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OCTOBER 25, 1993

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MINUTES  
DRAINAGE BOARD MEETING  
OCTOBER 25, 1993

The Vanderburgh County Drainage Board met in session on October 25, 1993, at 7:03 p.m., in the Commissioner's Hearing Room 307, with President Pat Tuley presiding.

RE: APPROVAL OF MINUTES (8-23-93 & 9-27-93)

Motion made by Commissioner Borries and seconded by Commissioner Hunter to approve the minutes of August 23, 1993 and September 27, 1993. So ordered.

RE: REQUEST FOR DRAINAGE PLAN APPROVAL

**A. Urban Estates Subdivision (Veach, Nicholson, Griggs Associates)**

Bill Jeffers: "Mr. Nicholson is here to present it. He has submitted calculations that were reviewed by the Surveyor's office and found to be accurate. He has a drainage plan that was submitted to the Surveyor's office in a timely fashion with everything on it that we requested. Basically it is a nine acre subdivision divided into three large lots. We asked for the drainage areas to remain natural. They are rocky bottom creeks. These two pipes that come out of State Road 66-Outer Lloyd Expressway were designed and installed by the State Highway Department and are adequate and they are in good condition. Excuse me, it is Outer Diamond Avenue. It is at the intersection of Detroy Road. He has given us a 60 foot easement for the maintenance so that property owners from either side, if a tree were to fall from one side across the easement, either property could work the easement and there is plenty of room. Therefore since Mr. Nicholson submitted the plan in accordance with our request the Vanderburgh County Surveyor's office recommends approval. I forgot to point out that, that's some poor ground out there with rough cover and there will only be two building sites. There will be less than three acres disturbed which is below the five acre minimum requirement to go to Rule 5. I forgot that you were reviewing that now. Mr. Nicholson has designed some siltation traps to catch the building site siltation before it travels down into that natural area, that I pointed out. He is aware of Rule 5 regulations and will counsel the owner to look at those even though it doesn't qualify and to keep that silt and to grade the yard so that the runoff will be returned to sheet drainage before it enters that hillside and runs down the hillside into that creek. Those siltation traps are designed to do that."

Bill Nicholson: "You note those heavy dashed lines along there. Everything on the steep, slopes to the bottom of those swales and will be undisturbed during the construction of the houses. Lot three (3) has the Seibert homestead already constructed on it. In other words, there are two children that are going to build on lots one (1) and two (2) and the mother lives on the developed lot three (3)."

Commissioner Borries: "Where are you going to build on lot one (1) here?"

Bill Nicholson: "Lot one (1) comes off of the cul-de-sac over here and they are going to build in this area here."

Commissioner Borries: "All of lot one (1)?"

Bill Nicholson: "Yes, all of lot one (1) here. That dashed line I was telling you about. These are steep slopes going into this natural drain down here. Likewise over here. There will be no disturbing of the turf that is on there in either place beyond that down to the natural drain, or anything in this area. It is heavily wooded. This is heavily wooded along here."

Bill Jeffers: "This is the less than three acres area that we were talking about that will be disturbed to build those two houses and this will be turned into grassy lawns."

(inaudible remarks)

Bill Nicholson: "No, no. This is the sixty-foot drainage swale that Bill was talking about that we put up and that there would be absolutely no construction or changes made in that because it flows from the highway to the pipes that come under the highway."

Commissioner Hunter: "Did I understand you also to say that there would be some type of erosion control even though you are under the five acres?"

Bill Nicholson: "Yes, these little swales."

Commissioner Hunter: "Ok, and those will be straw bales or what?"

Bill Nicholson: "There is going to be a trap. As they grade or slope away from the house rather than let the raw dirt wash into that, this will be a siltation trap along here. Until the turf gets built up on the lawn."

Bill Jeffers: "They are constructed so they can mow through them with a riding lawn mower. They are not too deep."

Bill Nicholson: "They will build it this fall yet. One of them intends to start as soon as possible. These traps will keep the wash from..."

Commissioner Hunter: "But the traps are bales of straw? Is that right?"

Bill Nicholson: "There will be bales of straw."

Commissioner Hunter: "Are these silt fences or what?"

Bill Nicholson: "Once they grade their yard and get it seeded then these will be a wide swale that will be a flat swale that will trap the sediment and wash it over into these natural drains here."

Bill Jeffers: "Eventually the straw bales will be removed and that will just be part of their lawn."

Commissioner Borries: "I move that the Drainage Plan known as Urban Estates Subdivision be approved."

Commissioner Hunter: "I will second."

Commissioner Tuley: "So ordered."

**RE: APPROVAL OF BLUE CLAIMS (COUNTY SURVEYOR)**

The following Blue Claims<sup>1</sup> for ditch maintenance were submitted as follows:

Shideler Spray Service #1851 Keil Ditch 234-022 93-SPR-22-15	3012 LF @ .048 = \$144.58 Pay 15% Retainage 21.69	\$21.69
Shideler Spray Service #1851 Sonntag Stevens 234-038 93-SPR-38-15	10,705 LF @ .048 = 513.84 Pay 15% Retainage 77.07	77.07

<sup>1</sup>Copies of Blue Claims included with the 10-25-93 minutes.

Shideler Spray Service #1851 Harper Ditch 234-017 93-SPR-17-25	4002 LF @ .048 = 192.10 Pay 15% Retainage 28.81	28.81
Shideler Spray Service #1851 East Side Urban S½ 234-015 93-SPR-15-15	47,592 LF @ .048 = 2,284.42 Pay 15% Retainage 342.66	342.66
Terry R Johnson #1052 Sonntag Stevens 234-038 93-SM-38-15	3050 LF @ .279 = 850.95 Pay 15% Retainage 127.65	127.65
Terry R Johnson #1052 Keil Ditch 93-SM-22-15	3012 LF @ .279 = 840.35 Pay 15% Retainage 126.05	126.05
Terry R Johnson #1052 East Side Urban S½ 234-015 93-FM-15-85	47,592 LF @ .3595 = 17,109.32 Pay 85% 14,542.92 15% Retainage due 2,566.40	14,542.92
Terry R Johnson #1052 Aiken Ditch 234-006 93-SM-06-15	1800 LF @ .2495 = 449.10 Pay 15% Retainage 67.37	67.37
Terry R Johnson #1052 East Side Urban S½ 234-015 93-SM-15-15	29,938 LF @ .3595 = 10,762.71 Pay 15% Retainage 1,614.40	1,614.40
Terry R Johnson #1052 Harper Ditch 234-017 93-SM-17-15	4002 LF @ .2695 = 1,078.54 Pay 15% Retainage 161.79	161.79
Terry R Johnson #1052 Harper Ditch 234-017 93-SM-17-85	4002 LF @ .2695 = 1,078.54 Pay 85% 916.75	916.75
Terry R Johnson #1052 Keil Ditch #234-022 93-FM-22-85	3012 LF @ .279 = 840.35 Pay 85% 714.30	714.30
Total Blue Claims Submitted		18,741.46

Commissioner Tuley: "The Surveyor apparently has reviewed them and they are recommending payment of the claims."

Motion made by Commissioner Borries and seconded by Commissioner Hunter to accept the Blue Claims as submitted.

RE: OLD BUSINESS

#### A. Discussion on Drainage Ordinance

Bill Jeffers: "I will briefly tell you that the Board is being notified that the Surveyor is in the process on drafting a Drainage Ordinance for presentation at your next meeting. The ordinance that we are using is the Purdue Model Ordinance for Counties. We are also looking at other ordinances. One from Indianapolis and one from Newburgh to pick up ideas from them too."

Commissioner Hunter: "Bill, may we have a copy of that before the November meeting so we can sit down and go through it?"

Bill Jeffers: "Yes sir. We are not really submitting it to you for approval in November. You may want to have it."

Commissioner Hunter: "It is just a rough draft."

Bill Jeffers: "Right. You may want it for something to look at and discuss for a couple of meetings before you take any action on it, I would think. You may want some public comment

on that. It will have a broad effect."

Commissioner Borries: "Will you indicate where the changes are going to be from this new ordinance to the old ordinance? Can that be done?"

Bill Jeffers: "Do we have an old ordinance? It is about a page and a half in the subdivision code, right? Is that the one that we are referring to?"

Commissioner Borries: "Right."

Bill Jeffers: "Ok, there is not much there. We will include as an exhibit the old ordinance."

Commissioner Borries: "I think that we need that. That is what I want."

Bill Jeffers: "And maybe highlight some areas that may change."

#### **B. Mt Ashley-'As Built' Drainage Plans (A. Biggerstaff)**

Bill Jeffers: "I believe that the Commissioners have a sheet in there that was the Surveyor's requirements for our positive recommendation from the Surveyor's office. You might want to refer to that as Mr. Biggerstaff speaks."

Aaron Biggerstaff: "I have made a copy of several of the changes that happened in Mt. Ashley since our last meeting. What we have done in effect, I will be as brief as possible. I realize that there were some problems out there. At the request of the Surveyor's office and the Evansville Sewer and Water Utilities we've changed some of the public utility easements that fit within the manholes. We were out of the easements a little bit when we put the sewers in so we changed those and I talked to Jim Williams about it and what we are here to discuss tonight is the drainage easements. You will note on this plat, how they have changed. When they put in the swales they ran into some problems they moved it to the south. We have incorporated these and we have discussed it with Mr. Jeffers and this shows the cross section which you requested, and how it is now and how we have proposed to do the new drainage easement. That is number one. Secondly, the retention pond. What we have done there is we have discussed it with Mr. Brenner and Mr. Jeffers also. It is still a retention pond. The capacity is greater now. What we did-we have an 'as built' on that which shows how we did it. By increasing the capacity of the pond it is as it was, as it was approved, except we made it deeper and it slopes up to the top of the banks further. We dressed it up a little bit. But it is still within the easements. What he tried to do, and we explained to him, to make that lot nine (9) more sellable and again, where the bottom of the grass is going to be, is where the water is now and will not get any higher than that. I have some pictures<sup>2</sup> to show you what it looks like. With some landscaping and instead of cattails and weeds growing out, he is going to landscape it and rip-rap it and, again, the owner of that lot will be responsible for the maintenance. But where that water is there is where the bottom of the pond is originally going to be. It won't be any higher. The calculations are the same. We went over them with Mr. Jeffers. In fact the capacity has increased since then. I think that we have addressed all the problems with the Surveyor's office."

Commissioner Borries: "What are your slopes on that, Aaron?"

Aaron Biggerstaff: "Actually the bottom is the same, you just back it up a little bit, but you stay within the easement. (inaudible) The top of the bank is this point (inaudible). "

Commissioner Hunter: "Yes, but what is the slope?"

Bill Jeffers: "On the drainage ditch or the lake?"

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<sup>2</sup>The pictures are on file in the Auditor's office.

Commissioner Hunter: "The lake."

Commissioner Borries: "This is going to have water in it at all times?"

Commissioner Hunter: "Is it a retention or detention?"

Aaron Biggerstaff: "I was confused too. He did not change any of the structures of the pipe. There is going to be water in it, but it is still a detention pond. Instead of where the water is now, is the grass level the way we approved it. We admitted it was going to be muddy a lot. There was going to be cattails, and you would have to get down in there and maintain it and it is going to be water level that you see right now is where the grass level is. We made it deeper and sloped the banks up."

Commissioner Hunter: "So it is going to retain water?"

Aaron Biggerstaff: "There will be water in it all the time."

Commissioner Hunter: "The next question is, 'After the water at a certain point trickles out, how deep is that water going to be?'"

Aaron Biggerstaff: "With the same calculations that we used before..."

Commissioner Hunter: "But you have dug it deeper. So that is why I am trying to figure..."

Bill Jeffers: "He is talking about from the water line to the bottom of the basin."

Commissioner Hunter: "Yes, right."

Aaron Biggerstaff: "It is six feet deep. You have got six foot of water."

Commissioner Tuley: "All the time?"

Aaron Biggerstaff: "Six feet of water. Five and a half to six feet. Again, at that point where the water that you see there, is where the original grass line was. We are increasing the storage area which is noted on the drainage plan. You are not changing-again, it is a big word, retention, detention-you are not changing any of the calculations from the detention plans that were approved. Basically that is as high as the water is going to get. I think that there will be more..."

Commissioner Borries: "The reason why I was wanting to know about the slopes, from the standpoint of erosion as well as the maintenance. In other words, this homeowner on lot nine (9) is going to have to maintain this thing all the time?"

Aaron Biggerstaff: "That is correct."

Commissioner Borries: "And that is going to have to be included on the plot and that also means that they are going to have to mow and everything else. Now, if this thing is going to erode all the time or if it is too steep it is going to be real difficult to maintain. That is my point."

Aaron Biggerstaff: "To answer your question. It is not going to be any steeper than it was. It is wider. It is deeper. As you can tell by the pictures that there is going to be-it is not done, but he is going to try to rip-rap and landscape it."

Commissioner Borries: "Where is he going to rip-rap it? If he is going to try and we are talking 'as built', where is he going to rip-rap it?"

Aaron Biggerstaff: "This is open for discussion. It was my suggestion. He is going to try to take it all the way around. It is not any steeper and..."

Commissioner Borries: "It is going to be trouble to maintain though, I think."

Commissioner Hunter: "Is it three-to-one? Two-to-one? What is the slope on it?"

Aaron Biggerstaff: "Let's see what we had on the other one. It is really not much of a variation. (inaudible) Three-to-one."

Bill Jeffers: "The original plan that you approved showed three-to-one from the ground line at the base of the basin to the top. Without going out there and measuring it I couldn't say absolutely but it looks approximately to be three-to-one. Three-to-one would mean that, that is three feet from, actually it is suppose to be three and a half feet from here to here. So if it is three and a half feet from the water line to the top of the levy then it lays back about eight feet. Horizontally."

(inaudible remarks)

Commissioner Hunter: "How much deeper is this than we originally approved?"

Aaron Biggerstaff: "Dug out about five and a half to six feet. (inaudible remarks) With the storage capacity being the same. It is still serving as it did in the past as a retention pond. Not that, that is your concern that it will look better. I think that it will be easier, possibly, to maintain than what it was before. The owner has not sold it yet is responsible for the maintenance of the pond. It has not reduced the capacity at all in the calculations, whatsoever. Again, I apologize for (inaudible)."

Commissioner Borries: "Is sure doesn't look as gradual as a three-to-one to me."

Bill Jeffers: "I'm not saying that it is. I am just saying if you look at the pictures it is about-I have not been out there so I can't..."

Commissioner Borries: "I guess what I am concerned about is because of the steepness, because of possible erosion here, do you need to have some rip-rap? Someway to stabilize these banks so that something can be maintained. If you are going to have to mow this are you going to have good enough sod to maintain this or is this just going to begin to erode here?"

Bill Jeffers: "These are requirements that the Surveyor's office sent to Mr. Biggerstaff that is shown on this piece of paper that is before you. There were six requirements based on our feeling that the plan was already approved and that what you had asked was that the developer and his engineer provide you with a set of 'as built' plans showing what is out there. Which is why item number one; we asked him to prove that what is planned is out there. Item number two; to prove what is planned is out there. Item number three; again, to prove what is planned is out there or what is out there. And all the way down through there. Then we added some things asking him to put a warning on there that because these easements had gotten so wide due to the fact that some of the drainage facilities were originally misplaced. And that the easement had to be enlarged to incorporate all those facilities that nothing could be put within those easements unless your Board approved a sketch brought in by a homeowner, basically. To show that it wouldn't interfere with the purpose of the facilities. Then item number six, is the most important to me; that all these 'as built' drainage plans that he is now presenting to you to show you where everything is located and all the supporting documentation to prove that what he has out there is according to the original plan or better. That these be submitted to your Board certified by Mr. John Herbert Leffel, who is a civil engineer engaged in drainage planning and registered to practice in the state of Indiana. His certification on those plans is his word that, that basin will operate the same as it was designed to operate under the original plan that was approved by this Board. Without me going out there myself and looking I can't answer some of the particular questions you're now asking. I can only take Mr. John Herbert Leffel's certified word."

Commissioner Hunter: "With all due respect, I would appreciate it very much if this engineer

would be here to do his own presentations."

Bill Jeffers: "I am not making a presentation for Mr. Leffel."

Commissioner Hunter: "I know. I say in all due respect, I would appreciate it if the engineer that signs off on this were here. I have a problem with that."

Aaron Biggerstaff: "He could be here. I don't understand your problem with-the slope is what I am trying to address. They are not any steeper than they were originally designed for. We worked closely with Mr. Leffel. If you want to request that he come here-that is fine. He is in ill health, and he is eighty-something years old, but his mental capacities are one that he can review this and he is one of the better in the area. I have known him for years and I don't think that there should be a question as to...we did everything that they asked. We did the 'as built'. The banks are not any steeper than it was. I have explained to you what he did-honestly. I feel that the drainage plans-yes, have been changed-but we have not decreased any of the storage at all. It has increased some, and as far as the drainage easements, we have increased those and that is not going to hurt the lots (inaudible)"

Commissioner Borries: "I have some concerns about the maintenance of that."

Commissioner Tuley: "How can we address that? Is that your main concern? By rip-rap?"

Commissioner Borries: "It is at this point."

Aaron Biggerstaff: "The plat has not been recorded yet we are doing the amended plat because of (inaudible) and whatever the recommendation (inaudible) The owner of lot nine (9) is required as he was originally to have the maintenance..."

Commissioner Tuley: "What if lot nine (9) never sells? Who is going to maintain it?"

Aaron Biggerstaff: "Mr. Fritz. That was one of the stipulations. If he doesn't sell lot nine (9), Mr. Fritz is responsible until he sells lot nine (9). This was brought up at the original drainage meeting. It has worked. There hasn't been any problems out there..."

Commissioner Tuley: "The original plans were approved and the only reason that we ever brought this back up was because what was presented wasn't done, right?"

Commissioner Hunter: "Right. The Surveyor's office came before us and indicated that the swales had been built off the easement on private property. Which creates a whole new set..."

Commissioner Tuley: "The point that I am making, is almost in agreement with what they are saying is, we approved them and then we for whatever reason found out that things weren't done. They have gone back now and supposedly done what they said that they were going to do to begin with-is that correct?"

Bill Jeffers: "They have represented on a revised drainage plan and replat. They have represented to you what you asked them to represent to you and they are making a representation that reflects that what was suppose to be done, is done and it is stamped by a registered engineer. A registered engineer is saying that what you asked for is done."

Commissioner Tuley: "And he actually went out and viewed it then, right?"

Aaron Biggerstaff: "He reviewed the notes and I went over everything with him."

Commissioner Tuley: "He reviewed these notes. He didn't physically go out there and say, 'Ok'."

Aaron Biggerstaff: "That is correct. I showed him the pictures and the notes that we took we

took back and reviewed the cross-sections and reviewed the calculations."

Commissioner Borries: "Who has been out there to inspect it? Either from the Surveyor's office or from the County at this point?"

Bill Jeffers: "Mr. Stoll told me he has been out there recently to look at some part of the drainage facilities."

Aaron Biggerstaff: "Gary Kercher went out there Friday or someone from their office went out there today. I have pictures that show no erosion. The plan is working. There is some changes to be made and we have presented those to you. Mr. Leffel can sign those without being out there physically. We have been doing this for years. I know Mr. Leffel and he wouldn't sign anything that he wasn't sure of. We took the plans to him and showed him what we came up with and we reviewed them with the County Surveyor's office. It works."

Commissioner Tuley: "Do you recommend approval?"

Bill Jeffers: "From what has been presented to the County Surveyor's office on paper compared to what we asked for in this letter, the County Surveyor's office has viewed it and recommends approval."

(inaudible remarks)

Aaron Biggerstaff: "If there is any recommendation from the Surveyor's office as far as the rip-rap of the bank (inaudible) then there is no problem. We're willing to do that if necessary. There is no problem with any of the calculations (inaudible) we have spent a lot of time on it and we wanted to do it right."

Commissioner Borries: "I would prefer some kind of rip-rap."

Commissioner Hunter: "John Stoll is out there why don't we ask him?"

Aaron Biggerstaff: "There is a picture, you can check the erosion. We even put down the proper erosion blankets and John recommended that we clear that one pipe that we discussed. That has been cleared and taken care of. That is the only major-real major problem except for the change in the easements. (inaudible)"

Commissioner Borries steps out into the hall to ask John Stoll if he has something to say.

Commissioner Borries: "He hasn't seen it yet. The only thing that he has seen is the pipes where there had been some silting. It had silted in where he had talked about..."

Aaron Biggerstaff: "The owner of lot fourteen (14) is here he can verify that, that has been cleaned out."

Darrell Schnucks: "I was out there today and it was cleaned out. There was a couple of inches of mud at the outlet end of the pipe again already but (inaudible)"

Commissioner Borries: "I would prefer some rip-rap on that. Other than that I would agree. I don't know what else we can do at this point."

Bill Jeffers: "I am going to withdraw that recommendation. I just noticed something on the pond. I would like to give a reason. They have got the edge of the water at 402.4 and that is basically the top of this stand pipe which was originally 402.5, which is only an inch difference, more or less. What they were telling me was, that the pool elevation would be all the way down here, which is another 18 inches lower. See what I am saying here, Aaron?"

Aaron Biggerstaff: "That was the whole purpose. If it gets that high it is so the..."

Bill Jeffers: "I know, but then they have the top of the dam at 405.0 on the original plan and here they have it at 406.0. So that is another foot. So you are still lacking about six inches of storage. See what I am saying? You are suppose to have this much storage. Three and a half feet from water level now, to top of the thing. Three and a half feet at all points and so that means that anywhere you go it should be no less than 405.4. Which it may be. They have just built everything out there off. This might just be a temporary withdrawing of the recommendation until I get this looked at a little closer. What he is saying is that the top of the dam is 405.0. The spillway is six inches less which would be 404.5. The bottom is 401.0. The storage would be from 405.0 down to 401.0 which is four feet, and as it comes up he is going to lose some of it through here and as it gets all the way up there he loses some of it through the spillway. But, basically his head is from 401.0 up to 405.0. Now he is showing that the water elevation instead of being 401.0 is 402.4. Which is a foot and a half higher than 401.0. He is showing the top anywhere from 406.0, 406.8, (inaudible) so instead of being three and half feet it is only three and a third. He has lost two tenths. But where is that spillway? Because if that spillway is below this point, that spillway is lower than 405.7, the water is going to go out here first."

Commissioner Hunter: "It sure is."

Bill Jeffers: "Because if that spillway was actually set at 404.5...everything looks like it's up a foot from where it was planned. Everything looks a foot higher than where it was planned is what I am getting at."

Aaron Biggerstaff: "Again, they made it wider. The pond is wider also. There is only two tenths there and the top of that is (inaudible)."

Bill Jeffers: "But this entire three and a half feet was suppose to be-or right here was suppose to be storage."

Discussion over the plans.

Bill Jeffers: "All that it will take is some dirt on top of that dam."

Aaron Biggerstaff: "I understand. The storage capacity was figured high anyway and that is as high as the water has been. (inaudible) You can look at these pictures it is a good two feet below that. It has never been that high, that was taken right after one of the hardest rains we've had. We have discussed this before. The capacity was more than met the requirements. We discussed that before and the storage on here is even more than it was originally. The storage has been increased. (inaudible)"

Bill Jeffers: "My dilemma is, basically I'm having to do everything on paper at the last minute."

Commissioner Hunter: "Which is not a good deal. That is putting you in a bad position."

Bill Jeffers: "What we have basically asked Mr. Biggerstaff to do was to comply with these items here, which I thought he had done until I just happened to look and catch-we are within three inches of compliance. Three inches of storage across the entire surface of that lake. I am not doubting Mr. Biggerstaff's word whatsoever. It may be that the increased size-flat area-square footage of area over the surface of that lake might compensate for the three inches of difference that we are talking about. I am not doubting that."

Aaron Biggerstaff: "According to the calculations and what we looked at, it did increase."

Bill Jeffers: "I am doing this on paper and I am relying on Mr. Leffel's expertise as a registered engineer that his word is true."

Commissioner Tuley: "Bill, do you want to call a special meeting so we won't have to delay this another month?"

Bill Jeffers: "As far as I see it, he has complied with everything that we have asked him to and I don't doubt his word and we are only talking about two or three inches of difference in earth work. That is pretty close and if you would like to have another Drainage Board meeting next Monday...is that what you are asking?"

Commissioner Tuley: "Did you want time to look at it and be satisfied yourself that it is Ok, so that you can come up here and say, 'I recommend approval'? Or do you want..."

Bill Jeffers: "I would be willing to recommend approval based on an on site inspection of myself and representatives of Mr. Biggerstaff and if one of the Drainage Board members would like to be there and address whatever concerns he may have and then do it by transmittal of a letter. Rather than a meeting. That would be fine with me. If you want to make a approval pending on a letter."

Commissioner Tuley: "Site visitation and a letter from the staff."

Bill Jeffers: "If that is what you would like to do, I would be happy to do that."

Commissioner Hunter: "Darrell Rice would be representative of..."

Bill Jeffers: "Darrell Rice would be great."

Aaron Biggerstaff: "One of the developers is here, the builder for lot one (1) and lot fourteen (14). As you are aware the drainage plan was approved separately. The south side of the road drainage plans has nothing to do with the north side drainage plan. You don't remember that? Mr. Brenner represented me both times. Remember when all of the lot owners were here? The representatives were here and a recommendation was made to approve the south side and it was approved at that meeting."

Commissioner Tuley: "We spelled out the lots that were approved."

Aaron Biggerstaff: "That's right. I showed all the drainage board members that were present that night the drainage plans. I know that you haven't seen this in a while. This was our drainage plan."

Commissioner Tuley: "We spelled out the numbers."

Aaron Biggerstaff: "We had lot one (1), eighteen (18), ~~seventeen~~ (17), sixteen (16), fifteen (15), fourteen (14), and actually we stopped off at twelve (12) or eleven (11)."

Commissioner Hunter: "We have the minutes here, let's take a look."

Aaron Biggerstaff: "Mr. Brenner was here, also the adjoining property owners were here and they were satisfied because we still had to address some problems concerning the detention pond."

(inaudible remarks)

Aaron Biggerstaff: "Mr. Brenner recommended it and there was a three to nothing vote. You asked me to bring it back."

Commissioner Hunter: "We also asked that the side slopes be three-to-one. Which is another question that Mr. Borries had."

A lengthy discussion followed over the minutes of January, February, and March of 1993. It was determined that Mt. Ashley was deferred in the January meeting. The February meeting was

canceled<sup>3</sup>. The minutes of March 1, 1993, and March 22, 1993, were read.

Bill Jeffers: "If I could just wind-up what I feel about it now and I don't want to make you apprehensive about withdrawing the recommendation because it only has to do with a couple of three inches that I just happened to notice. But he has complied with everything that we asked for and everything looks good except a couple of little spots that I would like to check, with regard to the basin itself."

Commissioner Tuley: "I can't speak for Don. What I am willing to do. Once we spell out those lots that we approved of. Get that out of the way so I can write a letter tomorrow to Roger and say, 'release the hold on the building permits on these lots'."

(inaudible remarks)

Commissioner Tuley: "I am speaking just for me. I am willing to give you if it can be agreed upon, basically permission upon a site visitation by a representative from your office and if you guys want to go out there, and Darrell to meet-approval pending a letter from the group."

Bill Jeffers: "I do think that Mr. Rice would be able to address what Mr. Borries wants addressed, and that is the erosion control on the banks of the basin. I can tell you whether it is three-to-one side slopes by measuring it. And Mr. Rice can tell you whether it requires additional erosion control measures by simply looking at it. He is very skilled at that."

Commissioner Tuley: "I am willing to do that. But I am only speaking for myself."

Bill Jeffers: "I think that the immediate concern is possibly releasing lot fourteen (14)."

(inaudible remarks)

Commissioner Borries: "The difficulty here, and it is real simple. At some point these developers are going to walk away from it and if things are done according to the way they are suppose to be done then you are going to be back to see us. And that never goes away and so we want to make sure that this thing is done right the first time. There have been problems out there. If the Surveyor's office hasn't been out there to see it, if the guy that draws the plans hasn't been out there to see, somebody needs to go out there and look at it who is a professional. In my opinion."

(inaudible remarks)

Commissioner Borries: "I think that we can make an approval tonight and subject to all of the people involved that have been discussed here. Mr. Jeffers or whoever from the Surveyor's office. Darrell Rice. Again, the concern here Aaron, the point that was missed-somebody has got to go out there and look at this thing that has got some professional expertise. If you say this guy hasn't seen it, yet he drew the plans-that is just not going to be good enough if we are going to have to resolve some of these issues. If they will initial the plan after the meeting tomorrow then we go ahead and approve it tonight. I can agree to that."

Commissioner Tuley: "Can we do two motions in one? To release the hold on lot fourteen (14) immediately. I can do that in the morning."

(inaudible remarks)

Commissioner Borries: "That will be fine. I will amend my motion to say that we will also include lot one (1)."

---

<sup>3</sup>Notice of cancellation included with the 10-25-93 minutes. Proof of advertising of this notice is on file in the Auditor's office.

Commissioner Hunter: "I will second that."

Commissioner Tuley: "We have a motion and a second to release immediately lots one (1) and fourteen (14) for building permits-only-at this time. We have that taken care of. Now we need a motion to the effect that pending a letter of recommendation and a signing off of the plans by the Surveyor and Darrell Rice [will merit] drainage plans approval."

Commissioner Borries: "After an inspection."

Commissioner Tuley: "After an inspection and a signing off."

So moved by Commissioner Borries with a second by Commissioner Hunter. So ordered.

Commissioner Hunter: "Let me say something, Aaron, just to clear the air. You have been down here numerous times and you are talking about a sizable subdivision. A subdivision with very nice homes on it. Now, we are still dealing with this subdivision and you are not here tonight because this is the first time that you are wanting approval. It is the second time because it was screwed up the first time. I am very uncomfortable, if you think about it the subdivisions that come before us the engineers normally make the presentations. There are a lot of dollars and a lot of things involved with this. I am very uncomfortable with a man who I have never met and he is not here to make a presentation, and therefore he can not answer the questions that we may have. I would like to have the certified engineer of record on this subdivision and any other subdivision appear before this Board. I am just not comfortable with it."

Commissioner Tuley: "Let's adjourn this meeting and then we can talk about this. Do you want it in the minutes?"

Commissioner Hunter: "Yes, I want it in the minutes."

Commissioner Tuley: "You have concern. Since it is going on record I am going to have to agree with him. Every plan that we get the engineer is in here and I would recommend that from now on whoever you use, whether it be this individual or someone else, so we don't have those concerns and those problems. And we don't have two homeowners standing up here looking down our throats ready to take our heads off. The man that signs it ought to be up here to defend it."

Commissioner Hunter: "That's right. And these two people once those house are built and the problems are created, they are going to be down here and they are going to be talking to us. Not you."

Commissioner Tuley: "Tonight was a prime example."

Commissioner Hunter: "Tonight was a classic example of it. So as I say, to add credibility I would like the engineer of record on these projects to make the presentations."

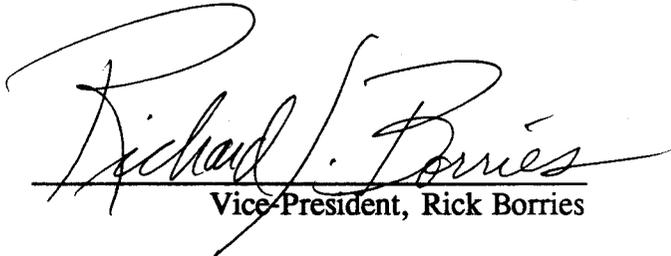
Aaron Biggerstaff: "I would agree. I am not making excuses to the Board. I was caught off guard with my father's death. I don't like this situation any better than you do. We are, just between us, we are trying to correct it. Myself and two other members. We don't have our licenses yet. We are in the process of taking our exams and hopefully one day my name or someone who works directly with us will be signed on there. I understand. I would like the Board to know that I appreciate and we are trying to correct that problem."

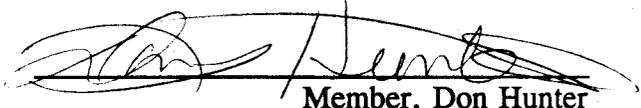
There being no further business, the meeting was adjourned at 8:20 p.m.

**PRESENT:**

President Pat Tuley  
Vice-President Rick Borries  
Member Don Hunter  
Attorney Alan Kissinger  
Sam Humphrey, Auditor  
Bill Jeffers  
Aaron Biggerstaff  
Bill Nicholson  
Darrell Schucks  
Larry Fulkenberg  
transcribed sbt

  
\_\_\_\_\_  
President, Pat Tuley

  
\_\_\_\_\_  
Vice-President, Rick Borries

  
\_\_\_\_\_  
Member, Don Hunter





CERTIFICATION OF PAYMENT

By this instrument, I, Terry R. John, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
EAST SIDE URBAN SOUTH HALF Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: EAST SIDE URBAN SOUTH HALF

CONTRACT # 234-015

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: \_\_\_\_\_ INSPECTED ON: \_\_\_\_\_

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Robert W. Bunn 10-11-93  
Department Head (date)





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

FALL MAOW

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON for  annual --  additional maintenance to EAST SIDE URBAN SOUTH HALF Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on OCT 12, 1993, and was inspected by our staff on OCT 13, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

10-21-93  
(date)

Additional comments:

F-1





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

FALL Mow

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and:

TERRY R. JOHNSON for  annual --  additional maintenance to KEL Ditch,

a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 10-24, 1993, and was inspected by our staff on 10-25, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brennan  
Robert W. Brennan, Vanderburgh County Surveyor

10-23-93  
(date)

Additional comments:

F-1



Warrant No. \_\_\_\_\_  
 Claim No. \_\_\_\_\_  
 Date \_\_\_\_\_

IN FAVOR OF

Vendor Name TERRY R. JOHNSON  
 Vendor No. 1052

\$ 126.05

ON ACCOUNT OF APPROPRIATION

Dept. Fund Name KEIL DUTCH  
 Account No. 234-022

Allowed \_\_\_\_\_ 19\_\_

In the sum of \$  
Richard J. Jones  
Richard J. Jones  
R. J. Jones

Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

\_\_\_\_\_  
9-17, 93  
[Signature]  
 Signature of Office Holder

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
 Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<del>93-SM-22-15</del>				
93-SM-22-15		AUG. 26, 1993	234-022	126.05
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

TOTAL \$ 126.05

CERTIFICATION OF PAYMENT

By this instrument, I, X Terry R. Johnson, representing:

\_\_\_\_\_ , and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:

KEIL Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None

\_\_\_\_\_ ;  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: KEIL

CONTRACT # 234-022

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Aug. 25, 1993 INSPECTED ON: Aug. 30, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[Signature]  
Department Head

9-27-93  
(date)

\_\_\_\_\_





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCM IN ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON for  annual --  additional maintenance to HARPER Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on AUG 10, 1993, and was inspected by our staff on AUG 11, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

7-13-93  
(date)

Additional comments:

F-1





CERTIFICATION OF PAYMENT

By this instrument, I, Terry F. Johnson, representing:

HARPER, and presently under contract with the Vanderburgh County Drainage Board to perform certain maintenance work on:

HARPER Ditch, a regulated drain in Vanderburgh County Indiana, do certify that I and/or the firm I represent have/has paid fully all expenses incurred for labor, supplies and subcontracts (if any) except for any unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or any claims which may arise from such expenses except for the fifteen (15) percent of the total contract price which the Vanderburgh County Drainage Board presently holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: HARPER

CONTRACT # 234-017

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Aug 11, 1993 INSPECTED ON: Aug 12, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Robert W. Jensen 8-13-93

Department Head

(date)











CERTIFICATION OF PAYMENT

By this instrument, I, Terry R. Johnson, representing:  
SOMNITAG STEVENS, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
SOMNITAG STEVENS Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: SOMNITAG STEVENS  
CONTRACT # 23A-038  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: Aug 23, 1993 INSPECTED ON: Aug 23, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

[Signature]  
Department Head

8-23-93  
(date)





CERTIFICATION OF PAYMENT

By this instrument, I, David W. Bennett, representing:  
Midler Spray Service, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:

KEIL Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None  
\_\_\_\_\_  
\_\_\_\_\_;

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: KEIL

CONTRACT # 234-022

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: July 29, 1993 INSPECTED ON: Aug. 17, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Robert W. Brenner  
Department Head

8-20-93  
(date)

F-1



Warrant No. \_\_\_\_\_

Claim No. \_\_\_\_\_

Date \_\_\_\_\_

IN FAVOR OF

Vendor Name Shidelet Spray Services

Vendor No. 1851

\$ 77.07

ON ACCOUNT OF APPROPRIATION

Dept. Fund Name Schooltagg Services

Account No. 234-038

Allowed \_\_\_\_\_ 19\_\_\_\_

In the sum of \$

Robert J. Bonies  
Richard J. Bonies  
[Signature]

Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Aug 20, 93  
\_\_\_\_\_  
Robert J. Bonies  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
Auditor

COST DISTRIBUTION -- TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-SPR-38-15</u>		<u>Aug 6, 1998</u>	<u>234-038</u>	<u>77.07</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

TOTAL 77.07

CERTIFICATION OF PAYMENT

By this instrument, I, X Daniel W. Bonnell, representing:  
Shideler Spray Service, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
SOMMATA STEVENS Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: SOMMATA STEVENS  
CONTRACT # 234-038  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: 7-29-97 INSPECTED ON: AUG. 18, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

Robert W. Bennett  
Department Head

8-20-93  
(date)

F-1





CERTIFICATION OF PAYMENT

By this instrument, I, [Signature], representing:  
Reider Spray Service, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
HARPER Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE  
\_\_\_\_\_  
\_\_\_\_\_;

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: HARPER  
CONTRACT # 234-017  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: 7-29-93 INSPECTED ON: AUG. 11, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[Signature] 8-13-93  
Department Head (date)





CERTIFICATION OF PAYMENT

By this instrument, I, David W. Chinn, representing:  
Shideler Spray Service, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:

EAST SIDE URBAN SOUTH HALF Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: EAST SIDE URBAN SOUTH HALF

CONTRACT # 234-015

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: JULY 28, 1993 INSPECTED ON: AUG. 13, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Ralph W. Burns \_\_\_\_\_

Department Head

8-13-93

(date)

F-1

NOTICE OF CANCELLATION  
OF MEETING  
VANDERBURGH COUNTY DRAINAGE BOARD

NOTICE IS HEREBY GIVEN that the regular scheduled meeting of the Vanderburgh County Drainage Board on Monday, February 22, 1993 has been canceled.

The next meeting of the Vanderburgh County Drainage Board will be held on Monday, March 1, 1993 in Room 307, Civic Center Complex, Evansville, Indiana immediately following the regular scheduled meeting of the Board of Commissioners.

VANDERBURGH COUNTY DRAINAGE BOARD

Patrick Tuley, President  
Richard J. Borries, Vice President  
Don Hunter, Member

Sam Humphrey  
County Auditor

Alan M. Kissinger  
County Attorney

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NOVEMBER 22, 1993

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Indiana Water Resources Study Committee Hearing (Jim Daniels)	20
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MINUTES  
DRAINAGE BOARD MEETING  
NOVEMBER 22, 1993

The Vanderburgh County Drainage Board met in session on November 22, 1993, at 7:15 p.m., in the Commissioner's Hearing Room 307, with President Pat Tuley presiding.

RE: APPROVAL OF MINUTES (10-25-93)

Motion made and seconded to approve the minutes of October 25, 1993. So ordered by President Tuley.

RE: BUILDERS SQUARE AT CROSS POINTE SUBDIVISION

Bill Jeffers: "Does anyone need a drawing of the plan? I am going to read a recommendation from the Surveyor's office."

Commissioner Borries: "Has a portion of this drainage plan been approved?"

Commissioner Tuley: "That is what it looks like."

Bill Jeffers: "This is 15 acres inside of Cross Pointe Subdivision. Cross Pointe Subdivision has a drainage plan on file that was approved by the Drainage Board in 1989 and the County Surveyor has reviewed the drainage plans and the attached calculations and details that were submitted by Mr. Mike Clark of Winkelmann & Associates Incorporated of Dallas, Texas, on behalf of their client CDC Real Estate Corporation also of Dallas, Texas, for this 15 acre site within Cross Pointe Subdivision located on the north side of Lloyd Expressway near the interchange with I-164. Winkelmann's plan is a request to you to change the drainage plan approved for Cross Pointe Subdivision in 1989. The need for the change in the layout is to allow Builder's Square to occupy a fifteen acre site previously occupied by several smaller lots, originally designed for commercial offices such as doctors, dentists, et cetera. In order to combine that drainage plan into a comprehensive fifteen acre drainage plan they have submitted this new plan. Our office concludes that the new plan substantially conforms to the intent of the approved plan with regard to the detention and controlled discharge of storm water from a twenty-five year return period storm at this fifteen acre site. And therefore the County Surveyor recommends your approval of the drainage plan for Builder's Square at Cross Pointe with the following stipulations:

1. Change the details of the spillway and earth berms-which are banks-elevations shown on sheet four (4) to correct a minor error of the draftsman with regard to Pond 'A' and Pond 'B' figures being transposed. A brief explanation of that is that he just wrote down for Pond 'A' what should have been written down for Pond 'B' and vice versa. We have discussed that on the phone today and he has already changed it. It was just a simple transposition mistake.
2. CDC must acquire an easement from Regency Corporation, who owns the unsold property for the pipes and the open ditch from the northeast corner-that is the upper right hand corner-of the fifteen acre site thence into Nurrenbern Ditch, which is a legal drain, to serve the off site facilities. In other words, they only bought fifteen acres so there is a portion of land up in that northeast corner-the upper right hand corner of your plan-that is still owned by Regency and to get those pipes off site over to our ditch they need to acquire an easement from Regency so that anything that they have and some property that they don't own has to be in the easement.
3. Winkelmann must include detailed drawings and instructions for the installation of the orifice plates designed for the pipes leaving the three detention basins and those designs and instructions must be included in the detailed plans and instructions to the contractor who is going to build the ponds. Now what that means is for example, a twelve inch pipe is our minimum size pipe. You can not install a pipe smaller than twelve inches in Vanderburgh County. However, that would carry too much water to discharge from Pond 'C' which is a small pond in the front marked in yellow. So to

choke down the discharge to what we will allow him to discharge into our ditch, he puts a control structure on the end of the pipe that only allows so much water to get into that pipe. He has done the calculations to prove that he is able to design that, but we need drawings of what he wants the contractor to put on the end of the pipe.

Like I said, I have already talked to Mr. Mike Clark on the telephone today and that is in the overnight express. Again, our recommendation is to approve this plan with the three stipulations included in this letter.<sup>1</sup>"

(inaudible remarks)

Commissioner Tuley: "Are all these changes coming to you, Bill? To your office?"

Bill Jeffers: "Number three, which would be a detailed design for those orifice plates to be put on those pipes would probably be included in the street and drainage plans that are subsequently going to come to you as the Board of County Commissioners through the office of the County Engineer. The County Highway Engineer whose office inspects the installation of storm drainage facilities within the street right-of-way and those ones that are constructed outside of the right-of-way if so instructed by you or requested by the developer. Yes, I did ask him to send us a copy to put in the file with the rest of the information in our office as well."

Commissioner Tuley: "The easement from Regency Corporation, is there going to be proof that has been done? Submitted to this Board or you?"

Bill Jeffers: "CDC has not closed the real-estate deal with Regency and when they close the real-estate deal with Regency, the closing of the deal will include a document or grant of easement."

Commissioner Tuley: "The only reason that I am asking is, here we are dealing with a plan that we approved based on certain other things happening. Where is the follow-up? How are we going to know all these things are done? You are saying, 'Yes, we are recommending it, but these three changes have to take effect first.'-more or less."

Bill Jeffers: "If this plan is not approved the deal will not close."

Commissioner Tuley: "They can't do the rest of it is what you are saying."

Bill Jeffers: "Right. If the deal doesn't close they won't break ground. If they don't break ground they won't build Builders Square. I am not sure you have a meeting scheduled for next month? That is a question."

Commissioner Tuley: "Yes, there is. On Tuesday the twenty-eighth."

(inaudible remarks)

Bill Jeffers: "The inclusion of three stipulations after a recommendation is simply to accommodate or to facilitate moving forward with the land deal so that this corporation can construct a work place."

Commissioner Tuley: "Stipulation number one has been met, you said, it was a simple math-someone wrote it down in the wrong place."

Bill Jeffers: "Right."

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<sup>1</sup>A copy of the letter of recommendation with the stipulations included sent from the County Surveyor to the Vanderburgh County Drainage Board regarding Builders Square at Cross Pointe included with the 11-22-93 minutes.

Commissioner Tuley: "So that one is done."

Bill Jeffers: "It should be done by tomorrow morning and in the mail."

Commissioner Tuley: "Overnighted to you."

Bill Jeffers: "Right."

Commissioner Tuley: "Number two will be done at the closing of the deal?"

Bill Jeffers: "It was told to me by the representative of Regency and by the representative's design engineer that, that would occur at the closing of the real estate deal."

Commissioner Tuley: "Number three can be done and verified by our County Engineer?"

Bill Jeffers: "Yes sir."

Commissioner Borries: "I move with the comments here to approve this amendment to the drainage plan of Center Pointe Subdivision."

Seconded by Commissioner Hunter. So ordered.

**RE: APPROVAL OF BLUE CLAIMS (COUNTY SURVEYOR)**

The following Blue Claims were submitted as follows:<sup>2</sup>

Terry R Johnson #1052 Kolb Ditch 234-025 93-FM-25-15	5593 LF @ 0.2895 = 1619.17 Pay 15% ..... 242.87	Amount \$242.87
Terry R Johnson #1052 Harper Ditch 234-017 93-FM-17-15	4002 LF @ 0.2695 = 1078.54 Pay 15% ..... 161.79	161.79
Terry R Johnson #1052 Aiken Ditch 234-006 93-FM-06-15	9911 LF @ 0.219 = 2170.51 Pay 15% ..... 325.58	325.58
Terry R Johnson #1052 Sonntag Stevens 234-038 93-FM-38-85	10705 LF @ 0.279 = 2986.70 Pay 15% ..... 2538.70	2538.70
Terry R Johnson #1052 Henry Ditch #234-019 93-FM-19-85	3179 LF @ 0.279 = 886.94 Pay 85% ..... 753.90 15% Retainage due. 133.04	753.90
Shideler Spray Service East Side Urban N½ 234-015 93-SPR-15-1-15	14102 LF @ 0.048 = 676.90 Pay 15% ..... 101.53	101.53
Daniel Paul #3590 Wallenmeyer Ditch 234-040 93-FM-40-40	8355 LF @ 0.145 = 1211.48 Pay 40% ..... 484.59	484.59
Daniel Paul #3590 Wallenmeyer Ditch 234-040 93-FM-40-45	8355 LF @ 0.145 = 1211.48 Pay 45% ..... 545.17	545.17

<sup>2</sup>Copies of the Blue Claims and Surveyor's Reports included with the 11-22-93 minutes.

John F Maurer #1483 Hoefling Ditch 234-020 93-FM-20-45	5571 LF @ 0.10 = 557.10 Pay 45% ..... 250.70	250.70
John F Maurer #1483 Hoefling Ditch 234-020 93-FM-20-40	5571 LF @ 0.10 = 557.10 Pay 40% ..... 222.84	222.84
Eugene Rexing #1227 Singer Ditch #234-037	2450 LF @ 0.11 = 269.50 Pay 45% ..... 121.28	121.28
Eugene Rexing #1227 Singer Ditch #234-037	2450 LF @ 0.11 = 269.50 Pay 40% ..... 107.80	107.80
Albert Steckler #1243 Baehl Ditch #234-007 93-FM-07-45	6890 LF @ 0.125 = 861.25 Pay 45% ..... 387.56	387.56
Albert Steckler #1243 Baehl Ditch #234-007 93-FM-07-40	6890 LF @ 0.125 = 861.25 Pay 40% ..... 344.50	344.50
Total Blue Claims Submitted		\$6,588.81

Bill Jeffers: "I will say that all the attached paperwork appears to be correct and appears to be appropriate and the County Surveyor has signed them and recommends approval of those claims."

Motion made by Commissioner Borries that the claims be allowed. Seconded by Commissioner Hunter. So ordered.

RE: MT ASHLEY SUBDIVISION (AARON BIGGERSTAFF)

Commissioner Tuley: "We had asked for a review inspection and an update inspection by the County Surveyor and by Darrell Rice from Soil Conservation Service. I have a letter in my hand from Darrell Rice<sup>3</sup> with reference to that inspection that he conducted. There have been several letters<sup>4</sup> submitted and pictures<sup>5</sup> submitted from the Surveyor and Aaron Biggerstaff. I understand that there is a lot owner here who would like to see us get those permits, the process going again so that he can begin the process of building his home. Do you want to take it from here Bill?"

Bill Jeffers: "At the request of the Board and at the request of the developer and his engineer our office made a re-inspection and found that all of the items covered by our letter subsequent to the first inspection have been reworked. The item of most concern in our office was the finished dirt grades of the dam which were at one time lower than the notch in the spillway and they are no longer-the dirt level has been raised all around the dam. It has been re-matted with erosion control fabric. Reseeded. The dirt elevation of the dam is now, at it's very lowest point four inches (4") above the spillway. I did observe this on Sunday between 8:45 and 10:45 in the morning after some back to back 'toad stranglers' and I saw the elevation of the detention basin at the very top of that little concrete stand pipe that you are looking at in the picture. The picture shows the elevation of the water approximately eight inches (8") below the top and the only

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<sup>3</sup>Copy of letter to Pat Tuley from Darrell Rice dated 11-22-93, regarding inspection of Mt Ashley on 11-22-93 included with the 11-22-93 minutes.

<sup>4</sup>Copy of letter to Pat Tuley from Bill Jeffers dated 11-02-93, regarding visit to Mt. Ashley 10-26-93; copies of letters to Pat Tuley from Aaron Biggerstaff dated 11-08-93 and 11-15-93 and copy of letter to Bill Jeffers from Aaron Biggerstaff dated 11-17-93, included with 11-22-93 minutes.

<sup>5</sup>Pictures are on file in the Auditor's office.

difference I noticed between the elevation pictured there of the water and when it got up to the very top of the stand pipe is, that when it got to the top of the stand pipe there was enough head pressure developed in that pond to cause water downstream to come out of the street inlets and the yard inlets on down in Brookview. I understand that, that condition occurred every time it rained before the pond was built. That the water running down that hill caused that condition every time and I believe it to be caused by the fact that there's two or three ninety degree turns in the pipes in Brookview that are restricting or causing a lot of turbulence. As soon as the elevation of the pool got back down to where you see it in the picture I drove back around and looked at it and it was running properly, again. So what is going to happen is when you have an unusually heavy rainstorm and this thing fills up you may have some water coming out of inlets. Which may generate some complaints, however, I do understand that occurred every time it rained hard in the past. I would like to point out that when it gets up to that elevation that it still has one foot three and a half inches (1'-3½") to go before it starts running out the emergency spillway. When it gets up to that elevation it is approximately two and a half feet (2'-6") above pool stage and it still has almost a foot and a half (1'-6") to go. As I said before, all the items covered by our initial report had been reworked and are much more satisfactory than they were before. I believe that you have a letter from Mr. Rice from Soil Conservation Service. I have a copy of a recent letter from him. The bottom line is I don't think that you are going to get anything better. That is about as good as you are going to get."

Commissioner Tuley: "Basically what Mr. Rice says here is that he completed a site inspection on 11-22-93. 'All drainage and erosion control practices are in place and appear to be functioning properly. Mr. Fritz has the individual lot owners using designated gravel drives which is a commendable item. Additional pressure needs to be applied to current lot owners and future buyers to install the planned erosion control around building sites. This erosion control will prevent the detention/retention pond from collecting unwanted silt.'"

Commissioner Borries: "Darrell, you are in the audience, based on this letter is it your feeling that the banks of this detention/retention pond, whatever it is, are alright? I have really had some concerns about how those things are going to get stabilized. Now we are hearing here that it is not going to overflow despite this heavy rain but as you point out here if we begin to get some silting..."

Darrell Rice: "Your concern was the side slopes being too steep?"

Commissioner Borries: "Right."

Darrell Rice: "Have you shot those, Bill? Aren't they three-to-one or greater, flatter?"

Bill Jeffers: "The low banks are four-to-one, the steepest portion up near the street is three-to-one."

Darrell Rice: "So those aren't erosive side slopes. He has went to extremes as far as getting it established in the grass with erosion control netting and for that small of a water body you shouldn't get much wave action at all especially with it protected by the hill from the west, so your erosive wave action problem shouldn't be a problem."

Commissioner Hunter: "Have you looked at these pictures, Darrell?"

Darrell Rice: "No I haven't seen any pictures. Are these what you took?"

Bill Jeffers: "No."

Commissioner Tuley: "No. Biggerstaff took them, I think."

(inaudible remarks)

Darrell Rice: "Well the straw is exaggerating your slopes. If you walk out there, it is mowable (inaudible)."

Commissioner Tuley: "Darrell, Rick expressed some concern at one time about maybe they need to rip-rap it. I either heard it from you, or from Bill, or somebody recommended that it is not necessary."

Darrell Rice: "I think that the last meeting that I was present at I wouldn't recommend it. Because of the flat slopes. It would only be for aesthetic reasons. A water body that small and with the side slopes at the slope that they are at you shouldn't get any wave action or erosion along the banks and all the areas where water is entering into the water body is concrete; so the erosion problems on the side slopes shouldn't be a problem. But I did point out that he is gaining on the contractor's-he has gotten them to use designated drives but he still needs to press them for more erosion control on the sides."

Commissioner Tuley: "Ok. It says that more pressure needs to be applied. I guess my question is, 'How do we do it?'"

Darrell Rice: "He is the ultimate responsible party. The developer is, for Rule Five. In this case on the houses that will be placed on the east side of the hill everything will drain into that basin so actually he wouldn't be in violation until silt leaves the site which it would be trapped in that sediment basin but then it would become a mud puddle and would detract from what he is wanting as an end..."

Commissioner Tuley: "Something that we could monitor then and go back to stop..."

Darrell Rice: "On his erosion control plan he shows silt fence and whatever-temporary seedings around each building site during construction. That is not being applied right now. So he needs to take it one step further. We were just talking, we are getting excellent plans together on paper and this rule has only been in affect for a year. So I think that we have gained tremendous headway in getting this rule implemented. A year of education is what it has taken and I think that by next spring we will be hitting it real hard."

Commissioner Hunter: "'He' is Mr. Fritz?"

Darrell Rice: "Arthur Fritz, yes. He is the responsible party as far as the development."

Commissioner Hunter: "At this point he is not complying with the Rule Five?"

Darrell Rice: "He is not following his erosion control plan to a tee."

Commissioner Hunter: "As it was submitted to you and approved by you."

Darrell Rice: "Recommended by us."

Commissioner Hunter: "Recommended by your Board of Supervisors."

Commissioner Tuley: "As a point of clarification. This has been in effect for a year and has this not, I don't want to put words in your mouth and correct me if I am wrong but this probably isn't the only person that you are having trouble with at this point in time?"

Darrell Rice: "No."

Commissioner Tuley: "It is a learning process for everybody."

Darrell Rice: "Right. We have had some educational tours and classroom situations through last winter and this summer to help educate them in what the erosion control rule means and how to implement it."

Commissioner Hunter: "Let me ask one other question. At this point Rule Five has been in operation for slightly over a year. What percentage of the developers would you say are compiling with this, at least in the spirit of the law?"

Darrell Rice: "All of the developments have submitted erosion control plans so that part of it I think has been very successful. Now the second phase is getting it from paper onto the ground in some of the designs the engineers have probably put some things on paper that they really don't know how to implement. One of our biggest downfalls is getting the erosion control plan from the developer into the contractors' hands. Some sites we went out to inspect, the contractor hasn't even seen the erosion control plan. So they really don't know what they are suppose to do. It is an education all through and I think that we are doing a fairly decent job. By some of the developments that have made the *PRESS* I think that it has gotten a lot of peoples' attention."

Commissioner Hunter: "In your opinion, would it be feasible or would it even be a good idea for the people who actually install the erosion control devices whatever they be fences or bales of straw or whatever-that there be some type of required training? Perhaps on the part of the Department of Natural Resources?"

Commissioner Tuley: "Certification of some type."

Commissioner Hunter: "Yes, and the second part would be some type of certification so that we know that when a development starts and we approve a drainage plan and you recommend approval of the Rule Five that it will be installed correctly."

Darrell Rice: "Contractor certification is being used in some east coast states."

Commissioner Hunter: "Who is responsible for that-the training and the certification?"

Darrell Rice: "The training? In many of those states the states are responsible for all of Rule Five. And they have used five thousand square feet or larger as their erosion control requirements. So they are much more strict."

Commissioner Hunter: "They are going with five thousand square feet and we are going with five acres? That is quite a lot of difference."

Darrell Rice: "So they have their own departments that are implementing this. The county has set up their own offices to implement that part of their rule. It has been in effect since the early '70's. Contractor certification could be a way to educate the contractors. Developers could be educated through the training process too."

Commissioner Hunter: "If we wanted this and you obviously think that it is a good idea, what would be the next step? The Department of Natural Resources?"

Darrell Rice: "No, this would be something that the counties would do on their own."

Commissioner Hunter: "Could we do it locally?"

Darrell Rice: "Yes, DNR has set out the rules that require erosion control plans and that they be implemented which was passed down to them by the EPA. Then the counties can always make tougher regulations or add to that to help get the plans on the surface."

Commissioner Tuley: "Darrell, before you leave, reference this Mt Ashley. Is it your observation and recommendation that we can go ahead and release the hold on those

building permits that they have complied with?"

Darrell Rice: "Yes. As far as the erosion control plans I don't know how the drainage ways and easements all work out. Bill could probably address that. But I think that he is making an effort and it is just an educative process that has taken him a while to understand what we have asked out of the erosion control plans. So I think that he is making a fair effort at it."

Commissioner Tuley: "Thanks. Anybody else? Bill, as I look at your agenda here it says that you will ask for release of the subdivision for building permits, is that correct?"

Bill Jeffers: "Yes."

Commissioner Tuley: "I know that there is at least one interested homeowner here not counting the number of phone calls that we all have been getting from other people and since we only meet once a month I would like for a motion to be made tonight to take whatever action that the rest of the Board deems appropriate. Basically what I am asking for is a motion to rescind the holding of permits or the letter that prohibits the issuing of building permits. Basically what my concern here is that we don't have to agree with the process of how we got here, there have been points made that this wasn't correct. Those things have been corrected. Now we need to do something. If there is something that we still aren't happy with then we need to make that very clear or we need to approve releasing that hold on getting those building permits issued. We have asked two different bodies to go out and inspect it and we have had two different bodies come back and recommend that we release that hold. So barring any other reasonable explanation not to, we need to do something. Take some sort of action and that action will either be to release the hold or to find some other problems that you want addressed. Other than that I don't know what else we can do."

Commissioner Borries: "Well I think that is reasonable too. I think that this Board has taken some firm action on this particular subdivision. There have been a number of homeowners and other subdivisions particularly the Brookview folks who have expressed a lot of concern. We have to be very cautious with what we do in this matter particularly as more development occurs all the time in the county. Things change and I am reminded of a comment that Mr. Bill Rucklehaus who was here as a CEO in Evansville this past month happened to mention, that we may be likely to see not less government but more government, and frankly that is really exactly what is going on here. This is much more government in relation to us looking at these drainage plans and deciding here what has to be done. I don't know either what else can be done here. I have expressed some concerns about the banks on this pond. At this point there has been testimony from others that say it will work. What happens is we just don't have an inspection process. Either Mr. Jeffers or someone from the County Engineer's office or Mr. Rice, someone needs to inspect-continue to inspect this drainage or this subdivision to see if this drainage plan is going to work. And if it doesn't we need to take immediate action to make sure that it is going to work. That is that only other thing that I can think of. It seems that if the monitoring process or the inspection process is where we always begin to run into trouble because we have done about as much as we can on this. We have other representatives that are now saying that it will work."

Commissioner Hunter: "I will make a motion. There are two separate issues here as far as I am concerned. I will make a motion that we release, accept this modified drainage plan based on the recommendations of Mr. Jeffers of the Surveyor's office and Mr. Rice from the Soil Conservation Service and let the developer and the homebuilders precede as need be."

Commissioner Tuley: "That is your motion?"

Commissioner Hunter: "That is my motion. My first one."

Seconded by Commissioner Borries. So ordered by Commissioner Tuley.

Commissioner Hunter: "My second motion is this body makes decisions based on recommendations from the Surveyor's office, the Soil Conservation Service and we have a degree of liability. At this point the land surveyor whose stamp appears on the drainage plans that we have seen on Mt Ashley has yet to appear. Mr. Biggerstaff, he has been asked to attend Area Plan Commission meetings and he has for one reason or other declined. He has been asked to attend Drainage Board meetings and per the letter I just read he has declined to appear. According to Mr. Biggerstaff, Mr. John Leffel who is the land surveyor and whose stamp appears on the plans and on the letters has not been on the site at any time. I have a real problem with this body approving plans and accepting the word of a person who has not yet been on the site. I am going along with this one tonight because it has been ongoing and we have two groups of people here who say, 'yes, it will work' and we will just have to wait and see. I don't feel that I can vote on any other major projects that Mr. Leffel puts his seal on unless Mr. Leffel makes a presentation to this Board. Now I don't know if that is in the form of a motion but it is in the form of a statement. I feel that we are assuming some liability here that could come home later on and create some major problems for us."

Commissioner Tuley: "The only reason that I had told him last week to have Mr. Leffel here and then I got the letter<sup>6</sup> and he called right before I came into this meeting, since it was not a new plan, there weren't going to be any representatives and I said that would be fine tonight. I served notice on him too that I can't speak for the Board but I am not willing to accept anymore presentations by his firm without that licensed individual being here. Just like everybody else makes presentations."

Commissioner Hunter: "Whoever's name appears on that, they need to be at this Board to make a presentation and I will go on record now saying that unless that happens I will vote 'No'."

Commissioner Borries: "I think that you are right. You wouldn't ask a lawyer to sign something that he or she hadn't seen or said was a matter of law. It seems to be an attempt at some way or other to downgrade the official license of a licensed land surveyor. I think that you are exactly right that if this Board must pass judgement over something that is stated to be legal and therefore correct and therefore according to the statutes of the state of Indiana then that is one thing. If there is some kind of attempt going on here to end run this process and get around it and demean the whole process by using someone else's stamps who has said on public record that they have not actually even seen the division then that is another thing. I certainly would concur with what you say."

Commissioner Hunter: "I think it behooves this Board to explore all avenues because we try to make the best decisions that we can possibly make with the information that we have available. I am not sure that we have adequate information when the person's whose signature appears on here has not been on the site."

Commissioner Borries: "We have had more than enough information on this one so that is probably why I would move forward. I can't recall many of them that I have seen quite like this one. Mr. Morley is here, a registered land surveyor. Maybe he might want to discuss this."

Jim Morley: "I would like to speak to Mr. Hunter's motion. I support your plan. There may have been at times in the past representatives from my office come before the Drainage Board who were not themselves the registered person signing off on it but I don't see that as a problem and I see it as perhaps the only way that you can put a stop

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<sup>6</sup>Copy of letter to Pat Tuley from John H. Leffel dated 11-21-93 include with the 11-22-93 minutes.

to what is essentially an illegal operation. And that is what is going on in this part of the state. It has been going on in this county. It has been going on in Warrick County. The only way for you to put a stop to it is to simply say that you will not hear presentations on drainage plans or design plans by persons other than the registered person who is responsible for them. I certainly support that and I can make those adjustments within my office. I think that it would not hurt to send a letter so that someone won't say that they didn't know about that new procedure. It is certainly within your purview to request that these plans that are being certified be presented by the person who holds that registration."

Commissioner Hunter: "Let me ask you a question Mr. Morley. You take the stamping of your name on a document as pretty important?"

Jim Morley: "I have a larger firm and with a larger firm I have liability. I know I have liability. They will come after me. Certain other loose..."

Commissioner Hunter: "My next question will be, do the professional engineers and the land surveyors-is there a professional organization that could deal with this sort of issue?"

Jim Morley: "No. It is the Indiana Registration Board and the particular problem that is involved here is that the Registration Board is here to regulate those who already have a license and in order to do anything about-for instance if you feel that you have a plan here that Mr. Leffel has not properly followed his duties and in fact obviously has not. How could he certify to any plan that he has not seen the site? Then you would file with the Indiana Registration Board, a complaint. It would be investigated. That is a very time consuming process. The whole procedure is difficult, it involves time and expense and hearings in Indianapolis. The bottom line is, it is probably not worth the trouble, you can solve it right here in front of your Board and let some more seriously aggrieved party go after the individuals who are responsible for it. But at least you could put a stop to it right here in front of your Board."

Commissioner Borries: "Isn't there a difference also though, that if you were not here in person and you send a representative who is actually an employee of yours-it would be beyond the stretch of my imagination that someone would come here on their own speaking for you if they did not have your letterhead and this person wasn't a verified employee. It is my understanding in this case which is different, is that this Mr. Leffel is not a actual owner or he is not the operator of this Associated Land Surveyors and Civil Engineers Inc. is he?"

Jim Morley: "No."

(inaudible remarks)

Commissioner Borries: "He isn't an employee of this?"

Jim Morley: "No."

Commissioner Borries: "In fact, the Associated Land Surveyors and Civil Engineers Inc., there may not be any land surveyor licenses nor any civil engineer licenses. Therefore the whole thing is illegal."

Jim Morley: "Therefore they can not function according to the laws of the State of Indiana."

Commissioner Borries: "Exactly. You can't operate that way."

Jim Morley: "I know that registration law and they are not operating legally."

Commissioner Borries: "I would only amend-I think that it is not possible for Jim Morley to make all meetings at all times particularly if he has something on the City Council or there is a conflict. As long as your stamp is on it and someone is saying, who is an employee of yours, therefore you have given them approval to come here to state your case and to present your case. I can go with that. What I can't go with is an operation where somebody-this guy is an independent contractor selling his stamp for a fee."

Jim Morley: "That is exactly what is going on."

Commissioner Borries: "Exactly. That is exactly what it is. That is the wrong part about it."

Commissioner Tuley: "Before we move off Mt Ashley I am leaving early in the morning to go to Indianapolis so I have drafted a letter for BJ to type to send to Roger Lehman to release the hold on the building permits in the morning giving her authorization to use my stamp as opposed to my signature being on the letter."

Commissioner Borries: "She is an employee of the county. You have stated on the record that you are giving her permission. That is a different thing."

Bill Jeffers: "I am sorry that I didn't have this suggestion or comment before you made your motion but a motion can always be amended. If you really want to follow up or you really want some way to hold this particular developer to finishing everything all the way out you might consider releasing everything but lot nine (9) which has the detention basin on it. Is that correct, lot nine (9)? That way he would remain the owner of the detention basin and he would then remain responsible for keeping it in operating order until he was allowed to sell it. That way that would take care of Mr. Rice's concern that silt from uphill is going to fill the basin. Who is going to remove it? The owner. That would take into account any downstream concerns that the neighboring subdivision might have. Maybe we could come up with a way to correct some of this 'geysering' of the water out of the downstream inlets; we might come up with something. Under the current ordinance the owner of the lot is responsible for the maintenance of the basin."

Commissioner Borries: "That is reasonable. I will amend my motion."

Commissioner Hunter: "You are willing to release everything except lot nine (9) and lot nine (9) will remain the responsibility of the owner until the completion of the subdivision?"

Commissioner Borries: "No, until that lot nine (9) is sold."

Attorney Alan Kissinger: "If I may, if we can make the motion in the form that lot nine (9) or whatever lot that the detention basin lies on assuming that it is lot nine (9) will be the last lot sold on the subdivision."

Commissioner Tuley: "I will change my letter to say with the exception of lot nine (9) or whichever lot the basin is on."

Bill Jeffers: "I can check that in the morning so that your letter says the correct lot and then call BJ."

Commissioner Hunter: "I will second the amended motion."

So ordered by Commissioner Tuley.

Commissioner Borries: "The only thing that I would say about lot nine (9) is that I would hope that whoever that potential buyer is we need to also make sure that we have some kind of letter or official communication attached making sure that person or owner knows

that they are responsible for that, if and when that lot is sold."

Commissioner Hunter: "Is it suppose to be on the plat?"

Commissioner Borries: "It is suppose to be on the plat. That's right."

RE: DETENTION BASIN-HENZE ROAD (JOE ELPERS SUBDIVISION)

Bill Jeffers: "Gary Jarboe called President Tuley about a problem he had out on Henze Road. Basically what you have got there is an agricultural styled detention basin mostly within the road right-of-way for Henze Road. It is doing it's job in detaining water but the spillway notch is at the same elevation as the top of the pipe that you own as County Commissioners-going underneath the road. There is like a twenty-four inch (24") pipe draining everything upstream of the Joe Elpers Subdivision and a notch in the detention basin that Mr. Elpers put in place is at the same elevation as the top of your pipe. So whenever he runs full as he did over last weekend in his detention basin the water also stands full under your road. There is not a lot of cover on your pipe. There is maybe only six or eight inches of cover on top of the pipe. Most of that is asphalt and rock. So I did not see any evidence that water crossed that road however, I do not doubt for a minute Mr. Gary Jarboe's statement that water crossed the road. I just didn't see any evidence of leaves or mud on top of the road. I'm sure it got close to crossing the road because leaves and everything were right up on the shoulders. I'm also sure that it crossed his driveway because the water coming down that hill comes in a hurry and has to take a right angle turn, go under his driveway through a twelve inch (12") pipe, take another right angle turn and go under the road and the pipe that is under the road is dead full. I remember from previous employment with the County Surveyor's office that the Joe Elpers Subdivision had an erosion problem along it's back line and it was recommended to him to cure that by installing a system of detention basins and he did so. My only concern is that this particular detention basin that is causing Mr. Jarboe's alarm is installed in your right-of-way and is affecting your roadway drainage and when it runs four to five feet full if someone where to happen to skid on mud or whatever on the surface of the road or hydroplane off the road they would end up in a four or five foot deep puddle of water on your right-of-way and if they were knocked unconscious and fell forward I would imagine that four foot of water might cover their head. That is my only comment on it other than to say that Mr. Jarboe was unable to come and give you exact details. I don't doubt for a minute anything that he said but he is a fireman and he is at the hosehouse right now."

Commissioner Hunter: "I have one question. Do you have any recommendations at this point what could be done to correct this problem?"

Bill Jeffers: "Move the basin back about fifty feet and downhill and get the flowline of your pipe above the high water elevation of that small detention basin and get it out of your right-of-way."

Commissioner Hunter: "Are we talking about a tremendous amount of cost to the developer?"

Bill Jeffers: "I don't know what one of those WASCB (Water And Sediment Control Basin) costs but I think that there is someone in the audience that can give you some kind of approximation of the cost of that."

Darrell Rice: "Bill had called me earlier on this and I checked and through the Soil Conservation Service we do install practices similar to this in a lot of our projects but we will not back up water on county or highway right-of-ways. One of those sediment basins similar to that would run somewhere between twelve to fifteen hundred dollars so it is not a large expense. It could be moved downhill to where the top of the fill will not

back up water any further than the edge of your right-of-way easily."

Commissioner Hunter: "Mr. Jeffers was saying that we have considerable liability there."

Bill Jeffers: "That was just a personal opinion. That is not a legal statement."

Attorney Alan Kissinger: "As a matter of record-we have liability."

Commissioner Hunter: "If it has got four or five feet of water in it at certain times then there is definitely a liability, yes, there is no doubt about it and your point is well taken."

Commissioner Tuley: "Does this Board have the right to demand..."

Commissioner Hunter: "Doesn't it Rick? If it is impacting county property?"

Commissioner Borries: "No. I don't think. If it is on county right-of-way we can take steps to do something about it. If it is on somebody else's property I am not sure that we can. I know that we can't."

Commissioner Hunter: "If something on private property is impacting county right-of-way and creating a liability problem for us then don't we the right to ask that, that be corrected?"

Attorney Alan Kissinger: "With *some things*, but not with water."

Commissioner Hunter: "Not with water? We have to wait until..."

Bill Jeffers: "I might add then that the entire structure is within the right-of-way of Laubscher Road which is a platted part of the subdivision but never built."

Attorney Alan Kissinger: "Are you saying that the improvement that has been suggested can be made totally on county right-of-way?"

Bill Jeffers: "I guess what I am saying is that the entire structure is within platted county right-of-way, although you are only using Henze Road a part of it is within Henze Road right-of-way the rest of it is on a platted right-of-way called Laubscher Road which was never built. But remains as a platted right-of-way dedicated to the county."

Attorney Alan Kissinger: "Could we make this improvement that you are talking about this device, that you are referring to can we install that device and still remain on county right-of-way in so doing? Or are we going to have to disturb someone else's property?"

Commissioner Borries: "I think that we would have to get approval from who owns this plot of Laubscher Road that was never developed?"

Bill Jeffers: "I just assumed that it remains either dedicated to the county but not accepted and possibly remains the property of Mr. Joe Elpers."

Commissioner Borries: "If he would grant it."

Attorney Alan Kissinger: "Yes. That would be an altogether different situation."

Commissioner Borries: "If he grants it then I can see where we can take some steps to do it and he may."

Darrell Rice: "If it is on county right-of-way can't you remove it?"

Commissioner Borries: "If it is on county right-of-way. But you see what it is the road

has never been built there has been an easement dedicated on a plat as a result it has never been accepted by the county. So if he indicates that he is willing to dedicate this to the county. Then I think that we could go ahead and do it. I would prefer to have a letter on file."

Bill Jeffers: "I think that the subdivision may have been platted before there was a requirement for a drainage plan and I would like to point out that Mr. Elpers probably did this in all good intentions at the recommendation of the Drainage Board at one period of time some years ago. And he just happened to get, in my opinion, too close to the road, that is just my opinion. People across the street have driveways in the same right-of-way. I am not trying to make a bad guy out of him but it is just maybe you could just abandon the right-of-way in exchange for them moving it on down hill a little ways and then let the adjacent property owners have full use of what use to be county right-of-way that doesn't belong to them. You might make some kind of deal with them about that. That might be worth six hundred dollars (\$600.00) a piece to them to have some additional yard belonging to them rather than being a dedicated right-of-way that is never going to be used."

Commissioner Hunter: "So this doesn't get lost, what would be our next step in trying to correct this?"

Bill Jeffers: "I think that you are going to have to take it to the County Commissioners meeting. I was just asked to make a report at this meeting."

Commissioner Borries: "We need to get a subdivision plot plan to see what can be done."

Bill Jeffers: "I would be happy to forward that to Mr. Stoll, your engineer."

Commissioner Tuley: "You are probably going to get a call from Mr. Jarboe tomorrow because I told him that I was going to be out of town."

Bill Jeffers: "He was very explicit in his description of what was going on out there and when I went out there and looked at it I immediately saw what he was talking about it."

Commissioner Hunter: "May I suggest that the plot plan if we ask Mr. Jeffers to convey that to the County Engineer and possibly be put on the Commission agenda for next Monday night?"

Commissioner Tuley: "Fine."

Commissioner Hunter: "Well I think that this is serious enough that we need to move..."

Commissioner Tuley: "Yes, he has got a problem and he is going to call and want to know what we are going to do about it."

Commissioner Hunter: "Yes, and I think that we ought to do something about it."

Commissioner Tuley: "Is that in the form of a motion?"

Commissioner Hunter: "It is the form of a motion."

Commissioner Borries: "Second."

Commissioner Tuley: "So ordered."

RE: PRUITT ROAD-REQUEST FOR NEW PIPE

Bill Jeffers: "One item that is not on your agenda. Darvin Elpers on Pruitt Road called and asked a favor that I remind my boss and anyone at the Drainage Board he would like a pipe near his driveway crossing Pruitt Road enlarged substantially so that Pruitt Road doesn't go underwater and get silted over. He has talked to Mr. Morpew and he has talked to Mr. Brenner and he just wanted to put in a friendly reminder."

RE: DISSCUSSION OF DRAINAGE ORDINANCE-DRAFT COPY II

Bill Jeffers: "You may have seen a copy that initially was put out last week. If any of you have any comments written on that copy I would be happy to take it back now because I have a new copy that some things have been changed at the suggestion of some of the engineers that I distributed it to and after reviewing how it mesh all this in with Area Plan Commission's schedule of events. There were things in the Model Ordinance from Purdue that will not go in our county simply because, for example Area Plan Commission demands that the subdivision on their monthly Wednesday agenda have prior approval from your board before it comes to them. So basically what that gives us is they have a site review committee on the second Tuesday of the month about 8-10 working days later your board meets as the Drainage Board and has to approve that and then about 6-8 working days later it goes in front of the Area Plan Commission on the first Wednesday of the month that isn't a lot of time. So in that instance we are asking that they give us a preliminary drainage plan to bring to you with as much detail as humanly possible at that time. We will give it as good as a review as we can possibly give it and bring it to you at your monthly meeting and then ask that they come back before the Board of County Commissioners under this purposed ordinance with a final street and drainage plan. Showing all the streets, inlets, ditches, basins with erosion control as a separate sheet and I wanted to point that out that came up during this meeting. We are asking for a separate sheet on erosion control that is part of the street plans. When the contractor gets the street plans and he is looking through there to see how to build the streets one of the top sheets is going to be the erosion control plan. It has to be in place before that street grading starts. So any grubbing and siltation and erosion from working the streets is trapped before it gets down and fills up neighboring property. Another item that we covered more intensely...

(break due to changing sides of tape)

...revised edition which is still just a draft. Tonight you had a concern about under whose direct supervision these plans are prepared. And in here it says it has to be by a land surveyor or civil engineer regularly engaged in drainage design, registered to practice in the State of Indiana. And under whose direct supervision the information was collected and crunched through the computer. There is still a whole lot of room on these pages for red marks and suggestions. I haven't even put it through spell check yet so I know that there is a lot of misspellings. Some pages weren't copied very well so if you need a page recopied I would be happy to do that."

Commissioner Hunter: "Did you say that various engineers and people in the community who would have an interest in this hadn't had a chance to look at this?"

Commissioner Tuley: "Jim you have working with this haven't you?"

Jim Morley: "Yes, I read through the fifty-one pages."

Bill Jeffers: "The way you can tell the difference is, the revised one has no page numbers. There are now sixty-one pages but that is because I put more space in here for you to write your comments. I eliminated a lot of things and yes, Jim Morley went all the way through this and a whole lot of this stuff has been changed."

Commissioner Borries: "What did you eliminate?"

Bill Jeffers: "There was some things from Purdue."

Jim Morley: "One of the things that we talked about was, if you have modified there is, following a requirement for the preparation by a person regularly engaged in hydrologic engineering--there was in the Purdue Model Ordinance a statement about a certificate from the engineer obligation to inspect and what the State of Indiana has done on regular building permits is they have place the obligation with the developer. I, having not interest in the property, could be fired tomorrow and therefore I can't sign on to something with an obligation to inspect. The obligation transfers over and you set up an issue where the developer is obligated to provide inspection by an engineer and I might have a falling out with the developer then he would immediately have to, with that kind of obligation, the developer would immediately have to engage another professional to carry out that inspection so that was one of the things that we talked about for modification."

Commissioner Borries: "So they would still have to get the inspection done but..."

Jim Morley: "Right. We need a commitment from the developer the owner of the project that carries with the project so that he doesn't just give you lip service right in here and walk out and say, I really don't need you Mr. Engineer. That is one of the things that..."

Commissioner Borries: "So you are aware of the changes here that were made."

Jim Morley: "No, I haven't seen the new draft. I would like to speak just briefly to this. I would suggest that what the Drainage Board might do on this is distribute copies of this to the interested parties that you can think of and along with it let them know that at the next Drainage Board meeting that you wish to have their responses of review in writing so that you can receive them all by your next meeting. And then at the following meeting which would be in January you could perhaps adopt the ordinance. Many of the things involved in here involve some rather complex issues. The proper values of numbers. The proper formula. The proper relationship and another issue that has to be dealt with is the jurisdictional issue. I think perhaps I understand from the Plan Commission Director--she was going to write you a letter--saying that her office was not really set up to be the office capable of doing the review and enforcing this ordinance. Surely she also said she supported an ordinance."

Commissioner Borries: "Oh yes."

Jim Morley: "Because it has been a problem for a long time. We have it now under subdivisions but we have no control whatsoever over shopping centers and various other commercial and industrial developments or various other land moving that goes on within the county because we don't have an ordinance to cover them. So they can go out and build a new truck terminal warehouse and run every bit of off into a ditch with a little twelve inch pipe in it and there is no enforcement. So this goes a long way toward sewing that up. Most of it is from the Model Ordinance but that's kind of what I think. Jurisdictional somehow it would seem that the logical location for that would be where you have expertise in hydrologics and hydrology which would either be in the County Surveyor's office or the County Engineer's office. I think to be reasonable perhaps some of the things in here about site review committee I think that any time anybody presents a hydrologics plan it takes study. It takes hours of checking the computations. Checking the numbers. You don't walk into a meeting like yours tonight and hear a presentation and say, 'Yeah it sounds alright'. You can't visually listen to numbers and know that they are right. You have to sit down and do the computations to confirm that they are right. Therefore perhaps on these small parcels such as the single size home where it is not in a subdivision with an already previously approved drainage plan you might consider authorizing someone to act on your behalf and then should there be a dispute arise they could appeal it and come to a Drainage Board meeting since you only meet once a month. Then once you reach that larger parcel of ground (the ten thousand square

feet or so) as far as affected area that, that does come before your regular meetings. You need somehow to be able to stop a project if they do not comply. Whether that involves your Building Commissioner, you have given authority to 'red tag' building and stop construction perhaps what you did before on Mt. Ashley which is a very powerful tool of saying there will be no more building permits issued until it complies. This does give people an opportunity. Some of these things are not instance fixes, you know it may take weeks to get the dozers out and do all of the right things that should have been done. Another thing is that perhaps you would want to consider that there be a bond or a letter of credit associated with drainage improvements and you treat it just like we treat the other entities."

Bill Jeffers: "I have stuck that in there."

Jim Morley: "Good. Currently we place a bond up for sanitary sewers and place a bond up for streets and sidewalks. Because they don't always correspond with streets and sidewalks and because the erosion control plan is an entity that is suppose to happen first, perhaps you ought to suggest that the cost estimate for erosion control and drainage be handled as a separate line item and be bonded separately that way you could release the other bonds for the roads and everything and continue to hold at least a portion of the bond for drainage improvements until the grass is growing and it doesn't have any ruts in it and until you are happy."

Commissioner Borries: "Does this address a hundred year event? Are we changing?"

Bill Jeffers: "It did at first but now after talking to Keith Poff and Jim Morley who are both down at Morley and Associates. We have decided that we have already allowed a lot of twenty-five year events up stream of what is going to be built now and we are going to stick with what your ordinance has been so far and that is designing for a twenty-five year event up to one square mile."

Commissioner Borries: "What does the Purdue Model call for? One hundred?"

Bill Jeffers: "Yes, but they leave it blank and they say fill in the return storm that you wish and then it lists three counties, Tippecanoe, and two others that are currently using one hundred year."

Commissioner Borries: "What does Warrick use?"

Bill Jeffers: "I don't think that Warrick has a drainage ordinance. Newburgh has one."

Commissioner Borries: "The county of Warrick does not have one?"

Bill Jeffers: "No because the county engineer called us the other day and wanted a copy of this and anything that we have. Because they are asking him to revise their's now."

Commissioner Borries: "I wonder why they didn't call Newburgh?"

Jim Morley: "I think that one of the things that we talked about and I don't know if it is completely taken care of in here, I know that Bill has had a lot to work on in this last week. But one of the things that consideration was if we had been approving drainage plans and doing a twenty-five year release rate and then we start all the new plans have to have a ten year release rate it does some strange things with your ponds downstream which is taken a twenty-five year outfall from a lake and then releasing it in a ten year outfall it does some things to sequence that it causes some problems. It might not hurt us to have capacity in that second lake for a hundred year storm which is a bit of a safety factor as you know most of the stuff that we turn in to you has a twenty-five storm and then we will have twenty percent over capacity. We do it, not by upping the years but by showing you that we are providing allowance for some extra silt and almost

everything that we show you, we show you what is required and then what is prepared. We will give you extra volume. It wouldn't hurt us that much perhaps to up the return period for holding water from the twenty-five year to a larger one. But the release rate could cause us-if we go from the ten to the twenty-five-it could cause us some little problems. That is certainly something that needs to be discussed and talked about so I have mixed emotions both ways."

Commissioner Borries: "I guess that if we are going to make some changes and we are going to do this to reflect the changes in the development in the county as well as insure for a better plan for the future that is the only reason that I bring it up."

Jim Morley: "It is a misnomer of course, to simply say that it is the one hundred year event that only occurs once every one hundred years. It is the event that has a one percent of chance of occurring every year. One percent, it may be this year. We got one percent of it this year. You can get a one percent next year too. So it is a statistical number not something that only comes around once every hundred years."

Bill Jeffers: "And by percentage of rainfall it is not that much greater of an event than a twenty-five year event which has a four percent chance of happening this year. So it is deceiving to tell people that it is only going to happen once every twenty-five or once every one hundred years. Because you can have an isolated twenty-five year event in Petersburg Place it seems to happen frequently right there."

Commissioner Borries: "What about the thing on enforcement? Are you saying that in here it says that Area Plan is to be the..."

(inaudible remarks)

Commissioner Borries: "Where are they in here? Who is suppose to enforce this? You are saying that they have some concerns that they wouldn't be able to..."

Commissioner Tuley: "I don't think that they have the technical expertise to, is what she explained to me. The letter that she told you about-I haven't got yet-but she did talk to me on the phone the other day and that was the one real concern."

Bill Jeffers: "What I have here is a type 'A' permit which is over the counter. You just go in to Area Plan with your site plan for one, two or three unit or garage or swimming pool-whatever. You are going to have people come in and just want to build a swimming pool. They come straight to Area Plan Commission and over the counter. They are not doing hardly anything and you are going to give under this, Area Plan Commission is empowered to give them an over the counter drainage permit and send them right straight to Roger Lehman if their plan shows that there is not going to be off site affect they go ahead and build. Number two, drainage permit type 'B'-quick start permit this thing goes to site review committee which meets once a week instead of once a month. If they don't have any problems with it after John Stoll and Bill Jeffers or whoever else looks at it. If we don't see any problems right off the bat they could get a permit right then and there. Once it hits one acre of disturbed ground it kicks into Rule 5. Instead of five acres, it is going to kick in at one acre or more. Ten thousand square feet of impervious surface. Such as new roof, paved lot whatever. If you have ten thousand square feet of impervious surface and/or one acre or more of disturbed ground kicks right in and you have to come in here. The fourth type of permit would be to change or add to a previous Ok'd plan. Anything that you want to do anywhere, if you don't come in here and get a permit at one of those three types of permits just like the one you got before-and we find out that you stuck a pipe into a drainage easement or you put a garage across a line, or you got a driveway across a drainage easement or anything without a permit. Then you get a ten day notice to take it out. If ten days after the notice has been mailed they haven't started removing it and if thirty days after the notice has been mailed, they haven't finished moving it, then you contract with a private contractor to have it removed

same as under the State Statues governing legal drains and you go out there and rip it out. And you attach it to their next tax bill. But I would like to say that all this is simply a draft and I never intended to bring something to you and have you come back two or three weeks from now and adopt it. This first of all has to go to Alan Kissinger to be approved as a legal form to see what I have left out. There is a lot of stuff that I haven't attached yet because it is still being worked over in the computer. Basically what this represents is several days of typing to get this on the hard drive. Now I am going to put it on a disk for distribution and put it into hard copy like this for distribution and encourage all the comment that I can possibly get."

Commissioner Hunter: "Who have you sent to for comment? I think that it is really critical."

Bill Jeffers: "Mr. Morley, I just gave Darrell Rice one and I gave you one."

Commissioner Tuley: "Bill, do you want to at Jim's recommendation do you want to since you have this readily available to you take care of sending this to the developers that we normally deal with and the engineers that we normally deal with?"

Bill Jeffers: "Sure. Anybody that wants to see one. You are going to get a variety of opinions."

Commissioner Borries: "When she talks about the county ordinance I guess that you incorporated everything that is in this current one into this new one?"

Bill Jeffers: "Not necessarily. Section Twenty-one; Repealer. What would this ordinance repeal? I've got a comment there. Somewhere else I say, something like that and it is basically directed to-do you want to still do this Home Owners Association Plan A: Fifty cents a lineal foot. Plan B...do you still want to do that?"

Commissioner Tuley: "Yes. The reason is this perpetual maintenance fund. If we decide to go that method, there has to be a way to properly account for that money by having those checks presented to you and you present them to the Drainage Board. There are all kinds of problems. There is a check for fifty-two dollars and fifty cents (\$52.50) right now. We don't have any idea what subdivision-nothing. That is just one of the things that we..."

Bill Jeffers: "I see several problems with that particular ordinance. The way it was drafted. Who drafted it. How it was adopted. Everything about it."

Commissioner Hunter: "I agree with you."

Bill Jeffers: "Who it benefits. I have problems with all of it. Again, they are personal opinions. But I will give you a real good example; today you had a matter come before you as Commissioners about a driveway and it has reduced the effective size of that easement to three feet and you want to know what to do about it and the developer couldn't tell you how the maintenance was going to take place. If it was so restricted. He did not know if he put in fifty cents a lineal foot. So if that thing collapsed how would we get a backhoe in three feet to fix it for him with the fifty cents a foot. And you pull that plat out and it says, he chose Homeowners Association Plan A. So in fact the Homeowners Association, which has never been formed, is responsible for anything that happens in that easement outside the right-of-way that was accepted by the County."

Commissioner Tuley: "The Association was never formed, therefore there is no money or nothing else."

Bill Jeffers: "The last thing I heard was no one knew how it was suppose to be taken care of and the developer didn't know if had given fifty cents a foot or formed a

Homeowners Association and right on the plat it says he chose Plan A, Homeowners Association. So there is no follow up and that is what you have been talking about all night."

Commissioner Borries: "That needs to be looked into. If we can come up with a better model."

Commissioner Tuley: "Whatever we decide to do there has to be, for their sake..."

Bill Jeffers: "The only model available, really, was Purdue. Newburgh's I know you wouldn't want to go with it. By the time you got the comments back from all the engineers. However, there are some things from Newburgh's in here, like the permit process. Which is not in the Purdue Model and some other stuff. But it is a good starting place."

(inaudible remarks)

Commissioner Borries: "What you need to do Sunny, is, and this will help us when you have questions like that if you would type up a list for us to consider and then copy that to Mr. Jeffers and any concerned individual so that we can take some steps to make sure that it is in the new ordinance. It is a valid point. Mr. President I would move at this time that, we will call this Revision Two, submitted on 11-22-93, be taken under advisement that copies be distributed to interested developers, licensed surveyors, Home Builders Association in Vanderburgh County-we are going to have to have a letter-that any comments be made in writing and be due by no later than December 28th. That those then be taken under advisement and that a final vote could be taken at the first meeting in 1994."

Commissioner Hunter: "I will second that."

So ordered by President Tuley.

Commissioner Tuley: "Bill, I won't be able to get this done by tomorrow, this letter to accompany what Commissioner Borries had just asked for. I will get with you Wednesday and give it to you. You don't have to be here. As long as it gets to your office so it can get out. Because if we are giving them until December 28, we need to get it to them."

Bill Jeffers: "We need to mail it out before Thanksgiving so that they have a full month to look at it."

Commissioner Tuley: "So I will be in Wednesday with the letter."

Commissioner Borries: "And then we will direct our recording secretary again, as items come up that you have questions concerning this that we ask for comments from you regarding anything that we need to put into this new ordinance."

RE: INDIANA WATER RESOURCES STUDY COMMITTEE HEARING  
(JIM DANIELS)

Commissioner Tuley: "You were approached tonight by Jim Daniels in reference to this meeting that is taking place tomorrow. Do you want to do anything?"

Commissioner Borries: "I don't know what to do. I never saw anything written down as to what kind of meeting this was or what is being discussed but why don't you give us what you..."

Commissioner Tuley: "Here is the handwritten note that I got from Jim. 'The hearing will be held tomorrow in Room 431, by the Indiana Water Resources Study Committee, concerning drainage activities and how they are regulated. The meetings were initiated by a surveyor from Huntington County who is opposed to any environmental regulation of Drainage Boards and County Surveyors. Drainage Boards should not be exempt from regulation.' I have no idea what this is reference to."

Bill Jeffers: "There is a county surveyor from Huntington County. Who has been sending letters to all county surveyors and maybe other folks encouraging them to support him by calling their Senators and Legislators to prevent certain legislation or to rescind certain legislation that gives the Department of Natural Resources certain governmental powers to come in to counties and cause certain things to happen through the Drainage Board or prevent the Drainage Board from carrying out certain activities in the maintenance of legal drains and he has sent us a letter weekly. I hope that Bob doesn't read the minutes, but he has put that letter on my desk weekly to respond to and I am real gun-shy to shoot off letters that will cause government agencies that aren't here today to come looking at what we might be trying to prevent them from looking at in the future."

Commissioner Hunter: "I guess when Jim explained that letter to me I was a little concerned that Drainage Board be exempt from any environmental controls that's..."

Bill Jeffers: "See what is going on with Anderson, twenty miles upstream they can come in and tell us what to do, we call it maintenance they call it destroying habitat. We call it keeping water in the waterways they call it destroying fish breeding ponds."

Commissioner Tuley: "Was there a reasonable explanation why surveyors are being contacted but Commissioners who make up the Drainage Board are not being notified or contacted about these meetings? Or what they are trying to do?"

Bill Jeffers: "Under State Statute the Surveyor has a heck of a lot more power than what the Surveyor in this county exercises with regard to the maintenance of legal drains. We have ~~always~~ brought you everything we could bring you. Right up front. For example, we can pay up to eight-five percent of all claims without ever showing you anything. Only ~~the last~~ fifteen percent do we have to show you. But we have never done that. There is a lot of power to be exercised by certain County Surveyors some of them are possibly jealous of that power. I don't know. I am not judging that guy. I think I know where he is coming from."

Commissioner Hunter: "I would certainly like to know more about it."

Commissioner Tuley: "Here is the guy that is Chairman of it. Senator Harold Wheeler."

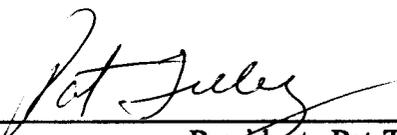
Commissioner Borries: "It can't work. (inaudible). On the other hand if he has got some legitimate things. Let's just wait and see what Jim (Daniels) brings back to us."

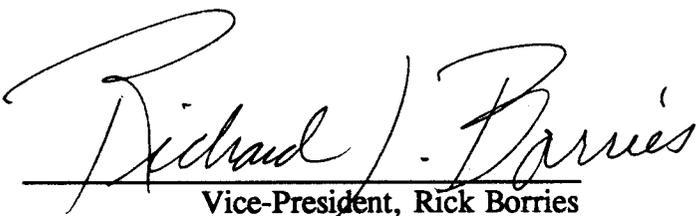
Commissioner Tuley: "That is fine with me."

There being no further business, the meeting was adjourned at 8:50 p.m.

PRESENT:

President Pat Tuley  
Vice-President Rick Borries  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Darrell Rice, Soil Conservation Service  
John Stoll, County Engineer  
Jim Morley  
Bill Nicholson  
Ken Jones  
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President, Pat Tuley

  
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Vice-President, Rick Borries

  
\_\_\_\_\_  
Member, Don Hunter

TO: THE VANDERBURGH COUNTY DRAINAGE BOARD  
FROM: THE VANDERBURGH COUNTY SURVEYOR  
RE: BUILDERS SQUARE AT CROSS POINTE SUB:  
A 15 ACRE SITE ADJACENT TO NURRENBERN DITCH

22 November 1993

The County Surveyor's Office has reviewed the drainage plans and attached calculations and details submitted by Mr. Mike Clark of Winkleman and Associates, Inc., of Dallas, Texas, on behalf of their client CDC Real Estate Corporation, also of Dallas, Texas, for a 15 acre site within Cross Pointe Subdivision located on the North side of Lloyd Expressway near its interchange with I-164.

Winkleman's plan is a request to change a drainage plan approved for Cross Pointe by your board in 1989. The need for the change in layout is to allow Builders Square to occupy a 15 acre site previously occupied by several smaller lots.

Our office concludes that the new plan substantially conforms to the intent of the approved plan with regard to the detention and controlled discharge of the storm water from a twenty-five year return period storm at the 15 acre site; and, therefore, the County Surveyor recommends your approval of the drainage plan for Builders Square at Cross Point with the following stipulations:

1. Change the details of the spillway and earth berm elevation shown on Sheet 4 to correct a minor error of the draftsman with regard to Pond A and Pond B figures being transposed.
2. CDC must acquire an easement from Regency Corp. for the pipe and open ditch from the N.E. corner of the 15 acre site, thence into Nurrenbern Ditch to serve off-site facilities.
3. Winkleman must include detailed drawings and instructions for the installation of the orifice plates designed for the pipe leaving the three detention basins; and the designs and instructions must be included in the detailed plans and instructions to the contractor who will build the ponds.

Again, the recommendation is to approve with the above stipulations.

RWB/wrj

F-1



FALL MOW

CERTIFICATION OF PAYMENT

By this instrument, I, X Terry R. Johnson, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
KOLA Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE  
\_\_\_\_\_  
\_\_\_\_\_;

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: KOLA

CONTRACT # 23A-025

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: SEPT 20, 1993 INSPECTED ON: SEPT 21, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

T. W. [Signature]  
Department Head

9-27-93  
(date)





CERTIFICATION OF PAYMENT

By this instrument, I, X Terry R. Johnson, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
HARPER Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None  
\_\_\_\_\_  
\_\_\_\_\_;

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: HARPER

CONTRACT # 234-017

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: SEPT 21, 1993 INSPECTED ON: SEPT 21, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ed W. Bremer  
Department Head

9-22-93  
(date)











SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM IS ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

FALL MOW

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON for  annual -- [ ] additional maintenance to SONNTAGG-STEVEN'S Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV 5, 1993, and was inspected by our staff on NOV 8, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-17-93  
(date)

Additional comments:

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY P. JOHNSON for  annual --  additional maintenance to HENRY Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 3, 1993, and was inspected by our staff on Nov. 8, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-17-93  
(date)

Additional comments:

F-2





CERTIFICATION OF PAYMENT

By this instrument, I, x Daniel W. Chmura, representing:  
Midler Spray Service, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:

\_\_\_\_\_ Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None

\_\_\_\_\_ ;  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: EAST SIDE URBAN NORTH HALF

CONTRACT # 234-015

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: 7-29-93 INSPECTED ON: 8-24-93

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Paul W. Bunn  
Department Head

9-13-93  
(date)





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: DANIEL J. PAUL for  annual -- [ ] additional maintenance to WALLEMMYER Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 11-9, 1992, and was inspected by our staff on 11-10, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brannan  
Robert W. Brannan, Vanderburgh County Surveyor

11-17-93  
(date)

Additional comments:

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: DANIEL J. PAUL for  annual -- [ ] additional maintenance to WALLENMEYER Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 11-9, 1992, and was inspected by our staff on 11-10, 1992, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-17-92  
(date)

Additional comments:





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM 225 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: JOHN F. MAURER for  annual -- [ ] additional maintenance to HOPKINS Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV. 11, 1993, and was inspected by our staff on NOV. 16, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Branner  
Robert W. Branner, Vanderburgh County Surveyor

11-17-93  
(date)

Additional comments:

F-2

Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF  
Vendor Name John Maurer  
Vendor No. 1483

\$ 250.70  
ON ACCOUNT OF APPROPRIATION  
Dept. Fund Name Hoeftling Ditch  
Account No. 234-020

Allowed \_\_\_\_\_ 19\_\_\_\_  
In the sum of \$ 2  
Richard J. Borius  
Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

11-17-93  
[Signature]  
Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-F.M-20-45</u>		<u>11-11-93</u>	<u>234-020</u>	<u>\$ 250.70</u>

TOTAL \$ 250.70

FS



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and:

JOHN F. MAURER for  annual -- [ ] additional  
maintenance to HOFFLING Ditch,

a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 11, 1993, and was inspected by our staff on Nov 16, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-17-93  
(date)

Additional comments:

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 233 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and:

Regene C. Redeney for  annual --  additional maintenance to Singh Dick.

a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 18, 1993, and was inspected by our staff on Nov 22, 1993 and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-22-93  
(date)

Additional comments:

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
RCCM ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Regene C. Redeney for  annual --  additional maintenance to Singlet Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 18, 1993, and was inspected by our staff on Nov 22, 1993 and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-22-93  
(date)

Additional comments:

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM IS ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: ALBERT J. STECKLER for  annual -- [ ] additional maintenance to BAFAL Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 16, 1993, and was inspected by our staff on Nov. 18, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

11-19-93  
(date)

---

Additional comments:

---





F-2

ADDITIONAL COMMENTS:

11-19-93  
(CASE)

Robert W. Brenner, Vanderburgh County Surveyor

*Robert W. Brenner*

Respectfully submitted by:

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: ALBERT J. STECKLER for  annual -- [ ] additional maintenance to BARTON Drainage District, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 16, 1993, and was inspected by our staff on Nov. 18, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

TO: The Vanderburgh County Drainage Board

SURVEYOR'S REPORT

SURVEYOR'S OFFICE  
 VANDERBURGH COUNTY  
 ROOM 23 ADMINISTRATION BUILDING  
 CIVIC CENTER COMPLEX  
 EVANSVILLE, INDIANA 47713





United States  
Department of  
Agriculture

Soil  
Conservation  
Service

November 22, 1993

To: Pat Tuley, President  
Vanderburgh County Drainage Board  
Room 305 City/County Building  
Evansville, IN 47708

From: Darrell L Rice  
District Conservationist  
Soil Conservation Service, USDA  
12445 Hwy 41 N  
Evansville, IN 47711

I completed a site inspection of Mt. Ashley on 11-22-93.

All drainage and erosion control practices are in place and appear to be functioning properly.

Mr. Fritz has the individual lot owners using designated gravel drives which is a commendable item.

Additional pressure needs to be applied to current lot owners and future buyers to install the planned erosion control around building sites. This erosion control will prevent the detention/retention pond from collecting unwanted silt.

cc: Aaron Biggerstaff  
Authur Fritz  
Bill Jeffers



The Soil Conservation Service  
is an agency of the  
Department of Agriculture

AN EQUAL OPPORTUNITY EMPLOYER

F-3

ASSOCIATED LAND SURVEYORS  
AND CIVIL ENGINEERS, INC.

1270 MAXWELL AVE. TEL. (812) 464-3031  
EVANSVILLE, INDIANA 47711

November 8, 1993

Vanderburgh County Drainage Board  
City-County Administration Bldg  
Evansville, Indiana  
Attn: Pat Tuley, President

Re: Mt. Ashley

Dear Pat;

With regards to the above mentioned project, Mr. Fritz has initiated work, under the supervision of the office, to comply with Mr. Jeffers' memorandum of November 2, 1993.

I visited the site this morning and noticed Mr. Fritz has corrected several of the concerns; #2, the raw dirt question, is complete; #3A and B are being completed; #1 has been addressed at the last meeting (it is still within the easement); #4 is not complete but will be this week; #5C has been corrected; #5A and B are being corrected.

The last three paragraphs in Mr. Jeffers' memo have been corrected.

Mr. Fritz is anxious to comply and is making a determined effort. Our office will keep you apprised of the changes as they occur.

Sincerely,

  
Aaron Biggerstaff  
President, ALSACE

cc: Mr. Bill Jeffers  
Mr. Darryl Rice  
Mr. John Stoll

F-4

MEMORANDUM

NOV. 02, 1993

TO: PAT TULEY, PRES. DRAINAGE BOARD  
FROM: BILL JEFFERS, DEP. CO. SURVEYOR  
RE: MT. ASHLEY "AS-BUILT"

Sir:

At your board's request, I visited Mt. Ashley Subdivision, with Mr. Darrell Rice of SCS, on 10/26/93, to view the condition of the drainage facilities; and I submit the following report:

1. The detention/retention pond on Lot 9 is larger than shown on the plan approved by your board.
2. The side slopes of the entire basin are 3:1, as approved, or flatter; and are either becoming covered with new grass, or have been graded recently, and are raw dirt.

At the time I arrived at the site, the owner was sowing grass seed on or near the pond banks.

Mr. Rice made a verbal recommendation to the owner with regard to types of grass that would be beneficial.

3. The concrete flume from the end of the cul-de-sac that is intended to carry storm water from the street into the basin is not constructed according to plan in that:
  - a. the earth channel designed to house the flume is not in place; and storm water traveling down the flume will erode the dirt from each side of the flume, rendering it useless;
  - b. and, the grade at which the flume is constructed is twice as steep as planned, which will accelerate the erosion on each side of the concrete flume.

Since the concrete flume draining the cul-de-sac is partially within the right-of-way, and drains a road subject to county acceptance, the county highway engineer should recommend a remedy.

F.4

ASSOCIATED LAND SURVEYORS  
AND CIVIL ENGINEERS, INC.

1270 MAXWELL AVE. · TEL. (812) 464-3031  
EVANSVILLE, INDIANA 47711

November 15, 1993

Pat Tuley, President  
Vanderburgh County Drainage Board  
Room 305  
City-County Administration Bldg  
Evansville, IN 47708

Re: Drainage Mt.  
Ashley Sub

Dear Pat;

Subsequent to our latest inspection of the above mentioned Subdivision, we are respectfully requesting a release of the hold on building permits. A release on Lot 18 is imperative as Mr. Fritz is in jeopardy of losing the sale of the lot. Lot 18 is located in the Southwest corner of the subdivision at the entrance and is in no way affected by the drainage on the North side. Nevertheless, we are requesting a release on all lots.

Our staff monitored the drainage Friday, Saturday and Sunday, before, during and after the rains-or monsoons. The drainage pattern is working and no water or runoff from the North banks affected the neighboring lots in Brookview. I have enclosed pictures; one noting the pond following the rain on Sunday; the second, looking west from Mt. Ashley's Cul-de-Sac. You will note the level of the pond & also noting no debris running down the street.

We would appreciate your discussion of this matter with Mr. Rice and Mr. Jeffers as soon as possible. Again, we are requesting an immediate release on Lot 18. Thank you.

Sincerely,

  
Aaron Biggestaff  
President, ALSACE

F-4

ASSOCIATED LAND SURVEYORS  
AND CIVIL ENGINEERS, INC.

1270 MAXWELL AVE. · TEL. (812) 484-3031  
EVANSVILLE, INDIANA 47711

November 17, 1993

Mr. Bill Jeffers  
Vanderburgh County Surveyors Office  
Room 325  
City-County Administration Bldg.

Re: Mt. Ashley  
Drainage

Dear Bill,

We are respectfully requesting a "follow-up" inspection by the Surveyor's office regarding the above mentioned Subdivision. We would appreciate your prompt attention as the regularly scheduled Drainage Board Meeting is scheduled for this Monday, November 22, 1993.

The recommendation and changes you expressed in your last letter, except for one minor area of concern, have been addressed. I have contacted Darrel Rice as well; possibly the three of us could meet at the site at your convenience. Please call if you have any questions.

Sincerely,

  
Aaron Biggerstaff  
President, ALSACE

F-4

ASSOCIATED LAND SURVEYORS  
AND CIVIL ENGINEERS, INC.

1270 MAXWELL AVE. · TEL. (812) 464-3031  
EVANSVILLE, INDIANA 47711  
November 21, 1993

Vanderburgh County Drainage Board  
City-County Building  
Room 325  
Evansville, Indiana 47708

Re: Revised Mt. Ashley  
Drainage Plans

Attn: Pat Tuley

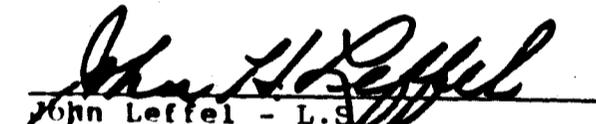
Dear Mr. Tuley:

Due to some recurring health problems, I, regretfully, cannot attend the meeting Monday evening, November 22, 1993, Drainage Board Meeting. I have reviewed the plans and calculations regarding the above mentioned Subdivision and still adhere to them.

Please accept my apology for not attending; maybe I can in the future. If not, Aaron Biggerstaff will have a Land Surveyor attend all future Drainage Board meetings. This, I understand, he is in the process of arranging.

If the Board has any questions, you may call me at home at 838-3880.

Very truly yours,

  
John Leffel - L.S.  
Indiana Reg. No. 10110



F-6

**DRAINAGE BOARD MEETING**  
**12-28-93**  
**CANCELLED DUE TO BAD WEATHER**

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JANUARY 10, 1994

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MINUTES  
SPECIAL DRAINAGE BOARD MEETING  
JANUARY 10, 1994

The Vanderburgh County Drainage Board met in session on January 10, 1994, at 7:20 p.m., in the Commissioner's Hearing Room 307, with President Rick Borries presiding.

RE: REORGANIZATION OF DRAINAGE BOARD

New officers for 1994 Drainage Board: President, Rick Borries. Vice-President, Pat Tuley.

RE: APPROVAL OF MINUTES (11-22-93)

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve the minutes of November 22, 1993. So ordered by President Borries.

RE: KOESTER ENVIRONMENTAL SERVICES  
(RECYCLING AND TRANSFER STATION)

Richard Mourdock: "We have submitted a plan to Mr. Brenner and Mr. Jeffers regarding the drainage plan for our trash transfer station north of Boonville-New Harmony Road and east of I-164. If you like we can go over the details of that plan or have Mr. Jeffers discuss them. Essentially, what we are doing is in line with the permit that we have submitted with the Indiana Department of Environmental Management, obviously our facility will be permitted both by the state and also with NPDES to make sure that we don't get out of compliance with any federal regulations. So that the local plan is simply a part of our bigger plan."

Commissioner Borries: "All of this has been submitted to IDEM. What was the other board?"

Richard Mourdock: "The other permit that we will submitting for is the NPDES (National Pollution Discharge Elimination System) permit, which is actually done under the federal EPA."

Commissioner Hunter: "Have you submitted you erosion control plan yet?"

Richard Mourdock: "That is our next step that we will be doing. The drainage plan that we are putting together now it is the first step of that."

Bill Jeffers: "I am not sure exactly what the process is on these industrial sites that are not within a subdivision and this is not a subdivision. So it will not be recorded as a subdivision but basically Koester Environmental Services voluntarily submitted this to the Surveyor for it's review and recommendation to your Board. We asked for a few small revisions to make sure that it conformed to the same guidelines as it would have, had it been a subdivision and that is, three-to-one side slopes, et cetera. They made the adjustments. The retention basin is a standing body of water. The minimum depth is five feet. I believe that the calculations show that it will be as deep as nine and a half (9½) feet in the middle. It is my understanding that they want it that way to use it for pumper trucks in the event of a emergency and for others uses for a standing body of water. All the calculations are done by Mr. Reginald Heck, who is here in the audience. He is a professional registered engineer in the State of Indiana. He has done a lot of drainage work on private and municipal and state projects. His calculations are correct. We asked for a easement along the north line-that is the top of your page-and a forty (40') foot wide drainage easement. The reason why we asked for that easement is because that it is an off-site drainage ditch. If you notice the slashed line that says, 'facility line' and at that point that is the line that has south eighty-nine (89°) degrees, seven (7) minutes, fifty-three (53) seconds east, and a distance of a 1014.94 feet. That is written along that line. That indicates that the 'facility line' is at the top of that berm that surrounds the entire project and that the ground to the north of that line, even though it is also owned

by William L Koester, could at some point in time be parcelled off and so we ask for an easement since that is outside of the project that we are looking at. We want to protect that ditch. You know what I am saying? If someone came along afterwards-to let them know that there is an easement there. That is a question that I have a real problem with in our ordinance, is when it is not recorded as a subdivision it is not truly an easement. Until it is recorded somewhere in the Recorder's office it is not really an easement. And that is something that we will have to address very shortly in our ordinance because parcels and stuff that comes before us for review that are not within a recorded document may have easements like this one here and we need a place to record them. What SIGECO does is, they obtain a Meets and Bounds Description of that easement and they take possession of it in the Deed Record. And of course they are putting their utility lines in there and they maintain it and they own it. In this case we are asking William Koester to dedicate an easement to himself to protect the future possible or potential owner of that ground. So I am not sure exactly how you do that. I had originally asked for easements for all the channels in this project and for the same reason that it is difficult for me to determine where to file those easements, the plat that you are looking at does not have those easements on it. The only one that remains is the one along the north line where there is a distinct possibility that, that piece of property might convert over to a new owner in the not too distance future. The rest of the channels and ponds are not within the easements. Because this is more or less a private project and they are going to maintain the channels and the basins privately."

Commissioner Hunter: "Are you telling us that all the suggestions that you had from your office have been incorporated in this?"

Bill Jeffers: "Yes sir. And we are recommending approval."

Commissioner Hunter: "I do have a few questions. There will be a fence around this retention basin since there will be a minimum of five feet in depth?"

(inaudible remarks)

Commissioner Hunter: "The second question that I have. A holding tank. Now are we comfortable that there will be nothing from that holding tank or on runoff that can get into these pipes and ultimately into this retention basin?"

(inaudible remarks)

Richard Mourdock: "There are actually two holding tanks that are part of the materials recycling and transfer facility."

Commissioner Hunter: "Are we comfortable here on your bituminous parking area that there is no way that a truck will drip or defrost-if frozen-and that could end up in this and ultimately into this ditch?"

Richard Mourdock: "The material off that parking lot could in fact, come back around and that is what this pond is for. Because again part of our NPDES permit, we have limited (inaudible)"

Commissioner Hunter: "What is the purpose then of the pond?"

Reginald Heck: "Right now there are four purposes. The first one is for looks. They wanted something to look nice with the site. The second one was, they wanted a place for the water, for a pumper when they needed it. The third, they knew they were going to need fill material to build the roads and the building up higher. And the fourth one is, when this NPDES permit is required they want one place where everything can go, and when water gets here, we do have an outlet but most of the time this water is going to

be down below the outlet. All of the rain that does come in there-nothing is going to come out at that time. It is going to evaporate off. Most of the time."

Commissioner Borries: "What kind of liner? Are you going to have any special liner or anything at all on this?"

Reginald Heck: "No sir, because we are not thinking that type of material is even going to be here. This is just mainly to be runoff. This is just in case something happens."

(inaudible remarks)

Commissioner Hunter: "As I understood when you made presentations months ago, your hazardous materials would be in that holding tank, and that would then be pumped out and taken elsewhere."

Reginald Heck: "By matter of definition, there is not hazardous waste going into the facility. It is a definition thing that I want to make sure everyone understands and it is on the record. There is no hazardous waste going in. There is only refuse and what is considered special waste. But anything that drips off those trucks that are in the building is going to go into those tanks."

Attorney Alan Kissinger: "If I may, I would like to address Mr. Jeffers' query in reference to the easement. It would be totally appropriate to request of the property owner, a perpetual easement described by 'meets and bounds' for legal description sufficient for maintenance. It would be a perpetual easement running with the land allowing the owner to use the easement in any manner that will not interfere with the County's right to maintain the easement. That would be totally appropriate and then you could record that easement and it would be there for future reference."

Bill Jeffers: "Who are they conveying the easement to?"

Attorney Alan Kissinger: "To Vanderburgh County."

Bill Jeffers: "Do you want it?"

Attorney Alan Kissinger: "If we don't, how do we enforce the maintenance of it in the future?"

Bill Jeffers: "That was the question that I had. Who is going to maintain an open channel? In a subdivision it is the individual property owner."

Attorney Alan Kissinger: "It's also going to be the responsibility of the individual property owner in this case, but in the event that the individual property owner does not maintain it then the county is going to have to have the easement in order to have the right to go in and maintain it in the absence of the property owner's (inaudible)."

Bill Jeffers: "I see your point, but I just want to make sure that we all understand what that involves if it is conveyed to Vanderburgh County."

Attorney Alan Kissinger: "It is not conveyed to Vanderburgh County. It is the conveyance of a perpetual easement to Vanderburgh County for the purpose of maintaining the drainage ditch in this particular case."

Bill Jeffers: "Is that recorded in the deed records?"

Attorney Alan Kissinger: "Yes. It is done frequently in condemnation cases, such as that for highway projects."

Richard Mourdock: "May I ask a question? We are referring to this one on the north border-granted we may have to look at this in the future at some point. Let's assume that William L Koester conveys this property to a third party and this easement exists that is there to the county. Mr. Jeffers' argument is, that, what if this new owner never cleans it out? Is he going to come back and ask the county to clean it out for him? Am I understanding the question?"

Attorney Alan Kissinger: "Yes, I think that perhaps you could include in your drainage plan that it is the responsibility of the owner of the property to keep the drainage ditch clean. But the county would have to have a easement for the purposes of coming in to clean it in the future. If Koester no longer owns it or there could even be a situation in which someone would come in and choose to use the property for some other use in which case a petition to the County Commissioners could be made for us to convey the easement back to that property owner. If it were no longer going to be used. Otherwise we have no control whatsoever."

Bill Jeffers: "That's right. I know that you don't want to get into a discussion on the proposed ordinance but, under the proposed ordinance I envision that there will be easements for every drainage facility and that includes open channels, pipes, whatever-and that there will be an annual report to the owner as to what type of maintenance may be needed to bring it back into compliance. And if the owner of the property doesn't do that voluntarily that the county would be authorized to go in there and perform that maintenance and bill it to the property owner of record. Under that condition I would say that you could have an easement but we don't presently have an ordinance like that. However, I see a distinct need for an easement along the north property line of this project."

Attorney Alan Kissinger: "Yes, because if we don't, anything could happen and we would be sitting there almost helpless as far as going on that property and remedying what may be a very dangerous situation."

Bill Jeffers: "Right. Now he does on this plan that is on the desk of the Commissioners at this time, the easements have been removed from the channel that passes through the lower portion and from around the detention basin however, I do have a copy of a plan that also has easements for those facilities as well."

Attorney Alan Kissinger: "What is your opinion, do we need those there as well-as far as maintenance purposes, emergency maintenance purposes?"

Bill Jeffers: "My opinion is that almost every drainage channel that I have gone out and viewed after three or four years is not being maintained properly."

Attorney Alan Kissinger: "Mr. Mourdock, do you see that, that would interfere with your plans in any way?"

Richard Mourdock: "The biggest problem I see with that is just that it seems to me-overstating the obvious. With that drainage easement through there why in the world would we allow that drainage easement to be closed up?"

Attorney Alan Kissinger: "I don't believe that you would but, you are not going to be the perpetual owner of that real estate."

(inaudible)

Attorney Alan Kissinger: "But as Mr. Jeffers can tell you, is there are a lot of people who have good reason to keep drainage facilities clean but do not."

Bill Jeffers: "They just don't do it."

Attorney Alan Kissinger: "Once again, I am not trying to indicate at all that you folks don't have an interest in keeping it clean and maintaining it properly but, you are not the only people that may in the future own it."

(inaudible)

Attorney Alan Kissinger: "I don't want to debate the issue but how to you suggest that we provide for emergency maintenance of that drainage facility if we do not have an easement?"

Richard Mourdock: "Going back to what my original question was, to make sure that I understood that question. We came in here fully accepting and agreeable to providing that easement along the north side. We have no problem with that whatsoever. As far as the easement along the south line, I am hesitant to do that because I see that as somewhat of an extinguishment of rights, if you will."

Attorney Alan Kissinger: "The only recommendation at this point that I have made to the Commissioners is in reference to the north line."

Richard Mourdock: "Ok, I have no problem with the north line we can do the easement there that is fine."

Attorney Alan Kissinger: "I don't know if Mr. Jeffers is prepared to make such a recommendation. But in order to answer his question to facilitate the recording for future reference that is a method that can be used and I would recommend that it be used as far as the north line is concerned."

Richard Mourdock: "We will do that and we will have it entered as record."

Attorney Alan Kissinger: "Thank-you."

Bill Jeffers: "I would still recommend the one that is on your desk at this time, that only shows the easement along the north line. There is one thing that was brought up and I am not sure that it was clarified. You wanted a fence around the pond itself. Is that in the plan-that there will be a fence around the pond itself? Internal fence?"

Richard Mourdock: "The fence is around the entire property, which is fourteen point six acres (14.6)."

Motion made to approve this drainage plan by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

RE: REQUEST FOR APPROVAL OF DRAINAGE PLAN

A. Elpers Commercial Subdivision (Morley)

Commissioner Borries: "Mr. Jim Morley is here regarding requesting approval of drainage plan for Elpers Commercial Subdivision on US 41 near I-164 on the west side of the highway across from the State Police Post at Schrader Road."

Jim Morley: "This involves seven acres that lies south of the Arby's Restaurant and the property currently fields to have sheet drainage. There are no defined ditches on any of this seven acres. The method of draining the seven acres as it is divided into four lots, is to drain the sites toward the street that extend along them. And with the topography it was not reasonable or basically possible to come up with a site for a detention pond or facility that could service all four lots. So, the drainage plan as prepared created with the street construction an individual storm water inlet at the low part next to the street on each of the four lots. Then on the four lots through the drainage plan that was

presented the allowable orifice size, or outfall, was calculated based on a ten year storm on today's surface. I went ahead and downsized the runoff quantity from the twenty-five. I know the assumption or the proposal for the proposed ordinance is that we drop back to the ten year storm. That is what I did do on this. Then provide since there is no place, no swale or anything that we can reasonably place it then, each of the four commercial lot developers then would have to come in when they developed their landscaping plan a way in which they can provide that detention facility on. Because it will be near the front of their lot. The front side of their lot. It has to be incorporated as a part of their landscaping or streetscape plan. But within the plan we have identified the number of cubic feet of storage that each lot has to provide on the assumptions that we have about how much of the lot they are covered. And we have specifically spelled out in the report the size of the outlet structure. Then Mr. Jeffers has recommendation that, that appear on the plat which we will add that to the plat, and that he also further suggests that the farmer who currently owns the property go ahead at this time and, not only seed his right-of-way, when the road is finished but go ahead and seed the ten foot green space that is required by Area Plan Commission that lies immediately outside of the right-of-way line. That is Mr. Jeffers' request."

Commissioner Hunter: "Didn't we agree the other night in APC that the road would be completed first?"

Jim Morley: "Yes. The sequencing of work is essentially this; in order to record the plat, the developer has to post the letter of credit for completion of all of the roadway and the storm drains that are included in the plat. Also, with that commitment he has to agree that all of the roadway and construction and the appropriate or concurrent drainage facilities would be completed prior to occupancy of the building. Mr. Jeffers has gone on in his recommendation to the Board to say, that as far as the drainage plan is concerned on each of those individual lots, that before the very first step as they enter the lot and have their approved drainage plan, that they go ahead and construct their basin and create their facilities as the first thing that they do. The nice thing about that approach is, that then the basin winds up capturing sediment and so on before it goes into the system. Excellent recommendation. As Bill Jeffers has outlined in his letter of recommendation and putting that on the plat everything should fall in its right and proper sequence."

Commissioner Borries: "I assume that because of all of this then we are talking about basically that there will be a sewer system, public utility system? The sewers are already in there? Right?"

Jim Morley: "Right. You see that as the dark line on the plan. At the north-street side of all four of those lots there is a storm sewer with a connection and within this drainage plan is the size of the orifice. They are the two lots that are one point eight (1.8) acres. They have an eight and a quarter inch (8¼") opening and on the larger lots, the two acres lots they have a nine and three quarter inch (9¾"). So we have already defined it so when they come in Bill Jeffers has something to check. If they don't use as much of it as hard surface, admittedly I assumed awfully high, and Bill is aware of that, if they don't cover that much of the lot they may not have to store as much cubic feet as we have outlined in the hypothetical situation here. But nevertheless, the orifice size on outfall will have to be just what we have calculated. Because it is based on today's condition under a ten year storm. So he has already done it ahead of time. He knows exactly what to look for whenever they create their landscaping plan and show where the basin will be."

Commissioner Borries: "Why do you use the ten year storm? Instead of twenty-five?"

Jim Morley: "That is the one in the proposed ordinance and we went ahead and pulled it back to that. It isn't that significant and if you change it to twenty-five, it really doesn't matter. It is pretty close either way, it is not going to hurt them."

Commissioner Borries: "If we go to a ten year wouldn't we be relaxing?"

Jim Morley: "No. No, we would be tightening up. A ten year rain is not as big as a twenty-five year rain and the question is, 'What shall we use as the rainfall if we are going to size on for existing conditions?'. Existing farm field conditions. So if you say that I will allow you to let water leave this site as a farm field on a ten year occurrence storm that is a smaller amount of water than what would run off of that site if it were a twenty-five year occurrence storm. Twenty-five year storm is a bigger one than a ten so what we are doing is under the existing conditions we are saying we are going to make you use a smaller storm to calculate the amount that we are going to let you run off. So we have automatically reduced it down from what we have been using and under the proposed ordinance that we have been working on and Bill Jeffers has been doing most of the work, you would calculate your storage volume to hold that twenty-five year storm. But you wouldn't let it run it off any faster than what it would now from that smaller ten year storm. So that is the sequence that we have been talking about. So it is tightening up on the ordinance by probably close to about 20%. Bill? It is kind of dropping the flow rate off of there somewhere in the neighborhood of 20%. One of the justifications for that is the fact that many of your county culverts that you have out there can't really carry a twenty-five year storm. Through the years of putting them in, you find that many of them really can't take that much."

Bill Jeffers: "First of all I would like to say, and don't be alarmed by what I am going to say, but I don't really like plans that say, 'As it is developed. The individual lot owners will be responsible for putting in the detention basin.'. If that is all that this plan said I would have recommended against it. The reason for that is, we started doing that out on the east side where land was extremely valuable along the expressway. In particular, Metro Center East and Royal Commercial Court (now basically Kenny Kent East). Those were envisioned as small lots that would have doctors and dentists offices. As it turned out they started combining lots and putting large facilities in some of them. Then the city annexed a portion of what your Board ruled on for drainage and subsequently some of the owners installed drainage-detention facilities and some of them did not install detention facilities. For example, there were certain owners who were in the process-the men were actually working on the detention facilities-right across the street from them was a huge car facility that to this day has not put in their detention basin. I don't have any way to make them do it. And you don't either. The City Engineer seems reticent to take any action on it. So I would have said, 'No', but Mr. Morley went several steps farther. He provided a storm sewer system which consists of twelve, fifteen and twenty-one inch pipe. So that automatically sets the maximum amount that will leave these lots and go into our Rusher Ditch. Which is a legal drain up here above Mc Donald's. He has gone ahead and set that in there in such a way that if they don't put in their detention facilities properly, the pipe is not going to carry the water anyway. It is just going to run out into the street. He has also taken it a step further by designing the orifice or what that is, is just a smaller opening he has twelve inch stubs there. That is the smallest pipe that we allow under our code presently. That would carry more water than what we wanted to so, he has designed these orifices that he told you about that are approximately eight or nine inches in diameter and that is simply an opening that restricts the amount of water that can leave that basin. He has given them the basis for designing those basins. So really our concerns are limited down to making sure that all this is clearly shown on the plat. Because surely someone that is going to invest in a commercial lot will look at the plat. Number two, the recommendation-this is on the sheet<sup>1</sup> that I gave you. This went to Area Plan last week after the postponed meeting of the Drainage Board. Number two; each building permit that is issued for any lot or combinations or part of lot will have a attachment or a statement on that building permit that the design for the detention facilities have to be submitted to the County

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<sup>1</sup>A copy of the memorandum dated 1-4-94 to County Commissioners, Drainage Board, and APC regarding Elpers Commercial Subdivision from the County Surveyor included with the 1-10-94 minutes.

Surveyor and we will decide whether they should come to you or not. I hope that they will be sufficient that we won't have to bring them back to you and we will just sign-off on our approval and at your next meeting following that we will bring you a notification telling you what we did. Number three; no building or parking lot or any other impervious surface be placed on a lot until the drainage and detention facilities are completed. That will act as a silt trap and that will guarantee us that we won't have a situation where somebody goes ahead and puts a large facility out there and never puts in a basin. Because the building inspectors will see that it is finished before they are allowed to put in their footings for the building and that Rule 5 be implemented on the entire subdivision since the road itself will require greater than one acre of disturbed land. And that between now and the time that they do develop, after they build the street, they plant a grass strip from the back of the curb all the way to this line that says, 'Ten foot green space set back line'. That will give you about a twenty-five foot filter strip where if this man continues to farm soy beans and corn the silt and so forth that might run off of his farm field would be filtered through that strip before it got into your accepted street and clog up your inlets. So I would recommend on behalf of the Surveyor- the Surveyor is aware of all of this-that you accept this plan if all these conditions are met. In the ordinance we are going to try to keep these orifices to a minimum of eight inches in diameter. Anything smaller usually gets clogged up and some maintenance man will go out there and take a sledge hammer and pop it out. That is why I don't like these small lots, each one of them having their own drainage facility. I would much rather see a lot set aside for a drainage facility. To serve the entire thing but as long as they are eight inches or larger you generally don't have those problems."

Motion made to approve the drainage plan at Elpers Commercial Subdivision by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

RE: BLUE CLAIMS

The following Blue Claims<sup>2</sup> for annual ditch maintenance were submitted as follows:

		AMOUNT
Big Creek Drainage #0986 Pond Flat Main Ditch 234-029 93-FM-29-45	36,852 LF @ .13 = .. 4,790.76 Pay 45% .....2,155.84 Retainage due.....2,634.92	2,155.84
Big Creek Drainage #0986 Pond Flat Lateral 'E' 234-034 93-FM-34-45	3,616 LF @ .12 = .....433.92 Pay 45% .....195.26 Retainage.....238.65	195.26
Big Creek Drainage #0986 Pond Flat Lateral 'E' 234-034 93-FM-34-40	3,616 LF @ .12 = .....433.92 Pay 40% .....173.57 Retainage 15% .....65.08	173.57
Big Creek Drainage #0986 Pond Flat Lateral 'C' 234-032 93-FM-32-45	9,036 LF @ .12 = ....1,084.32 Pay 45% .....487.94 Retainage.....596.38	487.94
Big Creek Drainage #0986 Pond Flat Lateral 'C' 234-032 93-FM-32-40	9,036 LF @ .12 = ....1,084.32 Pay 40% .....433.73 Retainage.....162.65	433.73
Big Creek Drainage #0986 Maidlow Ditch 234-028 93-FM-28-45	18,671 LF @ .15 = ...2,800.65 Pay 45% .....1,260.29 Retainage.....1,540.36	1,260.29
Big Creek Drainage #0986 Barrs Creek 234-009 93-FM-09-45	20,668 LF @ .20 = ...4,133.60 Pay 45% .....1,860.12 Retainage.....2,273.48	1,860.12

<sup>2</sup>Copies of Blue Claims and Surveyor's Report included with the 1-10-94 minutes.

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Big Creek Drainage #0986 Buente Upper Big Creek 234-010 93-FM-10-45	20,195 LF @ .17 = ...3,433.15 Pay 45% .....1,544.92 Retainage.....1,888.24	1,544.92
Big Creek Drainage #0986 Rusher Ditch 234-035 93-FM-35-45	4,444 LF @ .12 = .....533.28 Pay 45% .....239.98 Retainage.....293.30	239.98
Terry R Johnson #1052 East Side Urban N ½ 234-015 93-FM-15-85	18,370 LF @ .2995 = ...5,501.82 Pay 85% .....4,676.55 Retainage.....825.27	4,676.55
Terry R Johnson #1052 East Side Urban S ½ 93-FM-15-15	47,592 LF @ .3595 = .17,109.32 Pay 15% .....2,566.40 Due.....0.00	2,566.40
Terry R Johnson #1052 Keil Ditch 234-022 93-FM-22-15	3,012 LF @ .279 = .....840.35 Pay 15% .....126.05 Due.....0.00	126.05
Terry R Johnson #1052 Sonntag Stevens 234-038 93-FM-38-15	10,705 LF @ .279 = ...2,986.70 Pay 15% .....448.00 Due.....0.00	448.00
Terry R Johnson #1052 Henry Ditch 234-019 93-FM-19-15	3,179 LF @ .279 = .....886.94 Pay 15% .....133.04 Due.....0.00	133.04
Eldon Maasberg #1485 Kneer Ditch 234-024 93-FM-24-40	3,036 LF @ .07 = .....303.60 Pay 40% .....121.44 Retainage.....45.54	121.44
Eldon Maasberg #1485 Kneer Ditch 234-024 93-FM-24-45	3,036 LF @ .07 = .....303.60 Pay 45% .....136.62 Retainage.....166.98	136.62
Eldon Maasberg #1485 Maasberg Ditch 234-027 93-FM-27-40	2,206 LF @ .07 = .....154.42 Pay 40% .....61.77 Retainage.....23.16	61.77
Eldon Maasberg #1485 Maasberg Ditch 234-027 93-FM-27-45	2,206 LF @ .07 = .....154.42 Pay 45% .....69.49 Retainage.....84.93	69.49
John F Maurer #1483 Hoefling Ditch 234-020 93-FM-20-15	5,571 LF @ .10 = .....557.10 Pay 15% .....83.56 Due.....0.00	83.56
Daniel J Paul #3590 Wallenmeyer Ditch 234-040 93-FM-40-15	8,355 LF @ .145 = ...1,211.48 Pay 15% .....181.72 Due.....0.00	181.72
Ralph Rexing #1228 Pond Flat Lateral 'A' 234-030 93-FM-30-45	5,311 LF @ .14 = .....743.54 Pay 45% .....334.59 Retainage.....408.95	334.59
Ralph Rexing #1228 Pond Flat Lateral 'A' 234-030 93-FM-30-40	5,311 LF @ .14 = .....743.54 Pay 40% .....297.42 Retainage.....111.53	297.42
Ralph Rexing #1228 Pond Flat Lateral 'B' 234-031 93-FM-31-45	2,797 LF @ .14 = .....391.58 Pay 45% .....176.21 Retainage.....215.37	176.21
Ralph Rexing #1228 Pond Flat Lateral 'B' 234-031 93-FM-31-40	2,797 LF @ .14 = .....391.58 Pay 40% .....156.63 Retainage.....58.74	156.63
Ralph Rexing #1228 Pond Flat Lateral 'D' 234-033 93-FM-33-45	4,579 LF @ .14 = .....641.06 Pay 45% .....288.48 Retainage.....352.58	288.48
Ralph Rexing #1228 Pond Flat Lateral 'D' 234-033 93-FM-33-40	4,579 LF @ .14 = .....641.06 Pay 40% .....256.42 Retainage.....96.16	256.42

Rexing Enterprises Inc #4278 Singer Ditch 234-037 93-FM-37-15	2,450 LF @ .11 = .....269.50 Pay 15% .....40.42 Due .....0.00	40.42
Albert Steckler #1243 Baehl Ditch 234-007 93-FM-07-15	6,890 LF @ .125 = .....861.25 Pay 15% .....129.19 Due .....0.00	129.19
<b>TOTAL</b>		<b>18,635.65</b>

Motion to approve payment of Blue Claims made by Commissioner Tuley with a second by Commissioner Hunter. So ordered.

**RE: PROPOSED DRAINAGE ORDINANCE**

Jim Morley: "Could I just address one item on the proposed drainage ordinance? That is that Mr. Jeffers and the committee that works with him are now at the stage where we are in need of an attorney's review on this at some point and time so we would ask that the Drainage Board give us some consideration. I know that your attorney is not free to do whatever anybody asks him and so I would ask that we receive some legal help."

Bill Jeffers: "On that subject I am not sure that I am correct but, because this has some penalty clauses and because it does have some enforcement or it may, that of course depends on the Board. The enforcement that I envision would be if someone didn't do what they should do that the county would have the authority to go and do it and attach it to their tax bill. Having said that I think that only the Commissioners as the Board of County Commissioners can act on it. This type of ordinance has to go in front of the Board of County Commissioners rather than the Drainage Board."

Attorney Alan Kissinger: "Yes."

Bill Jeffers: "So at that point and time, the County Commissioners could instruct their attorney to review as to legal form and et cetera. Am I right on that?"

Attorney Alan Kissinger: "Yes, I do think that you are right. I think that also we will have to go through the long form of advertising the meeting because there will be penalty provisions."

Commissioner Borries: "So are you saying that you don't want to consider any comments, or we are going to consider comments on the meeting on the 24th?"

Bill Jeffers: "Yes, I would like for you to give some direction as to how you feel about it. I would like to give a new copy because we have already deleted some things that didn't seem workable. The committee that met asked that we reduce the type of permits to two (2) permits. One that is issued from our office and one that is issued from your Board, and leave the Building Commissioner and the Area Plan Commission out of it so I have reduced those down. I would like to say anything that our office does will be brought to you in the next Board meeting to notify you of exactly what we have done. I am talking about little bitty jobs that shouldn't require a big review. I am about three quarters of the way through on the revisions so by the next two weeks I will try to get it to you a week ahead of time. I would love your direction. Because you have heard hundreds of cases in the two or three years that I didn't serve as Chief Deputy and a lot of those cases brought up things that had never happened before. I believe that, that is what led to you wanting the ordinance in the first place. I need more advice."

Commissioner Tuley: "So the revisions that you have gotten up to this point then you will have that to us about a week before that meeting on the 24th?"

Bill Jeffers: "I hope to have them to you a week from now so that you will have a full week to look at them. Yes sir."

Special Drainage Meeting  
January 10, 1994

11

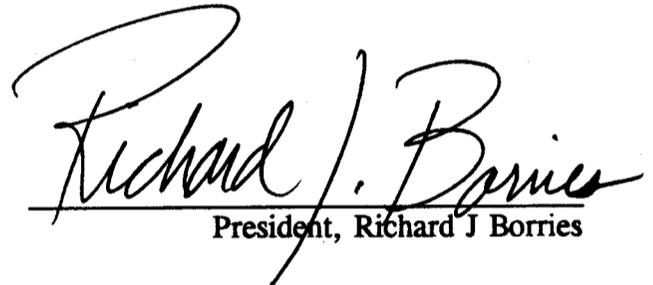
Commissioner Borries: "That sounds good."

There being no further business, the meeting was adjourned at 8:15 p.m.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Jim Morley, Morley & Associates  
Richard Mourdock, Koester Environmental Services Inc  
Reginald Heck, Bernardin Lochmueller Associates Inc  
Mike Helmer, Winnelson Supply  
Jack Woods, Crestline Plastic Pipe  
Terry Noriega, Advanced Drainage Systems-Indianapolis, In

transcribed sbt

  
\_\_\_\_\_  
President, Richard J Borries

  
\_\_\_\_\_  
Vice-President, Pat Tuley

  
\_\_\_\_\_  
Member, Don Hunter

MEMORANDUM: JANUARY 4, 1994

RECEIVED

JAN 04 1993

AREA PLAN COMMISSION

TO: COUNTY COMMISSIONERS/DRAINAGE BOARD/APC  
RE: ELPERS COMMERCIAL SUBDIVISION  
FM: COUNTY SURVEYOR

Elpers Commercial Subdivision is on the Area Plan Commission agenda for Wednesday, January 4, 1994. APC requires Drainage Board approval of drainage plans prior to APC approval of a subdivision.

Elpers Commercial Subdivision was on the Drainage Board agenda for Tuesday, December 28, 1993; which meeting was cancelled.

The Surveyor's office has reviewed the drainage plans for Elpers Commercial Subdivision, and is prepared to recommend approval of the plans, including the proposal that individual lot developers within the sub provide storm water storage and controlled release of excess storm water on a lot by lot basis; all with the following conditions or stipulations:

- (1) That the requirements for individual detention facilities on a lot by lot basis be clearly and completely shown on the recorded subdivision plat.
- (2) That conditions be attached to each building permit issued for Elpers Commercial Subdivision that the design for the detention facilities be submitted to the Surveyor and/or the Board when the lot is developed.
- (3) That no building, parking lot or other impervious surface be placed upon a lot until the drainage and detention facilities are completed.
- (4) That since the total area of the grading required to construct the streets exceeds one acre, Rule Five requirements shall be implemented.
- (5) That immediately after construction of the streets, a grass strip 25 feet wide be planted and maintained from the backs of all curbs and into all lots along the street fronts for as silt barrier/filter strip.

RECEIVED

(The owner plans to continue farming unsold lots) JAN 04 1994

Vanderburgh County Commissioners



F-1





CERTIFICATION OF PAYMENT

By this instrument, I, Regene C. Reeling, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
SINGER Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: Singer Ditch  
CONTRACT # \_\_\_\_\_  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: 11-19-93 INSPECTED ON: 11-22-93  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

Robert W. Blumwood  
Department Head

11-22-93  
(date)



Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF  
Vendor Name Albert Steckler  
Vendor No. 1243

\$ 129.19 *VP*  
ON ACCOUNT OF APPROPRIATION  
Dept. Fund Name Bachl Ditch  
Account No. 234-007

Allowed \_\_\_\_\_ 19\_\_\_\_  
In the sum of \$ \_\_\_\_\_  
*Richard J. Barnes*  
*Robert Jones*  
*[Signature]*  
Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

11-19, 93  
*Robert H. Barnes*  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:  
That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-FM-07-15</u>		<u>Nov 16, 1993</u>	<u>234-007</u>	<u>\$ 129.19</u>

TOTAL \$ 129.19

CERTIFICATION OF PAYMENT

By this instrument, I, X Albert J. Stebbins, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
BAEHL Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

None

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: BAEHL

CONTRACT # 234-007

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 16, 1993 INSPECTED ON: Nov. 18, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

Robert W. Brenner  
Department Head

11-19-93  
(date)





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCM 225 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

029

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to POND FLAT MAIN Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV. 24, 1993, and was inspected by our staff on DEC. 7, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Branner  
Robert W. Branner, Vanderburgh County Surveyor

12-14-93  
(date)

Additional comments:

NOTE: 45% PARTIAL PMT. 50% OF DITCH COMPLETED AND APPROVED

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCM IS ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 4708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to POND FLAT LATERAL "E" Disch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV. 24, 1993, and was inspected by our staff on NOV. 29, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

Additional comments:





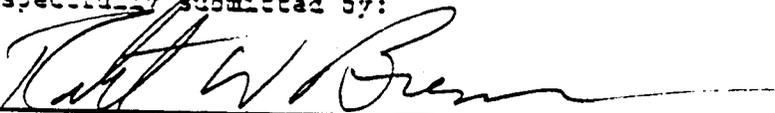
SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to POND FLAT LATERAL "E" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV 24, 1993, and was inspected by our staff on NOV 29, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

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Additional comments:

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SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to POND FLAT LAT. "C" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 24, 1992, and was inspected by our staff on Nov. 29, 1992, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

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Additional comments:

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F-2



Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF  
Vendor Name Big Creek Drainage Ass'n.  
Vendor No. 0986

\$ 433.73<sup>up</sup>  
ON ACCOUNT OF APPROPRIATION  
Dept. Fund Name Pond Flat hat.C.  
Account No. 234-032

Allowed \_\_\_\_\_ 19\_\_\_\_  
In the sum of \$  
Richard J. Jones  
Richard Jones  
Richard Jones  
Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

12-2-93  
Richard Jones  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:  
That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-FM-32-40</u>		<u>Nov. 24, 1993</u>	<u>234-032</u>	<u>\$ 433.73</u>

TOTAL \$ 433.73

SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Big Creek Drainage Assoc. for  annual --  additional maintenance to POND FLAT LAT. C Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 24, 1993, and was inspected by our staff on Nov. 29, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

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Additional comments:

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A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Big Creek Drainage Assn. # 0986

On Account of Appropriation for Maidlow Ditch 234-028

Invoice No.	Itemized Claim	Amount
	Bid at 0.15¢ per L.F. X 18,671	
	L.F. = #2800.65	
93-FM-28-45	Pay 4570 →	\$1260.29 ✓
5570	Retainage \$1540.36	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

*David R. Ellison*  
Name  
President  
Title

Date Nov. 24, 1993

F-2



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
300M 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOCIATION for  annual -- [ ] additional maintenance to MAIDEN Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 24, 1993, and was inspected by our staff on Dec 7, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-14-93  
(date)

Additional comments:

NOTE: PARTIAL PAYMENT OF 45% MADE  
OVER 50% OF DITCH IS INSPECTED AND APPROVED





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
300M 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual --  additional maintenance to BARRS CREEK Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 24, 1993, and was inspected by our staff on Dec 8, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-14-93  
(date)

Additional comments:

PARTIAL PAYMENT OF 45%  
50% OF DITCH APPROVED

F-2





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCOM IS ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 4708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to BUENTZ UPPER BIG CREEK Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 24, 1993, and was inspected by our staff on Dec. 8, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brennan  
Robert W. Brennan, Vanderburgh County Surveyor

12-14-93  
(date)

Additional comments:

NOTE: PARTIAL PMT. IS 45%.  
OVER 50% OF DITCH HAS BEEN INSPECTED AND APPROVED.

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Big Creek Drainage Assn. # 0986

On Account of Appropriation for Rusher Ditch 234-035

Invoice No.	Itemized Claim	Amount
	Bid at 0.12¢ per L.F. x 4444	
	L.F. = \$533.28	
93-FM-35-45	Pay 45% →	\$239.98 ✓
	Retainage 55% \$293.30 ✓	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Paul R. Ellison  
Name  
President  
Title

Date Nov. 24, 1993



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 225 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Big Creek Drainage Assoc. for  annual -- [ ] additional maintenance to Russler Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 24, 1993, and was inspected by our staff on Dec - 8, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-14-93  
(date)

Additional comments:

NOTE: PARTIAL P.M.T. 45%  
OVER 50% OF DITCH INSPECTED AND APPROVED.



47

Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF

Vendor Name Texas Industrial Corp.  
Vendor No. 1052

\$ 4,676.55

ON ACCOUNT OF APPROPRIATION

Dept. Fund Name EAST SIDE URBAN 1 1/2  
Account No. 234-015

Allowed \_\_\_\_\_ 19\_\_\_\_  
in the sum of \$  
Richard J. Barnes  
Richard J. Barnes  
Richard J. Barnes

Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

12-29-93  
Richard J. Barnes  
(Signature of Office Holder)

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-EM-15-85</u>		<u>Dec. 28, 1993</u>	<u>234-015</u>	<u>4,676.55</u>

TOTAL 4,676.55

SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY JOHNSON for  annual --  additional maintenance to EAST SIDE URBAN NORTH HALE Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 12-28-, 1993, and was inspected by our staff on 12-29-, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-29-93  
(date)

Additional comments:

F-2









Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF  
Vendor Name TERRY R. JOHNSON  
Vendor No. 1057

\$ 126.05  
ON ACCOUNT OF APPROPRIATION  
Dept. Fund Name \_\_\_\_\_  
Account No. 234-022

Allowed \_\_\_\_\_ 19\_\_\_\_  
In the sum of \$ \_\_\_\_\_  
Richard J. Jones  
Richard Jones  
Richard Jones  
Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

\_\_\_\_\_  
\_\_\_\_\_  
12-6, 93  
Robert W. Jones  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:  
That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

\_\_\_\_\_  
\_\_\_\_\_  
Auditor

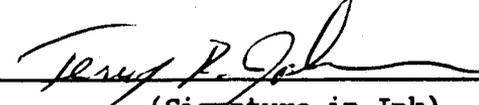
COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT  
INVOICE NO. 93-EM-22-15 PURCHASE ORDER NO. \_\_\_\_\_ INVOICE DATE OCT. 25, 1993 ACCOUNT NO. 234-022 AMOUNT PAID \$ 126.05  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_







**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I ,  
(Signature in Ink)

representing TERRY R JOHNSON CONST, and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on SONNTAGG-STEVEN'S DITCH, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

NONE

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: SONNTAGG - STEVEN'S # 234-038

CONTRACTOR: TERRY R JOHNSON VENDOR # 1052

CONTRACT # 234-038 AND/OR ACCOUNT # \_\_\_\_\_

ANNUAL MAINTENANCE                      COMPLETION DATE 11-5-93  
 ADDITIONAL MAINTENANCE                      INSPECTION DATE 11-8-93  
 EMERGENCY MAINTENANCE

WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

                      11-17-93  
VANDERBURGH COUNTY SURVEYOR                      DATE



Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF

Vendor Name TERRY R. JOHNSON  
Vendor No. 1052

\$ 133.04

ON ACCOUNT OF APPROPRIATION

Dept. Fund Name HENRY DITCH  
Account No. 234-019

Allowed \_\_\_\_\_ 19 \_\_\_\_  
In the sum of \$  
Richard L. Spruce  
Henry Ditch  
Ed H. [Signature]

Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

11-17, 93  
[Signature]  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-FM-19-15</u>		<u>Nov 8, 1993</u>	<u>234-019</u>	<u>133.04</u>

TOTAL 133.04



A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Eldon Maasberg # 1485

On Account of Appropriation for Kneet Ditch 234-024

Invoice No.	Itemized Claim	Amount	
	Bid at 0.07¢ per L.F. X 3036 L.F. = \$303.60		
93-EM-24-40	Pay 40% →	\$121.44	✓
	15% Retainage \$45.54		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

x Eldon Maasberg  
Name

\_\_\_\_\_  
Title

Date Dec. 13, 1993



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: ELDON MAASBERG for  annual --  additional maintenance to KNEER Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on DEC 13, 1993, and was inspected by our staff on DEC 15, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-21-93  
(date)

Additional comments:





F-2

ADDITIONAL COMMENTS:

Respectfully submitted by: Robert W. Egan  
Robert W. Egan, Vanderburgh County Surveyor  
(Case) 12-1-92

TO: The Vanderburgh County Drainage Board  
This report shall serve as notification to the Vanderburgh County Drainage Board that the work requested by a certain conveyance between the Board and Eldon Mays for  annual --  additional maintenance to KNER a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Dec 13, 1992, and was inspected by our staff on Dec 15, 1992, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

SURVEYOR'S REPORT

SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47712

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Eldon Maasberg # 1485

On Account of Appropriation for Maasberg Ditch 234-027

Invoice No.	Itemized Claim	Amount
	Bid at 0.07¢ per L.F. X	
	2206 L.F. = \$154.42	
93-FM-27-40	pay 40% →	\$61.77 ✓
	15% Retainage \$23.16	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

X Eldon Maasberg  
Name

\_\_\_\_\_  
Title

Date DEC. 13, 1993



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: ELDON MAASBERG for  annual --  additional maintenance to MAASBERG Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on DEC 13, 1992, and was inspected by our staff on DEC 15, 1992, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brannan  
Robert W. Brannan, Vanderburgh County Surveyor

12-20-92  
(date)

Additional comments:

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Eldon Maasberg # 1485

On Account of Appropriation for Maasberg Ditch 234-027

Invoice No.	Itemized Claim	Amount
	Bid at 0.07¢ per L.F. X 2206	
	L.F. = \$154.42 ✓	
93-FM-27-45	pay 45% →	\$169.49 ✓
	55% Retainage \$84.93	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

X Eldon Maasberg  
Name

\_\_\_\_\_  
Title

Date DEC. 13, 1993



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM IS ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 4708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: ELDON MAASBERG for  annual -- [ ] additional maintenance to MAASBERG Discn, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on DEC 13, 1993, and was inspected by our staff on DEC 15, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brannan  
Robert W. Brannan, Vanderburgh County Surveyor

12-20-93  
(date)

---

Additional comments:

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CERTIFICATION OF PAYMENT

By this instrument, I, x John F. Maurer, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
HOEFLING Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

\_\_\_\_\_;  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: HOEFLING

CONTRACT # 234-070

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 11, 1993 INSPECTED ON: Nov. 16, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

Robert W. Freeman  
Department Head

11-17-93  
(date)

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Daniel J. Paul # 3590

On Account of Appropriation for Wallenmeyer Ditch 234-040

Invoice No.	Itemized Claim	Amount	
	Bid at 0.145¢ per L.F. X		
	8355 L.F. X = \$1211.48		
	85% PREV. PMT. = \$ 1,029.76		
93-FM-40-15	Pay 15% Retainage →	\$181.	72 ✓

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

X Daniel J. Paul  
Name

\_\_\_\_\_  
Title

Date Nov. 9, 1993

F-2



CERTIFICATION OF PAYMENT

By this instrument, I, ~~X~~ Daniel J Paul, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
WALLENMEYER Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

\_\_\_\_\_  
\_\_\_\_\_  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: WALLENMEYER

CONTRACT # 234-040

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 9, 1993 INSPECTED ON: Nov 10, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[Signature]  
Department Head

11-17-93  
(date)





SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

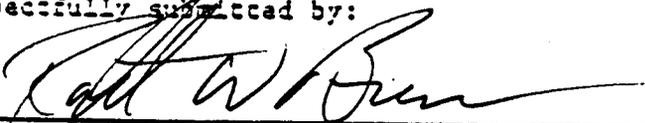
SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and:

X RALPH BEXING for  annual -- [ ] additional maintenance to POND FLAT LATERAL "A" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on NOV. 29, 1993, and was inspected by our staff on DEC. 1, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

  
Robert W. Brennan, Vanderburgh County Surveyor

12-2-93  
(date)

Additional comments:

F-2

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Ralph Rexing # 1228

On Account of Appropriation for Pond Flat Lat. A Ditch 234-030

Invoice No.	Itemized Claim	Amount
	Bid at 0.14¢ per h. F. X 5311	
	L.F. = \$743.54	
93-FM-30-45	Pay 45 <sup>90</sup> →	\$ 334.59
55 <sup>90</sup>	Retainage \$1408.95 w/	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Ralph R. Rexing  
Name  
\_\_\_\_\_  
Title

Date Nov 29, \_\_\_\_\_, 1993



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

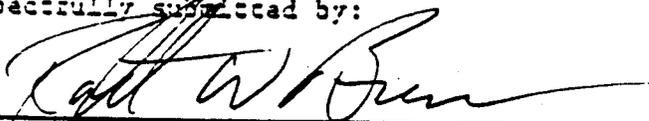
SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and:

X RALPH REXING for  annual -- [ ] additional maintenance to POND FLAT LATERAL "A" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 29, 1993, and was inspected by our staff on Dec. 1, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

  
Robert W. Branner, Vanderburgh County Surveyor

12-2-93  
(date)

---

Additional comments:

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F-2

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Ralph Rexing # 1228

On Account of Appropriation for Pond Flat Lat. B. 234-031

Invoice No.	Itemized Claim	Amount	
	Bid at 0.144 per L.F. x 27976.13 = \$391.58		
93-FM-31-45	Pay 4590 →	\$176.21	✓
5590	Retainage \$215.37		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Ralph R Rexing  
Name  
\_\_\_\_\_  
Title

Date Nov. 29, 1993



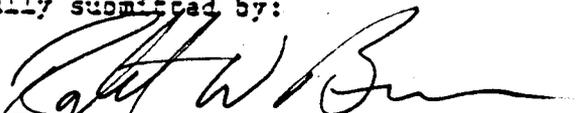
SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: RALPH R. REXING for  annual -- [ ] additional maintenance to POND FLAT LAT. "B" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 29, 1993, and was inspected by our staff on DEC. 1, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

Additional comments:





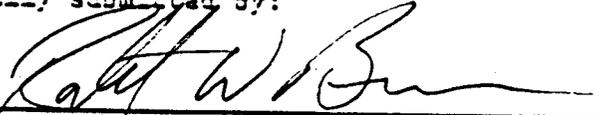
SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: RALPH R. REXING for  annual --  additional maintenance to POND FLAT LAT. "B" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov 29, 1993, and was inspected by our staff on DEC 1, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:



Robert W. Brannan, Vanderburgh County Surveyor

12-2-93  
(date)

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Additional comments:

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SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
PCCM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: RALPH R. REXING for  annual --  additional maintenance to POND FLAT LAT "D" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 29, 1993, and was inspected by our staff on Dec. 1, 1993, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

Additional comments:

F-2

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Ralph Rexing # 1228

On Account of Appropriation for Pond Flat Lat. D. 234-033

Invoice No.	Itemized Claim	Amount	
	Bid at 0.14¢ per L.F. x 4579 L.F. = \$641.06		
93-FM-33-40	Pay 40 <sup>70</sup> →	\$ 256.42	✓
	15 <sup>70</sup> Retainage \$ 96.16		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Ralph R. Rexing  
Name  
\_\_\_\_\_  
Title

Date Nov. 29, 19 93

Warrant No. \_\_\_\_\_  
Claim No. \_\_\_\_\_  
Date \_\_\_\_\_

IN FAVOR OF

Vendor Name Ralph Rexing  
Vendor No. 1228

\$ 256.42

ON ACCOUNT OF APPROPRIATION

Dept. Fund Name Pond Flat Lot D  
Account No. 234-033

Allowed \_\_\_\_\_ 19\_\_\_\_  
In the sum of \$  
Richard L. Jones  
Richard L. Jones  
Richard L. Jones

Board of Commissioners

I hereby certify that the within bill is true and correct; that the supplies and materials therein itemized and for which charge is made were ordered by me and were necessary to the public business; that each and every item has been delivered to me at prices mentioned, and was in accordance with contract, except

12-2-93  
[Signature]  
Signature of Office Holder

I have examined the within claim and hereby certify as follows:

That it is in proper form; that it is duly authenticated as required by law; that it is based upon contract / statutory authority; that it is apparently correct / incorrect.

Auditor

COST DISTRIBUTION — TO BE COMPLETED BY DEPARTMENT

INVOICE NO.	PURCHASE ORDER NO.	INVOICE DATE	ACCOUNT NO.	AMOUNT PAID
<u>93-FM-33-40</u>		<u>Nov. 29, 1993</u>	<u>234-033</u>	<u>256.42</u>

TOTAL \* 256.42

SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCM 225 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: RALPH R. REXINE for  annual -- [ ] additional maintenance to POND FLAT LAT. "D" Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on Nov. 29, 1993, and was inspected by our staff on Dec. 1, 1993, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

12-2-93  
(date)

Additional comments:

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JANUARY 24, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
JANUARY 24, 1994

The Vanderburgh County Drainage Board met in session on January 24, 1994, at 6:45 p.m., in the Commissioner's Hearing Room 307, with President Rick Borries presiding.

RE: RESOLUTION<sup>1</sup> ADOPTION

Motion made to accept for approval the resolution in accordance with Indiana Code 36-9-27-8, that establishes the meeting dates for 1994 by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

RE: PROPOSED DRAINAGE ORDINANCE

Commissioner Borries: "Last year this board under Pat Tuley's leadership, asked the Surveyor's office to begin to develop a revised and proposed county drainage ordinance based on now new information that was available through Purdue University-known as the Purdue Model. Based also on various other areas such as Rule Five and newly emerging ideas that have to do with drainage and certainly how you handle drainage. What you have this evening is kind of the final, final version. It has gone through some various forms of informal draft. I understand from talking with John Stoll there are some aspects of review that he will want to comment on. What we will intend to do, if I accurately reflect the feeling of this board, is to hear from persons who have concerns about specific items that are in this ordinance. We will not as I would understand it, take official action tonight. Quite the contrary, that is one of the reasons that we scheduled this meeting is to hear what is on your mind. Contrary to what some people would often think, we do listen to what folks have to say. The reality of this is, we know we have to change things and we want to hear what is on your mind. Then perhaps that will guide us in making a decision. Now this final draft was received in our office on 1-20-94. Does everybody have that? There may be a final, final draft based on what we hear this evening. At this time, I want to introduce this with the comments that I made. Perhaps the other members of this board might want to make some comments? Mr. Jeffers may want to highlight some points in the ordinance. Then we will listen to what these folks have to say."

Commissioner Hunter: "To reiterate what Mr. Borries has already mentioned. I served as President of the Drainage Board for two years. During that two years it became very, very apparent that what we currently had was not getting the job done. I think that what we want to end up with is something that everyone feels comfortable with and can live with. We want as much input in this as we can possibly get. I don't want anyone to feel that they are having something crammed down their throats, because that certainly is not the intention. But over the last two years there were problems that would arise with drainage and with projects that had been done previously and were done incorrectly or there was no follow up on. So we just generally felt that the time had come with the development in Vanderburgh County and the urbanization that has taken place that we kind of look at and review and make some changes for the better in the drainage plan and the rules that we had. This is, I guess step one, in getting that accomplished."

Commissioner Borries: "It is a long way down the road. We have talked to land surveyors, we have talked to engineers and we have talked to a lot of different people in developing this. Again, Purdue University provides a model here for current drainage needs and so this is where we are. Hopefully we can get this in place within a short time; perhaps a month or two. I think that our purpose this evening was to get this thing in a final version that we could offer this evening and get comments on that then entertain any revisions to it. That is where we are this evening."

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<sup>1</sup>A copy of the Resolution included with the 1-24-94 minutes.

Commissioner Tuley: "Not to be redundant, but the whole idea was to tighten up things, give everybody a procedure so that everybody knows exactly how things have to be done. The timetable that they have to be done in. Also last year I was President of the Drainage Board and I asked the Surveyor's office to make the proposals available to anybody that has anything to do, or would be affected by this. So we have not by any means tried to leave anybody out, or go around anybody. Again, that is why we are having these hearings. It is my intention and I will tell you straight up if it comes up for a vote tonight, I am not going to vote for the passage or the approval until everybody gets a chance to speak their mind and address the issues. Obviously you have got some concerns or you wouldn't all be down here tonight. Having said that I will turn it back over to the President."

Commissioner Borries: "Bill Jeffers do you want to lead off at this point and maybe highlight-perhaps give some rationale that you might have and get some reactions from Darrell Rice and John Stoll on this document? And then we will listen to what you folks have to say and then take your comments under advisement. Bill?"

Bill Jeffers: "First of all I have a memorandum<sup>2</sup> that was sent with your last copy from Mr. Brenner to the Board of County Commissioners because that is where we figured that, that is where this goes next after this hearing. Basically telling you we appreciated the opportunity to serve on this project and we wish to remain available to provide your boards with a finished letter quality document to go to publication after the public review period is finished. And, that aside from putting a few charts that are still missing-these are just rainfall charts I am trying to get some clear copies. The copies that I have, have been run through the copy machine so many times that they don't look very neat. But they are the standard charts and aside from some certificate forms at the end of the document to go with the permit, any modifications to this document that you have before you-which is marked 'final copy' in the upper right hand corner-any revisions or modifications will be at the direction of the Vanderburgh County Drainage Board or at the direction of the County Commissioners. In other words, we are finished other than receiving your direction to modify what you have in front of you. The Chief Deputy County Surveyor will remain at your service to complete the editing and publication of this drainage ordinance and hopefully see it through in the next month or two as President Borries has stated. I would like to enter that memo in the record. I got some valuable and helpful input from Mr. Darrell Rice of the Soil and Water Conservation District and some very constructive and to the point advise and criticism from Mr. Morley from Morley and Associates. Basically the difference between this and your last one is that this one has been gone over and a lot of the unnecessary language and procedures have been removed from it. Some of the things that tend to be expensive to the developers and largely unnecessary if you have conscientious technical advisors on your staff, has been removed from it. A definition section has been added from page three (3) to page five (5) and there is room on page five (5) to add some definitions of terms that may still remain obscure to nontechnical people. The number of permits has been reduced to two (2). And those two permits would be:

1. On page eight (8). QUICK START PERMIT: For any development where the disturbed land surface is less than one acre of disturbed land surface and less than twenty thousand (20,000) square feet or approximately one half (1/2) acre of hard surface coverage. That would be root tops and parking lots and streets, swimming pools, anything less than about one half (1/2) acre impervious surface and anything less than one (1) acre of disturbed land would come to the County Surveyor's office and the County Surveyor would be empowered by your board to examine-these would be basically one lot projects outside of subdivisions that had already received your approval. Maybe say, small parcels that are being urbanized. If we don't see anything that requires your review we would give them a QUICK

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<sup>2</sup>A copy of the memorandum dated 1-20-94, to Patrick Tuley from Robert Brenner regarding the county drainage ordinance included with the 1-24-94 minutes.

START PERMIT and then at the next Drainage Board meeting we would inform you of what we had done.

2. Would be all other projects one (1) acre or more of disturbed land surface and greater than twenty thousand square feet (20,000) of hard surface coverage. They would have to come to the board. That would be small commercial projects on up to major subdivisions.

We took out some of the bureaucratic red tape procedures that are usually found in every model ordinance from any university and just left in what we thought was absolutely necessary over the next several pages for issuing the permit and enforcement of the permit. On enforcement of the permit, basically your power to stop a faulty project or project that was outside of the boundary of good engineering practice would be on page twelve (12).

Item B-4. Ten (10) days after posting a CEASE WORK ORDER for doing what they are not suppose to be doing, they have thirty (30) days to correct it or otherwise you contract it to be done and charge the property owner of record.

Mr. Stoll had a comment on that one that it should be the developer who is charged for that infraction and the work that it took to correct that infraction. But the developer can go Chapter Eleven. The property owner of record can have a lien filed against them on the property taxes. That is why that is in there. That and the item six (6) below it, is a penalty item so that is why it needs to go to public hearing and be adopted through the County Commissioners whether than the Drainage Board. There is some other minor changes we made and knocked out a lot of repeat verbiage. Then over here on page twenty-three (23), we pretty much standardized the 'C' factors so that they are reflected of what is being used in Indianapolis and in the HERPICC manual that you have previously been using as your drainage code. The same on page twenty-four (24). We took some people's advise, including Mr. Stoll's and Mr. Morley's and assigned types of computer modeling that can be used for over two hundred (200) acres rather than just saying, use computer modeling we assigned some and the statement says, 'any other acceptable method'. If they bring it to the Drainage Board and explain it and it is in common use in some other mid-state where they have the same type of rainfall we would use that too.

These permanent grade monuments seem to be big problem with some developers. Just saying that you have to have permanent grade monuments-what that was intended to do was to keep people from filling in ditches like they did in Brookview. If we can't see the monument that was put there then obviously they have covered it over. They are expensive. They might run two or three hundred dollars per lot, so we are just saying that if one of the technical advisors sees a real need for one he will say so during the planning stage and they will only be placed where we think that there is critical need for them.

Some other problems that Homebuilders Association had with this was, back here on page fifty-seven (57); sump pumps, downspouts, footing drains and et cetera. We are being too restrictive on them discharging into streets and drainage channels and we have simply reduced that to all down spouts et cetera shall be installed and discharged without damaging the street system or storing water in a drainage system. And I would anticipate that the County Engineer would decide whether the drawings reflected a method of discharge that would damage the street and the County Surveyor will determine whether the same applies to going into ditches during their review period.

Other than that I would say that I would really strongly suggest that the Board of County Commissioners when they adopt this ordinance go before the Area Plan and strongly insist that they remove from their check list the requirement for prior Drainage Board approval before they review a subdivision on the first Wednesday of the month. The reason that I say that is, that because on their check list they do have the requirement that any subdivision that comes before them has to have prior Drainage Board approval. However this document here should cover all eventualities and by the time that we get through reviewing and revising it, and what their apprehension is at the APC is that remonstrators will be at their meeting clamoring about drainage problems and they have no technical answers at that meeting. You have all served on the Area Plan Commission you know what I am talking about. So when they have prior Drainage Board approval

they can simply say, 'Oh, that has been taken care of in Drainage Board and that has been addressed there and there is no problem.' However, because of the strictness of the sequence of events that a developer has to go through under this proposed ordinance, a developer could spend five, ten, fifteen thousand dollars on a major subdivision for a complete drainage plan to conform with all of this and then go to Area Plan Commission and be turned DOWN for a year and he is sitting on fifteen thousand dollars, thirty days at a time. They do have eighteen months to record a plat after it has been approved at APC and I would recommend that, that eighteen months is plenty of time for them to fully develop a drainage plan in conformance with this proposed ordinance and the requirements should be that the drainage plan be approved before the plats are recorded, rather than before it goes to APC. That would take a lot of the rush out of getting it done in thirty days and it would take a lot of the financial danger out of it for the developer and the developer's engineer. That is all the comments that I have at this time."

Commissioner Borries: "It would also address the concern here in terms of the available time to inspect this. Because this does up and increase the responsibilities here from local government's end."

Bill Jeffers: "Absolutely."

Commissioner Borries: "That is going to be an awfully tight time frame if we can't get some modifications on there and frankly I would just soon, speaking personally here, but I would want to make sure that it is done right, rather than done quickly."

Bill Jeffers: "Absolutely. That brings up another point on page fifty (50); Facility Maintenance Responsibility. I went ahead since the last one and incorporated your previous Homeowner's or Per Lineal Foot Method of Maintenance, from your previous ordinance and included that into this ordinance. So that a Lot Owner's Association or Homeowner's Association can be responsible for the maintenance for the entire system. As with plan 'A' which is the same as what you had before basically or, Plan 'B' maintenance through a prepayment per lineal foot, but we are suggesting that you go to two dollars (2.00) a lineal foot rather than fifty cents (.50) for subsurface storm sewer pipe located in easements outside of street right-of-ways and go up from fifty cents (.50) to one dollar (1.00) per lineal foot for shore lines of wet retention basins. I have talked with some developers who have always paid the fifty cent (.50) per lineal foot on every project they have done and they still feel that, that is a reasonable cost for subsurface storm sewer pipe, and a reasonable cost for an out flowing structure of a wet retention basin as an insurance policy for perpetual maintenance from the time they turn it over after inspection they still feel that wouldn't be an excessive amount. Then that money would be held in your special accounts for future maintenance if need be."

Commissioner Borries: "Thank you Bill. John Stoll, County Engineer, would you have any comments at this point?"

John Stoll: (inaudible remarks)

Commissioner Borries: "Ok, so this will give you some time to look at the final ones and we can revise where necessary."

(inaudible remarks)

Commissioner Borries: "Darrell Rice, Soil Conservation Service?"

Darrell Rice: "I think that Bill Jeffers should be commended, I know for a fact that he spent many, many hours in developing this ordinance. As the Drainage Board you know the many, many problems that we have addressed this past year on drainage and erosion control problems throughout the county. The ordinance does an excellent job tying erosion control and drainage together and it gives you a lot of leverage to get the erosion

control and drainage properly constructed and 'as built' given to you that prove that they were properly constructed as planned. Monuments in drainageways and things like that, should eliminate a lot of the problems that we have had. The inspection process, should eliminate a lot of the problems that we have had in the past. So many of the problems that we have had to deal with last year shouldn't occur again and Bill should really be commended for the excellent job. He has developed a real thick skin and he has taken a lot of heat from a lot of different areas and probably will in the next few weeks. He has put together a committee made up of units of government and private individuals to give him guidance on this and he has done an excellent job."

Commissioner Borries: "I appreciate your comments. Next we have some folks in the audience that would like to speak. One simple rule here, please, give your name and address for the record. If we don't have an answer for you tonight, we mainly want to listen to what you are going to say and we will try to get back with you. It may not even be before our next meeting but if you would want to mark your calendars the fourth Monday in February would be the 28th. So based on what is said here tonight any revisions that take place between now and then we could take action then but again, I can't tell you for sure because I don't know what you are going to say. We are ready at this point to hear from you."

Dave Keaffaber: "My name is Dave Keaffaber I am the Hancor area engineer. My address is 8370 Harrison Parkway, in Fischers, Indiana. It is up near Indianapolis. You may have gotten a copy of my letter which I sent to all three of you Board members, basically addressing the ordinance and a couple of key issues. Before I get started on that I would like to make a general observation with regard to the design criteria. The IDF curves which Mr. Jeffers is using are outdated. There are new IDF curves that Purdue has recently developed. There are brand new ones for Evansville. They just came out last year. I thought that I would bring that to your attention. It is based on new rainfall data over the last fifty years. As I said I am here to really talk about the competitive products which are identified in the new ordinance. On behalf of Hancor I would like to thank-you for the opportunity to speak, I think that it is important that feedback does come from the private sector. We do support what you are doing. We think that it is important also that standards be available to guide engineers and developers to insure that sound engineering practices are utilized in development within Vanderburgh County. I recently spent nearly two years working with the Indiana Department of Transportation, the City of Fort Wayne and the City of Indianapolis, helping and assisting them in developing their new standards. After quite a bit of evaluation and analysis they decided that it was in the best interest of their cities to allow competitive products. Initially they did only allow concrete, exclusively for storm sewers but they are aware that with the new technology which is coming around that there are new innovative products available. Organizations throughout the midwest in cities such as Louisville, Columbus, Cincinnati have all seen the benefits associated with the use of these products and have allowed them. Prior to working with Hancor I did spend seven years with the City of Indianapolis. I was chief engineer of the drainage district, so I did have a hand in writing their ordinance which is now available. But we think that it is important that new products that are available and have been proven to be sound and provide benefit in terms of conveying sewage, both sanitary and storm, be allowed, and we think that maybe Vanderburgh County should look at what the Indianapolis DPW and what the Indiana DOT did with their's. They spent quite a bit of time looking at these products. The material section within INDOT actually tested many of these products and they have new standards out. Mr. John Stoll has been provided copies of these, hopefully he will have the opportunity to read that and hopefully Mr. Jeffers will have the opportunity to review those. We are here to assist you and if there are any questions with regard to these products we are more than happy to provide the answers to them. We just feel that it is in the best interest of this county in terms of the cost savings with the installation savings and also just the fact that by allowing competitive products you may see your pricing come down quite a bit in terms of traditional materials. We hope that you will consider this seriously and allow us the opportunity to assist you in looking objectively

at these new products. I will leave my card with your secretary and Mr. Jeffers. So if he has questions he can get with me. Thank-you."

Commissioner Hunter: "I have one question. Are you saying that there has been objective and unbiased research that you will make available?"

David Keaffaber: "Absolutely. It is out there. There has been studies done by universities, federal agencies, state DOTs. The product has been tested over a ten year period, so there are studies available. In fact, the Kentucky DOT just finished a performance study on polyethylene pipe. There is more than ample material available for you to review and see that there is information available which does not have a bias connotation to it. I would be more than happy to provide that to you."

Commissioner Borries: "Is there someone else that wishes to speak at this time?"

Terry Noriega: "Terry Noriega, Advanced Drainage Systems. The address is 664 Echo Bend, Greenwood, Indiana. A couple of things that they have touched on. They said Indianapolis and the Indiana DOT in addition to the Kentucky DOT, the Ohio DOT, Wisconsin-many states have adopted using the polyethylene products in their standards. The acceptance in Indiana is used in a lot of areas already. In Madison County and Delaware County alone in the last eighteen months they have used over 1.2 million dollars worth of either polyethylene or PVC storm sewer piping. That is just the projects that they have used our products on. That is not their total funding and that is the product itself-not the project cost. The federal people have approved this in their standards. We have been used recently on the new runways for the Indianapolis airport. The US Department of Forestry also has us in there. I guess that is basically it-is that there is so much acceptance for that, we would like the County Commissioners to review it more closely."

Commissioner Borries: "What is your feeling about this material? Let me bring up an aspect that someone brought to my attention. For example, the question, 'Will it burn?'. Will polyethylene be a product that could burn?"

Terry Noriega: "Yes."

Commissioner Borries: "It would. Ok."

David Keaffaber: "Yes, and that issue was brought to the attention of the chief engineer of the Indiana DOT and the Chief Fire Marshall for the state. After looking at the facts they did determine that it would burn that it does have a high ignition temperature but they felt that the probability of the pipe catching fire and actually a fire being sustained in a closed sewer type atmosphere that the probably that, that pipe would continue to burn and destroy the system was very remote. Very few instances of fire in sewers could be identified and when I say that when you think that PVC has been used for the last twenty years in the application of sanitary sewer applications there is millions and millions of miles of that and there is very few documented cases of fires. They felt that the benefits far outweighed any disadvantages with using it and there wasn't a single case in the State of Indiana where the pipe actually caught fire and burned through. But to answer your question, yes it can catch fire, but there are many products available. Polyethylene is used in most gas tanks in trucks and cars. Most of your containers that carry gasoline is made from polyethylene. So if it were that much of a risk factor I believe that the material would not be used for many of your household type items that you find which can be exposed to fire."

Terry Noriega: "As simple as your children's toys. The Playskool toys, the plastic they are all polyethylene also."

Commissioner Borries: "Have there been any studies, anything-knock on wood-we live in an earthquake fault here too and have there been any studies on the durability and the stress on your product in terms of what would happen in an earthquake?"

Dave Keaffaber: "There are durability studies available, both abrasion and studies."

Commissioner Borries: "I am concerned about the stress."

Dave Keaffaber: "Ok, it is a flexible product, the connection is flexible, which means that it can sustain lateral and vertical movement. That is one of the benefits that flexible products have over rigid products such as concrete or clay. Those products cannot sustain a great deal of movement both vertically and laterally without stress cracks developing. Plastics inherently are materials which are somewhat elastic so they can be compressed in both directions and then rebound once that load is reduced. So, yes, it definitely would perform better than a rigid product just because of the fact that it is flexible and the connection is flexible. I can't point to an actual case where it was tested under earthquake conditions but, just looking at that scenario I would think that would not be a problem."

Commissioner Borries: "Are there other persons who wish to speak at this time? We thank-you. Let me say that if there is any thoughts that occur to you here this evening you need to put these in writing along with, as these people have done here tonight, your name and address so that we can get back to you. We would like to have copies of the studies that you referred to so that Mr. Jeffers, Mr. Stoll and Mr. Rice can review these with us. We will definitely keep an open mind of all of this, but we want to also indicate full well, we do have some concerns that we had to ask about and we have heard from your standpoint. So, if there is nothing further again, we would appreciate some written documentation from you as quickly as possible. If we can't get it done in February we will probably hear from Bill in the next couple of weeks, so it may delay another month but the reality is that I think that this board would like to see things as construction season starts we would like to have it in place. So we are not talking about a long time here, we are talking maybe a month, maybe two at the maximum. I personally would like to see it in place by April."

Commissioner Tuley: "Yes, I would like to see it put in place and put in place correctly and all your concerns identified and addressed but we do need to have it in place by construction season."

Commissioner Borries: "Thank-you once again for your time this evening. We appreciate it. We will take what you said under advisement and again, we appreciate your comments."

RE: NURRENBERN COMMERCE CENTER

Bill Jeffers: "Nurrenbern Commercial Center which is located on the Lloyd Expressway on the west side of I-164 at the interchange. Far eastern Vanderburgh County. It is on the northwest corner of that intersection, it is a small two lot total of twenty acres subdivision. Two large lots envisioned as a commercial subdivision. There is a prospective buyer for one lot. The buyer does not want to identify himself, or herself, or what the usage is going to be at this time. It is a very competitive endeavor. Mr. Jim Farny is here in the audience and he is an engineer registered in the State of Indiana, working for Bernardin Lochmueller Associates, who has developed the plan for the subdivision. Now this is strictly a drainage plan. There has been a lot of comment in subdivision review about the street layout and there will be a lot of comments made to Area Plan Commission about the street access to Crosspoint Boulevard. So we would like for you to be very aware that the two basins that are designed for this subdivision here, may have to be altered, moved, the configuration may have to be altered somewhat. If

for example, this street were extended to the north along the lot line and go to Virginia Street. So we want to take into consideration that he has designed this, I have reviewed all the calculations; they are all correct. He has provided for adequate detention and discharge at the pre-development rate. He has done all the things that we asked for but he does want to reserve the opportunity to come back before you if for example, this retention basin had to be moved to the east or configured so it lay totally along the north property line and come back probably under this ordinance get a drainage permit for the construction of these facilities. However, this plan that he is showing you tonight is a workable plan and we will recommend approval of it. Mr. Farny is here to answer any of your questions. I just want to keep you aware that this is probably a plan that may have to come back should Area Plan Commission require some reconfiguration of the roadway, et cetera."

Commissioner Borries: "Did you say this is retention? So it will..."

Bill Jeffers: "Yes, at this time they are showing retention both to serve as a landscape enhancement and as a source of fill material for that flat ground out there, possibly also fire protection. To provide water for watering his landscape, et cetera. Yes, it is a wet basin."

Commissioner Borries: "Wet basin."

Bill Jeffers: "Yes sir."

Commissioner Borries: "How deep?"

Jim Farny: "The depths shown are approximately eight (8') feet. Bill has summarized the plan. We are here trying to submit a drainage plan for approval. We are interested in obtaining approval of a plat, we need to take to APC. And in order to do so, we need this drainage plan approval. This goes back to what Bill had said earlier this evening, due to the fact that these are two relatively large commercial lots, one potential buyer is ready to come to design. The other lot really right now is speculation. It is very difficult for an engineer not knowing the site specifics to exactly lay out the plan 100%. And this is where Bill is saying it is too early in the game to prepare a plan exactly perfect and present it to you for approval. Therefore the ordinance is important in that what Bill wants to do is have some type of preliminary approval, like this evening, for this plan and then both of these lots will come back through this drainage ordinance at a later point in time. With an exact site plan, 'as built', and any modifications or anything that need to accommodate the site specific. But we have set forth all of the guidelines this evening that should be there that would make you comfortable in being able to approve this. Such as the runoff factors and the size of the basins and the size of the outlet pipes. And all of the factors that are important at this point and time. These factors should be significant enough that APC should be able to address any people confronting them in a public hearing. They can have something in their hand that says the preliminary drainage has been looked at and all of the factors and everything seems to be in line."

Commissioner Borries: "What kind of event have you designed this for?"

Jim Farny: "Twenty-five year storm. The basins however are shown at 125% of the design value. So we have intentionally somewhat over designed the basins as a safety factor. One reason that, that is critical on this particular development is, the site is very flat, as you all know it is on the east side and it is in the so-called targeted area that everything is subject to detention and all the ditches that the water flows to-in this case the Nurrenbern Ditch-is always subject to some water in some uncertainty. So because of that factor we have oversized the basins."

Commissioner Borries: "How about the amount of pavement? Do you have any indication? It is fairly flat? Is there going to be a lot paved?"

Jim Farny: "On the drainage plan, it is tucked in the back. On the right hand side there is the formula that was used to derive at the final runoff factors. The 'C' factors. It shows what amounts or percentages were attributed to pavement, rooftops and basins. It comes out to about 80% roughly. Part of that is due, you need to keep in mind that the west side of lot number one, 75 foot of that is legal drainage. So there will be no pavement in that."

Commissioner Borries: "Where Nurrenbern Ditch is?"

Jim Farny: "Yes, (inaudible). Then of course, there will be some minimal landscaping in and around the building. Again, I don't have site specifics. This is the need and the reason we have got to come back with the exact site at some other point in time."

Commissioner Borries: "Questions?"

Commissioner Hunter: "The recommendation that we approve this has been made, but reading the staff field report and reading the County Engineer's, I feel that whatever we approve tonight is going to be changed-perhaps radically. I guess that we have to approve something but at the same time, it looks like it is going to come back and again it is going to be in a totally different form."

Jim Farny: "Yes, the issue on this particular subdivision and more so than drainage is the access issue."

Commissioner Hunter: "That is what I am reading but I am assuming too that any changes in the access will change the possible drainage."

Jim Farny: "Not really so to speak. Not in any degree that would not automatically be handled by the resubmittal of the 'site specifics' at a later date. The reason being that the access that is being issued or argued is the fact that the frontage road that leads to the property is deemed an agricultural access and they are wanting to change the classification. But regardless of whether it is deemed agricultural or reclassified doesn't really effect the amount of impervious surfaces or anything that really directly affects drainage."

Commissioner Hunter: "But you are willing to go on record as saying that if there is concern on the part of our County Engineer or if there is concern on the part of the Surveyor's office that your firm is willing to do whatever it takes to be in compliance?"

Jim Farny: "Sure. Yes we will be glad to come back and if, say for instance, if the Area Plan approves the plat subject to some modifications to the roadway system, so to speak since that seems to be the concern as far as Area Plan Commission is concerned. And if Bill Jeffers or John Stoll or any of the other local authorities feel that, that is a significant change to warrant another submittal, we will be glad to resubmit."

Commissioner Hunter: "Why I am so concerned about this is we do have people that appear before this board who want us to approve one plan and then turn around and do something totally different. And in many cases not correctly."

Jim Farny: "Well again, just to reiterate one more time that is the whole reason, Bill has said it once and I have tried to reiterate it, is really this is the wrong time, in my opinion, to be asking for approval because this is too preliminary in stages but yet Area Plan..."

Commissioner Tuley: "But you can't get to Area Plan if you..."

Jim Farny: "It is like a Catch-22."

Commissioner Borries: "It is a Catch-22."

Commissioner Tuley: "John, I just briefly read your letter and your concern is more of the access, because this came up in EUTS the other day when I was in that meeting. This very road. There is going to be a fight over this I think."

Commissioner Hunter: "This access thing has come up before, and I have had engineers stand up here in front of us and say that we have to change our access it won't change anything in the drainage plan and we found out later that it changed the whole drainage. The whole thing. I am sure that Morley & Associates wouldn't do something like that-or Bernardin Lochmueller but, it has been a problem in the past with this board and with one thing being presented and approved and then something else, the entrance or something has to be moved and it changes the whole drainage plan. It doesn't always come out that way."

Jim Farny: "We will gladly volunteer to resubmit if Bill Jeffers or John Stoll deems it necessary. If they can get past the hurdle of Area Plan Commission and get the plat approved or approved subject to certain road changes or whatever. If Bill Jeffers or John Stoll or you gentlemen wish to have us resubmit. We will resubmit."

Commissioner Borries: "Let's just make that part of our motion. I really don't have a problem at this point approving it if you say that it looks like the calculations are going to work and it will hold the water, this plan will hold the water on their property-right now."

Bill Jeffers: "Yes sir. As he pointed out. He has assigned 90% runoff factor for all the hard surface and he has assigned an 80% total coverage of these 7 or 14 acre lots. He has assigned 80% coverage to that. Which he can't even achieve, I don't think, because he is going to have to have some green space and landscaping et cetera in excess of what he has shown you. Then on top of that-assigning the number he has gone a step further and put a 25% cushion into his basin. So I am very positive that it will work. It may have to be altered and the alteration will have to match the original plan."

Commissioner Borries: "So we can get off this square and throw it back to Area Plan, then I would entertain a motion at this point then that we approve this plan and if there are any changes then it comes back to the Drainage Board."

So moved by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

RE: WALMART WEST

Bill Jeffers: "Mr. Mike Eddington from Birmingham, Alabama is here. I'm sure that we want to welcome him. He came all the way up here to enjoy some Hoosier Hospitality and also to provide us a registered engineer in the State of Indiana, to present this to you. This is Walmart West. It was a Regency project that received your approval in, I believe, 1988 or so. Basically what is going on here is Walmart feels a strong need to redo the facade of their building, expand out several thousand square feet into the existing parking lot with an expansion of their floor space and garden center. A new facade to make it look nicer and more modern. Consequently they are displacing some parking area and as you know, a certain number of parking spots are required of all commercial ventures so at the bottom of your plat there is a rectangular area that goes out into a field and that is the new parking designed for employee parking. That will replace the parking area that has been displaced by this expansion. There is a ditch along the right hand edge where all the yellow markings appear. He has run the new run of pipe there through the parking lot and then connected it to an existing ditch. Looks kind of like honeycomb there, that is rip-rap that he is adding and that goes through the existing ditch back to where it doglegs out and he is realigning the flat bottom of that ditch and then back there I have some more yellow marks. What we asked him to do was to put concrete flumes in that area of the existing ditch that has had an erosion problem and he is running downhill into that basin. I have asked him to go down into the basin

with a concrete flume, across the bottom of the basin with a concrete flume, to the outletting structure because that basin has a lot of siltation in it from previous construction. They are going to take some of the fence down. They have agreed to go into the basin, clean it up, regrade the bottom of it properly, put all this concrete ditch bottom in so that we will know from now on where the bottom of that basin should be. He has several notes to the construction contractors on how to do this and he has also submitted several other detailed plans of how to install the rip-rap, concrete et cetera. It has all been done in conformance with what we asked Mr. Eddington to do, and bottom line basically is that the basin is more than adequate for the additional parking lot that is being added and the net increase. This is a dry basin; it dries all the way out. The net increase in depth of the water during the peak of the storm is a foot and a half (1½) additional depth, making it seven and a half (7½) feet deep during the peak of the storm rather than six (6) feet deep. That shows you the necessity for the fence. Also for the necessity for the concrete ditch so that the erosion doesn't cause a hole underneath the fence large enough for a child to climb under there and get down into that deep water. Our recommendation is to approve it and Mr. Eddington is here from Partnership Engineering and he will answer your questions."

Michael Eddington: "I am the engineer of record for this project with Partnership Engineering in Birmingham. The original basin was designed with future expansion in mind. Additional volume was left for that purpose. We are draining now to existing storm structures and making improvements to the bottom of the pond with concrete and along the slope with a concrete flume to prevent erosion. Other than that there are no changes to the existing design."

Commissioner Hunter: "How many acres will this disturb?"

Michael Eddington: "There is approximately three (3) acres of disturbed area."

(inaudible remarks)

Commissioner Borries: "He requested changes to the drainage plan and I assume that these changes are the ones here that we have highlighted."

Michael Eddington: "Yes, the items that Mr. Jeffers suggested were the concrete along the bottom of the channel as well as down the slope to prevent erosion under the fence and also cleaning out the existing pond. And those items have been addressed."

Motion made to approve the changes to the existing approved drainage system by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

(break due to change of tape)

RE: EXPRESSWAY COMMERCIAL SUBDIVISION SECTION II A

Commissioner Hunter: "I ask that question of Mr. Rice. This particular location was quite well known last summer because of the siltation and the lake and the apartment complex. Are we sure, is everyone happy, and has everything been done out there that should be?"

Bill Jeffers: "From day one, no sir. Not everything has been done that should have been done and it hasn't been just last summer. Before I left the county I inspected on two different periods of time, as long ago as 1988, when the project was initiated and there is severe downstream siltation occurring from this site and it has not been adequately protected during any phase of the development. We asked that when he resubmits this today, we ask him to include an erosion control plan and Mr. Rice is here. The plan just came to me today otherwise I would have had Mr. Rice prepped on it."

Commissioner Borries: "Who is the engineer?"

Bill Jeffers: "The engineer is Danny Leage of Morley & Associates. This is the lot that we are talking about it is for a hotel or motel facility. This is the plan that was the very first plan done in 1988, it shows you the northern most end of the entire project. With a temporary basin in place. This is the subsequent plan that was approved on February 26th, 1990."

Commissioner Tuley: "I'm sorry. Is this the northwest corner of Redbank and the expressway?"

Bill Jeffers: "Right."

Commissioner Borries: "Is this in place now?"

Bill Jeffers: "Everything on this down here is. This is the basin. This is the lot that they are wanting to occupy and they are wanting to go through a temporary basin and down through here to the permanent basin which is all in conformance with the original plan that was approved. Here is an erosion control sheet that came to me today. Which I have no comment on."

Commissioner Hunter: "So you really haven't had a chance to review the erosion control?"

Bill Jeffers: "I have reviewed the drainage and I find it to be in conformance with the original plan. I find it to be adequate to handle the storm water runoff. This is an erosion control plan you are now looking at. I have not had time to even look at that. I have absolutely no recommendation-and if I were to look at it, it would be the very first erosion control plan I have ever looked at with regard to Rule 5. And so, my comments would not be adequate to your board."

Commissioner Hunter: "Mr. President, I am going to say right now that in view of the problems that have existed out here on this project since 1988, it has involved the Soil Conservation Service, it involved the Indiana Department of Natural Resources, there have been letters from the state level to the developers here of some of the problems that need to be corrected that I don't feel comfortable voting in favor of this tonight, not until Mr. Jeffers has had a chance to review this and Mr. Rice has had a chance to review it. Because it is a project that has a history of considerable problems. No longer ago than last summer. I guess the lake and the apartment complex, twice it has been silted in and they have..."

Darrell Rice: "It has been dug out three times in the last two years."

Bill Jeffers: "In all fairness this is not the only source of silt that has been discharged into that lake. There are other upstream projects."

Commissioner Hunter: "I understand that. You have targeted several but the major source was on this project. If I understood you correctly..."

(inaudible remarks)

Commissioner Borries: "One of the things, let me just caution you here. What we don't want to get into. I don't have any trouble delaying it if that is your wish as long as these guys can work on it. There are no legal drains on the west side. That is a problem for us because we can't go in and clean up any of this. And the only way we can get legal drains is, you have to go through a real complicated process. In fact, we talked about this out in that area there..."

Bill Jeffers: "This very area. This very area was targeted by Shirley James and her group to become a legal drain and..."

Commissioner Borries: "Yes, they were not successful with it. I am only just saying that..."

Commissioner Tuley: "Are you saying that there is no place for it to go?"

Commissioner Borries: "No, I am only saying that we are going to have to be very careful and to make sure that they are able to contain what they are suppose to do on this property. Because we can't work on..."

Bill Jeffers: "In other words, the county can't help out. It is a branch of Carpenter Creek."

Commissioner Hunter: "That is exactly the reason I'm wanting to postpone it for a while."

Commissioner Borries: "Yes, we can't do anything."

Bill Jeffers: "The lake that Mr. Borries was talking about has been silted shut. It has been cleaned out on more than one occasion. Mr. Borries is correct that should you take an action on this you have no subsequent means of going out there and assisting anyone in cleaning something out because it is private property."

Commissioner Borries: "So what really has to happen, Bill and Darrell will have to be sure that this thing can contain on that plan what it says it can contain. Because we can't do anything."

Commissioner Tuley: "And they have got no way to check that since this morning until tonight."

Bill Jeffers: "I didn't have any way to check that since this morning."

Commissioner Tuley: "Ok. Then we need a motion to approve."

Commissioner Hunter: "I will move approval of this plan, Expressway Commercial Subdivision Section II A."

Motion seconded by Commissioner Tuley. Roll call vote taken with Commissioner Hunter voting, 'No'. Commissioner Tuley voting, 'No'. Commissioner Borries voting, 'No'. Approval denied.

Commissioner Borries: "So we are now at a point where they can resubmit for next month."

**RE: CONCERNED CITIZENS MEETING-CULLEN AVENUE EXTENSION-THE DIP**

Bill Jeffers: "There was one thing that someone wanted me to bring to your attention. A group of people meet here today and it included George Barnett as a landowner and possibly an attorney for a group of landowners and they met with EUTS and Area Plan Commission and the city and county engineer. There is an area that they are very concerned about. It is about 200 acres. The west boundary is Green River Road, the north boundary is Lynch Road, the south boundary is the city limits and an industrial subdivision east, owned by Mr. Braun of Industrial Contractors. The east boundary would go about halfway to Burkhardt and they feel that this area is being shut off from it's natural drainage at what will be the intersection of Lynch and Green River Road. That area is known as, 'The Dip', that radical dip, that is a drainway. They want the

Drainage Board to be aware of that and the Commissioners to be aware of it. They are asking us to come up with some type of long range plan to put a large subsurface storm sewer from the south side of Lynch Road. Area Plan and EUTS are pressuring them to set aside right-of-way for the Cullen Avenue extension and another road extended back from Green River. They will not have any access whatsoever to Lynch Road. Will not be allowed access. And they are saying since they're being asked to provide right-of-way for these further streets-which of course they appreciate the opportunity to access-but their apprehension is that they are not going to be able to drain their property."

Commissioner Hunter: "Is there concerns of..."

Bill Jeffers: "If in fact there have not been provisions made to keep that natural drainway open, under the two projects, yes, they have a very legitimate concern. So Mr. Stoll is going to go. He agreed at the meeting to go look at the plans prepared by Bernardin Lochmueller and the plans prepared by United Consulting to make sure that hopefully, they are wrong. But if that is the case we are going to look at possibly installing before the next section of Lynch Road is let, we are looking at the possibility of installing a major drainage system to carry that water from the end of Cullen Avenue under Green River Road and directly discharging into Pigeon Creek. Otherwise we would have to reroute it through Crawford Brandies ditch and that is like a three mile detour that we don't want to take."

Commissioner Hunter: "Does the famous 'dip' also back up when the Pigeon Creek floods? And what happens to that water when it comes back..."

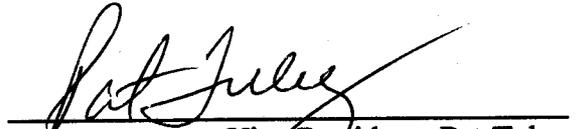
Bill Jeffers: "It backs up. It will simply back up. In a natural flood type system, it would still back up. That is a legitimate concern and that may be the reason why they wanted to close that dip. To prevent water from backing up into this area. However, there is no where for the water to go. A headwater rain has to get out. Backwater is just inevitable in this area. They wanted me to announce this at your meeting because we are going forward with looking at that area."

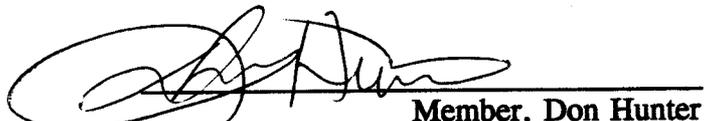
There being no further business, the meeting was adjourned at 8:05 p.m.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo Chief Deputy Auditor  
Jim Beck  
Kyle Foster  
Darrell Rice  
John Stoll  
Bill Kintner  
Michael Eddington  
Bill Jeffers  
Jim Farny  
Terry Noriega  
Dave Keaffaber  
Jill Buttemeier  
Brian Price  
transcribed sbt

  
\_\_\_\_\_  
President, Richard J Borries

  
\_\_\_\_\_  
Vice-President, Pat Tuley

  
\_\_\_\_\_  
Member, Don Hunter

RESOLUTION

IN ACCORDANCE with Indiana Code 36-9-27-8, the Vanderburgh County Drainage Board shall hold a regular meeting at least once a month and at other times as needed to conduct all necessary business and dates of regular meetings shall be established by resolution at the first meeting in January of each year.

NOW THEREFORE, let it be known that the meetings of the Vanderburgh County Drainage Board shall be held on the fourth (4th) Monday of each month immediately following the regularly scheduled meeting of the Board of Commissioners.

If a holiday falls on Monday, then the meeting will be held on the following business day, unless otherwise stated by the Drainage Board in an open meeting.

APPROVED this 24<sup>th</sup> day of January, 1994.

VANDERBURGH COUNTY DRAINAGE BOARD

Richard J. Borries  
Richard J. Borries, President

Pat Tuley  
Pat Tuley, Vice-President

Don Hunter  
Don Hunter, Member

ATTEST:

Sam Humphrey cm  
Sam Humphrey, Auditor  
Vanderburgh County

Alan M. Kissinger  
Alan M. Kissinger  
County Attorney

F-1

MEMORANDUM 01-20-94

TO: Patrick Tuley, President  
Board of County Commissioners  
Vanderburgh County, Indiana

FR: Robert W. Brenner  
County Surveyor  
Vanderburgh County, Indiana

RE: Proposed County Drainage Ordinance

Sir:

On Monday, January 24, 1994, the Surveyor will present the County Drainage Board with a final draft of the proposed county drainage ordinance which you requested.

We appreciate the opportunity to serve Vanderburgh County with this project, and remain available to provide your board with a finished, letter quality document ready for publication when the public review period is complete.

Aside from the insertion of a few charts and certificate forms, any revisions, deletions, or other modifications of the document will be at the direction of the Vanderburgh County Drainage Board or the Board of County Commissioners.

Our chief deputy surveyor will offer a few observations with regard to the proposed ordinance at the drainage board meeting Monday evening; and he will remain at your service to complete the editing and publication of the drainage ordinance.

SS: RWB/wrj

CC: Borries  
Hunter

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FEBRUARY 28, 1994

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**Due to problems with the recording equipment at the time of this meeting these minutes have sections that are not complete.**

MINUTES  
DRAINAGE BOARD MEETING  
FEBRUARY 28, 1994

The Vanderburgh County Drainage Board met in session on February 28, 1994 at 6:55 p.m., in the Commissioner's Hearing Room 307, with President Rick Borries presiding.

RE: APPROVAL OF MINUTES (1-24-94)

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of January 24, 1994. So ordered.

RE: DISCUSSION OF PROPOSED DRAINAGE ORDINANCE

Commissioner Borries: "The Drainage Board is a separate group, we serve according to Indiana Statutes along with the County Surveyor's office who is known as the technical advisor to this group. For sometime now we have recognized that there have been some dramatic changes going on in Vanderburgh County in relation to drainage. Drainage is a very difficult thing to envision and to make decisions on particularly when you are looking at flat pieces of paper and trying to figure out how water is going to run. It makes it even more difficult that after the plans are approved and structures begin to rise off those flat pieces of paper, it makes it even more difficult as to what will happen to the water and the drainage after the structures and all of the changes have been made. So what we have tried to do is to recognize those changes to try to address what this county is going to have to look at as we begin the twenty-first century. To know that life indeed gets a lot more complicated. What we do not-in any case want-is to prohibit growth, but rather we want to encourage it; but it has to be planned well. And frankly with the growth that has gone on and the growing space scarce in this county, we can't afford to make mistakes. So as a result, we have been working now for, really several months, trying to collect as much information as possible to make the right decision as we begin to strengthen and change the drainage ordinance. That is really what we are going to do tonight. I think that what this does show is now through word of mouth and through certainly some publicity that you know that there is a working document going on and that changes are envisioned. You have some concerns under one item and that has to do with plastic storm drainage pipe."

"So at this time, Mr. Jeffers who is representing the Surveyor's office this evening as the technical advisor, has a statement that we have not seen until just this evening and I don't know if the other board members have seen it as well. What I want to say at this point is, we will consider this. We will want you to look this over. We do not intend to vote on this-even what Mr. Jeffers has given this evening. It has not been our intent all along to do that. So we appreciate you being here this evening and we hope through information that we are collecting that we will come up with a fine drainage ordinance for this county. It is not an easy thing and it is not something that we have taken lightly. We do hope that we are going to have it in place either by March or by April. We meet once a month on the fourth Monday of the month to consider just drainage matters, immediately after the Commission meeting. Either on March 28th or on April 25th, we might-if we have the information-we will at that point be ready to take a vote. Why we would be looking at it at that point is to make sure that we have some things in place as the construction season begins to start. I might ask in the interest of time since all of you are here on one issue that you limit your comments to any new information because we know why you are here and know your concerns about that. So at this point I will let Mr. Jeffers put into the record here his statement."

Bill Jeffers: "First of all our department was given the task of developing a drainage ordinance for Vanderburgh County by the County Commissioners. We were directed by the Commissioners to use the Purdue Model which is a model ordinance developed by Purdue for use by all Indiana counties. We were also directed to take a look at the Newburgh ordinance which is in effect; largely due to the fact that the Newburgh ordinance has a lot of enforcement provisions and the Purdue model does not have any enforcement provisions. One of the main concerns about a drainage ordinance is, 'Is it enforceable?'. During the research we found that Vanderburgh

County has no standards or guidelines for the installation of any type of pipe. Whether it is concrete, metal or plastic. That is largely due to the fact that the drainage plans and the street construction plans come in, in detail and they are reviewed by the technical advisors to the Commissioners and the Drainage Board on a case-by-case basis. Each installation is looked at individually to see if it meets current standards. Our experience demonstrated that we have not seen any installation of plastic pipes that were done in conformance with either the manufactures' recommendations or the standards used in other communities. I have not had anyone come forward to take me to a installation that was done in conformance with the manufactures' recommendations or standards used in other communities. Actually to the converse, we have found many of them installed incorrectly and have simply just taken the drawings that were done for concrete pipe and stuck a plastic pipe in it's place. So since the installation is covered by this ordinance, or that will be covered by this ordinance, are only those done by developers in easements in subdivisions and not at the taxpayers expense, and because we wanted the most durable product least likely to be damaged-by either a natural cause or manmade activity-we went with concrete, initially. And understanding that other products may in the future be installed using specifications that would reflect the manufactures' recommendations. It has never been our department's intent to restrict the Highway Department, individual taxpayers, property owners and other people from using plastic products for driveway entrances, downspout drains, basement drains or other private uses on private property outside of dedicated drainage easements."

"As I said, we were directed to use the Purdue model and in this latest memorandum to Mr. Tuley<sup>1</sup>, President of the Commissioners, I have attached the pages of the Purdue Model Ordinance covering materials."

Page 52. It states: 'Pipe and fittings used in storm sewer construction shall be extra-strength clay pipe (ASTM C-700), ductile iron pipe (AWWA C-151), or concrete pipe (ASTM C-76). Other pipe and fittings not specified herein may be used only when specifically authorized by the Board.'

"From Tippecanoe County they enacted the ordinance with some modification.

Page 22. Their sentence there reads: 'Pipe and fittings used in storm sewer construction shall be extra-strength clay pipe (ASTM C-700), ductile iron pipe (AWWA C-151), or concrete pipe (ASTM C-76). Other pipe and fittings not specified herein may be used only when specifically authorized by the County Drainage Board.'

"From the Newburgh Ordinance which has been adopted.

VI. Acceptable Materials (page 5) are restricted to: ' Reinforced concrete pipe (Class III), ductile iron pipe and corrugated metal pipe.'

"What the President of the Drainage Board, Mr. Borries, was referring to was page 37 and page 38, an addition to the ordinance that was finished today. Under Materials on page 37 of this addition it says:

'All pipes and fittings used in storm sewer construction within Projects subject to this Ordinance shall be: Concrete pipe, extra-strength vitrified clay pipe, ductile iron pipe. Other pipe and fittings not specified herein may be used only when specifically authorized by the Drainage Board, on a case-by-case basis, after thorough consideration of information submitted to document the need, feasibility, suitability, and other attributes of the material proposed to be installed.'

"Then went further along to make it fair to all materials.

'Pipes and fittings, whether specified herein or not'-so that includes concrete, tile, ductile iron, plastic, corrugated metal or whatever. Whether it is specified in this ordinance or whether it is brought in on a case-by-case basis, 'Shall not be authorized for use in any Project subject to the requirements of this Ordinance unless the Plan

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<sup>1</sup>A copy of the memo to Pat Tuley from Bill Jeffers dated 2-25-94 included with the 2-28-94 minutes.

submitted contains, or is accompanied by, exact details of the type of materials to be used, and the trenching, bedding, cradling, saddling, backfilling, covering, and compacting of exactly specified fill materials.'"

"So that would cover all types of pipe regardless of the material and as an example I brought in what Indianapolis uses, to show a bedding diagram<sup>2</sup> of a plastic product. It shows a bedding diagram with 4 to 6 inches of bedding depending on the size of the pipe. Two foot saddle on each side. Minimum twelve inch cover over the top outside diameter of pipe. I am not sure about the application of this but it shows it being a certain distance required by DOT outside of the pavement line. My opinion on that is, that the Highway Engineer would decide whether or not it was suitable inside. This is pretty much in conformance with the memo from ADS which is almost identical, the words here describe that picture almost identically except that they are saying one foot of saddle on each side of the pipe rather than two foot. The individual engineer could bring in drawings that would be reviewed and recommended by the Board on individual basis. It is also not unlike the addition of the Louisville specifications that was referred to us by one of the salesmen earlier. Louisville is also on a case-by-case basis requiring drawings. I will just leave these up here if subsequent speakers would like to take a copy. The pages that you are interested in are pages 37 and 38."

Commissioner Borries: "Thank-you Bill. Questions from Board members at this point? Again, as part of his continuing charge-if you will-from this Board has been to conduct as much, and get as much research to see what other counties are doing. To see what we can and should do and again also to try to recognize that there are changes, but just as you have to recognize that we are definitely living in some changing times in relation to making sure that standards are as up to date and complete as possible because of the continuing growth in the county. I appreciate Bill's work on this. We want to provide you with copies of this so that you will have the opportunities to study to see what is being done. At this time in order to expedite that because most of you are all here because of this issue, if we could have a couple of spokespersons to cover some information and then we will enter that matter into the record. We will be reflecting on what you say here."

Terry Noffsinger: "I am standing here particularly for my partner, Les Shivley, who may be here later. We represent some people who do have an interest in this ordinance and we are going to make it short. We thought that we would bring to you some people who have a lot of expertise in this field and could address specifically some of the concerns that they have. We will make them short and we will also try to avoid any kind of duplication. First of all I would like to call on Mr. Richard Schroeder who is President of Cresline Pipe Company."

Richard Schroeder<sup>3</sup>: See footnote #3 for a transcription of Mr. Schroeder's speech

Terry Noffsinger: "All of our speakers will be available later on if any of you have any questions rather than have questions now if you don't mind. It just occurred to me when Mr. Schroeder was talking about jobs how it could be argued by some concrete person, even in other states, which receive Cresline Products, 'Did you know that they can't even put in plastic pipe in their own county?' So I think that we are not just talking about jobs in this county. Our next speaker is, Bill Smith, President with PVC."

Bill Smith: "Good evening, Commissioners. I am a resident of Vanderburgh County and President of a thirty year old, family-owned plastics distributor-not a manufacturer-distributor. PVC Plastics Company. I appreciate this opportunity to discuss the proposed drainage ordinance now under consideration by this Drainage Board. I am concerned about the speed at which the development that this ordinance has progressed without the consultation of a broad cross-section

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<sup>2</sup>A copy of Plastic Pipe (PVC, HDPE) Bedding Detail from Indianapolis included with the 2-28-94 minutes.

<sup>3</sup>A complete transcription of Mr. Schroeder's speech tonight is included with the 2-28-94 minutes.

of affected parties. On various occasions we have tried to get this hearing delayed until we have had a revised copy of this ordinance. In the absence of this, my remarks will be directed toward January the 20th, final draft of the ordinance, in which plastic is not approved for storm sewer drainage. I do acknowledge that we received, this evening a new draft and we are certainly interested in reviewing that. Preliminary reviews suggest that nothing has changed. As a county taxpayer, and a business man I am in favor of the county establishing a standard for the regulating of storm water drainage. I applaud the good work and wisdom that the Drainage Board and the Commissioners are taking in this bold direction. I also appreciate the work that the Surveyor's office and his ordinance drafting committee have done. I know that it is a monumental task to take into consideration all the various interests and concerns drafting this ordinance. Let me tell you that we as a company are committed to communicating our concerns and our various contractors' and builders' comments on this issue and then working with the Drainage Board to achieve a successful enactment and phase-in of this drainage ordinance. As I have watched this process unfold over the last two months I have really wondered what is at issue here. I believe that plastic has proven itself as a safe superior and cost efficient material for use in large diameter as well as small diameter drainage projects. We as a supplier of this wide range of plastic materials have had positive experiences with over a hundred and fifty (150) large diameter projects, in this area. Specifically in storm drainage. I submit a list<sup>4</sup> of thirty recent polyethylene and PVC projects that you may want to review. Plastic has also proven itself in many state and federal projects, including the Indiana Department of Transportation, also a majority of other state department agencies. The US Army Corp of Engineers, the US Forestry Service, and the FAA-Federal Aviation Administration. I believe that one of the central issues here is the regulation and proper installation of large diameter storm and drainage systems. Up until now, this has been limited to the reinforced concrete pipe and the aluminum pipe market. Over the last ten years we have seen many technological advances in the development of materials for storm drainage. The current draft of this ordinance limits the choice that the taxpayers, builders, developers and citizens of Vanderburgh County have available. The key word here is choice. I am concerned that we are eliminating our choices. I believe that in order for our area to be competitive in building technology and project development there is a need to provide a choice in the quality storm drainage plastic material area. And plastics should be included. The current products approved-reinforced concrete pipe and aluminum culvert-do have some limitations and they are not always practical or efficiently installed. By limiting the material in this ordinance you also limit the number of contractors that can successfully preform large drainage projects. By limiting contractors you limit competition. So far that is limiting the choice of material and limiting the choice of contractors. You are also limiting the choice of where the storm drain materials can be purchased. To our knowledge only one company can service this reinforced concrete pipe market in this area. That is giving one supplier a significant advantage. Lack of choice in any market drives material and labor costs higher. If plastic is allowed in the storm drainage standard of materials you will open the storm drainage supply business up to eight local firms-not one. I am here representing not just one firm but, those eight distributors. These eight distributors I might add have an estimated work force of over one hundred and twenty (120) employees and payroll of over five million dollars (\$5,000,000.00)."

"In summary, we are recommending to the Drainage Board that you open up the drainage ordinance standard to include plastic and to provide the citizens of the county a full market choice of materials. We do not believe that your intent is to restrict the market and raise costs. We are also requesting with the inclusion of plastic as an approved material that you develop a method to insure that all drainage products are properly specified and inspected for proper installation. Both plastic and concrete alike."

"Over the last four days when we knew this meeting was going to take place, we have received over three hundred signatures from contractors, customers, homebuilders and county residents that support plastic for use in storm drainage applications. I am sure when more are aware of

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<sup>4</sup>A list of the 35 projects in Vanderburgh, Vigo and Warrick Counties on file in the Auditor's office.

the situation we will have more to present to you. I submit an original copy<sup>5</sup> to you."

"We look forward to working with the Drainage Board, the Surveyor's office and the Commissioners to enact a fair, progressive and pro-development drainage ordinance. I thank-you."

Commissioner Borries: " Thank-you Mr. Smith. Let the record show that the petition that Mr. Smith referred to will be passed to our recording secretary to the Drainage Board and also a list that he provided us in relation to projects that have used the product that Mr. Smith referred to."

Ed Zausch, President of Utility Pipe Sales Company: "Thank-you. We have been a firm employing people of Vanderburgh County for over fifteen years. I couldn't concur more with Richard Schroeder or Bill Smith and what they have said about the specifications of the use and the conditions used with PVC pipe. They were very accurate and not as biased as one might think. They know what they are talking about on this subject. I won't be redundant and repeat a lot of the specifications. There are other topics that could be introduced at this time. But let me say that my main issue here is a concern for the job situation. Utility Pipe Sales Company is a little bit more unique than most of the gentlemen that you have heard, in that we specialize mainly in underground utility work. An ordinance of this nature would very seriously limit the growth of our company and eliminate the growth of our employment faith in Vanderburgh County. We would have to seek our sales elsewhere. It may limit the staff that we have; it may eliminate some of the staff that we have. Therefore, anything that would create a condition like this is not good for Vanderburgh County. It is not good for families. It is not good-definitely for our companies. I am not here only to represent that our company could be injured by this ordinance, but I also have very much concern for the infrastructure of Vanderburgh County and that being that the proper materials are used in the proper place. There is a place for all these materials; there is a reason for all these materials. As Mr. Schroeder said, the expanding use of PVC is creating jobs across the country. It is a superior product in many instances. In some instances concrete would have to be used. The point is, there is a variety of things that are available in the county, there is a variety of things that should be considered. We have offered and have continued to offer as a company our support for any engineering data that may be available. I personally feel that you have had limited engineering data. We have reports and we deal with people across the United States of America that are involved with construction. Not just in the county next door. I do offer that service to you. I want to thank-you and I do ask that you vote down an ordinance like this and re-think your positions on it."

Andy Easley, PE Andy Easley Civil Engineering: "I agree with Mr. Schroeder's comments and Mr. Smith's comments and Ed Zausch. We need to maintain the flexibility of selection. There are a great many good plastic materials out there available for pipe. We in the past two years have used five hundred (500) feet of-in Warrick County-of thirty-six (36") inch high density polyethylene pipe for storm sewer. It is particularly useful if you have a minimum cover situation because the smoothness of it, it is very smooth and you can get a lot more water through a thirty-six high density polyethylene than you can a thirty-six inch concrete. The PVC is useful as an youthful line from a retention basin and quite often we use a twelve inch pipe and it may be buried seven foot deep depending on how much you want to draw down your retention basin. It may be running parallel with and a few feet from a sanitary sewer that is made out of the same material. If you get a leaky joint you will force water into the surrounding soil and then when it drains back out it is going to bring soil particles with it, and how many complaints have you had about getting holes over concrete storm sewers? Mr. Borries and Mr. Willner had to send me out with a crew to seal the inside of a large elliptical pipe that we had to walk in like we were in a coal mine with lights and try to seal it from the inside because the people were complaining about the sink holes in their yard. Concrete pipe cannot constantly be belled up to stay water tight. And if you have a storm sewer on a steep slope, and we occasionally have rather steep slopes, you are very optimistic if you think you can bell up the concrete. You have to put thrust blocks or anchor blocks, to keep them together so that gravity doesn't make them come apart. With the availability of plastic pipe you need to be able to use that so that you won't

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<sup>5</sup>The original list of names are on file in the Auditor's office.

have open joints. I know that there are a lot of people here who want to speak and I am not going to take too much more time but the ordinance needs to be revised in my opinion preferably by some kind of a Blue Ribbon Technical committee that will put the proper language in there to allow the application of a modern materials. Plastics have been very slow to be accepted in the United States and they afford a lot of corrosion resistance. Resistance to abrasion. People who pump coal sculleries like polyethylene pipe because it will outlast ductile iron pipe. I don't know of a single engineer that has (inaudible) used much ductile iron pipe or clay pipe in storm sewers. I will buy somebody a case of their favorite beverage if they can go out there and show me two installations in this county where in the last five years they have used ductile iron pipe or clay pipe in a storm sewer. The ordinance itself, when it first came out had runoff coefficients of over a hundred percent (100%). In other words if it rains on a concrete pavement or asphalt pavement you get more water off of it than Mother Nature dumped on it. Now if that comes out of model Purdue Ordinance I think that they need to re-examine. I have never found in a handbook, and I have practiced engineering in California, Guam and you name it, that ever said that you get more water off of a tin roof or a asphalt pavement than rains on it. I submit that if you put a rain barrel and maybe catch every drop of water that falls on a metal roof you can not get one hundred and ten percent (110%) of the rainfall in the rain barrel. Now there is some serious shortcomings in that ordinance. There is 'depth of flow' shortcomings that limit the depth of flow in the street. Serious shortcomings that are going to cause housing to go up remarkably in this county. I don't know if the Homebuilders Association have raised their hand against this ordinance, but we have operated quite well for many years with the HERPICC County Storm Drainage Manual, intelligently applied. I as an engineer would like to see the cost of housing go down and the cost of improvements go down. That is all I am asking. Let Tippecanoe County have their glorious ordinance. The ordinance in Newburgh, I had to design a subdivision in Newburgh using that ordinance, it was extremely difficult to work with and they finally admitted that there were shortcomings in it. They had to relax some restrictions on velocity. They had velocity restrictions on some other things, it was a very theoretical ordinance that as a practical matter didn't really produce a better storm drainage system at all. It just increases the approval time and a lot of unnecessary calculations. I think that the ordinance basically has a lot of very poorly conceived sections in it. My acquaintance with plastic pipe goes back a long way. We've buried thirty-five miles of plastic pipe in the Darmstadt sewer system. I have designed sewer systems for Poseyville, it was all plastic pipe. The first plastic ever used in a sewer system I encouraged Charlie Day to allow it to be used out on N 41. The old Windmill wanted to be tied into a sewer system that was up in front of what is now the new hotel, the Raddison. And we had a very shallow run to make. It had to be flat and had to be on three tenths grade. I encouraged them to try it out and see how it works and it took off like a house on fire. Armco sold a lot of pipe in this county because of that. It was a water tight joint and it is corrosion resistant. Clay pipe itself, if has an 'O' joint I suspect that after a few years of tension on that clay pipe that the bells crack. I hope that this thing is taken under advisement and sent to a committee and maybe you will see it again in one hundred and twenty days (120) because I think that it is a long way from being ready to be enacted.

(break in tape)

Due to the recording equipment not functioning properly this part of the tape was not audible for transcription.

It was agreed by all Commissioners to wait for a vote until at least the April 25, meeting. President Borries requested that all information and input be given to the representing attorneys within a week or two, who then should turn it over to Mr. Jeffers for consideration.

RE: SUBDIVISIONS FOR REVIEW

A. Joseph Elpers Subdivision II

Bill Nicholson: "I am here representing Joe Elpers on this development, Joe Elpers Subdivision II. It is a minor subdivision a one lot subdivision comprised of five acres. There will be

approximately three quarters of one acre of this property, possibly that will be soil disturbed during the construction of the driveway and the house. After that the property when it is returned to it's natural state and the finished grading is done, it will return it what is called 'sheet drainage'. There is a ditch on the east side of this property that drains approximately two hundred and sixty-seven acres. And the calculated added flow to the developed property would add possibly one tenth of cubic foot per second to the drainage that now goes through the ditch and I don't think that it would cause any overflow from that standpoint. We have in the process and in the plans to develop the twenty-five acres that are lying north of these five acres on the west side of that ditch and adjoining that existing Henze Subdivision that fronts on Henze Road. I understand that there are some problems there with the existing drainage. This will be addressed at the time when we develop that property. We haven't gotten completely into it but most of the problems that are out there we can take care of is that which is north of this five acres."

Commissioner Borries: "Now is this ditch a legal drain?"

Bill Nicholson: "I don't believe so."

Commissioner Borries: "I think I know about where that ditch is. On Henze Road, did you say?"

(inaudible remarks)

Commissioner Borries: "It is only going to be this one lot?"

Bill Nicholson: "That is just one lot. The large ditch that I am talking about comes along the east line there and comes back up into the area south of School Road and west of Highway 65. The other five acres are not factored."

Commissioner Borries: "Didn't Joe cut that ditch himself?"

Bill Nicholson: "No. No. That big ditch was an existing drainage."

Commissioner Borries: "There is some ditch that I looked at, I don't know if it was behind these folks' house, it is almost like a one-to-one slope and that thing is..."

Bill Nicholson: "I will show you that, the ditch that I am talking about comes along this side here in this five acre area. Now there has been created a drainage swale down along here-a grassy drain. Now where this Laubscher Road would come through-which has never been improved-there is a pipe that comes under the road and he has created one of these form type of drainage. What do you call it?"

Bill Jeffers: "WASCB. Water and soil conservation basin."

Bill Nicholson: "It has a stand pipe in it, and the drainage comes across the road with such force that it was eroding this out and he constructed that and personally I think that it was constructed wrong. The overflow dam is too high and it causes the water to back up occasionally across the road. What we intend to do and I think that it can be done, is to bring that structure on over here and include it in our drainage of this twenty-five acres that I am talking about that we are in the process of developing right now. You will have six or seven, two and half (2½) acres, or larger, lots."

Commissioner Tuley: "On this WASCB, is that where the Jarboe property is?"

Bill Jeffers: "Right. The one that we got the phone call on."

Commissioner Tuley: "So when we do this we can move this over and correct that problem? Is that what you are saying?"

Bill Nicholson: "We are going to attempt to do it that way and I would say that this road could possibly be vacated and a swale be brought back and that drainage structure put near the back end of that thing. It would do more good, that way it is out there at the road."

Bill Jeffers: "The WASCB has no bearing whatsoever on his proposal for the five acres tonight. The only relationship between the five acres that he is asking for approval on tonight and the twenty-five or so acres to the north of it, is that he has to size any pipe where the roadway will cross that ditch in such a way to be the proper size for when he develops the twenty-five acres to the north. And he has done that. Then basically the only reason the five acres is coming in as a subdivision, is because of it's size and the definition of a sub, minor sub, parcellation, so forth according to Area Plan Commission. So he must come in as a subdivision, because of the method in which he has parcellized it. All his calculations are accurate and reflect provisions for the future development to the north. I do agree with him that Laubscher Road should-the man should come in and petition you to vacate Laubscher Road to the two adjoining property owners. Then have those property owners in return for gaining that ground for their own use, move the drainage swale and the basin to the back line of that lot and join in common project with the other twenty-five acres to detain water upstream of what he is asking for tonight. That is what I would look for when it comes in, and in as far as Mr. Borries is concerned about that ditch, yes, that ditch on that back line has had many, many problems of erosion over the years that you are aware of. Mr. Elpers has consulted with the Soil Conservation Service in an attempt to bring all that under control, for a concise analysis of what he has actually done you would probably want to go to Mr. Darrell Rice. I am sure that when he comes in with the twenty-five acres plan he is going to have some very strict soil erosion and sedimentation control plans to control that particular piece of ground out there. It is very erodible. But this five acre plan he has here now doesn't fall into Rule 5 and the planning that Mr. Nicholson has done for Mr. Elpers is sufficient and we would recommend approval of it."

Motion made to approve the plan by Commissioner Hunter with a second by Commissioner Tuley. So ordered.

#### B. Broadlawn Estates

Bill Jeffers: "The subdivision in front of you is Broadlawn Estates. Basically the broad yellow areas are all detention basins. Long and narrow detention basins."

(inaudible remarks)

Bill Jeffers: "This is all single family residential just like Edenborough. Edenborough is the back door to McCutchan Estates that was asked for by the Commissioners when McCutchan Estates came in under heavy truck entrance, because the right-of-way going up to Petersburg Road is only 37½ feet rather than 50 feet. They are all cul-de-sac streets. Heinlein Road was widened up to Edenborough from Birch. I am sure that you all are familiar with that. On the right hand side of your page are some yellow circles where I have circled the typical cross sections of all these basins. I wrote some notes down there what each 'A, B, C, D, E' represent. Which basically shows you the size of those basins and how they fit within the dedicated easements. Then there is a notation that shows you the controlled release for the basin is a 34x49 inch elliptical concrete pipe and it discharges down into Edenborough. That is down there on the lower right hand corner of the subdivision, what looks like a 'T' and that discharges into an existing ditch which goes under Edenborough Road. And he is showing you a 38x60 inch pipe which is substantially larger. That is basically demonstrating your detention."

"Then I outlined in blue all the arrows which tell you which way that water flows through and around that subdivision. So you can see that what he has done here is contained all the water from within the boundaries of the subdivision and directed down through these detention basins."

"And then on section 'EE' which shows you that over in the far lower left hand corner, which is the northwest corner of the subdivision, this is the typical separation between the swales on

Broadlawn Estates and the ones on Edenborough. This shows you that they have separated the drainage in such a way that it won't cross the property lines and go down hill into the yards down hill of this new sub. This central swale that is colored in yellow actually follows the alignment of the natural creek that runs through there. They are removing the trees and turning it into a detention area. The reason that, that '59' is down here at the lower corner-the detention basin was going to be what is shown as '59' and they moved it over to a more natural low place. This will create the least amount of land disturbance. It is currently a cornfield and the calculations were made according to HERPICC which is designated as the manual for county storm drainage by the current ordinance. Mr. Darrell James Helfert is the professional engineer who designed this and Mr. Danny Leek, also of Morley & Associates is the registered land surveyor who did the land surveying. They are both in the audience if you have any questions."

Commissioner Borries: "Recommendation?"

Bill Jeffers: "To approve the drainage plan for Broadlawn Estates Subdivision. I might point out, for you both, there is an erosion control plan for this development however, when they moved the detention basins into this creek valley that changed some of the silt fencing and straw dams and so forth and they are currently working on that."

(inaudible remarks)

Bill Jeffers: "Right. The erosion control plan was good for what they had but since then they have realigned. It needs to be remodified to reflect this and they are in the process of doing that. As soon as they do it we will deliver it to Mr. Darrell Rice and it will be available for..."

Commissioner Hunter: "So the plan hasn't been approved by the SCS yet?"

(inaudible remarks)

Danny Leek: "We did submit the first soil and erosion control plan to SCS for Darrell to review and rather than go back and refile this new plan with Darrell I don't think

(pause due to break in tape)

we told him we were in the process of probably changing this plan because we had submitted it and there was some drainage problems that we had to modify and we wanted to submitted a drawing for him."

**Due to problems with the recording equipment this section of the tape was inaudible.**

RE: 1994 MAINTENANCE SPECIFICATIONS

Bill Jeffers: "These are 1994 specification<sup>6</sup>s for annual maintenance of regulated drains in Vanderburgh County. First page under the cover is notice to bidders that sealed proposals will be received on Monday, the twenty-eighth day of March, 1994, by the Auditor up until 4:30 p.m. We are asking you to advertise this notice to Bidders in the local newspapers on March 4, and March 11. Which would be one week apart as required by law. Then that gives them almost twenty days and the requirement after the last advertisement is ten days, so that gives them plenty of time. The general specifications are the same. None of the wording will change, there is just a realignment in the printer. All the general specifications are identical as last year, 1993. The special provisions are nearly identical to last year. They are identical basically for Aiken, East Side Urban, Harper, Keil, Sonntag Stevens and Kolb ditches. We have added a provision in Eagle Slough trying to get somebody to spray it again. If we don't get anyone that is willing to spray it, we are going to try again to get it mowed properly. That seems to be a tough task since Mr. Heppler retired. And we have added at the request of Union Township Ditch Association, we have added Edmond ditch and Helfrich Happe ditch to be removed from annual

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<sup>6</sup>A copy of the 1994 Specifications for Annual Maintenance and the proof of publication on file in the Auditor's office.

mowing and once again, have the silt dipped out of the bottom and have the spoils spread out on the corn and the soybean fields. This is something-they rotate these ditches and about every five to six years each ditch gets the silt dipped out of them down in the bottoms where the river has come up and silted it shut. So this year they want Edmond and Helfrich Happe to be bid out for silt dipping and spoil spreading. Other than that, basically all the provisions are identical to last year and the Surveyor recommends that you adopt these as your specifications for this year and take the proposals under advisement on March 28, your next meeting."

Motion made by Commissioner Hunter to accept recommendations on the 1994 Maintenance Specifications from the Surveyor's office. Seconded by Commissioner Tuley. So ordered.

RE: REQUEST FOR PAYMENT OF BLUE CLAIMS

The following Blue Claims<sup>7</sup> were submitted for approval:

Big Creek Drainage Assn # 0986 Barrs Creel 234-009 93-FM-09-40	20,668 LF @ .20 = \$4,133.60 Pay 40%.....1,653.44 Retainage 15%...620.04	TOTAL 1,653.44
Big Creek Drainage Assn # 0986 Buente Upper Big Creek 234-010 93-FM-10-40	20,195 LF @ .17 = \$3,433.15 Pay 40%.....1,373.26 Retainage 15%...514.97	1,373.26
Big Creek Drainage Assn # 0986 Maidlow Ditch 234-028 93-FM-28-40	18,671 LF @ .15 = \$2,800.65 Pay 40%.....1,120.26 Retainage 15%...420.10	1,120.26
Big Creek Drainage Assn # 0986 Pond Flat Main Ditch 234-029 93-FM-29-40	36,852 LF @ .13 = \$4,790.76 Pay 40%.....1,916.30 Retainage 15%...718.61	1,916.30
Big Creek Drainage Assn # 0986 Pond Flat Lateral 'C' 234-032 93-FM-32-15	9,036 LF @ .12 = \$1,084.32 Pay 15%.....162.65	162.65
Big Creek Drainage Assn # 0986 Pond Flat Lateral 'E' 234-034 93-FM-34-15	3,616 LF @ .12 = \$433.92 Pay 15%.....65.09	65.09
Big Creek Drainage Assn # 0986 Rusher Ditch 234-035 93-FM-35-40	4,444 LF @ .12 = \$533.28 Pay 40%.....213.31 Retainage 15%...79.99	213.31
Terry R Johnson # 1052 East Side Urban N 1/2 234-015 93-FM-15-15	18,370 LF @ .2995 = \$5,501.82 Retainage 15%...825.27	825.27
Eldon Maasberg # 1485 Kneer Ditch 234-024 93-FM-24-15	3,306 LF @ .07 = \$303.60 Pay 15%.....45.54	45.54
Eldon Maasberg # 1485 Maasberg Ditch 234-027 93-FM-27-15	2206 LF @ .07 = \$154.42 Pay 15%.....23.16	23.16
Ralph Rexing # 1228 Pond Flat Lateral 'A' 234-030 93-FM-30-15	5,311 LF @ .14 = \$743.54 Pay 15%.....111.53	111.53
Ralph Rexing # 1228 Pond Flat Lateral 'B' 93-FM-31-15	2,797 LF @ .14 = \$391.58 Pay 15%.....58.74	58.74
Ralph Rexing # 1228 Pond Flat Lateral 'D' 93-FM-33-15	4,579 LF @ .14 = \$641.06 Pay 15%.....96.16	96.16

<sup>7</sup>Copies of the Blue Claims and Surveyor's Reports included with the 2-28-94 minutes.

TOTAL		7,664.71
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Commissioner Tuley: "I recommend approval."

Seconded by Commissioner Hunter. So ordered.

RE: REVIEW OF BRIDGE #5 AND BRIDGE #7  
(Mann Road and Bixler Road over Pond Flat Ditch)

Bill Jeffers: "We were asked to look at some bridge replacements for structure #5 on Mann Road and structure #7 on Bixler Road, both over Pond Flat Main, which is a regulated drain. This is Mr. Brenner's reply to you<sup>8</sup>. Some of the questions that we are asking on here, John Stoll provided the answers to earlier this evening. Probably what our main concern here would be is that the 100 year flood elevations given appear to be right at or just above what now is an annual event. Every time it rains two inches those bridges are under water. This may be due to development upstream, it may be due to the fact that we have done so much work on those ditches that they hold a lot more water than they use to, before it spills out across the farmland. There may be a variety of reasons however, we are asking that the 100 year flood elevation given on the plans be very closely examined because it appears to be within a 1/2 foot of what is going on out there every year. In some places the 100 year flood used to be 3 or 4 feet different than the annual events. We are also pointing out that we feel a twenty-four foot clear roadway is minimal by today's standards and restrictive for future road widenings, we are saying that any type of pile in a waterway is undesirable. We are asking to look closely at that 2-1 side slopes because our work out there has been 2 1/2-1 and we are trying to get 3-1 side slopes. We are asking for all pipes that are associated with the project that empty into Pond Flat have a flap gate on them so it won't back up into the adjacent fields. We are asking for you to add a gated pipe to the southwest corner of structure seven to prevent some current flooding. We are asking for an additional field entrance on the northwest corner to get to our maintenance pathway along top of the ditch. And we are asking you to go to the residents in the immediate neighborhood and ask for some high water testimony, because we don't really feel like what is showing on the plan is what is happening today. Ask the farmers if the roadway clearance is enough for modern farm equipment and, maybe, some other information that we may have over looked. There are two residents here in the audience tonight that live immediately up the road from one of the projects."

Sharon Baumgart: "My husband Maurice and I, we farm ground on both sides of the proposed ditch on Bixler Road. Basically we are here tonight because we had just seen the plans just this week and we were concerned about several aspects of this. Our main interest here is to make sure that the water that is coming down Big Creek continues down Big Creek at the same rate of speed through those bridges as it does upstream and downstream. Basically there is a bridge on Nisbeth Station Road that was recently replaced and about in 1988 there was one replaced on Woods Road and both of these bridge are concrete bridges. Both of them are at least longer. They are concrete bridges and they are both longer than the proposed one on Mann Road and on Bixler Road. One is upstream and one is downstream so basically if the bridges on Mann Road and Bixler Road are not made to the same size and specifications as the ones on Nisbeth Station and Woods, you are going to cause a bottleneck and blockage there. You are going to go from a wider area down to a smaller area and back out to a wider area and you are basically losing the whole idea of putting these bridges in to accommodate this water flowing through there. Like Mr. Jeffers said, we have a real concern about the height of this bridge at this point because right now you can go out there anytime and there is trash on the bottom of the bridge and they are proposing the new bridge to be one foot higher than the existing bridge. My husband and I have lived there for twenty-eight years and we can tell you that the water gets

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<sup>8</sup>A copy of the memorandum to Drainage Board from the Surveyor regarding timber bridge replacement of structures 5 & 7, dated 2-28-94 included with the 2-28-94 minutes.

pretty high down there and we are interested in making sure that not just today and not just tomorrow but that bridge, we hope, will be there 50-75 years. And we are concerned about the fact that it will take the water that we are going to see coming down that ditch in 50-75 years. Who is to say how much that is going to be? I do want to commend that Commissioners on this new ordinance for drainage, because it is very badly needed and especially on our end where we are looking at this. We are looking at the Highway 41 corridor that is being expanded and every time there is a new piece of concrete or a new piece of asphalt that goes in along that corridor it sends more water in our direction. So we are really thrilled that you are going to be setting some new standards for that because that way we won't have to eat that water but also those standards will only be as good as you can enforce them and if they are not enforced and they are not really as good as they need to be, then we are going to continue to eat more water and who is to say how much water that's going to be. We are just asking that this bridge be constructed so that it won't be obsolete in five years or ten years and so it also will be built basically to the same size and the same standards as the one on Woods Road and the one Nisbeth Station Road. Now, Mann Road I can't say for but Bixler Road since it has been paved it really, probably handles as much traffic as Nisbeth Station does and so there is a lot of traffic through there that wasn't through there a few years ago. Mann Road is not paved and since it has been paved it has really become quite beneficial to the people coming in from the Haubstadt area, coming from that direction it is a short cut for them and the road really takes a lot traffic. We want to be sure that the bridge is a good structured bridge too. I have a little bit of problem when we say wood bridge, I really don't have any engineering degree, I really can't say whether it is positive or negative I just know that there is concrete on Nisbeth Station, there is concrete on Woods and I question why the one on Bixler Road should be wood."

Commissioner Borries: "Well I can't even give you a reason why other than we are looking at replacing two and if you want to get an idea of what we are talking about you can look at Petersburg Road by Hamilton Golf Course or Red Bank Road out where wooden structures have been constructed. That is the kind of thing that we had envisioned in that area. If they don't fit there that's something that we will have to have the engineer determine. We have also had some problems with the concrete structure. A lot of problems and they are not finished yet on the one at Nisbeth Station. Major problems. We envision that the maintenance on these bridges-there is no maintenance for 75 years. And the one on Petersburg Road replaced a structure that was a concrete structure that became inadequate in 35 years. It was built in 1956 we took it out in 1991. So I would assure you that we are not going to try to put anything in there that would not be up to your standards and we will try to address your concerns on that. "

Sharon Baumgart: "The one concern that we had and I am not sure, I am no engineer, as to how much piling or how much support has to be for a wooden bridge verses a concrete bridge-if there is more required. Because the more support that you put under that bridge into that creek the more trash that you are going to hold when the water comes down. You are not talking about clean water coming down through there, you are talking about cornstalks, you are talking about silt, there is a lot of trash that comes down through that creek and that will hang on these supports and that will impede the flow of the water also. Our farm is on both sides of that bridge and we are just really interested in making sure what goes in there is going to be something that is going to be beneficial to the drainage of the creek and beneficial to the people who live around there. And that will be there for our children and our grandchildren. I had one more thing that I was wanting to mention and I don't know if I should say that or not, but the Blue Ribbon committee that you are talking about putting together for the Drainage Board, I would like to see a member of the farming community on that board. And especially one that has to deal with something like Big Creek, someone from that area possibly or someone who has lived with it knows how it goes and knows what we are dealing with and I just think that it would be good to have a member of the farming community on that board. Thank-you."

John Stoll: "That is the summary sheet that I gave Bill Jeffers this evening concerning all the adjacent bridges out in the vicinity of Mann Road and Bixler Road bridges. The sizes were determined by our consultants based on the flows that they had calculated using the methods shown on the sheet. If there is some other data that we need to use we can work with everybody in getting that. I guess that the main question is, 'Do you want to go with a 2½ or 3-1 side

slope with these bridges?' Because we will have to tell the consultant that and have the bridges redesigned accordingly to..."

Commissioner Hunter: "Did they do 3-1 on Nisbeth?"

John Stoll: "Yes."

(inaudible remarks)

Commissioner Borries: "Well I think that has been discussed, 2½ to 3. You may want to look and see if 2½ would fit in there and see if there is any-are you proposing the 2½ to 1?"

John Stoll: "No. Two to one. Both of them are 2 to 1. They would be replaced by 2 to 1. But that could be revised. It will increase the span lengths and increase the cost of the bridge-naturally-but it is nothing that is set in stone that we can't change as of yet. It is just that I didn't know that was the direction that you wanted to go in. I can have the consultants revise the plans."

Commissioner Borries: "See what a 2½ to 1, what change we would have on that. In so far as the width, these things are going to be significantly wider than what was..."

Sharon Baumgart: "Maybe I didn't make myself clear a while ago, the one thing that my husband and I are really concerned about is this 3 to 1 business. Because we feel that if Woods Road is 3 to 1 and Nisbet Station is 3 to 1 and you propose these bridges to be 2½ to 1, you are going to cause a bottleneck. What it does is it takes the ditch from being this wide, to this wide and then back out to this wide."

(inaudible remarks)

Sharon Baumgart: "I am saying that probably the reason that the creek is so narrow now is because if they widened out the creek-if it were any wider at that point the bridge would fall in. So that is why we are interested in getting a bridge that is long enough to allow for the slope in the future."

(inaudible remarks)

Commissioner Borries: "We will have John look this over and see what modification needs to be done on that. Do you have any further comment on that? Long enough and high enough. Ok."

(inaudible remarks)

Commissioner Borries: "Thank-you for your input."

RE: CAMPBELL ROAD SUBDIVISIONS

A. Forrest North Minor Subdivision

Bill Jeffers: "I apologize. I thought I had this handled. There are two minor subdivisions on Campbell Road that because of neighborhood alarm, someone in the neighborhood was trying to persuade Area Plan Commission to channel these through Drainage Board. The first one is Forrest North Minor Subdivision it is a simple two lot sub. I don't want to set a precedent by having all these two lot subs come before the Drainage Board. Area Plan Commission had that handled so they went to site reviews straight to sub review, then to APC."

Commissioner Borries: "Why is it coming here then?"

Bill Jeffers: "That is where somebody was cutting trees on what was said to be county right-of-

way and caused mudholes and this, that and the other. Very briefly, I asked Mr. Easley's office to submit a simple plan showing how many square feet of this is being put in there, what they have now and what they want to do and I sent these notations to Area Plan Commission and it was my understanding from Mrs. Cunningham that what I sent to her would suffice to go straight to Area Plan Commission, but just to make sure, these are the notations that I made. I would have absolutely no hesitation to recommend to you if need be, that if your approval of the simple plan for Forrest North Minor Subdivision on Campbell Road is required, I would have no hesitation to recommend to you that what Mr. Easley has submitted along with my comments-that should do."

#### B. Basham Minor Subdivision

Bill Jeffers: "Likewise, Basham Minor Subdivision. I don't even know that there is anything that is being added. The house is already built."

(inaudible remarks)

Bill Jeffers: "Ok. One additional house is being built. Less than ½ an acre is being disturbed and a little piece of driveway is being to accommodate the one house and the drainage pattern is exactly the same as it was before. This is submitted by Darrel Helfert who is here and Mr. Danny Leek. The plan that we looked over is absolutely sufficient for a minor sub, where they are building one house. I believe that the neighborhood alarm was that basically the road is so narrow that they were afraid that water might go over the top of the road and wash downstream and Mr. Easley in that case has designed a ditch and driveway applications that would-if put in that way are not going to cause that problem."

Commissioner Borries: "It is not on the agenda. I don't know."

Bill Jeffers: "I am not asking you to take any action. I just wanted to make sure that if I was suppose to bring it here, I did. And I am just informing you that I have already written a memo on this and I am going to write a memo on this one. I hope that, that suffices to be taken to Area Plan Commission because there is absolutely no reason for these to come to Drainage Board. They are too simple."

Commissioner Borries: "Ok."

#### RE: PIGEON CREEK GREENWAY

Bill Jeffers: "Mr. Brenner wanted me to send this to you and show that the master plan<sup>9</sup> being proposed for Pigeon Creek Greenway includes a ten foot bicycle and pedestrian trail directly along side Eagle Ditch. On the south side of I-164 and that would be great for us because then we could get in there and maintain that ditch. He just wanted you to see that because it doesn't affect a legal drain."

There being no further business, the meeting was adjourned at 9:15 p.m.

#### PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo Chief Deputy Auditor

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<sup>9</sup>A copy of the Master Plan: Design Guidelines, Section 4 included with the 2-28-94 minutes. (*The Evansville Greenway Passage Master Plan*)



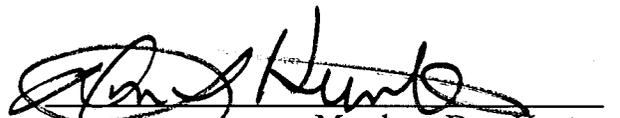
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President, Richard J Borries



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Vice-President, Pat Tuley



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Member, Don Hunter

TO: Pat Tuley, President  
Board of County Commissioners  
Vanderburgh County Indiana

PLEASE DISTRIBUTE

FR: Bill Jeffers, Chief Deputy  
Vanderburgh County Surveyor

2/25/94

Sir:

We are in receipt of numerous letters basically in the form of petitions against any prohibition of "plastic" storm drainage pipe in the proposed drainage ordinance.

First, it has never been the intent of this office to "ban" plastic pipe from use in Vanderburgh County, nor to prohibit the individual "taxpayer," homeowner, or even the highway department from realizing whatever savings may arise from the use of plastic drain pipe materials.

The exclusion of plastic pipe materials from the earlier drafts of the proposed ordinance eliminated their use only in projects subject to the requirements of the proposed ordinance.

The intent was to make the county taxpayers responsible for the least possible future repair and replacement expenditures on projects that originally are installed by developers; and not installed at taxpayers' initial expense.

Secondly, it has been totally unexpected that the sum total and surprisingly prolific remonstrance to the proposed ordinance has been from plastic pipe special interests. No other part of the proposed ordinance has come under any such attack, in spite of the fact that there is other bureaucratic and arbitrary language and procedures to be found therein.

Attached are:

1. The "new" two pages of our proposed materials section, which allows plastic pipe under controlled conditions.
2. The corresponding section of Purdue's model ordinance, which allows plastic pipe only "if specifically authorized by the Board."
3. The corresponding section enacted by Tippecanoe County, which allows plastic pipe only when "specifically authorized by the County Drainage Board." 4 36" plastic
4. The corresponding section enacted by the Town of Newburgh, which apparently allows no plastic pipe at all.

F-1

PURDUE  
MODEL

A. Workmanship:

The specifications for the construction of storm sewers shall not be less stringent than those set forth in the latest edition of the Indiana Department of Highways' "Standard Specifications"; additionally, ductile iron pipe shall be laid in accordance with American Water Works Association (AWWA) C-600 and clay pipe shall be laid in accordance with American Society of Testing Materials (ASTM) C-12.

B. Materials:

Storm sewer manholes and inlets shall be constructed of masonry, cast in place concrete or precast reinforced concrete. Material and construction shall conform to Indiana Department of Highways' "Standard Specifications", Section 720.

Pipe and fittings used in storm sewer construction shall be extra-

strength clay pipe (ASTM C-700), ductile iron pipe (AWWA C-151), or concrete pipe (ASTM C-76). Other pipe and fittings not specified herein may be used only when specifically authorized by the Board.

PURDUE  
MODEL

Pipe joints shall be flexible and watertight and shall conform to the requirements of Section 715.02 - Materials, of the latest edition of the Indiana Department of Highways' "Standard Specifications".

C. Special Hydraulic Structures:

Special hydraulic structures required to control the flow of water in storm runoff drainage systems include junction chambers, drop manholes, inverted siphons, stilling basins, and other special structures. The use of these structures shall be limited to those locations justified by prudent planning and by careful and thorough hydraulic engineering analysis.

f. Inlets:

Inlets or drainage structures shall be utilized to collect surface water through grated openings and convey it to storm sewers, channels or culverts. Inlet design and spacing shall be in accordance with Section 7-400 of the Indiana Department of Highways' Road Design Manual - Volume 1 or other approved design procedure. The inlet grate opening provided must be adequate to pass the design 10 year flow with 50% of the sag inlet areas clogged. An overload channel from sag inlets to the overflow channel or basin shall be provided at sag inlets, so that the maximum depth of water that might be ponded in the street sag shall not exceed 7 inches.

11. Workmanship and Materials:

a. Workmanship:

The specifications for the construction of storm sewers shall not be less stringent than those set forth in the latest edition of the Indiana Department of Highways' "Standard Specifications"; additionally, ductile iron pipe shall be laid in accordance with American Water Works Association (AWWA) C-600 and clay pipe shall be laid in accordance with American Society of Testing Materials (ASTM) C-12.

b. Materials:

Storm sewer manholes and inlets shall be constructed of masonry, cast in place concrete or precast reinforced concrete. Material and construction shall conform to Indiana Department of Highways' "Standard Specifications", Section 720.

~~Pipe and fittings used in storm sewer construction shall be extra-strength clay pipe (ASTM C-700), ductile iron pipe (AWWA C-151), or concrete pipe (ASTM C-76). Other pipe and fittings not specified herein may be used only when specifically authorized by the County Drainage Board. Pipe joints shall be flexible and watertight and shall conform to the requirements of Section 715.02 - Materials, of the latest edition of the Indiana Department of Highways' "Standard Specifications".~~

c. Special Hydraulic Structures:

Special hydraulic structures required to control the flow of water in storm runoff drainage systems include junction chambers, drop manholes, inverted siphons, stilling basins, and other special structures. The use of these structures shall be limited to those locations justified by prudent planning and by careful and thorough hydraulic engineering analysis.

From  
TIPPECANOE

drainage easements.

V. UTILITY CROSSINGS

All utility crossings under any drainage ditch shall maintain 3 feet of earthen cover or 2 feet of cover if the conduit is encased in ductile iron pipe or concrete.

VI. ACCEPTABLE MATERIALS

A. Reinforced Concrete Pipe (Class III)

1. Circular pipe-ASTM C76
2. Arch-pipe-ASTM C506
3. Elliptical pipe-ASTM C507
4. Box sections-ASTM C789

Mastic jointed or rubber gasketed joints are acceptable. The mastic sealer shall meet IDOT specifications. The rubber gaskets shall meet ASTM C443

- B. Reinforced Concrete Manhole Sections: All precast manhole sections shall be constructed to meet ASTM C478
- C. Inlet Boxes: All precast concrete inlet boxes shall be constructed to meet ASTM C478
- D. Inlet Castings: The following castings are acceptable for the uses shown:

E. Ductile Iron Pipe: Class 50 meeting AWWA standards

1. Curb Inlet-East Jordan 7030 with M4 grate  
Neenah R3067 with Type V grate  
Backs to match curb type
2. Area Drain-Flatgrate-East Jordan  
1020 with M1 grate  
Neenah R2502
3. Area Drain-Milk Stool-East Jordan 6488  
Neenah R4341-A
4. Area Drain-Beehive-East Jordan 6508  
Neenah R4345
5. Manhole Casting-East Jordan 1040 with M1 grate

F. Corrugated Metal Pipe: Corrugated metal pipe shall be bituminous coated per IDOT standard specifications. The gauge of galvanized steel shall be a minimum of that shown in the following table. Galvanized pipe without bituminous coating shall be one gauge thicker than specified below and only used upon approval of the Town's Engineer.

County

~~From Newburg~~

SECTION 11: WORKMANSHIP AND MATERIALS:

A. WORKMANSHIP:

The specifications for the construction of storm sewers shall not be less stringent than those set forth in the latest edition of the Indiana Department of Transportation "Standard Specifications";

In addition, ductile iron pipe shall be laid in accordance with American Water Works Association (AWWA) C-600; and vitrified clay tile shall be laid in accordance with the American Society of Testing Materials (ASTM) C-12.

B. MATERIALS:

The materials used in the storm water drainage systems for all Projects subject to the terms of this Ordinance shall be as follows:

1. All manholes, inlets, junction boxes, clean outs, and similar structures shall be constructed of masonry, cast in place reinforced concrete, or precast reinforced concrete.
2. All pipes and fittings used in storm sewer construction within Projects subject to this Ordinance shall be:
  - a. First quality C-wall, Class III, IV, or V reinforced concrete pipe (ASTM C-76) with cast-in-bell joint gaskets (ASTM C-443).
  - b. Extra-strength vitrified clay pipe (ASTM C-700).
  - c. Ductile iron pipe (AWWA C-151).
3. Other pipe and fittings not specified herein may be used only when specifically authorized by the Drainage Board, on a case-by-case basis, after thorough consideration of information submitted to document the need, feasibility, suitability, and other attributes of the material proposed to be installed.

Pipe and fittings, whether specified herein or not, shall not be authorized for use in any Project subject to the requirements of this Ordinance unless the Plan submitted contains, or is accompanied by, exact details of the type of materials to be used, and the trenching, bedding, cradling, saddling, backfilling, covering, and compacting of exactly specified fill materials.

PG ~~38~~ 37  
PROPOSED

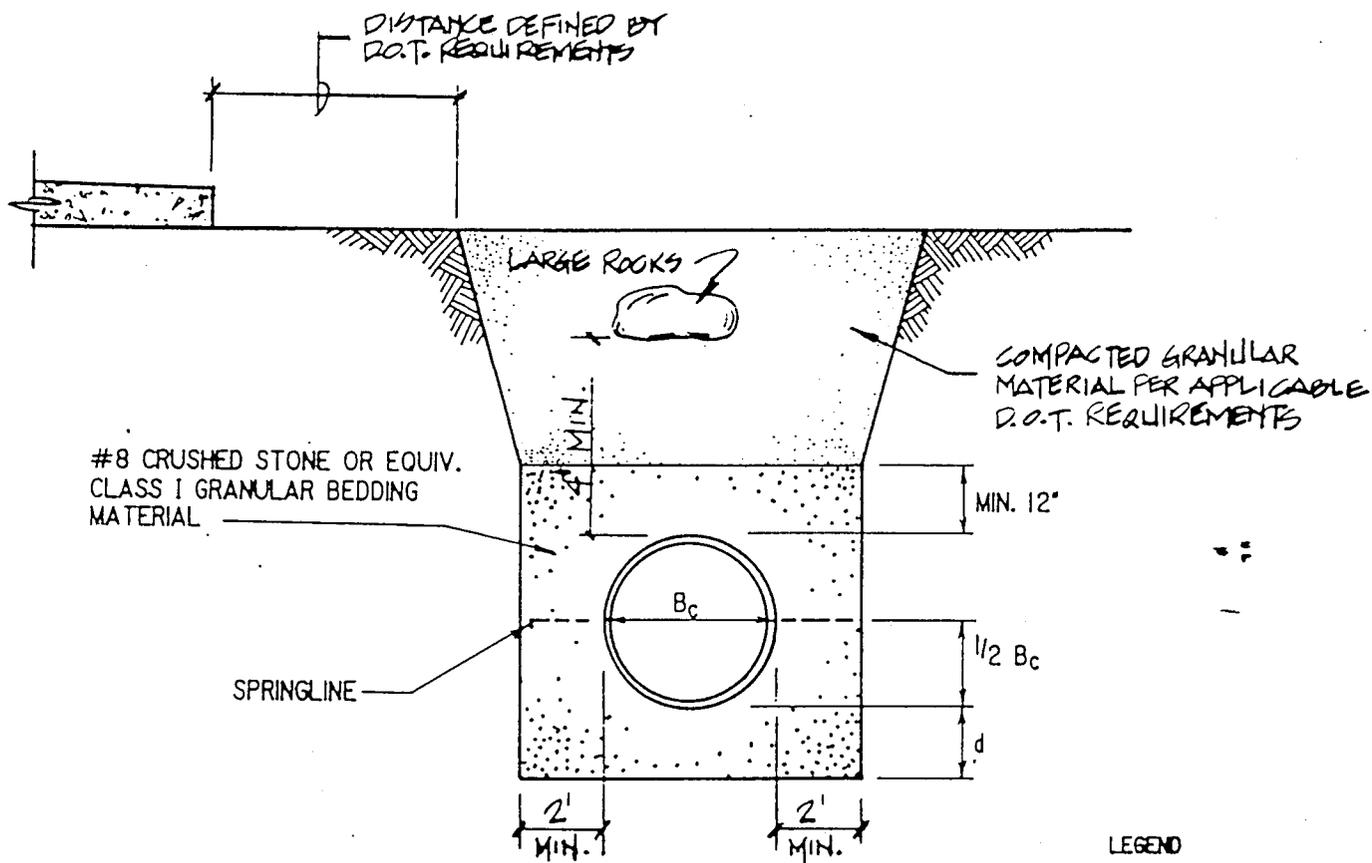
F-1

6.

Section 11: Workmanship and Materials  
Subsection B: Materials

4. Open ended, crossing culverts may be constructed of:
  - a. C-Wall, Reinforced Concrete Pipe Class III, IV, or V, (ASTM C-76);
  - b. Reinforced Concrete Elliptical Pipe, minimum Class HE-III, (ASTM C-507);
  - c. Pre-cast Reinforced Concrete Box Sections. (ASTM C-789, or C-850 when applicable);
  - d. Engineered reinforced concrete culvert structures, poured in place, or combinations of poured in place and precast components.
  
5. The Drainage Board may authorize use of other types of culvert materials on a case by case basis when the submittal is accompanied by detailed drawings and instructions for the installation of the proposed materials which shall be in conformance with applicable INDOT specifications, and manufacturer's specifications and recommendations for the class of materials and work proposed to be used.
  
6. Any installation of Materials which is found to be not in accordance with either the intent or the exact wording of Section 11, shall be subject to an order to remove and replace with an installation in accordance with the approved Drainage Plan, and/or materials selected and placed in accordance with the requirements of this Ordinance.
  
7. All pipe joints shall be flexible and watertight, and shall conform to the requirements of Section 715.02 Materials, of INDOT "Standard Specifications," latest edition.
  
8. Additional drawings, instructions, and specifications for the material and workmanship may be developed by the county engineering departments subsequent to the adoption of this Ordinance, and attached hereto; and it shall be the responsibility of the Applicant and the engineer for the Project to obtain the latest attachments to this Ordinance pertaining to the class of materials and workmanship applicable to the Project.

pg. 38  
PROPOSED



NOTE: ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.

BEDDING MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH & SIDES OF THE PIPE TO ENSURE PROPER COMPACTION & COMPLETE FILLING OF ALL VOIDS.

MIN. TRENCH WIDTH FOR PVC/HDPE PIPE CONDUITS POSSESSING 46 PSI OR GREATER PIPE STIFFNESS SHALL BE  $1.25 B_c + 12$  INCHES

LEGEND  
 $B_c$  = Outside Diameter  
 $D$  = Inside Diameter  
 $d$  = Depth of Bedding Material Below Pipe

DEPTH OF BEDDING MATERIAL BELOW PIPE

D	d (MIN)
27" & SMALLER	4
30" TO 60"	4
66" & LARGER	6

Plastic Pipe (PVC, HDPE) Bedding Detail

INDY

REMARKS BY RICHARD SCHROEDER  
TO VANDERBURGH COUNTY DRAINAGE BOARD  
VANDERBURGH COUNTY ADMINISTRATIVE BUILDING ROOM 307

MONDAY, FEBRUARY 28, 1994 6:00 p.m.

GOOD EVENING

MY NAME IS RICHARD SCHROEDER. I AM PRESIDENT OF CRESLINE PLASTIC PIPE CO., INC. AND CRESLINE-WEST, INC. I AM ALSO A LONGSTANDING MEMBER OF THE BOARD OF DIRECTORS AND A PAST PRESIDENT OF THE PLASTIC PIPE AND FITTINGS ASSOCIATION - A TRADE ASSOCIATION COMPRISED OF OVER 80 MEMBER COMPANIES WHICH SUPPORT THE PLASTIC PIPE AND FITTINGS INDUSTRY. I AM ALSO AN EVANSVILLE NATIVE, BORN AND RAISED HERE. MR. BORRIES, I CAN REMEMBER YOUR FIRST YEAR AT HARRISON - NOT TO EMBARRASS EITHER OF US, I WON'T SAY HOW LONG AGO THAT WAS.

YOU MAY NOT BE THAT FAMILIAR WITH CRESLINE PLASTIC PIPE CO. -- WE KEEP A FAIRLY LOW PROFILE IN THIS COMMUNITY. HOWEVER, WE ARE WELL KNOWN IN OUR INDUSTRY. IN FACT, WE ARE THE OLDEST AND ONE OF THE LARGEST PLASTIC PIPE AND FITTINGS MANUFACTURERS IN THIS COUNTRY. WE MANUFACTURE OUR PRODUCTS FROM A VARIETY OF PLASTIC MATERIALS FOR A WIDE RANGE OF USES. WE SELL OUR PRODUCTS NATIONWIDE -- COAST TO COAST -- AND MANUFACTURE CRESLINE PRODUCTS AT SIX PLANTS LOCATED THROUGHOUT THE COUNTRY, INCLUDING TWO IN THIS AREA. ALL OVERSEEN FROM CORPORATE HEADQUARTERS LOCATED RIGHT HERE IN EVANSVILLE - WHERE CRESLINE PIPE GOT ITS

START OVER FORTY YEARS AGO WHEN MY GRANDFATHER BEGAN THE BUSINESS.

WITH OUR SISTER COMPANIES, CRESCENT PLASTICS AND WABASH PLASTICS, WE PROVIDE LOCAL RESIDENTS WITH OVER 500 GOOD PAYING JOBS. WE TRY TO BE A GOOD CORPORATE CITIZEN - OUR EMPLOYEES PARTICIPATE IN MANY COMMUNITY PROGRAMS, AND WE ARE A FINANCIAL CONTRIBUTOR TO MANY, MANY PHILANTHROPIC ORGANIZATIONS IN THIS COMMUNITY.

I AM HERE TONIGHT BECAUSE OUR COMPANY IS VERY CONCERNED ABOUT THIS PROPOSED ORDINANCE WHICH, AS WRITTEN, BANS PLASTIC PIPE FROM CONSIDERATION FOR STORM SEWER DRAINAGE PROJECTS IN VANDERBURGH COUNTY. I AM CONCERNED FOR FIVE BASIC REASONS.

FIRST, THE PROPOSED ORDINANCE IGNORES THE MANY TECHNICAL MERITS AND SUPERIOR ASPECTS OF PLASTIC PIPE. INSTEAD, THE ORDINANCE FAVORS CONCRETE PIPE, AS IF IT WERE A SUPERIOR PRODUCT. IT FAVORS CONCRETE UNJUSTLY. THE FACTS ARE THAT BURIED PLASTIC PIPE IS SUPERIOR OVER CONCRETE IN MANY WAYS. TO NAME A FEW: 1)IT IS MUCH LIGHTER AND THEREFORE EASIER AND SAFER TO INSTALL; 2)IT HAS SUPERIOR DURABILITY AND A LONGER LIFE THAN CONCRETE WHICH, UNLIKE PLASTIC, IS MORE LIKELY TO DETERIORATE AND CRACK; 3)PLASTIC PIPE PRODUCES TIGHT FITTING JOINTS, WHILE CONCRETE PIPE CAN PRODUCE LOOSE FITTING JOINTS; 4)PLASTIC PIPE IS UNAFFECTED BY ROAD SALTS AND OTHER CHEMICALS WHICH CAN DETERIORATE CONCRETE. RATHER THAN GO ON AND ON, I INSTEAD REFER YOU TO THE FEBRUARY 21 LETTER FROM MR. BOB WALKER, EXECUTIVE DIRECTOR OF THE UNIBELL PVC PIPE ASSOCIATION, WHICH WAS SENT TO EACH OF

YOU AND WHICH SPELLS OUT IN MUCH MORE DETAIL THE MANY ATTRIBUTES OF PLASTIC PIPE OVER CONCRETE.

THE REAL WORLD IS THAT PLASTIC PIPE HAS BEEN USED IN THIS COUNTRY FOR OVER FORTY YEARS AND HAS AN OUTSTANDING PERFORMANCE RECORD. FOR DRAINAGE APPLICATIONS ALONE, OVER 500,000 MILES OF PLASTIC PIPE HAVE BEEN INSTALLED THROUGHOUT THIS COUNTRY. WHY IS VANDERBURGH COUNTY SO DIFFERENT THAT PLASTIC PIPE IS UNACCEPTABLE HERE?

SECOND, THE PROPOSED ORDINANCE COULD UNJUSTLY AFFECT CRESLINE 'S SALES OF PLASTIC PIPE AND JEOPARDIZE LOCAL JOBS. NOT ONLY COULD CURRENT SALES BE AFFECTED, BUT FUTURE GROWTH OPPORTUNITIES WOULD BE LOST. THESE ARE SALES IN OUR OWN BACKYARD. IN OUR BUSINESS, SHIPPING COSTS PROHIBIT THE SHIPMENT OF PLASTIC PIPE VERY FAR. THEREFORE, SALES CLOSE TO A PLANT ARE VERY IMPORTANT. I BELIEVE THIS ORDINANCE, AS PROPOSED, WOULD ALSO AFFECT ANOTHER MAJOR PLASTIC PIPE PRODUCER, CAPCO PIPE CO., WHICH HAS A PLANT IN THIS AREA AND PROVIDES ALMOST 100 JOBS. THE RESULT: MORE JOBS AT RISK.

I'M SURE THE CONCRETE PIPE INDUSTRY IS EAGER TO SEE THIS PROPOSED ORDINANCE PASS. IT WOULD GIVE THE LOCAL CONCRETE PIPE PRODUCER AND DISTRIBUTOR A LOCK ON THE LOCAL MARKET. IT WOULD ALSO BE AN EXAMPLE THEY CAN TAKE TO OTHER COUNTIES TO USE VANDERBURGH COUNTY'S ACTIONS AS REASON TO PASS SIMILAR ORDINANCES. THE RESULT WOULD AGAIN BE THE LOSS OF MORE SALES AND THE LOSS OF MORE LOCAL JOBS. WHAT IS TO STOP THIS MOVEMENT WITH ONLY SEWER PIPE INSTALLATIONS? IF THE MANY BENEFITS OF PLASTIC PIPE ARE TO BE IGNORED, OTHER PIPE APPLICATIONS CAN BE ATTACKED, WITH THE END RESULT THE LOSS OF MORE AREA JOBS. AT WHOSE BENEFIT?

THIRD, BY ELIMINATING THE CHOICE OF PLASTIC PIPE, THIS ORDINANCE TAKES A STEP BACKWARDS IN TIME TO THE OLD AND MORE EXPENSIVE WAY OF DOING THINGS. FURTHERMORE, BY ELIMINATING COMPETITION AND CREATING IN ESSENCE A MONOPOLY FOR AN AREA CONCRETE PIPE PRODUCER/DISTRIBUTOR, THIS ORDINANCE SETS FORTH THE LIKELIHOOD OF HIGHER INSTALLATION COSTS. ALL OF WHICH MUST BE PASSED ON TO COUNTY TAXPAYERS AND AREA HOMEBUYERS. BY IGNORING PLASTICS LOWER MAINTENANCE COSTS, THIS ORDINANCE MAY ALSO RESULT IN HIGHER COUNTY OPERATING COSTS TO REPAIR LEAKING JOINTS, CRACKS, AND PIPE DETERIORATION. THESE COSTS MUST BE BORNE BY AREA TAXPAYERS. AND FOR WHAT REASON?

FOURTH, BY BANNING PLASTIC PIPE THIS ORDINANCE CREATES A GREATER RISK TO ENVIRONMENTAL DAMAGE IN THE EVENT OF A HAZARDOUS SPILL. WITH PLASTIC SYSTEMS THE TIGHT JOINT INTEGRITY ASSURES CONTAINMENT OF ANY SUCH SPILL. DUE TO CONCRETE'S POROUS WALLS , LOOSE FITTING JOINTS, AND INCREASED POTENTIAL FOR CRACKING, CONCRETE PIPE SYSTEMS CAN LEAK SUCH SPILLS INTO SURROUNDING SOILS AND CONTAMINATE SURFACE AND SUBSURFACE WATERS. IN FACT, THE U.S. ENVIRONMENTAL PROTECTION AGENCY IS CURRENTLY STUDYING THIS PROBLEM.

FINALLY, BESIDES THE HOME OF CRESLINE - WHICH IS IMPORTANT TO ME - THIS AREA HAS AN ENORMOUS PLASTIC INDUSTRY - WITH THE LIKES OF COMPANIES SUCH AS GE, AKZO, AND WINDSOR PLASTICS TO MENTION JUST A FEW - REPRESENTING AN INVESTMENT OF OVER \$ 1 BILLION. ENOUGH TO BE KNOWN TO MANY AS THE "PLASTICS VALLEY." TAKEN AS AN INDUSTRY, PLASTICS PROBABLY IS THIS AREA'S LARGEST EMPLOYER. I THINK IT IS TRAGIC WITH THE COMMITMENT THIS INDUSTRY HAS MADE TO OUR AREA THAT A BAN TO PLASTIC PIPE SHOULD EVEN GET THIS FAR FOR CONSIDERATION. WHILE PLASTIC PIPE SALES CONTINUE TO GROW NATIONWIDE, IS A "BAN PLASTICS" ACTION THE IMAGE WE WANT FOR "PLASTICS VALLEY?" IT CERTAINLY ISN'T WHAT I WANT FROM CRESLINE'S CORPORATE HOME.

F-3

NOW I'VE HEARD VARIOUS REASONS FROM THIS ORDINANCE'S PROPONENTS FOR NOT INCLUDING PLASTIC PIPE. ONE WAS THAT PLASTIC PIPE IS SUBJECT TO FIRES, A CHARGE BROUGHT BY THOSE WHOSE BUSINESSES ARE THREATENED BY PLASTIC PIPE. THE TRUTH IS THAT POLYVINYL CHLORIDE , OR PVC, FROM WHICH SEVERAL BILLIONS POUNDS OF PLASTIC PIPE IS PRODUCED EACH YEAR, INCLUDING SEWER PIPE, WILL NOT SUSTAIN A FIRE WITHOUT AN EXTERNAL SOURCE. FURTHERMORE, HERE WE ARE CONSIDERING STORM SEWERS, DESIGNED TO CARRY WATER! I AM PERSONALLY UNAWARE OF A SINGLE RECORDED INCIDENT IN WHICH A PLASTIC PIPE STORM SEWER HAS SUCCUMBED TO FIRE.

ANOTHER REASON GIVEN FOR NOT INCLUDING PLASTIC PIPE IN THIS ORDINANCE WAS THAT A PURDUE STUDY RECOMMENDS AGAINST ITS USE. UPON INVESTIGATION, IT WAS LEARNED THAT THIS STUDY WAS A GRADUATE STUDENT'S RESEARCH PAPER WRITTEN OVER 10 YEARS AGO, WHEN PLASTIC PIPE WAS NOT AVAILABLE IN DIAMETERS LARGE ENOUGH TO BE A SERIOUS ALTERNATIVE FOR STORM SEWERS. MUCH LARGER SIZES OF PLASTIC PIPE ARE NOW AVAILABLE, AND I AM TOLD THIS STUDY IS NOW BEING REVISED TO INCLUDE PLASTIC PIPE. IN FACT PURDUE HAS BEEN USING PLASTIC PIPE FOR THE PAST SEVERAL YEARS FOR ITS CAMPUS STORM DRAINAGE PROJECTS AND HAS REALIZED SIGNIFICANT SAVINGS IN INSTALLATION COSTS.

A THIRD REASON GIVEN WAS THAT PLASTIC PIPE IS PRONE TO POOR INSTALLATION, AND SINCE THE COUNTY HAS NO FUNDING FOR INSPECTION WHILE SYSTEMS ARE BEING INSTALLED, CONCRETE IS THE ONLY CHOICE. ANY MATERIAL IS PRONE TO PROBLEMS IF IMPROPERLY INSTALLED. BUT PLASTIC PIPE IS ACTUALLY MUCH EASIER TO INSTALL. IT IS PRODUCED IN LONGER LENGTHS THAN CONCRETE AND HAS GREATER FLEXIBILITY WHICH ALLOWS IT TO ADAPT TO SHIFTING SOIL AND INSTALLATION VARIABILITY. PLASTIC PIPE IS WIDELY USED, EVEN IN VANDERBURGH COUNTY, FOR OTHER PIPING NEEDS. SO WHY ARE INSTALLATIONS

F-3

FOR STORM SEWERS UNACCEPTABLE? EVEN WITHOUT INSPECTION, TECHNOLOGY EXISTS TO CHECK BURIED PIPE SYSTEMS IN PLACE TO VERIFY PROPER INSTALLATION.

COMMISSIONERS, WHAT WE HAVE HERE IS A TRADE WAR. IT HAS BEEN TRIED BEFORE BY THE MATERIALS WHICH ARE FINDING THEIR MARKET SHARE DECREASING AS THEY CAN NO LONGER ECONOMICALLY COMPETE AGAINST PLASTIC PIPING -- THE MODERN AND MOST ECONOMICAL SOLUTION TO PIPING NEEDS. AS SUCH, THESE SPECIAL INTERESTS NEED PROTECTION TO JUSTIFY THEIR USE. GIVEN A FAIR CHANCE, PLASTICS USUALLY PREVAIL. WHY SHOULD ANYONE BE GIVEN SPECIAL FAVORS? ALL WE WANT IS A "LEVEL PLAYING FIELD" - A CHANCE TO COMPETE WITH OTHER PIPING ALTERNATIVES. WE AREN'T ASKING FOR SPECIAL FAVORS. PLASTICS DON'T NEED THEM TO SHOW THEIR SUPERIORITY AS IS EVIDENT BY THEIR WIDESPREAD ACCEPTANCE AND GROWTH ACROSS THIS COUNTRY TODAY.

IF THERE ARE LEGITIMATE REASONS WHY PLASTIC PIPE MUST BE LIMITED IN VANDERBURGH COUNTY STORM SEWER SYSTEMS DUE TO SOME UNIQUE CIRCUMSTANCES, LET ALL CONCERNED WITH THE DEVELOPMENT OF THIS ORDINANCE ADDRESS THESE CONCERNS IN AN OPEN AND COMBINED EFFORT TO PRODUCE AN ORDINANCE TO FAIRLY INCLUDE ALL ACCEPTABLE PRODUCTS. RECENT ATTEMPTS TO ENGAGE IN DISCUSSIONS TO DO JUST THAT HAVE BEEN MOSTLY UNSUCCESSFUL.

I HOPE THAT VANDERBURGH COUNTY - FOR ALL THE ABOVE REASONS - WON'T DENY PLASTIC PIPE ITS FAIR CHANCE BY PASSING THIS ORDINANCE AS IT IS PRESENTLY PROPOSED. I ASK THAT YOU DELAY YOUR DECISION UNTIL THIS ORDINANCE CAN BE MODIFIED TO INCLUDE ALL LEGITIMATE ALTERNATIVE MATERIALS, INCLUDING PLASTIC PIPE, AND THEN LET THE FREE MARKET MAKE ITS CHOICE.

F-3



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 22 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to BARRS CREEK Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on FEB 1, 1994, and was inspected by our staff on FEB 14, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

2-18-94  
(date)

Additional comments:

F-7



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOOM IN ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSN. for  annual -- [ ] additional maintenance to ROUTE UPPER BIG CREEK Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on FEB. 1, 1994, and was inspected by our staff on FEB. 14, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

2-16-94  
(date)

Additional comments:

F-7



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 225 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSN. for  annual --  additional maintenance to MAIDLOW Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on FEB 1, 1994, and was inspected by our staff on FEB. 14, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brennan  
Robert W. Brennan, Vanderburgh County Surveyor

2-16-94  
(date)

Additional comments:

100% FINAL ACCEPTANCE FEB. 14, 1994

F-7



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual --  additional maintenance to POUND FLAT MAIN Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on FEB 1, 1994, and was inspected by our staff on FEB. 14, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

2-16-94  
(date)

Additional comments:

100% COMPLETE

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, [Signature], representing:  
BIG CREEK DRAINAGE ASSOC., and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
POND FLAT LAT "C" Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: POND FLAT LAT. C

CONTRACT # 234-032

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 24, 1993 INSPECTED ON: Nov. 29, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

[Signature]

Department Head

12-2-93

(date)

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, David R. Ellison, representing:  
BIG CREEK DRAINAGE ASSOC., and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
POND FLAT LAT. "E" Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: POND FLAT LAT. "E"  
CONTRACT # 234-034

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 24 1993 INSPECTED ON: Nov. 29, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[Signature]  
Department Head

12-2-93  
(date)

**F-7**



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: BIG CREEK DRAINAGE ASSOC. for  annual -- [ ] additional maintenance to RISHER Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on FEB 1, 1994, and was inspected by our staff on FEB 14, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

2-16-94  
(date)

Additional comments: 100% COMPLETE.

F-7



CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN

By this Instrument, I Terry R. Johnson  
(Signature in Ink)

representing TERRY JOHNSON CONST., and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on EAST SIDE URBAN NORTH HALF, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

NONE

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: EAST SIDE URBAN NORTH HALF # 234-015

CONTRACTOR: TERRY R. JOHNSON CONST VENDOR # 1052

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-015

ANNUAL MAINTENANCE COMPLETION DATE \_\_\_\_\_  
 ADDITIONAL MAINTENANCE INSPECTION DATE \_\_\_\_\_  
 EMERGENCY MAINTENANCE

WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

[Signature] 1-24-94  
VANDERBURGH COUNTY SURVEYOR DATE

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, X Eldon Maasberg, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
KNEER Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: KNEER  
CONTRACT # \_\_\_\_\_  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: DEC 13, 1993 INSPECTED ON: DEC 15, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

Ruben A. W. Breen  
Department Head

12-21-93  
(date)

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, X Elden Maasburg, representing:  
\_\_\_\_\_, and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
MAASBURG Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: MAASBURG  
CONTRACT # 234-027  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: DEC. 13, 1993 INSPECTED ON: DEC. 15, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

Robert W. Bro  
Department Head

12-21-93  
(date)

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, X Ralph R. Reising, representing:  
\_\_\_\_\_, and presently under contract with

the Vanderburgh County Drainage Board to perform certain maintenance work on:  
POND FLAT LATERAL "A" Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

\_\_\_\_\_  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: POND FLAT LAT "A"

CONTRACT # \_\_\_\_\_

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 29, 1993 INSPECTED ON: DEC. 1, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Ralph W. Brun \_\_\_\_\_

Department Head

12-2-93

(date)

By this ins

represent

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F-7



CERTIFICATION OF PAYMENT

By this instrument, I, Ralph R. Reising, representing:  
\_\_\_\_\_ and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
POND FLAT LAT. "B" Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

\_\_\_\_\_;  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: POND FLAT LAT. "B"

CONTRACT # \_\_\_\_\_

ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE

WORK COMPLETED ON: Nov. 29, 1993 INSPECTED ON: DEC 1, 1993

WORK IS:  APPROVED [ ] NOT APPROVED

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12-2-93

Ralph W. Brown

Department Head

(date)

F-7



CERTIFICATION OF PAYMENT

By this instrument, I, Ralph R. Reising, representing:  
\_\_\_\_\_ and presently under contract with  
the Vanderburgh County Drainage Board to perform certain maintenance work on:  
POND FLAT LAT. "D" Ditch, a regulated drain in Vanderburgh County  
Indiana, do certify that I and/or the firm I represent have/has paid fully all  
expenses incurred for labor, supplies and subcontracts (if any) except for any  
unpaid costs as specified herein, to wit:

NONE

\_\_\_\_\_;  
and that neither I nor the firm I may represent will hold the Vanderburgh County  
Drainage Board nor the Vanderburgh County Surveyor responsible for any costs or  
any claims which may arise from such expenses except for the fifteen (15) percent  
of the total contract price which the Vanderburgh County Drainage Board presently  
holds in retainage pending the receipt of this certified statement.

INFORMATION

DITCH NAME: POND FLAT LAT "D"  
CONTRACT # 234-033  
 ANNUAL MAINTENANCE [ ] ADDITIONAL MAINTENANCE [ ] EMERGENCY MAINTENANCE  
WORK COMPLETED ON: Nov. 29, 1993 INSPECTED ON: DEC. 1, 1993  
WORK IS:  APPROVED [ ] NOT APPROVED  
COMMENTS: \_\_\_\_\_

Ralph W. Brun  
Department Head

12-2-93  
(date)

F-7

MEMORANDUM

TO: VANDERBURGH COUNTY DRAINAGE BOARD  
FR: VANDERBURGH COUNTY SURVEYOR  
RE: TIMBER BRIDGE REPLACEMENT OF STRUCTURES 5 & 7.

Sirs:

Pond Flat Ditch is critically important as the main waterway draining all of Northern Vanderburgh County east of Indiana 65, West of Old State Road, and North of Orchard Road.

An intense program to improve the waterway, and to replace the undersized structures spanning it, has been undertaken by this department and by your board over the past fifteen years.

Every new maintenance or replacement project affecting Pond Flat Ditch requires the utmost detailed planning.

Our brief review of what we perceive as very preliminary bridge plans generates the following comments and questions:

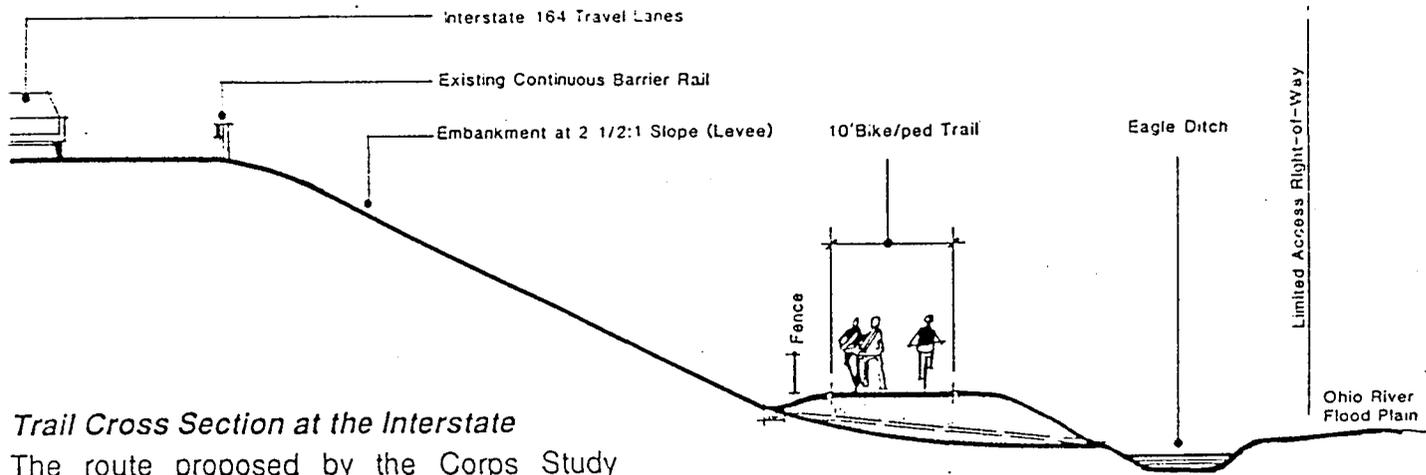
1. Please verify the bench mark data given, and provide the verifying data to our office; particularly the elevation given for the P.K. nail at Bixler & Nisbet.
2. Please verify the 100 year high water elevation given as 421.3 for #5, and 420.8 for #7; particularly as:
  - a. The bridges are only 600 feet apart which in a 100 year event is not far enough to generate 1/2 ft. gradient.
  - b. Both bridges hang considerable trash in annual two inch rainfalls, indicating that 421.3 is more like a five or ten year return period highwater elevation.
  - c. Raising the low superstructure elevation to 422.3 will barely raise the structure out of the existing waterway, the banks of which are exceeded annually.
3. A level circuit is needed to compare the elevation data given in these plans to the data available at:
  - a. Nisbet Road over Pond Flat.
  - b. Woods Road over Pond Flat.
  - c. I-64 over Pond Flat, which has a State Bench Mark, and an assigned 100 year highwater elevation.

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TIMBER BRIDGE MEMO:

4. Twenty-four foot roadway clearance is minimal by today's standards, and very restrictive to future road widenings.
5. Timber piles in the waterway are very undesirable.
6. The planned 2:1 side slopes for the waterway are steeper than what we have standardized by our recent ditch improvements. We have limited all work to 2.5:1, and have encouraged 3:1.
7. The planned 2:1 side slopes probably do not match existing conditions upstream and downstream of the project.
8. All pipes associated with project that empty into Pond Flat should be gated.
9. An additional gated pipe is needed at the Southwest Corner of Structure #7.
10. An additional field entrance is needed at the Northwest Corner of #7 for the travelway along North Bank of creek.
11. Residents of the immediate neighborhood should be consulted for:
  - a. Annual highwater testimony.
  - b. Unusual historic highwater testimony.
  - c. Roadway clearance required by modern farm equipment.
  - d. Their views on the application of the proposed structures.
  - e. Other information that we may have overlooked.

 2/28/94  
Robert W. Brenner, Vanderburgh County Surveyor



**Trail Cross Section at the Interstate**

The route proposed by the Corps Study utilized Levee Authority property between Angel Mounds and the Waterworks. Since publication of the Corps Study, however, Interstate 164 was constructed largely on the levee alignment, thereby preempting use of the levee for the trail from Angel Mounds to west of the US 41 interchange.

The Greenway Master Plan recommends that the Angel Mounds to Waterworks Bend trail segment be located at the base of the Interstate's south facing slope, within the right-of-way. The trail is protected from vehicle conflict by vertical and horizontal distance and by a continuous barrier rail. The vertical separation reduces the noise impact of the Interstate. A fence is recommended between the trail and the Interstate travel lanes.

The vast agricultural floodplain that the trail borders is visually powerful. It is psychologically far removed from the urbanism immediately north of the Interstate.

By locating the Greenway entirely south of the Interstate it will capture the rural character of this region and effect a dramatic sense of entry into the Evansville downtown district, largely uninterrupted by local streets and curb cuts.

Even more important in this route location, however, is that it is of a scale that assumes regional and state interest in its clear connection between Downtown Evansville and the Angel Mounds State Historic Site. Future Greenway extension into historic Newburgh, and to the Ohio River locks and dam beyond, will further emphasize the regional and State interest of this route.

It is this larger concept that positions this section of the Greenway plan for funding as a State project rather than as a local ISTEAA project with lower funding caps.

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MARCH 28, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
MARCH 28, 1994

The Vanderburgh County Drainage Board met in session on March 28, 1994 at 6:50 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

Commissioner Borries: "We have an agenda that has been published here this evening. First I will turn the meeting over to Mr. Bill Jeffers, from the County Surveyor's Office, who will proceed through the agenda."

**RE: Opening OF THE ANNUAL DITCH BIDS AS ADVERTISED**

**These bids will be taken under advisement for one month for Surveyor's recommendation:**

Bill Jeffers: "We have the opening of the annual ditch maintenance bids as advertised. Then we had planned on asking for one month to come back to you, but if they're pretty simple, and straight forward we may be able to do those in one week, and come back in one week."

Motion made by Commissioner Tuley to authorize the attorney to open those Annual Ditch Bids and seconded by Commissioner Borries. So ordered.

**RE: REQUESTS FOR DRAINAGE PLAN APPROVAL FOR SUBDIVISIONS TO BE SCHEDULED ON AGENDA OF APC 4-6-94**

**A. OMICRON INDUSTRIAL PARK (US 41 & MT. PLEASANT ROAD):**

Bill Jeffers: "We have four subdivisions on Area Plan agenda, April 6, 1994. The first one is Omicron Industrial Park, which is located at the intersection of US 41 & Mt. Pleasant Road. It's on the southeast corner of that intersection. Originally, the Drainage Plan for this subdivision was approved in 1981, without any provisions for detaining water. As the board members are aware that area from there on down Little Pigeon Creek through Hamilton Golf Course, etc. subject to annual flooding. The developer who is not here tonight, (because I told them that I thought this was very simple, and straight forward) has submitted a plan. The reason it's coming to you is because he reconfigured some lots for better commercial salability. He added a detention basin down here along the creek that runs through all of these developments, and off under 41 into Little Pigeon Creek. The detention basin is a part of lot 10, and will be maintained by lot 10. This represents an improvement over the plan that was originally approved by your board in 1981. The Surveyor's Office is holding the calculations for the new plan. They reflect that a sufficient amount of water will be stored to control the release from that subdivision to it's pre-redevelopment condition under a twenty-five (25) year event. We recommend that you accept this new drainage plan for Omicron Industrial Park."

Motion made by Commissioner Tuley for approval and seconded by Commissioner Borries for approval for new drainage plan for Omicron Industrial Park. So ordered.

**B. Jones (3) Lot Subdivision (Hedden Road & Kansas Road:**

Bill Jeffers: "The second one is Jones (3) Lot Subdivision, which is located on Kansas Road, at the intersection of Hedden Road. It's on the north side of Kansas Road. It's catty-cornered from the Sunbeam Plastics property. It's a residential piece of property that because of it's size, and the fact that they want to cut it into three (3) lots, falls under the Area Plan Commissions definition of a major

subdivision. However, what it really amounts to is there's two (2) domiciles on the property at the present time, and they wish to create a lot to build a third domicile. It's residential. The comments from Easley Engineering provided to us from Tom Keith, who's employed by Mr. Easley. Says that there are two (2) existing homes on this site, and a third home is planned. The third home on lot 2 will have a driveway. Those are the only planned improvements for this acreage, (4.3) acres. All the lots at this time will remain in the same family. The new construction will not disturb over twenty thousand square feet total. The increased runoff will not be directed on the Kansas Road, meaning that they will build a driveway in such a way as it will drain directly into the existing side ditch. There will be no streets constructed for the subdivision. Sewer and water is available on site. Based upon the small amount of plan improvement for this project, no retention, or detention is felt to be necessary. Those are Mr. Keith's comments. I will provide them for the record to Sunny. We agree with the comments provided by Tom Keith. The Surveyor's Office recommends that the drainage board pass this subdivision and forward it to Area Plan Commission without a drainage plan to detain water. Just a simple site plan provided by Easley's office showing the proposed new homesite on lot 2, and the associated driveway is always required."

Motion made by Commissioner Tuley and seconded by Commissioner Borries to approve Jones (3) Lot Subdivision Plans. So ordered.

#### C. Covington Heights Subdivision:

Bill Jeffers: "Covington Heights Subdivision is located on Hedden Road. Which is about one mile long. It's about halfway up the road. It's on the eastside of Hedden Road and it's west of and immediately adjacent to Green River Estates. It's around fifty acres in size. It's going to be divided into a hundred and thirty-seven small quarter acre lots. The developer Mr. Elpers is here in the audience. His engineers and surveyors are also here to present that plan to you. This is a major development."

Keith Poff: "My name is Keith Poff. I am from Sitecon, Incorporated with the engineers for the developer John Elpers. The Covington Heights Subdivision consists of fifty-two acres in the watershed, that's going to be forty-three acres in the subdivision development. The site has natural drainage divide that separates, and runs into the west in these halves. The majority of the sites have been cultivated in smaller portions, if it would to rain and to form home (inaudible) site. The area south of the site are subject to high return period flooding. The runoff from the forty-two acre watershed upstream of our site will be intercepted by a drainage ditch along the north, and east sides of the site that convey to the existing (inaudible) ditches. All storm water within the development would be detained on-site, except for the backyard areas butting the proposed intercept ditches. Storm water detention will be provided in two separate areas. Retention basin "A", near the southwest part of the site, Retention Basin "B", near the southeast corner. Both retention basins will release stored storm water at controlled rates, not to exceed the twenty-five year undeveloped runoff rate. Both retention basins will have adequate freeboard capacity for storing runoff in the one hundred year storm. All on-site storm runoff will be conveyed to the retention basins by accommodation of swales, and reinforced concrete pipe. The developer will be providing to the County Treasurer a check in the amount equal to fifty cents per linear foot of storm sewers outside of the county street easements. Fifty cents per linear foot of shoreline for the retention basins to transfer

the maintenance to Vanderburgh County. The required maintenance of the retention basin language will be recorded on the subdivision plat. I have a copy of the drainage plan here. (Barely Inaudible...I anticipated it to be in three phases in the subdivision. The drainage divided it simple cuts this area in half. It goes this way into the existing ditch which is the long Green River Estates (barely inaudible). This is Hedden Road. Including phase I should go up to here. Phase II, this half is completely taken care of by this pipe system, over to Hedden Road in the ditch, and then into the retention basin. Third portion is going down to this retention basin will be built. These are some sketches of the sections through the retention basins. I apologize for the scale ... (inaudible remarks). The twenty-five year storage bin will only occupy 1.70 feet of a possible almost five feet. So we have more than enough (inaudible), or retention basins. Likewise in Basin "A" which we will do first. Twenty-five year storage depths there will only be 2.3 feet, out of 5.1. All the reinforced concrete pipes dividing a bypass ditch, intercepts flow from all site into our property. Along the northside and westside here and another one across this portion of the eastside that will continue to use this ditch here for the bypass. The entrances that we propose will have the two pipe systems there. One pipe system that is collecting the runoff from our development, and feeding it to our basin to be another culvert pipe, which will cross under and carry this bypass water through our proposed intersections and continue to flow to the creek. We are providing with our bypass ditch that with an existing corrugated metal pipe. It's part of this water over to the westside, and then down that side. Our new ditch rides (inaudible remarks). About one foot that will stay in place, and remain open as an overflow (inaudible) water to the opposite side of the street. (Inaudible Remarks)."

Commissioner Tuley: "How many lots did you say?"

Keith Poff: "One hundred and thirty-seven lots."

Commissioner Borries: "Are there any rolled curbs and gutters in there?"

Keith Poff: "Yes."

Commissioner Borries: "Who will maintain these?"

Keith Poff: "According to the recent ordinance the pipes will be maintained by Vanderburgh County with the payment of \$.50 per linear foot. The grass, the erosion control would be required of the lot owner. This basin would be owned by lot 120, 127, 124. This basin will be only maintained by lot 137. (Inaudible remarks). Pipe maintenance would be the county. Copy of that drainage plan was made available to Darrell Rice, Soil and Conservation Service."

Commissioner Borries: "Bill, any comments?"

Bill Jeffers: "I've reviewed the plans that are in front of you there. The developer has informed us he'd like to go phase I, and phase II, and phase III. The plans may look slightly preliminary to you, because we asked Friday, and again today for some additional information about (where Mr. Borries hands are there about the detention basins) how deep it would be in a normal pool. How deep it would be twenty-five years. How deep it would be in a hundred year storm. Those were provided quickly to us. The draftsman was not available to them today. He was off today, so all those details will be cleaned up, and put in a more visually pleasing format. All the information you see on there that's handwritten will be drawn in clearly. It's just actually a result of some last minute request on our

part for additional information. All information checks out. It may have appear a preliminary plan because of the last minute information. Your also aware that when the street plans come through with Mr. Stoll, that all that will be attached to the street plans in a final format. If any changes are made after that final set of construction plans is provided to Mr. Stoll that the developer will supply you with an as-built plan to reflect any further changes during construction. We recommend approval of it, and would simply ask that the final street plans also be given to our office for inclusion in our drainage files for us to check to make sure they comply with this plan here, which we approved, or we recommend approval of. The maintenance statement that Mr. Poff referred to. This \$.50 per linear foot thing is part of your Ordinance. That's what I asked for him to include on the plat. The two lots to which the two individual basins are assigned, will keep the weeds cut, the erosion controlled storm sewer discharging out of the basin in proper working order. The shorelines free of erosion, and soforth. The maintenance to which Mr. Poff is referring I believe has been clarified at one time to include or to be inclusive only of in the event that the pipe system fails. Collapses, or something like that. Vanderburgh County would replace the pipe that fails. As far as maintenance, keeping it clear of debris and etc. I still feel that's the property owner's responsibility. As I've heard it interpreted. The area that Mr. Poff referred to is being subject to high return period flooding is that area that's on the eastside lower than 385.5, and on the westside lower than 386 feet above sea level. Those areas are subject to hundred year flooding, and the home sites will be dictated by the Building Commissioner to be two feet above that elevation. There's only a very small portion of that entry road called Hartford, is subject to inundation in a hundred year event, because it's matching the existing elevation of Hedden Road, which is also underwater in a hundred year event. Pretty much once you get couple hundred feet inside the subdivision you won't experience any hundred year flooding of the roadways. The embankments of the two detention basins are shown to be a minimum of one foot above the hundred year flood, so that only during those high return period events when everything else is under water, will that system fail to detain any water. It will detain the twenty-five year events sufficiently, and we recommend you accept it."

Commissioner Borries: "With the comments outlined then through Mr. Jeffers. Mr. Poff, you're agreeable to the changes here that he mentions in relation to the added information here that can be obtained here for the final sheets?"

Keith Poff: "Yes."

Commissioner Borries: "Okay."

Commissioner Tuley: "Keith, is the check with you guys tonight, or when is that going to be submitted?"

Keith Poff: "Voluntary after, actual construction."

Commissioner Tuley: "Voluntary, after actual construction."

Keith Poff: "I believe Mr. Jeffers has (Inaudible Remarks)."

Commissioner Tuley: "Okay."

Bill Jeffers: "The Ordinance requires that resubmitted prior to construction (inaudible). It would be like when he brings those plans in to the Commissioners for street plan approval."

Commissioner Tuley: "The reason Ms. Titzer is asking is so we keep a handle on. So when everybody knows when they come in, who's in receipt of them in proper county form."

Motion made by Commissioner Tuley and seconded by Commissioner Borries to approve Covington Heights Subdivision Plans. So ordered.

**D. Waterford Park Subdivision:**

Bill Jeffers: "The next subdivision for your review is Waterford Park Subdivision, located at Vogel Road & Burkhardt Road. This is at the intersection of the new roadway that your commission constructed, Vogel Road out to Burkhardt Road. It's on the northside of Vogel at the intersection of Burkhardt Road."

Commissioner Borries: "Is this on the westside of the road?"

Bill Jeffers: "On the westside of Burkhardt, and the northside of Vogel Road. This is proposed to be a commercial subdivision. The developer, engineer are here. Mr. Jim Farny, representing the developer, of Bernardine Lochmueller, Associates'."

Commissioner Borries: "So it's on either side of the road?"

Bill Jeffers: "That's right. Vogel Road splits that. I'll let Mr. Farny explain that. That's right. There's like three small lots on the northside right on Burkhardt that I understand there is a strong interest in purchase of that. Then there is two large lots. One on either side of Vogel Road. One on the northside, and one on southside, which may be reconfigured at some point in time. There is a lot of potential there for a Mini Mall; and a Strip Mall. Strip Mall on the northside, and Mini Mall on the southside. We submitted some requests to Mr. Farny, Thursday, which he included in the plan and sent back to us Friday. I provided Sunny with a copy of those. You'll find all those comments listed on the drainage plan that are necessary. The reason that we asked for that is because it is not a residential subdivision where lot owners have the opportunity to maintain the ditches, and the basins, and etc. So what we basically are doing here is acknowledging that because of the very desirable commercial location of this. There is the potential for those two lots to be reconfigured. If they are, we are asking for a new drainage plan to be brought back before your Board for re-approval. The one he presented to you here will work. It would work very well, but if someone buys one of those large lots, and wants to reconfigure they want to reserve the right to move those basins and put them in such a place they wouldn't interfere with maximum potential commercial use of that land. So we're asking that any change to be brought back before the Drainage Board, with a new plan. In as far as maintenance of the basin soforth, we're asking for the design engineer, Mr. Farny to develop a report, and provide it to the owner, detailing how to maintain these basins in good working order. Also that the owner, or developer subsequently would give a copy of this report to anyone who purchased a lot in this subdivision. So they would know how to maintain these systems. The need to maintain them and the responsibility to maintain them be included in the covenants, or whatever on the plat, that they need to notify anyone purchasing a lot here. That they're responsible to maintain the drainage system in accordance with the report that Mr. Farny will develop. I'll let Mr. Farny take it from there, but I'll assume because he included this information on the drainage plan that he will also include it

on the plat, and make sure that the developer is provided with that report."

Mr. Farny: "Thanks Bill. Bill has pretty well outlined pretty well what the plan is about. For the record, my name is Jim Farny, and I represent the developer, who is East Park Development, Incorporated. What East Park Development, Incorporated is proposing is a five lot subdivision. Currently lots one, two and three have (inaudible) developers who are planning developments on those lots. Lots (4), and (5) at this time actually are not proposed for the development, and have no active development. But, in order to of course receive plat approval we're here to present a drainage plan. So as Bill sort of suggested, and said, we proposed a detention basin labeled # (1) on lot #(3), will service lot (1), lot (2), and lot (3). Those are the three (3) lots that are currently being proposed for development. That basin should be constructed just exactly as shown. However, lots (4), and (5) at this time, they have no actual (inaudible) sale, or plans to sale for those lots. Therefore, we've just prepared a drainage report which as Bill has said; (inaudible) and has outlined criteria for the basins that would be required for lots (4), and (5). Of course lots (4), and (5) we will have to come back either to you as the Drainage Board or to site review to get those actual realistic drainage plans approved, once those sites are developed. The owner has a what he considers a marketing plat that shows the development as we show on here. However, depending on the needs of the client at the time of the development, he may wish to relocate the basins as Bill said, in some other location or reconfigure the basins to meet his needs. In order to make Bill comfortable with this then I have agreed to do what Bill has said. That is prepare a maintenance report, because these being commercial developments these basins will be owned operated and maintained by the developers. There's no request here being asked for the county to own or maintain any of these basins. These will remain on private property and maintained by the owner. I can get into specifics if you wish. The written report outlines the requirements for acre feet of storage, and everything else. It's also summarized on the right hand side of the plan, in abbreviated form. All basins are sized for a twenty-five year storm. All outlets are sized such that under two foot or less head, they will release the twenty-five year storm. The hundred year storm basically on this side is almost untenable, because the majority of the site lies just below the hundred year flood elevation. The hundred year flood elevation for this development is elevation three eighty-five (385). The ground ranges from like (384½) to (385) as you progress from the Stockfleth towards Burkhardt Road. So in the event of a hundred year storm, basically not only the basins, but a larger area will be under water. Of course we've met with Roger Lehman, and have assigned all the first floor building elevations for the sites. Those will be published on the plat. So in general the entire site being on the east side as your familiar with is extremely flat, and is basically part of it is just below the hundred year flood elevation."

Commissioner Borries: "Jim, explain here in terms of these paved inverts here that you have, at some future point here, how this is all going to ...?"

Mr. Farny: "Okay. Right now we show what we are looking at here is just the same thing ... (inaudible). This drawing is just this other drawing enlarged. (They're looking at the Blue Print drainage plan for Waterford Park Subdivision) We proposed an outlet for basin #1. This is the basin that's the realistic basin that services these lots. This is the outlet structure is a twelve inch pipe. In the report it says that under a one, and a half (1½) foot a head, that twelve inch

pipe will release the twenty-five year storm. The elevation three eighty-four, point five (384.5) is the hundred year elevation of the water. When it is not raining it goes back down to the permanent flow elevation, which is three eighty four, and a half (384½) to three eighty five (385). This is a wet basin proposes the landscape (inaudible). These are the ones that's basically what his marketing plan left green areas that I've put the detention basins in. Now these, we'll probably have to come back."

Commissioner Tuley: "So for now this represents your detention basins?"

Mr. Farny: "Yes. This basin would hold the twenty-five year storm for this site. Now one thing I didn't mention is these are proposed as heavy commercial developments in the way of shopping centers. So we took what you gentlemen have become accustomed to for this part of the world, we used undeveloped that operates very low, which is point two (0.2). We weighted developed C-factors very high. In other words the highest you can actually get which is water is one (1). We're at point seven nine (0.79), point seven eight (0.78) on the site. So we're planning on a lot of development and there is definitely a need for detention on this site."

Bill Jeffers: "They're basically showing ninety (90%) percent hard surface coverage at (0.9) runoff."

Commissioner Tuley: "Are you asking then for approval for this whole thing with the understanding that these probably will change with the selling of lot 4, and 5, and will have to come back before us?"

Mr. Farny: "Yes."

(Inaudible Remarks)

Bill Jeffers: "Before you vote I would like to also say that the developer is asking for a relaxation of the seventy-five (75) foot legal drain easement on Stockfleth Ditch, on the left hand side of your page."

Commissioner Borries: "How much of a relaxation?"

Bill Jeffers: "They think that they can live if we take it down to fifty (50) feet from the top of the bank. If we retain fifty (50) feet from the top of the bank as a grassy area, and we think that's plenty. So if you would include that in your motion we would recommend that you accept the drainage plan for Waterford Park Subdivision, and to relax the drainage easement for Stockfleth Ditch as it lies along lot 5 to a distance of fifty (50) from the existing top of the bank."

Motion made by Commissioner Tuley for Waterford Park Subdivision to be approved, as submitted, with the relaxation of the easement as recommended and suggested by the County Surveyor's Office and seconded by Commissioner Borries. So ordered.

**RE: REQUEST SPECIAL DRAINAGE BOARD MEETING TO BE HELD (4-4-94). REGARDING THE FINAL ACTION ON ABOVE DRAINAGE PLANS AND OTHER BUSINESS LISTED ABOVE REQUIRING ADDITIONAL ACTION:**

Bill Jeffers: "We might go along here pretty good and not need a Special Drainage Board meeting. That's the next item, and what I'm anticipating is that Linda Freeman, Jim Josey, and I can get together and crunch all the numbers on these bids and come back to you next week with recommendations. If you want

to hold this item until end of the meeting we can. We can do this on 4-4-94, or 4-11-94."

Commissioner Tuley: "We would prefer to do this on 4-11-94 if there is nothing pressing that has to be done."

Bill Jeffers: "Let's do it 4-11-94. That would be great because we have a legal holiday here at the end of this week. Okay so let's have one if you would be so kind enough to call one on 4-11-94."

Motion approved by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

Commissioner Borries: "Sunny you can get the correct advertisement for all of that."

Bill Jeffers: "I think that should be only for the purpose of receiving the recommendations on the bids that Mr. Kissinger opening, and not for any other business."

**RE: OLD BUSINESS**

**RE: DISCUSSION FROM AUDIENCE ON PROPOSED DRAINAGE ORDINANCE. THOSE REQUESTING TO SPEAK: LES SHIVLEY, BRUCE BIGGERSTAFF, AND EARL WERNE:**

Bill Jeffers: "Under old business would be discussion from the audience on proposed drainage ordinance. Those who have requested to speak and who are here present are Mr. Les Shively, and Bruce Biggerstaff. Earl Werne did not confirm that he would like to speak at this time."

Commissioner Borries: "Okay. Mr. Shively."

Mr. Shively: "Members of the Vanderburgh County Drainage Board as you know from the...I believe it was the meeting of the 28th of February, our law firm represents the plastic manufacturers and the companies that sell plastic piping, PVC piping in this particular market. Once again for the record, my name is Les Shively. We made a pledge, if you will, at the last meeting to work with the Drainage Board towards an Ordinance that would provide objective standards for installation, maintenance, construction of surface water drainage facilities in Vanderburgh County in conjunction with all development. Not just subdivisions, but all developments where those concerns are relevant. Since that meeting and as you know our concern was that we believed that plastic is a suitable alternative and we want to see that plastic is a material that is given equal consideration in these specifications. Since the last meeting we have had a meeting of our own. With those involved to represent Crescent Plastics, PVC Plastics, Utility Pipe Service and others. Mr. Bill Smith, PVC, I believe had several conversations with Mr. Jeffers. We are also in the process of doing this. We have Ordinances from other communities in Southern Indiana and some outside of Indiana. Which we have reviewed. We have requested additional Ordinances from communities that are more relevant in size to Vanderburgh County similar in geographic features. We have not received those yet, but we are continuing that review process. Mr. Jeffers was kind enough to supply us with a revised section of the Ordinance dealing with materials and workmanship. Specifically, the material section has changed to leave the approval of materials to the discretion of the Drainage Board. We are concerned about that to two (2) standpoints. Number (1) we are concerned that the whole purpose of (inaudible) a Drainage Ordinance (I can say this for perspective of representing developers) and I am sure you all are seeking this as well, is to get away from subjective

determinations and have some objective standards. When you leave the discretion of approval materials to the Drainage Board we have not accomplished the new Ordinance as we want to accomplish. So we certainly applaud Mr. Jeffers efforts to put some flexible language in and unfortunately it makes for an objection standard fact where we were before. So we still want to continue to search to try to come up with some language that defines specifications such that will put that the plastics and other materials on equal footing. We are continuing that at the review. I've been told that the homebuilders, and I called Evansville Homebuilders' also. In fact I called Mr. Hatfield, I thought he would be here this evening. Apparently he will not be. I understand that they also have met independently, but have not met with us as of yet. Here again, I am not representing them, but my understanding through the grapevine that they have voted to employ the services of an engineer to review the Drainage Board and suggest some input that concerns the present draft. Not just the material section, but other sections that my clients are not necessary directly involved. So what we would propose is this. I think we have shown in good faith that we're trying to work with the county to come up with an Ordinance that will work. An Ordinance that embraces materials that are out there in the market that will work. I think that Mr. Tuley said at the last meeting; obviously this is something that we have been working on for a long time. It's not going to be able to be in affect this building season. I think as long as the parties that are involved in good faith, in progress, in trying to come up with some solutions, and continue that dialogue, that we would ask that we not set this for a vote real soon until we complete that process. Let's say we make requests from the communities that we know that have similar Ordinances. We have not received those yet. Obviously we have not had a chance to review those, or share those findings with you and your staff. That's the progress report and I'm more than happy to answer any questions."

Commissioner Borries: "We share your feelings I think in terms of our objective. I would take a bit of exception to the fact to say that if Mr. Jeffers said; that it was going to come to the Drainage Board, that it would be subjective. It all depends Mr. Shively, on who's side you're on. So if you're on the plastic side, it might not be as objective to the concrete folks. So we certainly concur, at least I would concur, that we will work toward that goal of assuring fairness to all. It's never been our intent to ban anything; particularly in terms of private developments. However, we have some ongoing concerns in the future about county right-of-way, and what kinds of material are acceptable in terms of what we can use there. Those are going to continue to be ongoing. Again, we will certainly work with you to insure fairness."

Mr. Shively: "Thank you very much. Appreciate that."

Commissioner Borries: "Mr. Biggerstaff."

Mr. Biggerstaff: "Members of the Board, my name is Bruce Biggerstaff. I'm strictly here as a person concerned about drainage system ....(Inaudible Remarks)."

Commissioner Borries: "Okay. And we think that that would be. We'd sure appreciate your feelings in that area."

Bill Jeffers: "In as far as Mr. Shively's comments about the revised what I call what I put out without any authorization from the Board, A generic materials editions, what I put it out as. It's just something and some more information to throw out there. I would like to stress that not any of the addition that have been published and distributed have received the

blessing of the Board. I don't want anyone to think that you guys are behind any of it. We're just throwing ideas out there to be mulled over until we arrive at a solution of the pondering we're in. So it was just another edition that was thrown out there, but I do take issue with the comments from Mr. Shively in that, I consulted Indiana Department of Transportation prior to doing it, and found out what their practice is. Their practice is to publish a set of specifications, and standard drawings from their department. Which in our case would be the County Engineer's Department. So the first priority listed in that edition was that any submittal to your Board would have to conform to the existing County Highway standards. Put out by the County Highway Department. The next thing that the man that I was directed to speak to at Indot Materials Division said that all new products, especially for newer products, and specifically plastic and other flexible products. Have to conform to the manufacturer's recommendations so that any submittals to them were reviewed with regard to their conformance to the manufacturer of that materials recommendations as to installation, bedding, that type of thing. I listed that as one of the priorities. That if your technical advisor, such as Mr. Stoll. Without using names the County Engineer, the County Surveyor, whoever your technical advisor would be would use that in the review process so that they were put in place in accordance with manufacturer's recommendations, and so forth. Anything that is put in the ground regardless of the material, put in the ground in a proper fashion, so that neither the county, nor the private property owner, whomever has to maintain or replace these installations is unjustly or unfairly put in position of excess of expenditures, because of shoddy practices. It's not the materials that we object to. It's the potential for shoddy installation there of. I have had conversations with Mr. Hatfield, and Mr. Bussing, both of whom had expressed exactly what Mr. Shively said, is to participate in the ongoing review of any proposal we come forward with. Their main concern at this point and time is the bureaucratic nature of any Ordinance. I'm saying this very objectively as a business person. The bureaucratic nature of any Ordinance that government might pass which would cause excessive layers of government to be looking over the shoulder of people who are already doing a good job. In this case what they have expressed to me was, we already have rule "Five" (5) in force from the Federal and State level. Why include it in a local Ordinance? Because those regulations at a State and Federal level may change next year. We don't really need to be adding another layer of governmental on top of those regulations. They will be enforced by the appropriate State and Federal Agencies. Our Ordinance should address the stormwater end of it. Because there are not any Federal or State regulations regarding the detention of stormwater. That's a county by county duty. So many of the things that Mr. Hatfield and Mr. Bussing have conveyed to our department of helping have very well been taken and we continue to work on the revision of the proposed Ordinance until such time as we can all agree that it's to the benefit of everyone in Vanderburgh County."

Commissioner Tuley: "Bill, before we leave this subject, I've talked to you since the last Drainage Board Meeting. There was some discussion at the last Drainage Board Meeting, and I know people don't like studies, they don't like committees, but the term blue ribbon committee or whatever you want to call it, kind of came up at the last meeting. Is there merit to putting together a group including yourself, our County Engineer, someone from Area Plan, someone representing plastics, someone representing concrete, somebody representing Homebuilders, someone who's a commercial developer. Drainage systems like Mr. Biggerstaff puts in. Maybe even an independent engineer.

I don't want to build it too big, but to get a cross-section to review not just this area within that Drainage Ordinance, proposed Ordinance. So that everybody has their input. Everybody has their little netch to protect or concerns that they have. Put a committee like that together? Is it feasible, is it necessary? Because when I first talked to you about it, you said; "if your wanting to put together a committee just to decide plastic, concrete, or combination, or whatever, that probably isn't necessary, but if you want to look at the whole drainage plan it might be something worth looking into." What's your feelings tonight?"

Bill Jeffers: "Well I think it's something that's worth looking into. I think it's something that could be an aid to the completion of this project, but at the same time I don't feel it's necessary."

Commissioner Tuley: "That almost sounds like...I don't want to say it's a contradiction, but..."

Bill Jeffers: "Parallel reality. It might work if you could get all those people in the same room, at the same time, on the same day of the week. Because everyone you're talking with there has a private interest nine to five they have to do. They have a private business to run. I don't think it's necessary, because these people are now coming forward, and saying; hey we don't like this, or we think this needs to be revised. Do you know what I'm saying?"

Commissioner Tuley: "Yes, and I think maybe that's the direction we need. Contacting each of these groups and saying; okay, we need a contact person that you selected to represent your group. Anytime there's any kind of changes, or recommendations, or whatever we will provide you with a copy and ask for a timely response. It is going to be hard. I mean your there because that's your job. Engineer is here because that's his job, and someone from APC. Everybody else, your right, they have a job to do nine to five."

Bill Jeffers: "Mr. Bussing's job is to build homes, and the guy on PVC, his job is to sell his product."

Commissioner Tuley: "But, I want to insure that we make every effort, and not put the notice on them to contact us and say; I'm not happy about this. We want to get this done, we want to get it done timely, but more importantly we want to get it done right in the best interest of the community as best as we can."

Bill Jeffers: "I don't think it's a bad idea for you to continue to compile a list of names, or entities that should be included for representation, or membership on committees, such as you would like, or such as you have expressed an interest in. I would like to get this Ordinance into such a format form that when we do take it to a committee like that there's very little work left to do."

Commissioner Tuley: "I will leave that up to you as a technical advisor. How we get to that point, that's fine. You work that out. I just want to make sure these people all have a chance to be represented, and be heard. I'm not saying anything is wrong with the way we've done, to this point. I'm just saying because there have been so many people contact this, and come out and say I'm willing to serve on this, or I've got something here I'm concerned about, that we touch base with all of these the best we can."

Bill Jeffers: "If we could get it to a form that would take very little time to finish off, then maybe a committee would be useful. But, make sure we covered all bases."

Commissioner Tuley: "Before we actually call a final draft?"

Bill Jeffers: "Right."

Commissioner Borries: "I would concur with that. I think at some point we could keep going on and on. Communication is going to be the key. I think we have identified some key people here, key groups that have some interest vested, special, whatever we want to call it in this particular Ordinance. Probably who we've not enveloped are going to be all those future people who are going to be buying homes, and making developments and everything else, because they're going to have to live with whatever is decided. At some point we will have to begin to set some time limits, because I think we can talk this thing to death, water it down to the point where we'll end up even worse than where we started off. So I think we have to continue that communication. Bill needs to within these next couple of months, now that we are going to be in April, keep us posted about the communication that he has from these various groups that have now expressed some interest, or concerns. See if we can arrive at some point here where we can hit that final draft, which I hope we can do this year. The reality of it is there is growth occurring. We don't want to penalize anyone, but we also have to realize the change of realities. It's no longer a completely rural county. Things are changing. We have to address I think what some of these standards will be for the future."

Bill Jeffers: "You are exactly right. The people that depend upon us the most are those potential home buyers' who assume we handle everything in these meetings, and that water is not going to come running down their driveway into their garage."

Commissioner Borries: "We can all know that when it does happen, we'll hear from them too. We hear from them a lot. It gets very frustrating, and you get a little humble because we all know that water is going to seek it's lowest levels, and you get into situations sometimes, or you can't predict the future. So that's why it's so important that each of these moves that we're doing protects the future to a large extent. Not to penalize (inaudible) but certainly to make sure that it's going to improve the quality of life and certainly the desirability of owning a home or developing something in this county."

Bill Jeffers: "I've also been in contract with Dr. Scholler again about three (3) times in the last month. He's the man at Purdue who's (inaudible). He's forwarding some new information to me. They had a drainage conference on March 17, 1994. All of that is coming out. There had been revisions of the County Drainage Manual since 1981. He's forwarding those to me. I've got two last things to say on it. I showed Mr. Tuley in our office, how using the current Ordinance, and the current Drainage Manual with it's figures that the subdivision that came before you tonight, Covington Heights, forty-two (42) acres with a hundred thirty-seven (137) lots. Brought to you using the figures in that book for farm ground discharging fifty percent (50%) of the rainfall that falls on it. Then using the lawn figure of seventeen percent (17%) and the streets, sidewalks on both sides and everything all crunched together. I showed Mr. Tuley how there would be no detention what soever requires, because there would actually be a couple of cubic feet per second less discharged theoretically off that subdivision after a hundred and thirty-seven (137) homes were built. In excess of four (4) houses per acre. The

developers is not any longer in the audience, his lawyer is, but the engineer was aware of this too, and was tempted to bring that before you without detention. I told him our office would not recommend it...whether, or not we were right or wrong. He brought the plan that you approved with the detention you approved before you. It was not necessary under the current Ordinance. That was an expenditure that he went to that could of been argued. The good news by the way is that the signed Ordinance that the Area Plan Commission passed a few years ago took two and half (2½) years. So I think we're way ahead of that."

Commissioner Borries: "I think that hits it at a core. Often times we get beguiled by those who would want to say that government ought to operate as quickly as we can turn the light switches on, and off. Because any decisions we make there are going to bad, I'll tell you that. So the electronic townhall meetings that were inspired by some candidates frankly won't even though we live in an instant age of communication won't work unless you get the right communication from a lot of different groups. So what you're saying is that this is a very time consuming process. One in which we're going to have to again take input from a lot of different sources here, so that we make the right decision."

Bill Jeffers: "Right. The reason I brought up the signed Ordinance, that was just one issue. That was just a one issue Ordinance. It took two and half (2½) years and this Drainage Ordinance covers a whole lot of issues. So I'm not disappointed with the progress, frustrated sometimes, but not disappointed."

**RE: REQUEST PAYMENT FOR BLUE-CLAIMS DITCH MAINTENANCE**

Bill Jeffers: "All these claims I bring before you tonight are from Union Township Ditch Association, and therefore a total of (85%) payment. We're still holding back (15%), due to the water being up."

**THE FOLLOWING BLUE-CLAIMS WERE SUBMITTED AS FOLLOWS:**

		<b>AMOUNT</b>
UNION TOWNSHIP ASS'N #1259 CYPRESS DALE MADDOX DITCH #234-012 93-FM-12-40	23887 LF @ 0.03=\$716.61 PAY 40%....\$28.48 RETAINAGE 15%...\$107.50	286.64
UNION TOWNSHIP ASS'N #1259 BARNETT DITCH #234-008 93-FM-08-45	8358 LF @ 0.03=\$250.74 PAY 45%....\$112.83 RETAINAGE 55%...\$137.91	112.83
UNION TOWNSHIP ASS'N #1259 CYPRESS DALE MADDOX DITCH #234-012 93-FM-12-45	23887 LF @ 0.03=\$716.61 PAY 45%....\$322.47 RETAINAGE 55%...\$394.14	322.47
UNION TOWNSHIP ASS'N #1259 EDMOND DITCH #234-016 93-FM-16-45	15395 LF @ 0.08=\$1231.60 PAY 45%...\$554.22 RETAINAGE 55%...\$677.38	554.22
UNION TOWNSHIP ASS'N #1259 EDMOND DITCH #234-016 93-FM-16-40	15395 LF @ 0.08=\$1231.60 PAY 40%...\$492.64 RETAINAGE 15%...\$184.74	492.64
UNION TOWNSHIP ASS'N #1259 KAMP DITCH #234-021 93-FM-21-45	11160 LF @ 0.03=\$334.80 PAY 45%....\$150.66 RETAINAGE 55%...\$184.14	150.66
UNION TOWNSHIP ASS'N #1259 HELFRICH-HAPPE DITCH #234-018 93-FM-18-40	12698 LF @ 0.03=\$380.94 PAY 40%....\$152.38 RETAINAGE 15%....\$57.14	152.38

DRAINAGE BOARD MEETING  
MARCH 28, 1994

UNION TOWNSHIP ASS'N #1259 HELFRICH-HAPPE DITCH #234-018 93-FM-18-45	12698 LF @ 0.03=\$380.94 PAY 45%....\$171.42 RETAINAGE 55%....\$209.52	171.42
UNION TOWNSHIP ASS'N #1259 KAMP DITCH #234-021 93-FM-21-40	11160 LF @ 0.03=\$334.80 PAY 15%....\$133.92 RETAINAGE 15%...\$50.22	133.92
<b>TOTAL</b>		<b>2,377.18</b>

Motion made by Commissioner Tuley and seconded by Commissioner Borries to approve Payment for Blue-Claims. So ordered.

Commissioner Borries: "Mr. Kissinger, your report sir."

Alan Kissinger: "Yes. I'll go bidder's, then amounts, and then the name of the ditch."

**THE FOLLOWING DRAINAGE BIDS WERE SUBMITTED AS FOLLOWS:**

BIDDER	AMOUNT	DITCH
DANIEL J. PAUL	1,211.48	WALLENMEYER
JOHN F. MAURER	557.10	HOEFLING
ALBERT J. STECKLER	861.25	BAEHL
RALPH REXING	391.58	POND FLAT LAT "B"
RALPH REXING	641.06	POND FLAT LAT "D"
RALPH REXING	743.54	POND FLAT LAT "A"
REXING ENTERPRISE, INC.	269.50	SINGER
BIG CREEK DRAINAGE ASS'N	4,133.60	BARR'S CREEK
BIG CREEK DRAINAGE ASS'N	2,800.65	MAIDLOW
BIG CREEK DRAINAGE ASS'N	3,433.15	UPPER BIG CREEK
BIG CREEK DRAINAGE ASS'N	4,790.76	POND FLAT MAIN
ELDON MAASERG	303.60	KNEER
ELDON MAASBERG	154.42	MAASBERG
TERRY R. JOHNSON CONSTR.	2,170.30	AIKEN
TERRY R. JOHNSON CONSTR.	1,078.52	HARPER
TERRY R. JOHNSON CONSTR.	924.38	KEIL
TERRY R. JOHNSON CONSTR.	1,781.09	KOLB
TERRY R. JOHNSON CONSTR.	3,199.92	SONNTAG STEVENS
TERRY R. JOHNSON CONSTR.	17,112.37	EAST SIDE URBAN S½
TERRY R. JOHNSON CONSTR.	6,327.54	EAST SIDE URBAN N½
TERRY R. JOHNSON CONSTR.	975.63	HENRY
BIG CREEK DRAINAGE ASS'N	433.92	POND FLAT LAT "E"
BIG CREEK DRAINAGE ASS'N	1,084.32	POND FLAT LAT "C"
BIG CREEK DRAINAGE ASS'N	533.28	RUSHER CREEK
SHIDELER SPRAY SERVICE	189.76	KEIL
SHIDELER SPRAY SERVICE	1,331.01	EAST SIDE URBAN N½
SHIDELER SPRAY SERVICE	633.15	SONNTAG STEVENS

SHIDELER SPRAY SERVICE	2,452.97	EAST SIDE URBAN S½
SHIDELER SPRAY SERVICE	185.85	HARPER
UNION TOWNSHIP ASS'N	1,433.22	CYPRESS DALE MADDOX
UNION TOWNSHIP ASS'N	669.60	KAMP
UNION TOWNSHIP ASS'N	501.48	BARNETT
UNION TOWNSHIP ASS'N	5,714.10	HAPPE HELFRICH
UNION TOWNSHIP ASS'N	6,927.75	EDMOND
TOTAL	75,951.85	

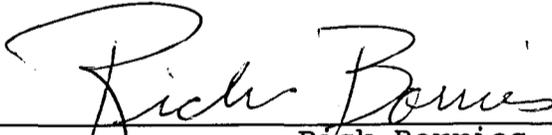
Bill Jeffers: "I would say that if Sunny would be kind enough to carry those back down for safe keeping in the Auditor's Office, we will pick them up in the morning, and check them for mathematical correctness, etc., and bring you a recommendation for letting of bids and entering into contracts for successful bidder on April 11, 1994."

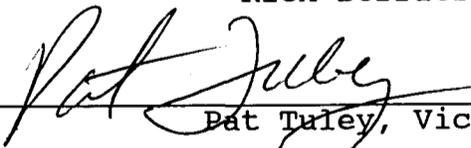
Motion made to approve by Commissioner Tuley and seconded by Commissioner Borries So ordered.

There being no further business the meeting was adjourned at 7:55 p.m.

**PRESENT:**

President Rick Borries  
Vice-President Pat Tuley  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Sunny Titzer, Recording Secretary  
Keith Poff, Sitecon  
Jim Farny, East Park Development, Inc.  
Bruce Biggerstaff, BMB Inc.  
Julie Hinton, Transcribed

  
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Rick Borries, President

  
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Pat Tuley, Vice-President

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Don Hunter, Member



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: UNION TWP DITCH ASSN for  annual --  additional maintenance to BARNETT Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 10 \*, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

(date)

Additional comments:

\* OVER 60% OF DITCH COMPLETED AND INSPECTED



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 223 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Ulrich Temp. Ditch Assn for  annual -- [ ] additional maintenance to CYPRESS DALE MADDOX Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 12, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Branner  
Robert W. Branner, Vanderburgh County Surveyor

3/28/94  
(date)

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Additional comments:

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A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Uniontownship Ditch Assn. # 1259

On Account of Appropriation for Edmond Ditch 234-016

Invoice No.	Itemized Claim	Amount
	Bid at 0.08¢ per L.F. X 15,395	
	L.F. = \$1231.60 ✓	
93-FM-16-45	Pay 4590 →	\$554. 22 ✓
	55% Retainage \$677.35 ✓	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

John A. Rollata  
Name

Treasurer  
Title

Date JAN 10, 1994

SUPERIOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47802

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: United Twp Ditch Assn. for  annual -- ( ) additional maintenance to Edmond Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 10, 1994, and was inspected by our staff on MARCH 28, 1994, and is  approved -- ( ) disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

3-28-94  
(date)

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Additional comments:

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A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Union township Ditch Ass'n. # 1259

On Account of Appropriation for Edmond Ditch 234-016

Invoice No.	Itemized Claim	Amount
	Bid at 0.08¢ per h.F. x 15,395 L.F. = 1231.60	
93-FM-1640	Pay 40 90 →	\$492.64
1591	Retainage \$184.74	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

John G. Rollett  
Name  
Treasurer  
Title

Date JAN 17, 1994

SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
FOCM IN ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: United Twp Ditch Ass'n. for  annual -- [ ] additional maintenance to EDMOND Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 10, 1994, and was inspected by our staff on MARCH 28, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

3-28-94  
(date)

Additional comments:



SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: 1) HIGHTOWER/DITCH ASS'N. for  annual -- [ ] additional maintenance to KAMP Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 1-11, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner, Jr.  
Robert W. Brenner, Vanderburgh County Surveyor

3-28-94  
(date)

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Additional comments:

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SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Union Twp. Ditch Ass'n. for  annual -- [ ] additional maintenance to HELEKICH-HADOK Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 10, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

3-28-94  
(date)

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Additional comments:

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SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 203 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Union Twp. Ditch Assn. for  annual --  additional maintenance to HELEFICH HARRIS Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on JAN 10, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brennan  
Robert W. Brennan, Vanderburgh County Surveyor

3/28/94  
(date)

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Additional comments:

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SURVEYOR'S OFFICE  
VANDERBURGH COUNTY  
ROOM 23 ADMINISTRATION BUILDING  
CIVIC CENTER COMPLEX  
EVANSVILLE, INDIANA 47708

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: UNIONTOWNSHIP DITCH ASSN. for  annual -- [ ] additional maintenance to KAMP Ditch, a legal drain in Vanderburgh County, Indiana, was completed by the said contractor on 1-11, 1994, and was inspected by our staff on MARCH 25, 1994, and is  approved -- [ ] disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

3-28-94  
(date)

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Additional comments:

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APRIL 11, 1994

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MINUTES  
SPECIAL DRAINAGE BOARD MEETING  
APRIL 11, 1994

The Vanderburgh County Drainage Board met in session on April 11, 1994 at 8:15 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

RE: RECOMMENDATION OF APPROVAL FOR ANNUAL DITCH MAINTENANCE BIDS

Bill Jeffers: "Mr. President Borries, the following bids for the Annual Maintenance of regulated drains of Vanderburgh County Indiana are recommended by the Vanderburgh County Surveyor from among the bids received by your board on March 28, 1994. I will read them and the County Surveyor is asking that you approve these bids and allow the County Surveyor to begin entering in to contracts on your behalf with these contractors. We have five days to enter into contracts and then the spraying can begin on April 15, 1994 and the mowing as specified. I will read the name of the ditches. The handout I provided you also has the account number. There is sufficient money in the accounts or monies will be gathered by assessment to pay for these, none of them are excessive. There was no competition between bidders on any of the following ditches."

1994 ANNUAL DITCH MAINTENANCE BIDS

ACCOUNT	DITCH	BIDDERS NAME	AMOUNT
#234-006	AIKEN	TERRY R JOHNSON CONSTRUCTION	2,170.30 709.28
#234-007	BAEHL	ALBERT J STECKLER	861.25
#234-008	BARNETT	UNION TOWNSHIP DITCH ASSOCIATION	501.48
#234-009	BARRS CREEK	BIG CREEK DRAINAGE ASSOCIATION	4,133.60
#234-010	BUENTE UPPER BIG CR	BIG CREEK DRAINAGE ASSOCIATION	3,433.15
#234-012	CYPRESS DALE MADDOX	UNION TOWNSHIP DITCH ASSOCIATION	1,433.22
#234-013	EAGLE SLOUGH	NO BIDDERS (WATER TOO HIGH) OPEN LATER DATE	
#234-015	EASTSIDE URBAN N 1/2	SHIDELER SPRAY SERVICE TERRY R JOHNSON CONSTRUCTION	1,331.00 6,327.54
#234-015	EASTSIDE URBAN N 1/2	SHIDELER SPRAY SERVICE TERRY R JOHNSON CONSTRUCTION	2,452.97 17,112.37
#234-016	EDMOND	UNION TOWNSHIP DITCH ASSOCIATION	6,927.75
#234-017	HARPER	SHIDELER SPRAY SERVICE TERRY R JOHNSON CONSTRUCTION	185.85 1,078.52
#234-018	HELFRICH HAPPE	UNION TOWNSHIP DITCH ASSOCIATION	5,714.10
#234-019	HENRY	TERRY T JOHNSON CONSTRUCTION	975.63
#234-020	HOEFLING	JOHN F MAURER	557.10
#234-021	KAMP	UNION TOWNSHIP DITCH ASSOCIATION	669.60
#234-022	KEIL	SHIDELER SPRAY SERVICE TERRY R JOHNSON CONSTRUCTION	189.76 924.38
#234-024	KNEER	ELDON MAASBERG	303.60
#234-025	KOLB	TERRY R JOHNSON CONSTRUCTION	1,781.09
#234-027	MAASBERG	ELDON MAASBERG	154.42

#234-028	MAIDLOW	BIG CREEK DRAINAGE ASSOCIATION	2,800.65
#234-029	POND FLAT MAIN	BIG CREEK DRAINAGE ASSOCIATION	4,790.76
#234-030	POND FLAT LAT. A	RALPH REXING	743.54
#234-031	POND FLAT LAT. B	RALPH REXING	391.58
#234-032	POND FLAT LAT. C	BIG CREEK DRAINAGE ASSOCIATION	1,084.32
#234-033	POND FLAT LAT. D	RALPH REXING	641.06
#234-034	POND FLAT LAT. E	BIG CREEK DRAINAGE ASSOCIATION	433.92
#234-035	RUSHER	BIG CREEK DRAINAGE ASSOCIATION	533.28
#234-037	SINGER	REXING ENTERPRISE INC	269.50
#234-038	SONNTAG STEVENS	SHIDELER SPRAY SERVICE TERRY R JOHNSON CONSTRUCTION TERRY R JOHNSON CONSTRUCTION	633.15 3,199.92 550.83
#234-040	WALLENMEYER	DANIEL J PAUL	1,211.48

Motion made by President Commissioner Borries and seconded by Commissioner Tuley to accept the fifth as read into the record by Mr. Jeffers and for the Annual Maintenance. So ordered.

There being no further business the meeting was adjourned at 8:30 p.m.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary



Rick Borries, President



Pat Tuley, Vice-President



Don Hunter, Member

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DRAINAGE BOARD MEETING  
APRIL 25, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
APRIL 25, 1994

The Vanderburgh County Drain Board met in session on April 25, 1994 at 6:55 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

RE: APPROVAL OF MINUTES (1-10-94 & 1-24-94)

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve the minutes of January 10, 1994 and January 24, 1994. So ordered.

RE: CONTRACTS ON ANNUAL DRAINAGE MAINTENANCE TO BE ACCEPTED AND SIGNED BY BOARD

Commissioner Borries: "Mr. Bill Jeffers, Assistant County Surveyor is here, and will speak regarding contracts on Annual Drainage Maintenance to be accepted and signed by this Board."

Bill Jeffers: "Do you want me to read each one that I have into the record?"

Commissioner Tuley: "You want to submit them, to be attached, don't you?"

Bill Jeffers: "Right."

Copies of Contracts on Annual Drainage Maintenance is on file in Auditor's Office.

Motion to waive reading, made by Commissioner Tuley and seconded by Commissioner Hunter.

Bill Jeffers: "These are not all the contracts, these are the ones received as of 4:30 this afternoon. There are still some in the mail from Shidler, and a few people who have not come in and signed contracts. So, I will be back next month with the remainder of the contracts. I will submit them to you now-the last page requires each of the three Board members signatures -signature of "Attest" by the Vanderburgh County Auditor, and at the top of the back page of each contract is a space for the 25th day of April, 1994."

Commissioner Borries: "You recommend then?"

Bill Jeffers: "We recommend-these are all from successful bidder's that we recommended to you at our last meeting, and you approved the bid amounts, and the bidder's for each of these contracts, and then these are the follow up contracts that they must enter into with the Board, in order to accomplish and the work can be paid by you at a later date."

Commissioner Borries: "Okay."

Bill Jeffers: "We recommend each of these."

Commissioner Borries: "OK."

Motion made by Commissioner Tuley and seconded by Commissioner Borries to accept these Contracts.

Bill Jeffers: "I will bring you the rest of those the next month."

Commissioner Tuley: "Okay."

RE: DISCUSSION REGARDING THE PROPOSED DRAINAGE ORDINANCE

Commissioner Borries: "Mr. Jeff Hatfield, representing the Evansville HomeBuilders, is here regarding the proposed Drainage Ordinance."

Jeff Hatfield: "Hello, thank-you. I am Jeff Hatfield, I represent the Evansville HomeBuilders Association, which is made up of 300 or better companies here in Evansville in Vanderburgh County, that do most all of the homebuilding and developing work. I was put in charge of establishing a committee within the association to review this Drainage Ordinance proposed by the County Surveyor's Department. In the last 30 or 60 days we've made some good headway in evaluating the impact of this Ordinance, but there's a lot of items in it that quite frankly needed some professional opinions, and at our last meeting that we held within the last 30 days we the Association did hire an Engineering Firm here in Evansville, to review the Ordinance for us, and give us some suggestions on possible rewording, some aspects of it. And what I'm here for is to basically ask for time, to get that work done on our part, and maybe come back to you at a later date sometime this year, and basically, purpose alternate language within the Ordinance. Before I leave that with you, I just want to say that most of the developers and builders in the Association believe that there are many good aspects of this Ordinance that should not be discarded. That there are a lot of things in it that will go a long way in providing good subdivisions for our County, and so we don't want to see those things discarded. There are also things in it that we would like to maybe see reworded or compromised with the County on it, and basically, I'm here just to ask for some time to get back with you."

Commissioner Borries: "Okay?"

Commissioner Hunter: "I guess my first question would be, how much time would you like to have? Have you had any thoughts on this?"

Jeff Hatfield: "Well, unless you took action tonight on this, or I don't know this even for sure but, I am just kind of thinking out loud, we may have missed this years building season? This is such a far reaching Ordinance that maybe 3 to 6 months?.....I am not saying it's going to take that much time, I just don't want to confine, and to give you a reason why is, our Association is made up of independent business owners that have their own opinions, and to get all of them to be on the same track is sometimes an achievement."

Commissioner Borries: "It is with any Board."

Jeff Hatfield: "Yes. I have to think about how much time it would get for our members to basically feel good about this. Trying to get everybody on board."

Commissioner Hunter: "The reason I'm asking, I think, I put you on the spot. I think, we need a target date. Maybe push you a little bit to go after your members. I just feel we need something to shoot at right now."

Jeff Hatfield: "Right, I agree, I don't think it should be open-ended at all."

Commissioner Hunter: "Otherwise we'll let it go until the last two weeks or week."

Jeff Hatfield: "Sure."

Commissioner Tuley: "I'm not ready to act on it, so I'm sure there's not going to be anything done tonight. That automatically buys you a month. I have to agree with you a little bit. I don't like to put time tables on it, but if we just kind of leave it open this thing is going to sit here forever."

Jeff Hatfield: "Yeah, and I don't want that to happen."

Commissioner Tuley: "Yes."

Jeff Hatfield: "I think the key to this is to get the people that it affects the most to feel good about it, and feel like that they're a part of something that's going to make their work look better, or be better, or whatever, and we'll take as much time as you're willing to give."

Commissioner Borries: "We want to work with you, and always have Jeff, and speaking personally, I would want to concur, obviously to ask the Commissioners here to, the other members of the Board here maybe to pick a date in a second, but, and we want to work with you, we do feel I think some obligation. I do know Commissioner Hunter has pushed very hard while he has been a member of this Board, to insure that we have something not only you can live with, but certainly that the homeowner's in the future can."

Jeff Hatfield: "We think that goes hand in hand."

Commissioner Borries: "Yes, we'll kind of be able to see that, so let's pick a date."

Commissioner Hunter: "In a very selfish fashion, I want to see this happen before I leave December 31, to be quite frank with you!"

Commission Borries: "Sure."

Commission Tuley: "I would hope we would reach something before then. I would say that 90 days should be more than ample for this thing to be resolved. Hopefully, you guys, that's a big Organization I understand but, I think that if you can pull that together, and get your Organization to all agree, you've done a heck of a job because, it is a pretty big detailed Ordinance! I believe if you can get a consensus out of it within 90 days, I think you will be okay."

Commissioner Hunter: "I talked to Jeff before and I made a suggestion on something else, I hope you two will concur. Looking at item B under 4 the PVC people with plastic pipe, I have asked Jeff within his deliberation with the Engineering Firm that he will retain recommendation. I would like for them to include when they come back to us, the areas where they recommended plastic pipes be used, in the area where they recommended it not be used. In the areas in terms of what you deal with on a daily basis. The plastics people have given us excellent presentations but, they're there to sell the product, and then if they don't, they should be in front of us but, from your point "of" view what can you live with, and what areas do you recommend, and what areas should we look at in a little different direction?"

Jeff Hatfield: "Well, behind this engineering company we're going to look at every sentence, and so every sentence includes plastics."

Commissioner Hunter: "Okay."

Jeff Hatfield: "What we hope to do, to give to you, is a complete alternative, and I'm not saying that the whole thing would be revamped. I'm just not saying that because there is a lot of things that the Surveyor's Office has proposed that are quite positive, and we're just not going to waste our time with even arguing those points, and so, yeah, plastic's will be covered."

Commissioner Hunter: "Let me ask you one other thing too, that I want to request, assuming we look at this at the July meeting which will be 90 days up the front, could we have this a week or 10

days...your suggestion...so we have time to sit down and look at them before we decide?"

Jeff Hatfield: "That is only to our advantage to do that."

Commissioner Hunter: "I would really like to have at least a week to 10 days so I can sit down, and digest it, and if I have questions I can ask our County Engineer, or I can ask Darrell Rice or so we're kind of on the same page when you come before us."

Jeff Hatfield: "Okay, now do we send that directly to the Commissioner's Office?"

Commissioner Tuley: "Yes, that would be fine. I am glad you are doing this Jeff, because every public discussion we have had so far, and I've had this discussion with Bill, there seems to be an awful narrow focus on just this plastics versus concrete issue, and Drainage Ordinance is a heck of a lot more than that."

Jeff Hatfield: "Yes, which is why I'm here."

Commissioner Hunter: "Quite honestly, I have been uncomfortable because, we haven't gotten into it from you people, and your the ones that generate the houses, the jobs, and tax bases, and all that, we have to come up with something you all can live with."

Jeff Hatfield: "It's not that we're not aware of this Ordinance, Mr. Jeffers made us aware of it last fall, when he first started working on it, and it's just that when you have 300 hundred people, it is extremely difficult for things to move very quickly. It may sound like an excuse, but it's not, and I do appreciate the extension."

Commissioner Tuley: "Okay."

Commissioner Hunter: "I will move it if we can get Jeff Hatfield, and the homebuilders 90 days which will put them to the latter part of July, and that they try and get us a copy of their suggestions a week or 10 days prior to that meeting, so we can look at them and be ready."

Motion made by Commissioner Borries and seconded by Commissioner Tuley. So ordered.

Jeff Hatfield: "Thank you."

Commissioner Borries: "I don't see Les Shively here."

(Inaudible)

Commissioner Borries: "Okay. You're the President, of PVC Plastic's?"

Bill Smith: "We spoke with you a couple of months ago, I am Bill Smith, with PVC Plastic's."

Commissioner Borries: "Sure."

Bill Smith: "Such a nice evening, the rest of the plastics folks wanted to stay out and work in the yard. I am sure you all feel pretty much that way as well, so I will get out of here quickly. We were here a couple months ago, and we wanted to follow up and find out what your timetable looked like, so this certainly looks good for all of us."

Commissioner Hunter: "You have no problems with it?"

Bill Smith: "None whatsoever."

Commissioner Borries: "Thank you, Mr. Smith."

Bill Jeffers: "Speaking about the subject that was just discussed, I would have liked to have been included in on the mailing list for their proposals but, I guess if I don't get one, I won't have any comments 90 days from now, and also I'd like to know who the Engineering Firm is that is working on it."

Commissioner Hunter: "It's Veach Nicholson & Griggs."

(Inaudible)

Commissioner Tuley: "Bill if you like, I'll call him, and just tell him."

Bill Jeffers: "Well, when there is 3 or 4 different versions of it out there I have no idea of what they've got."

Commissioner Borries: "Have you dated each of those versions that are out there Bill?"

RE: REQUEST FOR PAYMENT OF BLUE CLAIMS

Bill Jeffers: "More or less! I have five claims, Big Creek Drain Associations for Rusher Ditch, the final 15% of \$79.99. Big Creek Drain Association for Maidlow Ditch, the final 15% of \$420.10. Big Creek Drain Association for Pond Flat Main Ditch, the final 15% of \$718.62. Big Creek Drain Association, final 15% of \$514.97. Big Creek Drain Association for Barr Creek, final 15% of \$620.04. He recommended all of them to be paid. The necessary paperwork is attached."

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve payment of Blue Claims. So ordered.

Bill Jeffers: "That brings us to all but, I believe Helfrich Happe Ditch, which was still under water, we had some additional work that had to be done on it, it's been under water since first of the year."

RE: VALLEY DOWNS DISCUSSION ON FLOOD PLAIN

Bill Jeffers: "It is Flood Plain, P-L-A-I-N. Very briefly, the U.S. Army Corp. of Engineers, recently completed a study of the, I believe it's the part of Pigeon Creek from US 41 upstream to GreenRiver Road. I'm not familiar with all the particulars, Mr. Roger Lehman went to Louisville to talk to the Corp. of Engineer's and they informed him that it was their opinion that about 132 homes in Valley Downs Subdivision were in the flood plain, and therefore, required Federal Flood Insurance, which would be a minimum of approximately \$300.00 per home. Roger Lehman, and his predecessors in the Building Commissioner's Office have established finished floor elevation for each of those homes, and basically certified that those elevations were two foot or greater above the 100 year flood so, therefore there were some disagreement expressed with the Corp. of Engineers' findings. City Engineers were unable to free up a crew to certify the flood plain data, and Morley Associates had done some partial work out there, and we were asked by Roger Lehman, and Jim Morley to complete that work, and we're presently out there collecting data in an attempt to certify that all the homes are above 382.25 ft. in elevation above sea level. I haven't found one yet that isn't. A lot of the streets along the north end of the subdivision would go under water in a 100 year flood, but none of the homes we found yet, they're all set according to the finished floor elevations assigned by the Building Commissioner. Most of them are 2-2½ ft. above the 100 year flood plain that we've checked, and there would be some islands, some of the blocks of houses would look like an island in case that the water got as high as Corp. of Engineers has designated as a flood

plain. We believe everyone would have a way out of Valley Downs, and so we're continuing that work, and we have retained James Morley, as a consultant like Sam Biggerstaff used to be for the Surveyor's Office. He will certify to the state which will be complete in the next week or so."

Commissioner Borries: "Does the Army Corp. of Engineers ever share what basis they give, for saying that this was in the flood plain now after all these years?"

Bill Jeffers: "I'm not sure, I'm not familiar with their technique of mapping, just from looking at the maps they've sent out, it looks to me like they're using an older map, an older planimetric map, where basically pretty much of the east half of that ground was way under the 100 year flood plain back in what 1969, or so before that subdivision was developed. We have acquired a grading plan, G-R-A-D-I-N-G, grading plan from Sam Biggerstaff's Office, that showed his plan for moving the dirt from the westside of the subdivision, which is the higher side across the eastside, and across the middle of that subdivision, and we're checking our data against his grading plan, and pretty much it shows with some minor exceptions that all that dirt was moved from the high ground. There's going to be another subdivision coming. It's all in the city now that way. There's going to be another subdivision come in, in the city and go before the Board of Works. On the westside of Valley Downs, and that's all the high area, the dirt was moved down, the building pads for the houses were constructed, and what we're basically finding is just some areas of the streets are not as high as they were planned, but all the areas of the houses are, so when you overlay all this data onto the old planimetric, we hope that when we send this back to the Corp. of Engineers with the certification from Mr. Morley of our work, that they will agree that that dirt has been moved since 1969, and that those 132 homes hopefully will not be required to pay another \$300.00 a year for Federal Flood Insurance. That's basically, the reason we're doing this is to save them \$300.00 a year that we don't think is necessary to spend."

Commissioner Borries: "Okay, keep us informed."

Bill Jeffers: "Right, we're getting alot of questions from the neighbors, we're just wanting to let you know, in case they call down here asking the Commissioner's Office, what's the County crew doing out there. We want to let you know that's what we're doing."

Commissioner Borries: "Okay."

Bill Jeffers: "I don't have anything else."

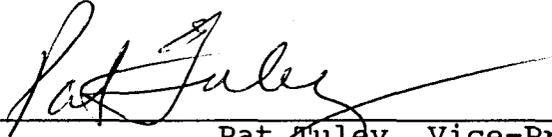
There being no further business, the meeting was adjourned at 7:15 p.m.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary  
Bill Smith, President PVC  
Jeff Hatfield, President HomeBuilder's



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Rick Borries, President



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Pat Tuley, Vice-President

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Don Hunter, Member

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MINUTES  
DRAINAGE BOARD MEETING  
MAY 23, 1994

The Vanderburgh County Drainage Board met in session on May 23, 1994 at 6:45 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

RE: BRIDGES #5 AND #7 (JOHN STOLL) OVER POND FLAT DITCH

Commissioner Borries: "Mr. Jeffers are you going to need this discussion, or I think we have some folks here in the audience?"

Bill Jeffers: "John Stoll sent the two sets of plans over to our office Thursday afternoon, and asked that we put those on the agenda for discussion. I notified Sunny to put those on the agenda, Sunny Titzer, and she did. Then I notified Mr. and Mrs. Baumgart, who were previously in attendance at your meeting, and expressed interest in those bridges. Some of their neighbors are here tonight."

Bill Jeffers: "Surveyor's comment's on them is:

1. Bridge deck widths of 24 ft. will require "Narrow Bridge" designation, when the roads are improved to existing county standards.

Since timber structures are touted as having a 75 year life span, you might expect a roadway widening well before the bridge replacement is necessary, so that's to say when the road gets up to county standards, you'll have to post a narrow bridge sign.

2. Discrepancies within the plan sheets include:

- a. "Typical Cross Section Through Abutment" detail on Sheet shows 2:1 side slope rather than 3:1 as it shown on Sheet 3.

- b. 100 year high water elevation is given as 423.4' and then as shown on the profile drawing at 421.5' which is 2 ft. lower than what they say it is.

- c. Mann Road right-of-way is shown on the drawing, but is not available from record except one piece along north side of the road east of the bridge, so you may want to look into buying some right-of-way.

- d. Bixler Road has an existing low steel elevation given at 421.5', but the profile drawing provided for the contractors shows existing roadway at 424.0' or 3.5' higher and this maybe an error that might effect the bid price on quantities.

- e. Bixler Bridge is listed as "...timber plank deck..." and it has a concrete deck; and this misinformation might affect the bid price on demolition.

- f. Bixler Road right-of-way is shown as "apparent" 33 ft., but the recorded right-of-way is 30 ft., from Volume S-1 of the Commissioners' Record, September 1913, that might affect your right-of-way purchase.

3. The 20 foot wide drive entrance at the Northwest corner of Bixler Road does not show a culvert. In discussing that with the neighbors, there maybe a reason why you would want to put a culvert there to drain Mr. Anderson's woods there by

avoiding one of our other problems down at that section of the county, where Mr. Anderson is very unhappy about the water standing in his woods. A culvert under that drive at the Northwest corner of this project might be an inexpensive way to make Mr. Anderson happy. Other than that, the Baumgarts and their neighbors are in the audience if you would like, solicit comments with them."

Commissioner Borries: "Okay."

Mrs. Baumgart: "I'm Mrs. Baumgart, and I'm here representing the people here on Bixler Road, and we have in attendance Mr. Hartman and his wife, Mrs. Relleke and Mr. Baehl that are representing people with interest in the Mann Road Bridge. Basically, we're just here to listen to what you have to say, what your offering us, what you intend to do, what the plans are. Have the Commissioner's decided that this definitely is going to be a wooden bridge? I mean has that decision been made?"

Commissioner Borries: "Yes. I don't know of any changes on that, but by bidding both together, we see some real savings as well as what we have seen is a very long lasting kinds of structures out there."

Mrs. Baumgart: "We don't have a problem with that, our biggest concern with that is the number of piers that will be in the creek. We are looking at 4 piers with a wooden bridge verses 2 piers."

Commissioner Borries: "We've redesigned it to open up on a 3:1, quite a bit of the waterway for you at a much larger expense than what was originally designed. Most designers, particularly in rural areas, have said that a 2:1 is something that is very typical of most areas and in deference to you, and from what we've talked about previously, we have redesigned the structures to talk to a 3:1."

Mrs. Baumgart: "Right."

Commissioner Borries: "Which opens it up considerably, but it also is involving a lot more expenses in result of that because it is a wider opening."

Mrs. Baumgart: "I think one thing that Mr. Jeffers had made reference to, is the other pipe that is just one that he's proposing, that's not on the Blue Prints now on the Northwest corner on Mr. Anderson's property, whether or not you will consider doing that. It's just our opinion. We have not talked to Mr. Anderson about it, it really was just something we got to thinking about that it may help eliminate the other problem we have there."

Commissioner Borries: "Right."

Mrs. Baumgart: "If you guys will consider that."

Commissioner Borries: "Sure."

Mrs. Baumgart: "I guess our next question is, what sort of time table are we looking at? If you can give us any idea as to when these roads are going to be closed, and how long they are going to be closed for."

Commissioner Borries: "Mr. Baumgart may have some information about that, our County Engineer, John Stoll. Let me just say, I would have some questions for you, or Mr. Hartman, or any one out there, in the audience that would wish to respond. In terms of the 24 ft. we're also talking about Mann Road if my memory is correct is not even a paved road."

Mrs. Baumgart: "No it's not."

Commissioner Borries: "I wouldn't envision Mann Road ever getting up to urban standards simply because you'd have to have some pretty drastic growth over the next century. I just don't see that at all. At one time Mann Road was even discussed, if I remember.... closed. Now that one does have a wooden deck in it, if I recall. In terms of the right-of-way with that particular bridge, or I know that there was some concerns about whether or not Mr. Gene Adler. Is Mr. Adler in the audience this evening? Can anyone speak for him at all? Are there any problems in terms of right-of-way with him that your aware of on this? I mean those will be some questions that could hold us up as far as some right-of-way acquisitions on that."

Mrs. Baumgart: "I have no idea on that. Mr. Adler is not here. The one thing I did want to comment on, you said that Mann Road was not paved, it is paved as far as Montgomery Rd., from Owensville Rd. to Montgomery Rd. it is paved."

Commissioner Borries: "Yes, you're right, that is correct."

Mrs. Baumgart: "That was another question whether or not once this bridge is replaced, will they finish paving that road from Montgomery Rd. onto Bixler Rd?"

Commissioner Borries: "We've paved Bixler, largely because at that time there were some complaints specifically from Mr. Adler that the dust was so bad at times, that he didn't have air-conditioning and it was causing some major pollution problems. We've tried when money permits, to pave rural roads whenever we've been able to do so. So that could be something we can consider there. However, I think when your talking about time lines, I think we're talking about cooperation with everybody involved out there. Are we all saying at this point, that we will cooperate? I don't know what the right-of-way situation is. If we have enough for 24 ft. in terms of what he says, narrow bridge, well again I don't envision that this is going to be an urban area in the next 50 years, unless you folks want it that way, and want to sell a whole bunch of property all of a sudden that it would be pretty tough to get into in my opinion, so there would have to be a lot of work. The only other alternative, is what we could end up doing would be closing maybe Mann Road, and improving parts of Montgomery, and not doing that other bridge, but I don't think you want that at all."

Mrs. Baumgart: "I don't think the people here are not, you know that's not their wish."

Commissioner Borries: "Okay."

Mrs. Baumgart: "Their wish is to keep Mann Road open."

Commissioner Borries: "To keep it open?"

Mrs. Baumgart: "Yes."

Commissioner Borries: "Okay."

Mrs. Baumgart: "Yes, and you know basically, we're willing to work. We're just asking what your ideas are, what your planning on doing."

Commissioner Borries: "Okay."

Mrs. Baumgart: "And where we stand."

Commissioner Borries: "These structures can be put up very quickly in good weather."

Commissioner Tuley: "What was the time we?"

Commissioner Borries: "We wanted Hamilton's Golf Course done in

October, and it certainly changed my mind, that one was constructed in 17 days. It replaced a structure, in fact Hamilton's was most concerned because it affected his business. It was a very old and Petersburg Rd there was very heavily traveled. It replaced the structure, it was concrete structure that had been looked upon as one of the most deficient of bridges we had in that current bridge report, and it replaced a structure that was built in 1956, so that was 75 years old, or I mean excuse me, 35 years old. And we asked what are we going to have to do now to maintain this, and they said nothing. It will have a like an asphalt base to it, so in other words it's not going to have a wooden deck."

Mrs. Baumgart: "Right."

Commissioner Borries: "It's been designed with a 3:1 slopes, and if there is any right-of-way problems...., I'm not aware of that maybe Mr. Stoll can comment on that."

John Stoll: "We're certainly willing to work with you, I think if we get good weather, and everyone cooperating... in so far as letting this... I think it can be done very quickly."

Mrs. Baumgart: "Well, that was our only concern, you know the traffic out there is more than just farmers, but you know it does affect harvest. The crops are in now, but we're looking at harvest."

Commissioner Borries: "Right I know that. You would want it in before winter. Right?"

Mrs. Baumgart: "Before harvest, you know because then it makes a lot of detouring with the crops."

Commissioner Borries: "Sure."

Mrs. Baumgart: "Okay, well I thank you for your time."

Commissioner Borries: "Oh, I'm glad you all came."

Commissioner Hunter: "John, would you want to add any comments?"

John Stoll: "As far as when it can start I don't know, because there is right-of-way that has to be acquired."

Commissioner Hunter: "Who from?"

John Stoll: "Several."

Commissioner Hunter: "Mr. Adler?"

John Stoll: "Yes, he's one of them."

Commissioner Hunter: "Is he the only person?"

John Stoll: "I haven't been through the plans again as of yet. I know he's one of the people required though, and I have to check out the Surveyor's Office comments on the a improper right-of-way specified on the plans and see who else that it may affect."

Commissioner Borries: "Okay. Do you all have any problems in terms of us being able to purchase this small amount of right-of-way...any of you in the audience? If it takes that, I again don't know what we're talking about there. Now Mr. Adler again is another matter, he's not here tonight. Because what happens is if we don't get your cooperation, if we have to get into some kind of condemnation proceedings, that really takes some time."

Commissioner Tuley: "That slows it up."

Commissioner Borries: "If he cooperates, whatever we have to get in there, we can get these done quickly, real quickly."

John Stoll: "It's no problem from our perspective at least to go ahead and coordinate it with everybody to make sure we can get it done, and not interfere with the harvest of the crops or anything like that."

Commissioner Borries: "Sure."

Commissioner Hunter: "So your saying the only real problem that may crop up is acquisition of right-of-way?"

John Stoll: "Right."

Commissioner Borries: "If we can get that done we would like to have them in this summer before you have to harvest, and when the creeks, the rivers and everything is at a low spot at that point. We can put them in-in the winter, but sometimes your water runs so high that your talking about problems then in terms of..."

Mrs. Baumgart: "That was another comment Mrs. Hartman made in regards to school buses also."

Commissioner Hunter: "Yes."

Mrs. Baumgart: "One of the school bus driver's is concerned about the timetable for this too, because of school bus routes, because I do know that we have several school buses that travel our road everyday, and this will affect the school bus driver's, and if it can be done over the summer."

Commissioner Hunter: "We can do it, I think the only thing that we need is everyone's cooperation on this, and as you all well understand, good weather. If we have some bad weather we're talking all bets are off then, but other than that if we have some good weather, dry weather, we can get it done."

Mrs. Baumgart: "Everyone here in attendance tonight is more than willing to work. I mean for the common good of everyone."

Commissioner Borries: "That may take if you can assist us, if we do run into problems with any other individuals here, we may need your help. If we get into some condemnation, we've got a very capable attorney, but that's going to cause us some more problems in terms if we have to go to condemnation. We do have the 3:1 slopes design, and we'll make any of the modifications that the Surveyor here has brought to our attention. We'd like to get these in very quickly. If we get the right-of-way questions solved, I think we can get it done safely...if the materials, and everything that can be ordered quickly, we can get them in in a month."

John Stoll: "Mr. Borries, there is also a concern, I believe when we read the latest bridge reports, on the condition of those bridges and if we have to wait a great deal of time in trying to acquire right-of-way, we may have to close a bridge from the safety standpoint, because we certainly can't have people using it if it's in anyway unsafe. Then that again would be another hold up."

Commissioner Borries: "So that's where we are, all systems are go if we get the right-of-way we need, and make these modifications here, and we are going to do 3:1 slopes."

Mrs. Baumgart: "Are we to understand then that John is going to go ahead and start proceedings to get all this rolling right away then?"

Commissioner Borries: "Yes. I think we can approve it, subject to

modifications that have to be done here."

John Stoll: "Sure."

Commissioner Hunter: "John, is the funding in place for this?"

John Stoll: "Yes."

Commissioner Hunter: "So there's no problem with that? The only problem again would be right-of-way? Okay."

Commissioner Tuley: "No problem to get these corrected or whatever?"

(Inaudible)

Commissioner Hunter: "For the most part these are minimal problems that can be dealt with?"

Bill Jeffers: "These are only problems that will be corrected before sending out the bids. These are just minor problems."

Commissioner Tuley: "Right. These can be corrected."

Bill Jeffers: "In other words, some guy goes out there and said you told us "timber plank bridge", this is concrete we want our \$10,000.00."

Commissioner Tuley: "Right."

Bill Jeffers: "That's all I am pointing out. I don't want you to get the idea... As far as narrow bridge, that's just the State Law. If your roadway width is 24 ft. and your bridge is 24 ft. you need to post a narrow bridge sign."

Commissioner Tuley: "Okay."

Bill Jeffers: "It's not just a matter of urbanization, there's a lot of cars going from Owensville Road down Bixler. Nisber Station has become more popular. It's just a matter of somebody having an accident."

Commissioner Hunter: "At this point has there been any dollar figures put with the possibility of putting a culvert with the Anderson property? Are we talking about a considerable out lay?"

John Stoll: "A 36 inch pipe."

Commissioner Hunter: "So we're not talking about a great deal of money?"

John Stoll: "No."

Bill Jeffers: "There is no ditch assess on that side of the road, Mr. Hunter. I mean in other words the Highway Dept. might have to expend some manpower digging a ditch back to that low spot in Mr. Anderson's woods are that meets the road there."

Commissioner Borries: "But not that far, and I think it might do a great deal to heal some wounds out there. I have met with Mr. Anderson a couple of times on the property. I think there has been some misunderstandings over the years there and this might go a long way to put some of those aside. John I guess we're asking you to go ahead and proceed with Bridge #5 and #7 over Pond Flat Ditch and to work with the neighbors as necessary to acquire the right-of-way and I suppose we also include putting in a culvert on the Anderson property to drain his woods."

Motion made by Commissioner Tuley and seconded by Commissioner

Hunter. So ordered.

RE: PRELIMINARY REVIEW

A. Windsor Place Boonville-New Harmony

Commissioner Borries: "John, Bill who else? We have Preliminary Review on this. Are you folks here for Windsor Place? For a different matter....new business? Okay. Bill Jeffers..."

Bill Jeffers: "On Windsor Place we had originally put that on the agenda for a preliminary review because it doesn't go to area plan commission until the July meeting. I thought it might give us an opportunity to bring everything up that might need to be reviewed so that our meeting at the end of June would not run a whole long time if there were a lot of things to review. Now we've reviewed the drainage calculations that were all done by computer program and we find them to be sufficient for all the lakes. He has designed the lakes with 2 ft. free board and we understand that the Soil Conservation Service has looked at his calculations too and they're satisfied with them. There's a few very...very minor details on the a primary plat before it would be recorded. There's just a very few details that requires some minor attention by the draftsman, but other than that we're in agreement with the calculations and we're in agreement with his preliminary design plans and we understand that as he phases this in in two or three phases he plans to bring the street plans before the Highway Engineer and your Board of Commissioners. These little minor items that might come up in the field could be incorporated into those street plans. So, having said that and having discussed it with the developer, Mr. Del Shanks who is here in the audience with his engineer, Mr. Biggerstaff, Jim Biggerstaff. They thought if it was that close to finalization they would like to go ahead and try for final drainage approval tonight. I said I was not opposed to that if it was the Boards pleasure to go ahead and take that up this time. Like I said the only reason I put the preliminary review on there was if any of the Board members had any specific item that isn't or they feel that has not been addressed in the typical review of the subdivision such as this one. Like I said what we've reviewed all the drainage calculations that were run through a computer program by the engineer and the basic layout and design sheets with all the details on them for the pipes, the lakes the outlet structures, etc."

Commissioner Borries: "Any questions?"

Commissioner Tuley: "Bill I guess my only question is I've got a copy that you sent us, there are about 28 concerns this is from back in March, but I am going to assume those items have been addressed and your comfortable with..."

Bill Jeffers: "Okay. that letter was sent at the request of Mike Wathen who wanted me to think of any possible details that should be looked at between back in March when we first went out and took a field trip, I took one with him. Any possible details, now some of these were based on my assumption that a drainage ordinance would be in place by the time this came to review. So there's some things here going down the list:

1. In treatment of pipes have been addressed in the detailed sections and is efficient.

Commissioner Tuley: "You don't have to spell them out specifically if you don't want to. I just want to make sure that you as our technical advisor are satisfied with any corrections or modification that have been made."

Bill Jeffers: "On every one of these either the building

commissioner will take care of this at such time that is appropriate or it's already been done, except for #3 at the top of the first page some very minor easement locations and I am talking about really minor stuff that should be cleaned up in a matter of minutes. Everything else has been addressed and discussed with Mike Wathen and the developer."

Commissioner Tuley: "Yes, I talked to Mike. I think it was last Thursday or maybe even Friday morning and he was comfortable with the changes and modifications and there was a couple of minor things, but he said they were insignificant enough that they didn't have any problem with it."

Bill Jeffers: "The developers have been extremely cooperative and he's delayed bringing it to this point for about 3 months now and has been extremely cooperative in meeting the concerns submitted by Mike Wathen and by our department as well."

Commissioner Borries: "Okay."

Commissioner Hunter: "Mr. Borries, may be able to enlighten you on this, but I have never seen this before. I do have a question and perhaps a problem with the fact that Sub Review (Subdivision Review Committee) has asked Windsor Place to return on June 14, because there were questions on the one issue we're dealing with tonight is the sewer, erosion, and drainage, and obviously we're concerned it's a drainage part of this. I guess my question is I'm not comfortable giving a blanket clearance here for something that sub review had questions on. Is this abnormal?"

Del Shanks: "We started this probably 6 or 7 months ago and our sewer connection that we were looking at was to go through the Daylight Industrial. That was the (Inaudible) so we were just sitting and waiting. In my opinion we waited and waited and for some reason I don't "Think" that thing is just actually going to fly fast enough to accommodate this thing so we just sort of sat and all of a sudden we are heading towards Hunters Ridge, that sewer there, working with the utility board and eliminating that pump station there and we're going to participate in eliminating that pump station and hooking it into Campbell Road down there, so that would do away with that pump station and make that all gravity. We got 2 easements that we're going to have to get and we're quite frankly going to be talking about some money. I don't think there is going to be some problems, but I hate like the dickens to go out and get a bunch of easements and all that, and all of a sudden fail on drainage or fail on you know some other thing; so step by step trying to get pre-approval or sanction or something that we can go on with or just sit on it until we get that."

Commissioner Hunter: "Yes, but that deal is with the sewer issue. My question here is the fact that we're not dealing with that. We're dealing with drainage and erosion."

Del Shanks: "Right."

Commissioner Hunter: "I guess my question is.... why do the sub review folks have questions about drainage and erosion?"

Del Shanks: "When it first came up we was, a we put it, a "conceptional thing" to them. Mike Wathen had some problems with some of the things, and I think we addressed them. So we were going through some things with him. At the last meeting he was out of town. There was a vague thing that we needed a letter back from him, well it hadn't been addressed and put back in their file, so that was one of the reasons that wasn't cleaned up. They're sitting because the sewer department, at this point in time, cannot say we have satisfied their requirements; and so until they can do that then area plan ..."

Jim Biggerstaff: "At the last Planning Commissioner Review Meeting Mr. Wathen wasn't there, he wasn't present and the things he asked for had been sent to his office, so he finally got to review that after he got back."

Commissioner Hunter: "So this would be the main meeting?"

Jim Biggerstaff: "Yes this would be the main meeting, so that was done and taken care of with Mr. Wathen and Mr. Rice. That was taken care of. That was taken care after the meeting. What we're trying to do is clean up drainage and streets and everything and get everything out of the way then we're down to our final issue which would be the sanitary sewer, but those issues have been cleaned up as for as the SWCD (Soil And Water Conservation District) Office."

Del Shanks: "That's my understanding that we're going to have to come back with our Phase I for approval anyhow."

Commissioner Borries: "What do you expect? This letter just came out today. It says:

To Drainage Board  
From Barbara L. Cunningham

There is not a staff field report available from Windsor Place. Questions on sewer, erosion, and drainage required Mr. Shanks return with more information for subdivision review on June 14."

Jim Biggerstaff: "We assume we are going to that meeting, but as my understanding we have to have the Drainage Board and the SWCD approves before we go back to that meeting. What comes first?"

Commissioner Hunter: "That's what I was asking you about Rick on this because I was under the assumption that we went to Sub Review for their comments and for the staff field report before it came to drainage, and that's the reason I am not comfortable with it, until it had done that.

Jim Biggerstaff: "That came from us having the drainage review which we've gone through now and the SWCD. I don't know what comes first here."

Commissioner Hunter: "Well, now wait a minute, your telling me you had the drainage review with...?"

Jim Biggerstaff: "What I'm saying is we went through the AEC, Mr. Wathen; that was the question raised. That's the AEC Office (SWCD). He was not present at that meeting when we addressed that."

Commissioner Hunter: "That's this letter?"

Jim Biggerstaff: "Yes."

Commissioner Hunter: "That he sent to Del Shanks on March 3, 1994?"

Jim Biggerstaff: "Yes."

Commissioner Hunter: "And he listed 6 items that he had concerns about?"

Jim Biggerstaff: "Right."

Commissioner Hunter: "Also the erosion control plan will need to be submitted to our office before construction starts."

Jim Biggerstaff: "Okay, that all has been addressed and he has all those in his files."

Commissioner Hunter: "Now I guess my question is then if this was

submitted March 3, 1994... we seem to have a time lapse here with the staff asking you to come back on June 14, 1994. What happened in April? Did you not appear before the Sub Review?"

Jim Biggerstaff: "We continued one month."

Commissioner Tuley: "So you could address the concerns?"

Jim Biggerstaff: "Yes, until we had time to address the concerns."

Commissioner Hunter: "Those concerns were addressed in the May 17, 1994 letter?"

Jim Biggerstaff: "Right."

Commissioner Tuley: "Except in between, in the May and (Inaudible) Mike wasn't there?"

Jim Biggerstaff: "In between though your representatives of SWCD weren't present. We addressed all those and went through that with Mike."

Commissioner Hunter: "Have you had any kind, has the SWCD responded to anything?"

Commissioner Tuley: "Yes, I went out there. I personally went out there and walked it with Mike. He pointed out problems and things that he didn't like and had concerns with, but like I said I talked to him on the phone...can't remember if it was last Thursday or Friday, and I said Mike I know you've expressed a lot of concerns, if their addressed in a written form to you or to this board I personally don't a problem, if your satisfied that they have progressed all your problems, but I said I want to see something in writing. He told me that there was a couple of minor things and he didn't tell me what they were, but they weren't significant enough that he would not recommend that you be approved."

Jim Biggerstaff: "Now he felt comfortable then."

Commissioner Tuley: "He felt comfortable, yes."

Jim Biggerstaff: "Okay, that's what I thought. We went through all that, we gave him additional plans and stacks of erosion control and all that. I have been in contact with Mr. Rice and Del has been in contact with Mr. Wathen because he was not present."

Commissioner Tuley: "I went out there and walked it with Mike. This was back obviously before we had a chance to..."

Jim Biggerstaff: "This has been just in the last 30 days that we met with them, made all the additional changes, the specifications, erosion control and all those compliance."

Del Shanks: "When we started out in there we had 74 lots and there were a lot of concern about that back part."

Commissioner Tuley: "Back toward that creek area?"

Del Shanks: "Right, we deleted all those areas."

Commissioner Tuley: "You did delete all that?"

Del Shanks: "Yes."

Commissioner Tuley: "What are we down to now?"

Del Shanks & Jim Biggerstaff: "Seventy, seventy. We have those prints here if you want to see them."

Commissioner Tuley: "No that's okay. That was a big concern of Mike's."

Del Shanks: "Right."

Jim Biggerstaff: "When we get in an area back there in no mans land nobody knows, and we have to do map amendment and go through a bunch of red tape."

Bill Jeffers: "What he's talking about is they eliminated this cul-de-sac and went in here and made this lot, this lot, and this lot of the three. Lot 47, 48 and 49 now are the only three lots now that are affected by the 100 year flood plain. Previously he had a cul-de-sac going down in here and there was about 5 lots that forced this creek right up almost from the back door of the building sight."

(Inaudible)

Bill Jeffers: "Yes, it's a Rip and Roaring kind of a stream there."

Jim Biggerstaff: "We have completed all the requirements as (Inaudible) dates."

Commissioner Tuley: "The only reason I don't have any problems with this is because Mr. Wathen expressed by his office and SWCD that it appears you all have addressed."

Jim Biggerstaff: "Sure, thank you."

Commissioner Tuley: "I had some problems with it myself after having heard their concerns that were addressed to me. I personally don't have any problems with it. Again maybe there's something here I'm missing you all with, concerns."

Commissioner Borries: "The only thing is their going to ask you for some information. The sewer's not a question here but in terms of the erosion and drainage; I guess if you can combine them with that on June 14, 1994 then it goes to the Area Plan Commission in July, is that your plan? Then of course the Area Plan has the final say on that."

Commissioner Hunter: "I guess my concern here is with regarding the June 14, 1994 meeting, that is giving blank approval with the drainage plan is that I don't know was the concerns that Sub Review had originally. I had this scenerio of saying, well the drainage board has approved this, therefore this is the way it will be and there maybe some problems that we may not be aware of."

Jim Biggerstaff: "No, Mike Wathen brought them up and the other ones Bill brought them up, and we covered both of them entities. That was the two entities that they weren't satisfied with. We had covered both of those and we met with those people and Bill just reviewed what we given him, so we have covered those two items. We're talking strictly drainage and erosion control now, that's all we're talking about."

Bill Jeffers: "Again the explanation for this meeting is that when we sat in there in subdivision review, it was obvious that there was still unanswered questions at that time. Unanswered to Mike Wathen, and unanswered to me, as being the two people that were reviewing respectively erosion control, and drainage calculations and the design of the layout."

Commissioner Borries: "Will you be attending June 14, 1994 meeting?"

Bill Jeffers: "I don't know, because I went over to Area Plan Commission and I said I want to have a meeting where we just have

preliminary review and they said, why? I said so everybody can get all the cats out of the bag and put all the cards on the table if there's anything that anyone thinks we have not looked at that we normally look at like I said drainage calculations, lake stages, easement layouts, end treatment of pipes, etc., lets get it out. As you can look around here today there's no one from APC here, so they apparently have no concern. I haven't heard anything else addressed."

Commissioner Borries: "Who would have prepared the staff field report?"

Bill Jeffers: "That's done by the staff of the Area Plan Commission. There's 2 or 3 staff members from Area Plan Commission sitting in there with Mrs. Cunningham at those meetings from her staff, such as Darren, maybe another young lady, or whatever, and they sit there, Ms. Behme, and they're sit there and write down all comments that are made in the Area Plan Subdivision Review Committee Meeting and they produce what's called a staff field report which has a couple of legal size pages of type written information addressing everything all the concerns that were addressed."

Jim Biggerstaff: "If your not comfortable with ... if we delay it and go back and bring it back.."

Del Shanks: "(Inaudible) We have to have the drainage board recommendation, we have to have from the two departments to know what to go back with."

Bill Jeffers: "The Area Plan Commission doesn't need a drainage board approval until July, first Wednesday in July, that's when they actually need your approval."

Commissioner Borries: "Can't we give this at the end of June then?"

Bill Jeffers: "You can, if you like. I was just saying that two gentlemen have all their ducks in a row, why not get an approval tonight?"

Commissioner Hunter: "That's my concern. Mr. Wathen has been in contact on a very regular basis with Area Plan Commission. Yet we don't have anything from them tonight saying that their comfortable. If we had something from them, this is all we have is what Mr. Borries read you."

Commissioner Borries: "What we can do is this. We're not going to delay your schedule because you can still make the July meeting. Go to the subdivision review. Take the information that is there and have either Mr. Wathen or the Area Plan Commission or someone issue us a report at that point that whatever these questions are have been answered. Is this a final plan that you gave to Mr. Jeffers or any modifications that have to be made on that ?"

Bill Jeffers: "Very slight modifications."

Commissioner Borries: "Could you bring those to our meeting which would be your June 27, 1994 meeting? You could still make it."

Jim Biggerstaff: "Yes."

(Inaudible)

Jim Biggerstaff: "The best thing for us to do is to get you a written letter then from him. The representatives were not there to address it."

Commissioner Borries: "I think Commissioner Hunter would feel better about that and again this doesn't delay the time at all."

Commissioner Hunter: "I would be delighted to see that someone from the SWCD (Soil, Water, Conservation, District) at that June 14, 1994 meeting."

Jim Biggerstaff: "That is a problem for us when they don't show up at the review meeting to address it."

Commissioner Borries: "Okay, now Bill if your not going to attend the meeting can you provide some kind of documentation that you reviewed it and it was discussed here."

Bill Jeffers: "I will be there."

Commissioner Borries: "Thank you gentlemen."

Jim Biggerstaff: "Thank you."

Commissioner Borries: "We will hear the final recommendation for Windsor Place on the June 27, 1994 meeting."

RE: NEW BUSINESS

A. Storm sewer Burkhardt Road (Bayard Park Drive)

Karen Hummell: "Hello, my name is Karen Hummell and I live at 6419 Bayard Park Drive, which for a reference is very close to the corner of Burkardt and outer Lincoln."

Commissioner Tuley: "We've run into a city problem already."

Commissioner Borries: "Yes, I have talked to Ms. Hummell I believe on this already, but go head."

Karen Hummell: "Yes, there were several phone calls to your office and one was returned."

Commissioner Borries: "I remember talking to you on the phone."

Karen Hummell: "Yes, the other homeowners and I are here through the advisement of Mike Wathen, The Soil and Conservation Specialist. After inspecting our properties he has informed us that our homes should never have been built. Our homes are at the bottom of a chopped off hill which didn't present problems immediately, but over time we have experienced water run off and now soil erosion. Some neighbors have rain water and mud running from the back of their garages through to the front door. Some have had privacy fences and yard timbers ruined and pushed forward through mud piling up on the other side. Others have massive sink holes at the top of their property. One homeowner had a 15 ft. deep hole filled in by Hoffherr LandScaping, because of fear that many of the children that live in our neighborhood may be hurt. A huge weeping willow tree on one of our properties proposes a threat to three homes should it fall, do to soil erosion at the base. The street in front of our homes have cracks and cave-ins possibly do to water run off underground. Except for the owners to the homes built within past two years, we have spent thousands of dollars only to find out the so called solutions will fail unless overall project is completed. We are asking you to consider installing a storm sewer along the top of the hill to catch the water and pipe it off through Burkhardt Road. This was the only solution posed from Mike Wathen. We have reason to believe that the City and, or County allowed the developer and builder of homes which by the way now have both gone into bankruptcy, to slip through rules and regulations and now we're stuck with drainage problems that no matter how thousands of dollars we put into we'll have no solution. Thank you for your time. We would appreciate any of your help as this is our beginning."

Commissioner Hunter: "How long have you lived in your home?"

Karen Hummell: " I personally have lived there eight years."

Commissioner Hunter: "Now did you purchase it new?"

Karen Hummell: "Yes we did. We built there."

Commissioner Hunter: "The builder was who?"

Karen Hummell: "Tony Clements."

Commissioner Hunter: "He has filed bankruptcy?"

Karen Hummell: "Yes sir. Clements Construction at the time."

Commissioner Tuley: "He is still building homes though isn't he?"

Commissioner Hunter: "Is he still building homes?"

Karen Hummell: "He builds now I believe, please don't quote, but I believe he's through Prudential Real Estate...and the developer at the time was Hatfield and Hatfield."

Commissioner Hunter: "What's the name of the subdivision?"

Karen Hummell: "Plaza Meadows II."

Commissioner Hunter: "Okay. Is this on the back end towards Newburgh Road?"

Karen Hummell: "Yes it is. We went to the city engineering and we got a blue print that is ten years old, best we could do. All they have listed there is a sewer drain. There is nothing in terms of helping or taking the water away from the hill."

Commissioner Hunter: "That problem has been in existence for several years, because I remember campaigning out there, four years ago and I remember walking in the area you all are talking about and you could look around behind the houses and see they have erosion problems then."

(Inaudible)

Commissioner Borries: "The Drainage Board deals on legal drains. We also can't do work in the city. We are confined to working on legal drains. I guess we could say if it's something it effects and goes into the county as well, but we do not install storm sewers in the city simply because we have no tax base on doing that. I would contact several people if you've not done so. First, you probably live in the first ward in the city of Evansville, so you should contact Councilman Jim Price."

Karen Hummell: "Right."

Commissioner Borries: "He is your city councilman in that area. You should contact the Board of Public Works Persons if you have not done so and plan to attend the meeting of the Board of Public Works, because they are the ones that would consider installing sewers along city right-of-way inside the city limits of Evansville. So I would also consider going to the Board of Public Works and I am trying to think of who would be the head of that."

Commissioner Hunter: "She can call and get the date, time and place of their next meeting."

Karen Hummell: "I am assuming that's how we got this one."

Commissioner Borries: "Okay. Now the Evansville City Council also meets at this same time on Monday nights and their just in a larger room just around the corner. You could request going to that

meeting as well, but again I would first contact your area city council person which is Jim Price."

Karen Hummell: "Okay."

Commissioner Borries: "Make him aware of this."

Commissioner Tuley: "There are four families involved here?"

Karen Hummell: "More than four. All of them aren't in attendance."

Commissioner Tuley: "The reason I am asking the question, it needs to be coordinated some how. I'd gotten several phone calls a couple of weeks ago. After I'd talked to engineer, because I talked to some one named Robert. Is that person here by some chance?"

Robert: "Right here."

Commissioner Tuley: "I will try to back with you. What happened was I got busy for a couple of days and when I contacted the engineer, as soon as I said Bayard Park he said, let me check I believe that's in the city, okay? In the meantime somebody named Lee called my house and asked about the same particular problem, so when I had our secretary here call Lee back and tell, whoever Lee is I don't know who that is, that this was in the city and you really need to get to someone in the city, to help you solve your problem."

Karen Hummell: "Okay."

Commissioner Tuley: "Mike Wathen as you heard me say earlier, called me on Friday and he told me he told you all to contact the Commissioners and I said: no we need to get over toward the city engineer or someone in the city. the comment came back, well...they didn't feel that they were treated properly or rightly in the city engineer's office whoever this person was. I said well there are several city elected officials including the Mayor that you might want to talk to if you don't feel like some of these apartments are dealing with you."

Karen Hummell: "Okay."

Commissioner Tuley: "We're not trying to push this off on anybody else, other than what Commissioner Borries have already stated. If it's inside the city, then we're very limited and we can't do anything for you."

Karen Hummell: "Okay."

Commissioner Tuley: "I am just trying to get you in the right direction."

Karen Hummell: "We appreciate it."

Commissioner Borries: "Also I know from time to time we've received little comments, it's like a complaint or issue item where residents who live in the county will call the Mayor's Office about something, because again a lot of residents don't understand all that, and that's understandable from our end. I certainly think a document that you have been to our meeting tonight, can't we Sunny in terms of putting this on record and sending this to the Mayor's Office, so that we can say you were here to express your concerns on that. Again, your council people who are elected and who would directly be supervisors over the city engineer's office. Supervisors since they control the city engineer's budget."

Karen Hummell: "Okay."

Commissioner Borries: "Also, again your Board of Public Works would be two important places to start."

Commissioner Hunter: "And again attend the Evansville's City Council Meeting."

Karen Hummell: "Okay."

Commissioner Tuley: "In addition to Jim Price you might want to get the (Inaudible) Ordinance."

Commissioner Borries: "Yes."

(Inaudible)

Commissioner Borries: "Well all things change."

Commissioner Hunter: "The players change and that's...and that's true too, but what was said a few years ago with a set of new players can change considerably."

Karen Hummell: "Okay, we thank you for your time."

Commissioner Borries: "Thank you."

Cindy Mayor: "I just want to mention that Julie Hinton, which I spoke to President Borries about will be the new Recording Secretary for Drainage Board."

There being no further business, the meeting was adjourned at 7:40 p.m.

PRESENT:

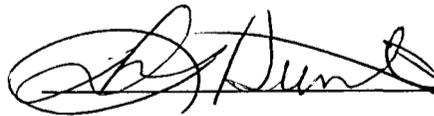
President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary  
Sharon Baumgart  
John Stoll  
Jim Biggerstaff, Engineer  
Del Shanks, Developer  
Karen Hummell



Rick Borries, President



Pat Tuley, Vice-President



Don Hunter, Member

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JUNE 27, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
JUNE 27, 1994

The Vanderburgh County Drainage Board met in session on June 27, 1994 at 6:55 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

RE: APPROVAL OF MINUTES (4-25-94)

Motion made by Commissioner Tuley and seconded by Commissioner Borries to approve the minutes of April 25, 1994. So ordered.

RE: ACCEPTANCE OF REMAINDER OF CONTRACTS FOR 1994

DITCH ACCT.	DITCH	CONTRACTOR	AMOUNT
#234-015	EAST SIDE URBAN S½	SHIDELER SPRAY SERVICE	2,452.97
#234-015	EAST SIDE URBAN N½	SHIDELER SPRAY SERVICE	1,331.00
#234-017	HARPER	SHIDELER SPRAY SERVICE	185.85
#234-022	KEIL	SHIDELER SPRAY SERVICE	189.76
#234-024	KNEER	ELDON MAASBERG	303.60
#234-027	MAASBERG	ELDON MAASBERG	154.42
#234-030	POND FLAT LAT A	RALPH REXING	743.54
#234-031	POND FLAT LAT B	RALPH REXING	391.58
#234-033	POND FLAT LAT D	RALPH REXING	641.06
#234-038	SONNTAG-STEVENSON	SHIDELER SPRAY	633.15
#234-040	WALLENMEYER	DANIEL J. PAUL	1,211.48
TOTAL			8,238.41

Motion made to approve these contracts based on the Surveyor's recommendation by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

RE: REQUEST PAYMENT FOR BLUE CLAIMS

The following Blue Claims were submitted as follows:

SHIDELER SPRAY SERVICE #1851 KEIL DITCH #234-022 94-SP-22-85	3,012 LF @ 0.063=\$189.76 PAY 85%.....\$161.30 RETAINAGE 15% . \$28.46	AMOUNT \$161.30
TERRY R. JOHNSON #1052 KOLB #234-025 94-SM-25-85	5,593 LF @ 0.31845=\$1,781.09 PAY 85%.....\$1,513.93 RETAINAGE 15% . \$267.16	\$1,513.93
TERRY R. JOHNSON #1052 AIKEN DITCH #234-006 94-SM-06-85	2,450 LF @ 0.2895=\$709.28 PAY 85%.....\$602.89 RETAINAGE 15% . \$106.39	\$602.89
UNION TOWNSHIP DITCH ASS'N #1259 CYPRESS DALE MADDOX DITCH #234-012 93-FM-12-15	0.03 LF @ 23,887=\$716.61 PAY 15% RETAINAGE.....\$107.50	\$107.50
UNION TOWNSHIP DITCH ASS'N #1259 HELFRICH HAPPE DITCH #234-012 93-FM-18-15	0.03 LF @ 12,698=\$380.94 PAY 15% RETAINAGE.....\$57.14	\$57.14
UNION TOWNSHIP DITCH ASS,N #1259 KAMP DITCH #234-021 93-FM-16-15	0.03 LF @ 11,160=\$334.80 PAY 15% RETAINAGE.....\$50.22	\$50.22
UNION TOWNSHIP DITCH ASS'N #1259 EDMOND DITCH #234-016 93-FM-16-15	0.08 LF @ 15,395=\$1,231.60 PAY 15% RETAINAGE.....\$184.74	\$184.74
TOTAL BLUE CLAIMS SUBMITTED		\$2,677.72

Motion made to approve by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

RE: REVIEW OF DRAINAGE PLANS

A. Miller Subdivision

Bill Jeffers: "A simple three lot subdivision. That narrow area that enters off of Moffett Lane and winds down to the back lot is surveyed off so that it gives 50 ft. frontage to that lot and gives access to it through a driveway. That is why it is shaped like that."

Commissioner Borries: "So in effect there will be no public streets in the area?"

Bill Jeffers: "No sir. The only public street is Moffett Lane which is an accepted county road. The developer voluntarily asked his engineer who is Bill Nicholson, to provide some detention storage down in that natural valley and they did so by providing two pipes. One which will allow a limited amount of water to flow under the driveway until it builds up and spills over into an emergency spillway, which is created by a concrete box that inlets into a second pipe and that takes the excess storm water so that the water won't run over the driveway. By doing that they give themselves a safety valve and they provide some storage back up in that valley up hill of the driveway. That is a natural drainage way. It is not really suitable for building, and we want to thank the developer for voluntarily providing storage on what a lot of people would come in with as large lots and saying that it didn't really require it. He is doing his down stream neighbors a great favor there. We recommend passing this drainage plan. Mr. Nicholson is here if you have any questions. He did submit drainage calculations and detailed drawings of the pipe structures and the end treatments of the pipes how all this fits under this driveway here. They have been reviewed by our staff and we recommend approval."

Motion made to approve by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

B. Cynthia Heights Section D

Bill Jeffers: "This is a two lot sub, both lots are huge. If you look up along the north, or top of the sheet you will see a little tier of small lots that was done by Mr. Elpers, and that basically is what was planned for all the rest of the area. They left some street entrances where they could have gone back into the rest of that area and divided it up into those small lots. But apparently they have buyers for two large lots. So they built a cul-de-sac back there and set aside about a 30 ft. strip for drainage easement from the end of that cul-de-sac through a natural depression down through there. Right now I think that it is a corn and soybean field. Again, Mr. Nicholson is the representative of the subdivider in this. We don't feel that it needs any detention as having two large lots. If they come back with a replat and divide it off into smaller parcels or lots, we'll get another chop at it through site review and it will have to come back to drainage with some kind of a plan. But something this large all they really need is that easement to get rid of that water that is coming off that cul-de-sac. Mr. Nicholson has provided calculations and drawings showing the ditch along side of the road, and what kind of water you can expect to flow off of that ground. We have reviewed the calculations and his simple drawings, and recommend approval of this drainage plan also."

Motion made to approve by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

C. Cypress Creek Subdivision

Bill Jeffers: "The developer is Dan Buck General Contractor Inc. The consulting and design engineers is Sitecon Inc. Mr. Keith Poff and Chris Weil are here to answer any questions. They have submitted an extensive set of calculations and other data in their drainage report for Cypress Creek Subdivision, along with a drainage plan. I believe that it has around 28 lots. It has an entry street called Cypress Creek Drive, which winds around and ends in a cul-de-sac called, Live Oak Court. Then another cul-de-sac comes off of that called, Wind Gate Court. There are a couple intermittent waterways that become down toward the west end of this subdivision which is on your left, they have become a pretty good size creek. By that I mean, meadow or woodland creek, nothing real major like Pigeon Creek or anything, just a branch. There is a retention basin planned on lot 23 and 22. About half and half. Lot 22 and 23 share the detention basin. All the water from the subdivision except for a very small portion that might drain off the extreme west end of lots 24 and lot 25 run through this detention basin. The drainage report compiled by Sitecon states, that the calculated required retention volume is 55,308 cubic feet. The retention basin can provide 87,032 cubic feet of storage at a maximum depth of four feet. So basically, using the factors currently under use they have designed a retention basin that is capable of storing a little under 32,000 cubic feet in excess of what they calculate will be generated during a 25 year storm. Both of the waterways that come out of Plantation are controlled by carrying them into large diameter concrete pipes, and then they run through pipe easements, and under the road, and empty out into this retention basin. So basically, he is filling those creeks, and controlling them by putting them through large diameter pipes. The out flow from the retention basin is smaller than-it is a 36 inch concrete pipe-the small culvert that goes under a private lane that is immediately adjacent and west to this site. (inaudible remarks) That 36 inch pipe will not overflow the existing box culvert. That existing box culvert may have to be improved, extended or enlarged at such time as the next person comes in and develops some ground over there. Depending on the traffic patterns."

Commissioner Borries: "And this box culvert goes into some kind of legal drain over here?"

Bill Jeffers: "No, it empties out into a private drain which then connects down closer to HWY 41 and Little Pigeon Creek. It is all private drains in that area. No legal drains. The only problem that we have encountered in the review of this is that Plantation-the original drainage plan shows a pond right here-this pond should be located in this corner. So that discharge pipe would either go right into their new pond or run down this side ditch and into that culvert. Somehow or another the plat when they platted Plantation they flopped it over and it is on the other corner of that lot."

(Inaudible)

Bill Jeffers: "I have not been able to determine that, that pond is there or has been constructed. It is actually just a dry basin that Mr. Morley calculated for Mr. Koester to build it a certain way and that 27 inch pipe would discharge the right amount of water. Now I don't want to extend this meeting or get into any technical or any violations it isn't like that. All I am going to ask is that we reviewed the plan for Cypress Creek and we find it to be sufficient and a very good preliminary plan. We think that it can be refined during the period when he brings you street and drainage plans to the County Commissioners."

Commissioner Borries: "And in your opinion because this is helpful-it does say dry retention basin here-but in your estimation this drainage plan will not affect or impact the one to the south on Plantation Estates?"

Bill Jeffers: "All I am asking is that this Dan Buck, allow his

engineer and agree with us that if a basin is there or is built there or becomes built there at some time, that they will either provide enough easement area to carry the out flow from that basin around their basin and into the road side ditch or into their basin. Because their basin can handle it. As a matter of fact, their calculations are based on it being there. We are just asking..."

Commissioner Tuley: "To make sure that I understand what you are saying Bill, this lot 18 in Plantation where this drainage easement is, you are asking that Dan Buck allow them permission to either take it into this lot 22 or around this easement, is that what you are saying?"

Bill Jeffers: "Right now this is called a PU easement (public utility). It is not called a drainage easement. So all I am asking is that if a basin is located here.... that Dan Buck either grant what is necessary to get that into here, or if he needs to share a little bit of a easement to go around him and get it in there."

Commissioner Borries: "This is kind of an unusual drainage easement right here, according to this it looks like it just dead ends right there."

Bill Jeffers: "Right. I think that it is intended to be the basin. I think that they found-I just can't remember, and I don't have any documentation on them changing the location of that basin. They may have. But from brief field investigation I did not see a basin there. So if one comes to be or if there is one there, we just need-if they will agree what we have just discussed that is fine with me everything else is in order."

Commissioner Borries: "Would you Keith, be able to speak for Mr. Buck to see if this modification could be done?"

Keith Poff: "Yes, speaking for Mr. Buck we would agree to allow a easement to either enter into our basin or to bypass our property so that it could enter it's natural drain."

Commissioner Borries: "Ok."

Motion made by Commissioner Tuley to approve Cypress Creek Subdivision drainage plan with the exceptions noted. Seconded by Commissioner Borries. So ordered.

RE: OLD BUSINESS

A. Windsor Place Boonville-New Harmony

Bill Jeffers: "There is no representative here. President Borries asked that Mike Wathen and Bill Jeffers attend the Area Plan Commission site review committee on June 14, 1994 and we were both there. We notified the other members that we were there specifically to address any questions that they had or the developer had with regard to Windsor Place, and there were no questions brought up. The sense that I got from the whole thing was that most of their questions at present are regarding sanitary sewers, and they are not going to take any action until they hear from the developer for Windsor Place, and so they don't have any questions for us at this time. That is all I have on that."

RE: NEW BUSINESS

A. Temporary Construction Crossing of Lynch Road at Crawford Brandies Extension.

Bill Jeffers: "You have Lynch Road and it crosses Green River and continues east and before it gets to Burkhardt you have the large Crawford Brandies ditch that runs duenorth from the Eagles Country

Club and then under Hirsch Road and then into Pigeon Creek. It is a pretty good size ditch, and we have a request from Blankenberger Brothers Inc., who has a portion of your contract #R20843 Lynch Road Extension, requesting the Drainage Board to allow them to temporarily relocate Crawford Brandies ditch so that they can build a bridge over the true channel. They would like to place a low water temporary crossing in the old ditch, and in the relocated ditch so that construction vehicles can cross the ditch. They tell us what size the pipes are going to be, and that they will only be two feet of fill over the pipes. So the ditch can pass over the top in the event of high water situation, and they agree that if at any time the county feels that the pipes are restricting the water up stream, Blankenberger Brothers Inc. will remove the pipes to eliminate the restriction at our order. This is what we ask for they show a picture of the location, and how they plan to...this is just a copy but they have a plan...we have never had any problem with this contractor on this type of request, and we recommend that you allow them to do this. And we will keep an eye on it to make sure that it is not a problem."

Motion made to approve the request of a temporary structure crossing Lynch Road and Crawford Brandies Extension by Commissioner Tuley. Seconded by Commissioner Borries. So ordered.

#### B. Request From Green Briar Corporation

Bill Jeffers: "This is from Green Briar Corporation, and attached to Mr. Hamps letter is a copy of the minutes of the Drainage Board meeting of February 23, 1987. It is just the last of the discussion where Mr. Willner entertained a motion to approve the drainage plan for Green Briar III with the stipulation that Lot 60 be set aside with a sediment control basin on it. It is at the bottom of the hill-until 90% of the development is complete, and I interjected, until such time as 54 lots are sold. Because 54 was 90% of 60, and developed. And I am saying here that my intention was that, that lot be used as a basin for silt and sediment until all of the lots were stabilized, and since this was a little over seven years ago, you can imagine that most of those lots are in good stable condition. As a matter of fact, the break down on them is: 55 of the 60 lots are sold, 51 have houses constructed on them with lawns-good tight stable lawns, one of those lots probably will not have a house build on it because of the adjacent homeowner bought the lot more-or-less he wanted two lots. So that brings it to 52 lots. Mr Hamp has an offer on four lots down on Bob Court, with the condition that this hole be filled or the guy won't buy those four lots. Now Bob Court just had several houses erected on it in the last two years, and these last four lots do not drain into that sediment control basin. They drain into either the rear lot line directly into the ditch between that and Mr. Jagoe's development or they drain out into the street and the water is collected in an inlet and taken to that ditch. So, the sediment from those four lots-if there were any-would not go in there anyway. And that brings it to 59, and the last lot is the hole, which he intends to fill and compact with a sheep's foot and make it suitable for building the last home. So really what's happened here, I said 54 sold and developed, and really the intent was just to use it as a silt and sediment control basin until 90% of the development was under control, which it is. The requirements of the Building Commissioner being what they are today with regard to silt and sediment control at each building site I think that if Mr. Hamp and Green Briar Corporation and the builders that buy those last four lots, would just comply with that there wouldn't be any problem with silt and sediment running out into the street or onto adjacent property, and I would recommend that your board allow Mr. Hamp to go ahead and fill that hole so that he can take this man's offer for those four remaining lots."

(Inaudible Remarks)

Motion made to approve the request submitted by Green Briar Corporation with regard to lot 60 by Commissioner Tuley and seconded by Commissioner Borries. So ordered.

C. Drainage Ordinance-Homeowners Association

Bill Jeffers reported that he had sent a copy of the proposed drainage ordinance to Darrell Veach and Bill Nicholson for their comments. They will be bringing it back to the Drainage Board by the 15-18 of July 1994.

RE: UPDATE ON EAGLE SLOUGH FOR NEXT MEETING

Commissioner Borries: "If you could bring us somewhat of an update on Eagle Slough. Eagle Slough has become a focal point of the Waterworks Road situation. At one point you had recommended rejection of a previous...what was it...a maintenance contract on Eagle Slough?"

Bill Jeffers: "Right."

Commissioner Borries: "And I would like to see what we need to do out there as we put this Waterworks Road situation back in business. What needs to be done there on Eagle Slough. If you could have someone do some work and some research at our next meeting where we could see what needs to be done there. One of the concerns seem to be, I have heard this from several people along there, was because there had been some businesses now that were affecting Eagle Slough because of the aggregate that was going in to Eagle Slough, and thereby eventually ending up down sediment..."

Bill Jeffers: "Right, down closer to the river."

Commissioner Borries: "We also knew that we had some problems even trying to mow it because of how steep as it is near the interstate. Whatever you can come up with I think we need to focus again, on Eagle Slough as putting this Waterworks Road situation back, and that was my final point that I wanted you to carefully and I mean carefully, review the assessments along Eagle Slough. It is our understanding that if a ditch assessment particularly as it is going toward the Levee Authority, in other words, that because of what we have had to do and what we consider as a portion of a legal drain, we may want to look very carefully at that ditch assessment to everyone."

Bill Jeffers: "What you might find is that I-164 the state has occupied a good deal of what originally was assessed to the Levee Authority. Because their road rides the top of the levee for quite a way and I am not sure that the state pays assessment. The Levee Authority, yes they do. The County Commissioners pay an assessment. You own some property down in Union Township somewhere and you pay an assessment on that. But I am not sure that the state or the federal government or the post office has to pay."

Commissioner Borries: "As we look at those ditch contracts carefully look at that one for next year."

Bill Jeffers: "And a another way to gain money is to go out and research and find out what has been converted from agricultural to urban by enough hard surface that they pay an additional and thereby you gain more funds to do more that you might want to do."

Commissioner Borries: "That ditch assessment could be very helpful."

Bill Jeffers: "I think that you can do some work with that ditch assessment if you like because there is a surplus at the current time."

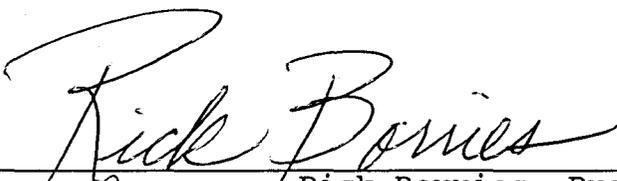
Drainage Board Meeting  
June 27, 1994

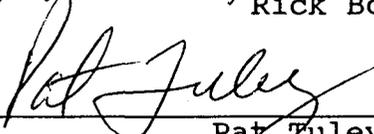
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There being no further business the meeting was adjourned at 7:40 p.m.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary  
Bill Nicholson  
Keith Poff  
Chris Weyle  
Harry Hampt

  
Rick Borries, President

  
Pat Tuley, Vice-President

\_\_\_\_\_  
Don Hunter, Member

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JULY 25, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
JULY 25, 1994

The Vanderburgh County Drainage Board met in session on 1994 at 7:40 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

**RE: APPROVAL OF MINUTES (5-23-94 & 6-27-94)**

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of May 23, 1994.

Motion made by Commissioner Tuley and seconded by Commissioner Rick Borries to approve the minutes of June 27, 1994. So ordered.

**RE: LETTER FROM EVANSVILLE COURIER COMPANY-JULY 13, 1994**

The following payments and charges dating from May, 1986 through December, 1988:

CHARGES FOR ADS		PAYMENTS MADE	
05/15/86	\$36.56	05/13/87	\$1,031.95
08/15/86	\$26.22	10/18/88	\$25.55
03/11/87	\$33.69	10/18/88	\$25.55
09/12/88	\$52.62	12/14/88	\$76.00
<b>TOTAL</b>	<b>\$276.19</b>		<b>\$1,159.05</b>
<b>CREDIT BALANCE</b>	<b>\$882.86</b>		

Bill Jeffers: "I'm going to give this to the Auditor so they can take care of this."

**RE: REQUEST FROM TOWN OF DARMSTADT FOR A CULVERT-(LEGAL DRAIN)**

Bill Jeffers: "Somebody from the Town Board of Darmstadt sent a request to take care of a culvert that's at one end of our legal drain and I would like to pass that on to the Commissioners. Gene Cook, Clerk Treasurer of Darmstadt, for a culvert on Maidlow Ditch at Boonville-New Harmony Road just west of Gilles Lane. That probably should be taken care of by the Commissioners and the Highway Department."

**RE: PRESENTATION OF PROPOSED DRAINAGE ORDINANCE VERSION-WHICH INCLUDES COMMENTS BY THE HOMEBUILDERS ASSOCIATION AND/OR THEIR REPRESENTATIVES AND THE PLASTICS MANUFACTURERS AND WHOLESALERS AND/OR THEIR REPRESENTATIVES.**

Bill Jeffers: "Mr. Hatfield from the Homebuilders Association is here. Mr. Smith and Mr. Shively representing the Plastic Manufacturers and Wholesalers are here. Everything up to page 14 the changes are typographical or clarity or spell correcting. The one with the red cover I thought had everything in it that the Homebuilders, and the Plastics Manufacturing and Wholesalers had asked to be revised. We went back through and really proof read it closely, because there always is room for clarity and this that and another. On page 14 we want to take under advisement:

**Chapter 611.00**

.01 We feel that requiring the Building Commissioner to suspend the building permits might cause a really undue problem such as somebody might be in the middle of roofing a house or pouring a concrete drive in a suspension of a permit would be extremely costly and it might even imperil the structural.

.02 We want to eliminate ordering the Building Commissioners to deny future building permits for a Project, because let's say somebody had 50 lots for example and they sold them off 5 blocks here and 10 blocks there to fellows who are building speck homes and we suspended the building permits on five of them because that particular builder was in violation and he turned around and sold those five lots to an unsuspecting buyer saying something like, "hey look I'm over extended I've got houses over here, I've got houses over there, I need to move some lots, move some cash. A guy comes up here to get a builder permit can't get one."

Commissioner Borries: "Did Mr. Hatfield address some of that? Jeff, at the last meeting were there some discussion...were you able to look at an individual who maybe responsible for that? Did you say that as an alternative?"

Bill Jeffers: "I'm going to turn this over to him. I just want to get these other two."

Commissioner Borries: "Okay."

Bill Jeffers: "On page 57, Chapter 1109.03:

We want to eliminate other constructual inspectors for the time being. It's getting too complicated trying to hire somebody else and pay them out of this permit money, it's just best if we try to do that ourselves. We need to hire it done, than the way I've tried to do it there.

On page 77, Chapter 1505.00:

This ties right into page 57, Chapter 1109.03. Top of the page with draw funds to pay for those kind of inspectors. We feel that we might deplete that fund completely by inspecting and not have any money left to repair damages. So, pages 14, 57 and 77, other than that all the red marks you'll find in here are basically for clarity, to correct spelling or to clean up the Ordinance. I'm going to turn over that corrected addition to you, because I have already corrected in our computer and printed it out."

Commissioner Borries: "Okay. Are there any other persons here who wish to speak for or against this particular Ordinance this evening?"

Les Shively: "Mr. President, members of the County Drainage Board, my name is Les Shively, I represent the Plastics Distributors in this area and Plastics Fabricators of the type of plastic material used in construction of, or installation of surface water drain facilities. First of all let me say this especially to you Mr. President, we appreciate your response to our request in person February 28, 1994 and we knew there were concern and some momentum building for a Drainage Ordinance to allow us the opportunity to be a part of the Ordinance Development process and to sell the County if you will on the flexibility, excuse the pun, but the utility I guess is a better way to put it, a plastic. Since plastic is an important part of this industrial, part of our industrial base of this area we felt that it was appropriate that this ordinance embrace the use of plastics, that's it's proven in other areas to be a good material for the type of drainage facilities that are established by this particular Ordinance. You allowed that to happen and we promised you that we would meet with Mr. Jeffers and all other affected personnel and give our input. We did that over several meetings, both meetings of the group internally, sharing our collective thoughts then with the Surveyors Office. We also brought in copies of Ordinances from other jurisdictions, other communities out side the State of Indiana. As well as consulting with experts in this field that are respected through out the United States including representatives of that various trade organizations. You allowed us to do that and all those changes have

been adopted in this latest red line version of the Ordinance, as I said before back on February 28, 1994 our concern was the material section in making sure plastics was on an even plain with other materials that can be used for these types of facilities. This Ordinance accomplishes that purpose and we appreciate the opportunity to participate, and endorse this version of the Ordinance. I guess what we have left at this point is are questions. The Drainage Board considers I guess as acting as a committee to consider this Ordinance, and next goes to the County Commissioners I suspect for legislative of action and eventual adoption. I guess the members of this organization here this evening would basically want to know at this point and time assuming that there some type of favorite type of recommendation of this body and it doesn't change from the version we saw the June 18th version. We would like to know what that legislative schedule will be so that we can shepherd it through and see that's it's passed in the version that you now have before you. Before I conclude I would like to have those people from Pressline Plastics, from PVC Plastics, I am sure I am leaving out some people that are here this evening that have worked very hard on this and has spent a lot of voluntary time and we appreciate your efforts and that's where we stand. Thank you very much Mr. President, more than happy to answer any questions you might have."

Commissioner Borries: "Okay, thank you Mr. Shively for your presentation. Thank the members of the audience here for your input. We did want to address your concerns. This Ordinance does offer really a dramatic change to what we've done in the past. It has taken some time but that's been our goal to listen to what people have had to say , to incorporate it and certainly to be as fair as we possibly can with all the persons who are involved in your Industry as well as those other suppliers, so we appreciate your input on this. Are there other persons who wish to speak at this time?"

Jeff Hatfield: "My name is Jeff Hatfield, I live at 10211 Belmont Court in Evansville, Indiana. As representative of the Homebuilders Association we also are in favor with what has been proposed except for page 14 which deals with the area penalties, which we discussed last week and what I had proposed to you to consider was instead of pulling permits or refusing permits was to somehow rewrite this to penalize the person responsible for the infractions or the fact that some part of the projects under noncompliance through fines or some other method, so that's where we stand basically."

Commissioner Borries: "Does Bill revision here which we'll refer to as the revision of 725-94. He says last half not proof, but anyway this is the 725-94. When it says: Requiring a Building Commissioner to suspend the building permits for...THAT PART OF THE PROJECT FOUND...is that what you would consider a fair statement?"

Jeff Hatfield: "Well, that's what's written...yes."

Commissioner Tuley: "That's the way it stands...that stands the corrected version, right?"

Jeff Hatfield: "Right."

Bill Jeffers: "I just left that whole section unchanged."

Commissioner Tuley: "We haven't arrived at what you want to do."

Bill Jeffers: "Right, because I'm waiting. That whole section is really not appropriate the way it is."

Jeff Hatfield: "I think your attorney would probably tell you that your options are open...is that right?"

Alan Kissinger: "Yes, basically the advise that I would give the

Drainage Board is that the County Commissioners who will actually adopt this Ordinance does have the authority under home rule to adopt as part of the Ordinance penalty provisions which could include fines. They could be enforced just the same as any other penalty provision in any of their Ordinance adopted by the Commissioners. I think what it really comes down to is placing those fines or causing those fines to come into affect in such a way to prompt in responsible or offending party to correct the problem. I think basically that's what the Homebuilders are interested in as well that we don't inadvertently penalize a homebuilder who may be some what at the mercy of the developer. Not necessarily they being the culprit, but that could happen."

Jeff Hatfield: "We don't intend to deny you the teeth to enforce the Ordinance. We just hope that ..."

Commissioner Tuley: "A little more specific and not quite so broad."

Jeff Hatfield: "Right."

(Inaudible)

Commissioner Borries: "Do you have any thoughts if our attorney says that the Board of Commissioners can adopt under home rules certain fines, procedures, do you have any thoughts on that?"

Jeff Hatfield: "I would give an offending person 30 days to respond to any letter that the Drainage Board or the County Surveyors Office would send them to respond in writing as to what their plans would be to correct the problems that the County Surveyors Office has found. I would set a guide line after that 30 days that within another 30 that the problem was corrected or a pretty good reason why it wasn't say 30 days arraign. You have to cut it off at some point and then I guess at that point you would level a fine per day after I guess that 60 day period from the time the County Surveyors Office has notified that person in writing that they are not compliant. That just a start. I am not saying that's what you should adopt, I am just saying that maybe on those..."

Commissioner Tuley: "We're not putting you on the spot Jeff, but you've got to...what you would consider a reasonable fine? That you would want to publicly go on record?"

Jeff Hatfield: "I don't know, \$50.00 a day could get some ones attention and then again \$50.00 a day may be something someone has in their pocket. I think it depends on who your fining will depend on the amount that would get that persons attention. I would probably research what other governmental entities fine people for certain things like IDEM, DNR or what those fines are. I don't know...I don't even know what those fines are, but maybe look into that."

Commissioner Tuley: "Okay."

Jeff Hatfield: "That's all I have. I thank you for the time that you've given our Association to look over."

Commissioner Borries: "Okay, thank you. Does anyone else wish to speak at this time?"

Andy Easley: "My name is Andy Easley. I just received this last Friday. There is still a couple of things in here about maximum gutter depth, maximum water depth in the gutter like 3 inches, I think is awfully restrictive. If you make a computer model and you have the roll curb and the crown, if you can visualize what a street that is 29 ft. back to back, and come up 3 inches on the gutter and go out towards the center line, your going to get your inlets awfully close together. I don't have to pay for them, but

it's going to cost the developers a lot of money. I don't know where that came from, but I think that it's very very conservative."

Commissioner Borries: "So what are you suggesting?"

Andy Easley: "I think we ought to look at some technical data to see just how far apart the inlets are going to be to satisfy that Bill, do you know off hand?"

Bill Jeffers: "That's for a 10 year storm, inlets ought to take it all."

Andy Easley: "No, I'm talking about the flow in the gutter. What about the flow coming to the inlet?"

Bill Jeffers: "Three inches apply to a 10 year storm. The inlet ought to be able to take it all in a 10 year storm."

Andy Easley: "I read this to be the maximum depth of water in the street to be 3 inches."

Bill Jeffers: "During the designed storms, 10 year storm."

Andy Easley: "I still think that's...I still would have to do some calculating, but I think that's not very deep. I think I may have said I worked in another state before I came to Indiana. A 10 year storm you could flood curb to curb, a 25 year storm right-of-way to right-of-way."

Commissioner Borries: "How long ago was that Andy that you worked in another state? What I am wondering...is there any possibilities that the rules you operated under in California are different now?"

Andy Easley: "They maybe different now. It could be, I will have to find out what their using out there. We thought they were terribly restricting then."

Commissioner Borries: "Thank you Andy. What page were you reciting?"

Andy Easley: "On page 33 of this revision, 901.00 STREETS NOT TO BE FLOODED."

Bill Jeffers: "Basically if you'll remember...Brookview and it got 2½ ft. deep and went right through a guys garage, all because inlet was plugged. Streets shall not be flooded during a 10 year period storm to exceed 3 inches. That 3 inches is measured 10 ft. away from the inlet, so if your street grades coming down to that inlet that might be 6 or 8 inches deep on top of the inlet. I am just trying to establish some perimeter of flooding during a storm where everything should be able to go down that inlet. So that is showing laxness not stiffness there. Then on page 39 it reads that the inlet grate shall pass the 10 year storm, but that will allow flooding up to 10 ft. away either side of that inlet 3 inches deep. Then it says in the very next paragraph: An overload channel from these sag inlets and that means that the low point in the street like what was right in front of Mr. Mintons house in Brookview, that the low point in that street there shall be an overflow channel back to the main ditch or basin so that the maximum depth of water that is ponder in that street sag, or that low point in the street shall not exceed a ½ ft. which will top the curb. So what it means is then that 4 inch or 4¼ inch curb is topped which presently our Ordinance does not allow it to be topped until a 5 year event occurs in the first place. That will flood it, curb to curb at 6 inches. That allows for a little bit of grass there and then you should have an overflow channel going back to a basin or to an open ditch to get rid of that water and get it off the street before it goes through a mans garage. I don't think that is unreasonable during a 25 year storm. If that had been built

properly in Brookview, if the builders of those houses had not spoiled all the dirt they took out of the crawl spaces in between those two houses, Mr. Menton would not of had his garage flooded by 3 inches of water. All this says is that the Ordinance says it isn't going to happen. If it does happen it's in violation. We are allowing 6 inches of flooding which will be curb to curb during a 25 year storm and then all the excess above that has to be taken through a channel to some main method of caring it off. I did forget to say and I know I am going to leave somebody out so I just want to make a blanket statement. I really appreciate the Homebuilders Association participation in this. Here's all the corrections that were sent from Veach Nicholson and Griggs. That saved me a lot of research, all I had to do is type it in. I really appreciate that. Also from the Plastic Manufacturers and Wholesalers who through Bill Smith, a fellow who works through him. They just compiled it all and sent it to me on a disc and all we had to do is slip that disc in the machine, bring it up on the screen and transfer it over into this document. I'll tell you right now it saved me at least two weeks of work and I really appreciate that. All we had to do was to get it to fit our floormat, which didn't take but a couple of days. Then here at the back of the Ordinance they provided us with charts showing materials and the type of rust proofing that they should have and also some drawings that came from Indianapolis back there on how to entrench the pipes, and I really appreciate their help."

Commissioner Borries: "Thank you Bill. Are there other persons who wish to speak at this time on this? We have tried to listen to everyone. I guess to some extent I guess someone thinks there some slow steps but there certainly the liberate steps and again this is probably compared to what our Ordinance is right now, a dramatic increase in relation to what we're currently going after, so it has been extensively studied and advised and based on what the testimony has been here this evening we've arrived at a concessive that we can all live with, except for the one item then that we ought to have our attorney address and we are going to need some input in relation to rewording the item 611 on page 14. Specifically the fines and specifically how we respond to certain individuals here on that. If we can address that, Bill would you or any of you who are here, obviously are interested enough to Jeff, Les, whoever wants to work on this as well. If we can get that information to Bill Jeffers and he can forward it on to our attorney, let's say by August 12, 1994. We could hold a final hearing on the Drainage Board on August 22, 1994 for Final, Final and have the Commissioners adopt that final version then on August 29, 1994 at our meeting. Is that a do able, Bill?"

Bill Jeffers: "Yes."

Alan Kissinger: "We have penalty provisions, so it has to be advertised at least twice."

Commissioner Borries: "If we can get a final approval from this Drainage Board on August 22, 1994, could we do it at our Tuesday, September 6, 1994 meeting the day after Labor Day? Does that allow us to fit those requirements?" Is that agreeable with everyone? Bob, Bill can your office make those deadlines?"

Bill Jeffers: "Surveyors Office will comply with those dates."

Commissioner Borries: "Okay. We want again thank you for your patience. I think we have studied this thing and hashed it out and we're close."

Andy Easley: "I have got one more comment. Again this version page 59, minimum grade set for required ribbon liner. Will the provisions of this Ordinance, will the Drainage Board in reconstructing a legal drain, would you abide by these, this criteria? In reconstructing a legal drain grading a new slope,

would you abide by this criteria?"

Bill Jeffers: "No."

Andy Easley: "No, but a developer has to?"

Commissioner Borries: "Why do you have a problem with this?"

Andy Easley: "Well it's a lot of concrete in the bottom of a pretty flat ditch. Again it's not going to cost me, but it's going to cost the developers."

Commissioner Borries: "Are you saying that's a bad idea?"

Andy Easley: "I don't think it's necessary. I think it's a bad idea. I think the development of land and the cost of houses it ultimately comes back to the homeowner who takes out the mortgage and pays the monthly payment. I think there's a lot of very restrictive, again this is pretty restrictive."

Commissioner Hunter: "What is the purpose of a concrete ribbon?"

Bill Jeffers: "In some of the previous versions of this document we had monumentation required to set the elevation at various points along ditches that are backyard swales so that if someone attempted to take a large, wide slowly sloping or a flat graded swale that was intended to convey a volume of water in a slow wide way down to a main channel, maybe even as a detention swale. Someone were to come along like they did in Petersburg Place and put a 12 inch pipe in a swale that was designed to have a 6 ft. bottom and be 14 ft. wide and slowly convey the water down to Little Pigeon Creek. Come in and stick a 12 inch pipe or an 8 inch pipe in there and cover it up so it's easier for them to mow the grass. Then one end of the pipe the channelized flow of all that water is going to rush out and roll into Mr. Kelleys backyard and cause him to complain for the last six to eight years, or an upstream were it is coming out of two 15 inch pipes out the end of cul-de-sac is going to flood everybody upstream and their going to start hollering and screaming that we did everything wrong. So we wanted to monument the bottom of these ditches and the Homebuilders felt that monuments were way too expensive, so what we came up with was a ribbon of concrete, 16 inches wide and 8 inches deep where you just simply take a footing trencher and drop it down the bottom of that ditch and run a footer trench down through there, and whenever somebody's finished pouring some concrete they can go down there and wash there concrete trucks out and you have got a ribbon in the bottom of there at an expensive price and that pretty much marks the bottom of the ditch. If they choose to do that in a different method by sending out a crew with some potato spades and ordering concrete to do it, that's their choice, but we wanted some way to monument it and we thought that would be the least expensive way to do it."

Commissioner Hunter: "So in other words this is nothing more than a marker to you? Ten years from now we can see whether or not the approved drainage plan has been altered."

Bill Jeffers: "Is still there or been altered. It's also a way to, if you put it in so that that grade is just a little bit lower than the surrounding grass or sod. It's also a way to draw the moisture out of that ditch and have it trickle down a ribbon of concrete rather than have chronic wetness or (Inaudible) in the bottom of that swale. We just thought it was least expensive way to handle several problems. Although the point is well taken that it could add some expense to the cost of the lot. We are hoping it will save money in the long run. It probably will initially cost some additional labor and material."

Commissioner Borries: "I think it insures some uniformity in your swales. It would impede perhaps some pipes being put in or some

structures putting in that messes up an entire swale system, which no developer can control anyway. We have difficulty of enforcement in some of these areas. I think when you talk about being passed along to the homeowner, the homeowner is going to have to pay in higher either flood costs or other maintenance costs in the long run anyway, so it could be a form of preventive maintenance from that stand point. I think it insures some uniformity in terms of your swales, because otherwise you've got structures, pipes, you've got all kinds of bridges and everything else that people can put in there. What happens is a various property owners at that point after the subdivision has already started, they get disputes, somebody puts one here, somebody else has to have a pipe here, somebody else wants a bigger one there, we're going nowhere."

Andy Easley: "How is it going to prevent people from rolling a pipe at the bottom of a swale in order to put truck loads of dirt on top of it?"

Commissioner Borries: "I'm not sure that it would in all cases but as he points out it is a marker. It insures at that point in orderly development as to way this thing proceeds. It also reflects to the changing times because we're not living in the 1948 anyway and working for the same drainage thing, this is 1994. There is a lot of growth in this area and we want that to continue and it's got to ensure in an orderly way that the water is going to go somewhere, and as he points out in terms of a swale that it's not impeded somewhere down the line, and suddenly dumped into a legal drain somewhere that's not equipped to handle a sudden flow of water at that point. It reflects 1994 growth instead of 1948 in my opinion."

Bill Jeffers: "Just for the immediate neighbors too, on each side of whoever might do that. The other thing is we get a lot of calls or we used to when the eastside was all in the county, of course now the city gets those calls because they annexed it. We got a lot of calls out in that area where people would say I've got water standing in my backyard and you guys sent us out there and it really was a couple of baggers full of lawn clippings that somebody dumped over here that got incorporated into the sod and there was about a 2 or 3 inch hump that held water back for 3 or 4 yards. Now we say hey, have you got a ribbon liner in your backyard? Take a spade and go scrape it down to that liner and you'll drain your yard and you'll find out if your neighbor has caused you a problem and go over and politely ask him to do the same thing."

David Savage: "I have a question. If that's under the channel design section. I see lots of benefits with this that can be good, but let's say if you have a drainage swale between two houses that's graded less than (1) foot than a (100) feet, would you also have to have a paved concrete trench?"

Bill Jeffers: "Those are outside of easements. Those are on private property outside of drainage easements and I don't think we have jurisdiction."

David Savage: "The way I read it I thought it said on public or private ground. Again, a lot of those I see the benefit, but on page 59, 1202.06 it said all channels, and then on page 58, the header of that section, whether private or public. I just wondered if you have drainage swale between every house and its graded less than (1) foot and 100%, the way I read this, you have to have a paved concrete trench between the houses."

Bill Jeffers: "That's a point very well taken and Mr. Savage has pointed out that on page 59, 1202.06 we need to make sure that that refers only to channels and drainage easements. The land between two houses is controlled by the Building Commissioners requirements on site plans."

Andy Easley: "Depth of stored water. Bill does this mean that a retention basin deeper than (4) feet wouldn't be allowed? If you wanted to have some fish in it, and work with someone to have a small pond that wouldn't get all green with algae? I am on page 69, 1307.02, Dept Of Stored Water."

Bill Jeffers: "Okay, Depth Of Stored Water, page 69, 1307.02. What we are asking for there, this is general detention and retention basin designs. On 1307.01 we don't want the excess water stored longer than 48 hours unless there is an additional storm during that 48 hours. We don't want water there longer than 48 hours, this is because it's an emergency storage facility. The maximum depth without a permanent pool, will not exceed (4) feet. So that means in a dry basin the maximum you can store in a dry basin for 48 hours is (4) feet, then it should drain dry. And the maximum depth of storm water to be stored above a permanent pool should not exceed (4) feet. It doesn't say how deep a pool can be. If it's (10) feet deep during that 48 hour period it can't be anymore than (14) feet deep. We're just trying to limit the amount of water stored because I speak best from example: Wal-Mart west started out (6½) feet of stored depth and dry basin. When they added on here recently because they were restricted to only using that basin, they had no more land to use. Their now at (9½) feet of stored depth. If you will remember when the revision came through I asked because that shoot had eroded under the fence and kids could get down in there and their always attracted by rushing water and taken those impromptu raft rides. They could get down under that fence while the water was still coming up, they would be in (9½) feet of water inside of that fence. That's real scary to me as a father or to you lady's as mothers and we just don't want that, (4) feet is dangerous enough. We also state in here that the design engineers shall be responsible for determining when a pools design would require a safety fence around it. But no, in answer to Mr. Easleys question you can have a permanent pool as deep as you wish, but you can only store (4) feet above the normal pool elevation."

Andy Easley: "Thank you."

Commissioner Borries: "Further comments? Is the schedule agreeable with everyone? Thank you again for those if there are further comments get those to Bill Jeffers as quickly as we can, or any further revisions, but it seems to me we are very close and so we'll try to make the final decision then on the schedule that we outlined for you."

Andy Easley: "Thank you."

Commissioner Borries: "Thank you."

**RE: DISCUSSION OF EAGLE SLOUGH-REGARDING WATERWORKS ROAD CULVERTS**

Bill Jeffers: "At your last meeting, President Borries ask me to look into this Eagle Slough which is a regulated drain of yours. The total acreage being billed is 7100 acres at \$.80 an acre. A breakdown on that is approximately 3000 of the 7100 acres is inside the city limits and the city is paying the assessment on that. Around 210½ acres is being paid by the State, which is mostly I-164 right-of-way. Approximately 73¾ acres is being paid by the County and it's mostly County Highway right-of-way, and 60 acres is being paid by the Levee Authority for what's known as the Knight Township Levee. Leaving approximately 3763 acres remaining in private land mostly agricultural. We stopped collecting assessment for a period of time, because the account was exceeding the expenditures by greater than 300%. By law we can only have in our account (3) three times the amount of a expected expenditures per year. We now have \$25,500 in the account. The last bid for maintenance was \$10,500. We're not maintaining it this year because the bid came in over the engineers estimate substantially. So if we were to spend \$10,500 to clean the ditch the whole 6 miles, that would still leave us with

approximately \$15,000 in surplus. There is no evidence of silt, gravel, sand, rock or other materials entering the ditch from... any longer from off sight projects like I-164 and Hwy 41 or private Industries, rock piles or sand mines. All those have come under control and we can't find any evidence that we're still receiving any off sight construction debris. It never was a big problem. The State had always had silt traps and various other methods of keeping that to a minimum, while they we're building I-164. The majority of the foreign material you might call it coming into the ditch is an agricultural siltation and that's minuscule. The major source of debris is tree limbs, logs and other trash and debris that floats in with the Ohio River backwater. That is a major problem and a major source of debris. Okay, specifically to the pipes that are being constructed on Waterworks Road, we need to realign the channel to match the center of that structure, that's a 3 pipe structure, and over the years the current of the river when it's up against the Levee, trying to get around the entrance to the Marina Point, trying to go through that other channel that goes back towards Staubs Construction Landfill has pulled that channel over to the south and basically right now it's lining up with the outside wing wall of your new structure. We think that may cause you a problem during high water situations with that current hitting those pipes where it really should be lined up in the middle instead of along the side. I talked to Mr. Steve Rudolph in the field Friday, and he is presently testing some dirt that lies on the southside of this bank that's being eaten into, and he feels that it may have enough clay content to qualify for backfill over your pipes in compliance with your the Corp of Engineers fill requirements for clay content to build a levee. If he we're able to acquire that basically on sight fill, to fill your pipes, that's going to save you some money, because you won't have to haul it in from a remote sight. That will result in a more or less pit that's been constructed or caused by pans dragging dirt out of that sight. That will provide you a place to dump some of this debris that was gathered up during the course of clearing the sight to facilitate the construction of these pipes. You can take organic debris such as logs and etc., put it into that hole, then if we realign the channel to match your new structure, the fill that we acquire from cutting a new channel can be applied on top of that pit and you will be able to dispose of your waste which is organic waste, it's nothing harmful. All this can be done on sight and that would save you some money. We believe that the legal drain terminates at the front face of those pipes. The upstream front face, so anything that's done from those pipes upstream could be paid for out of your account which we say at the present time is a minimum of \$15,000 surplus. We also would need to clear that waterway back several (100) feet to eliminate anymore debris coming up against the pipe right-of-way. First high water we need to clear that back and we might even acquire some extra fill or some other material that we could place, stack or tie down in such a way that it might trap backwater debris before it gets up against your pipe. We would like to look at the possibility of that. We feel that some of the work that has already been done to clear the waterway and get down into the pipe to do the reconstruction and some of the work that possibly could be done to correct the alignment situation down there, could all be taken out of your account."

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to declare Eagle Slough/Watershed on Aiken Ditch as Urban Drain. So Ordered.

**RE: SIGN COVERSHEET FOR ELPERS SUBDIVISION (PASSED PLAN EARLIER)**

Bill Jeffers: "This was passed back in January or February. They just want you to sign the blanks."

Commissioner Borries: "Okay."

**RE: SUBDIVISIONS FOR APPROVAL:**

**A. Autumn Hills Subdivision Section IV**

Bill Jeffers: "Autumn Hills Section IV is a 3 lot portion of Dewey Burtons Development called Autumn Hills. The consulting Surveyor and Engineer on this is David Savage here in the audience. What you see is a Blue Print or a Blue Line was submitted earlier and then what you see sketched in or hand written in are items that I asked him to add to his drainage plan. The calculations are in our office, they've been reviewed and we agree with them. If the items drawn and written are added to the drainage plan and were reflected on the recorded plat, the Surveyors Office would recommend approval of the Drainage Plan for Autumn Hills, Section IV. Mr. Savage is in the audience."

Commissioner Borries: "You agree then with the additional comments that were added as Surveyors recommendations?"

David Savage: "Yes."

Motion made to approve by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

**B. Five Oaks Subdivision**

Bill Jeffers: "The drawing you have in front of you is the Drainage Plan for Five Oaks Subdivision. It is located on Hedden Road. I think it's about an (1/8) of a mile or (1/4) of a mile north of the new subdivision out there called Covington Heights. It's 20 lots subdivision, it has one entrance road terminated into a cul-de-sac. The increase run off from these 20 lots is minimal. The developer has opted for retention basin with a standing body of water immediately north of and adjacent to lot (1) and lot (2). The Engineer is Daryl Helfert, of Morley Associates. He submitted calculations which I reviewed in the same manner as I would review all calculations submitted by any developer or the engineer. Under normal circumstances I would not hesitate to recommend this plan to the County Drainage Board on behalf of the County Surveyors Office, but in this case the person who holds the County Surveyors Office, Mr. Robert Brenner is also the Developer. I have no financial interest in this development. I would not hesitate to recommend this on behalf of the Surveyors Office, if it were submitted by another developer. I do work for Mr. Brenner, he is the developer. I have avoided discussion of this with Mr. Brenner, I have conducted my discussions with Mr. Helfert on this, and both of them are here in the audience."

Commissioner Borries: "Do you have your retention basin? You designed it for what event on that Daryl?"

Daryl Helfert: "Twenty-five years."

Commissioner Borries: "Do you intend to have the swales in the rear of the property? Is that correct?"

Daryl Helfert: "Yes."

Commissioner Borries: "Do you have rolled curbs and gutters in your street?"

Daryl Helfert: "Yes."

Commissioner Borries: "Bill, usually a Surveyors Office puts some boiler plate on here concerning your swales, I mean are we going to have all of that, are you willing to abide by the current standards since we haven't adopted the new standards, but usually we have a whole set of boiler plate language in terms of your whole drainage swales and your plans."

Daryl Helfert: "Right, all that's in the report."

Commissioner Borries: "Okay."

Commissioner Hunter: "John, this doesn't really deal with this, but indirectly it does. This goes to Area Plan Commission. This is another (20) lots on top of the (140) or (150) just down the road. Were going to have remonstrators who are going to begin to ask you and a little loudly what we're doing out there in terms of additional traffic that is going to be here, because Kansas Road won't handle it, and Millersburg still floods. So I'm just wondering if we shouldn't begin to look at some kind of a plan, short term, middle term, long term, because we're starting to create a monster out here. I think it would be awfully nice if we did have something in writing. It appears that we gentlemen have taken a look at this and are trying to project to the future. To have Millersburg Road that doesn't flood everytime we have a rain of any consequence and Kansas Road has some drop offs on either side of it, if I recall. With this kind of increase traffic we are going to have more accidents and more finger pointing. I am assuming that there is still quite of bit of land left on Hedden Road that will end up..."

John Stohl: "Not really. I got a little bit and the rest is in the flood plain."

Commissioner Hunter: "But, that's still a large number of houses for emergency equipment to get into. If Millersburg is shut down and you've only got Kansas Road to access incase of an emergency, that's not a good situation. We've been worrying about a bridge out here Heckel Road because of emergency access and replacement. I mean it's a different situation, but isn't either. I just think we need to begin to look at something and even to say even if it's long term."

Commissioner Borries: "I don't know if those are legal drains. I'm sure it's right-of-way on eitherside of Millersburg on the ditch. I don't know what we would do there if short of having a purchased some addition right-of-way on the south side of the road. I agree with Commissioner Hunter, we need to look at that intersection up there at Millersburg Road / Oak Hill Road. Look at what we can do on Millersburg Road. Kansas is really kind of a short distance off of Hwy 57. The problem is is that John points out is that we don't have any money we can't qualify in terms of Federal funding, about all we can do is again try to pull some right-of-way maybe to widen those ditches a little bit if we can eventually get some right-of-way in there. That will take some negotiation on part of some of the farmers there. We can't widen the road, there are no shoulders there."

(Inaudible)

Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**RE: REQUEST FOR PAYMENT OF BLUE CLAIMS-DITCH MAINTENANCE**

The following Blue Claims were submitted for approval:

SHIDELER SPRAY SERVICE #1851 EASTSIDE URBAN N½ #234-015 94-SP-15-85	21,127 LF @ \$.063=\$1,331.00 PAY 85%....\$1,131.35 RETAINAGE 15%....\$199.65	<b>TOTAL</b>  1,131.35
SHIDELER SPRAY SERVICE #1851 EASTSIDE URBAN S½ #234-015 94-SP-15-85	15,195 LF @\$ .063=\$2,452.97 PAY 85%....\$2,085.02 RETAINAGE 15%....\$367.95	2,085.02
TERRY R JOHNSON #1052 EASTSIDE URBAN S½ #234-015 94-SM-15-85	22,724 LF @ \$.4395=\$9,987.20 PAY 85%....\$8,489.12 RETAINAGE 15%....\$1,498.08	8,489.12

SHIDELER SPRAY SERVICE #1851 HARPER DITCH #234-017 94-SP-17-85	2,950 LF @ \$.063=\$185.85 PAY 85%....\$157.97 RETAINAGE 15%....\$27.88	157.97
TERRY R JOHNSON #1052 HARPER DITCH #234-017 94-SM-17-85	2,950 LF @ \$.3656=\$1,078.52 PAY 85%....\$916.74 RETAINAGE 15%....\$161.78	916.74
TERRY R JOHNSON #1052 KEIL DITCH #234-022 94-SM-22-85	3,012 LF @ \$.3069=\$924.38 PAY 85%....\$785.72 RETAINAGE 15%....\$138.66	785.72
TERRY R JOHNSON #1052 SONNTAG STEVENS #234-038 94-SM-38-85	1,730 LF @ \$.3184=\$550.83 PAY 85%....\$468.21 RETAINAGE 15%....\$82.62	468.21
SHIDELER SPRAY SERVICE #1851 SONNTAG STEVENS #234-038 94-SP-38-85	10,050 LF @ .063=\$633.15 PAY 85%....\$538.18 RETAINAGE 15%....\$94.97	538.18
<b>TOTAL</b>		<b>\$14,572.31</b>

Motion made to approve Payment of Blue Claims-Ditch Maintenance by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

**RE: NEW BUSINESS**

Commissioner Borries: "The only new business, there's been some interest from some developers on an area along Burkhardt Road which is known as the Eastside Urban area. The size of that particular legal drain has always kind of been an intimidating factor on that. There has been some request for the County to do work on that. At some time and I'm not sure if this would require yet, I've been in contact with some consulting engineers whether or not it qualify for Federal Funding. There has been some discussion that maybe a portion of that legal drain could be used as the median. You put a guardrail on the otherside if we can get the right-of-way it will go north from state road 66 up to state road 62. To pipe that ditch is going to be a prohibitive amount of money or maybe even to relocate it."

Robert Brenner: "We lost a law suite to Hirsch then you bought the right-of-way to move the ditch on to him even farther....Larry Hirsch."

Commissioner Borries: "Well if we could do a little research to look and see where that right-of-way is. That may be something there because frequently I'm okay with helping developers and we've done a lot of developing in this county, but there is going to have to be some other people bring some stuff to the table if this thing is going to work. Other developers have had to put their money up to extend certain parts. It's going to have to be a four lane, but this county has already thrown a bunch of money on a state highway out at USI to meet some needs of students out there. We don't know what the States going to bring to the table yet in terms of the intersection along that corridor there. If you could give us some research in what you see is some cost alternatives on that, it might help, because we are going to start talking with some of these developers. I think we are taking a pretty slow approach that time might be on our side in terms of the way that the developments are going to have to occur if we can't get some help on the infer structure rather than the county do it, some help from the developers is traditionally has been the case. There going to reap the economic benefits anyway."

Robert Brenner: "A median is a good idea, but I do think we own the right-of-way. I do know we own the right-of-way."

Commissioner Borries: "Do you?"

Robert Brenner: "Yes."

Commissioner Borries: "Can we really determine that? That would be a big help."

Robert Brenner: "Yes. New Business the Urbanization of Eagle Slough. I'll go ahead and schedule meetings, advertise and do whatever it takes."

Commissioner Borries: "Okay. Bill, personally if we can work with Alan and get the 611.00 done and make the one minor change on the public and private in so far as at one easement. I think some of the other comments as far as I'm concerned the consensus the board will let stand."

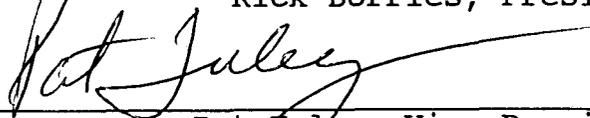
There being no further business the meeting was adjourned at 9:00 P.M.

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary  
Robert Brenner, Surveyor  
Les Shively  
Jeff Hatfield  
Andy Easley  
Darly Helpert  
Bill Smith  
John Stohl  
David Savage



Rick Borries, President



Pat Tuley, Vice-President



Don Hunter, Member

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MAG

AN ORDINANCE ESTABLISHING STORM WATER DRAINAGE CONTROL  
IN VANDERBURGH COUNTY, INDIANA

SECTION 100 PURPOSE:

100.01 TO REDUCE OR PREVENT FLOOD HAZARD:

To reduce the hazard to public health and safety caused by excessive storm water runoff which may result when land use changes from agricultural and other non urban land uses to more urbanized land uses.

100.02 TO REDUCE OR PREVENT FLOOD DAMAGE:

To reduce or prevent damage to public and private property, including existing streams, drainage channels, and storm water drainage facilities which may be caused by excessive storm water runoff resulting during and after land development.

100.03 TO PROTECT AND CONSERVE RESOURCES:

To protect and conserve water and land resources by implementing beneficial design features and conservation techniques.

100.04 TO PROMOTE ECONOMIC DEVELOPMENT:

To promote orderly economic development and resource use.

**SECTION 200 POLICY**

**200.01 DRAINAGE PLAN REQUIRED:**

It shall be the policy of the Board of County Commissioners of Vanderburgh County, Indiana, hereinafter referred to as the Commissioners, that an engineered drainage plan be submitted to the Vanderburgh County Drainage Board, hereinafter referred to as the Drainage Board, for any new development, redevelopment, new construction, addition to existing construction, or other land disturbing activity located within the Drainage Board's jurisdiction which shall result in the addition of impervious surfaces exceeding a total of ten thousand (10,000) square feet.

**200.02 SUBJECT DEVELOPMENT DEFINED AS PROJECT:**

Any new development, redevelopment, new construction, additional construction, or other land disturbing activity which shall result in the addition of impervious surfaces totaling over ten thousand (10,000) square feet, hereinafter shall be called a Project.

**200.03 DRAINAGE PLAN SUBMITTAL:**

The engineered drainage plan for a Project shall be submitted to the Vanderburgh County Surveyor, Room 325 Civic Center Complex, 1 Martin Luther King Blvd., Evansville, IN 47708, no later than two (2) full weeks prior to the drainage board meeting at which the engineered drainage plan is to be presented.

**200.04 DRAINAGE PLAN REVIEW ROUTE:**

The Vanderburgh County Surveyor, hereinafter referred to as the Surveyor, will determine the route of review, in accordance with this Ordinance, for an engineered drainage plan, hereinafter referred to as the Drainage Plan submitted for a Project.

**201.00 STORAGE AND CONTROLLED RELEASE OF STORM WATER RUNOFF:**

It shall be the policy of the Drainage Board that the Drainage Plan for certain Projects shall include provisions for the storage and controlled release of excess storm water runoff, unless such controlled release specifically is waived due to the direct discharge of storm water into a major waterway such as Pigeon Creek, or the Ohio River; or into a secondary waterway at a point of study where direct discharge has been determined to be of benefit to the tributary watersheds, and tributary waterways.

**PROJECTS WHICH SHALL BE SUBJECT TO THE REQUIREMENT FOR STORAGE AND CONTROLLED RELEASE OF EXCESS STORM WATER RUNOFF INCLUDE:**

**201.01 MAJOR SUBDIVISIONS:**

All new Major Subdivisions as defined by the Vanderburgh County Subdivision Control Ordinance which major subdivisions are shown to discharge an amount of storm water in addition to that which is discharged prior to new development.

**201.02 MINOR SUBDIVISIONS; C-0 THROUGH M-3:**

All new Minor Subdivisions as defined by the Vanderburgh County Subdivision Control Ordinance, which Minor Subdivisions are zoned for commercial use, or for industrial use.

**201.03 CERTAIN RESIDENTIAL PARCELS:**

Any new "Parcelizations" as defined by the Vanderburgh County Subdivision Control Ordinance, on which parcels residential development will disturb five (5) acres or more of land surface, and/or add a total of one (1) acre or more of impervious surfaces.

**201.04 ALL COMMERCIAL AND INDUSTRIAL PARCELS:**

All "Parcelizations" as defined by the Vanderburgh County Subdivision Control Ordinance, which parcels are zoned for commercial use, or are zoned for industrial use.

**201.05 CERTAIN OTHER PROJECTS:**

Any Project for which the Drainage Board, the Commissioners, or the Vanderburgh County Surveyor shall require or recommend storage and controlled release of storm water runoff due to the Project's location within:

- .051 The East Side Urban Drainage Watershed.
- .052 The watershed of a Regulated Drain.
- .053 An Impacted Drainage Area.

**201.06 IMPACTED DRAINAGE AREA DEFINED:**

An Impacted Drainage Area is an area defined, declared, and mapped by the Drainage Board which area is unlikely to be easily drained because of one or more factors including but not limited to soil type, topography, land use, lack of adequate drainage outlet, location in a floodplain, location within seventy-five (75) feet either side of a regulated drain, or location within a watershed of an overburdened drain or system of drains.

**202.00 CONTROLLED RELEASE RATE REQUIRED:**

Projects required to store excess storm water runoff shall be required to release the stored storm water at a controlled release rate equal to or less than that established herein below.

**202.01 RELEASE RATE ESTABLISHED:**

The post development controlled peak release rate of storm water runoff during a twenty-five (25) year return period storm from a Project required to detain excess storm water runoff shall not exceed the peak release rate during a ten (10) year return period storm from the same land area prior to its development.

**202.02 STORAGE AND RELEASE RATE CALCULATIONS:**

The pre development release rates and post development storage rates and controlled release rates of storm water runoff shall be calculated using the methods, factors, and charted data specified by, supplied as a part of, attached to, or reference by this Ordinance.

Methods, factors, and data other than those referred to in the paragraph immediately above shall have prior approval of the Drainage Board before submittal as a part of a proposed Drainage Plan.

**202.03 STORAGE CALCULATION FORM PROVIDED:**

Form 800, which shall be used to determine storage volumes, is provided in Section 3000, at the end of this Ordinance.

Form 800 shall be completed and submitted with the Drainage Plan.

**203.00 THE BOARDS' RIGHTS TO DISCRETIONARY DECISIONS:**

Because topography, soil types, field conditions, and the availability and adequacy of outlets for storm water runoff vary with almost every site, the requirements for storm water drainage tend to be a unique matter for each Project; therefore, the Drainage Board and the County Commissioners retain the right to make discretionary decisions on an individual basis.

**203.01 DISCRETIONARY DECISIONS:**

Discretionary decisions may include, but shall not be limited to, the exemption of certain Projects from the requirements to detain excess storm water runoff, in part or totally, and other decisions within the parameters of this Ordinance, based upon the Purpose and the Policy of said Ordinance as stated herein above.

**203.02 TECHNICAL ADVISORS TO THE BOARDS:**

The Drainage Board and the County Commissioners shall authorize and empower certain technical advisors including:

- .021 The Vanderburgh County Surveyor;
- .022 The Vanderburgh County Highway Engineer;
- .023 The Vanderburgh County Soil and Water Conservation District.

**203.03 TECHNICAL ADVISORS' POWERS:**

The Drainage Board and the County Commissioners shall empower their Technical Advisors as follows:

- .031 To make reviews of submitted plans and supporting data.
- .032 To make recommendations to the Drainage Board and the County Commissioners with regard to such reviews.
- .033 To make periodic inspections before, during, and after completion of a Project; and to report findings to the Drainage Board and the County Commissioners.
- .034 To act on behalf of the Drainage Board and the County Commissioners when so authorized, or by ordinance.

The Drainage Board encourages and advises anyone with an interest in a Project to contact the technical advisors named above at the earliest possible time during the planning stage of the Project.

**204.00 RECORD OF BOARD DECISIONS:**

Decisions by the Drainage Board and the County Commissioners with regard to this Ordinance shall be made only during regular or special meetings of the Drainage Board, or during regular or special meetings of the County Commissioners.

Records of the actions taken by the two Boards named above with regard to this Ordinance shall be made in the appropriate edition of the two boards' minutes.

**205.00 SPECIAL OR EMERGENCY DECISIONS:**

In special or emergency circumstances where procedures must be taken quickly in order to enforce the Purposes, the Policies, or other requirements of this Ordinance, the Drainage Board, the County Commissioners, or their duly authorized representatives may make decisions, or take actions outside of board meetings.

Special or emergency decisions and actions of the Drainage Board, the County Commissioners, or their authorized representatives shall be recorded in the appropriate edition of the minutes of the boards' meetings.

**SECTION 300 CONFLICTING ORDINANCES:**

The provisions of this Ordinance shall be deemed as additional requirements to minimum standards required by other ordinances of Vanderburgh County, Indiana; and in the case of conflicting requirements, the most restrictive requirements shall apply.

**SECTION 400 COMPLIANCE WITH OTHER ORDINANCES:**

In addition to the requirements of this Ordinance, compliance with the requirements set forth in other applicable ordinances with respect to submission and approval of preliminary and final subdivision plats, improvement plans, building and zoning permits, inspections, appeals, and similar matters; and compliance with applicable state and federal laws and regulations shall be required.

**401.00 NOTIFICATION OF THE FLOODPLAIN MANAGEMENT ORDINANCE:**

The requirements of the Floodplain Management Ordinance of Vanderburgh County, Indiana contains certain requirements applicable to Projects subject to this Ordinance.

SECTION 500 DEFINITIONS:

- .01 The Applicant shall mean the person, persons, partnership, corporation, or other private entity, their heirs or assigns who shall apply to the Board for Drainage Plan approval.
- .04 Board, or Drainage Board shall mean the Vanderburgh County Drainage Board; except where "boards" refers to both boards.
- .07 County Commissioners, or Commissioners shall mean the Board of County Commissioners of Vanderburgh County, Indiana.
- .10 Detention Basin shall mean a facility constructed to restrict the flow of storm water to a prescribed maximum rate, and to detain concurrently the excess waters that accumulate behind the controlling outlet.
- .14 Drainage Area or Watershed Area shall mean the land area which storm water is collected from, conveyed through, and/or carried off from by a drainage system.
- .18 Dry Bottom Detention Basin or Dry Basin shall mean a basin designed to drain completely dry after providing its planned storm water storage function.
- .21 Duration or Storm Duration shall mean the time period, given in hours or minutes, of a rainfall event.
- .25 Engineer, or County Engineer shall mean the Vanderburgh County Highway Engineer, or duly appointed representative(s).
- .28 Flood Elevation shall mean the vertical limits of elevation at all locations delineating the maximum level of high waters for a flood of a given return period.
- .32 Flood Plain shall mean the area adjoining a river or stream which has been or may be covered by flood waters; and comprising the regulatory floodway and floodway fringe.
- .36 Floodway or Regulatory Floodway shall mean the channel of a river or stream plus those portions of the flood plain adjoining the channel which are required to efficiently carry and discharge the peak flow of the 100 year flood.
- .40 Outfall or Outlet shall mean the point or structure at which the storm water discharges from the system or a part thereof.
- .44 Peak Flow shall mean the maximum rate of flow of water at a given point in the system from a predetermined storm.
- .48 Project shall mean any new development, redevelopment, new construction, reconstruction, or land disturbing activity which creates and additional 10,000 square feet of impervious surface, or disturbs five (5) acres or more of land surface, and is regulated by this drainage ordinance.

SECTION 500 DEFINITIONS; continued:

- .52 Rainfall Intensity shall be the cumulative depth of rainfall occurring over a given duration expressed in inches per hour.
- .56 Regulated Drain or Legal Drain shall mean a drain maintained by the County Surveyor and the Drainage Board under Indiana Drainage Code, IC 36-9-27.
- .60 Release Rate shall mean the amount of storm water let go from a given land area or release point in cubic feet per second.
- .64 Retention Basin or Wet Bottom Retention Basin shall mean a basin designed to hold a permanent pool of water after providing its planned detention of storm water runoff.
- .68 Return Period shall mean the average interval of time within which a given rainfall event will be equaled or exceeded once; expressed in years. Expressed as a percentage of chance, a 100 year return period storm has a one percent chance of occurring in any one year period.
- .72 Runoff Coefficient or C-Factor shall mean a decimal fraction relating the amount of rain which runs off a parcel of land to the total amount of rain falling. So expressed as a percentage, a C-factor of .25 means that twenty-five (25) percent of the rain falling on a parcel of land can be expected to discharge from that parcel of land.
- .76 Storm Water Drainage Facility shall mean any single part or any combination of parts of a system designed and/or constructed to gather, convey, store, and discharge rainfall.
- .80 Storm Water Drainage System shall mean a complete combination of facilities designed and constructed to gather, convey, store, and discharge rainfall in an orderly fashion.
- .84 Surveyor or County Surveyor shall mean the Vanderburgh County Surveyor.
- .88 SWCD shall mean the Vanderburgh County Soil and Water Conservation District.
- .92 Tributary as an adjective shall mean contributing storm water from upstream land areas into the storm drainage system.
- .96 Tributary as a noun shall mean a stream, waterway, channel, or other conduit of storm water contributing upstream drainage into the drainage system of a project.
- .99 BLANK

Various intervening numbers have been left blank intentionally in order that additional definitions may be inserted as needed.

**SECTION 600 FINAL DRAINAGE PLAN APPROVAL:**

**601.00 PRIOR APPROVAL REQUIRED FOR PROJECTS:**

No person, partnership, corporation, or other private entity shall undertake or accomplish a Project without prior Drainage Board approval of a Final Drainage Plan as defined and required by this Ordinance.

**602.00 EXEMPTIONS FROM PLAN APPROVAL:**

The approval of a Final Drainage Plan shall not be required by the provisions of this Ordinance for the following:

- .01 Excavation of cemetery graves.
- .02 Ordinary cultivation or use of agricultural land including tilling, terracing, construction of drains, and construction of tool storage or harvest storage facilities, all so long as such activities do not adversely affect drainage facilities, and so long as such activity shall not change land contours greater than two (2) feet in elevation.
- .03 The planting or tilling of gardens, shrubs, trees, or other common agricultural or landscaping activities so long as such activities do not reduce the conveying or holding capacity of waterways, ponds, and basins; nor interfere with the proper operation and maintenance of regulated, public, or private drainage facilities.
- .04 Filling and grading a basement site after demolition of a structure, to conform to the adjacent terrain.
- .05 A fill less than one (1) foot in depth placed on natural terrain with a slope flatter than four (4) percent, not intended to support a structure, and which does not exceed one thousand (1,000) cubic yards per acre, and does not obstruct the existing drainage pattern.
- .06 Construction of permitted structures within the limits of a Project with an approved Drainage Plan, so long as the construction fully complies with, and does not alter the approved Drainage Plan for that Project.

**603.00 EXEMPTIONS ARE SUBJECT TO STATUTES AND REGULATIONS:**

Be aware that the above exemptions are subject to statutory provisions with regard to regulated drains, and applicable local, state, or federal laws, ordinances, and regulations.

**604.00 PLAN APPROVAL REQUIRED TO START CONSTRUCTION:**

Final Drainage Plan approval shall be obtained before physical activity is undertaken to construct the Project with the exception of such testing as typically is required to determine procedures or materials to be used.

**605.00 PLAN APPROVAL REQUIRED TO RECORD A PLAT:**

Final Drainage Plan approval shall be obtained prior to the recording of a plat of a Major Subdivision, as defined and required by the Subdivision Control Ordinance.

**606.00 REQUEST BY APPLICANT FOR PLAN REVIEW AND APPROVAL:**

All requests for Drainage Plan approval shall be made by the Applicant to the Drainage Board through the County Surveyor's office by the presentation to the Surveyor of the Drainage Plan and the supporting data, all in triplicate, by the close of the business day two (2) full weeks prior to the meeting at which approval of the Plan shall be sought.

The three (3) copies of Drainage Plans and supporting data, shall be distributed by the Surveyor as follows:

- .01 To the Surveyor's Drainage Plan Records.
- .02 To the County Engineer.
- .03 To the Soil and Water Conservation District.

**607.00 BOARD APPROVAL OF DRAINAGE PLAN RECORDED:**

Drainage Plan approval, or disapproval of a Drainage Plan shall be expressed in a regular meeting or special meeting of the Drainage Board, and such approval or disapproval shall be recorded in the minutes of the Board's meeting.

608.00 CONDITIONS OF DRAINAGE PLAN APPROVAL:

In order for an Applicant to obtain approval of a Final Drainage Plan, the following requirements must be met:

- .01 The Applicant shall be eligible under the terms of this Ordinance to apply for and obtain Drainage Plan approval.
- .02 The Drainage Plan and supporting submittals required by this Ordinance shall have been prepared and submitted in a timely and proper manner in accordance with the provisions of this Ordinance.
- .03 The Drainage Plan and supporting submittals shall reflect compliance with the requirements of this Ordinance, and compliance with any conditions of approval required by the Drainage Board.
- .04 The submitted data shall be gathered, analyzed, assembled into the Drainage Plan and supporting submittals; and shall be certified, and presented to the Drainage Board all by a civil engineer or land surveyor regularly engaged in storm water drainage design, and registered to practice in the State of Indiana.
- .05 An easement has been dedicated to house any off-site drainage facilities if such facilities are required to serve the Project's storm water drainage system.
- .06 The person, persons, partnership, corporation, or other entity to whom approval of the Drainage Plan is granted must be the person, persons, partnership, corporation, or entity who will be responsible for accomplishing the Project for which the Drainage Plan is developed.

**609.00 CONDITIONS OF PLAN APPROVAL REMAINING IN FORCE:**

In order for the Approval of the Final Drainage Plan to remain in force, the following conditions shall be met:

- .01 The Applicant or the design engineer shall notify the Surveyor and the APC Site Review Committee prior to making any modification of the approved Drainage Plan.
- .02 The Applicant shall obtain approval of the Drainage Plan when making a major modification of the Plan.

**609.025 MATERIALS CHANGE CONSTITUTES MAJOR MODIFICATION:**

A change from the materials designated in the approved Drainage Plan shall constitute a major modification requiring approval by the Board.

**609.030 DETAILED "AS-BUILT" PLANS REQUIRED:**

The Applicant shall agree to submit, and shall submit within thirty (30) days of completion of the drainage facilities of a Project, a complete set of "as-built" plans which shall show every detail of the finished installation of all storm water drainage facilities for the completed Project.

**609.035 FINAL INSPECTION AFTER DELIVERY OF "AS-BUILTS":**

The Final Inspection of the drainage facilities shall be made only subsequent to the delivery of the as-built plans to the County Engineer; and shall be based upon said as-built plans.

- .04 The Applicant shall install and maintain the street system and the storm drainage system until the Project has been completed, or until maintenance of such systems is assumed by others.
- .05 The Applicant shall agree to remove, and shall remove sediment from, or repair erosion damages to all property where such damage has been caused by the Project.
- .06 The Applicant shall allow the Drainage Board, or agents of the Drainage Board, to enter the Project to verify compliance with this Ordinance, or to bring the Project into compliance with this Ordinance.
- .07 The Applicant shall develop methods of maintenance for all drainage facilities, and shall have printed clearly on the plat, and/or other documents of record for the Project, the developed methods of maintenance.

610.00 ENFORCEMENT OF FINAL DRAINAGE PLAN APPROVAL:

The Board, the Commissioners, or their authorized representatives shall make inspections, or shall order inspections to be made of the Project site to ensure compliance with various requirements of this Ordinance, and/or other conditions attached by the Board to the approval of the Drainage Plan.

The Board may deny, withdraw or suspend approval of a Drainage Plan if the Board determines that:

- .01 The requirements of this Ordinance are not met in full.
- .02 Other conditions of the approval of the Final Drainage Plan are violated.
- .03 Any Drainage Plan or attached submittal contains a false statement or misrepresentation.
- .04 Some part of the Drainage Plan or construction plans are not executed in good faith, or are not executed in accordance with plans approved by the Drainage Board and the Commissioners.
- .05 A Project is undertaken without an approved Final Drainage Plan.
- .06 Unauthorized alterations, or modifications which are not properly documented to the Surveyor, the Site Review Committee, or the Drainage Board, are made to the drainage facilities prior to completion of the Project.

△ **611.00 REMEDIES FOR VIOLATIONS OF THE TERMS OF PLAN APPROVAL:**

The Drainage Board or the Commissioners will take the actions necessary to remedy violations of the conditions of plan approval including but not limited to:

- .01 Requiring the Building Commissioner to suspend the building permit(s) for that part of the Project found to be in violation until the requirements and conditions are satisfied.
- .02 Ordering the Building Commissioners to deny future building permits for the Project until the requirements and conditions are satisfied.
- .03 Contracting for work to be accomplished to bring a Project into compliance with this Ordinance, and billing the cost of said work to the property owner.
- .04 Denying additional Plan approval to the same developer until the requirements and conditions are satisfied.
- .05 Enforcing compliance with this Ordinance by injunction.

**612.00 REINSTATEMENT OF SUSPENDED PERMITS:**

The Board or the Commissioners may reinstate any suspended permits, or will take steps to allow continuous development of the Project immediately upon the determination that all violations are corrected, or are being corrected in a timely fashion, and all requirements and conditions are being satisfied.

**613.00 APC SITE IMPROVEMENT PERMITS CONDITIONED:**

The Area Plan Commission shall not issue an Improvement Permit on a Project requiring Final Drainage Plan approval until such approval has been expressed by the Board.

**614.00 BUILDING PERMITS CONDITIONED:**

The Vanderburgh County Building Commissioner shall not allow construction of buildings, or other impervious structures or facilities to commence at the site of a Project requiring Final Drainage Plan approval until:

- .01 Such approval has been expressed by the Drainage Board;
- .02 And all storm drainage facilities are constructed.

**615.00 PHASED DEVELOPMENT OF LARGE PROJECTS ALLOWED:**

Large Projects may be divided into phases for the purpose of constructing drainage facilities and obtaining permits.

SECTION 700: DRAINAGE PLAN INFORMATION REQUIREMENTS:

701.00 GENERAL REQUIREMENTS BY POLICY:

- .01 Unless a Project has been exempted from the requirement to submit a Drainage Plan, the Applicant shall provide a detailed Drainage Plan and supporting submittals in accordance with the provisions of this Ordinance.
- .02 Unless a Project subject to the requirement to detain excess storm water runoff has been exempted from that requirement, the Drainage Plan and supporting submittals shall demonstrate clearly that the post development peak rate of storm water runoff during a twenty-five (25) year return period storm is controlled sufficiently so that it shall not exceed the peak runoff rate from the same Project site in its pre development condition during a ten (10) year return period storm.
- .03 The required computations shall be made using only the methods, factors, charts, and data specified by or supplied within this Ordinance, or approved for use by the Drainage Board.
- .04 The critical storm durations used in the submitted computations to design detention storage shall be those durations which require the greatest detention storage.
- .05 Computations for land areas of two hundred (200) acres or less shall be made either by the Rational Method using the runoff coefficients and rainfall data given in this Ordinance; or by hydrographic techniques, or computer storm drainage modeling methods approved by the Drainage Board.
- .06 For land areas larger than two hundred (200) acres, approved hydrographic techniques and approved computer storm drainage modeling methods shall be used.
- .07: The calculations submitted to determine storm water runoff and storage volumes shall be made by hydrographic techniques and computer modeling methods granted prior approval of the Drainage Board upon the recommendation of the County Surveyor and/or the County Engineer.
- .08 Form 800 as referenced herein above shall be the form used for charting and submitting storage volumes.

**702.00 INFORMATION SUBMITTAL AND REVIEW SCHEDULE:**

The required Drainage Plan and supporting data shall be submitted and reviewed by a schedule as follows:

**702.01 REGULAR DRAINAGE BOARD MEETINGS:**

The Vanderburgh County Drainage Board generally meets on the Fourth Monday of each month, unless an official holiday coincides with the Fourth Monday, in which case the Board generally meets on the Tuesday immediately following the official holiday.

**702.02 SPECIAL DRAINAGE BOARD MEETINGS:**

Special meetings of the Board outside the regular and advertised annual schedule of board meetings may be requested of the Board, or may be called by the Board.

Special meetings shall be granted, called, announced, advertised, and held at the discretion of the Board and/or the Commissioners.

- .03 The Vanderburgh County Auditor shall provide a schedule of all Drainage Board meeting dates and times.

**702.04 PLAN SUBMITTAL DEADLINE:**

For a Drainage Plan to be reviewed by the Board's technical advisors prior to the regular monthly meeting, and to receive recommendations to the Board at that meeting, the Drainage Plan and supporting data must be submitted in triplicate to the Surveyor by the close of business day two (2) full weeks prior to the meeting at which plan approval shall be sought.

- .05 Drainage Plans and data not submitted two (2) weeks prior to the meeting, as stated above, may be viewed by the Board at its discretion; but are liable to come before the Board without a positive recommendation, should the technical advisors lack sufficient review time
- .06 Drainage Plans will be reviewed by the advisors in the same chronological order in which the plans are received.
- .07 The Drainage Board requires a printed agenda from the Auditor submitted no later than Noon of the Thursday immediately preceding the Drainage Board meeting.

**702.08 LATE SUBMITTALS OMITTED FROM AGENDA:**

Any plan, or request submitted to the Surveyor later than Noon on the Thursday immediately preceding the Board meeting will not appear on the agenda, and may be heard by the Drainage Board only at its discretion.

**702.09 NOTIFICATION OF INSUFFICIENCY:**

Notification of the insufficiency of a Drainage Plan or other insufficiency of submittal may be issued by the Surveyor, or by other technical advisors to the Board with explanation of the insufficiency provided to the Applicant.

**702.10 VIEWING OF PLAN GUARANTEED:**

In the absence of a Notification of Insufficiency as described herein above, any Plan timely submitted shall be viewed by the Board at its regular monthly meeting, or at a special meeting called for that purpose.

**702.11 ADDITIONAL TIME REQUIRED FOR REVIEW; OR DELAYED REVIEW:**

If additional review time is required beyond that time described above, the Applicant will be notified by the authorized representative of the Board requiring the additional time with an explanation for the postponement of the presentation of the Drainage Plan to the Board.

**702.12 APPLICANT MAY PROTEST DELAY; OR APPEAL "INSUFFICIENCY":**

The Applicant may protest postponement of presentation of the Drainage Plan, or appeal the Notification of Insufficiency, by requesting to be put on the agenda at or before noon of the abovesaid Thursday agenda deadline; and then appearing before the Drainage Board.

**703.00 DETAILED FINAL DRAINAGE PLAN REQUIRED:**

A comprehensive Final Drainage Plan shall be submitted for each Project subject to the provisions of this Ordinance. The Final Drainage Plan shall be designed facilitate storm water runoff in a safe and orderly fashion, and to detain the increased storm water runoff where detention is required.

**704.00 PRELIMINARY DRAINAGE PLAN ALLOWED:**

Presentation of a preliminary form of the Final Drainage Plan may be allowed when the Applicant is in need of approval of a Preliminary Drainage Plan to satisfy certain requirements of the Area Plan Commission, and it can be shown that the complexity of the Project prohibits the submittal of the Final Drainage Plan within the time limits set by the APC for plan submittals.

**705.00 APPROVAL OF PRELIMINARY DRAINAGE PLAN LIMITED:**

Approval of a preliminary form of the Final Drainage Plan shall not constitute, nor be interpreted as, final approval of the Final Drainage Plan for a Project as required herein.

**705.01 PERMITS NOT ISSUED ON PRELIMINARY APPROVAL:**

The Area Plan Commission shall not issue a site improvement permit, nor shall the Building Commissioner issue a building permit, nor shall the owner or developer of the Project start construction for a Project subject to this Ordinance until the Board approves the Final Drainage Plan for the Project.

706.00 CONTENTS OF PRELIMINARY DRAINAGE PLAN:

The Contents of the Preliminary Drainage Plan shall include a map based on the most current county planametric maps, or a topographic map prepared from a more recent aerial photo reconnaissance that provides more accurate data, complete with contour lines, and showing the following:

- .01 The extent and area of each watershed affecting the design of the drainage facilities for the Project.
- .02 The soil types based on the most current information available from the SWCD.
- .03 Zone "A" floodplain based on the current FIRM panels.
- .04 The existing manmade and natural waterways, ponds, basins, and other drainage facilities or features.
- .05 The preliminary layout and design of the streets, and all storm water drainage facilities, including depressed pavements used to convey or temporarily store overflow from the heavier storms, and all outlets for the storm water drainage facilities.
- .06 The existing streams, floodways, and floodplains to be maintained, and new channels to be constructed, their locations, cross sections, profiles, and materials used.
- .07 The proposed culverts and bridges to be built, with the specific materials to be used, elevations, waterway openings, and the basis of their design.
- .08 Existing detention basins or ponds within the Project, or outside the Project but affecting it, to be maintained, enlarged, or otherwise altered, together with any new basins or ponds to be built; and their basis of design.
- .09 The estimated depth and amount of storage required of the basins and ponds, and their available freeboard.
- .10 The estimated location and percentage of impervious surface existing and expected to be constructed at completion of the Project.
- .11 Any interim plan which is to be incorporated into the Project pending its completion according to the Final Drainage Plan.

**706.12 NOTATIONS AND EXPLANATIONS ON THE PRELIMINARY PLAN:**

All notations necessary to indicate the existing conditions, and the proposed functions of the various features shown thereon; and shall include:

**706.13 GEOGRAPHIC ORIENTATION REQUIRED:**

A north arrow, scale, location insert, and other information necessary for geographic clarification shall be included on a Preliminary Plan.

**706.14 DATA REQUIRED TO ACCOMPANY PRELIMINARY PLAN:**

Descriptive data sufficient to support the feasibility of the Preliminary Drainage Plan with regard to the requirements of this Ordinance, including calculations of the pre-development and post development runoff rates using rainfall data supplied herein shall accompany a Preliminary Drainage Plan.

**706.15 RECOMMENDATION OF PRELIMINARY PLANS RESTRICTED:**

No Preliminary Drainage Plan shall be recommended to the Drainage Board by their Technical Advisor's unless the Preliminary Drainage Plan shall be a workable plan according to the same criteria as, and capable of being incorporated into, a Final Drainage Plan.

**706.16 DETERMINATION OF SUFFICIENCY:**

The Drainage Board shall decide the sufficiency of the Preliminary Drainage Plan, and any conditions or additional requirements to be applied to the Preliminary Drainage Plan.

**707.00 CONTENTS OF THE FINAL DRAINAGE PLAN:**

The contents of the Final Drainage Plan shall include:

**707.01 SOILS MAP:**

A soils map indicating soils names and their hydrologic classification must be provided for a proposed Project.

**707.02 LOCATION AND TOPOGRAPHIC MAP:**

In addition, a location and topographic map must be provided showing the land to be developed, and such adjoining land whose location and topography may affect or be affected by the layout or drainage of the Project.

**707.03 CONTOUR INTERVALS:**

The contour intervals shown on the topographic map shall be two and one-half (2.5) feet for slopes less than four (4) percent; and five (5) feet for slopes four (4) percent or greater; or best available.

- .04 The location of streams and other storm water conveyance channels, both natural and manmade; and the vertical and horizontal limits of the one hundred (100) year floodplain, according to FIRM panels, and/or the Building Commissioner; all properly identified.
- .05 The normal shoreline of lakes, ponds, swamps, and basins, their floodplains, and lines of inflow and outflow.
- .06 The location of existing regulated drains, farm drains, inlets and outfalls.
- .07 Storm, sanitary, and combined sewers, and outfalls.
- .08 Wells, septic tank systems, and outfalls, if any.
- .09 Seeps, springs, sinkholes, caves, shafts, faults, or other such geological features visible, or of record.
- .10 The limits of the entire proposed Project and the limits of the expected extent of land disturbance required to accomplish the Project.
- .11 The location of the streets, lot lines, and easements.
- .12 A scale, preferably one (1) inch equals fifty (50) feet.
- .13 An arrow indicating North.

**707.14 ON SITE BENCHMARK REQUIRED:**

A bench mark determined by "Mean Sea Level Datum 1929," is required to be located within the Project limits.

#### 708.00 FINAL DRAINAGE PLAN LAYOUT:

In addition to the requirements listed for a Preliminary Drainage Plan, the Final Drainage Plan shall depict the following:

- .01 The extent and area of each watershed tributary to the drainage facilities within the Project.
- .02 The final layout and design of proposed storm sewers, their inlet and outfall locations and elevations, the receiving streams or channels; all with the basis of their design.
- .03 The location and design of the proposed street system, including depressed pavements used to convey or detain overflow from storm sewers and over-the-curb runoff resulting from heavier rainstorms, and the outlets for such overflows; all with their designed elevations.
- .04 The locations, cross sections, and profiles of existing streams, floodways, and floodplains to be maintained, and the same for all new channels to be constructed.
- .05 The materials, elevations, waterway openings, size, and basis for design of the proposed culverts and bridges.
- .06 Existing ponds and basins to be altered, enlarged, filled, or maintained; and new ponds, basins, swales, to be built, and the basis of their design.
- .07 The location and percentage of impervious surfaces existing and expected to be constructed.
- .08 The material types, sizes, slopes and other details of all the storm water drainage facilities.
- .09 The estimated depth and amount of storage required in the new ponds or basins, the freeboard above the normal pool and highwater pool of wet basins, and details of the emergency overflows from the basins.
- .10 For all controlled release basins, a plot or tabulation of the storage volumes with corresponding water surface elevations, and a plot or tabulation of the basin outflow rates for those water surface elevations.
- .11 The location of any applicable "impacted drainage areas" or other areas designated to remain totally undisturbed, natural, or for common recreational use.

#### 708.25 PROTECTION OF STRUCTURES FROM 100 YEAR FLOODING:

All structures to be occupied as residences or businesses shall have finished floor elevations two (2) feet above the highwater calculated to occur during a one hundred year return period storm for the subject building site; and the required floor elevations shall be depicted on the plan drawings for such affected sites.

**709.00 SUBMITTAL OF A WRITTEN DRAINAGE DESIGN REPORT:**

The Final Drainage Plan shall be accompanied by a written report containing the following:

- .01 Any significant storm water drainage problems existing or anticipated to be associated with the Project.
- .02 The analysis procedure used to identify and evaluate the drainage problems associated with the Project.
- .03 Any assumptions or special conditions associated with the use of the procedures, especially hydrologic or hydraulic methods, used to identify and evaluate drainage problems associated with the Project.
- .04 The proposed design of the drainage control system.
- .05 The results of the analysis of the proposed drainage control system showing that it does solve the Project's identified and anticipated drainage problems.
- .06 A detailed description, depiction, and log of all hydrologic and hydraulic calculations or modelings, and the results obtained thereby; together with the input and output files for all computer runs.
- .07 Maps showing individual drainage areas within the Project subdivided for use in the analysis thereof.

**710.00 TYPICAL CROSS SECTIONS OF THE DRAINAGE FACILITIES:**

One or more typical cross sections must be provided for each existing and proposed channel, basin, pond, or other open drainage facility, which cross sections:

- .01 Must show the elevation of the existing land immediately adjacent to all drainage facilities.
- .02 Must show the high water elevations adjacent to all waterways and impoundments as expected from the 100 year storm in relationship to permanent structures.

**711.00 A SITE PLAN REQUIRED:**

A Site Plan must be provided, drawn to scale, showing the overall site dimensions with existing and proposed drainage facilities, streets, parking lots, buildings and other existing or proposed improvements.

**712.00 TIMELY REVIEW BY BOARD OF FINAL DRAINAGE PLAN:**

The Drainage Board's consideration of the Final Drainage Plan will not be continued greater than two consecutive regular meetings, including the first hearing of the Final Drainage Plan, without due cause such as insufficiency of plan, conflict between plans, or other discrepancy, omission, or defect of the plan(s), or unless the Applicant consents to a continuance.

**713.00 FINAL DRAINAGE PLAN APPROVAL:**

Any Drainage Plan in compliance with the requirements of this Ordinance and with conditions and requirements applied by the Drainage Board shall be approved by the Drainage Board.

**714.00 RECORDING, STORING, AND VIEWING OF FINAL APPROVAL:**

Drainage Plan approval shall be recorded in the minutes of the meeting at which the approval occurs.

The Drainage Board's minutes are kept by the Vanderburgh County Auditor, and may be viewed at the Auditor's office.

SECTION 800: DETERMINATION OF RUNOFF QUANTITIES:

801.00 COMPUTING RATES OF STORM WATER RUNOFF:

The storm water runoff quantities shall be computed for the area of the Project, plus the area of the watershed flowing into the Project.

The quantity of runoff which is generated as the result of a given rainfall intensity may be calculated as follows:

802.00 THE RATIONAL METHOD:

For areas up to and including two hundred (200) acres, the Rational Method may be used, providing the runoff coefficients given in this Ordinance are employed.

In the Rational Method, the peak rate of runoff, "Q", in cubic feet per second (cfs) is computed as:

$$Q = C I A$$

Where: "C", or the runoff coefficient, is the ratio of peak runoff rate to average rainfall rate over the entire watershed during the time of concentration.

Where: "I" = the rainfall intensity in inches per hour.

Where: "A" = the tributary drainage area in acres.

Guidance to selection of the runoff coefficient "C" is provided by TABLE 803 and TABLE 804, which show values for different types of surface characteristics.

The composite "C" value used for a drainage area with various surface types shall be the weighted average value for the total area calculated from a breakdown of individual areas having different surface types.

TABLE 803

## UNDEVELOPED RUNOFF COEFFICIENTS

## SURFACE TYPE:

WOODLAND, TURFED MEADOWS  
ROUGH PASTURE, FALLOW BRUSH:

SLOPE:	STORM FREQUENCY			
	10 yr	25 yr	50 yr	100 yr
Less than 2%	0.10	0.11	0.12	0.13
2% to 5%	0.20	0.22	0.24	0.25
5% to 10%	0.30	0.33	0.36	0.38
Over 10%	0.40	0.44	0.48	0.50

CULTIVATED FIELDS:	STORM FREQUENCY			
	10 yr	25 yr	50 yr	100 yr
Less than 2%	0.20	0.22	0.24	0.25
2% to 5%	0.30	0.33	0.36	0.38
5% to 10%	0.40	0.44	0.48	0.50
Over 10%	0.50	0.55	0.60	0.63

TABLE 804

## DEVELOPED RUNOFF COEFFICIENTS

## SURFACE TYPE:

SURFACE TYPE:	STORM FREQUENCY			
	10 yr	25 yr	50 yr	100 yr
PAVEMENT, ROOFTOP OTHER IMPERVIOUS:	0.80	0.88	0.96	1.00
LAWNS WITH TURF:	10 yr	25 yr	50 yr	100 yr
Less than 2%	0.20	0.22	0.24	0.25
2% - 5%	0.25	0.28	0.30	0.31
5% - 10%	0.30	0.33	0.36	0.38
Over 10%	0.35	0.39	0.42	0.44
ALL WATER SURFACES BASINS, PONDS & LAKES:	10 yr	25 yr	50 yr	100 yr
	1.00	1.00	1.00	1.00

#### 805.00 DETERMINATION OF RAINFALL INTENSITY:

"I" or Rainfall Intensity shall be determined from data interpolated from the weather bureau rainfall frequency curves, which data is shown in TABLE 807.

When using the Rational Method, the Storm Duration is equal to the "time of concentration" ( $t_c$ ), which is the travel time from the most hydraulically distant point to contribute to the point under consideration.

The Travel Time to a given location shall be the sum of the overland flow time, the gutter flow time, and the sewer flow time.

The Time of Concentration ( $t_c$ ) at the point under consideration is the longest travel time when all paths are considered.

In terms of sewer design practice, the Inlet Time for each sub-basin must be compared to the travel time from all upstream sub-basins, and the longer time selected as the local time of concentration.

The Flow Time in the storm sewers may be estimated by the distance in feet divided by the velocity of flow in feet per second (fps.)

The velocity shall be determined by the Manning Formula.

Inlet time is the combined time required for the runoff to reach the inlet of the storm sewer.

Inlet time includes overland flow time, and flow time through established surface drainage channels, and sheet flow across such areas as lawns, fields, and parking lots.

Commonly used formulas employed in the determination of the Overland Flow Time are Ragan (1972), Kerby (1959), Federal Aviation Agency, and Izzard (1946.)

#### 806.00 RATES FOR ACREAGE IN EXCESS OF 200 ACRES:

The runoff rate for areas in excess of two hundred (200) acres shall be determined by hydrologic methods and computer modeling which have received prior approval of the Drainage Board.

Hydrologic methods and computer modeling methods which receive board approval will be attached to this Ordinance as addenda.

TABLE 807

## RAINFALL INTENSITY-DURATION-FREQUENCY TABLE FOR EVANSVILLE

STORM DURATION		INTENSITY IN INCHES PER HOUR				
		STORM RETURN PERIOD IN YEARS				
		5	10	25	50	100
5	MIN	6.063	6.625	7.208	7.936	8.469
10	MIN	4.863	5.380	5.925	6.616	7.126
15	MIN	4.029	4.515	5.033	5.697	6.194
30	MIN	2.837	3.226	3.646	4.194	4.608
60	MIN	1.549	1.819	2.078	2.412	2.663
2.0	HRS	1.053	1.230	1.400	1.620	1.785
3.0	HRS	0.774	0.899	1.019	1.175	1.291
4.0	HRS	0.632	0.736	0.836	0.965	1.062
5.0	HRS	0.524	0.606	0.684	0.785	0.861
6.0	HRS	0.453	0.522	0.589	0.676	0.741
7.0	HRS	0.399	0.459	0.516	0.591	0.647
8.0	HRS	0.358	0.412	0.463	0.530	0.581
9.0	HRS	0.323	0.370	0.415	0.472	0.516
10	HRS	0.297	0.339	0.379	0.431	0.470
11	HRS	0.276	0.314	0.351	0.399	0.435
12	HRS	0.259	0.296	0.331	0.376	0.410
13	HRS	0.245	0.280	0.314	0.357	0.390
14	HRS	0.233	0.267	0.299	0.341	0.372
15	HRS	0.220	0.252	0.281	0.320	0.349
16	HRS	0.209	0.238	0.266	0.302	0.329
17	HRS	0.198	0.225	0.251	0.284	0.310

TABLE 807; Continued:

## RAINFALL INTENSITY - DURATION - FREQUENCY TABLE

STORM DURATION		INTENSITY IN INCHES PER HOUR				
		STORM RETURN PERIOD IN YEARS				
		5	10	25	50	100
18	HRS	0.189	0.215	0.240	0.272	0.296
19	HRS	0.181	0.206	0.229	0.260	0.282
20	HRS	0.175	0.199	0.222	0.251	0.273
21	HRS	0.169	0.193	0.215	0.244	0.266
22	HRS	0.164	0.187	0.208	0.236	0.257
23	HRS	0.160	0.181	0.202	0.229	0.250
24	HRS	0.154	0.174	0.194	0.219	0.239
25	HRS	0.149	0.168	0.187	0.212	0.230
26	HRS	0.143	0.162	0.180	0.204	0.221
27	HRS	0.139	0.156	0.174	0.196	0.212
28	HRS	0.135	0.152	0.169	0.190	0.206
29	HRS	0.132	0.149	0.165	0.186	0.201
30	HRS	0.129	0.145	0.161	0.182	0.197
31	HRS	0.126	0.142	0.158	0.178	0.193
32	HRS	0.122	0.138	0.153	0.173	0.188
33	HRS	0.119	0.135	0.149	0.168	0.183
34	HRS	0.116	0.131	0.146	0.164	0.178
35	HRS	0.113	0.128	0.142	0.160	0.174
36	HRS	0.111	0.125	0.139	0.157	0.171

TABLE 808  
HUFF CURVE COORDINATES  
PERCENT PRECIPITATION VALUES  
EVANSVILLE STATION  
FOUR QUANTILES

10% Probability				
Storm Time	Qt. 1	Qt. 2	Qt. 3	Qt. 4
0%	00.00	00.00	00.00	00.00
10%	45.44	15.56	13.64	17.14
20%	69.63	32.50	23.62	28.75
30%	79.14	60.00	30.83	37.50
40%	86.09	77.27	40.00	43.40
50%	89.09	88.72	53.85	50.00
60%	92.85	93.94	77.62	55.17
70%	95.00	95.77	90.33	62.55
80%	96.97	97.50	96.30	83.33
90%	98.78	98.98	98.78	96.92
100%	100.00	100.00	100.00	100.00

20% Probability				
10%	36.67	12.28	10.00	13.23
20%	60.00	27.27	18.67	23.38
30%	71.15	49.40	26.86	30.41
40%	78.57	69.38	35.19	37.61
50%	85.19	82.31	48.08	44.12
60%	88.57	89.38	70.38	51.43
70%	92.35	93.29	87.82	60.00
80%	95.23	96.12	94.49	79.05
90%	97.96	98.40	98.09	95.00

30% Probability				
10%	30.00	9.86	8.00	10.00
20%	52.80	22.98	16.36	20.00
30%	66.67	42.77	24.00	26.79
40%	74.19	62.50	32.00	33.67
50%	80.00	77.14	44.44	40.44
60%	85.45	85.00	67.34	47.65
70%	85.45	85.00	67.34	47.65
80%	89.39	90.73	84.21	57.14
90%	93.55	94.73	92.50	75.83

TABLE 808 Continued:  
HUFF CURVE COORDINATES

40% Probability				
Storm Time	Qt. 1	Qt. 2	Qt. 3	Qt. 4
10%	27.00	8.00	6.45	8.00
20%	48.48	20.00	13.08	16.64
30%	60.74	37.20	20.29	23.75
40%	69.83	56.93	28.81	30.00
50%	75.71	73.68	40.91	37.66
60%	81.22	81.82	61.12	43.61
70%	87.12	88.13	80.17	54.12
80%	92.17	93.18	90.63	72.73
90%	96.58	97.14	96.58	91.43

50% Probability				
10%	22.82	6.28	5.13	6.92
20%	44.69	17.33	11.11	14.04
30%	57.11	33.33	16.67	20.51
40%	65.33	53.09	25.44	27.06
50%	71.43	69.57	37.93	34.21
60%	78.15	78.57	57.39	40.91
70%	84.66	85.60	77.44	50.79
80%	90.00	91.72	88.54	69.70
90%	95.36	96.50	95.88	89.36

60% Probability				
10%	19.15	5.07	4.00	5.22
20%	40.51	15.12	9.00	11.11
30%	53.13	30.00	13.69	16.94
40%	60.86	48.81	22.22	23.00
50%	66.95	65.79	33.96	30.77
60%	74.36	75.56	53.33	37.23
70%	80.91	82.46	74.43	47.27
80%	87.50	89.53	86.67	66.00
90%	94.00	95.50	94.67	86.00

TABLE 808 Continued:  
HUFF CURVE COORDINATES

70% Probability				
Storm Time	Qt. 1	Qt. 2	Qt. 3	Qt. 4
10%	15.88	4.08	3.13	3.75
20%	36.67	12.33	7.10	8.72
30%	49.88	25.88	11.33	14.00
40%	56.79	44.40	17.55	18.18
50%	63.37	61.11	29.30	25.00
60%	70.00	71.58	49.41	32.86
70%	76.54	79.76	70.34	43.33
80%	85.00	87.32	84.08	61.33
90%	92.50	94.11	93.62	82.04

80% Probability				
10%	12.40	2.92	2.22	2.78
20%	33.33	9.80	5.17	6.36
30%	45.83	22.02	8.70	10.22
40%	51.06	40.00	13.60	13.50
50%	59.14	56.73	24.00	17.89
60%	65.37	66.67	43.48	27.29
70%	72.00	75.56	66.33	38.33
80%	80.00	84.72	80.70	55.56
90%	89.71	92.50	91.67	77.73

90% Probability				
10%	7.69	1.80	1.27	1.61
20%	28.89	6.48	3.39	3.87
30%	38.79	16.67	5.65	6.25
40%	46.15	34.29	9.52	8.92
50%	51.22	51.90	13.71	11.65
60%	60.00	62.00	34.00	20.00
70%	66.67	71.11	61.75	30.60
80%	74.29	80.00	76.67	46.32
90%	84.00	90.00	88.64	69.27

NOTE: PER HERPICC INSTRUCTIONS:  
"FOR DETENTION STORAGE THE 3rd QUANTILE (50%) RAINFALL  
DISTRIBUTION SHOULD BE USED, ALONG WITH STORM DURATIONS  
UP TO AND INCLUDING THE 24 HOUR DURATION."

**SECTION 900 AMOUNT OF RUNOFF TO BE ACCOMMODATED BY VARIOUS PARTS OF THE DRAINAGE SYSTEM:**

Various parts of a storm water drainage system must accommodate storm water runoff as follows:

**901.00 STREETS NOT TO BE FLOODED:**

The interior street drainage system for a Project, including inlets, catch basins, street gutters, and curbs shall be designed so that storm water during a 10-year return period storm shall not exceed twenty-five hundredths (0.25) foot, (3 inches deep), as measured at the gutter line ten (10) feet either side of a maximum inlet rim sump of one tenth foot (0.10')

For the street drainage calculations, rainfall duration shall be equal to the time of concentration of one hour, if the time of concentration is less than one hour.

**902.00 USE OF THE FIRST QUARTILE STORM DISTRIBUTION:**

The 1st Quartile Storm Distribution, shown in Table 808, should only be used for minor drainage systems such as inlets, catch basins, street gutters, swales, sewers, and small channels; per HERPIC instructions to Indiana Counties.

**903.00 MINIMUM REQUIREMENTS TO BE SATISFIED:**

In Projects subject to this Ordinance, these minimum requirements must be satisfied:

- 903.01 An open channel carrying a peak flow greater than thirty (30) cubic feet per second, shall be capable of accommodating peak runoff for a 50-year return period storm within the drainage easement designated for that channel.
- 903.02 Culverts shall be capable of accommodating peak runoff from a 50-year return period storm when draining an area greater than one (1) square mile, or when crossing under a road which is part of the INDOT rural functional classification system, and are classified as principal or minor arterial, major or minor collector roads.
- 903.04 A storm water drainage system, or any part thereof, draining a tributary area greater than one (1) square mile shall be designed to carry the volume of storm water runoff calculated to occur during a fifty (50) year return period storm entirely within the easement for that storm water drainage system.

SECTION 1000 STORM SEWER DESIGN STANDARDS:

The storm sewer system for a Project subject to the requirements of this Ordinance, whether such storm sewer system is to remain private or public, and whether constructed on private or public property, shall conform to the design standards and requirements contained, attached to, or referred to in this Ordinance.

1001.00 MANNING EQUATION:

The hydraulic capacity of storm sewers shall be determined using Manning Equations:

$$V = \frac{1.486}{n} R^{2/3} S^{1/2}$$

V = mean velocity of flow in feet per second

R = the hydraulic radius in feet

S = the slope of the energy grade line in feet per foot

n = the roughness coefficient of the conduit surface(s)

The hydraulic radius, R, is defined as the cross sectional area of flow divided by the wetted flow surface or wetted perimeter. Typical "n" values and maximum permissible velocities for storm sewer materials are listed in TABLE 1002, found on the following page.

Roughness coefficient (n) values for other sewer materials can be found in standard hydraulics texts and references.

The use of texts and references must be documented in all submittals of hydraulic calculations.

TABLE 1002

## TYPICAL VALUES OF MANNING'S "n"

TYPE OF MATERIAL	MANNING'S "n"	MAX. VELOCITY
CLOSED CONDUITS/CULVERTS:		
PVC; STORM SEWER GRADES	0.010	15 fps
CONCRETE (circular or elliptical)	0.011	15 fps
SMOOTH FLOW HDPE	0.010	15 fps
PRECAST CONCRETE BOXES	0.013	15 fps
C.1 or D.1 S.J. Type/Cement Lined	0.013	15 fps
CORRUGATED METAL PIPE: CIRC. WELD      SPIRAL WELD		
Unpaved	0.024	0.021      7 fps
25% Paved	0.021	0.018      7 fps
50% Paved	0.018	0.015      7 fps
100% Paved	0.013	0.013      7 fps
OTHER CONCRETE CULVERTS	0.013	
OPEN CHANNELS:		
CONCRETE, Trowel Finish	0.013	
CONCRETE, Broom or Float Finish	0.015	
GUNITE	0.018	
RIPRAP, Placed	0.030	
RIPRAP, Dumped	0.035	
GABIONS	0.028	
NEW EARTH	0.025	
MATURE EARTH, Some Weeds	0.030	
MATURE, Dense Weeds	0.040	
MATURE, Weeds & Brush	0.040	
SWALE, Grass Cover	0.035	

OTHER "n" VALUES SHALL BE TAKEN FROM MANUFACTURERS' DATA.

**1003.00 MINIMUM PIPE SIZING:**

The minimum pipe size for all storm sewers shall be twelve (12) inches inside diameter.

**1003.01 ORIFICE PLATES AND FLOW-LIMITING DEVICES:**

Where a twelve (12) inch pipe will not limit the rate of release to that rate needed to meet detention storage requirements, an orifice plate, or other device subject to the approval of the Drainage Board, shall control the rate of release.

When an orifice plate or other device is used inside of the pipe or enclosed system, the opening in the plate or device shall not be less than eight (8) inches in diameter, or eight (8) inches on a side.

If a controlling device less than eight (8) inches on a side, or in diameter is required to restrict the release rate, the controlling device shall be installed above ground, and in a place easily accessible for maintenance, and protected from tampering.

**1004.00 STORM SEWER GRADE:**

The following are minimum requirements for storm pipe grade:

**1004.01 GRADE RELATED TO PIPE COVER:**

Storm sewer grades generally shall be such that minimum cover as required in Section 1100 of this Ordinance, and/or as shown in detailed drawings attached to Section 3000 of this Ordinance, is achieved and maintained over the top outside surface of all pipe in Projects subject to the provisions of this Ordinance.

**1004.02 UNIFORM SLOPE REQUIRED:**

Uniform slopes shall be maintained between inlets to the subsurface storm sewer system, and between manholes connecting the pipes and inlets of the storm sewer system.

**1004.03 GRADE RELATED TO CAPACITY AND VELOCITY:**

Final grade(s) shall be set with full consideration of the capacity required, sedimentation problems expected, and other storm sewer design parameters.

Minimum and maximum allowable slopes shall be those capable of producing velocities of two (2) feet per second, and fifteen (15) feet per second, respectively, when the storm sewer is flowing full.

**1005.00 ALIGNMENT:**

Storm sewer pipe shall be aligned horizontally straight between manholes, inlets, etc., in-so-far as is possible.

**1005.01 MINIMUM RADIUS AND PIPE SIZE FOR CURVED INSTALLATIONS:**

Where long radius curves are necessary to conform to street layout, the minimum radius of curvature shall be no less than fifty (50) feet, and allowable for sewers forty-two (42) inches in diameter and larger only.

Deflection of pipe sections shall not exceed the maximum deflection recommended by the manufacturer of the specific pipe to be installed, and that manufacturer's recommendation shall accompany the submittal; and only the type and size of pipe specified in such a submittal shall be installed.

The deflection shall be uniform, if used; and the finished installation shall follow a smooth curve.

**1005.02 PREFAB 45° STRUCTURES:**

Prefabricated forty-five (45) degree structures may be allowed with only one manhole access or inlet to one of the laterals thereof, if it can be shown that by using such a structure, one or more ninety (90) degree turn is eliminated.

Designs for other special prefabricated junctions may be submitted for approval.

**1006.00 MANHOLES:**

Manholes shall be installed to provide access to continuous underground storm sewers for the purpose of inspection and maintenance. Manholes shall be provided at the following locations:

**1006.01** Where two or more storm sewers converge.

**1006.02** At the point of beginning of, or at the end of a curve; and at the point of reverse curvature (PC. PT. & PRC.)

**1006.03** Where pipe size changes.

**1006.04** Where an abrupt change in horizontal alignment occurs.

**1006.05** Where a change in storm sewer profile grade occurs.

**1006.06** At suitable intervals in otherwise straight sections of storm sewer runs, as specified below:

**1006.07 MAXIMUM DISTANCES BETWEEN MANHOLES:**

The maximum distance between storm sewer manholes shall be as follows:

<u>Size of Pipe in Inches:</u>	<u>Maximum Distance in Feet:</u>
12 in. thru 24 in.	400 ft.
27 in. thru 42 in.	500 ft.
48 inches and larger	600 ft.

**1007.00 PIPE EASEMENTS:**

All storm sewer pipes located outside road rights-of-way shall be housed in easements dedicated for the purpose of accessing the storm sewer facilities to perform maintenance thereon.

**1007.01 PIPE CENTERED IN EASEMENTS:**

The easement lines generally shall be parallel to and equidistant from the centerline of the pipe run.

**1007.02 MINIMUM EASEMENT WIDTHS:**

The easement shall be a minimum ten (10) feet in width for pipes up to twenty-four (24) inches in diameter, and a total of twelve (12) feet plus the diameter of the pipe, with the total rounded off to the next larger even number of feet, for pipes larger than twenty-four (24) inches in diameter.

**1007.03 OFF-CENTERED AND COMBINATION EASEMENTS:**

The adequacy of designs for combination easements housing storm sewers with other utilities shall be adjudged by the Board on a case-by-case basis; and acceptable designs for combination easements may be attached to this Ordinance as addenda.

**1008.00 INLETS:**

Inlets, or other collecting drainage structures, shall be designed and utilized to collect surface water through grated openings; and convey it into storm sewers, channels, or culverts.

**1008.01 USE OF INDOT ROAD DESIGN MANUAL:**

Inlet design and spacing shall be in accordance with Section 7-400 of the INDOT Road Design Manual, Volume 1, or other approved design manuals and procedures.

**1008.02 DESIGN SOURCES TO BE DOCUMENTED:**

The source of inlet design shall be documented in the submittal, and approved by the Board.

**1008.03 MINIMUM OPENINGS AND FLOW RATES:**

The inlet grate openings provided for street drains must be adequate to pass the design 10-year flow.

Sag inlets shall pass the design flow with a maximum gutter depth of 0.25 feet as measured ten feet distance either side of the inlet during a ten (10) year return period storm.

**1008.04 OVERLOAD CHANNELS TO PREVENT STREET FLOODING REQUIRED:**

An overload channel from sag inlets to the overflow channel or basin shall be provided at sag inlets that the maximum depth of water that is ponded in the street sag shall not exceed one half (0.5) foot during a twenty-five (25) year return period storm event with the inlet plugged.

**1008.05 MAXIMUM DISTANCE BETWEEN STREET INLETS:**

The maximum distance between inlets for street drainage shall be six hundred (600) feet measured in the gutter.

**1008.06 AREA INLET DESIGN STANDARDS:**

Area inlets shall be designed and installed in such a manner as adequately will conduct the runoff from a twenty-five (25) year return period storm into the underground storm sewer system; and shall be designed to preclude safety hazards.

**SECTION 1100.00 WORKMANSHIP AND MATERIALS:**

**1101.00 WORKMANSHIP:**

The specifications, instructions, and design details for all storm sewer facilities provided in or with the Drainage Plan, and/or Street Construction Plan for a Project subject to the requirements of this Ordinance shall conform to the following:

- 1101.01 The current standard specifications and drawings provided by the Vanderburgh County Engineer.
- 1101.02 The standard specifications, detailed drawings, requirements, and instructions contained within, attached to, adopted concurrent with, and/or subsequently referenced to this Ordinance by the Vanderburgh County Commissioners.
- 1101.03 The specifications for the construction of storm sewers set forth in the latest edition of the Indiana Department of Transportation "Standard Specifications;" (INDOT Standard Specifications.)
- 1101.04 The most current manufacturers' recommendations for installation of the materials to be used.
  - 1101.045 A copy of the manufacturer's recommendation used must be submitted with the Drainage Plan employing the recommendation.

**1101.05 HIGH QUALITY WORKMANSHIP REQUIRED:**

All workmanship in the development and implementation of the Drainage Plan and the Street Construction Plan shall be of high quality; and shall reflect compliance with the requirements of this Ordinance, and with all applicable local, state, and industry standards.

1102.00 MATERIALS:

The materials used in the construction of storm sewers and open culverts in Projects subject to the requirements of this Ordinance shall be in full conformance with regulations set forth herein below:

1102.01 STORM SEWER DEFINED:

For the purpose of this Ordinance, a storm sewer shall be defined as a network of pipe conduits, and precast concrete manholes, and/or box inlet structures, which collect and convey surface and subsurface water by gravity flow from a specific geographical area.

A gravity flow system utilizes elevation gradients to cause water flow.

1102.02 CERTAIN TILES AND DRAINS EXCLUDED:

Subsurface yard and field drainage tiles, building floor drains, downspout outlets, roof conductors, and sump pump lines are not considered as part of the storm sewer system with regard to the requirements of this section.

Requirements for some tiles and drains not covered in this section are covered in sections near the end of this Ordinance

1102.03 STORM SEWER SYSTEMS AND FACILITIES SUBJECT TO ORDINANCE:

Storm water conveyance systems which route an existing natural or man-made stream channel, open ditch, storm sewer, or overland surface drainage around or through a Project site shall be considered a storm sewer by the Drainage Board, and shall comply with the requirements of this section; and:

Storm water conveyance systems, excess storm water storage and discharge facilities, and other drainage facilities defined within and specified by this Ordinance shall be subject to the requirements of this section.

1102.04 ACCEPTABLE PIPE MATERIALS:

Table 1100, in Section 3000 of this Ordinance, lists those pipe materials and corrosion protection measures subject to acceptance by the Drainage Board for the construction of enclosed gravity flow storm sewers.

1102.05 OPEN CULVERTS DEFINED:

An open culvert shall be defined as a conduit open on both ends, intended to provide for free passage of channelized storm water runoff under highways, streets, roads, railroads and embankments.

For the purpose of this Ordinance, culverts further shall be defined, based upon their expected use, as follows:

1102.051 Class A Culvert:

A culvert intended to provide for passage of channelized surface water under highways, streets, roads, railroads or other high fill embankments. High fill embankments are those engineered fills with a distance from the pipe invert to the top of embankment or pavement of greater than twelve (12) feet.

1102.052 Class B Culvert:

A culvert intended to provide for passage of channelized surface water under commercial entrance and exit drives, residential drives or other low fill embankments. Low fill embankments are those engineered fills with a distance from the pipe invert to the top of embankment or pavement of less than twelve (12) feet.

1102.06 ACCEPTABLE CULVERT MATERIALS:

Table 1199 in Section 3000 of this Ordinance, lists those pipe materials and corrosion protection measures subject to acceptance by the Drainage Board for the construction of open culverts.

1102.07 PAVED INVERTS:

If a paved invert is specified for circular pipe or pipe-arch, the pipe shall be fully or half coated as specified, and additional bituminous material applied in the bottom section to form a smooth pavement.

Except where the upper edges intersect the corrugations, the pavement shall be applied to the lower forty (40) percent of the inside periphery of the culvert.

1102.08 POLYMER PRE-COATED CMP:

Polymer precoated corrugated steel pipe shall be in full conformance with AASHTO M245 (or ASTM Designation A762) and AASHTO M246 (or ASTM Designation A742) Grade 10/10.

1102.09 BITUMINOUS COATED AND SMOOTH-LINED CMP:

Bituminous coated and smooth-lined galvanized corrugated steel pipe shall be coated as required herein; and shall be lined on the inside of the pipe so that a smooth surface will be formed which surface completely fills the corrugations to a minimum thickness of one eighth (1/8) inch above the crests, and a maximum thickness of one half (1/2) inch above the crest.

The interior lining shall be applied by a centrifugal or other approved method and shall be free from sags and runs; and the lining material shall meet the requirements of AASHTO M 190.

1102.10 FIBER BONDED CMP:

Fiber-bonded corrugated metal pipe shall be in full conformance with Section 908.08 of INDOT Standard Specifications, latest edition.

1103.00 MATERIAL SPECIFICATIONS:

Subsection 1103 outlines requirements for the manufacture of storm sewer and open culvert materials according to applicable American Association of State Highway and Transportation Officials (AASHTO) and American Society for Testing and Materials (ASTM) specifications.

These material requirements in part are restatements of requirements set forth within the referenced standard, with noted exceptions.

A summary of information from the referenced ASTM and AASHTO specifications has been included in this section for the convenience of the reader; however, the design engineer, contractor, manufacturer, and developer also must assume responsibility for familiarizing themselves with these specifications as they apply to the guidelines set forth herein.

The Drainage Board will not assume responsibility for noncompliance with the referenced specifications as a result of information not provided by this Ordinance.

Each storm sewer pipe or open culvert material has been separated into divisions which generally contain the following information:

Production and material standards;

Pipe joint requirements;

Criteria for rejection of damaged materials; and:

Material markings.

**1103.01 ALUMINUM-ALLOY STRUCTURAL PLATE PIPE, PIPE-ARCHES, ARCHES, LONG-SPANS, AND BOX CULVERTS**

**1103.011 Production and Material Standards:**

Aluminum-alloy structural plate culverts must be formed from aluminum-alloy structural plate in conformance with ASTM B 790, and ASTM B 746.

Material used in the manufacture of aluminum-alloy structural plates must be as required in ASTM B 209, and secondary structural components must conform to ASTM B 221.

**1103.012 Rejection of Damaged Structural Plates:**

Aluminum-alloy structural plates possessing the following defects will be rejected for installation:

Dents or bends in the metal;

Lack of integrity;

Illegible markings as specified herein, on the aluminum sheet;

Ragged or diagonal sheared edges.

**1103.013 Aluminum-Alloy Structural Plate Markings:**

Each plate shall be identified on the inside with the following information as a minimum:

Name or trademark of plate manufacturer;

Name of fabricator, if other than the manufacturer;

Year and month of manufacture; and:

ASTM designation.

**1103.02 GALVANIZED STRUCTURAL PLATE PIPE, PIPE ARCHES, ARCHES, LONG SPANS, AND BOX CULVERTS:**

**1103.021 Production and Material Standards:**

Galvanized structural plate culverts must be formed from galvanized structural plate in conformance with ASTM A 76 and ASTM A 796.

Steel sheet used for flat plate shall be galvanized by the hot-dip process according to ASTM A 444.

Repair of damaged hot-dip galvanized coatings shall be in conformance with ASTM A 780.

**1103.022 Rejection of Damaged Galvanized Structural Plates:**

Galvanized structural plates possessing the following defects will be rejected for installation:

Dents or bends in the metal;

Lack of integrity;

Illegible markings, as specified herein, on the galvanized sheet; and:

Ragged or diagonal sheared edges.

**1103.023 Galvanized Structural Plate Markings:**

For galvanized structural plate products, each plate shall be identified on the inside with the following information as a minimum:

Name of manufacturer;

Specified zinc-coated plate thickness;

Specified coating weight (mass);

Identification showing heat number and coating lot number (may be omitted if fabricator's records tie the coating lot number to a specified heat number, and manufacturer); and:

ASTM designation.

**1103.024 Exterior Field Coatings**

Exterior field applied coatings of asphaltic mastic or tar base material shall be required for all galvanized structural plates with less than five (5) feet of cover, in conformance with AASHTO M 243.

**1103.03 CORRUGATED METAL PIPE AND PIPE ARCHES:**

**1103.031 Production and Material Standards:**

Corrugated metal pipe (CMP) shall be of either riveted lap joint construction (annular corrugations); or be constructed with a continuous lock seam, or welded seam from end to end of each length of pipe (helical corrugations).

Aluminum-Alloy Corrugated Pipe shall be fabricated in accordance with ASTM B 745. This pipe shall be fabricated from aluminum-alloy sheet and plate, as specified within ASTM B 209.

1103.031 CMP Production and Material Standards; continued:

Aluminum Coated Steel Type 2 Corrugated Pipe shall be fabricated as specified within ASTM A 760, except that all pipe and pipe coupling bands shall be formed from aluminum coated steel conforming to ASTM A 819.

Galvanized Steel Pipe shall be manufactured according to those guidelines set forth within ASTM A 760, formed from zinc-coated steel sheet material conforming to ASTM A 444.

1103.032 Corrugated Metal Pipe (CMP) Joints:

External coupling bands conforming to those standards set forth within ASTM B 745 and ASTM A 760 will be accepted for use in the construction of corrugated metal pipe joints.

All coupling bands shall be fabricated with annular corrugations to lap an equal portion of each adjoining pipe section, and shall be of the same gauge and coating material as the pipe structure.

Each pipe end shall be reformed to have a minimum of two (2) annular corrugations.

A tightly closed joint shall be formed in order to create a soil-tight seal.

The pipe ends shall be matched at the joint such that the difference in diameter between abutting pipes is no more than one half (1/2) inch around the entire pipe circumference.

All corrugated metal pipe couplings shall be required to be wrapped with a strip of nonwoven geotextile fabric around the entire pipe diameter to prevent infiltration of bedding and backfill materials.

The minimum width of this fabric shall be one (1) foot, plus the band width, to allow a minimum six (6) inch overlap of each band edge.

Rubber "O" ring gaskets may be used in place of geotextile fabric wrap at the corrugated metal pipe joint provided that "O" rings are placed on each end corrugation, and hugger-type bands are used that seat into the second corrugation from the end of the pipe on both pipes at the joint.

Bolted connectors are required on the bands such that compression of the "O" rings occur.

"O" ring diameters shall be per the manufacturer's recommendations.

**1103.033 Rejection of Damaged Corrugated Metal Pipe (CMP):**

The completed pipe shall show careful, finished workmanship in all aspects of its production.

Pipe which has been damaged will be rejected for any one of the following defects:

Variation from a straight centerline;

Elliptical shape in a pipe intended to be round;

Dents or bends in the metal;

Metallic coating or bituminous coating or liner which has been bruised, broken, or otherwise damaged;

Lack of rigidity;

Illegible markings on the steel sheet;

Ragged or diagonal sheared edges;

Uneven laps in riveted or spot welded pipe;

Loose, unevenly lined, or unevenly spaced rivets;

Defective spot welds or defective continuous welds; or:

Loosely formed lockseams.

**1103.034 Corrugated Metal Pipe Markings:**

For corrugated metal pipe products, each corrugated sheet used in the fabrication of annular pipe, and each two (2) feet to five (5) feet of coiled sheet used in fabrication of helical pipe must be identified with the following information:

Name of sheet manufacturer;

Alloy and temper;

Specified thickness;

ASTM designation; and:

Heat number.

1103.04 HIGH DENSITY POLYETHYLENE PIPE (HDPE):

1103.041 Production and Material Standards for HDPE:

Corrugated High Density Polyethylene Type S (HDPE) pipe shall be manufactured in accordance with AASHTO M 294.

Pipe manufactured under this specification shall have a minimum Cell Class of D 324420C in accordance with ASTM D 3350.

The flexibility factor of HDPE pipe shall not exceed 0.095.

Ribbed Polyethylene pipe shall be in accordance with ASTM F 894 for the specified sizes, meeting the requirements for RSC 100 or RSC 160; and:

Pipe manufactured under this specification shall have a minimum Cell Class of 334433C in accordance with ASTM D 3350.

Smoothwall Polyethylene pipe shall be in accordance with ASTM F 714 for the specified sizes; and:

Pipe manufactured under this specification shall have a minimum Cell Class of 35434C in accordance with STM D 3350.

All polyethylene pipe and fittings shall be made from high molecular weight high density polyethylene material meeting the applicable Cell Class requirements.

All polyethylene material used in storm sewer pipe manufacture shall be virgin resin.

1103.042 High Density Polyethylene Pipe Joints:

High Density Polyethylene pipe shall possess male and female pipe ends which allow the construction of overlapping, gasketed pipe joints in conformance with the requirements of AASHTO M294.

The gasket material shall conform to all requirements of ASTM F 477.

As an alternative, pipe joints utilizing external coupling bands will be accepted, provided the minimum AASHTO requirements for satisfying silt tightness are also achieved.

1103.0425 NOTICE:

MANUFACTURED WYES, TEES, ELBOWS, OR ADAPTERS SHALL NOT BE ACCEPTED FOR USE IN PLACE OF PRECAST STORM SEWER MANHOLES AND BOX INLETS.

PRECAST MANHOLES AND BOX INLETS SHALL BE REQUIRED WITHIN ALL STORM SEWER SYSTEMS COMPOSED PARTIALLY OF, OR TOTALLY OF, HDPE STORM SEWER CONDUIT.

1103.043 Rejection of Damaged HDPE:

High Density Polyethylene pipe possessing the following defects will be rejected for installation:

Variations from straight centerline;

Elliptical shape in pipe intended to be round;

Illegible markings as required herein;

Deep or excessive gouges or scratches on the pipe wall;

Fractures, punctures, or cracks passing through the pipe wall; or:

Damaged or cracked ends where such damage would prevent making a satisfactory joint.

1103.04 HDPE Pipe Markings:

For high density polyethylene pipe products, each length of pipe shall be marked clearly with the following information as a minimum:

Manufacturer's name or identification symbol;

Nominal pipe size; and:

Production/extrusion code.

**1103.05 POLYVINYL CHLORIDE PIPE (PVC):**

**1103.051 Production and Material Standards:**

Polyvinyl Chloride (PVC) profile wall gravity flow storm sewer pipe shall be the integral wall bell and spigot type with elastomeric seal joints and smooth inner walls in accordance with AASHTO M 304.

A minimum Cell Class of 12454C or 12364C as set forth by ASTM D 1784 shall be required.

Smoothwall PVC pipe shall be in accordance with ASTM D 3034, ASTM F 679, ASTM F 891 or AASHTO M 278 for the specified sizes, and shall have a minimum Cell Class of 12364C for pipes meeting specification ASTM F 679, or 12454C for pipes meeting specification AASHTO M 278.

Cell class properties shall be as set forth by ASTM D 1784.

**1103.052 PVC Joints:**

Flexible, gasketed joints shall be compression type so that when assembled, the gasket inside the bell is compressed radially on the pipe spigot to form a soil-tight seal.

The assembly of joints shall be in accordance with the pipe manufacturer's recommendations contained in ASTM D 3212 or AASHTO M 304.

The gasket shall conform to the requirements of ASTM F 477.

All field-cutting of pipe shall be completed in a neat, trim manner using a hand or power saw.

**1103.0525 NOTICE:**

PRECAST MANHOLES AND/OR BOX INLETS SHALL BE REQUIRED WITHIN PVC STORM SEWER SYSTEMS AT ALL CHANGES IN GRADE, ALIGNMENT, SIZE, AND PIPE MATERIAL TYPE.

MANUFACTURED WYES, TEES, ELBOWS, OR ADAPTERS SHALL NOT BE ACCEPTED FOR USE IN PLACE OF MANHOLE OR BOX INLET STRUCTURES.

**1103.053 Rejection of Damaged PVC:**

Polyvinyl Chloride Pipe (PVC) possessing the following defects will be rejected for installation:

Variation from straight centerline;

Elliptical shape in pipe intended to be round;

Illegible markings as required herein;

Deep or excessive gouges or scratches of the pipe wall;

Fractures, punctures, or cracks passing through the pipe wall; or:

Damaged or cracked ends where such damage would prevent making a satisfactory joint.

**1103.054 PVC Pipe Markings:**

For polyvinyl chloride (PVC) pipe products, each length of pipe must be marked with the following information as a minimum:

Name of manufacturer;

Trade name or trademark;

Nominal pipe size;

Production/extrusion code;

Material and cell class designation; and:

ASTM designation.

**1103.06 REINFORCED CONCRETE PIPE (RCP):**

**1103.061 Production and Material Standards:**

Reinforced concrete pipe shall be Class III, IV, or V in accordance with ASTM C 76, latest edition.

A minimum "B" wall thickness will be required.

Elliptical reinforced concrete pipe shall be a minimum Class NE-II in full conformance with the requirements of ASTM C 507.

1103.0615: NOTICE:

ELLIPTICAL PIPE WILL BE PERMITTED ONLY WHEN SEVERITY OF FLAT LAND GRADES PROHIBITS INSTALLATION OF ROUND PIPE WITH ADEQUATE COVER.

1103.061 Continued:

Longitudinal reinforcement shall be continuous, and all reinforcement shall have a minimum concrete cover of three quarters (3/4) of an inch.

Upon request by the Drainage Board, the manufacturer shall furnish certification on the type of cement, aggregate and steel used in the pipe furnished.

Lift holes will not be allowed for reinforced concrete pipe less than thirty-six (36) inches in diameter.

A maximum of two (2) lift holes may be provided for each section of reinforced concrete pipe thirty-six (36) inches in diameter and larger.

Lift holes must be repaired in a clean, workmanlike manner using a conical shaped precast concrete plug, properly sealed into place using mastic or non-shrink cement grout.

Compliance with the Indiana Department of Transportation Standards and Specifications for completion of lift hole repair shall be required.

1103.062 Reinforced Concrete Pipe Joints  
Must Have Rubber Gasket In Groove:

Concrete pipe shall be furnished with a bell or groove on one end of a unit of pipe, and a spigot or tongue on the adjacent end of the adjoining pipe.

All joints shall be sealed with a rubber gasket.

Joints provided with a groove on the spigot for placement of a rubber gasket shall be in conformance with ASTM C 443.

Joints provided with a cast-in-bell rubber gasket shall be in conformance with ASTM C 443.

The gasket shall be a continuous ring which fits snugly into the annular space between the overlapping surfaces of the assembled pipe joint to form a flexible, soil-tight seal.

**1103.063 Rejection of Damaged Reinforced Concrete Pipe:**

Individual sections of reinforced concrete pipe will be rejected because of any of the following:

Fractures or cracks passing through the wall, except for a single end crack that does not exceed the depth of the joint;

Defects that indicate proportioning, mixing, and molding not in compliance with Section 10.1, of ASTM C 76;

Surface defects indicating honey-combed or open texture;

Damaged or cracked ends where such damage would prevent making a satisfactory joint;

Any continuous crack having a surface width of greater than 0.01 in., and extending for a length of 12 in. or more, regardless of position in the wall of the pipe;

Or, visible spacers or longitudinal reinforcement used to position the reinforcing cage shall not be cause for rejection of reinforced concrete pipe sections.

**1103.064 Reinforced Concrete Pipe Markings:**

Each length of reinforced concrete pipe must be marked with the following information as a minimum:

Date of manufacture;

Class of pipe and specification designation;

Size of pipe;

Trade name or trademark of the manufacturer; and:

Plant identification.

**1103.07 REINFORCED CONCRETE BOX SECTIONS:**

**1103.071 Production and Material Standards:**

Precast reinforced concrete box sections for open storm drainage culverts must be manufactured from a homogenous concrete mixture conforming to the test and design requirements of ASTM C 789.

Box sections must be cured in such a manner that the specified compressive strength of the concrete is achieved in 28 days or less.

Compressive strength tests must be conducted in accordance with Section 10 of ASTM C 789, prior to shipment.

1103.071 Continued:

Reinforced concrete box sections are divided into three design types, dependent upon varying earth dead load and HS-20 and Interstate live loading conditions.

Each Type "O" box section must be designated by type, span, rise, and design cover.

Precast reinforced concrete box sections manufactured in accordance with ASTM C 850 also may be accepted by the Drainage Board under those minimum cover conditions for which the applicable standard is intended to apply.

1103.072 Reinforced Concrete Box Joints:

Precast reinforced concrete box sections shall be produced with male and female ends, designed to allow box sections to be laid together in a continuous line.

Reinforced concrete box joints shall be sealed using either trowelable grade butyl rubber or asphaltic mastic to form a soil-tight seal.

Reinforced concrete box joints shall be wrapped around their entire outside periphery with a one (1) foot wide non-woven geotextile fabric wrap.

1103.073 Steel Reinforcement of Concrete Box Sections:

The minimum cover of concrete over the steel reinforcement shall be one (1) inch.

The inside steel reinforcement shall extend into the male portion of the joint.

The outside steel reinforcement shall extend into the female portion of the joint.

The clear distance of the end reinforcement steel wires must not be less than one half (1/2) an inch, nor more than two (2) inches from the end of the box section.

**1103.074 Rejection of Damaged Concrete Box Sections:**

Individual box sections will be rejected due to any of the following:

Fractures or cracks passing through the wall, except for a single end crack that does not exceed the depth of the joint;

Honeycombed or open texture that would adversely affect the function of the box sections; or:

The ends of the box sections not being normal to the walls and center line of the box section, within the specified acceptable tolerances.

**1103.075 Reinforced Concrete Box Section Markings:**

For reinforced concrete box sections, each length of a reinforced concrete box must be marked with the following information as a minimum:

Box section span and rise;

ASTM table number;

Maximum and minimum design earth cover;

Specification designation;

Date of manufacture;

Name or trademark of manufacturer; and:

Orientation of the top of the structure.

**1104.00 MINIMUM COVER OVER STORM SEWER PIPE AND CULVERTS:**

1104.01 All flexible storm sewer pipe and culvert material shall be covered by a minimum two (2) feet of cover unless the Applicant submits detailed plans accompanied by manufacturers' recommendations specifying allowable cover less than two (2) feet in depth.

1104.02 All non flexible storm sewer pipe and culvert material shall be covered by a minimum one and one half (1.5) foot of cover unless the Applicant submits detailed plans accompanied by manufacturers' recommendations specifying allowable cover less than 1.5 feet in depth.

**1105.00 INTEGRITY OF THE STORM SEWER SYSTEM:**

The storm sewer system for a Project subject to the requirements of this Ordinance shall be built only of components specifically designed, engineered, manufactured, specified, and supplied to be fitted together to form a first quality storm sewer system.

**1106.00 ATTACHMENTS AND REFERENCES IN SECTION 3000:**

There are diagrams, charts, forms, checklists, instructions, and other reference documents attached to this Ordinance, in Section 3000, which attachments are made a part hereof either coincidental with the adoption of this Ordinance; or by subsequent action(s) of the County Commissioners.

**1107.00 MATERIALS AND METHODS OTHER THAN INCLUDED HEREIN:**

Materials and methods proposed to be used in the storm sewer system for a Project subject to the requirements of this Ordinance, which materials and methods are not described within, specified by, attached to, or referenced in this Ordinance shall be approved or rejected by the Drainage Board, and/or the County Commissioners on a case-by-case basis after consideration of the Applicant's justification for the use of alternative materials and methods.

**1108.00 INSTALLATION OF NONCONFORMING MATERIALS SHALL CONSTITUTE A "MISREPRESENTATION":**

The installation of any material within the storm sewer system of a Project subject to the requirements of this Ordinance, which installation is found to be not in accordance with this Ordinance, nor with the approved Drainage Plan, nor with the approved Street Construction Plan, nor with the attached drawings, instructions, details, and specifications, shall be considered a misrepresentation, and a violation of the conditions of plan approval; and shall be removed and replaced with an installation in conformance with this Ordinance, the approved Drainage Plan, and/or the approved Street Construction Plan, at the Project Owner's expense.

**1108.00 CULVERTS, BRIDGES, PIPES, AND OTHER STRUCTURES IN, NEAR, OR CROSSING REGULATED DRAINS:**

Any culvert, bridge, structure, pipe, earthwork, pavement, or utility installed within or across a Regulated Drain, or that land within seventy-five (75) feet either side of a Regulated Drain in Vanderburgh County shall be subject to prior approval of the Vanderburgh County Drainage Board and the Vanderburgh County Surveyor, per Indiana State Statute.

**1109.00 INSPECTION OF STORM SEWER SYSTEM INSTALLATION:**

The Vanderburgh County Engineer shall inspect, or cause to be inspected, all installations of storm sewer systems in Projects subject to the requirements of this Ordinance; and shall keep a permanent record of the findings thereof, in accordance with the following:

**1109.01 INSPECTIONS OF WORK IN PROGRESS:**

The County Engineer shall inspect or direct the inspection of all installations storm sewer material at the same time as such material is installed, and shall keep a permanent record of the findings of such inspections filed in the County Engineer's office.

**1109.02 INSPECTION REPORT:**

The record of the inspections conducted by or under the direction of the County Engineer shall be in the form of an Inspection Report which accurately shall describe the workmanship and materials used in the storm sewer system, and shall give accurate accounting of compliance or non compliance with the requirements of this Ordinance.

**1109.03 INSPECTION TIME TO BE SUFFICIENT:**

The County Engineer shall schedule the inspections of storm sewer installations so that sufficient control of proper workmanship can be maintained and monitored by inspections of no less than a composite total of two (2) hours per Project per day.

This requirement shall not be interpreted to limit the County Engineer from more lengthy inspections as the Engineer deems necessary.

**SECTION 1200.00 OPEN CHANNEL DESIGN STANDARDS:**

All open channels in Projects subject to the requirements of this Ordinance, whether private or public, and whether constructed on private or public land, shall conform to the design standards and other design requirements contained herein.

**1201.00 MANNING'S EQUATION:**

The waterway for channels with uniform flow shall be determined using Manning's Equation:

$$Q = AV = A \frac{1.486}{n} R^{2/3} S^{1/2}$$

A = Waterway area of channel in square feet.

Q = Discharge in cubic feet per seconds (cfs).

V. R. S. & n are explained in SECTION 10: Paragraph A.

**1202.00 CHANNEL CROSS SECTION AND GRADE:**

The required channel cross section and grade are determined by the design capacity, the material in which the channel is to be constructed, and the requirements for maintenance.

**1202.01 MINIMUM CHANNEL DEPTH:**

A minimum channel depth of one (1) foot is required; however, additional depth may be required to provide adequate outlets for tributary drains.

**1202.02 MINIMUM BOTTOM WIDTH:**

A minimum flat bottom width of one (1) foot is required for all open drainage channels.

**1202.03 VELOCITY TO PREVENT SILTATION:**

- The channel grade shall be such that the velocity
- in the channel is high enough to prevent siltation, but low enough to prevent erosion.

**1202.04 MINIMUM VELOCITY SET:**

Velocities less than one and one-half (1.5) feet per second should be avoided because siltation will take place, and ultimately reduce the channel cross section.

**1202.05 LOW VELOCITY CHANNEL LINER REQUIRED:**

In cases where minimum required grade and/or velocity requirements cannot be met, the Board shall require concrete channel liners, and/or other methods of maintaining channel grade and cross section integrity.

**1202.06 MINIMUM GRADE SET FOR REQUIRED RIBBON LINER:**

All channels with grades less than one (1) percent shall have flow line grades established with concrete ribbon liners with a minimum depth of eight (8) inches, and a minimum width of sixteen (16) inches, (i.e. a footer.)

*only channels in drainage easements*

**1203.00 MAINTENANCE OF DESIGNED DITCH GRADE AND CONDITION:**

Open channels in storm water drainage systems subject to the requirements of this Ordinance shall be constructed in such a way that designed flow line grades and alignments are clearly defined, and so that alterations to the constructed flow line grades and alignments can be detected readily.

**1203.01 CONTROL OF DESIGNED CONDITION REQUIRED:**

Channels which are likely to become altered or obstructed after construction due to natural or human acts shall have some method of marking the flow line grades and alignments worked into the design and construction of such channels.

Such methods shall include:

**1203.011 RIBBON LINERS:**

Ribbon liners as described in Paragraph 1202.06 above.

**1203.012 INVERT ELEVATIONS**

Pipe inlet/outlet locations and invert elevations exactly described on the as-built final plans.

**1203.013 OTHER METHODS AS DESIGNED AND APPROVED:**

Other methods of marking grades, elevations, and alignments as may be developed by the design engineer and/or the advisors to the Drainage Board.

**1204.00 PERIODIC DITCH INSPECTIONS:**

The County Engineer shall inspect periodically, or cause to be inspected periodically, all channels constructed in Projects subject to the requirements of this Ordinance, to determine their existing condition; and to assure that their "as-built" condition is maintained.

**1205.00 DITCH CONDITION RESPONSIBILITY OF PROPERTY OWNER:**

If the Engineer's inspection determines that the grade, alignment, or general integrity of a channel has been altered, obstructed, or adversely effected by actions of a person not authorized by the Board to take such actions, the Board shall order any obstruction or alteration removed; and the channel restored to its approved, or as-built condition according to plan(s), and at the expense of the property owner of record.

**1206.00 ORDER TO REMOVE OBSTRUCTION OR RESTORE CONDITION:**

The order to remove an obstruction or alteration, and/or restore the channel to its approved, designed, or as-built condition shall be mailed to the property owner of record at the address to which tax county property tax statements are mailed.

**1207.00 REMEDY FOR IMPROPER OR UNTIMELY REPAIRS:**

If work to restore the channel to its approved condition is not started within ten (10) days, and is not completed within thirty (30) days of the mailing of the notice, the Board shall contract for the work to be completed, and shall bill the cost to the property owner of record.

**1208.00 WATERWAY STABILIZATION AND COVER:**

The Vanderburgh County Soil and Water Conservation District should be consulted for recommendations on open channel construction and vegetative cover.

**1209.00 GRASS MIX MATCHED TO SITE CONDITIONS:**

The choice of grass mixture for stabilizing open channels shall be based upon specific site conditions such as shade and sun tolerance, velocity tolerance, and waterway maintenance requirements.

**1210.00 TIMELY CHANNEL SEEDING:**

Grass-lined channels should be permanent seeded within two (2) days of finish grading to promote proper germination

1211.00 EROSION CONTROL BY PERCENTAGE OF GRADE:

- 1211.01 The bottoms of seeded, grass-lined channels with grades from one (1) percent to two (2) percent shall have erosion control blankets properly installed.
- 1211.02 Channels with grades greater than two (2) percent and up to six (6) percent shall have bottoms lined in staked sod.
- 1211.03 All channels with grades greater than six (6) percent shall have bottoms lined with six (6) inch rip rap.
- 1211.04 Side banks of grass lined channels with a grade of two (2) percent or greater shall be protected by erosion control blankets installed coincidental with seeding, and in accordance with manufacturer's recommendations.

1212.00 LOW FLOW TROUGHS IN WIDE BOTTOM CHANNELS:

The bottom width of trapezoidal grass lined channels shall not exceed fifteen (15) feet unless a paved low flow liner is provided to prevent flowline meandering.

1213.00 TRICKLE TROUGHS IN WET BOTTOM CHANNELS:

Grass lined channels intended to convey a continual trickle flow shall be provided with a paved, low flow liner to prevent chronic wetness.

1214.00 Vee-shaped channel bottoms shall not be allowed.

1215.00 CONCRETE CHANNEL LINERS TO HAVE UNDER-BAFFLES:

Other than in ribbon lined channels as in Paragraph 1202.06, concrete channel liners shall be built as reinforced concrete flumes with cut-off walls at the beginning and end of the liner, poured monolithically with the liner to a depth of eighteen (18) inches below grade; and lugs poured monolithically to a depth of eighteen (18) inches, and spaced at the following intervals:

1215.01 Up to 6% grade use 100 ft. spacing between lugs.

1215.02 Greater than 6% use 50 ft. spacing between lugs.

**1216.00 OPEN CHANNEL SIDE SLOPES:**

Channels side slopes treatment shall be as follows:

**1216.01 EARTHEN SIDE SLOPES:**

Earthen side slopes shall be no steeper than three to one (3 : 1); and flatter side slopes may be required to prevent erosion, and facilitate maintenance.

**1216.02 STONE LINED SIDE SLOPES:**

Stone-lined side slopes shall be no steeper than two to one (2 : 1); and flatter side slopes may be required to prevent rock movement, facilitate maintenance, and promote safety.

**1216.03 CONCRETE SIDE SLOPES:**

Reinforced concrete side slopes shall be no steeper than one and one-half to one (1.5 : 1); and flatter side slopes may be required to facilitate maintenance, and promote safety.

**1216.04 OTHER SIDE SLOPE COVER:**

The Board will consider other methods of channel lining and other side slope ratios on a case-by-case basis; and render decisions based on submitted designs, applicable standards, manufacturer's recommendations, and other pertinent data.

**1216.05 WEEP HOLES IN CONCRETE SIDE SLOPED:**

All concrete lined or grouted riprap lined channels must have provisions made for weep holes.

**1216.06 DEAD LOAD DESIGN REQUIRED FOR SOME SIDE SLOPES:**

Side Slopes steeper than one and one-half to one (1.5 : 1) shall be lined with side linings and structural retaining walls designed and constructed with provisions for live and dead load surcharge.

**1216.07 ACCEPTABLE MATERIALS FOR RETAINING WALLS:**

Retaining walls can be reinforced concrete, concrete or metal Bin Walls, Gabions, Reinforced Earth, or other approved designs.

**1217.00 CHANNEL STABILITY:**

All channels constructed under the regulations of this Ordinance shall be designed and constructed to remain stable during and after the initial construction period; and the Applicant shall transfer ownership of the channels only in a stable condition.

**1217.01 CHARACTERISTICS OF A STABLE CHANNEL:**

- .011 It neither aggrades nor degrades beyond tolerable limits.
- .012 The channel banks do not erode to the extent that the channel cross section is changed appreciably.
- .013 Excessive erosion does not occur around culverts, bridges, or other structures and outlets.
- .014 Excessive sediment bars do not develop.
- .015 Gullies do not form or enlarge due to the entry of uncontrolled surface flow into the channel.

**1217.02 DETERMINATION OF CHANNEL STABILITY:**

Channel stability shall be determined for an aged condition, and the velocity shall be based on the design flow, or the bank full flow, whichever is greater.

**1217.03 ANALYSIS OF CHANNEL STABILITY:**

Channel stability must be checked for conditions immediately after construction.

For this analysis, the velocity shall be calculated for the expected flow from a ten-year return period storm in the watershed, or the bank full flow, whichever is smaller.

The "n" value for newly constructed open channels shall not exceed 0.025.

**1217.04 ACCELERATED VELOCITY ALLOWED FOR ANALYSIS:**

The allowable velocity in newly constructed channels may be increased by a maximum of 20% reflecting the effects of vegetation to be established, if the following apply:

- .041 The soil and site are suitable for rapid establishment and support of erosion controlling vegetation.
- .042 Species of erosion controlling vegetation adapted to the area, and proven methods of establishment are incorporated into the plan.

1218.00 CHANNEL EASEMENTS:

1218.01 CHANNELS CENTERED IN DRAINAGE EASEMENTS:

All channels shall be centered in easements dedicated for the purpose of accessing the drainage facilities to perform required maintenance.

Off-centered designs may be approved by the Drainage Board when a specific need is demonstrated for such an easement layout.

1218.02 REQUIRED EASEMENT WIDTHS:

Easements for open channels shall be a minimum width equal to the width of the channel plus:

- .021 Six (6) feet out from the tops of each bank for channels less than two (2) feet deep.
- .022 Ten (10) feet out from the top of each bank for channels up to two (2) to four (4) feet deep.
- .023 Twelve (12) feet out from the top of each bank for channels greater than four (4) feet deep.

1218.03 GRASS COVER OF EASEMENT REQUIRED:

The entire area of the channel easement shall be maintained perpetually in an established grass cover.

1218.04 FENCING AND FIXTURES RESTRICTED IN EASEMENTS:

Fencing, landscaping appurtenances, other fixtures whether publicly or privately owned, as well as designs for combination easements housing public utilities or private appurtenances together with drainage facilities, shall be allowed by the Board on a case-by-case basis when the Drainage Plan includes adequate provisions for the perpetual maintenance of unobstructed storm drainage.

**1219.00 STRUCTURES APPURTENANT TO DRAINAGE CHANNELS:**

The design of channels will provide all structures required for the proper functioning of the channel, and the laterals thereto. including:

- 1219.01 Recessed inlets and structures needed for entry of surface and subsurface flow into channels without erosion or degradation shall be included in the design.
- 1219.02 Culverts and bridges which are modified or added as part of channel improvement projects shall meet reasonable standards for the type of structure, and shall have a capacity equal to the design discharge, or governing agency's design requirement, whichever is greater.

**SECTION 1300 STORM WATER DETENTION:**

The following shall govern the design of any facility within a Project with respect to the detention of storm water runoff:

**1301.00 ACCEPTABLE DETENTION METHODS:**

The increased storm water runoff resulting from a Project shall be detained on site by providing wet pond, dry bottom, or storage swale reservoirs; or by storage on flat roofs, parking lots, streets, or lawns.

Measures to retard the rate of overland flow and velocity in channels, also may be used to control the runoff rate.

**1302.00 DESIGN STORM:**

Design of storm water detention facilities shall be based on a return period of once in twenty-five (25) years.

Rainfall depth, duration, frequency, and intensity relationships shall be those developed from data given in Section 800, herein.

**1303.00 ALLOWABLE RELEASE RATE:**

The allowable post development peak release rate of storm water from a Project during a twenty-five (25) year return period storm shall not exceed the pre development peak release rate from the same land area during a ten (10) year return period storm.

**1303.01 INADEQUATE DOWNSTREAM DRAINAGE OR RESTRICTIONS:**

If the downstream channel or storm sewer system is not adequate to accommodate the release rate provided above, then the release rate shall be reduced to that rate permitted by the capacity of the receiving channel or storm sewer system; and additional detention shall be required to store that rate of runoff exceeding the capacity of the receiving storm water drainage facilities (limiting restriction.)

If more than one basin is involved in the development of the area upstream of the limiting restriction, the allowable release rate from any one basin shall be in direct proportion to the ratio of its drainage area to the drainage area of the entire watershed upstream of the restriction.

**1304.00 UPSTREAM FLOW THROUGH DRAINAGE SYSTEM:**

The Upstream Storm Drainage Flow through the storm water drainage system constructed for a Project subject to this Ordinance shall be designed in accordance with the following:

**1304.01 For Watersheds One Square Mile or Less:**

Drainage systems serving a Project shall have adequate capacity to convey the storm water runoff from tributary areas totalling one (1) square mile or less through the Project under consideration, and within drainage easements, for a twenty-five (25) year return period storm calculated on the basis of upstream land in its existing condition.

**1304.02 Watersheds Larger Than One Square Mile:**

Drainage systems shall have adequate capacity to convey the storm water runoff from all tributary areas totalling greater than one (1) square mile through the Project under consideration, and within drainage easements, for a fifty (50) year return period storm calculated on the basis of upstream land in its present state of development.

**1304.03 Allowance for Existing Upstream Detention:**

An allowance, equivalent to the reduction in flow rate provided, shall be made for upstream detention when such upstream detention and release rate previously have been approved by the Board; and evidence of the detention facility's as-built construction, or existing condition, can be shown certified to the Drainage Board.

1305.00 DETERMINATION OF STORAGE VOLUME - RATIONAL METHOD:

For areas of two hundred (200) acres or less, the Rational Method may be used to determine the required volume of storm water storage. While other approved methods may be used, the following eleven step procedure may be used to determine the required volume of storage:

Steps:

Procedure:

- (1) Determine total drainage area in acres -- "A"
- (2) Determine composite runoff coefficient based on existing land use (undeveloped) -- "C<sub>u</sub>"
- (3) Determine time of concentration in minutes based on existing conditions -- "t<sub>c</sub>"
- (4) Determine rainfall intensity in inches per hour based on time of concentration and using Figure 1, or from data given in Table 3, for the ten (10) year return period -- "I<sub>u</sub>"
- (5) Compute runoff based on existing land use, and the ten (10) year return period: "Q<sub>u</sub> = C<sub>u</sub> I<sub>u</sub> A<sub>u</sub>"
- (6) Determine composite runoff coefficient based on the developed conditions and a twenty-five (25) year return period -- "C<sub>d</sub>"
- (7) Determine the twenty-five (25) year return period rainfall intensity "I<sub>d</sub>" for various storm durations "t<sub>d</sub>" up through the time of concentration for the developed area using Table 3
- (8) Determine the developed inflow rates "Q<sub>d</sub>" for various storm durations "t<sub>d</sub>", measured in hours:  
$$Q_d = C_d I_d A$$
- (9) Compute a storage rate, "S<sub>t<sub>d</sub></sub>" for various storm durations, "t<sub>d</sub>" up through the time of concentration of the developed area:  
$$S_{t_d} = Q_d - Q_u$$
- (10) Compute required storage volume "S<sub>R</sub>" in cubic feet for each storm duration, "t<sub>d</sub>"  

This assumes a triangular hydrograph of duration ( 2 \* t<sub>d</sub> ) hours with the peak flow of S<sub>t<sub>d</sub></sub> at t<sub>d</sub> hours:

$$S_R = S_{t_d} (t_d \cdot 12)$$
- (11) Select the largest storage volume computed in step 10 for detention basin design.

1306.00 DETERMINATION OF STORAGE VOLUME: OTHER METHODS:

Methods other than the Rational Method for determining runoff and routing of storm water may be used to determine the storage volume required to control storm water runoff when such models and methods are approved by the Board.

The use of the models and procedures subject to approval, can be defined in a seven step procedure to determine the required storage volume of the detention basin.

- | <u>Step</u> | <u>Procedure</u>   |
|-------------|--|
| (1)         | Calibrate the hydrologic/hydraulic model that is to be used for prediction of runoff and routing of storm water.   |
| (2)         | For each storm duration listed in Table 3, perform steps three (3) through (6).  |
| (3)         | Determine the ten (10) year undeveloped peak flow. Denote this flow by $Q^{10}_u$ .  |
| (4)         | Determine the twenty-five (25) year runoff hydrographic ( $H^{25}_d$ ) for developed conditions.   |
| (5)         | Determine the hydrographic that must be stored ( $H^{25}_s$ ) by subtracting a flow up to $Q^{10}_u$ from the hydrographic ( $H^{25}_d$ ) found in step 4. |
| (6)         | Determine the volume of water ( $V_s$ ) to be stored by calculating the area under the hydrographic $H^{25}_s$ .   |
| (7)         | The detention basin must be designed to store the largest volume ( $V_s$ ) found for any storm duration analyzed in step 6.                                |

**1307.00 GENERAL DETENTION/RETENTION BASIN DESIGN REQUIREMENTS:**

The following design principles shall be observed for detention and retention basins:

**1307.01 DURATION OF STORAGE:**

The maximum volume of water stored and subsequently released at the design release rate shall not result in a storage duration in excess of forty-eight (48) hours, unless additional storms occur within the period.

**1307.02 DEPTH OF STORED WATER:**

The maximum depth of storm water to be stored, without a permanent pool, shall not exceed four (4) feet; and the maximum depth of storm water to be stored above a permanent pool shall not exceed four (4) feet.

**1307.03 BASIN DISTANCE FROM DWELLINGS:**

All storm water detention facilities shall be separated by not less than fifty (50) feet from any building or structure to be occupied.

**1307.04 EARTHEN SIDE SLOPES 4:1 FOR BASINS:**

All detention and retention basins with grassed, earthen side slopes shall have side slopes no steeper than four horizontal units of measurement to one vertical unit of measurement (4:1).

**1307.05 RIP RAP SIDE SLOPES 2:1 FOR BASINS:**

Wet retention basins with riprap armored side slopes shall have slopes no steeper than two (2) horizontal units of measurements to one (1) vertical unit of measurement (2:1).

**1307.06 RIP RAP TO EXTEND BELOW WATER LINE:**

The armored portion of the side slope must extend to, but not exceed, a depth below the permanent pool elevation of two (2) feet vertically.

**1307.07 SAFETY/MAINTENANCE LEDGE REQUIRED IN WET BASINS:**

From the base of the side slopes of wet retention basins, a safety/maintenance shelf of a minimum width of six (6) feet, measured horizontally, shall be built at a minimum depth of two (2) feet, and a maximum depth of thirty (30) inches.

**1307.08 MINIMUM DEPTH OF RIP RAP APPLICATION:**

Riprap side slope armor shall be a minimum twelve (12) inches in depth at all points of application.

**1307.09 BOTTOM DRAIN REQUIRED:**

Wet retention basins shall be constructed so that the basin may be drained completely to facilitate periodic maintenance.

**1307.10 FENCING OF BASIN:**

Safety fencing surrounding the basin shall be provided if deemed necessary by the design engineer or the Board.

**1307.11 OUTLET CONTROLS TO OPERATE AUTOMATICALLY:**

Outlet control structures shall be designed to operate as simply as possible, and shall require little or no maintenance for proper operation.

**1307.12 DESIGNED WATER LEVEL CONTROL REQUIRED:**

A controlled positive outlet shall be required to maintain the designed water level in wet bottom basins, and provide the required detention storage above the designed low water level.

**1307.13 AUTOMATICALLY OPERATING EMERGENCY SPILLWAY REQUIRED:**

Emergency overflow facilities shall be provided for the release of storm runoffs exceeding the design maximums, or in emergency conditions, should the normal discharge devices become totally or partially inoperative.

The emergency overflow facility shall be of such design that its operation is open, automatic, does not require manual attention, and is designed to pass the 100 year return period storm flow.

**1307.14 SMALL POOLS REQUIRE AERATION:**

Basins with permanent pools smaller than one half (1/2) acre shall have provisions, such as adequate aeration, to maintain water quality.

**1307.15 DRY BASIN COVER AND MAINTENANCE:**

Dry basins shall be provided with grass or other suitable vegetative cover throughout the entire basin area; and shall be mowed at intervals sufficient to achieve a turfed cover equal to that of a residential lawn, and in no case shall the vegetative cover growth of a dry basin exceed twelve (12) inches in height.

**1307.16 SIDE SLOPES TO REMAIN STABLE:**

All side slopes of a basin shall be constructed stable and shall be maintained in a stable condition by the same criteria as specified herein above for open channels.

**1307.17 WET BASIN COVER AND MAINTENANCE:**

The earthen side slopes of wet basins shall be provided with grass or other suitable vegetative cover above the low water elevation, which cover shall be maintained in a condition equal to the turfed cover of a residential lawn, and in no case shall the vegetative cover growth exceed twelve (12) inches in height.

**1307.18 MAINTENANCE PATHWAY FOR BASINS:**

A flat pathway with a minimum width of ten (10) feet shall be constructed completely around the top of the embankment of all detention/retention basins.

**1307.19 MAINTENANCE EASEMENT FOR BASINS:**

An easement dedicated for the purpose of accessing and maintaining the basin and its appurtenances shall be provided, and which easement shall be configured so as to include the entire basin, the entire earthwork encompassing the basin, the maintenance pathways into and around the basin, and all inletting and outletting appurtenances of the basin.

**1307.20 MAINTENANCE REPORT REQUIRED FOR BASIN:**

A brief and concise report shall be prepared by the design engineer, consisting of a description of the location, intended function of all parts appurtenant to the basin, together with a description of the ways in which the basin and its appurtenances should be maintained, all worded in language easily understood by residential or commercial property owners; and:

The report shall be attached to the restrictions for the property on which the basin and its parts are located. If no restrictions exist, the report shall be delivered to the property owner(s) by the design engineer; and the property owner of record shall be responsible for the maintenance of the basin and its appurtenances according to the contents of the report.

**1307.21 COPY OF REPORT MUST BE SUBMITTED TO THE BOARD:**

A copy of the maintenance report described above shall be included with the as-built plans required to be submitted herein above.

**1307.22 ELEVATION OF DRY BASIN BOTTOM MARKED:**

A continuous concrete ribbon equal in characteristics to that described in Paragraph 1202.06 shall be installed in all dry basins from the point of inflow of each channel entering a basin to the point of outflow from the basin. The concrete ribbon shall be installed at an elevation slightly lower than the earthen floor of the basin, so that it may serve as a trickle trough.

**1308.00 ROOF TOP STORM WATER STORAGE:**

Detention storage requirements may be met in total or in part by detention on flat rooftops.

Details of such designs are to be included in the building permit application, and shall include the depth and volume of storage, details of outlet devices and down drains, and elevations of emergency overflow provisions.

**1309.00 PARKING LOT STORM WATER STORAGE:**

Parking lots may be designed to provide temporary detention of storm waters on all or a portion of their surfaces.

**1309.01 MAXIMUM DEPTH IN PARKING LOTS:**

Depths of storage should be limited to a maximum depth of six (6) inches to prevent damage to parked vehicles.

**1309.02 STORAGE AREAS IN PARKING LOTS TO BE STRIPED:**

A pattern for painting the parking area designated for storm water detention shall be employed to alert vehicle owners to the possibility of stored water in the event of storms.

**1309.03 STORAGE IN PARKING LOTS EXCEEDING SIX INCHES DEPTH:**

A separate pattern for painting the lot shall be developed for all areas where the detained volume of water will exceed six (6) inches in depth; and such a pattern shall be highly visible, and easily recognizable as a warning.

**1309.04 CONFINING STORAGE IN PARKING LOTS:**

In general, ponding should be confined to those portions of the parking lot farthest from the area served, or parts of the lot likely to be used the least.

**SECTION 1400 FINANCIAL RESPONSIBILITY FOR FACILITY CONSTRUCTION:**

The cost of constructing storm water drainage systems in accordance with the requirements of this Ordinance shall be accepted in total by the land owner and/or land developer as part of the cost of land development.

**SECTION 1500 RESPONSIBILITY FOR DRAINAGE FACILITY MAINTENANCE:**

The installation, maintenance, repair, and replacement of all storm water drainage facilities, and erosion and siltation control measures for a Project during the period of construction, and until final approval by the County Engineer, shall be the responsibility of the land developer(s), and/or the property owner(s) of record.

The assignment of responsibility for the maintenance and repair of all storm water drainage systems and facilities outside of county accepted road rights-of-way after the completion of the Project shall be determined before the Final Drainage Plan is approved; and shall be documented by appropriate covenants to the property deeds, and shall be printed clearly upon all recorded plats of the Project.

**1501.00 FOR PROJECTS OTHER THAN SINGLE FAMILY RESIDENTIAL SUBS:**

The maintenance and repair of all storm water drainage facilities outside of county accepted rights-of-way after completion of a Project other than Single Family Residential Subdivisions, as defined in the Vanderburgh County Subdivision Control Ordinance, shall be the sole responsibility of the property owner(s) of record.

**1502.00 FOR ALL SINGLE FAMILY RESIDENTIAL SUBDIVISIONS:**

For all Single Family Residential Subdivisions, as defined by the Vanderburgh County Subdivision Control Ordinance, the maintenance and repair responsibility, after completion of a Project, for all storm drainage facilities and systems outside of the county accepted road rights-of-way shall be determined by one of the following two methods:

1. PLAN "A": LOT OWNERS' ASSOCIATION
2. PLAN "B": REPAIR FUND HELD BY COUNTY

1502.01 PLAN A: LOT OWNERS' ASSOCIATION:

The land owner(s)/land developer(s) shall form a Lot Owners' Association which solely shall be responsible for the maintenance and repair of the storm water drainage system and facilities outside of county accepted road rights-of-way, and within a subdivision's boundaries, together with any off-site facilities housed within easements acquired to service the Project.

The maintenance and repair required of the Lot Owners' Association shall include all measures needed to keep all parts of the storm water drainage system and facilities outside of county accepted road rights-of-way in working order according to the original provisions of the Plan, the provisions of this Ordinance including the engineer's report(s) required herein above, and the requirements of any pertinent codes and ordinances.

Printed clearly upon the plat for a subdivision with a Lot Owners' Association shall appear a notification that:

"The Lot Owners' Association shall be responsible, including financially, for the maintenance and repair of the storm water drainage system and facilities outside of county accepted road rights-of-way including:

- (1) "Mowing grass, controlling weeds, and maintaining the designed cover in the waterways and storage basins.
- (2) "Keeping all parts of the storm water drainage system and facilities operating as designed; and free of all trash, debris, and obstructions.
- (3) "Keeping the channels, embankments, and shorelines of the waterways and basins free of erosion and sedimentation.
- (4) "Maintaining and repairing the storm water drainage system in accordance with its needs, with the County Drainage Ordinance.
- (5) "Preventing others from altering, obstructing, or otherwise harming or changing the designed condition of the drainage facilities for the subdivision."

1502.02 PLAN B: REPAIR FUND: PAYMENT PER LINEAL FOOT:

As an alternative to Plan A, the land owner(s) and/ or developer(s) shall present to the County Commissioners, at the same time and along with the submission of the Street and Drainage Improvement Plans, a Cashiers Check or a Certified Check in an amount equal to two dollars (\$2.00) per lineal foot of storm sewer pipe which is located outside of dedicated road rights-of-way as demonstrated upon the abovesaid Improvement Plans.

The check shall be attached to a prescribed submittal form available from the County Auditor, which form shall provide specific data with regard to the subdivision for which the check is presented.

Printed clearly on the plat for a subdivision using Plan "B" method of maintenance shall be a notification stating that:

"The individual lot owner(s) shall be responsible, including financially, for maintaining that part of the storm water drainage system which exists on his or her property in proper working order including:

- (1) "Mowing grass, controlling weeds, and maintaining the designed cover the waterways and storage basins.
- (2) "Keeping all parts of the storm drainage system and facilities operating as designed; and free of all trash, debris, and obstructions.
- (3) "Keeping the channels, embankments, and shorelines of the waterways and basins free of erosion and sedimentation.
- (4) "Maintaining the storm water drainage system in accordance with its needs, and with the County Drainage Ordinance.
- (5) "Preventing all alterations, obstructions, or other detrimental actions from occurring to the storm water drainage facilities.
- (6) "The Repair Fund established for this Project will pay the costs of repairing structural failures in the storm sewer pipes, inlets, manholes, junction boxes, and the outlet structures of the storm water control basins which are a part of the approved storm water drainage system for this Subdivision; and which are in the drainage easements, and outside of the county accepted road rights-of-way as shown on this plat."

**1503.00 OWNERSHIP OF REAL ESTATE AND IMPROVEMENTS  
WITHIN DRAINAGE EASEMENTS:**

Regardless of whether the Owner/Developer chooses Plan "A" or Plan "B", the real property and improvements thereon, laying outside the county accepted road rights-of-way and within the drainage easements shall be deeded with and remain part of the property of the underlying lots, parcels, and/or holdings.

**1504.00 COUNTY HELD REPAIR FUNDS:**

The following shall apply with regard to funds collected and dispersed in accordance with Section 1500 of this Ordinance:

**1504.01 DEPOSITS OF REPAIR FUNDS:**

The County Auditor shall create an account into which the County Treasurer shall deposit all monies received from the owner(s) and developer(s) of Subdivisions which use Plan "B" Method of Maintenance as described herein.

**1504.02 WITHDRAWALS OF REPAIR FUNDS:**

The County Auditor shall sign a warrant for payment of a claim for materials and labor used to repair structural failures of storm sewers in Subdivisions covered by Plan "B" as described above only if the following criteria are met:

- .021 The repair is a structural repair of drainage pipes, manholes, inlets, and controlled release outlets all of which must be outside of county accepted rights-of-way and within the drainage easements of a subdivision using the Plan "B" method of maintenance as described herein.
- .022 The County Engineer has determined that repair is needed to return the facility to its proper operating condition and the Engineer's determination has been reported to the County Commissioners and to the Drainage Board.
- .023 Bids have been sought, received, and a contract has been let and completed to accomplish the repairs detailed in the Engineer's report; and the repair specifications, cost estimates, and bidding procedures are in compliance with the applicable statutory requirements.

**1505.00 ACCEPTANCE INSPECTIONS:**

The storm sewer system for a subdivision with county-held repair funds under the provisions of Plan "B" shall be subject to the following inspection procedures:

**1505.01 APPROVAL INSPECTION:**

The installation of the storm water drainage system and facilities in Plan "B" subdivisions shall be subject to the written approval of the County Engineer.

The Engineer's approval inspection shall be by the following schedule:

- .011 The owner(s)/developer(s) shall give written notice to the County Engineer, addressed to the office of the Engineer, that the storm water drainage system for the Project is completed.
- .012 The Engineer shall inspect, or shall cause to be inspected, the storm water drainage facilities for the Project; and shall issue, within twenty-one (21) days of the receipt of the owner(s)/developer(s) written notice, either a written approval of the facilities, or a notice listing the inadequacies of the facilities.
- .013 Upon correction of inadequacies, if listed, the owner(s) or developer(s) again give written notice of Project completion.

**1505.02 PERIODIC INSPECTIONS OF ALL STORM SEWER INSTALLATIONS:**

All privately and publicly owned storm water drainage systems and facilities constructed under the provisions of this Ordinance will be inspected by the County Engineer on a periodic basis, after construction of said facilities; and a permanent record shall be kept by the Engineer of all inspections.

The purpose of Periodic Inspections shall be to determine compliance or non compliance with the requirements of this Ordinance, and the conditions of Plan Approval.

A certified inspection report covering physical conditions, operational conditions, compliance with requirements, and other pertinent data will be filed with the Drainage Board, and made available for viewing.

**1505.03 CORRECTION OF DEFICIENCIES:**

If the County Engineer discovers deficiencies within the storm water drainage system constructed under the provisions of this Ordinance, the Engineer shall file a report of such deficiencies with the Drainage Board, and the County Commissioners both of whom shall take actions in accordance with provisions of this Ordinance to remedy such deficiencies.

**SECTION 1600 JOINT DEVELOPMENT OF CONTROL SYSTEMS:**

Storm water drainage systems may be planned and constructed jointly by two or more developers as long as compliance with this Ordinance is maintained.

**SECTION 1700 INSTALLATION OF CONTROL SYSTEMS:**

Storm water drainage systems, and erosion control and sedimentation control systems shall be installed in accordance with a schedule of construction activities submitted to the Drainage Board at the same time as, and attached to the final Drainage Plan.

Unless otherwise approved, the sequence of construction activities shall conform with the following:

**1700.01 NOTIFY UNDERGROUND UTILITIES:**

Notifying the Indiana Underground Plant Protection Systems, Inc., at 1-800-382-5544 for location and identification of utilities potentially effected by the proposed project.

**1700.02 LOCATE AND PROTECT CERTAIN FEATURES:**

Identify, evaluate, and clearly mark trees and associated root zones to be protected during construction; septic absorption fields where applicable; unique areas to be preserved such as wetlands; and existing vegetation suitable for use as filter strips, particularly in perimeter areas of the site.

**1700.03 EROSION AND SEDIMENTATION CONTROL:**

Install perimeter erosion and sediment control measures such as flow diversions, sediment basins and traps, fabric fencing and straw bale dams, and construction access drives and parking areas, as shown on the erosion and sediment control plan.

**1700.04 INSTALL DOWNSTREAM STORAGE FACILITIES AND OUTFALLS:**

Complete improvements to downstream storm water outfalls, and install detention and/or retention facilities as shown on the approved Drainage Plan.

**1700.05 INSTALL STORM DRAINAGE SYSTEMS:**

Detention and/or retention facilities designed to become a permanent part of the storm water drainage system shall be installed with an additional ten (10) percent capacity to allow for sediment accumulation resulting from development, and to permit the pond to function for reasonable periods between cleanings.

**1700.06 STABILIZE CHANNELS AND SIDE BANKS:**

Install stream and basin side bank stabilization measures including stream crossings, and other measures required by the erosion control plan.

**1700.07 CLEARING, GRUBBING, GRADING, ET CETERA:**

Initiate on-site land development activities including site clearing, grubbing, filling, and grading activities, and installation of the main runoff conveyance systems.

**1700.08 LONG TERM EROSION CONTROL MEASURES:**

Installation of the required erosion control measures such as temporary seeding, and permanent seeding per Building Commissioner's requirements, and in accordance with Rule 5, after finish grading.

All areas to be left barren for more than thirty (30) days shall be temporarily seeded according to Soil and Water Conservation District recommendations.

1700.09 INLET PROTECTION:

Install storm drain inlet protection measures such as straw bale dams, silt fences, filter fabric wraps, and/or slotted barrel risers.

1700.10 ROAD CONSTRUCTION:

Initiate permanent road and building construction.

1700.11 FINAL GRADING:

Complete final grading and permanent seeding.

SECTION 1800 CERTIFICATION REQUIRED:

After completion of the Project, and before final approval and/or acceptance can be made, a professionally prepared and certified "As Built" set of plans shall be submitted to the Drainage Board through County Surveyor, and to the Commissioners, through the County Engineer for review.

These "as built" plans shall include all pertinent data relevant to the completed storm water drainage system and shall include:

- .01 Pipe size, length, and material.
- .02 All rim and invert elevations.
- .03 Correctly located limits and alignment of all streets, walks, drainage facilities, erosion and sedimentation control facilities intended to remain in place, and all other pertinent improvements in correlation to platted easements and rights-of-way.
- .04 Data and calculations showing all basin storage volumes and storage elevations "as built."
- .05 An engineer certified statement on the "as built" plans that the completed storm water drainage system complies with the Final Drainage Plan approved by the Board; or clearly depicting, describing, and explaining deviations from the approved Final Drainage Plan.

1801.00 COUNTY SURVEYOR TO STORE "AS BUILTS" WITH DRAINAGE PLAN:

The County Surveyor shall store one copy of the "as-built" plans with the approved Drainage Plan.

1802.00 COUNTY ENGINEER TO STORE "AS BUILTS" WITH STREET PLANS:

The County Engineer shall store one copy of the "as-built" plans with the approved Street Plans.

**SECTION 1900 CHANGES IN PLAN:**

**1901.00 MODIFICATIONS DURING PROJECT CONSTRUCTION:**

Any major modification of the Final Plan approved by the Drainage Board shall be filed with the Drainage Board prior to implementation of such major modification.

If the modification is approved by the Board, it shall be attached to the Final Drainage Plan.

The provisions of this subsection shall apply only to work in progress during the construction stages of the Project.

**1902.00 MODIFICATIONS AFTER PROJECT COMPLETION:**

Changes to any part of the entire storm water drainage system after completion of the Project shall require new approval of a Drainage Plan by the Board.

Changes approved and implemented after submission of the required "as built" plans shall be attached to the "as built" plans.

**SECTION 2000 DETERMINATION OF IMPACTED DRAINAGE AREAS:**

The Board is authorized, but not required, to classify certain geographical areas as Impacted Drainage Areas; and to enact and promulgate regulations which generally are applied at the discretion of the Board.

In determining Impacted Drainage Areas, the Board shall consider such factors as topography, soil type, proximity to a regulated drain, capacity, and condition of existing regulated drains; and distance from, or capacities of available adequate drainage facilities.

An Impacted Drainage Area may be so designated by resolution of the Board, and special requirements for development within any Impacted Drainage Area shall be included in such a resolution of the Board.

A resolution of the Board designating an Impacted Drainage Area shall be attached to this Ordinance, and become a part thereof.

**SECTION 2100 OTHER REQUIREMENTS:**

**2101.00 SUMP PUMPS:**

A sump pump shall be used only for one function; either the discharge of storm water, or the discharge of sanitary sewerage.

Sump pumps installed to receive and discharge ground water, or other storm water, shall be connected to the storm water drainage system where possible, and by a method and with fittings specifically manufactured for the applied use.

Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary sewer system.

**2102.00 DOWN SPOUTS:**

All down spouts or roof drain water shall be discharged by means that will not undermine street slabs, or otherwise damage street or storm water drainage systems, neighboring property, adjacent structures, or downstream public or private property.

All connections into the storm sewer system, or through the street curbing shall be made using fittings specifically manufactured for the applied use.

**2103.00 FOOTING DRAINS:**

Footing drains shall be connected to the storm water drainage system sewers where possible.

Footing drains shall be installed to discharge without damaging street systems, storm water drainage systems, neighboring or downstream property, or adjacent structures.

No footing drains or storm drainage tile shall be connected to the sanitary sewers.

**2104.00 BASEMENT FLOOR DRAINS:**

All basement floor drains shall be connected to sanitary sewers.

**SECTION 2200 DISCLAIMER OF LIABILITY:**

The degree of protection required by this Ordinance is considered reasonable for regulatory purposes, and is based on historical records, and engineering and scientific methods of study.

Larger storms may occur, or storm water runoff depths may be increased by man-made or natural causes.

This Ordinance does not imply that the land uses permitted will be free from storm water damage.

This Ordinance shall not create liability on the part of Vanderburgh County, Indiana, or any officer or employee thereof for any damage which may result from reliance on this Ordinance, or on any administrative decision lawfully made thereunder.

**SECTION 2300 CORRECTIVE ACTION:**

Nothing herein contained shall prevent Vanderburgh County, Indiana, from taking such other lawful action as may be necessary to prevent or remedy any violation.

All costs connected therewith shall accrue to the person or persons responsible.

**SECTION 2400 REPEALER:**

This Ordinance repeals and replaces a certain amended subdivision drainage ordinance adopted by the Commissioners on November 24, 1986, and again on December 1, 1986.

**SECTION 25: WHEN EFFECTIVE:**

This Ordinance shall become effective upon its final passage, approval, and publication as required by law.

**SECTION 3000: ATTACHMENTS AND REFERENCE MATERIAL:**

This Section includes certain charts, diagrams, drawings, forms, specifications, instructions, and other special data attached to or referred to in or by this Ordinance.

The documents contained in this section are made a part of this Ordinance either by adoption concurrent with the enactment thereof, or by subsequent action(s) of the Board of County Commissioners of Vanderburgh County, Indiana.

**TABLE 1100 Enclosed Gravity Flow Storm Sewer Pipe Materials**

Pipe Size	Material	Corrosion Protection
12"	DI	None
	HDPE	
	PVC	
	RCP	
15" to 41"	DI	None
	HDPE	
	PVC	
	RCP	
42" to 48"	AAP	Type 1
	ASP	Type 2
	HDPE	None
	PVC	
	PBC	
	RCP	
54" to 120"	AAP	Type 1
	ASP	Type 2
	GSP	Type 3
	SPS	None
	PBC	
RCP		

**TABLE 1199 Open Culvert Pipe Materials**

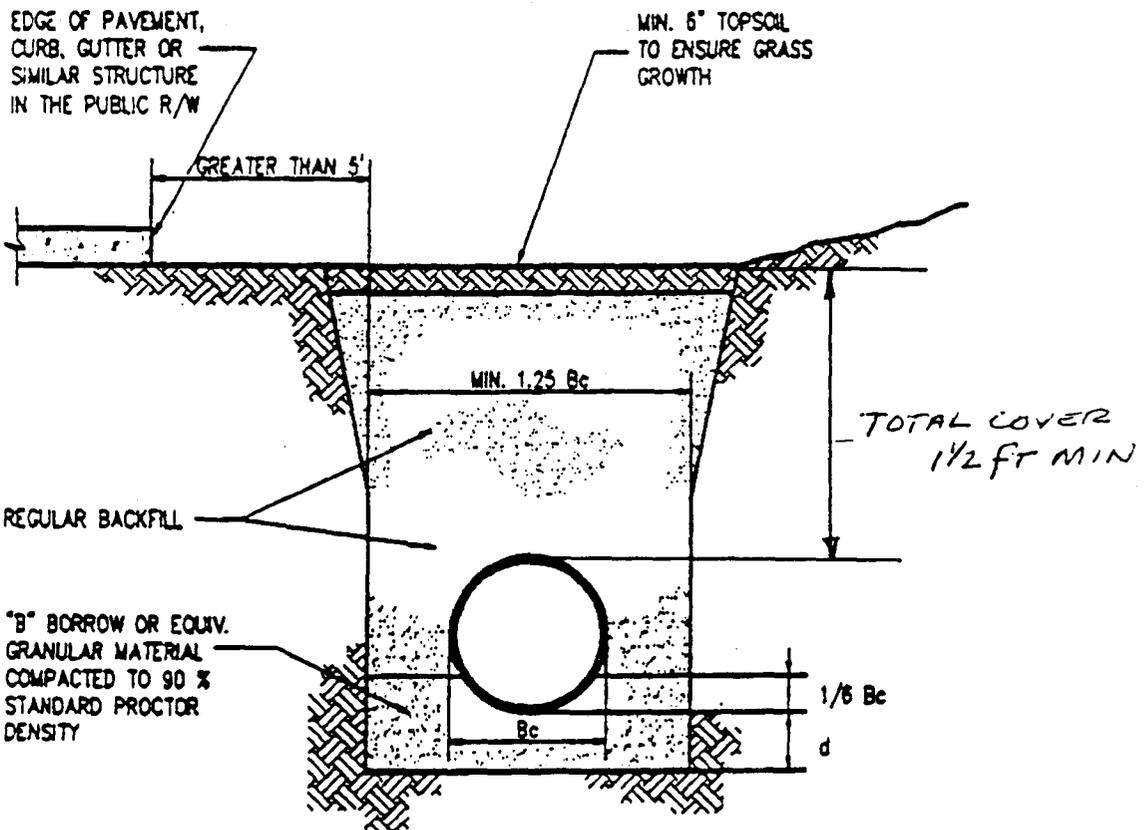
Pipe Size	Material	Corrosion Protection	
12"	DI	None	
	HDPE		
	PVC		
	RCP		
15" to 23"	DI	None	
	HDPE		
	PVC		
	RCP		
	AAP		Class A - Type 1, Class B - None
24" to 48"	ASP	Class A - Type 2, Class B - None	
	GSP	Class A - Type 3, Class B - None	
	HDPE	None	
PVC			
PBC			
DI			
49" to 120"	RCP	None	
	AAP		Type 1
	ASP		Type 2
	GSP		Type 3
54" to 120"	SPS	None	
	PBC		
	RCP		
	AAP	Type 1	
	ASP	Type 2	
GSP	Type 3		

**LEGEND:**

- |      |   |     |  |
|------|---|-----|--|
| DI   | Ductile Iron Pipe (AWWA C 151)  | AAP | Aluminum-Alloy Pipe                          |
| HDPE | High Density Polyethylene Pipe, double walled as specified herein                 | ASP | Aluminum Coated Steel Type II Pipe           |
| PBC  | Precast Box Culvert of equivalent open end area (ASTM C 789 and ASTM C 850).      | GSP | Galvanized Steel Pipe                        |
| PVC  | Polyvinyl Chloride Pipe, SDR 35 Type PSM or Ribbed Storm Pipe as specified herein | SPS | Structural Plate Steel and Aluminum-Alloy    |
|      |   | RCP | Reinforced Concrete Pipe Round or Elliptical |

- Type 1 Protection Minimum 14 gauge (0.079 in.) - To be used in non-load bearing applications only.
- Type 2 Protection Minimum 14 gauge (0.079 in.) - To be used in non-load bearing applications only. Half Bituminous Coating with Paved Invert on pipe (AASHTO M 190).
- Type 3 Protection Minimum 12 gauge (0.109 in.) - To be used for load bearing applications. Polymer Coating with Paved Invert on pipe, Polymer Coated bands (AASHTO M 246).
- Class A Culvert A culvert intended to provide for passage of water runoff under highways, streets, roads, railroads or other high fill embankments. High fill embankments are those engineered with a distance from the pipe invert to the top of the embankment or pavement greater than twelve (12) feet
- Class B Culvert A culvert intended to provide for passage of surface water runoff under commercial entrance and exit drives, residential drives or other low fill embankments. Low fill embankments are those engineered with a distance from the pipe invert to the top of the embankment or pavement of less than twelve (12) feet.

The bituminous material for coating and paving on corrugated metal pipe shall be in full conformance with Section 902.07 of the Indiana Department of Transportation Standard Specifications. When applied to the pipe, the bituminous material shall be free from impurities and the metal shall be free from grease, dust, or moisture.



GREATER THAN 5' FROM EDGE OF PAVEMENT

**NOTE:**

ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE

**DEPTH OF BEDDING MATERIAL BELOW PIPE**

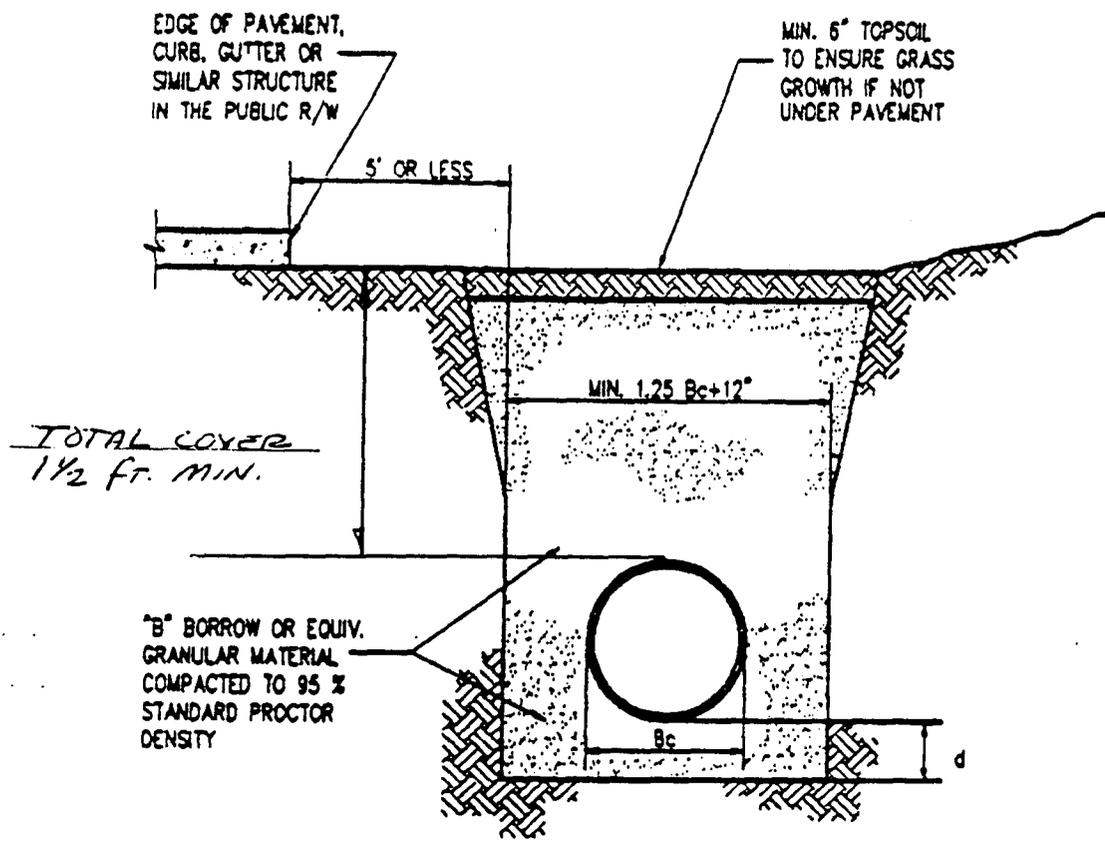
D	(d) MIN.
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	6"

**LEGEND**

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

**REINFORCED CONCRETE PIPE (RCP)  
TRENCH DETAIL**

GREATER THAN 5' FROM EDGE OF PAVEMENT



WITHIN 5' OF EDGE OF PAVEMENT

**NOTE:**

ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS

A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE

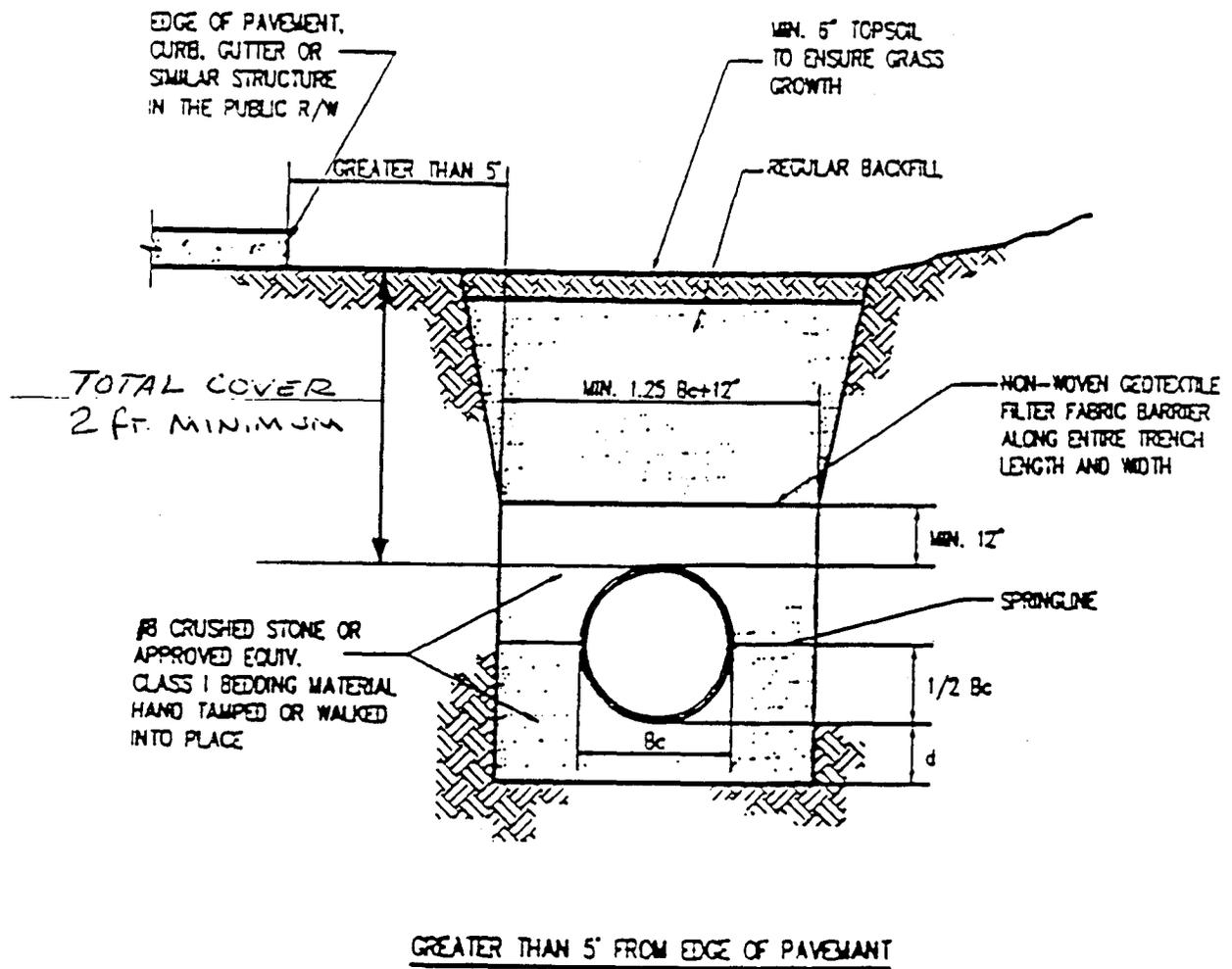
**DEPTH OF BEDDING MATERIAL BELOW PIPE**

<u>D</u>	<u>(d) MIN.</u>
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	6"

**LEGEND**

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

**REINFORCED CONCRETE PIPE (RCP)  
TRENCH DETAIL  
WITHIN 5' OF EDGE OF PAVEMENT**



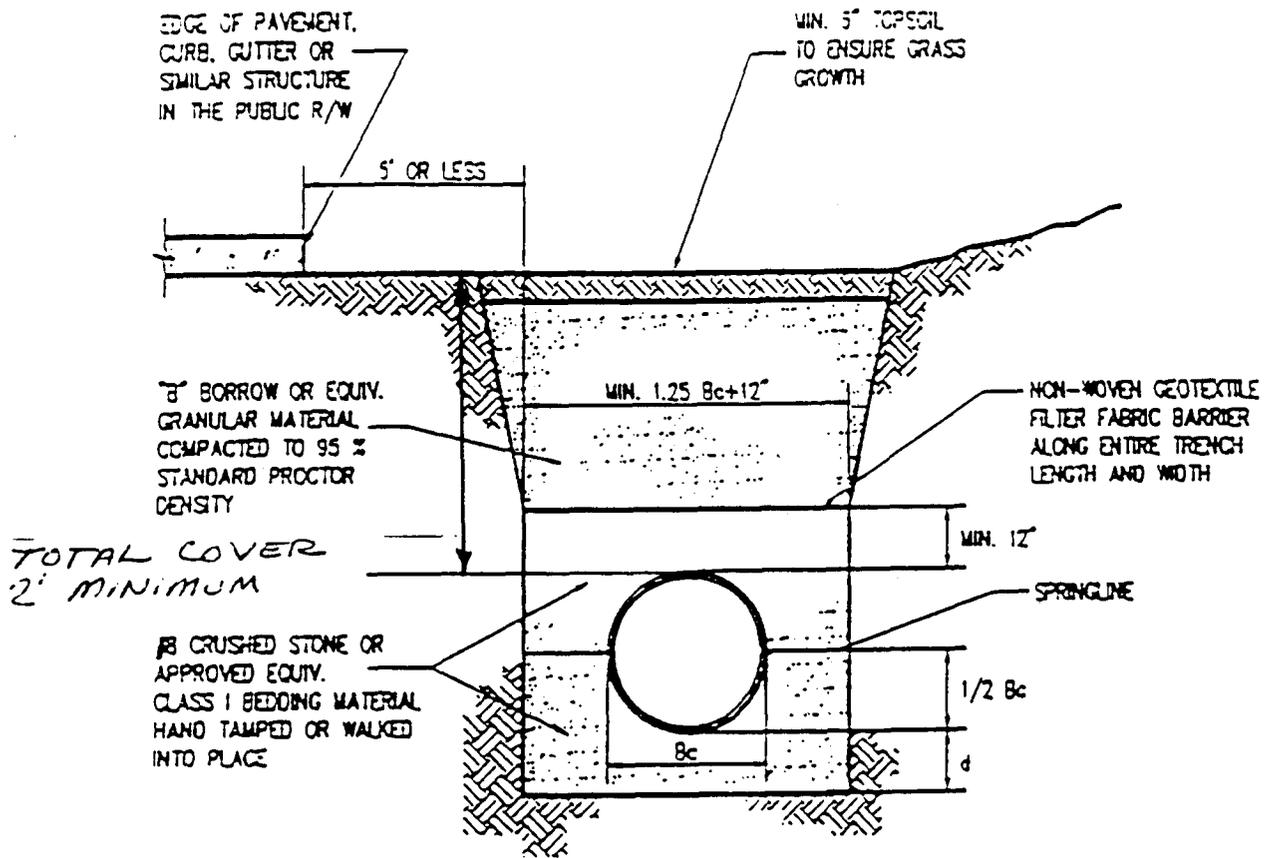
DEPTH OF BEDDING MATERIAL BELOW PIPE

<u>0</u>	<u>(d) MIN.</u>
12" TO 48"	4"

### LEGEND

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

## PLASTIC PIPE (PVC & HDPE) STORM SEWER BEDDING DETAIL GREATER THAN 5' FROM EDGE OF PAVEMENT



WITHIN 5' OF EDGE OF PAVEMENT

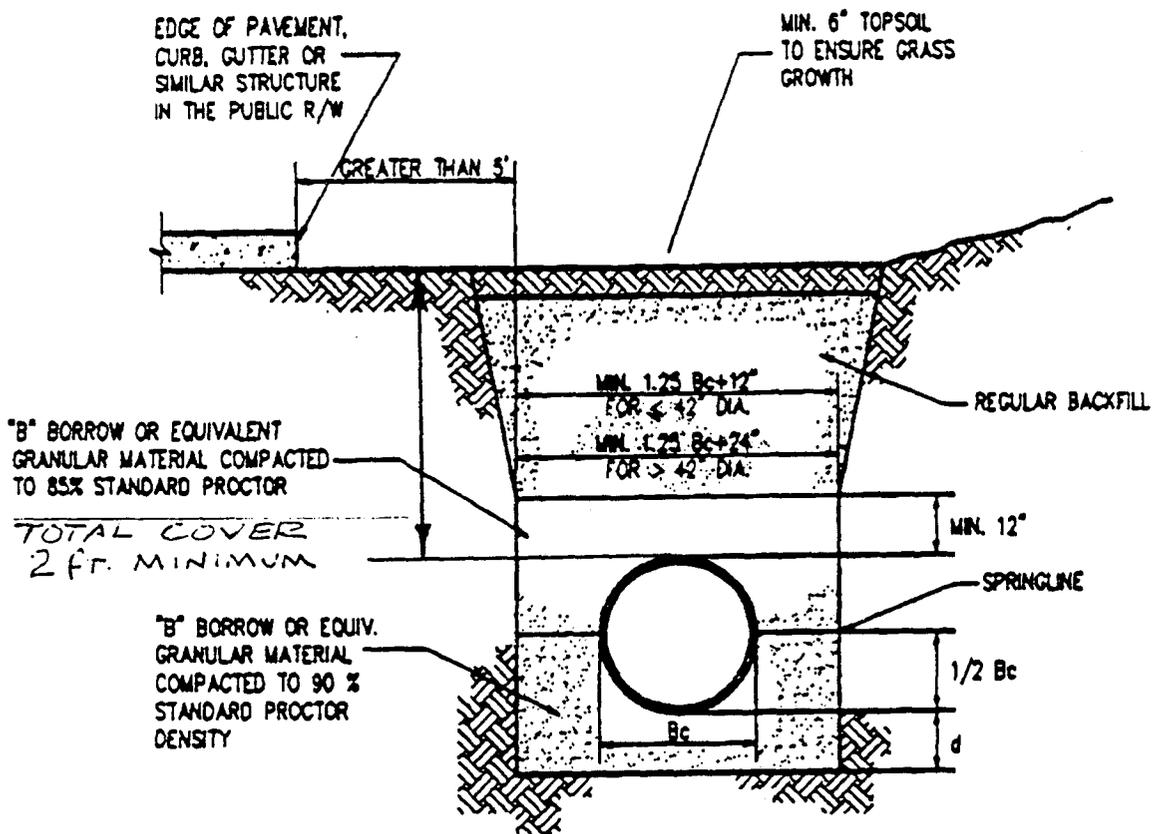
DEPTH OF BEDDING  
MATERIAL BELOW PIPE

<u>0</u>	<u>(d) MIN.</u>
12" TO 48"	4"

**LEGEND**

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

**PLASTIC PIPE (PVC & HDPE)  
STORM SEWER BEDDING DETAIL  
WITHIN 5' OF EDGE OF PAVEMENT**



GREATER THAN 5' FROM EDGE OF PAVEMENT

**NOTE:**

ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS

MIN. 9" CLEARANCE EACH SIDE OF PIPE FOR 42" DIA. AND LESS

MIN. 12" CLEARANCE EACH SIDE OF PIPE FOR LARGER THAN 42" DIA.

**DEPTH OF BEDDING MATERIAL BELOW PIPE**

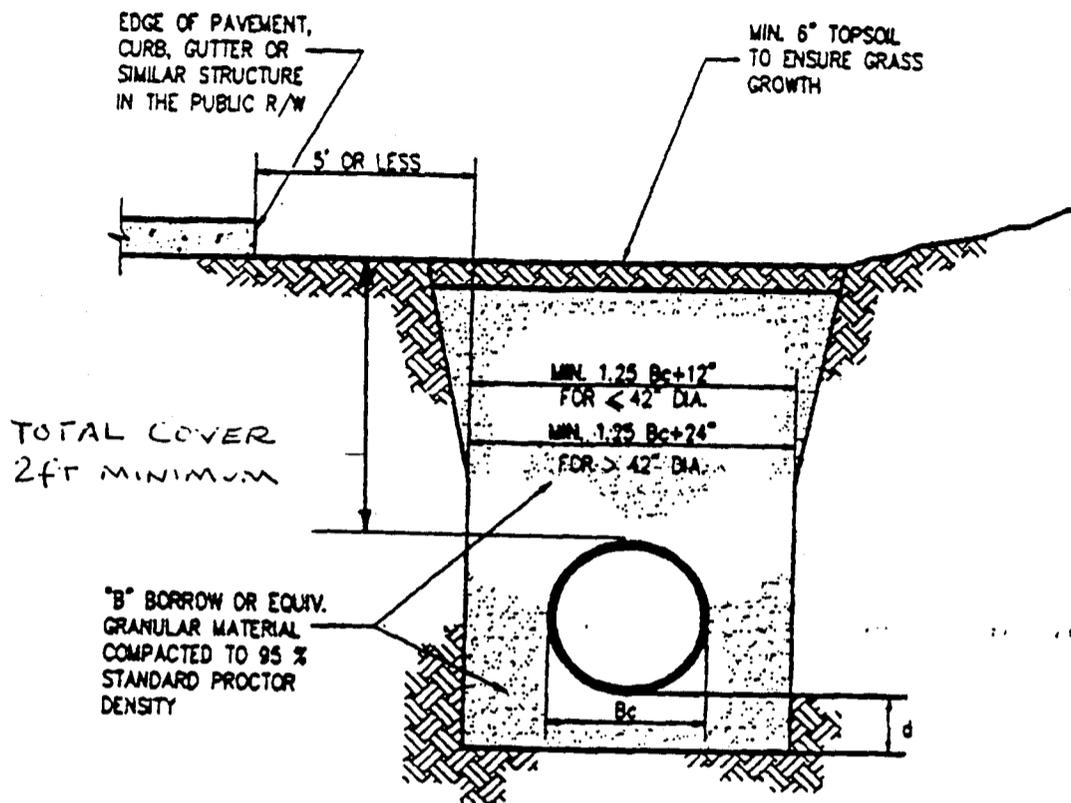
D	(d) MIN.
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	6"

**LEGEND**

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

**CORRUGATED METAL PIPE (CMP)  
TRENCH DETAIL**

GREATER THAN 5' FROM EDGE OF PAVEMENT



WITHIN 5' OF EDGE OF PAVEMENT

**NOTE:**

ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS

MIN. 9" CLEARANCE EACH SIDE OF PIPE FOR 42" DIA. AND LESS

MIN. 12" CLEARANCE EACH SIDE OF PIPE FOR LARGER THAN 42" DIA.

**DEPTH OF BEDDING MATERIAL BELOW PIPE**

<u>D</u>	<u>(d) MIN.</u>
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	5"

**LEGEND**

- Bc = OUTSIDE DIAMETER
- D = INSIDE DIAMETER
- d = DEPTH OF BEDDING MATERIAL BELOW PIPE

**CORRUGATED METAL PIPE (CMP)  
TRENCH DETAIL  
WITHIN 5' OF EDGE OF PAVEMENT**



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AUGUST 22, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
AUGUST 22, 1994

The Vanderburgh County Drainage Board met in session on August 22, 1994 at 7:50 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

**RE: APPROVAL OF MINUTES/SPECIAL DRAINAGE BOARD MEETING (4-11-94)**

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve the minutes of a Special Drainage Board Meeting April 11, 1994. So ordered.

**RE: Postpone Presentation of Drainage Ordinance One Month**

Bill Jeffers: "Purdue University is publishing a County Storm Drainage Manual that was produced over the summer at Christopher Burke Incorporated in Chicago, Illinois. One of the fellows that helped produce the new Storm Drainage Manual, is Tom Burke who works for Dr. Scholer. This new Storm Drainage Manual is being represented by Dr. Scholer of Purdue University, perfect extension, as being the most advanced edition of rainfall information, and methods of calculating storm detention and storage. It won't be available until towards the end of September, and I would like to incorporate some of that new data into our Drainage Ordinance. I won't have it in my hands until towards the end of the month."

Commissioner Hunter: "Will this require additional public hearings?"

Bill Jeffers: "No, I just would like to postpone....you asked me to bring you the final editon today, and you were going to take it to the Commissioners meeting on September 6, 1994, and I am asking you to postpone that one more month."

Commissioner Hunter: "What I am driving at, have you incorporated new material?"

Bill Jeffers: "No sir. What they have done is some of the rainfall data previously was only available from the year 1909 to the year 1951, and they're incorporating new data from 1952 through 1992. It shows there has been more intense rainfalls in the last forty (40) years than there were in the previous forty (40) years. We're just trying to give you the most current data available since we're publishing all that data in the body of the Ordinance."

Commissioner Hunter: "Okay, but as far as the substance of the document itself there will be no changes?"

Bill Jeffers: "No changes other than you asked me to do the legal language, and also John Stoll sent in some comments Thursday. I will just give you copies of his comments and my replies to him, because I am making changes on behalf of the County Engineer, or in favor of his comments. I will give you an example: In order for County Personnel to be able to schedule inspections, this section must state that the contractor must contact the County Engineer's office a minimum of 24 hours in advance. That wasn't in the Ordinance, so I added that in, things like that. In other words, so if Mr. Stoll is going to schedule inspections, he wants a 24 hour notice in advance. I received his comments on Thursday, August 18, 1994 and I am still working on incorporating. Since Mr. Bill Smith, from PVC Inc. on Morgan Avenue, here in Evansville, Indiana is here in the audience, I would like to...last month I wasn't able to get in what I wanted to say, but to thank him for having Jeff Eckels provide us with all the information that he did provide us with on a disc, to be incorporated into the material section. It was extensive and it saved us a lot of time and a lot of money for him to do that. Mr. Eckels did a great job for us on that. He supplied the specifications for bedding pipes of all kind: concrete, metal, plastic, PVC as well as the drawings, and the written

specifications and manufacturer's recommendations, and it certainly saved us a lot of time and we appreciated it."

Commissioner Hunter: "Thank you."

Bill Jeffers: "So if that doesn't create too much of a problem for you, I am asking your permission to postpone it one (1) month."

Commissioner Hunter: "Fine."

Bill Smith: "Could I just get note of the dates, that you will be doing the final readings?"

Commissioner Borries: "Yes, If we get everything in, and Bill can provide you with all of the information, I would say that this Board can take action then on Monday, September 26, 1994 and if he is going to be out of town on October 3, 1994 I wouldn't want to do anything then. We would probably go for maybe Monday, October 10, 1994 at the Commissioners Meeting."

Bill Jeffers: "Right, that sounds good."

**RE: PRESENT REPORTS ON EAGLE SLOUGH**

**A. RECONSTRUCTION OF PIPES**

Bill Jeffers: "The State Statute requires that the Surveyors submit a report, and I do have it here in writing. You've read that...so you know what the Surveyor's report is, and you know what our estimates of construction and maintenance are on the last page."

Commissioner Borries: "The most obvious thing is when you go down there now and look at the new thing, it's got to be realigned, because it's kind of hitting the sidewall now."

Bill Jeffers: "We have plans in our office on the reconstruction of Eagle Slough back in the 70's and that's where I'm referring to realignment of the lower one quarter mile on page 2, section IV, paragraph A. Realignment of the lower one quarter mile to the alignment of original construction back in 1972. That has wandered southerly and could try to bypass your pipe towards the Marina, and that's what we want to avoid there."

Commissioner Borries: "Right. It is really noticeable now."

Bill Jeffers: "You can see it on aerial photographs, you don't even have to be down there to see it, it is so noticeable. Okay, that's the expensive modification. The rest of it is what we feel will be necessary and doable in the first year of 1995 with the money we project we'll collect."

**B. RECOMMENDATION: RECOMMEND URBAN DRAIN**

Bill Jeffers: "Then beyond 1995 we'll have additional monies, if you declare an urban drain, to continue modifying the channel; and the maintenance of it. There may come a time when all we need is a smaller amount of money to maintain it on an annual basis by spraying, mowing and an occasional silt dipping, and we may be able to lower that assessment back to a lower figure, say three (3) to five (5) years from now. Commissioner Tuley mentioned the memo from Leslie Blenner the City Controller who obviously would be alert to the increase to \$36,000.00. The city's assessment jumping from \$2,000.00 or so to \$36,000.00. I received her memo this afternoon at 4:30 p.m. and have a reply to it here, and with your permission I will forward it to her tomorrow."

Commissioner Borries: "It's not the rural area when she talks about the privately-owned rates, it's not some of the farm land down there that we are concerned about as much as we are the

urbanization of another portion of that drainage basin. I think you pointed that out here."

Bill Jeffers: "First: She is asking for a copy of the report that I had given you and I attached a copy of the report to her to the reply. Second: She is asking for explanation of what the capital project entails, and its estimated cost and that's in the report on the last sheet, which has been attached to the reply. Third: She is asking for a projection of when the city can expect to see their rate drop in the future and I am saying five (5) years or beyond, we should have it in good enough shape to go back to annual maintenance. Fourth: She is asking for explanation of why the city's 3,000 acres have an increase rate of assessment, but approximately 3,800 privately owned acreage are not projected to increase, and the answer is, quote, "Rural land affected by an urban drain is benefitted only as rural land and shall be assessed on that basis" per IC 36-9-27-69b (6). Fifth: She asks, is it a correct assumption that these improvements are precipitated by development at I-164 and the Lloyd Expressway, which is not in the city? My reply on that is: It is not a correct assumption that these improvements are precipitated by development at I-164 and the Lloyd Expressway (the south half of which is in the city, by the way) as that area of the city and county drains into either Williams Ditch and/or Nurrenbern Ditch.

On the last page of the report, the Vanderburgh County Surveyor recommends that the Vanderburgh County Drainage Board declare Eagle Slough to be an urban drain and to direct the Surveyor to proceed with plans to calculate the assessments to modify and maintain Eagle Slough as a urban drain. Before you make your motion to make sure I've done everything right, I just ran a copy of what the statute says we have to do if the board determines to declare this an urban drain. I direct your attention to the very last paragraph, lower left hand corner (D) Before final adjournment of the hearing, the board shall find in writing that the drain is an urban drain....So you can recess this meeting, but before you adjourn in a month from now, you have to have received all this stuff here from us."

Alan Kissinger: "What section of the code is this Mr. Jeffers?"

Bill Jeffers: "36-9-27-69."

Commissioner Borries: "You have submitted in writing your recommendations, so it's in writing. Your saying however that we've got the Surveyors recommendation and he's provided documentation."

Bill Jeffers: "We have to notify every property owner who will receive an assessment, that their assessment will be (X), rather than what it was last year. We have to prepare a schedule of assessment to enter into the record."

Commissioner Hunter: "Are the private ownerships, the \$.80, is that different than it was last year?"

Bill Jeffers: "No, but the way that we were reading it is that everyone is affected and has to be notified."

Commissioner Hunter: "Even though the assessments not changing?"

Bill Jeffers: "Right, because some of their assessments may actually change."

Commissioner Hunter: "I guess what I am driving at, the farmers do we have to notify them if there is no change in their assessment?"

Bill Jeffers: "The way Mr. Brenner read it, yes."

Commissioner Hunter: "Okay."

Commissioner Borries: "I think they need to be notified. I think it would be helpful even if their not going to get an increase."

Motion made to adopt Eagle Slough for Urban Drain by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

Commissioner Borries: "This will be an Ordinance, there has been a motion made. Let's call for a roll call vote since it will be involved in an Ordinance. Commissioner Hunter..." "I vote yes." Commissioner Tuley..." "I vote yes." President Commissioner Borries..." "I vote yes."

Bill Jeffers: "We will bring to you a complete schedule of assessments and etc., a list of addresses that we have to mail, to the next meeting."

Commissioner Borries: "Okay."

**RE: EXPRESSWAY COMMERCIAL SUBDIVISION DRAINAGE PLAN RED BANK ROAD/HWY 62**

Bill Jeffers: "This is Jack Rogers and Bob Jarrett. The original drainage plan was passed some years ago. I think in February you saw it when a hotel chain wanted to bring a unit in, and we recommended you pass it again. The Area Plan Commission has asked for additional details which the subdivider or the developers presented at this time and again, it is the original drainage plan is being followed, it's just a rearrangement of some lot lines and some roadways. Mr. Morley is here if you have any questions. We also have several letters if you need to look through them."

Commissioner Borries: "Do you recommend approval?"

Bill Jeffers: "Yes sir. This was the one that had some erosion control problems, and you sent Darrell Rice out and he worked with the developer to bring that under control, and there are letters in the file that confirmed his agreement that everything was brought under control back at the first of the year."

Motion to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**RE: SIGN COVER SHEET KORB MANOR DRAINAGE PLAN (PREVIOUSLY APPROVED)**

Bill Jeffers: "The last item is to sign a cover sheet for Korb Manor drainage plan which was previously approved. It's just a bookkeeping procedure that Morley and Associates would like to have the signature on the mylar that they store at their office."

Commissioner Borries: "Bill, does Mr. Morley have another item that maybe is not on the agenda?"

Bill Jeffers: "There is one that is not on the agenda that Mr. Morley has come and respectfully asked you to consider. Maybe while you are considering it, do I need to read all the ditch claims in the meeting each time? All the paperwork is in order. They have been signed."

Commissioner Hunter: "I don't think so, as long as they are recommended from your office."

Bill Jeffers: "We recommend the payment of the amount shown. I personally reviewed them and checked the mathematics. If you'll take these on my recommendation, you might be signing them while Mr. Morley's making his presentation."

**RE: REQUEST FOR PAYMENT OF BLUE CLAIMS-DITCH MAINTENANCE**

The following Blue Claims were submitted for approval:

ALBERT STECKLER #1243 BAEHL DITCH #234-007 94-FM-07-45	6,890 LF @ \$.125=\$861.25 PAY 45%....\$387.56	<b>TOTAL</b>  387.56
BIG CREEK DRAINAGE ASS'N. #0986 BUENTE UPPER BIG CREEK #234-010 94-FM-10-45	20,668 LF @ \$.17=\$3,513.56 PAY 45%....\$1,581.10	1,581.10
BIG CREEK DRAINAGE ASS'N #0986 MAIDLOW DITCH #234-028 94-FM-28-45	18,671 LF @ \$.15=\$2,800.65 PAY 45%....\$1,260.29	1,260.29
BIG CREEK DRAINAGE ASS'N #0986 POND FLAT MAIN #234-029 94-FM-29-45	36,852 LF @ \$.13=\$4,790.76 PAY 45%....\$2,155.84	2,155.84
BIG CREEK DRAINAGE ASS'N #0986 POND FLAT MAIN LAT.C #234-032 94-FM-32-45	9,036 LF @ \$.12=\$1,084.32 PAY 45%....\$487.94	487.94
BIG CREEK DRAINAGE ASS'N #0986 POND FLAT MAIN LAT.E #234-034 94-FM-34-45	3,616 LF @ \$.12=\$433.92 PAY 45%....\$195.26	195.26
BIG CREEK DRAINAGE ASS'N #0986 RUSHER DITCH #234-035 94-FM-35-45	4,444 LF @ \$.12=\$533.28 PAY 45%....\$239.98	239.98
SHIDELER SPRAY SERVICE #1851 KEIL DITCH #234-022 94-SP-22-15	3,012 LF @ \$.063=\$189.76 PREV. PMT. 85%....\$161.30 PAY RETAINAGE 15%....\$28.46	28.46
TERRY R JOHNSON #1052 KEIL DITCH #234-022 94-SM-22-15	3,012 LF @ \$.3069=\$924.38 PREV. PMT. 85%....\$785.72 PAY RETAINAGE 15%....\$138.66	138.66
TERRY R JOHNSON #1052 KOLB DITCH #234-025 94-SM-25-15	5,593 LF @ \$.31845=\$1,781.09 PREV. PMT. 85%....\$1,513.93 PAY RETAINAGE 15%....\$267.16	267.16
<b>TOTAL</b>		<b>\$6,742.25</b>

Motion made to approve payment of Blue Claims-Ditch Maintenance by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**RE: NEW BUSINESS**

Jim Morley: "O'Charleys is doing a restaurant at Cross Pointe, and the edge of the restaurant is right next to the lake. There is a drainage easement all the way around the lake, therefore it's necessary to encroach on the drainage easement to bring...they do a retaining wall we're not deducting any storage whatsoever and we're doing a deck out over the water on pilings."

Commissioner Borries: "So it doesn't affect the drainage whatsoever?"

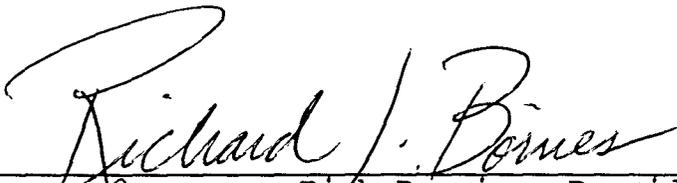
Jim Morley: "No it does not and Bill has copies, I made him additional copies of the original drainage plan. The drainage plan is not being modified whatsoever and it is all exactly as originally planned as far as the run off and the excess capacity we have there, but it is necessary to have approval to encroach in the drainage easement in order for them to receive their building permit and go ahead with construction. They seek permission for the building to be built there. They have a vertical retaining wall along the bank and then the deck actually sticks out over the water."

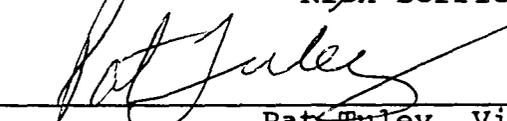
Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

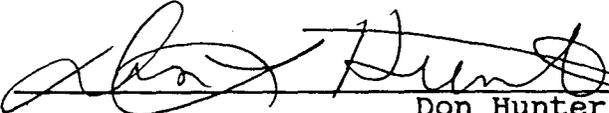
There being no further business the meeting was adjourned at 8:20 p.m.

PRESENT:

- President Rick Borries
- Vice-President Pat Tuley
- Member Don Hunter
- Alan Kissinger, Attorney
- Sam Humphrey, Auditor
- Bill Jeffers, Chief Deputy Surveyor
- Julie Hinton, Recording Secretary
- Jim Morley, Morley and Associates
- Bill Smith, PVC, INC

  
 Rick Borries, President

  
 Pat Tuley, Vice-President

  
 Don Hunter, Member

MEMO 082294-LB1

TO: MS. LESLIE BLENNER  
FR: MR. ROBERT BRENNER  
RE: EAGLE SLOUGH/URBAN DRAIN

August 22, 1994

In answer to Leslie Blenner's letter dated 8/22/94:  
which may be found attached.

1. Find attached a copy of the Surveyor's Report  
Re: Eagle Slough; submitted 8/22/94.
2. Find in the report an estimate of the costs  
of the capital project.
3. The assessment rate of twelve (12) dollars may  
decrease when the six and one half (6.5) miles  
of Eagle Slough are adjudged to provide proper  
drainage of the watershed it serves.

Proper drainage of the watershed may occur after  
five years of intense corrective construction and  
maintenance efforts; at which time the assessment  
will drop to the amount needed for normal annual  
maintenance.

4. "Rural land affected by an urban drain is benefited  
only as rural land and shall be assessed on that basis"  
per IC 36-9-27-69b(6).
5. It is not a correct assumption that these improvements  
are precipitated by development at I-164 and the Lloyd  
Expressway (the south half of which is in the city, by  
the way) as that area of the city and county drains  
into either Williams Ditch and/or Nurrenbern Ditch.

Additional information may be had upon request.

Sincerely,

---

Robert W. Brenner, County Surveyor

cc: County Drainage Board



CITY OF EVANSVILLE  
**Office of the Controller**

CIVIC CENTER COMPLEX, ROOM 300  
ONE NW MARTIN LUTHER KING JR. BOULEVARD  
EVANSVILLE, INDIANA 47708  
(812) 426-5492

FRANK F. McDONALD II  
MAYOR

August 22, 1994

27-67

Mr. Richard Borries  
County Commissioner  
One N.W. M.L. King Jr. Blvd.  
Room 305 Administration Building  
Evanville, IN 47708

RE: Increased Drain Assessment - Eagle Slough

Dear Rick:

We are understanding of the County's need to fund drainage projects. We are requesting this additional information on Eagle Slough:

1. A copy of the report to be presented on this project to the Drainage Board.
2. An explanation of what the capital project entails and its estimated cost; what will the City's dollars will be used for?
3. A projection of when the City can expect to see the rate drop in the future, due to lack of funding needs.
4. An explanation of why the City's 3,000 acres will receive an increased rate, but the approximate 3,800 privately-owned rates are not projected to increase.
5. Is it a correct assumption that these improvements are participated by development at I164 and the Lloyd Expressway, which is not in the City?

Thank you for your consideration of our concerns.

Sincerely,

  
Leslie Blenner  
City Controller

cc: Patrick Tuley  
Donald Hunter  
Robert Brenner  
William Jeffers

CINDY MAYO

A REPORT TO THE VANDERBURGH COUNTY DRAINAGE BOARD  
FROM THE VANDERBURGH COUNTY SURVEYOR  
WITH REGARD TO EAGLE SLOUGH

August 22, 1994

I. EAGLE SLOUGH SHOULD BE CLASSIFIED AN "URBAN DRAIN" BECAUSE:

- A. Greater than forty-five (45) percent of the lands within the Eagle Slough Watershed have be converted from rural use to urban use.
- B. Additional tracts of land within the watershed are targeted for change to urban use, or appear to be changing to urban use.
- C. Eagle Slough, in its present condition, is not able to provide proper drainage of lands within its watershed.
- D. Proper drainage may be provided if modifications are made to the drain, and if the methods of maintenance are modified.

II. THE ANNUAL ASSESSMENT FOR MAINTAINING EAGLE SLOUGH SHOULD BE INCREASED ON URBAN LANDS BECAUSE:

- A. The costs of the required modifications will exceed the funds held in the account for maintenance to the drain.
- B. The costs of annual maintenance to the drain subsequent to the modifications will increase above the current annual assessment.
- C. Future maintenance needs and waterway modifications will require funds in excess of the current assessment.
- D. The majority of the increased cost projections is caused by the changes in land use from rural to urban.

III. IN ACCORDANCE WITH ESTABLISHED POLICY OF THE DRAINAGE BOARD THE FOLLOWING DESIGNATIONS AND RATES SHOULD APPLY TO LANDS WITHIN THE WATERSHED OF EAGLE SLOUGH:

- A. All parcels of property on which the area of hard surface coverage is less than one fifteenth ( $1/15$ ) of the total shall be classified as rural parcels, and shall continued to be assessed at the rural-rate.

The 1994 rural rate of assessment is eighty (80) cents.

- B. All parcels of property on which the hard surface coverage is equal to or greater than one fifteenth ( $1/15$ ) of the total shall be classified as urban parcels, and shall be assessed at a rate equal to fifteen (15) times the rural rate.

Fifteen times eighty cents equals twelve (12) dollars.

IV. EAGLE SLOUGH CONSTRUCTION AND MAINTENANCE NEEDS 1995:

- A. Realignment of the lower one quarter mile (1,320 feet) to the alignment of original construction, in order that the channel enter the pipe structure under Waterworks Road in the proper pattern.

This modification will require removal of silt accumulation along the North Bank of the slough.

- B. Construction of a barrier which will prevent the accumulation of debris against the pipe structure under Waterworks Road.

The accumulation of debris immediately upstream of the structure is responsible for the channel moving to the South of its original alignment.

- C. Providing continuous maintenance pathways along the entire length of Eagle Slough.

The maintenance pathways are interrupted presently by numerous modifications to the lands alongside the slough by activities associated with highway construction.

V. EAGLE SLOUGH CONSTRUCTION AND MAINTENANCE NEEDS BEYOND 1995:

- A. Realignment of another one quarter mile upstream of the section mentioned in IV-A above, to its original line.
- B. Annual normal maintenance of the waterway by spraying, mowing, tree cutting, and obstruction removal.
- C. Improvement and maintenance of the service pathways.
- D. Installation of any control structures and/or improvements found to be required.

VI. MAPS AND ATTACHED DATA:

- A. Maps describing the locations of areas in need of improvement are provided attached to this report.
- B. Design criteria including rainfall data, channel configuration and protection, allowable storm discharge, and other data are available from the county surveyor.
- C. Current and projected land use designations for the properties in the Eagle Slough Watershed are available from the Area Plan Commission and EUTS.

VII. THE SURVEYOR'S RECOMMENDATION:

- A. The Vanderburgh County Surveyor recommends that the Vanderburgh County Drainage Board declare Eagle Slough to be an urban drain; and to direct the surveyor to proceed with plans to calculate assessments, modify, and maintain Eagle Slough as an urban drain

Robert W. Brenner  
Robert W. Brenner  
Vanderburgh County Surveyor

8/19/94  
(date)

PRELIMINARY ASSESSMENT ESTIMATES FOR 1995

CITY OF EVANSVILLE	3000.00 AC	@ 12.00	.....	36,000.00
STATE OF INDIANA	210.46 AC	@ 12.00	.....	2,525.52
VANDEBURGH COUNTY	73.73 AC	@ 12.00	.....	884.76
LEVEE AUTHORITY	60.00 AC	@ 12.00	.....	720.00
PRIVATE OWNERSHIP	<u>3763.13 AC</u>	@ 00.80	.....	<u>3,010.50</u>
TOTALS	7107.32 AC			43,140.78

NOTE: As privately owned parcels are examined to determine if they are "urban" or "rural", some parcels may be assessed at the higher urban rate (\$12.00) if they qualify.

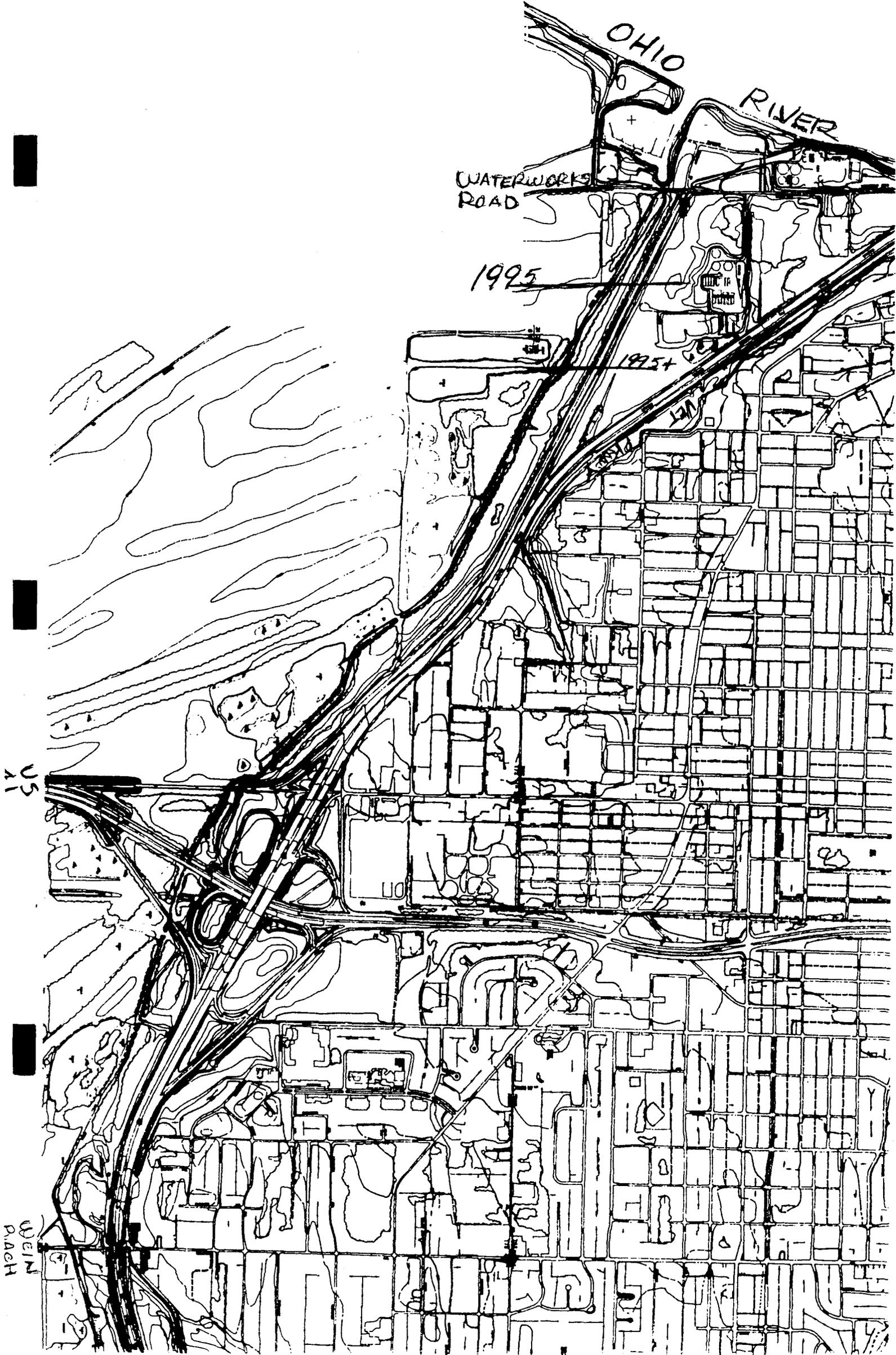
Current estimate on such parcels is less than 25 acres.

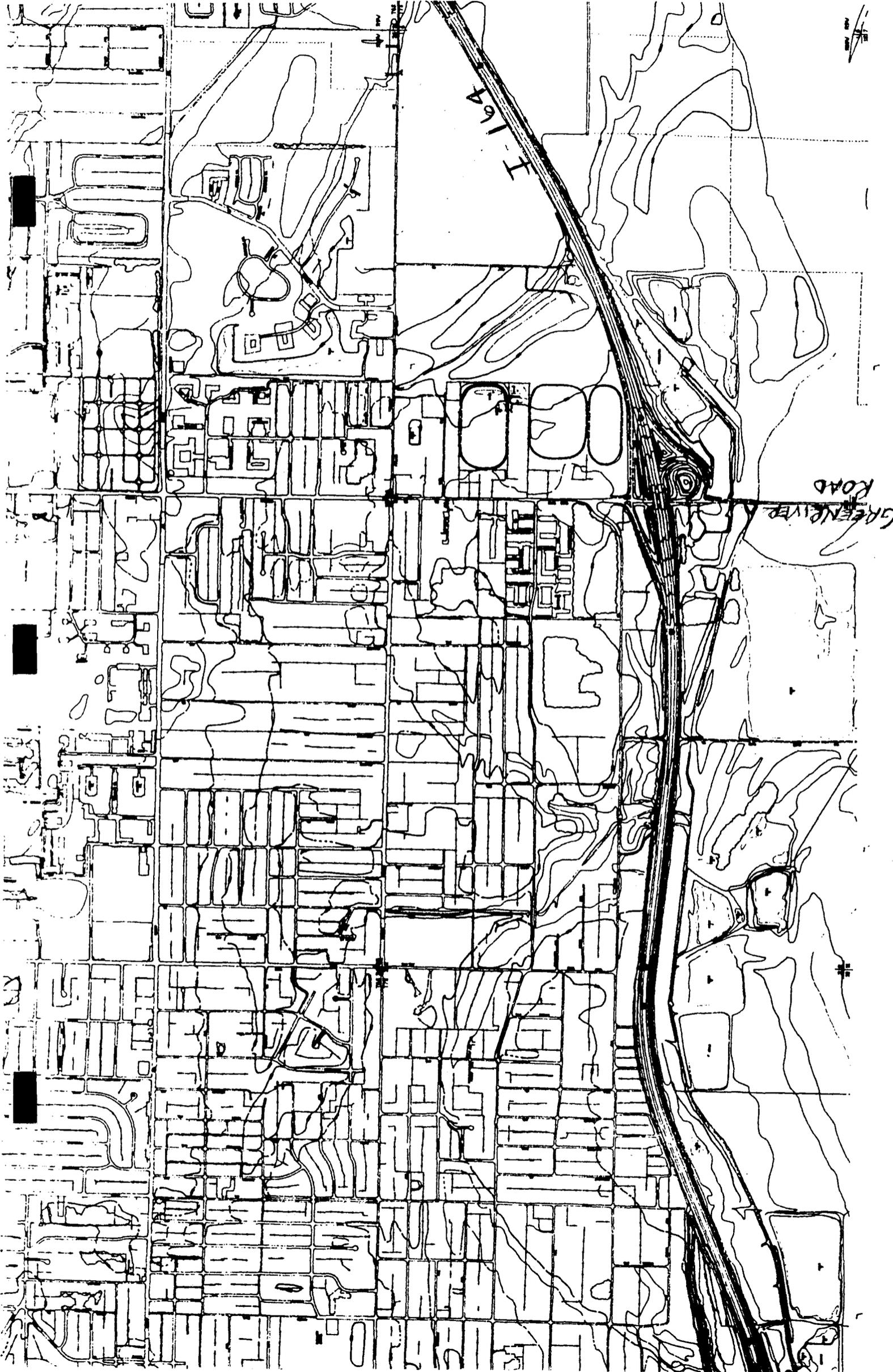
PRELIMINARY ESTIMATE OF COSTS FOR 1995

CLEAR RIGHT-OF-WAY & REALIGN LOWER 1,320 FEET	.....	24,640.00
CONSTRUCT DEBRIS BARRIER(S) WITHIN LOWER AREA	.....	8,800.00
CLEAR RIGHT-OF-WAY, SPRAY, AND MOW UPPER 6 MI.	.....	15,840.00
LEVEL SELECTED STRETCHES OF MAINTENANCE PATHS	.....	<u>10,560.00</u>
TOTAL		59,840.00

SUMMARY

CURRENT BALANCE IN EAGLE SLOUGH ACCOUNT	.....	20,573.48
ESTIMATED 1995 COLLECTIONS AS URBAN DRAIN	.....	<u>43,140.78</u>
TOTAL ESTIMATED AVAILABLE FUNDS IN 1995	.....	63,714.26





schedule of assessments and de-  
termination of damages; notice  
and hearing

Sec. 69. (a) After the county surveyor has filed his report on the construction or reconstruction of an urban drain, he shall consult with the board, and the board may adopt or modify the designations recommended by the surveyor. The

board shall then prepare a schedule of benefits, assessments, and damages.

(b) The board shall determine and compute benefits, assessments, damages, total estimated cost, and percentage allocations in the manner provided by section 50 or section 62 of this chapter. However, in determining benefits and assessments for an urban drain, the board shall consider the following factors:

(1) The watershed, or entire land area drained or affected by the urban drain, shall be considered to be benefited and shall be assessed.

(2) If specific parts of urban land are to be served by new drainage arms, routings, special structures, or other similar new features that are part of the total cost of the urban drain, those specific parts of urban land may be considered to have extra benefits greater than the benefits to the other affected urban land.

(3) Except for urban land that has extra benefits, all urban land within the watershed shall be considered to be equally benefited, and the benefits shall be computed in proportion to the number of acres in each tract.

(4) If a tract of urban land has been platted or subdivided into lots, and the subdivision contains streets, parkways, parks, or similar common use areas, the board may determine the per lot benefits by:

(A) ascertaining the total approximate benefits in proportion to the area of the tract before the subdividing; and

(B) apportioning the total benefits in substantially equal amounts to each lot.

Additional assessments may not be imposed on a right-of-way apportioned to the lots under this subdivision.

(5) Rights-of-way of a public highway, railroad company, pipeline company, or public utility that lie within or adjoin urban land shall be considered to be benefited and shall be assessed in the same manner as urban land.

(6) Rural land affected by an urban drain is benefited only as rural land and shall be assessed on that basis. Whenever the board

finds that a drain would have drained rural land without reconstruction, the board may reduce the assessment apportioned to rural land, subject to section 84(c) of this chapter.

(c) The notice to landowners in the case of an urban drain must:

(1) state that the drain has been designated as an urban drain;

(2) describe the land of the owner to whom the notice is addressed; and

(3) state that the land described is shown by the schedule of assessments to be assessed as either rural land or urban land.

—(d) Before final adjournment of the hearing, the board shall find in writing that the drain is an urban drain or that it is a rural drain and is not an urban drain. If the board finds that the drain is not an urban drain, the board shall then request the county surveyor to deny all future connections to the drain, as provided in section 17 of this chapter, and the board shall make this request and finding public. *As added by Acts 1981, P.L.309, SEC.101.*

August 15, 1994

Vanderburgh County Drainage Board  
305 Civic Center Complex  
Evansville, IN 47708

Dear Board Members:

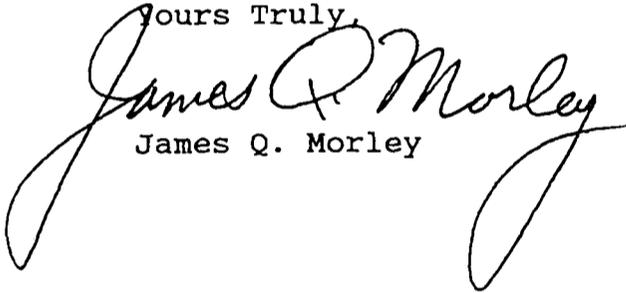
On behalf of O'Charleys Inc. we are requesting a building encroachment into the drainage easement for the storm detention basin on lot A8 in Cross Point Section 1. The encroachment will allow approximately 4 feet of the building plus 5 feet of sidewalk to be constructed on the west bank of this basin. There will be no reduction of storm water storage capacity because a retaining wall will be constructed.

We have enclosed a legal description for a 10 foot wide by 165 foot long strip defining the location of this encroachment

In addition we are requesting permission to extend a deck supported on piling out over the basin approximately 35 feet east of the west line of this detention easement. This deck will not reduce storm water storage capacity.

O'Charleys will be responsible for all additional maintenance associated with this encroachment.

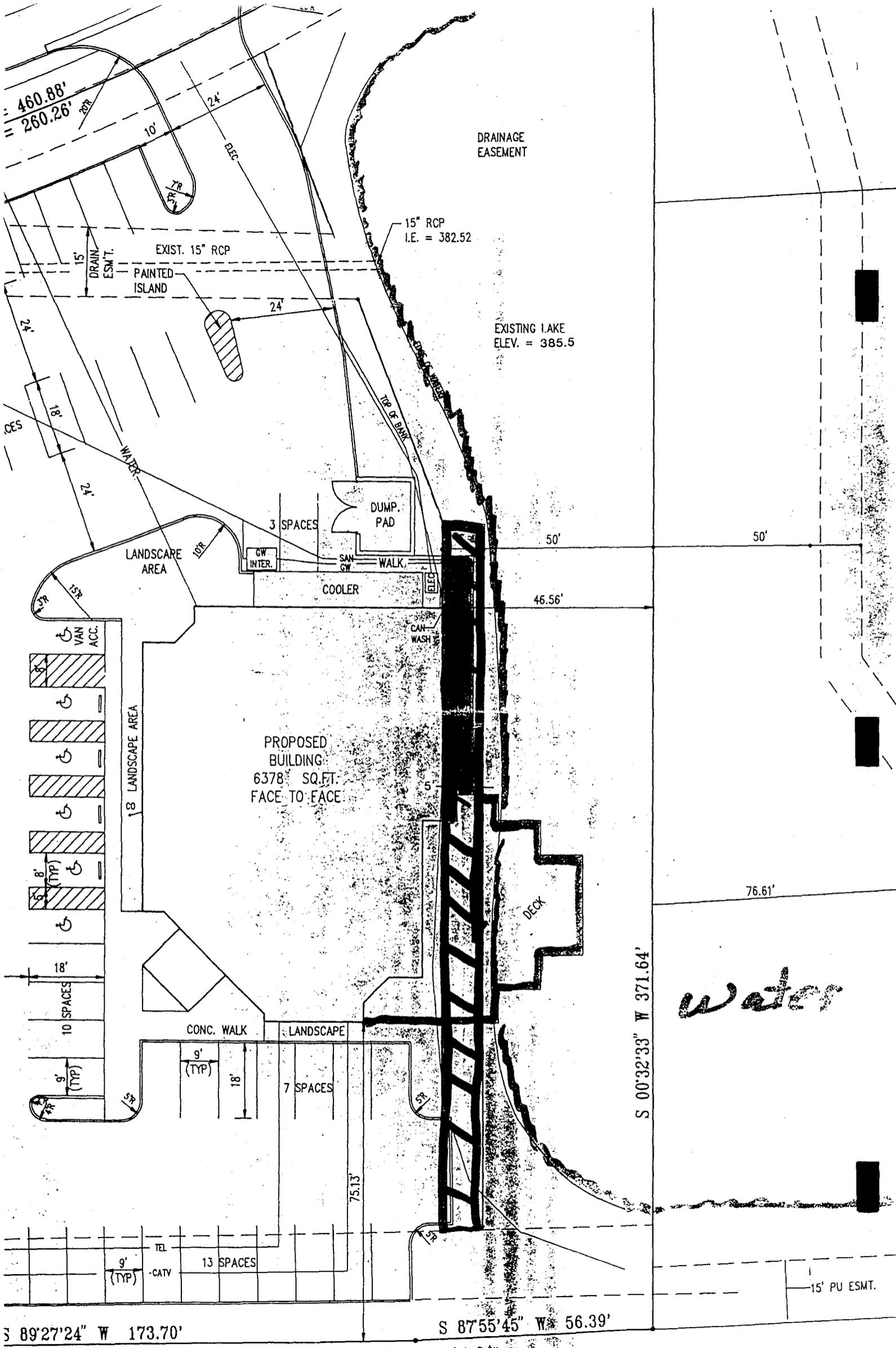
Yours Truly,

  
James Q. Morley

### Description For Drainage Easement Encroachment Permit

A part of the Southwest Quarter of Fractional Section Nineteen (19), Township Six (6) South, Range Nine (9) West, Vanderburgh County, Indiana and being a part of Lot A8 in Cross Pointe Section 1, a subdivision recorded in Plat Book 0, Page 17 in the office of the Recorder of Vanderburgh County, Indiana being a 10 foot strip of land more particularly described as follows:

Commencing at the southeast corner of said Lot A8; thence along the south line of said lot A8 South 87 degrees 55 minutes 45 seconds West 50.05 feet; thence parallel with the east of line said Lot A8 North 00 degrees 32 minutes 33 seconds East 25.03 feet to the southwest corner of a drainage easement as recorded on said plat and being the true point of beginning; thence along the west line of said drainage easement North 00 degrees 32 minutes 33 seconds East 165.00 feet; thence South 89 degrees 27 minutes 27 seconds East 10.00 feet; thence parallel with the West line of said drainage easement South 00 degrees 32 minutes 33 seconds West a distance of 164.54 feet to the south line of said drainage easement; thence along the south line of said drainage easement South 87 degrees 55 minutes 45 seconds West a distance of 10.01 feet to the true point of beginning, containing 0.038 acres.



460.88'  
260.28'

DRAINAGE  
EASEMENT

15" RCP  
I.E. = 382.52

EXISTING LAKE  
ELEV. = 385.5

EXIST. 15" RCP

PAINTED  
ISLAND

3 SPACES

DUMP.  
PAD

COOLER

LANDSCAPE  
AREA

PROPOSED  
BUILDING  
6378 SQ. FT.  
FACE TO FACE

DECK

18 LANDSCAPE AREA

*water*

CONC. WALK

LANDSCAPE

7 SPACES

9'  
(TYP)

TEL

13 SPACES

-CATY

15' PU ESMT.

S 89°27'24" W 173.70'

S 87°55'45" W 56.39'

L.A. R/W

S 00°32'33" W 371.64'

76.61'

50'

50'

46.56'

5'

75.13'

15'

CES

WATER

TOP OF BANK

24'

24'

15'

15'

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SEPTEMBER 26, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
SEPTEMBER 26, 1994

The Vanderburgh County Drainage Board met in session on September 26, 1994, at 6:40 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

**RE: APPROVAL OF MINUTES (7-25-94 & 8-22-94)**

Motion made by Commissioner Hunter and seconded by Commissioner Borries to approve the minutes of July 25, 1994 & August 22, 1994. So ordered.

**RE: JIM MORLEY/EXTENDING UTILITY LINE ALONG MARX ROAD**

Jim Morley: "Southern Indiana Gas & Electric Company is running five (5) miles of a new sixteen (16) inch gas line from Red Bank Road just south of Kasson Road to Copperline Station in Posey County. This line crosses three county roads, Red Bank Road, Koring Road and Kuebler Road and it does cross Little Creek. Little Creek is not a legal drain, but it is a jurisdictional creek because it drains more than one (1) square mile. The creek crossing details are submitted to Indiana Department of Natural Resources, and DNR normally would send out letters of notification regarding this crossing. Also on any five (5) mile project that disturbs more than five (5) acres and does fall under the jurisdiction of the Erosion Control Plans. An Erosion Control Plan will be filed with Mr. Jeffers, and with the Soil Conservation Office both here, and the Drainage and Conservation Office in Posey County. I have got a copy of the route of this and the crossing of the creek for you to simply receive for record, Since it is not a Legal Drain, it does not require any action on your part, but I do want it to be received of record, so that you will be aware of it if should you get a copy of correspondents from DNR. Are there any questions on that, Sigeco Line?"

Commissioner Hunter: "I have none."

Commissioner Borries: "Do you need a motion at this point?"

Jim Morley: "No. Just to receive and file."

Commissioner Borries: "Alright. Any comments Bill?"

Bill Jeffers: "I just thought it would be a good idea for him to present it to you, because you will probably get phone calls from people on that route asking questions."

Commissioner Borries: "Okay."

Jim Morley: "It essentially runs along approximately a quarter mile south of Marx Road. It runs parallel to Marx Road, so anybody that knows the western part of the County, it's about a quarter mile south of Marx Road. I have a second request by a property owner by the name of Jeff Dexter, in Copperfield Subdivision. He called my office with a question about piping a ditch. The ditch in Copperfield was a part of the Erosion Control Plan that was originally approved by your Drainage Board. I informed Mr. Dexter that the appropriate thing to do was that if anyone proposed to put a pipe in any ditch, that they return back to the Drainage Board for approval to put the pipe in the ditch. He is proposing to put a thirty (30) inch concrete pipe in the ditch approximately one hundred fifty (150) feet of pipe and to construct a box, a head wall situation around there to turn the pipe. There is an existing thirty (30) inch pipe that was installed. My original Drainage Plan only called for a short pipe. My original Drainage Plan called for the pipe size to be twenty four (24) inch. He has

used an over-sized pipe at thirty (30) inches which that's fine, I don't have any problems with that, it was not used to throttle the water. It is the pipe that leads into the detention lake for Copperfield. I've reviewed his request and have no problem with it. What he is proposing does meet the design requirements for the original Drainage Plans. He had some out of town business people here, and could not be here this evening, so I told him that I would present his request to put the pipe in the ditch to the Board tonight for your review. Perhaps Mr. Jeffers would have a comment about that request."

Commissioner Borries: "Okay. That's exactly what I was going to do next Mr. Morley, refer to Mr. Jeffers here for any comments."

Bill Jeffers: "The pipe that has already been installed in a north/south direction, I would say about that, I concur with Mr. Morley that it is oversized and therefore we have no objection to the size. It's a reinforce concrete pipe so we have no objection to the material. However, it was privately installed by the lot owner and no notification was given to our Department or to the County Highway Engineer's Department so we did not have the opportunity to observe it being installed. Therefore, we would not recommend that you except any maintenance responsibility for that the same way you would for the other pipes in the Subdivision that have a fifty (\$.50) per linear foot payment on them. I am sure you follow me on that. The size and the material is fine, but we have no idea how it was installed, so I would say that it would be the property owners responsibility to perpetually maintain it. Now the other portion of pipe that runs east and west in the Drainage Easement that he proposes to install, we also have no problem with the size or the material of that pipe, but we would like to have the opportunity to observe the installation of it through the Engineer's Office if you grant the request, and the connecting structure that will connect the two open ends of the pipe. Originally was proposed to be riprap covered by concrete, but I think he needs some type of head wall structure around each end of the pipe. A formed and poured reinforced concrete box and either designed by Mr. Morley's Company, or designed by the Soil Conservation Service, because there is also water entering from the yard and from the neighboring Subdivision into that pipe area. So if all that were done by this property owner, we would not have any objection to him installing it, but if he intends for us to maintain any portion of it, he needs to submit the fifty cents (\$.50) a linear foot under the current Ordinance or the two dollar (\$2.00) a linear foot under the proposed Ordinance, and notify us when he is going to install it so we can observe it and make sure that it's properly done. With those comments we don't have any objection to the installation of it."

Commissioner Borries: "Mr. Morley do you have any objections to any of the points then that Mr. Jeffers raised?"

Mr. Morley: "No, that's fine. They're excellent and that's what should be incorporated in your motion."

Commissioner Hunter: "Are we creating a problem here by starting something like this?"

Commissioner Borries: "In what way?"

Commissioner Hunter: "Well, if this gentleman feels that it is in, is everybody along there going to want to do the same thing?"

Commissioner Borries: "If they did they would have to come here on a case by case basis."

Commissioner Hunter: "I think I am thinking about the Old Petersburg Place, and the hours I have spent out there and never resolved the issues, because one or two neighbors decided that they had to fill something in."

Jim Morley: "Sure. My comment relative to that is what we're doing here for Mr. Dexter in telling him this is the way it's done. This is the way it should always be done. Personally, I think you should get a tough policy that says if you didn't ask us first, take it out. Come and ask us and then we will review it later. Just too many of these pipes are undersized, they haven't been controlled, there was no notification. Physically, relative to the drainage of this one, there is not a problem of putting this pipe in. I think he is wasting his money, that's a lot money, but we certainly don't have to worry about the pipe floating out. I don't have a problem with it, the problem that's created is by just what's going on in the past. This is the procedure I think you should always follow."

Commissioner Hunter: "Well I agree with you, but I am also looking at Lot (36) & Lot (27), and they see Mr. Dexter putting his in and they're going to go ahead and assume they can do what they want, and when they want, and we're the ones that have to deal with the problem later."

Commissioner Borries: "They can't do what they want. They have to come before this Board, and if they do, I think as Mr. Morley has pointed out, we're really required to tell these people that they can't put something in, and it must be removed until it has a professional evaluation by either a licensed Surveyor that they hire who presents to this Board or through the County Surveyor's Office as our technical representative. So they can't do it unless they go through those steps."

Commissioner Hunter: "If they don't do that, Commissioner Borries, can we have the legal clout to make them take it out? This question has been brought up before during my four (4) years, and basically there were some question as to whether after the fact we could do it."

Commissioner Borries: "I think we can. Unless I can get our County Attorney, Alan Kissinger here to give me some direction otherwise, but that's the whole purpose of these meetings, and I understand we are going to hear from other folks tonight. These are very difficult situations in relation to this whole drainage situation, as you well know. But, to say to a resident, in something that has already been plotted, and is verified as a Drainage Easement, "Structures cannot be placed in there if it has been prohibited on the plat as it was recorded." If they do that, I think we have legal grounds to ask them to remove that until this Board and the Surveyors Office grant approval; and so that's what's being done in this situation."

Alan Kissinger: "I think, Mr. Hunter, where we might run into a problem is if someone did put the drain or the pipe in and it did meet all the necessary engineering requirements, and it would drain appropriately, then if we tried to get them to remove it perhaps we would not be successful; but under any other circumstances I feel that certainly the law would be with us, and we would be successful in having them remove the drain."

Commissioner Hunter: "We had Old Petersburg Place where they simply installed it and it was undersized, we didn't get the job done; and to this day as far as I know it is still in place."

Commissioner Borries: "I think there should be either a Homeowner's Association, or joining property owners who could petition this Board to take some action, and the action that this Board would have to take would be to inform those people to remove it. If they do not, we've got to go back to our attorney again there, but I don't know if there is a system of fines, or what we do at that point."

Alan Kissinger: "Basically, we could file an action for declaratory judgement of what they're required to do under the law. Then if they don't follow the law they're in a position to perhaps being found in contempt in court. We would probably get their attention long before that occurred."

Commissioner Borries: "Okay."

Jim Morley: "I think your proposed Ordinance that your going to take up later in this meeting, I think part of that's addressed in that, and perhaps that's one of the areas you'll want to make sure says just exactly what you want it to do. That is one area that needs to have critical legal review to determine that you do have those rights."

Commissioner Hunter: "I'll go along with all the stipulations that you've placed on it. That it go through SCS, and Surveyors Office. That you all be on sight, or somebody from the County Engineers Office at the time of the installation."

Commissioner Borries: "Yes I think that's critical Mr. Morley. When he starts this, he has to inform the office within a reasonable time here so that they can inspect this."

Jim Morley: "I agree, and file the information to the SCS Office too."

Commissioner Borries: "Yes."

Jim Morley: "That's fine, I agree."

Motion made by Commissioner Hunter and seconded by Commissioner Borries. So ordered.

**RE: APPROVAL OF NEW DRAINAGE ORDINANCE**

Commissioner Borries: "This Board had indicated earlier that the New Drainage Ordinance would be on the agenda for September, and it is. At this point Mr. Jeffers would you want to highlight any aspects of this that we need to be aware of at this point? Otherwise I guess we're close to winding this process down."

Bill Jeffers: "After what has just been said on the preceding issue, I think the only thing that maybe missing from the Ordinance would be a clause that would require that printed on every plat, recorded plat, would be a statement that would somehow reflect that after a storm sewer system is constructed in accordance with approved Drainage Plan, no alterations or additions including pipes, fences, fill, cut, this that or the other, would be installed in a Drainage Easement without the approval by the Drainage Board of a subsequent plan revision brought to you. Some brief statement on the plat. Now I know there's problems and I know there is going to be a problem tonight. Where your 1986 Ordinance requires certain things be printed on the plat, and they were not printed on the plat of

Willow Creek Subdivision. So, it's not your fault, you required it. Then those persons who subsequently reviewed the trail that a primary plat follows on it's way to becoming a recorded plat, should be responsible to see to it that that information is included on those plats. That still doesn't cure the problem because a lot of folks that go out and build homes or buy homes don't ever see the recorded plat, they just see the land and the deed and the restrictions. We can only do what we can do."

Commissioner Borries: "What will this New Ordinance say about this issue that we're discussing?"

Bill Jeffers: "First of all it covers major Subdivisions, minor Subdivisions that are commercial industrial, residential parcels, commercial and industrial parcels, certain sizes and other projects.

On page (11) there are Conditions Of Drainage Plan Approval that the applicant must meet, and you have been through all that. The Plan "B" formulated and presented by civil engineer, or land surveyor engaged in storm water drainage design, and registered to practice in the State of Indiana. That is one of the things you have had problems with before. Then after he submits his plan: No changes, or modifications can be made without approval of the Board, no major changes."

Commissioner Borries: "So it is in there?"

Bill Jeffers: "Right. They have final inspection enforcement of a Drainage Plan: The Board may deny, withdraw or suspend approval of the Drainage Plan, and by doing that you're denying them the ability to go forward with any future permits, because if you withdraw or suspend approval of the Drainage Plan, they can't get a building permit, if you notify the Building Commissioner that you've done so. If the requirements of this Ordinance are not met in full, if all the terms and conditions of approval of the Drainage Plan, or Street Plans, or any terms are violated. That any submission contains a false statement or misrepresentation, which does happen. That any part of the Drainage Plan, or Street Plan is not executed in good faith, or in accordance with the various plans approved by the Board, or any project is undertaken without an approved final Drainage Plan, that does happen. That any alterations or modifications is made prior to the completion of the project which is not documented to or authorized by the Board or their appointed representatives in accordance with the requirements. The only thing this doesn't do with regard to what Mr. Morley just presented is that, after the developer is finished, and homes are being built. The only thing that is addressed in here about that, is that if the alteration, or addition or whatever they stick in the Drainage Easement, if it adversely affects the drainage, you have the right to go in there and order them to remove it.

First of all if during construction basically...(611.00 on page 13)...if during construction your agents that you send out in the field to make inspections and such, notice that a project is not being completed in accordance with the approved plan, you can levy a fine of a one hundred dollars (\$100.00) per day, per violation against the party that's determined to have violated the terms and conditions of plan approval or against the party determine to have caused the condition of the Drainage system which is not in accordance with all the requirements of this Ordinance. If you choose not to do that, you could correct the violation by contractual services. In other words you could hire someone to go onto the property and correct the deficiency. All these require notice. That requires a ninety (90) day notice. The fine requires a thirty

(30) day notice. It gives them thirty (30) days to do something before you fine them. Gives them ninety (90) days to do something before you go in on their property. If you do that, and they don't pay the cost of the contractual work you can apply a tax lien against the property. Then any money that is collected either from fines, or from tax liens goes into the fund that's used for perpetual care of the Subdivisions that have a problem, either a defect that occurs years later, or this contractual work you have to go in and do. It also gives the Board and the Commissioners the ability to act together, so if you don't have time for the Drainage Board to wait thirty (30) days for their meeting and your engineer comes in and tells you in a Commissioners meeting that there's a problem, you can act as the Commissioners immediately, because you did approve the street plans. It prevents the Area Plan Commission from issuing a site improvement permit until the Final Drainage Plan is approved. It prohibits the Building Commissioner from issuing a Building Permit until the Final Drainage Plan is approved and until all Storm Drainage facilities are constructed. Now, that is what you are going to find tonight with Willow Creek, is that all the Final Drainage Storm facilities were not in place and they were already building homes. As a matter of fact, I heard they were building homes before they ever had sewers. This would make it mandatory to have all the Storm Drainage facilities in place, and the Erosion Control in place before they start building homes.

However on page (15) underneath that, large projects may be divided into phases so that they can build homes on phase I while they're still working on the Streets and Drainage in Phase II. I mean you can understand the need for that. So you are allowing them to break it down into Phases. So it doesn't cause too much of a hardship to go into a place that has a one hundred and thirty six (136) Lots, and build everything all at once before they ever build a home. They can do it in Phases. There's more in there, but that's basically it. This is ready to go except for a few more comments. I am asking for the lawyers blessing. I still need your counselors comments on what I have done here, because I don't know if you're empowered to pass this strong of a thing. This is what the Homebuilders asked you to do. Take out all that stuff about jerking permits, and all the other things we have had in there before, and just put a fine in there. Well I don't think a fine always works, I think that sometimes you have to go on a persons land and correct the problem. I just want to make sure that I haven't superseded your powers, or your wishes here in relationship to what your counselor would say. I don't know how long that takes to read through that and research it, but you still have two (2) weeks before this comes before the Commissioners October 10, 1994 I believe."

Commissioner Hunter: "Bill if you could be specific in reference to what you want me to review. I cannot, and I don't have any intention of reviewing the entire document. I don't have any expertise in that area. Tell me what you want reviewed and I will review it."

Bill Jeffers: "Can I highlight that and bring it to your office tomorrow?"

Commissioner Hunter: "Yes."

Bill Jeffers: "Taking something out of somewhere or out of thin air and putting it in here, I want to make sure we're not overstepping our bounds."

Commissioner Hunter: "I understand."

Bill Jeffers: "The other thing I would like to see that is not in here, and I do not know how to get it in here, is to incorporate all those existing monies that you've collected since 1986, at fifty (\$.50) cents a linear foot, to take that from where it is now at the Auditors Office, and put it into the Fund that we are creating with this.

On page (77), we are creating two (2) Funds. I incorporated your 1986 Ordinance into this Ordinance, starting on page (74). Basically that is your 1986 Ordinance starting on page (74) with some very minor rewording where you can have a Homeowners' Association, which I now call a Lot Owners' Association, because we are looking at things that don't have homes on them. We're looking at Commercial Lots if they want to get in on it. Then a Repair Fund that was fifty (\$.50) cent a linear foot is Plan "B". It shows what should be printed on the plats which is basically the same thing that you have always required since 1986. Then on page (77), that the County will hold Two (2) Funds. One of them is called the Plan "B" Repair Account. We have raised it to Two Dollars (\$2.00) a linear foot and eliminated the shoreline of detention basins. I think Two Dollars (\$2.00) a linear foot per pipe will cover everything in the Subdivision, and that goes in the Plan "B" Repair Account to repair failures in the pipe structures, and the spillway structures.

Account Two (2) is the General Storm Drainage Account, that's for all those Subdivisions who are not submitting two (\$2.00) dollars a linear foot. They choose to have a Homeowners' Association. All the money from fines, tax liens and etc., interest payments and penalties generated by violations of the terms of this Ordinance from all properties not using Plan "B" will go into that account. Then if we have to go in on a Subdivision like Willow Creek would have been, where they don't have Plan "B", we would have at least some small amount of money to go in there and make a correction. It says that the disbursements of those funds shall be in accordance with State Statutes on bidding procedures."

Commissioner Borries: "If this Ordinance is approved eventually and it will be, we have continued to modify as discussion and input occurs, would this Ordinance then at that point provide for the moving of those Funds? This in affect would be "The" Ordinance that cancels out the New Ordinance."

Bill Jeffers: "Could I just put back here what I need to know from the lawyer in just that regard alone?"

Commissioner Borries: "Yes, you need to get those comments to Alan Kissinger."

Bill Jeffers: "This Ordinance repeals and incorporates, and replaces a certain amended Subdivision Drainage Ordinance adopted by the Board of County Commissioners, on November 24, 1986 and again on December 1, 1986. Then add something that says we are going to take that money from that Ordinance and put it into this one? Then somehow to also say that therefore those Subdivisions that have come in under the Ordinance since 1986, wouldn't be totally grandfathered, we could still go on in some limited capacity and help them out by using those funds to correct things we find on those Subdivisions. That those Subdivisions that complied with the 1986 Ordinance only. That's the only thing I have had a problem with there.

Other than that the only thing that's not found in this stapled copy is again Mr. Bill Smith from PVC Plastics and his Assistant, Mr. Jeff Eckels have uncovered some updated things from Indianapolis that is a slight bit better than what I had included in here from the Indianapolis Publication of a few

years ago. All I am going to do is substitute these sheets right here for a few of the sheets in the back of this Ordinance, because it includes some greater detail on how to wrap pipe joints, and how to protect from infiltration of the pipe joints by surface water. Mr. Smith gave these to me tonight because Mr. Eckels just discovered that they should be in here and they weren't. They are self explanatory. What I will do then is get all that information over to Mr. Kissinger and I will incorporate this information that Mr. Smith brought to us tonight. I will print a booklet, and I will bring it to you on October 10, 1994. It will be what you approved tonight in a book form that you can take forward through your hearing."

Commissioner Borries: "Are you going to add the item that we discussed, or ask our Attorney, Mr. Kissinger to help on the item here that we talked about to get the notification on the plat?"

Bill Jeffers: "Yes. I never said specifically that that should be on the plat."

Commissioner Borries: "Okay, but you are going to include that?"

Bill Jeffers: "Yes. I think it should be after what I just saw here from Mr. Morley."

Alan Kissinger: " Bill in reference to the Funds that were established, if you could bring copies of the Ordinances that established those funds, so we can use them for reference."

Bill Jeffers: "I have copies of them and the reason I referred to them as a certain Ordinance, I never could find the name or number of that Ordinance."

Alan Kissinger: "That's not unusual at all."

Commissioner Borries: "Alright...so with those comments and with rather exhaustive process here that we've used to get this Ordinance to this state, to include the comments of all those who have expressed concerns or suggestions, I am going to ask for anyone else, and then I would like to ask Bill Jeffers to review the time line so we know right where we are here on this thing. Then we're going to leave this matter for tonight."

Bill Jeffers: "Sure, I think we can have it all ready to go on November 10, 1994."

Commissioner Borries: "Okay. Is there anyone else in the audience at this point who wishes to speak regarding the Ordinance with the additions of the points here we have discussed this evening?"

Les Shively: "My name is Les Shively, representing the plastics manufacturers and suppliers who have been involved on this Ordinance since February of this year. As you can tell of Mr. Jeffers comments, they played an active roll in trying to develop an Ordinance that not only will be progressive and preventive at the same token will allow this community to encourage or at least provide for the use of the material...plastics that is a very important part of the industrial base of this community, if not the industrial heritage of this community. This brief involvement on this process, Mr. Smith , Mr. Eckels and others have worked a lot more detail than I have, but it has been a pleasant experience. Mr. Jeffers as you can tell how detailed he was this evening. He is most conscientious, he has been very very

patient, worked with us and spent a lot time on this. Congress may not pass the Health Care Plan, but the County Commissioners look like their going to get a Drainage Ordinance together that's going to shore up all the loop holes and make you all the final defining point for Drainage monitoring this community. I think it's a real credit to the Commissioners and to Mr. Jeffers. Thank you."

Commissioner Borries: "Thank you Mr. Shively. Are there other persons who wish to speak?"

Dan Swidron: "Is this Ordinance going to be passed on the 10th of October or is this going to be reviewed again?"

Commissioner Borries: "We're going to pass this Ordinance. We have to advertise. What we're going to consider on the 10th of October is it, with the comments that we have made. We have been doing this since February. We started as you would I guess in any Democratic society here, with a small "d", with a document; and people have continually updated and provided us with things. So we are at a point here, so unless there are other comments or other concerns here that we can address tonight (and we do keep finding things), but we are at a point here where we are going to make a decision on October 10th."

Dan Swidron: "Will this be an open forum for anyone to attend?"

Commissioner Borries: "Sure."

(Inaudible)

Commissioner Borries: "Bill your going to get highlighted points to Mr. Kissinger? You are also adding the item on the plat, and that's about it, isn't it?"

Bill Jeffers: "Yes sir."

Commissioner Borries: "We're adding the new information regarding the plastic pipe."

Bill Jeffers: "It's actually all pipe. Plastic, corrugated and different things that they discovered, or had been updated in Indianapolis, we think are better than what we had before."

Bill Jeffers: "Just a very brief comment in regard to what you just spoke about. What we attempted to do and why it took so long is that several of the versions that we produced would of been workable Ordinances, but as we reviewed them we found that possibly every month or two we would be coming in and asking for amendments to fine tune it. You directed us to go ahead and get it as fine tuned as possible before you adopted. I'm sure that we will find things in here year to year that have to be modified."

(Inaudible)

Commissioner Borries: "Any further comments then by any persons in the audience regarding the Ordinance establishing the Storm Water Drainage Control? Okay, thank you again for your input this evening and we will proceed forward. We're going to deal with it in the Commissioners Meeting October 10, 1994 and expect final approval then in November."

**RE: EAGLE SLOUGH ASSESSMENTS BY OWNERSHIP**

Bill Jeffers: "This single sheet is just a notice that you declared Eagle Slough to be a Urban Drain, and that the assessments will be collected in accordance with the State

Statue. Then informational verbiage down here, what the 1994 rate was, and what the 1995 rate will be. What the minimum billings are. Then some blanks that we're going to fill in. This goes out to every land owner on this list. We are notifying them what their assessment was before you took this action, which like Paul Neville, number one there on the list, would be five dollars (\$5.00) and what his 1995 assessment will be after your action would be is nine dollars (\$9.00) Then a phone number for them to call, and some names incase they have questions. The mailing label includes their tax code number, etc. just like the Treasurer's Department sends out. The stapled sheets is a list of each of your property owners and their mailing address. The first column of numbers is the acres that's being billed. Then a "U" for Urban, or "R" for Rural designation. Nine dollars (\$9.00) for "U" Urban, sixty cents (\$.60) for "R" Rural. Then what the 1994 Billing was, and what the 1995 Billing is. So basically what you have here is the information that will appear on here on the mailing. If you will look down through here what we did was adjusted it down to sixty cents (\$.60) for "R" Rural instead of eighty cents (\$.80), and down from twelve dollars (\$12.00) for "U" Urban to nine dollars (\$9.00) so that only a very few people have an increased assessment. I did this to cause the least amount of disturbance out in the community. There is only five (5) or six (6) of them that actually increased. Mr. Neville increased four dollars (\$4.00), the rest of them are like thirteen to eighteen to fifty-eight cents. Then one fellow Ron Beard goes up from five dollars (\$5.00) to twelve dollars and sixty-nine cents (\$12.69). Then all these huge pieces of property, the eighty acres (80), forty acres (40), etc., all go down. Then on the very last page, the bulk of the money will be coming from Indiana Highway Commission, City of Evansville, for all that property inside the city limits. Vanderburgh County for your road right-of-ways. The Levee Authority for its Levee. So the net increase is the difference between the new total of thirty two thousand, six hundred eighty four dollars and fifty two cents (\$32,684.52), and the old collection five thousand nine hundred eighty two dollars and twenty eight Cents (\$5,982.28). We feel that we can do enough with that thirty two thousand, six hundred eighty four dollars and fifty two cents (\$32,684.52) to get the job done. We thought that since most of these people who are going to suffer an increase on their home places, will realize a savings on their farm ground. We think it will balance out. We are asking you to approve this rate of nine dollars (\$9.00) "U" Urban, sixty cents (\$.60) "R" Rural, and instruct us to print on here, "This Is Not A Bill" and mail this to each of those homeowners notifying that they will receive a bill in 1995 in that amount. We feel that will comply with the statute that requires you to notify each land owner of the affect of your actions on them."

Commissioner Borries: "Okay."

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve this notice of Urban Drain known as Eagle Slough. So Ordered.

Motion made by Commissioner Tuley and seconded by Commissioner Hunter instructing the Surveyor to proceed with plans to repair a portion of Eagle Slough near where what's known as Water Works Road. So ordered.

Commissioner Borries: "Subdivision Drainage Plans is not going to be heard this evening."

**RE: REQUEST PAYMENT FOR BLUE CLAIMS**

The Following Blue Claims were submitted as follows:

		<b>TOTAL</b>
SHIDELER SPRAY SERVICE #1851 EASTSIDE URBAN SOUTH HALF #234-006 94-SP-15-15	15,195 LF @ \$.063=\$2,452.97 PREV. PMT. 85%....\$2,085.02 PAY RETAINAGE 15%....\$367.95	<b>367.95</b>
SHIDELER SPRAY SERVICE #1851 SONNTAG STEVENS #234-038 94-SP-38-15	10,050 LF @ \$.063=\$633.15 PREV. PMT. 85%....\$538.18 PAY RETAINAGE 15%....\$94.97	<b>94.97</b>
SHIDELER SPRAY SERVICE #1851 HARPER #234-017 94-SP-17-15	2,950 LF @ \$.063=\$185.85 PREV. PMT. 85%....\$157.97 PAY RETAINAGE 15%....\$27.88	<b>27.88</b>
SHIDELER SPRAY SERVICE #1851 EASTSIDE URBAN N½ #234-015 94-SP-15-15	21,127 LF @ \$.063=\$1,331.00 PREV. PMT. 85%....\$1,131.35 PAY RETAINAGE 15%....\$199.65	<b>199.65</b>
TERRY R JOHNSON #1052 HARPER #234-017 94-SM-17-15	2,950 LF @ \$.3656=\$1,078.52 PREV. PMT. 85%....\$916.74 PAY RETAINAGE 15%....\$161.78	<b>161.78</b>
TERRY R JOHNSON #1052 SONNTAG STEVENS #234-038 94-SM-38-15	1,730 LF @ \$.3184=\$550.83 PREV. PMT. 85%....\$468.21 PAY RETAINAGE 15%....\$82.62	<b>82.62</b>
TERRY R JOHNSON #1052 EASTSIDE URBAN S½ #234-015 94-SM-15-15	22,724 LF @ \$.4395=\$9,987.20 PREV. PMT. 85%....\$8,489.12 PAY RETAINAGE 15%....\$1,498.08	<b>1,498.08</b>
TERRY R JOHNSON #1052 EASTSIDE URBAN S½ #234-015 94-FM-15-85	38,936 LF @ \$.4395=\$17,112.37 PAY. PMT. 85%....\$14,545.52 RETAINAGE 15%....\$2,566.85	<b>14,545.52</b>
TERRY R JOHNSON #1052 HARPER #234-017 94-FM-17-85	2,950 LF @ \$.03656=\$1,078.52 PAY PMT. 85%....\$916.74 RETAINAGE 15%....\$161.78	<b>916.74</b>
TERRY R JOHNSON #1052 KOLB #234-025 94-FM-25-85	5,593 LF @ \$.31845=\$1,781.09 PAY PMT. 85%....\$1,513.93 RETAINAGE 15%....\$267.16	<b>1,513.93</b>
TERRY R JOHNSON #1052 AIKEN #234-006 94-FM-06-85	5,025 LF @ \$.4319=\$2,170.30 PAY PMT. 85%....\$1,844.76 RETAINAGE 15%....\$325.54	<b>1,844.76</b>
<b>TOTAL</b>		<b>21,253.88</b>

Motion made to approve by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

**RE: NEW BUSINESS**

**A. Vogel Road Water Line Crossing Ditch:**

Bill Jeffers: "I have talked with the Water Works on the problem on Vogel Road. I won't have to talk to you about it until it's not done."

**D. Deer Field Subdivision Reroute Ditch:**

Bill Jeffers: "Deer Field, I've talked with the Developer, Mr. Calvin Dentino, and with his Engineer at Bernardin Lochmueller. We are going to try to handle that on the telephone."

**C. Harper Ditch Additional Maintenance:**

Bill Jeffers: "What we have there is about twenty or thirty shopping carts and some wooden pallets in the ditch. They are collecting a lot of debris and clogging the ditch up. We have complaints from Normandy Arms and Carriage House Apartments. I called Ventures, they agreed to send some people out and get theirs, and I'm calling Wal-Mart in the morning. I hope they agree to do the same thing. We are going to try get them to take as much out as we can possibly get out before we send our contractor in. I am asking you to authorize us to pay no more than seventy five dollars (\$75.00) an hour and hopefully less to send a three (3) man crew out on an emergency contract to remove those before the ditch starts running full of water again. We will if you do that, send an inspector to be on site during the entire time that the work is being accomplished to count the hours and make sure that it is done in a quick and orderly way. We plan to park the shopping carts on the property from which they came. If we have to haul anything to the dump, I guess we will need a dump fee in addition to the seventy five dollars (\$75.00) an hour. We have the available funds in the Harper Ditch account and we will not spend them unless it is absolutely necessary."

Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**B. Big Creek Drainage Assoc. Requested Additional Maintenance:**

Bill Jeffers: "Big Creek Drainage Association is here represented by Dave Ellison. First thing of the two items is if you will remember several months back you approved two thousand dollars (\$2,000.00) on Maidlow Ditch to straighten out some curves and apply tire mats made of used automobile tires in some problem areas that experience a lot of erosion. Once we got working on that with the two thousand dollars (\$2,000.00) matching funds for their two thousand dollars (\$2,000.00) they were putting up...farmers. Some of the farmers liked it so well, they couldn't visualize it when we were trying to describe it, but they liked what they saw so well in the first area, that they completed two more areas and even removed some walnut trees, and some other trees that we have tried for years, and years, and years to get removed without any success. We have been threatened with law suits and so forth if we touched those trees. The land owner liked it so well he voluntarily removed the tree so that he could get involved in this. Here is the Soil Conservation Services guidelines and brochure on how to do the tire mats. Here are several pictures I've selected four (4) of them that show lowering the tire mats into place. Setting the bottom down at the toe of the slope, there is a man down there doing that. Getting them all arranged properly and beginning to cover them up with dirt and then kind of a half way finished picture about half this tire mat is covered up with dirt. There are other pictures here available if you would like to see them, but those four kind of show what went on.

The final bill was in excess of seventy four hundred dollars (\$7,400.00) because they added on those two (2) areas. We have available funds in the Maidlow Ditch account to share that cost. We are asking at this time that you allow us to pay a claim of another fifteen hundred dollars (\$1,500.00) in addition to the two thousand dollars (\$2,000.00) you originally appropriated to split the cost with Big Creek Drainage Association for all the work that was accomplished. It has been inspected, it looks real good and all the property owners are very happy with it. Dave Ellison here could not acquire contractual labor on this from the work release folks.

He himself along with several other farmers personally just went out there and did this work, this manual labor."

Commissioner Hunter: "Why couldn't we use them?"

Bill Jeffers: "It got into insurance problems and someone would have to pay for the liability insurance on the workers. Mr. Ellison can explain it to you. It just got so bureaucratic that he just said the heck with it and went out and got a bunch of guys in the neighborhood and they did the work. So we feel like they did a heck of a job and we would like to help them at least pay for half of it. It is in Maidlow Ditch, regulated drain."

Motion made to approve by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

**RE: REQUEST LETTER FROM JOHN J. BITTNER**

Bill Jeffers: "Also in the agenda with Big Creek Drainage Association, Inc. is a letter from John J. Bittner. Who was asking for some additional sediment removal from the bottom of the ditch, and bank repair along Pond flat Main near its junction with Upper Buente Creek, and then a very similar endeavor on Barr Creek through the property of Homer Buente. He gives specifics here. Big Creek Drain Association, Inc. is our prime contractor and their naming Blankenberger Bros. as the subcontractor who does most of the work for them up there. He names the land owners, George Seib, Homer Buente, etc., and gives the locations. We have inspected the site. It is in need of a silt bar removal from the bottom of the ditch, and it is in need of bank repair as he describes it here. We recommend that you allow them to do it. This does not require any money from the County Funds. Their doing it with money from Big Creek Funds. We will monitor it from time to time and inspect the finished product and make sure it complies with your various requirements."

Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**E. Willow Creek Subdivision:**

Bill Jeffers: "That brings us to Willow Creek Subdivision. Dan Swidron will fill you in on the Willow Creek Subdivision."

Dan Swidron: "Be patient with us, some of us have been living with these problems for a year and a half. I don't know if you have the report from Bill Jeffers. This will go along with some of those pictures. I can explain some of those pictures and the rest of us have some more pictures. What we are requesting here is that the Board review our problems, and take some kind of a legal action to correct the conditions that we have you to enforce the developer or the builders of the homes that caused the drainage problem. On those pictures that you have, one (1) through four (4). If you see that trailer that is on there one (1) through four (4) it shows how the land was leveled. It was nice and even. Five (5) through eight (8) you'll see how a developer, Bruce Hatfield brought in loads of dirt to fill the swale up that originally suppose to go to the westside. He filled it up, and I also have a letter here from another neighbor, he could not make it tonight. This is his request. He is in Lot twenty-one (21) and I am in Lot twelve (12) and the other home that you see where the piles of dirt in pictures five (5) through eight (8) is Lot twenty two (22). Then Larry Dietch, the builder of Lot twenty-one (21) came along and he built some kind of swale which he couldn't get over the swale in Lot twenty-two (22). Now he has twenty (20) feet less of a yard, and in that letter

that he's got there, he's requesting that the Board take action to build the swale the way it should be going to the westside, instead of going down to my property and going down to the eastside. He also states in there that he moved in in March. If you read some of those phone contacts and there's an asterisk (\*) by the ones that we talked about Drainage, to Bruce Hatfield, Margaret Harp, Keith Emge, Larry Dietsch, everybody has been involved since 1992, except Larry Dietsch he just started in February. We have no recourse, I have no recourse from anyone of those individuals. Bruce Hatfield keeps pushing off to the homeowners that they should correct the condition that he built some kind of a swale there, but you can see by those pictures there was no swale. He never put the swale like it should have been. When he did come out he built the swale that you can see the obstruction of the Drainage. So at this point there is pictures of the fence. My fence used to sit two (2) inches above the ground. Now it is four (4) inches below the ground. It's rotting at the bottom. You can see the brick that's imbedded, now that brick is sitting on top of rocks even, and landscape timbers, the last pictures you see there you'll see water crossing the driveway. That driveway already collapsed back in December of 1992. Bruce Hatfield at that time promised...and it's in my contract...that he would rectify the water, the drainage problems and put in a new driveway. Also, Bill Higgins was out at the site with Bill Jeffers, he looked at the street right directly in front of my house which is now collapsing from the water drainage. I have put drain tile all around my whole house. I've put rubber guards up against my fence so the water could hit the rubber and go into a drain tile. I think Bruce Hatfield should be motivated or forced, whatever you want to call it to correct the conditions that you see there. We have several other problems in the community and he keeps saying that we are the Homeowners', we are not a Homeowners' Association. We don't know when we are going to become a Homeowners' Association. He won't let us know. Even in the covenants if your taken out of the context, we should maintain the swale and the tiles, pipes and that's how Bill Jeffers wrote it. Maintain just means that we should cut the grass and take care of it and make sure we don't obstruct it. The Drainage never has been put in proper order according to the plat that he even submitted, when he started the development. Now he's changing it, if he did you could see that there's eight (8) feet of extra dirt piled up. I'm sure that's not on their plat that he can do that."

Commissioner Borries: "Would you give your name again now that your up at the microphone?"

Dan Swidron: "Dan Swidron, SWIDRON. We have five (5) other gentlemen here from Willow Creek that have some problems or just supporting the community. I have a video tape of five (5) videos of how the water actually runs and hits the fence. He can't be motivated, and Keith Emge even said that he would try, but he can't, he has no real supervision over Bruce Hatfield. There was no Erosion Plan that was put in affect according to County Ordinances. This has gone on for a year and a half, no Erosion Plan, there's no bales of straw, nothing."

Commissioner Hunter: "Bill, do you remember when the Drainage Board approved this plan? Do you have a date on that?"

Bill Jeffers: "Yes. The first plan which was basically a conceptual preliminary plan was submitted September 24, 1990."

Dan Swidron: "Just let me say that the contact list that you see here, also has other problems that are with the house. The one with the asterisk (\*) has water drainage."

Commissioner Hunter: "My next question Bill would be, are we saying that Mr. Hatfield has not lived up to what this Board approved in 1990, and then reapproved in January 22, 1992?"

Bill Jeffers: "Unfortunately the plan on file that I have looked at, that was approved in 1990, did not show any great detail for Lot 21, Lot 22, Lot 11 and Lot 12, which are the four (4) lots that are effected by this particular complaint. As a matter of fact the pipe that runs between Lot 10 and Lot 11 runs down those lot lines, was not even shown on the plan. From looking at these pictures I'm not really sure how much water was suppose to go into that fifteen (15) inch pipe that is there now. How much of the water from particularly from Lot 21. It's pretty obvious that most of the water from Lot 22 would of gone there, but I'm not sure that all the water from Lot 21 would have, if the ground were left more natural."

Dan Swidron: "The first discussion with Bruce Hatfield he said, the water with flowed to the west, because that's where the drain stands."

Bill Jeffers: "That's true. The drain is on the west, but you can see there is a little peak of ground right here that may have prevented all of it from getting over there."

Dan Swidron: "They have the first four (4) pictures of virgin ground from my neighbor. He gave the first four (4) pictures. I don't have those, because they weren't double prints. Virgin grounds shows that it was pretty well level, so there shouldn't have been any water at all. Now my driveway goes in like a (V) and he said he would rectify that when he built a new one. I said, why don't you just put a culvert underneath, and he wouldn't do that either. He said no, the water is going to go where it should, it should drain out to the west. I'll take care of that. That was 1992. I still live with the condition. I sealed the driveway three (3) times already. I don't know how much dirt, how much seed I've put on the lawn. It's all washed away. He hasn't done anything other than piled more dirt on the lots behind me. Lot 21, if you read the letter from Mr. Quddus, he wants to put the fence, if he puts up a fence, he's going to be five (5) feet below. He's going to be standing over his six (6) foot fence, because he's that high but yet his lot line is twenty (20) feet behind where that swales at. That's the last picture on the page."

Commissioner Tuley: "Is that out by USI?"

Dan Swidron: "Right."

Commissioner Borries: "What does he want to do?"

Dan Swidron: "Well his lot line ends way over here and he's got the swale that goes right in front. If he puts his fence right here where his lot line's at, he will be standing over his fence, because he is five (5) feet above the lot line."

Commissioner Borries: "Let me just ask you here as we start this Dan. Have you all retained an attorney in this matter yet?"

Dan Swidron: "No. We thought that the County should interfere on this because the plat was submitted to the County. He is not living up to what he stated in the plat or in his covenants. Now he's restricting the flow of water by himself just like piling dirt in the swale area."

Commissioner Borries: "We can do that, but I think when you get into damages that you may have incurred on your driveway

and others, I think you may have to seek some legal advice here that is beyond what this Board can do."

Dan Swidron: "At this point I am just looking for the correcting of the problem as it is now. The damages, it's already there."

Commissioner Tuley: "Is there any building going on out there? There is continuing building going on right now?"

Dan Swidron: "Oh yeah."

Commissioner Hunter: "Who is doing the building, Bruce Hatfield?"

Dan Swidron: "Most of the homes."

Commissioner Hunter: "So he has houses under construction there now?"

Dan Swidron: "Yes, and three (3) streets that hasn't been taken over by County, you won't even accept them yet because their not built up to spec. We have had so many problems in that area that the County won't accept, Water Works won't accept the pump house, because it's not up to spec. Now Bruce Hatfield made a statement that maybe he should move out of town. Well he just took another eighteen (18) month grant from the City or the County. I don't think he can move out."

Commissioner Borries: "Who would move out? Bruce Hatfield?"

Dan Swidron: "Bruce Hatfield, and leave it to the Homeowners'. We do not want to accept the development as it is for sure. I mean he can't even rectify the problems that we have personally, he's not going to rectify the problems that the community in it all has. He just ignores all the attempts to even talk to the man."

Commissioner Borries: "I would have to seek some legal advice on this. We have done this before. This Board denied certain building permits to be issued in the future. Depending upon what must be followed in a plan of action. Bill you've been there and observed, you have some notes and some drawings here. Could we ask you to write up a plan of what you see, a plan of action to remedy the situation? Specify that as per what his Drainage Plan was when he submitted it."

Bill Jeffers: "You have a lack of a Drainage Plan, not a Drainage Plan."

Commissioner Borries: "What do you see then as recourse of what the Board can do?"

Bill Jeffers: "One of the biggest problems I see out there, and I see it in other Subdivisions in Vanderburgh County, and really I see it at other houses in Willow Creek more so than at Dan's house, is that there is an Ordinance requirement in the Subdivision Ordinance, that all yards shall be graded away from the foundation with a two (2%) percent slope away from the foundation. That's to prevent water from coming up against the foundation or infiltrate in the crawl space. There are houses in Willow Creek Subdivision that are more poorly graded than Dan's, in that respect. In the respect that it is not graded away from the foundation in such a way to prevent water from infiltrating the crawl space."

Commissioner Hunter: "These are houses that were built by the developer in question here?"

Bill Jeffers: "Since 1990. I assume that some of them were built by Mr. Hatfield. But, I also see this in other Subdivisions in the County. Mr. Morley and I were discussing this down at the office before the meeting, he sees this frequently. This is something that the Building Commissioner should enforce on every house built in Vanderburgh County. That the dirt in the yard slope away from the foundation at a minimum two (2%) percent as required by the Building Code. There is a guy down here in Copperfield below Deerfield. This will come up, that they actually put an opening at the back side of their crawl space and another opening at the front of their house, so the water can run through it. Now that is TOTALLY UNACCEPTABLE."

Commissioner Tuley: "Are all of these folks here on Willow Creek? All of you had homes built by Bruce Hatfield?"

Bill Jeffers: "Some other builders are operating there as well."

Dave Halbig: "My name is Dave Halbig, 9205 Marfield Court. My whole backyard is like a big funnel and it funnels from my backyard, which Bruce Hatfield is building two (2) houses behind me. All his loose dirt is just sediment building up in my backyard, and it drains into my crawl space door. He busted two (2) holes in my foundation block and installed perforated tile so they can run out into the street. I myself had to alter it, because he was not completely done with my house when I purchased it. He graded my property and then we had some rain and I figured it out. Then there it was, the big problem. He had probably seven (7) or eight (8) inches of water under my crawl space. It drained for like probably three (3) or four (4) days. I had to alter my whole backyard myself because I knew Bruce Hatfield, once I purchased my house, that he was gone. Anyway my backyard is like a funnel and I had to dig ditches around my house. I think that something needs to be done about it. I had so much excessive water running through my crawl space it covered over my vapor barrier. I've got probably an inch of silt mud in my crawl space. I wrote it up in the contract that he had to rectify underneath my crawl space, and he has yet to do it."

Bill Jeffers: "Did he sign the contract?"

David Halbig: "Yes he did. I had to dig a ditch around my whole property to keep everybody's mud from washing in my yard."

Dan Swidron: "I have Dave's on video tape also. I put twenty (20) tons of rock around my house, that's why you don't see the slope. This is to keep the water from coming into the crawl space. That's forty thousand (40,000) pounds. It took me all summer to do forty thousand (40,000) pounds."

Bill Jeffers: "So that's the first problem I see is that if a house is sitting on a piece of ground and it's not sloped away from the foundation, you are going to have this problem. Most likely his floor joist and flooring will buckle up, from the moisture and dry rot and etc."

(Inaudible)

Commissioner Borries: "Surely Bill, on this Drainage Plan that was accepted, it's obvious that it isn't working. We ought to be able to sight situations here that Mr. Hatfield should immediately rectify, can't we?"

Bill Jeffers: "I'm being perceived, and Dan Swidron has not said so much to his credit, but I'm being perceived probably

as back tracking after I made the visit, because yes I would agree with that statement when I first went out there that there were a lot of things that Mr. Hatfield should of done as he cut in the streets and cut in the lots, put the utilities in and graded the sites, got them ready to construct houses on there. Other developers in the County would have had all of this done and graded, but after I made those statements and observations in the presence of Dan, I learned that several people had specific contracts with Mr. Hatfield as to what he would do for them. Signed contracts and that certain restrictions and covenants had been entered into by the lot owners and Mr. Hatfield.

Specifically that each lot owner shall be responsible to see to it that it's respected builder or contractor, exercise good Erosion Control during the construction of any improvement. That the owner of the lot or the contractor shall finish grade, seed, and mulch a lot as soon as possible, etc.. Apply straw bales and this, that or the other. Thereafter a good turf shall be established and maintained. Each lot owner shall be responsible for the maintenance of the Drainage Swales and the Drain Tiles within the lot owners lot, or along the lot owners lot lines. That the easements for drainage shall be maintained continuously by the lot owner, so is not to change or obstruct the intended direction of flow of the surface water within that easement, as set forth in the plat of the Subdivision, and that upon acceptance of the deed of conveyance to any lot. Upon acceptance of the deed that any person shall be construed and conclusively deemed to be in acceptance of an affirmation of each and all of the covenant conditions, reservations, restrictions, etc. set forth in this Declaration. So after I read these things, I realized that the lot owners took upon themselves certain responsibilities, preliminary to forming a Homeowners' Association. Entered into contracts with the builder and some cases being Mr. Hatfield. That they have legal recourse through their contract to get this done. Otherwise they do accept certain responsibility for seeing to it that it is done properly. I hope that they read this before they signed it, the contract with them."

Dan Swidron: "None of us signed these covenants. Most of us got them after we moved in the house. As a matter of fact we just gave some of the covenants out here last week. People have been living here for months already."

Bill Jeffers: "For someone not to have seen these covenants before they bought that house. That's shameful, because upon acceptance of the conveyance of the deed, they agreed to abide by these covenants."

Dan Swidron: "It also says that it doesn't have to be conveyed and that's what Bruce Hatfield didn't do. He didn't convey it to everybody. Also maintaining of the swale, we maintained. We cut the grass, we keep the rocks and debris out of the swale. We don't make the swale. Bruce Hatfield is the developer and the builder. How do we see that our responsibility to make him do it? He won't."

Bill Jeffers: "You have a contract."

Dan Swidron: "But he doesn't live up to my contract."

Alan Kissinger: "Sir, You do then definitely have the choice to sue him on the contract. That may be the only way your going to get compliance."

Dan Swidron: "He is not living up to what he submitted to the County Board."

Alan Kissinger: "We may, and the County may very well have the remedy and the Commissioners may very well see fit to exercise that remedy. What you have to understand is what the Commissioners are trying to get to is if they exercise that remedy it may not solve any of your EXISTING problems. It may avoid some problems for some people in the future. In order to solve your immediate problems you may very well be in a position of having to hire legal counsel to represent you. As many of you as there are, you might be well advised to hire one to do it all, and share the expense."

(Inaudible)

Dan Swidron: "There is no way we can motivate this person to do what he should be doing. He is not living up to his own covenants. He wrote them, and we're suppose to force him live up to them."

Commissioner Borries: "Here is what we can do. We can have Mr. Jeffers put his notes into the form of letter and send them to Mr. Hatfield. We can offer specific suggestions to Mr. Hatfield on how to implement these, or whoever the developer is. We are not yet, Dan, in a position, until this other Ordinance is in affect to impose some of the things that we have discussed earlier in the meeting. We can insist that what we have in place at this time, if there are ways in which he has not followed the Ordinance, we can verify and indicate that he must do so. We are at a big disadvantage here too, because frankly most developers I think in this County, the ones that are really left from some boom periods of earlier times, try to do the right thing. We are limited by tax dollars in terms of people. We simply do not have enough people in the Surveyor's Office, or in our County Highway Office, or Engineer's Office to literally every time a house is built to have somebody on site eight (8) hours a day. We couldn't do it, because of the complexity of that. It takes all we have have sometimes to have inspector on a job like Water Works Road, before we basically have a position for one guy. So we have to confine those and of course by the public works project. We can't have them on private property watching a developer that should be doing the right thing anyway. I think if he will put those things in a letter form, this also would be documentation for you, for legal action as Mr. Kissinger points out. It will be a way in which we then can ask Mr. Hatfield to make corrections and do these things and do so immediately. We will use what power we have on this Board to do that. I don't think there will be any hesitation on this Boards part to do that. We can't at this point tell you that we're going to throw him in jail for example if he doesn't get out there and do that. You are going to have to take further steps in addition to what we do, legal steps to make him do these things. It sometimes becomes, it's a tragic almost like a, "BUYER BEWARE" in some of these situations. Buying property becomes sometimes such a complicated thing that frankly the home buyer probably doesn't get all the information that he or she needs. Apparently you are saying you didn't get, when you purchased some of this property. We will take every step we legally can to insure and make him do things that he should have done before."

Commissioner Tuley: "What we can do is have a review of the Drainage Plans that were submitted and got a approval versus the reality of what he has done. Submit a written letter form and then he will have so many days to correct it, or we will exercise whatever authority we have, which we have done in the past, to stop any further development until he does that. As far as your individual problems, it sounds like as you have been advised by Mr. Kissinger, you might want to look into hiring as a group, some attorney to represent your legal

things that we don't have any authority or control over, but collectively we should be able to get his attention and get it corrected."

Dan Swidron: "In other words, he can do anything he wants in development regardless to what he submitted to the Board?"

Commissioner Tuley: "No. What I said was, we will go back and review what he submitted and compare that to the reality of what is out there now. We can then order him to correct it and make good on those things. You all also have the responsibility through legal action to take care of your individual problems."

Commissioner Borries: "In the future that's why we talk about and to mention this New Ordinance, what is called, "As Built". He must, under the New Ordinance...MUST SUBMIT AND DO AS BUILT...if he does not, well then we're going to have a system of further action of fines in here that will insure that kind of problem doesn't happen"

Commissioner Tuley: "What we did in an other particular problem we had, we stopped any further building permits. It's amazing how quick when you tell a builder that he can't get anymore permits in the Subdivision, how quick he will come in and try to solve some of the problems he has created already, because he's not going to get anymore money if he's not building."

Commissioner Hunter: "To do that we have to go through due process. The first step is what Commissioner Borries is trying to say to you, is that we need to review what was approved, and then find that he has not lived up to what he said he would do in some form of writing. I guess the thing I am sorry about is that you all didn't come in here earlier, because it sounds like you all have been putting up with a lot of mickey mouse for a long time. Occasionally, I will get wind of problems that will increase and it comes through the SCS. You people call Daryl Rice or somebody and Mike Wathen, but there has been no official approach to this body and that's really what needs to be done. We can go through steps, but we have to go through them. Before we shut down a developer, we have to give them so many days or weeks to correct the problem. We had this several months ago and then he chose not to do anything, we shut him down and within twenty four (24) hours it was amazing how busy he got. So, but at the same time you all have some personal problems with this that we can't deal with. It looks like he has made commitments and signed contracts that he has not lived up to. Now we can't do anything about that. That is your business."

Geri Dennis: "My name is Geri Dennis, I live at 2400 Willow Creek. I have a couple of questions. First of all, we heard Mr. Jeffers speal on the codes and what can be done and all that. Will that be grandfathered? I guess that's up for your discussion?"

Alan Kissinger: "As far as enforcement procedure, any penalty procedure anything such as that, no that is what is known as a Ex Post Facto Law and we can not do that."

Geri Dennis: "My second question is, can Mr. Hatfield be forced to do this work before he turns over the development to Homeowners' Association.?"

Alan Kissinger: "It's basically a contract between you and Mr. Hatfield, and quite frankly if you sit around stewing about it and don't do anything about it, he's going to be gone before you get anything done about it."

Geri Dennis: "Okay, thank you."

Commissioner Hunter: "Another problem we have with this and that was that in Rule Five which requires Mr. Hatfield and the other developers to submit the Erosion Control Plan the only time you can stir up more than five (5) acres. I don't think it took affect until October 1, 1992 and it looks like he was before this Board in January 1992. So teeth have been put into it since this whole thing started."

Dan Swidron: "Then he should live up to of October 1992 now?"

Alan Kissinger: "No. That's what I am saying, we can't do it, because the law did not become affective until October 1, 1992. He was in front of this Board in January 1992."

Commissioner Borries: "It's a little like leaded and unleaded gasoline. We used to have a whole bunch of gas guzzlers and they changed the law and said you are going to have to go to unleaded gasoline. When they changed the law, changed the nozzles it make it harder and harder to drive around in some of those old clunkers in leaded gasoline. You couldn't go back and say, alright now you can't drive your car anymore because it drives leaded gasoline. In effect by what they did changing the law to take the new cars and move them all forward in that direction. You couldn't go back and penalize those old ones in that sense. They gradually just weeded themselves out. The same thing what we're trying to say applies to the law. We can't take the law that was passed in October 1992 and say, okay now you have to do all these things that you didn't do before. We had some weaknesses and that's why we have been working on this thing for a year to try to strengthen that. Again I would want to assure you if, and I think Mr. Jeffers, would you be able to write up something here that we can send to Mr. Hatfield?"

Bill Jeffers: "The only problem I am having again, I will repeat, that the plan that was approved showed very little detail in the lots that affect this man. There are some other areas of the Subdivision that show greater detail that are experiencing severe problems that I could write up if I inspected the entire Subdivision. I only went out and looked at four (4) lots that I was directed to look at. Over on the other side of the street where the detention basins are, they're in terrible shape and in gross violation of your Ordinance. Weeds greater than twelve (12) inches tall. Detention basin totally shut off with silt. Pumped dry to be repaired by Homeowners' and no participation by the developer. But in Dan's yard, back here behind his yard, there was very little detail given and from the pictures you can see that there was a lot of dirt brought in and the yard was built up. I'm not authorized to design Drainage Plans on behalf of Homeowners' and Developers'. That's what Mr. Easley should of done for that part of the Subdivision he designed, and what Mr. Feldbusch should do for the part of the Subdivision he designed. It's not up to the County Government to design remedies or to design Drainage Plans for developer(s) that hire private engineers to do so."

Commissioner Hunter: "It was your office that recommended in 1990 that Drainage Plan be approved. This Board does not approve Drainage Plans without a recommendation of the Surveyors Office."

Bill Jeffers: "That's correct."

Commissioner Hunter: "These people need help. There was a recommendation by somebody in 1990. I wasn't here and Commissioner Tuley wasn't here. I guess Dan Hartmann

recommended this. So the question is, how can we help these people?"

Bill Jeffers: "If I were to go about doing what you are asking me to do, and we accomplish the drainage of those four (4) lots into the pipe where we all say that possibly will work okay, and this mans fence continues to rot because the dirt is up around the bottom of his fence and his fence rots and falls over because my plan didn't include removing the dirt from underneath his fence. Who are we going to hold responsible for that?"

(Inaudible)

Commissioner Tuley: "What I don't understand is, I don't think anyone is asking to go out there and say, design this, but based on the plans that were submitted, the bottom line is that they didn't do what they said they were going to do. Is that right?"

Bill Jeffers: "Based on the review that was given it by Mr. Hartmann, I would say that his review wouldn't include these four (4) lots or the specifics there on. There is nothing that shows that fifteen (15) inch pipe down there. It doesn't show a pipe coming under McDowell Road and running through the ditch in the back of lot twenty three (23)."

Dan Swidron: "My plat does, or the plat that we have that was submitted by Bruce Hatfield shows that there is a pipe there."

Bill Jeffers: "He didn't submit it to this Board."

Dan Swidron: " Well that's what I am saying, you know."

Bill Jeffers: "Well, I need to see that. I guess what I'm getting at is I can go out there. Like I told Dan, when I was out there it would take about four (4) hours on the bobcat and we would get all this water going down that pipe. It's really a minor thing. But that is not going to keep a certain amount of water from going across your driveway. It was not anyone but your own choice to put an exposed aggregate for a driveway, stain it dark and then apply an epoxy coating to it and if dirt runs across that, it's going to stain it, you can't come back and say to us like you did out in the field, that somebody ought to do something about that for you."

Dan Swidron: "I didn't put the aggregate, Bruce Hatfield. He recommended sealing it. So where do I go from there?"

Bill Jeffers: "But, you don't come back to us on that. I am willing to help to a certain point, but your not going to be able to come back to me and say, "Well my fence rotted because that dirt was there and it rotted my fence."

Dan Swidron: " I'm looking right now to rectify the problem that exists. That is water running from the three (3) lots that comes down on my property."

Bill Jeffers: "That can be rectified. The water coming from lots up hill of this man, this man on lot twelve (12), the water coming from lots twenty one (21) and lots twenty two (22). Not three lots. Twenty one (21) and lot twenty two (22) can be directed down to that pipe. However, some amount of water will still continue down the hill from the downhill side of your neighbor in lot twenty one (21), and it will go against your fence and will cross your driveway. I personally don't want to hear about dirt stains on your driveway. I will go out and help you do that, but I am not going to want to

hear that somebody should come out and scrape off your driveway and restrain it."

Dan Swidron: "If you put an Erosion Control in, maybe I wouldn't have all the dirt. Dirt is not the problem. The problem is the water coming through my whole yard."

Bill Jeffers: "The Erosion Control is "your responsibility" according to those covenants. Clearly stated."

Dan Swidron: "How do you motivate Bruce Hatfield on his own covenants?"

Alan Kissinger: "You have got to get legal counsel."

Commissioner Borries: "That's how you motivate him. Yes it's going to cost you some money and we're very sorry about that. That's why we have courts and you do have legal recourse. You have signed things that this guy has said he would do that he has not done. You have to hold him accountable, if necessary to walk him across down here and say you didn't do these things."

Dan Swidron: "If Bill Jeffers sets the plan for him to do those two (2) homes, I won't have the water. I know I'm going to get maybe five hundred (500) square feet to a thousand (1,000) square feet."

Commissioner Borries: "We can do this. The hardest thing about this whole situation, and we're not asking for sympathy, but I have repeatedly found in all my experience on this, all this stuff. Here we are looking at a flat piece of paper, and you know water is always going to go to it's lowest place, but it's really tough, I'm telling you on a concept to look at a piece of paper and say we know what it ought to do. If it hasn't done what it says it will do, we'll try to rectify that, but you've got to seek some legal advice. You've got to push him to do those things. I understand what Bill is saying, we will try to help in anyway we can. Bill if we could just ask you to go through the plan, what we have to see the things he didn't follow or what he added."

Bill Jeffers: "This fellow here (Swidron) has expended a whole lot of money and a whole lot of effort, to prevent what's going on out there from further damage to him. He has done that. He's done a heck of a job along that fence line. But it's going to take somebody to go up in his neighbor's yard and say you have to do this. You have to come out here and regrade this so the water goes down to this pipe. I don't think we have the authority to do that."

Commissioner Borries: "I don't either, but I think if the guy says he won't do that. See what this Drainage Board is suppose to be is basically to approve these concepts here and make sure we are following them. We work with Legal Drains that you've heard about in here, and we can work on Legal Right-Of-Way, but we can't go on somebody else's private property and say we are going to do this, because someone can go to jail. We can't work on private property."

(Inaudible)

Dan Swidron: "Will we hear from the Board?"

Commissioner Borries: "You are going to here from us as we've asked for Mr. Jeffers to pull together some things he has done here. Again what he is saying, I understand what he is saying is he can't reduce this. That again is part of your thing, it probably ought to be Mr. Easley or whoever, it was that drew

this thing up and maybe that's Mr. Hatfields problem. I don't know, but at some point whatever they put down there on that paper, flat piece of paper, if they're not following it, we'll cite what those things are, and we will furnish you with that information. We will do everything we can to ask this guy to make it right, but you have to do, what you have to do. In terms of the legal authority. You have that right and you must consider it. If nothing else you certainly would probably have the right to form your own Homeowners' Association. Hire your own legal counsel in this situation, and take Mr. Hatfield to task."

Dan Swidron: "Okay. I noticed this Drainage Board that Mr. Jeffers talked about all the weeds around the retention, Mr. Miller lives on one of them. We've called Tom Lutz several times. The first time he was real congenial about it. The next couple of times he (inaudible) in weed controlling, grass cutting and all that."

Commissioner Hunter: "Who is Tom Lutz?"

Dan Swidron: "Tom Lutz works out at the County. I have a list of phone numbers."

Commissioner Hunter: "Building Commission?"

Bill Jeffers: "Right."

Dan Swidron: "He is in charge of weed control, and he said we talk to Margaret Harp. We want to complain out there. We want the weeds cut down. This man has children that play back there."

Commissioner Borries: "Who is responsible for them?"

Dan Swidron: "He is, Mr. Hatfield."

(Inaudible)

Dan Swidron: "Thank you."

Commissioner Borries: "Thank you."

Dave Laine: "My name is Dave Laine, I am at 2330 Willow Creek. Moved out there about two (2) years ago. There's a retention pond that Mr. Jeffers hit on a little bit about, it's that they designed I think to handle like a twenty five (25) year flood. He's let it fill in with soil that he uncovered a year and half ago up stream from this retention pond, he uncovered about five acres I guess. He never did seed it, straw it or mulch it or anything like he says here in this Erosion Control Plan. It sat for like a year and half. It just filled in the whole backend of that pond. Now we've drained the pond. We're kind of fortunate that one of the guys that lives on this pond, works for Sterling Boiler, he's got equipment that he said that his company will let him bring in and dig this thing out. We've kind of only asked Bruce Hatfield if he would supply us with equipment once we dig it out, to move the dirt somewhere. I think Bruce really wants this dirt because he's got some area that he really needs this dirt. But, he's dragging his feet on it and we've dug the pond out. We've even gone to the trouble, the guys have brought the equipment out once and Bruce wasn't ready with his equipment. Then we had an emergency and the guy had to use the equipment somewhere else. I think tomorrow at 2:30 some guys from IDM and the DNR and also the Soil Conservation Service are coming out there to meet with him at 2:30 tomorrow I believe."

Commissioner Hunter: "Who, Bruce Hatfield?"

Dave Laine: "Yes."

Alan Kissinger: "Okay. Some of your problems may disappear very quickly. This is an inspection. They're doing thirty two (32) different Subdivisions, and yours was at the top of their list, I think."

Dave Laine: "So are they going to really enforce him to do this? I mean the problem is going to happen when, I mean it might get dug out, but if he don't control Erosion upstream. He hasn't seeded or put a bale of straw out or anything to keep stuff from running out into the streets, the mud from running into the streets, into the storm sewers which eventually drain into this retention pond."

Commissioner Hunter: "I think the answer is yes."

Commissioner Borries: "I think that Mr. Jeffers has given you a report here. I mean he tells the easement exist sufficient to construct a drainage swale. A swale is in place, but it's not properly constructed. We will send this to him. He has prepared this report on this. You should be careful. Again, I keep coming back like a broken record. If he is responsible for this property, you guys better be documented if your doing work on his property."

Dave Laine: "This retention pond?"

Commissioner Borries: "Yes. If he has not turned it over to you. He's letting you off the hook big time. You do not own that yet until you have officially taken, if you have not formed your own Homeowners' Association, he has not turned that on to you, you have to ask yourself who's property that is. Be careful."

(Inaudible)

Dave Laine: "Well, I mean the guy that was willing to dig all this out was Sterling Boiler. You know I kind of question why he was willing to do it."

(Inaudible)

Commissioner Borries: "Be careful, and he had be careful. We will work with you, and do whatever we can to push this person to follow what he said he would do."

Dave Laine: "If he would just keep things seeded and put the Erosion Control fences to keep all the mud from running off the lots into the road and storm sewers."

Commissioner Hunter: "I think I can tell you that that is going to happen. I have a meeting tomorrow night with Daryl Rice, and with the Board that approves these plans. If IDM is coming down tomorrow, we are going to look over a number of projects and I think yours is at the top of the list, because it has the greatest number of problems."

(Inaudible)

Commissioner Borries: "We will review this and there may be a way in which we might be able to stop further building until he says what he will do. Again we have got to go back and research and find out exactly what he had said he would do. Everything you had signed with him, you must insist that he do what he said."

Dave Laine: "Okay."

Dan Swidron: "Excuse me, Dave don't you own that pond?"

Dave Laine: "Well, there is four (4) Homeowners' that are suppose to have to maintain this pond once we all build on there."

Commissioner Borries: "Are all four (4) on there?"

Dave Laine: "Yes we are all on there now."

Dan Swidron: "There are two (2) more homes that are going up."

Dave Laine: "There are two (2) more homes that are going to go, but they're not suppose to be part of the Homeowners' Association that maintain this little pond."

Commissioner Borries: "You should check your plot, your deed. (Inaudible). Area Plan will have that."

(Inaudible)

Dave Laine: "It doesn't say that. All it says is to be maintained by Homeowners' Association. It doesn't spell it out very clear at all."

Commissioner Borries: "If there's some doubt, don't do it."

Dave Laine: "I even asked Bruce about it, and he said, "Well, he said since there is no access to it other than crossing your property to get to the pond, then that means that it's just your, the people that live on that pond."

(Inaudible)

Commissioner Borries: "There is a little bit of truth, because that's why I am saying check your deed. Sometimes what they will do, in some of the newer ones on these where they have a retention pond, they'll put which lot has responsibility on that."

Dave Laine: "He didn't do that."

Commissioner Borries: "He didn't?"

Dave Laine: "No, he didn't put what lot that has responsibility for that pond."

(Inaudible)

Dave Laine: "He just verbally mentioned that to people. He doesn't have anything in writing as to who's actually suppose to be responsible for maintaining it, other than he's just verbally told us that the four (4) lots on that pond will have to maintain it."

Commissioner Borries: "That's not good enough. He has to put that in writing."

(Inaudible)

Dave Laine: "I appreciate your time tonight guys."

Commissioner Borries: "That is what we are here for."

(Inaudible)

Commissioner Borries: "Hold on to everything. It looks like someone has well documented all their phone calls. I think your legal counsel will be very glad to see those things. I

wish we had some magic here this evening so we could give you a clear bill of health, but we've tried to suggest every alternative with you. We will continue to do this."

Commissioner Hunter: "Will any of you be seeing when Daryl Rice and his crowd come out tomorrow, will you be seeing them? Okay, will you see that they get copies of that phone log and any other pertinent documents that you have? The report from Bill that he has written up, because it is a good report, would you see that any and all things you have that you get it into the hands of the IDM people tomorrow?"

Dave Laine: "Yes I can. Bruce will probably be there to attend too, right?"

Commissioner Hunter: "I don't know. Does that make any difference?"

Dave Laine: "If he's there and sees me give them all this information, I mean is he going to lower the boom on me?"

Commissioner Tuley: "What can he do to you? It is common knowledge."

Commissioner Hunter: "I think you need to get in IDM hands, all the things...you need a paper trail, and it looks like you have got a paper trail. Just get it to the right people."

Commissioner Borries: "Thanks gentlemen for coming."

**RE: OLD BUSINESS**

Motion made by Commissioner Tuley and seconded by Commissioner Borries for approval of checks. So Ordered.

There being no further business the meeting was adjourned at 8:40 p.m.

**PRESENT:**

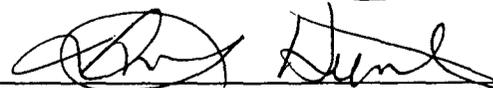
President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Recording Secretary  
Jim Morley, Developer  
Les Shively, Shively & Associates  
David Ellison, Big Creek Drain  
Dan Swidron, Willow Creek  
Geri Dennis, Willow Creek  
Dave Laine, Willow Creek  
David Halbig, Willow Creek



\_\_\_\_\_  
Rick Borries, President



\_\_\_\_\_  
Pat Tuley, Vice-President



\_\_\_\_\_  
Don Hunter, Member

This is Not A Bill

NOTICE OF DECLARATION OF URBAN DRAIN

On August 22, 1994, the Vanderburgh County Drainage Board declared Eagle Slough to be an Urban Drain as defined by Indiana State Statute.

NOTICE OF ASSESSMENT FOR MAINTENANCE OF AN URBAN DRAIN

In accordance with Indiana State Statutes, and consonant with the historic practices of the Vanderburgh County Drainage Board, you, as a property owner within the watershed of Eagle Slough, will be billed an annual assessment as your share of the maintenance cost required to operate Eagle Slough as an efficient urban drain.

The 1994 rate for all land was eighty cents (\$0.80) per acre.

The 1995 rate for rural ground (farmland, etc.) will be sixty cents (\$0.60) per acre with a five (5) dollar minimum billing.

The rate for urban ground (housing, highways, levees, commercial, industrial, etc.) is nine (9) dollars per acre (\$5.00 minimum.)

Your 1994 assessment before the Board's action was \$\_\_\_\_\_.

Your 1995 assessment after the Board's action is \$\_\_\_\_\_.

Any questions you have with regard to the information given above may be addressed to the Vanderburgh County Surveyor, 812-435-5210. Ask for Bill, Linda, or Wayne.

7-B

September 26, 1994

Vanderburgh Co. Drainage Board  
Commissioners Office  
Administration Bldg. Room 305  
Evansville, IN 47708

SUBJECT: Sediment removal and bank repair of Pond Flat Main  
at the junction of Pond Flat and Upper Buente and  
also Barr Creek.

Big Creek Drainage Association, Inc. is requesting permission to remove sediment and flatten one side of Pond Flat Ditch making it a 3 to 1 side slope. This excavation is to begin shortly and be completed by October 31, 1994. The work will be done by Blankenberger Bros. The cost of the project (about \$5,000) will be shared by Big Creek Drainage Association, Inc. and the land owner George Seib. No funding is being requested of the General Drainage Fund. We have requested advice from the County Surveyor, Vanderburgh County Soil & Water Conservation District and the Purdue University Cooperative Extension Service. The banks will be seeded with wheat, annual rye and low-endophyte fescue.

There is also an area on Barr Creek in need of work. This area is from Boonville-New Harmony Road---North. Barr Creek would be treated in the same fashion, with one exception. The work will be done at appropriate spots, since the ditch meanders. Mr. Homer Buente, the land owner, will level the spoil.

Respectfully,



John J. Bittner  
Resident Agent  
Big Creek Drainage Association, Inc.  
17700 Owensville Road  
Evansville, IN 47720



CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN

By this Instrument, I X David W. Bennett  
(Signature in Ink)

representing Shidelet Spray Service, and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on East Side Urban South Half, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

None

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: East side Urban South Half

CONTRACTOR: Shidelet Spray Service VENDOR # 1851

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-015

- ANNUAL MAINTENANCE  
 ADDITIONAL MAINTENANCE  
 EMERGENCY MAINTENANCE

COMPLETION DATE June 24, 1994  
INSPECTION DATE July 13, 1994

- WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

David W. Bennett

VANDERBURGH COUNTY SURVEYOR

7-15-94

DATE

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDEBURGH COUNTY, INDIANA

VENDOR NAME SHIDELER SPRAY SERVICE # 1851

On Account of Appropriation for SONNTAGG STEVENS DITCH # 234-038

Invoice No.	Itemized Claim	Amount
	1994 SPRAY	
	10,050 LF @ <sup>18</sup> 0.063 = \$633.15	
	PREV. PMT 85% = \$538.18	
94-SP-38-15	PAY 15% RETAINAGE = \$94.97 →	\$ 94 97

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

X David W. Chumeth  
Name  
Right-of-Way MANAGER  
Title

Date June 22, 1994, 1994

**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, David W. Shumeth, X  
(Signature in Ink)

representing Shideler Spray Service, and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on Sonntag Stevens, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

\_\_\_\_\_;  
\_\_\_\_\_;

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: Sonntag Stevens # \_\_\_\_\_

CONTRACTOR: Shideler Spray Service VENDOR # 1851

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-038

- ANNUAL MAINTENANCE
- ADDITIONAL MAINTENANCE
- EMERGENCY MAINTENANCE

COMPLETION DATE June 22, 1994  
INSPECTION DATE July 1, 1994

- WORK IS APPROVED
- NOT APPROVED: COMMENTS: \_\_\_\_\_

\_\_\_\_\_  
David W. Shumeth  
VANDERBURGH COUNTY SURVEYOR

\_\_\_\_\_  
7-5-4  
DATE



**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I *Daniel W. Shumaker*,  
(Signature in Ink)

representing *Shideler Spray Service*, and presently  
under contract with the Vanderburgh County Drainage Board to perform  
certain maintenance on *Harper Ditch*, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

\_\_\_\_\_

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: *Harper* # \_\_\_\_\_

CONTRACTOR: *Shideler Spray Service* VENDOR # *1851*

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # *234-017*

- ANNUAL MAINTENANCE
- ADDITIONAL MAINTENANCE
- EMERGENCY MAINTENANCE

COMPLETION DATE *July 22, 1994*  
INSPECTION DATE *July 30, 1994*

WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

*R. W. Bunn*  
VANDERBURGH COUNTY SURVEYOR

*7-5-94*  
DATE

sept

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME SHIDELER SPRAY SERVICE # 1851

On Account of Appropriation for EAST SIDE URBAN W<sup>1</sup>/<sub>2</sub> #234-015

Invoice No.	Itemized Claim	Amount
	1994 SPRAY	
	21,127 LF @ \$0.063 = \$1,331.00	
	PREV. PMT. = 85% = \$1,131.35	
94-SP-15-15	15% RETAINAGE DUE = \$199.65 →	\$ 199 65

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

X David W. Chenseth

Name

Right-of-Way MANAGER

Title

Date June 23, 1994

**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I X David W. Schumert,  
(Signature in Ink)

representing Skideler Spray Service, and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on Eastside Urban N 1/2, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

NONE

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: Eastside Urban N 1/2 # 1851

CONTRACTOR: Skideler Spray Service VENDOR # 1851

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-015

- ANNUAL MAINTENANCE  
 ADDITIONAL MAINTENANCE  
 EMERGENCY MAINTENANCE

COMPLETION DATE June 22, 1994  
INSPECTION DATE July 14, 1994

- WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

Carl W. Benn

VANDERBURGH COUNTY SURVEYOR

7-15-94

DATE

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON # 1052

On Account of Appropriation for HARPER DITCH # 23A-017

Invoice No.	Itemized Claim	Amount
	SPRING MOWS - 1994	
	2,950 L.F. @ \$ 0.3656 = 1,078.52	
	PREV. PMT. 85% = \$ 916.74	
94-SM-17-15	15% RETAINAGE DUE = \$ 161.78	\$ 161 78

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name  
Owner  
Title

Date June 29, 1994

**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I Terry R. Johnson  
(Signature in Ink)

representing Terry R. Johnson Const., and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on Harper Ditch, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

None

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: Harper Ditch

CONTRACTOR: Terry R. Johnson VENDOR # 1052

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-017

- |  |                                      |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> ANNUAL MAINTENANCE | COMPLETION DATE <u>June 29, 1994</u> |
| <input type="checkbox"/> ADDITIONAL MAINTENANCE        | INSPECTION DATE <u>June 30, 1994</u> |
| <input type="checkbox"/> EMERGENCY MAINTENANCE         |                                      |

WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

Robert W. Brennan 7-5-94  
VANDERBURGH COUNTY SURVEYOR DATE

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDEBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON # 1052

On Account of Appropriation for SONNTAGG STEVENS DITCH # 274-038

Invoice No.	Itemized Claim	Amount
	1994 SPRING MOW	
	1,730 LR @ \$0.3184 = \$550.83	
	PREV. PMT. 85% = \$468.21	
94-SM-38-15	PAY 15% RETAINAGE \$82.62	\$ 82 62

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name  
Owner  
Title

Date June 30, 1994

**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I Terry R. Johnson  
(Signature in Ink)

representing Terry R. Johnson Const, and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on Sonntagq Stevens, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

None  
\_\_\_\_\_

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: Sonntagq Stevens # 234-038

CONTRACTOR: Terry R. Johnson VENDOR # 1052

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-038

- ANNUAL MAINTENANCE  
 ADDITIONAL MAINTENANCE  
 EMERGENCY MAINTENANCE

COMPLETION DATE June 30, 1994  
INSPECTION DATE July 1, 1994

- WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

Ralph W. Brenner  
VANDERBURGH COUNTY SURVEYOR

7-5-94  
DATE

50pt

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON # 1052

On Account of Appropriation for EAST SIDE URBAN DITCH S. 1/2

Invoice No.	Itemized Claim	Amount
	<u>EAST SIDE URBAN S 1/2 - SPRING MOW</u>	
	<u>TOTAL L.F. MOWED = 22,724 LF</u>	
	<u>@ \$0.4395 = \$9,987.20</u>	
<u>94-SM-15-15</u>	<u>PREV. PMT. 85% = \$8,489.12</u>	
	<u>PAY 15% RETAINAGE = \$1,498.08 → \$1,498.08</u>	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name

Owner  
Title

Date July 21, 1994

**CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN**

By this Instrument, I Terry R. Johnson,  
(Signature in Ink)

representing Terry R. Johnson Const., and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on Eastside Urban S. 1/2, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

NONE

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: Eastside Urban # \_\_\_\_\_

CONTRACTOR: Terry R. Johnson VENDOR # 1052

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-015

- ANNUAL MAINTENANCE  
 ADDITIONAL MAINTENANCE  
 EMERGENCY MAINTENANCE

COMPLETION DATE July 21, 1994  
INSPECTION DATE July 21, 1994

- WORK IS APPROVED  
 NOT APPROVED: COMMENTS: \_\_\_\_\_

Robert W. Brenner  
VANDERBURGH COUNTY SURVEYOR

9/20/94  
DATE



E-SIDE URBAN 5 1/2  
FALL NOW

Robert W. Brenner, Vanderburgh County Surveyor

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON

for  annual --  additional maintenance to EASTSIDE URBAN SOUTH 1/2 Ditch, a legal drain in Vanderburgh County, Indiana, was completed on SEPT 20, 1994, and was inspected by our staff on SEPT 20, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner WRB 9/21/94  
Robert W. Brenner, Vanderburgh County Surveyor Date

Additional Comments:

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY JOHNSON CONST. # 1052

On Account of Appropriation for HARPER DITCH # 234-017

Invoice No.	Itemized Claim	Amount	
	1994 FALL MOW		
	$2,950 \text{ LF} \times \$0.3656 = \$1078.52$		
94-FM-17-85	PAY 85% = \$ 916.74 →	916	74
	15% RETAINAGE = \$ 161.78		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name  
Owner  
Title

Date SEPT 26, 1994

1994  
FALL MOW

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON

for  annual --  additional maintenance to \_\_\_\_\_ Ditch, a legal drain in Vanderburgh County, Indiana, was completed on SEPT 24, 1994, and was inspected by our staff on Sept. 26, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner 9-26-94  
Robert W. Brenner, Vanderburgh County Surveyor Date

Additional Comments:

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON CONST. # 1052

On Account of Appropriation for KOLB DITCH # 234-025

Invoice No.	Itemized Claim	Amount	
	FALL MOW		
	5593 LIN. FT. X 0.31845 = 1,781.09		
94-FM-25-85	PAY 85% = 1513.93 →	\$ 1,513	93
	15% RETAINAGE = 267.16		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name  
Owner  
Title

Date SEPT 23, 1994

Fall

Robert W. Brenner, Vanderburgh County Surveyor

**VANDERBURGH COUNTY  
SURVEYOR'S OFFICE**  
 Room 325 Civic Center Complex  
 One Northwest Martin Luther King, Jr. Boulevard  
 Evansville, Indiana 47708-1833  
 (812) 435-5210

**SURVEYOR'S REPORT**

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Terry R. Johnson

for  annual --  additional maintenance to  
Kelb Ditch, a legal drain  
 in Vanderburgh County, Indiana, was completed on  
SEPT. 22, 1994, and was inspected by  
 our staff on SEPT 23, 1994, and is  
 approved --  disapproved for payment per the  
 contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
 Robert W. Brenner, Vanderburgh County Surveyor

9/23/94  
 Date

---

Additional Comments:

---



File Me

Robert W. Brenner, Vanderburgh County Surveyor

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Terry R. Johnson

for [] annual -- [] additional maintenance to  
Aiken Ditch Ditch, a legal drain  
in Vanderburgh County, Indiana, was completed on  
SEPT 24, 1994, and was inspected by  
our staff on SEPT 26, 1994, and is  
[] approved -- [] disapproved for payment per the  
contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner 9-26-94  
Robert W. Brenner, Vanderburgh County Surveyor Date

Additional Comments:

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OCTOBER 24, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
OCTOBER 24, 1994

The Vanderburgh County Drainage Board met in session on October 24, 1994, at 7:00 p.m., in the Commissioners' Hearing Room 307, with President Richard Borries presiding.

**RE: APPROVAL OF MINUTES (9-26-94)**

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve the minutes of September 26, 1994. So ordered.

Commissioner Borries: "I want to declare a quorum present because I will have to temporarily leave, and I say temporarily because I have a meeting conflict that will take place approximately 7:30 P.M., so I will be leaving, but there is a quorum present of a Commissioner Tuley and Commissioner Hunter who serve as the Drainage Board. They have strong constitutions in all physical areas, so they can certainly conduct business here in my temporary absence.

We are going to change the agenda as a result of my temporary absence here, because of what could be perceived as a conflict and we try to avoid these wherever we can and we do. There is a situation on one Subdivision Drainage Plan where one Commissioner feels that he may not wish to vote on this particular matter. (B) This is a new Subdivision Drainage Plan, William Wortmann Subdivision. If we could take that one at this time."

**RE: NEW SUBDIVISION DRAINAGE PLANS**

**B. William Wortmann Subdivision Section II:**

Bill Jeffers: "William Wortmann Subdivision Section II is located on Old State Road, just east of Peck Road, very close to Scott School. It is a Subdivision which drains basically downhill and to the northwest. It is an agricultural piece of land, most recently in soybeans. It has been divided up into about twenty-eight (28) lots, I believe. It goes up to thirty-two, but lot two (2), four (4), five (5) and six (6) are previously platted, William Wortmann Subdivision plat book K, page 23. So these lots are numbered one (1), three (3), seven (7), eight (8), nine (9) on up.

I have reviewed the Drainage Plan, and I have reviewed the calculations. I have a report to submit; which basically says that County Surveyor will recommend approval of this Drainage Plan if the developer agrees with a number of comments. Showing on the following three pages of the report."

Commissioner Borries: "Has the developer seen these?"

Bill Jeffers: "The developer is not here present, but his Engineer Keith Poff, is here in the audience to represent him. Basically, these are recommendations and comments that would bring this Subdivision a whole lot closer to conformance with what may become our Drainage Ordinance at the end of this month, as opposed to what we currently have as a Drainage Ordinance. Rather than to read each one of them, I will just turn that in to you, to be included in the minutes. The Engineer for the developer has read them and is here to answer any questions you may have."

Commissioner Borries: "I think the most obvious here is, if you have had the opportunity, Keith Poff, to review these, will you insure that these comments are followed in your Drainage Plan?"

Keith Poff: "Yes I will."

Commissioner Borries: "You will?"

Keith Poff: "Yes."

Commissioner Borries: "Okay. So you haven't any objections here to any particular item that has been pointed out on this?"

Keith Poff: "Well not with the understanding that you're in the "midst" of creating a New Subdivision Drainage Ordinance, and knowing what that Ordinance says; that this will be brought under essentially those rules after that Ordinance is passed, so I agree with the comments."

Commissioner Borries: "Okay. With those comments indicating that the Engineer for the Developer indicates that he will make these plans. Are there any remonstrators, any persons to speak for, or against this particular petition, to speak this evening?"

Commissioner Borries: "Hearing none then, Chairman entertains a motion to approve this plan."

Motion made by Commissioner Tuley and seconded by Commissioner Hunter for approval for the Plans for the William Wortmann Subdivision, Section II with the recommended changes. So ordered.

Commissioner Borries: "At this time I would like to turn the meeting over to Commissioner Pat Tuley and Commissioner Don Hunter."

Commissioner Tuley: "Commissioner Borries has to leave for a few minutes, he will be back, so in the meantime let's go ahead and follow the agenda."

**RE: NEW SUBDIVISION DRAINAGE PLANS**

**A. Oaklynn Park Subdivision:**

Bill Jeffers: "This Subdivision is located directly west of Oak Hill Road, and just a few hundred feet north of Lynch Road. It is directly adjacent and south of Cloverlawn Subdivision. As Mr. Hunter is aware, around the southeast corner of this Subdivision it drops off of a steep hill, and some steep grades, but then the largest part of the Subdivision from Clover Drive west is flat and portions of it are in the flood plain. The pink shaded area along the top of the plat in front of you, is a forty (40) foot strip. They're asking you first of all to relax the Legal Drain Maintenance Easement along Sonntag Stevens Ditch to forty (40) feet from the center line of the Ditch. That will leave us with approximately thirty (30) feet from the top of the bank out for working area for spraying and mowing that drain."

Commissioner Hunter: "Is that sufficient?"

Bill Jeffers: "That is sufficient."

Commissioner Hunter: "Your satisfied?"

Bill Jeffers: "Yes sir, we've done it for other people such as the Athletic Park. We're allowed to do it by statute. We're allowed to go down to no less than twenty-five (25) feet. I am asking for several things on this ditch also, but I will continue. The yellow shaded area represents all the Drainage Easements in addition to the Legal Drain Easements. All that

yellow shaded area, that's what the Lot Owners' will have to maintain."

Commissioner Hunter: "There are actually going to be three (3) basins?"

Bill Jeffers: "Yes sir there are three (3) basins. They all drain dry, none of them remain wet. These are dry basins that are for temporally storage of excess storm water. After the storm is over over a period of a few hours they will drain dry."

Commissioner Hunter: "How deep are those?"

Bill Jeffers: "Two (2) to three (3) feet when they are full of water. None of them will exceed four (4) feet, which is going to be the maximum under the new Ordinance. In depth the stored water will be four (4) feet under the new Ordinance. None of the three (3) will exceed four (4) feet in depth during a rain storm. They each have an emergency spillway.

I have dotted some lot numbers red, because I believe that each of those Lot Owners' should be aware that we don't want any fences within an open channel or open basin, or cross an open channel or open basin.

Then I have added a pink dot to those lots where no fences can be within the easement at all. In other words the fences would have to be back on the easement line along the Legal Drain. In that central portion that's a waterway that drains that central basin, that's going to have to be totally clear of all stored material, fences, buildings, whatever. From easement line to easement line, no fences, no nothing. No stacks of firewood, no dog pins."

Commissioner Hunter: "How are we going to make all those people aware of that?"

Bill Jeffers: "Again I have a report that I have given to the developer, Mr. Dan Buck. Mr. Buck is here present in the audience with his Engineer, Mr. Chris Weil. Mr. Buck has transmitted us a letter saying that he agrees with all of the terms that we have put upon him as a condition of our positive recommendation. Rather than go through all of them, unless you have a question about any of the individual terms, I'll turn this over to be entered into the record. I'll let Mr. Buck or his Engineer answer your questions. I may have added one thing since I showed this to the developer. It says caution should be exercised by all Builder(s) and Lot Owner(s) to engineer any foundations, and basement walls to be water tight and yards to be grated to drain away from the houses due to the flat grade of the land, and the proximity to the hundred (100) year flood plain. Mr. Hunter asked, how are we going to enforce the fences being out of the easement? I am asking the developer to give a written notice to each Homebuilders and each Lot Owner adjacent to that twenty (20) foot easement that is to be maintained "in dense, mowed grass," and that no fence or other obstruction whether temporarily, or permanently placed within the easement. Any obstruction will be removed at the property owner's expense. I am asking to add one (1) other notice to the plat that wouldn't normally appear on it. It basically says nothing shall be put in that easement without or no alterations shall be made to it without coming back before the Drainage Board to get your permission first."

(Inaudible Remarks)

Commissioner Hunter: "This will work for the first Homeowner(s). How do we convey this message to the second,

third or fourth Homeowner or persons to move in there? I guess it's just kind of a puzzle to me to how we go about that."

Chris Weil: "The developers have incorporated a lot of the verbiage into the preliminary issue of the covenants and restrictions. Which I think a part of the agreement when they purchase a lot they sign off that they have read the covenants and restrictions."

Commissioner Hunter: "That is the first homeowner. How do we convey that to the second homeowner and the third homeowner? After the home has been built and they sell it to the next guy. This always bothers me."

Dan Buck: "My name is Dan Buck. This will all be under Title Insurance Policy. Under the Title Insurance Policy, they all have recommendations or exclusions. One of them is restrictions to the Subdivision. So we intend to record what Mr. Jeffers has recommended as far as nothing be done to these drainage right-of-ways unless they've gotten approval from the Board to do that. Now if somebody goes in there and does it on their own and work has to be done, they have to tear it out at their own expense, just by what it says in our restrictions that it is all recorded and it is passed on in the Title Insurance Policy."

Commissioner Hunter: "Would you pass it on to the second homeowner and so forth?"

Dan Buck: "Right. Every time they sell it that exception comes up."

Commissioner Hunter: "Alright."

Dan Buck: "That the (inaudible) restrictions on that property."

Commissioner Tuley: "Did you all have any problems with that additional recommendation that he put in here after you signed this?"

Dan Buck: "No I don't have any problems with that."

Commissioner Tuley: "Okay. Now with these recommendations then you recommend approval?"

Bill Jeffers: "Yes. We have reviewed the calculations and recommend approval."

Commissioner Tuley: "Are there any remonstrators, anyone that wants to speak for or against? Now is the time to come forward."

Kathy Nickolick: "My name is Kathy Nickolick, I live at 2915 E. Burke Drive. My property line runs right to the Steven Sonntag Ditch. I am in the middle of the block as you go around you notice the people that is here live further back towards the end of the block than I do. This whole area has flooded in the past. A lot of people have had water in their homes, water in their property. There is one man here that's had water within three (3) feet of his house just about a week ago when we had the rain."

I am objecting to what I've heard so far this evening about building homes with restrictions. Someone brought up that the first homeowner will know that the second and third owner that this area has flooded. I've been there eighteen (18) years and in the spring that area looks like not a field, it looks like

a lake. There are six (6), ten (10), twelve (12) inches of water laying on that field half of the time. Everything off of Oak Hill Road drains down into that area. It is extremely low. My subdivision there are basements, tri-levels. I have a tri-level with a basement. I have four (4) levels and back when my home was built there weren't restrictions. I am glad now that there's someone to supervise the building and what homes they're building and in what areas. But I have some questions that concern me. You discussed the size of the ponds that are going to hold the water. What I heard was two (2) to three (3) feet maybe four (4) foot at the max, then you have an emergency spillway. I couldn't hear all of it. What is the emergency spillway? Can you explain that?"

Commissioner Hunter: "Bill Jeffers or the engineer either one should address this."

Chris Weil: "Spillway elevation is when we exceed the storage capacity of the basin. We have emergency spillway into the existing ditches in the area."

Kathy Nickolick: "Okay, but that existing ditch is right in...my property runs right into the ditch and it was three quarters ( $\frac{3}{4}$ ) full a few days ago when we had a heavy rain. I am sure the neighbors can tell you it was already three quarters ( $\frac{3}{4}$ ) full then. So if that's your spillway, that whole area floods all the time."

Commissioner Hunter: "Let me ask you a question. Does all the water from this subdivision currently go into the ditch that's behind your house?"

Kathy Nickolick: "Yes. There is already maybe eighty (80) homes?"

Commissioner Hunter: "Here is your house, right here, okay?"

Kathy Nickolick: "Yes."

Commissioner Hunter: "What they are recommending is a retention basin here, then one way down here and one over here. I am not an engineer, but this might even help a little bit, because it would hold some of this water and then let it drain out under normal circumstances."

Kathy Nickolick: "What is your hundred (100) year flood plain? What is that for this area? I know when I talked to someone on the phone, they were talking about like two and half ( $2\frac{1}{2}$ ) inch rain fall within a half ( $\frac{1}{2}$ ) an hour. That's with your plan was, your objective was to take care of that water, but what is your the..?"

Chris Weil: "We are required to design for a twenty-five (25) year "Rain", in retaining the excess water in these basins and all these basins have excess capacity. That is what we are required to hold."

Kathy Nickolick: "What is that capacity?"

Chris Weil: "Which basin?"

Kathy Nickolick: "Any of them, all of them. What capacity are all of them. How much rainfall is that in inches and time? Let's say we get a three (3) inch rainfall in an hour."

(Inaudible Remarks)

Chris Weil: "You are welcome to get a copy of this report if you like."

(Inaudible Remarks)

Kathy Nickolick: "I am just concerned, because I live in this area."

Commissioner Borries: "I agree with you."

Kathy Nickolick: "I am glad to see that there's not going to be basements, because if those poor people if they bought a home there it would be a nightmare. I have also seen people carry furniture out of their homes. A lot of us have invested a lot of money in our homes."

Commissioner Hunter: "What your concern is is that this will compound your problem."

Kathy Nickolick: "Yes. Now if you can show me this is going to make things the way it is, or better."

(Inaudible Remarks) Looking at the map.

Chris Weil: "The undeveloped (inaudible) is 3.7 inches per hour. Basin that is required to store nine thousand, eight hundred twenty-three (9,823) cubic feet. The basin provides fourteen thousand, four hundred thirty-seven (14,437) cubic feet of storage."

Kathy Nickolick: "I don't know how to compare that with other basins. Do you have an example of another area? I don't think your average homeowner is going to know how to compare all of this."

Commissioner Hunter: "You mentioned 3.7 inch water fall in an hour. Would this basin handle this, you said?"

Chris Weil: "(Inaudible). That's from the twenty-five year event."

Kathy Nickolick: "What about the hundred?"

Chris Weil: "We're not required to design for a hundred year event."

Kathy Nickolick: "The current twenty-five year."

Chris Weil: "Yes."

Lewis Smith: "What I am saying is, we're talking about a rain in the spring and in the fall we get a saturated rain that fills up the basin, it fills up the ditch and the rain keeps coming in right there. What I am saying is, what are we going to do to take care of this amount of water. I understand a quick rain. We very seldom ever get a three (3) inch rain in an hour's time. What we get is all day or two (2) or three (3) day rain. This is when I have my water problem and everybody else in the neighborhood have the water problem. What are we going to do to take care of that water? Because right now that field drains into several ditches out there, but it all backs up. That ditch runs all the way up to next to my house, when this rain happens."

Kathy Nickolick: "Your more on the curve, so his lot is bigger than a lot of ours. Mine is one of the smallest lots. I think mine is only seventy (70) foot wide."

(Inaudible Remarks)

Kathy Nickolick: "Sometimes you don't even see the ground. It's like a lake bottom, is what it looks like."

Lewis Smith: "What happens is when the street floods it runs down this, right on the edge of our houses, back to this ditch here and the storm sewer, right up here. What is going to happen when you get all this draining is going to have to come in here when you have that type of rain."

Kathy Nickolick: "You discussed the ditch. Okay, would have this spillage going to the ditch."

Chris Weil: "There are emergency spillway on here, which comes down to this ditch. An emergency spillway over here which comes into this ditch, and one over here that comes into this ditch."

(Inaudible Remarks)

Kathy Nickolick: "This Steven Sonntag Ditch. Our property runs like, everyone's property runs right to the middle of that."

Commissioner Hunter: "Does it Chris?"

Chris Weil: "Fairly close."

Kathy Nickolick: "Not to the middle, maybe it's close to the middle. Okay my property runs right down to the middle. If you dig the ditch out, how much more? Are digging that ditch out?"

(Inaudible)

Commissioner Hunter: "That's the Surveyors Office. These guys have no authority to dig that ditch out."

Kathy Nickolick: "I had talked to the Surveyors Office, Mr. Jeffers and I was told they were going to dig the ditch out."

Bill Jeffers: "I am asking them to widen it."

Kathy Nickolick: "You said you were going to double it."

Bill Jeffers: "No I did not say that. We're going to widen it two (2) feet. Never said it, that we were going to double it."

Commissioner Tuley: "Now it's on tape, so let's go on."

Lewis Smith: "I have a question. This ditch here, Steven Sonntag, does it dump into here?"

Chris Weil: "Yes."

Commissioner Hunter: "It dumps into Steven Sonntag doesn't it?"

Chris Weil: "Right."

Lewis Smith: "So it's going to add more water?"

Chris Weil: "Right now there is a certain amount of run off associated with this farm ground. What we are retaining it, in the impervious areas that we have put in here and we are producing excess surplus run off. We're not allowed to just put that into the ditches where we are probably going to hold that. We can not increase the rate of runoff."

Lewis Smith: "Okay the spillway is going to dump in the water?"

Chris Weil: "When it gets down in here."

Lewis Smith: "Okay. This ditch is going to be connected here?"

Chris Weil: "Right."

Kathy Nickolick: "So it's all going to back up in our backyards?"

Commissioner Tuley: "Your required to retain like nine thousand (9,000) cubic feet here, but your capacity is at fourteen thousand (14,000). Only then is there an emergency run off after it exceeds that fourteen thousand (14,000). Am I correct?"

Chris Weil: "Correct."

Commissioner Hunter: "If I understand also correctly, what he's saying; is that there can't be anymore water come off of this property after it's been developed than there is currently. That's the reason for this, this, and this."

Chris Weil: "Correct."

Commissioner Tuley: "By law."

Commissioner Hunter: "By law. That's what we want."

Chris Weil: "We won't be increasing any runoff into this ditch. That is the current Ordinance."

Commissioner Tuley: "The new Ordinance has a lot more teeth."

Bill Jeffers: "I would like to clarify that. Under the current Ordinance, they don't have to detain one drop of water."

Commissioner Tuley: "Right, but under the new law that they're going to be operating under, which more than likely will take affect next week."

Bill Jeffers: "Begins October 31, 1994...possibly."

Commissioner Tuley: "So your building these drainage plans based on the anticipation of the October 31, 1994 Ordinance?"

Bill Jeffers: "Yes sir. We're asking them to abide by the new Ordinance."

Commissioner Tuley: "Which are much more strict. We went from a page to that showing 85 pg document."

Lewis Smith: "Okay what we are saying here on tape is that there will be no water running off the farm land right here into our area. Is this what we're saying?"

Kathy Nickolick: "None of this water. None of this new water is going to get..this ditch isn't going to get any fuller and come up in our property?"

Bill Jeffers: "No we are not saying that."

Commissioner Hunter: "It runs off there now doesn't it? In to Sonntag Stevens Ditch?"

Lewis Smith: "It holds it."

(Inaudible Remarks)

Commissioner Hunter: "What you are saying this is a low spot."

(Inaudible Remarks)

Chris Weil: "Actually we are not associated with the farm ground right now than what we are proposing to release in here with low areas, right now it is farm ground areas. Most of the year there isn't much vegetation on there. The ground is bare and they're going to come in and put lawns in some of these areas here."

Bill Jeffers: "What he is saying is that the backyards will be adjacent to Sonntag Stevens Ditch. The same as the two people who are up here speaking at the present time. Their backyards are Sonntag Stevens Ditch. Okay? The new Subdivisions likewise, the backyards will drain directly in to Sonntag Steven Ditch for the most part. Under the Purdue guidelines that we were suppose to use, the Purdue guidelines say that flat agricultural ground discharges fifty (50%) percent of the rainfall. Flat grassy lawns only discharge eighteen (18%) percent of the rainfall."

Kathy Nickolick: "I'm thinking of Oak Hill Road and where everything drains into ."

Bill Jeffers: "No I am addressing one question at a time, and your question is; what will drain into the ditch from the backyards? I am getting ready to make my point. My point is is that Purdue says; that thirty-two (32%) percent less water will come off those backyards after they have grass on them, than as a soybean field. I don't believe it. So I gave them other figures that would cause them to detain more water than what the present Ordinance, which stipulates the Purdue Method would cause them to detain. They're detaining everything but those backyards along the ditch, and a little bit of the water off of Clover Drive right there were the street crosses the ditch, that's going to go in the ditch, because it can't go anywhere else. There will be a little water come off Clover Drive into that ditch. Other than that all the interior water from the Subdivision; goes through basins and the calculated storage capacity is greater than that which is required. It will ultimately discharge at or near the northwest corner of the Subdivision. Which is down stream of everyone who is here remonstrating."

Kathy Nickolick: "Downstream, which direction downstream?"

Bill Jeffers: "West is downstream. So ninety-nine (99%) percent of the water generated out of this Subdivision will not enter the ditch and pass by your yards. It will enter the ditch at a point downstream of your yards."

Lewis Smith: "Okay. So the answer or your saying we will still have water coming in, but we will not have as much water coming in the ditch as we have right now."

Bill Jeffers: "Theoretically that's correct."

Lewis Smith: "Theoretically, but I have got big investments, so does everybody else up there. We can't go on theories."

Bill Jeffers: "This man has an investment too."

Dan Buck: "When I am done I'll have seven and half million dollars in the project, so I have a lot in invested along with my reputation. I have family that live in the neighborhood. They've lived there for thirty years, so I am not going to do anything that's going to hurt them."

Kathy Nickolick: "Are they going to be right on this ditch?"

Dan Buck: "No."

Kathy Nickolick: "Okay."

Bill Jeffers: "My uncle is."

Kathy Nickolick: "I know. I know your uncle is, but it's right in our backyard. Our property lines run right on to the ditch. How much are you going to take out of the ditch? Exactly how much?"

Bill Jeffers: "From the center line of the ditch, from the property line basically, your property line north to the top of the bank in your yard, is approximately ten (10) feet wide."

Kathy Nickolick: "From the center of the ditch?"

Bill Jeffers: "From the center of the ditch to the top of your bank is approximately ten (10) feet wide. From the center line or property line."

Kathy Nickolick: "It's about from where I am to where you are. It's not ten (10) foot. I cut the grass all the time, it's not ten (10) foot."

(Inaudible Remarks)

Maurice Woolsey: "My name is Maurice Woolsey, I live at 2909 East Brooke Drive. I've lived in the place approximately twenty-seven (27) years. The ditch itself when I first moved there was probably five (5) to six (6), seven (7) foot deep. It is filled in, it's been cleaned out once thoroughly. Twice just graded out slightly, three (3) times in twenty-seven (27) years. So the ditch has failed. We do have considerable water."

(Inaudible Remarks)

Bill Jeffers: "The residential charge on that ditch is five dollars (\$5.00) per lot."

(Inaudible)

Kathy Nickolick: "My main concern is right now is the properties along this side, the existing homeowners. According to what I just heard, a lot of us have fences. Over half of us have fences, three fourths ( $\frac{3}{4}$ ) of us. Are they going to take our fences? We have six (6) foot high fences."

Commissioner Tuley: "I think what we are trying to point out, is that there is an easement where they have the right, but Bill has already, and there's no intent by anybody to come out and to start tearing up your fences."

Kathy Nickolick: "Someone just said it. I don't know if they were trying to be sarcastic. Someone just talked about it and we mentioned that there were no restrictions at the time."

Commissioner Hunter: "This is a legal drain. A legal drain by virtue what it is has restrictions. Now you may have bought property and you weren't told the restrictions...but this is state law. This is a legal drain and that's the reason you all have to pay the five dollars (\$5.00) maintenance fee. You can read the law and it's seventy-five (75) feet from the center."

Bill Jeffers: "In 1966 it was seventy-five (75) feet."

Kathy Nickolick: "My property is not that big. The size of my property, well like this is hundred and fifty (150) by (inaudible remarks)."

Bill Jeffers: "What we are doing right now, we're relaxing it from Mr. Buck on his side to thirty (30) feet, but we're not letting him put one (1) fence, one (1) tree, nothing in that forty (40) feet."

Kathy Nickolick: "What happens to our fences and our trees?"

Bill Jeffers: "We're going to clean it from Mr. Buck's side. We haven't messed with you guys for years. We've gone in there and done the best we can, for the last sixteen (16) years. I think we have done a very good job considering that there's no fall in that ditch, from the pipe up at Mr. Whipples house, all the way down to the corner of your Subdivision, there is so little fall, that water doesn't move very fast. I think we have done an excellent job of maintaining that ditch considering the conditions we have to work under."

kathy Nickolick: "The question was are you going to take any of our property up to our fences and our trees?"

Bill Jeffers: "I don't foresee that."

Kathy Nickolick: "I want a yes or a no. We have a right to know, we have fences and trees."

Bill Jeffers: "I can't speak for the next elected Surveyor. I can only speak for our office."

Commissioner Hunter: "This whole legal drain thing is Surveyors Office."

Kathy Nickolick: "I object to this whole, what I am seeing now unless...I mean...the ditch they're taking...the ditch has always been a problem when it rains. I am not convinced this is going to hold the water. You have got everything coming from Oak Hill Road."

(Inaudible Remarks)

Bill Jeffers: "Your problems are basically associated with what you yourself said, as there were no restrictions years ago on the builders to retain water, or put the buildings at the proper elevation, or regrade the ground, or widen the ditch, or anything."

Kathy Nickolick: "Now in 1994 your building on an area that you know that floods. You know it floods."

Bill Jeffers: "We're going to build it up two (2) feet above the flood plain."

(Inaudible Remarks)

Bill Jeffers: "Ditches are for conveying water. That's their purpose, and if that ditch fills up then it's doing it's job. The reason it fills up so rapidly, is because there is so much commercial and industrial development along Lynch Road that was not required under previous development rules to detain water. They're throwing that water in there as fast as it falls on the ground."

Kathy Nickolick: "This ditch here is from Oak Hill in our area."

Bill Jeffers: "It's from residential development."

Kathy Nickolick: "Okay, but that's not the Lynch Road, that doesn't come down in this area."

Bill Jeffers: "Everything on Lynch Road goes into that ditch as fast as it can get there, and when that ditch fills up downstream towards Hitchpeters where's the water suppose to go, that's coming into the ditch from uphill? All that commercial and industrial development until the ball park, which truly didn't really need detention because it was converting a soybean field that runs off fifty (50%) percent of it's rainfall into a ball park, which runs off a lot less they voluntary put in the detention basins to help us out, and they realigned the ditch to make it wider. That's why your not getting as much flooding now as you used to, because we have done a lot of work downstream. You know yourself that a lot of the development that went along Hwy 41 and up through Lynch Road."

Kathy Nickolick: "There was no restriction at that time."

Bill Jeffers: "No restrictions at that time."

Kathy Nickolick: "Now there are restrictions. That's what my concern is."

Bill Jeffers: "But those developments are still there pumping that ditch full of water before your water ever gets into it, so the ditch fills up really rapidly. The new homes are discharging through detention basins at the same or less."

Kathy Nickolick: "Can you give me an example of where they have had other detention basins? I would like to talk to people in areas that had detention basins to see if it works?"

Bill Jeffers: "Out there by the Eagles. We had the same arguments, the same apprehensions. Country Trace Subdivision, the same problems and once it became fully developed it was recommended by SCS not to build house number one on it, because of the soil type. Don't do this, don't do that, can't do it, going to have flooding. Exactly the same arguments and today it is operating fairly well. Probably discharging less water than it did as a soybean field."

Kathy Nickolick: "I don't object to this really Bill. I just object to all the extra water, sewage. There is going to be problems for the existing people. Anytime you have an area this low and you put seventy-three (73) more homes in it. I am foreseeing problems, and right now I am concerned about this ditch. Again, now I am very uneasy because I am not sure your going to be , the County Surveyors Office or whoever is the elected official, is going to take, you said seventy-five (75) feet? If you take seventy-five (75) feet of the ditch?"

Bill Jeffers: "I should have never brought that up. We won't ever do that. We won't ever do it to you."

Kathy Nickolick: "That will go into my house. That will go up in my house if you took seventy-five (75) feet."

Bill Jeffers: "I brought it up to point out that Mr. Buck is setting aside thirty (30) feet as a maintenance pathway in his subdivision in which his home buyers will not be able to do the same thing you've enjoyed doing, because we need that thirty (30) feet left set aside for maintenance. We are going to maintain everything from that side of the ditch."

Kathy Nickolick: "Another question. Isn't this in the city?"

Bill Jeffers: "No ma'am, that's in the County."

Kathy Nickolick: "I was told that the Sonntag Stevens Ditch ran right along this side of the county and this side the city."

Bill Jeffers: "No ma'am."

Kathy Nickolick: "Okay."

(Inaudible Remarks)

Lewis Smith: "The only thing I am wanting and I think everybody here is wanting to know is, with the plans that you have here that we're going to have no more water coming in to that ditch that we have at the present time."

Bill Jeffers: "Absolutely correct. No more water per second. No more cubic feet of water per second."

Lewis Smith: "So I should not be seeing water coming up to my back door?"

Bill Jeffers: "I didn't say that. I said there will be no more water per cubic second discharged into that ditch after development than before."

Lewis Smith: "I have lived out there sixteen (16) years and everybody has. We have had sudden downpours and the streets have flooded. We have had all day, two (2) or three (3) day rain out there that we've had a couple of winters. What we don't want to do is add to it."

Bill Jeffers: "I understand."

Commissioner Borries: "I think your statement always hits the mark of what I have to ask, and Bill Jeffers has answered as our technical advisor. Most difficult thing we have to do on this drainage is look at a flat piece of paper, and figure out how all this is going to work in terms of water. But as you have also heard here this evening, the complexity in the demands of what we are expecting developers to do now, is considerably more than what has happened before. I would say that knowing who the general contractor is here at this point, who is a local person, in effect, a lot of his reputation is involved in this particular process as well. If these figures verify that you're not going to be impacted by anymore water that in fact this particular plan takes care of their water. That's basically all we can do in relation to this individual thing. That's why I think they verified to try and answer your question here. To say that if we had a rain like Houston, Texas, you would not be impacted, or they wouldn't, no one can say that. An act of God is going to happen and we just can't do that."

Lewis Smith: "Let me interject something here. I understand to act like Houston, Texas, but we in this neighborhood have been through several rains that you well know in this area. In the winter time the more water you saturate the ground out there whether it be grass, or whatever it be you saturate the ground the water has nowhere to go, and it backs up. Now we've had this, I've had water within three (3) feet of my house and some people here have had water in their house."

Commissioner Borries: "I understand exactly what your saying, but as again what he's saying...this particular drainage plan as it sits, if they answer the question yes to your exact question which what I always have to ask. We'd have a lot of difficulty denying them anything if our technical advisor and these calculations work out the same, no you will not be impacted. I understand full well your concerns. Again this is

the toughest thing we have to consider when we're looking at a flat piece of paper. However as he's pointed out, there have been other Subdivisions that have worked, and if they do it by 1994 standards, your not going to be any worse off and it could be a real win situation for everybody from that stand point. Because there could be some very real possibility that this whole drainage situation may improve that situation for you."

Kathy Nickolick: "That's what I am hoping, it will improve. I don't want it to be worse."

Commissioner Borries: "Right. We don't want it to be worse."

Dan Buck: "Mr. Borries, if you remember probably about four (4) years ago St. Michaels Court and the flooding problems they had. The engineering I provided for that area took care of all the problems. The engineers that I have here are capable of design work that I had in the past. I have taken care of problems in the Oak Subdivision flooding at the end of those Stewart Street and all that area back there. The other Subdivisions that I have done I haven't tried to squeeze anything in that would make a subdivision substandard to what it needs to be."

Commissioner Borries: "Mr. Buck is whom I was referring to without mentioning his name. I didn't want to require him to speak here at this point, but he does have extensive developments in the community. He is correct if you look at St. Michaels Court which is a very low end of Washington Avenue coming off of Newburgh Road. They have less problems today now because of the drainage plans that are in place than they did before with (inaudible)."

Kathy Nickolick: "We have been told that we are not going to have anymore drainage because of this new subdivision than we have already had in the past. Right? That is what we were told here this evening. Right?"

Bill Jeffers: "Okay. I want to answer that question this way. Under normal conditions for a twenty-five (25) year storm, you will not have any greater runoff of storm water in cubic feet per second after development, than you presently have before development. That is the only way I can answer it truthfully. You will not have any greater cubic feet per second runoff in a twenty-five (25) year storm after development, than you do now before development. There will be situations that could occur, such as this fellow here referred to, when everything is frozen or saturated you have a hundred (100) year storm, you have a seventy-five (75) year storm something like that, that's a different story."

Kathy Nickolick: "If your moving these houses, I am sure that the houses are not just going flat where it is now? Your going to move the ground around a little bit on each lot for the landscaping. What is this yellow line here?"

Bill Jeffers: "Those are highlighting all the drainage easements that I say cannot be obstructed by fences or yard barns, etc.. those have to be kept open for drainage, or storage of drainage. They're either pipes, ditches or the basins to store drainage."

Kathy Nickolick: "Okay. When will building start on this construction? I mean when will they start up the construction on this subdivision? What is the date?"

(Inaudible)

Bill Jeffers: "In the recommendations I am asking that they have the Drainage facilities in place before they start building houses and streets. So part of your answer is that the basins should be in place in those areas that they serve. In other words if they want to start building on one area, they have to put the pipes and the basins in there to catch the silt and the runoff before they start building."

Kathy Nickolick: "I just wanted the Commissioners to hear the existing problems in the area. I think the majority of us just don't want more drainage problems inside the subdivision."

Commissioner Tuley: "I understand you to say, even if we widened, dug this deeper because of the problems on this western end of this, it still won't drain any faster, correct?"

Bill Jeffers: "I don't think it will. We went out there, it seems like it was back in the mid or late eighty's is the last time we dredged that ditch, and I believe we had Blankenberger Brothers go out there and they were only able to achieve a very limited improvement because that ditch is so flat from this pipe up here where it says Lloyd and Elizabeth Whipple. There is a pipe entering the ditch right there. That's the beginning of our ditch. From the outlet of that pipe, down to the corner of this Subdivision we're looking at, there is like only three tenths foot, and in a quarter mile that's nothing. We did the best we could at that time. This gentleman that said we cleaned it out three in twenty-five or twenty-seven years is probably correct. I will point out that's once every nine years. That's a lot better than most ditches get."

Kathy Nickolick: "A lot of us get out and clean it out ourselves."

Bill Jeffers: "We appreciate that."

Commissioner Tuley: "There's not standing water in there?"

Mr. Stevens verified that there is no water standing in the ditch.

Bill Jeffers: "That ditch does drain out."

Kathy Nickolick: "It takes awhile, but it does go out."

Bill Jeffers: "That ditch drains dry. The last time we dredged it out, we made sure it drained dry."

Kathy Nickolick: "The last heavy rain just within a week, it was three quarters full."

Commissioner Hunter: "For how long of period of time?"

Kathy Nickolick: "It depends, it builds up fast."

Bill Jeffers: "In a few hours and then it drains dry."

(Inaudible Remarks) Again everyone is talking at the same time.

Lewis Smith: "The ditch is doing it's job. If we didn't have it, we wouldn't be living where we are at right now."

Bill Jeffers: "I hope the microphone got that part where this gentleman said the ditch is doing it's job."

Lewis Smith: "The ditch is doing it's job, and we want to keep it doing it's job."

Bill Jeffers: "The ditch is doing it's job."

Kathy Nickolick: "We want it to continue doing it's job after seventy-three more homes are on it."

Bill Jeffers: "We're asking Mr. Buck to provide a thirty foot wide flat maintenance pathway and widen the ditch by two feet."

Commissioner Borries: "Your looking at a carefully planned drainage plan that's in conformance with our 1994 standards here that we're going to adopt. This is tougher."

Kathy Nickolick: "This is still a really low area and it floods now."

Commissioner Borries: "But again he's going to build it up. What your seeing now is going to be different than what your going to see when those houses are in there, because he can't build without building that other part up. He understands that as well."

Kathy Nickolick: "Thank you for listening."

Commissioner Hunter: "I guess too no matter what this is not going to remain agricultural. You could have a lot of things in here that could be a whole lot less desirable."

Kathy Nickolick: "No, I would rather have residential. I am concerned about the drainage."

Commissioner Hunter: "We are too."

Kathy Nickolick: "Well we'll wait and see if it works. Thank you."

Motion made by Commissioner Hunter to move the passage of the recommended Drainage Plan on Oaklynn Park Subdivision and seconded by Commissioner Tuley based on the recommended changes which everybody has agreed to. So ordered.

**RE: NEW SUBDIVISION DRAINAGE PLANS**

**C. WINDSOR PLACE SUBDIVISION:**

Bill Jeffers: "The developers for Windsor Place and their Engineers are in the audience. Del Shanks, Jim Biggerstaff and Elmo Dockery are all three here present. I have highlighted all in yellow all the areas that are either drainage easements or retention facilities. All of which that will have to be maintained by the Homeowner's Association, which must be formed by Mr. Del Shanks. He has put the language into his covenants and restrictions as requested and on the plat with the exceptions of one notice #7, which he is going to agree to do, I believe. He has it in his restriction. NOTICE: "Any pipe, fence, wall, building, pool, patio, planting, stored material, excavation, fill or other construction, improvement, addition to, or alteration of the land within a drainage easement in this subdivision requires the prior written approval of the Vanderburgh County Drainage Board." So you can't do anything until you come back after Mr. Shanks have finished it off and sold it. The person who buys it can do nothing inside those easements without coming back before you."

Commissioner Tuley: "Those will be continued much like what Mr. Buck continued?"

(Inaudible Remarks)

Bill Jeffers: "The title transfer. Right. It will come up each time it's sold."

Jim Biggerstaff: "I might say in regards to these easements and these restricted covenants. What I suggested in the area planning Commission meeting, and this is what we've done in the previous counties is that all your restricted covenants and all your associations they're all made of part of the plat and they're made reference by the plat and when the plats are recorded the plat makes reference to those restricted covenants and we cross reference it. I don't think that has been done much at all in this county. That cross referencing immediately brings up the issue of title and any title attorneys in when they review that plat it points out through cross reference and cross restricted covenants that they become a part of that plat just like any other easement or any other document. That is what basically what we proposed in this development."

Bill Jeffers: "Like the other two, I prepared a report so it does not all have to be read in to the minutes at this time but can be attached at the end of the minutes for the record. Saying that the Surveyor will recommend approval if the developer agrees to all these points."

Commissioner Hunter: "Has the developer seen all this?"

Bill Jeffers: "Most of it. I gave him a copy tonight to look at the rest of it. I would like to point out that there are three (3) lots that I believe are within the one hundred year flood plain. I shaded them green down there in that corner. The Building Commissioner has assigned a finished floor elevation to them. However I am adding the notice in these minutes here that the developer should be aware that certain requirements of the 1990 Vanderburgh County Flood Plain Management Ordinance may apply to those three (3) lots and maybe even one (1) on each side of those three (3) lots. You all passed an Ordinance, called the Flood Plain Management Ordinance that has something to do with the square mile of drainage area above an unstudied point. I am not sure it's really really close to being one square mile above that point. I understand from the developer that Mr. Roger Lehman assigned those finished floor elevations. If he did so correctly that would comply with that Ordinance."

(Inaudible Remarks)

Bill Jeffers: "I am asking for a lot of things in these recommendations tied into Soil and Water Conservations specifications on rock chutes entering Schlensker Ditch. I think every ditch that goes into Schlensker Ditch should have a rock chute at the end of it to protect the bank of Schlensker Ditch from future erosion."

Commissioner Tuley: "That's the ditch on the far backside of this?"

Bill Jeffers: "Yes sir. That's the large ditch. Well it's not a legal drain that far upstream. Just up to Hwy 57 I believe. There are some other things in here that you can read at your leisure, but they are in the minutes and they are a part of our recommendation. Without compliance with those we would not recommend this Subdivision but if he does comply with these we will recommend."

Commissioner Tuley: "Can we for the record then have someone come forward and say for the record since we don't have a signed paper like we have gotten from previous ones, that they read, understand and agree to these?"

Bill Jeffers: "And also have some additional notes on the plan that will remain on file in our office for future reference, but they basically refer back to these notes."

Commissioner Tuley: "Okay."

Del Shanks: "Most of them that we had addressed...(inaudible remarks). A lot of that has to do with drainage. In fact this has been standing out pretty much for the fall and where it drains to and what have you. We have concerns about drainage. I particularly have. We don't want bad vibes coming out. I mean we want to protect ourself. We worked with Darrell Rice and them out there trying to come up with everything that we could. I have highlighted in there all the things that we're going to try to do. As a developer most of the problems we run into all the time is with the homeowner's not doing or the builder's. So we try to do language in here where we actually place the thing. We're going to maintain ownership or maintain the development corporation. We're going to maintain everything till we get eighty percent (80%) of it. Then even after eighty percent (80%) to keep two (2) lots or two (2) votes for each lot. So we're still going to be managing this thing way on in as far as placing these things."

Commissioner Hunter: "Your going to be responsible for the erosion controls? Is that what you are saying?"

Del Shanks: "Right. Then eventually we turn it over but we're going to be way on down."

Commissioner Hunter: "But that will be after eighty percent (80%) of these have been developed?"

Del Shanks: "Right, but initially we're setting it up and we'll place both of them. Ten years from now, or whenever it's turned over to the Homeowner's Association, but the language in there matches this where it's pretty enforceful. I mean it's strictly up to them."

Commissioner Borries: "Again Del, we don't have time to cross reference what the extensive thing you have done and with what Bill Jeffers has done in relation to our putting together what we are requiring in the 1994 Drainage Ordinance. So I guess my simple question is, in addition to this and I don't know if this includes anymore, if it does that's great, but will you abide by every part of it if we do that?"

Del Shanks: "Yes. We agreed to that."

Commissioner Tuley: "Well since you put it that way, my question was just concerned because this is very bold print, this is a draft subject to change."

Commissioner Borries: "Right."

Del Shanks: "We're still talking, until we file this."  
(Speaking of the covenants)

Commissioner Tuley: "This has been going on for quite awhile, and I don't want this thing back in the spring. I know you have been working with Mike Wathen at Soil Conservation and there has been a lot of changes."

Del Shanks: "We want to be a good custodian out there. This thing is a pretty big project. We want it to be a nice project. We don't want to trash it up, we don't want bad press, we don't want to have to talk to you guys again about drainage or how we screwed it up or why we're at fault."

(Inaudible Remarks)

Del Shanks: "So we have tried to address it. I think probably out there drainage is probably more important than anything else we can do. That's our feeling."

Commissioner Hunter: "I agree because that's a major undertaking you guys are doing here."

Bill Jeffers: "You did notice that he has rule five (5) referenced to this?" (In the covenants)

Commissioner Tuley: "Yes."

Commissioner Hunter: "Yes."

Del Shanks: "Another thing...and it is recorded with rule five (5), and we did it at North Pointe. Just make them come in and put a rock base down before they haul any material in. That way they're not pulling out, and I don't have to clean the streets."

Commissioner Hunter: "You already have a rock base on there, haven't you?"

Del Shanks: "Yes, but I mean even when they leave our surface onto theirs, they're going to put a temporary road base in, so I'm not going to clean up after them."

Commissioner Hunter: "Now you have already submitted your erosion control plan too haven't you?"

Del Shanks: "Oh yes."

Bill Jeffers: "I would like to say that I drove out there today again because I also went and looked at Wortmann, Section II and I came back in on Browning Road and some of the most impressive estate homes in Vanderburgh County right now are built in North Pointe Estates which this man here has built."

Motion made by Commissioner Hunter to approve the Drainage Plan for Windsor Place Subdivision and Commissioner Tuley with the recommended changes in agreement to those changes I'll second. So ordered.

**RE: REQUEST PAYMENT OF BLUE CLAIMS-DITCH MAINTENANCE**

The following Blue Claims were submitted as follows:

TERRY R JOHNSON #1052 HARPER DITCH #234-017 94-FM17-100	REMOVING SHOPPING CARTS FROM DITCH 1LUMP SUM @\$246.10	246.10
TERRY R JOHNSON #1052 HENRY DITCH #234-019 94-FM-19-85	3,179 LF @ \$.3069=\$975.63 PAY 85%....\$829.29 RETAINAGE 15%....\$146.34	829.29
TERRY R JOHNSON #1052 SONNTAG STEVENS #234-038 94-FM-38-85	10,050 LF @ \$.3184=\$3199.92 PAY 85%....\$2719.93 RETAINAGE 15%....\$479.99	2719.93
TERRY R JOHNSON #1052 KEIL DITCH #234-022 94-FM-22-85	3,012 LF @\$\$.3069=\$924.38 PAY 85%....\$924.38 RETAINAGE 15%....\$138.66	785.72
TOTAL		4581.04

Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

**RE: OLD BUSINESS****A. Willow Creek Subdivision/Report II:**

Commissioner Borries: "In the interest of time here, have the parties that are with us this evening that have been patient, have they seen your report that you introduced in our first meeting?"

Bill Jeffers: "Yes sir."

Commissioner Borries: "Okay."

Bill Jeffers: "I will let my comments rest on the report just as is."

Commissioner Borries: "Okay, if you have seen that report I think we would like to hear from you now and we will go from there."

Dan Swidron: "My name is Dan Swidron, I live at 9200 Hannah Court in Willow Creek Estates. I received a first report that we presented at the first meeting. That was the first investigation he made. Now this report I just received tonight and the minutes I jotted down some comments. We came in kind of late for the Commissioners meeting. There was a lot of stating that Bruce Hatfield as developer did not live up to a lot of the, I guess the county regulations. Now what we are asking here before we get into the real drainage part then that's still drainage because that's retention basin. Where we go from here...is the county going to send him a letter saying that he is in violation of several of those stipulations in that...a rules and regulations?"

Commissioner Borries: "The county can send him a copy of this report."

Dan Swidron: "Well that might be good, but in January 1, he's turning over his Association to the Homeowner's."

Commissioner Borries: "Do you have a Homeowners' Association formed now?"

Dan Swidron: "No we don't. We don't have anything. He says he is going to start billing us January 1, 1995 for all the easements, maintenance, insurance, taxes."

Commissioner Borries: "Do you have an attorney?"

Dan Swidron: "We have talked to an attorney, Mr. Paul Wallace and we are going to drop off some papers tomorrow at his office. Basically what we are going to ask Mr. Wallace is to review all the codes that he is in violation of, and see what can be done. Either he's penalized, fined, building permit pulled like Commissioner Hunter said. Anything that is possible because the people out there are not happy. I have seven (7) more letters here, letters that I want to keep in your possession."

Commissioner Borries: "Do you have copies of these letters?"

Dan Swidron: "Yes we have copies. These are copies. Here is a letter I just received tonight. A woman has her floors buckling because of drainage. She thinks her floor is not strong enough. She has so much water down in her crawl and that's been since 1993. Mr. Hatfield hasn't addressed anyone of these here problems. We talked about drainage, the IDEM came out there, Erosion Plan, and I know I heard Mr. Jeffers

say that he came out there during a rain. He's got sandbags around the storm sewers which creates water around Megan Court, Marfield Court. Mud is sitting in there two inches (2) thick. People are bringing this mud into their driveways, so the Erosion Plan is not working. Then he put sandbags to keep the settlement from going into the storm sewers. Something has to be done."

Commissioner Borries: "I think you are on the right track. Apparently some of these people have already hired their own attorneys."

Dan Swidron: "No, no one hired their own attorney yet."

Commissioner Borries: "Well there's a message of phone calls attempted or made, and says, sent facts to our attorney Mr. Becker about the above mentioned problems!"

Dan Swidron: "He closed on my house. That was to get the home warranty deed and all that. That's when we first moved there. That's all those mess of calls made were from myself to Bruce Hatfield and Margaret Harp. There were over forty-two (42) calls made and no action."

Commissioner Borries: "You said there were seven (7) different letters from homeowners' here and I have not had the opportunity. So what you are talking about here..."

Dan Swidron: "They are attached separately if you pull those apart."

Commissioner Borries: "Your talking about these phone calls... are all made by you, in this various log here?"

Dan Swidron: "Yes. Right and then there is another report by other neighbors. They all say several attempts have been made to the Corporation trying to correct their problems and the ones that are highlighted in yellow are drainage problems."

Commissioner Borries: "This Board certainly can contact Mr. Lehman to stop any future building in this area. You have a very complete report from Mr. Jeffers concerning the wall and the recommendations that he has made. Copies of that would be forwarded to Roger Lehman."

Dan Swidron: "Roger Lehman already asked for these letters here. So we are going to drop that off in his office tomorrow."

Commissioner Hunter: "You did say you would recommend that a copy of Mr. Jeffers recommendation be sent to the Building Commissioner?"

Commissioner Borries: "Yes. We can order based on that review no new building permits. Have Mr. Lehman review any violations that are currently involved there. Mr. Swidron, we keep asking, we've done all we can do here to make sure he is complying to do that, but your legal battle here, so to speak, your grievances are with the developer. You have a right to enter your objections and I guess to put into layman terms, sue him for noncompliance of what he has done. If you have not obtained an attorney, I would urge you to do so, because again that is your legal right. You're into a situation where we can be a technical advisor for you, but we cannot come out and work on private property. Our county cannot do this."

Dan Swidron: "That is true. Now reading Mr. Jeffers report here, we will direct it towards the three properties that he is making report on, because we have already talked about some

of the drainage in the development. This report here shows that one suggestion. There are supposed to be three solutions. If you recall the last meeting he was going to make three solutions. He says he doesn't have time to make the other two solutions. The wall I don't think is feasible in this as a solution. Three foot wall is something that is ugly and unsightly. Let me explain here, when Larry Dietch built a home Lot 21, his landscaper came out and told us personally that he could build this here swale without any problems as long as they brought dirt in. Larry Dietch and Bruce Hatfield told them no, you will do it the way we tell you to do it. Now the wall was nowhere in mind, and just like any golf course you've got all kinds of swales every place for a golf course and nowhere do you see a wall built to retain the water. We know we are going to get some water over on to our property. Some of the statements in here that some of the owners' made that...I showed you the pictures the last time. That lot was flat. Yes we did get some water over and that is why our driveway collapsed. I have a picture of the street in front of our house which is collapsing and the county has responsibility for that street. That's collapsing because of the water drainage. Now if I knew that the water went right through my house when I bought the house, according to Mr. Jeffers plan there, that that is the right-of-way of water, I wouldn't of bought a house with a flow going through my house. Mr. Hatfield said, "Oh don't worry the water is going to flow to the west." He built me a new driveway because the driveway collapsed like before I moved into the house. Then when he built the other two homes he built lot twenty two (22) first then he built lot twenty one (21). Twenty two (22) the neighbor made a statement here that the water never flowed over his land. I got pictures here that's showing that his land was flat too. Until he built up all this here land, that's when all the water started coming across my land. So there is a problem here and the solution of building a wall is not the answer to it."

Commissioner Borries: "Then you have the right to ignore it."

Dan Swidron: "I understand that. I would like to see two more solutions from the county. The county allowed him to build houses on a right-of-way of water."

Commissioner Borries: "Now wait a minute...go back, the county did what?"

Dan Swidron: "They approved the Surveyors plan. They approved something and it shows right under the plan that Mr. Jeffers has. Here's my house, here's lot 21 and the water flow goes through the house. Who would build a house on a water flow? Who would allow them to build it?"

Commissioner Borries: "He has said that is a way. He's also given aspects about yard grading. I think he's done other things. He's not saying that...if I'm interpreting this thing right...that this the only solution, but it is a solution of what he's saying that is going to be part of the whole plan, the whole drainage plan. Am I correct on that Bill?"

Bill Jeffers: "We just approved two (2) Subdivisions, William Wortmann Subdivision, and Windsor Place Subdivision, that have identical situations where in Hillside Development some part of the lot on which a house is going to be built, in particular where the house is going to be located itself is in a natural draw or area where water collects and runs down hill through the low point in that draw. I ask both builders in the office before I wrote up the report, how normally are you going to handle this. Well we're going to fill in those areas and grade the yards so we can build the house on the fill and

direct the water around the foundation. This has been the way that developers have utilized large pieces of ground; divided them into smaller parcels and building a house on each parcel. Somewhere in that land your going to find parcels in this particular situation as Mr. Swidron parcel, where a low area has to be filled in and the water directed around that fill. If it's done properly it works. If it's done improperly it doesn't work. The analogy of a golf course is not valid analogy. Golf courses aren't divided off into postage stamp lots with a fence around each lot and a little building plopped in the middle of each quarter acre. They're wide open spaces. I told Mr. Swidron and I will say it once more. All of the proper grading to accomplish proper grading could of been done with dirt before the houses were built. But now that there's a house on each of the three (3) lots, and there's fences, and swimming pools and driveways, streets, landscaping and all that's there unless we take all those fences, swimming pools and everything out, we can't go back in there and do it with dirt alone. There is going to have to be some way to hold that dirt, because before Mr. Quddus sent his letter in asking for and I quote; "At least six (6) more trucks of clean dirt to level off our backyard properly," before that was said Mr. Swidron said, he didn't mind if some of the water from Mr. Quddus backyard came on down through his yard. Then this new development came up where Mr. Quddus wants his yard leveled right down to Mr. Swidrons lot line. The only way to hold that dirt is to build a wall. Where the water should go is out into the street and on down it's natural water course. The county has allowed many, many, many homes to be built on what previously was a low area through which water moved. In almost every case the developer properly filled those areas and graded the yard so the water would not go into the foundation of the homes and cause damage. Every once in awhile you find one that was not properly built and apparently not properly inspected by the Building Commissioners Office."

Dan Swidron: "Let me just say about Mr. Quddus; "Yes it would take five to six truck loads of dirt going maybe about sixty feet of space that has to come through." He wants the dirt leveled off to the end of his property line. Right now I get about fifteen thousand square feet of water coming over my property. There is section here about that fifteen inch drain pipe might not accept fifteen hundred or fifteen thousand square feet of water. Made a statement before at Windsor, and he said that ditch is made to drain water. Well it's a ditch and that ditch goes down about ten feet deep. It should drain water. That's the way and I still have pictures here if anyone wants to see the pictures. That swale went to the west. That's how it was made. The neighbor next door has an embankment of dirt the same way that this swale was supposed to be made next door of my property. So building a three foot fence or brick wall next to my fence inches away, is not feasible. I know I am going to get some water and some of that water is going to be maybe fifteen hundred square feet of land and not fifteen thousand square feet of land. That's how it is right now. I get fifteen thousand, and I am sure that drain pipe can hold fifteen thousand square feet of water. It was left up to the developers and to Bruce Hatfield and Larry Dietch to do both properties at the same time, yet he failed to do that. I talked to the building inspector, and I talked to Roger Lehman and he said things slipped through the cracks. That is all I hear that things are slipping through the cracks through the county. I have to live there and the rest of our neighbors have to live there. Bruce Hatfield came out and he did this man's property, you ought to see the trench that he made there. He made a double trench now. I showed you the pictures the last time of the single trench. The other man won't move his trench because he knows the flow is not going to work right."

Commissioner Borries: "We can't go back and regardless of whether we finger point who did what to whom. In order to move forward on this and get this done, this is the best that we can suggest according to what our technical advisor is telling us here. If you say you want to hire...which he mentions over here too...if you want to hire a professional architecture someone else to do this, that is your right, you can do this."

Dan Swidron: "Stating at the County should oversee the construction of this wall. But now a simple landscaper said that he could build this, and he was the one that did the landscaping on Lot 21. He said he could of built it without any problem. As long as he had the dirt there, but Larry Dietch and Bruce Hatfield didn't want to put the dirt in it. He didn't say anything about building a wall. He's only a landscaper and he says it can flow properly. Now I would like to see two more solutions from Mr. Jeffers saying that this is feasible. When he came out there he says, moving a little bit of dirt will do the problem, will correct it. Now all of a sudden we're building a sixty foot wall."

Bill Jeffers: "That was before you talked to Mr. Quddus into wanting six more loads of dirt. The statement you are quoting me on...I said we could do it with a bobcat in four hours as is. Then you said; I am going to take up Mr. Quddus's fight, I am going to fight this fight for him. He needs to have his yard leveled off. The next thing I see is a letter that he says he needs six more loads of dirt."

Dan Swidron: "You said would it be okay if we just correct your problem. I am a homeowner in a development. We all have the problem. Not just I. I said to you that I wouldn't be very neighborly if I would have my problem corrected and Mr. Quddus wouldn't have his problem corrected. He still has water in his crawl."

Bill Jeffers: "So then he still wants six more loads of dirt. How are we going to hold that up on that hill?"

Dan Swidron: "We have dirt all over the place that's on hills. It never falls off. You build a swale prior to the end of the dirt. I am not an engineer and I can do some landscaping. I can show you to do the same thing. No one wants to listen. Everyone wants to come up with a forty thousand dollar (\$40,000.00) wall. We don't want to do that. You build up a little dirt some of the water is going to come down, we know that. You put bales of straw there it's going to hold the rest of the mud as long as they do it, but now it's winter. I mean we waited a month, you gave me the report here a month later. How many times were you out there? You said you couldn't get a hold of Bruce Hatfield. I would of called that man at home. I would of tracked him down like a dog."

Bill Jeffers: "I have tried to talk to him. All I get...."

Dan Swidron: "He don't even want to talk to you. Your right."

Bill Jeffers: "I get double talk from him. I am not going to waste my time talking to him."

Dan Swidron: "Why do we deal with a developer like this? I'm getting my hairs raised up here. This man here can't even talk to him."

Bill Jeffers: "I'm not going to talk to him."

Dan Swidron: "The County has to have some power over this man."

Commissioner Borries: "The County will have some power over this man if he in fact in what we have talked about here, we deny any future permits on this land until he does this, we do have that power, and so do you. You have power to sue him. To take him to court to make him do the things that he is suppose to do. If you don't like the wall then I say hire another engineer. We can sit here until midnight Mr. Swidron and figure out here why he said he would do this, or make this suggestion, but you don't have to do it."

Bill Jeffers: "One of the other solutions would of been to simply put an area drain at the low spot down there at the back of the lot 21 and gather the water up and trench it to the west through lot 22 over to that fifteen inch pipe. Okay? Now that would require getting the owner of lot 22, Mr. Wheeler to allow us to trench through his yard."

Dan Swidron: "There is an easement there."

Bill Jeffers: "If we were successful in getting it trenched through there we would be dumping that water into that fifteen inch pipe over there, and I will not be the one to say that that water should leave this watershed and cross over into another watershed, thereby diverting a natural flow of water so that if we overload that fifteen inch pipe and it runs down through the house in lot 11, like I said in the Commissioners meeting; is it any worse to go into the lot 11's back door, than into yours."

Dan Swidron: "That's a ten foot ditch down there."

Bill Jeffers: "No sir, it's a pipe."

Dan Swidron: "But there is a ditch that leads down to the pipe."

Bill Jeffers: "The water goes into the pipe, but, if the pipe can't handle it, it will go through lot 11."

Commissioner Borries: "What we do on a drainage plan is, and what Mr. Jeffers will tell you, every Drainage Plan must stand on it's own. We can't impact somebody else. We denied them here before when somebody walks up here with something and says well we'll drain on somebody elses land. We can't do that. If this man is telling us as a technical advisor going on record, he cannot allow or approve a plan that's going to impact on somebody else. We can't approve that. I wouldn't go for that or recommend that. It has to be something that is taken care of within the existing Drainage Plan for your area."

Dan Swidron: "Bruce Hatfield did not live up to the Drainage Plan in the first place. That is why I am here at the County."

Commissioner Hunter: "Excuse me. I am reading this letter signed by Mr. Quddus?"

Dan Swidron: "Yes."

Commissioner Hunter: "The problem here is that Mr. Quddus has a direct, his builder has never completed his job."

Dan Swidron: "But the Building Inspector must have came out and said he did."

Commissioner Hunter: "I don't know anything about that. That has nothing to do with us. The problem is that this man bought a home, we moved in the backyard that was not developed at

all. As I read through this the backyard is still not been developed."

Dan Swidron: "Bruce Hatfield was suppose to develop it. That was the deal and Bruce Hatfield hasn't done it."

Commissioner Hunter: "Where in writing does it say that?"

Dan Swidron: "I guess that's Mr. Quddus and Larry Dietch has."

Commissioner Hunter: "I don't see anything in front of me that says that Bruce Hatfield was responsible for developing the yard that Mr. Dietch developed from his particular piece of property. I am confused by all of this. Your saying we should do it but this is contractual problem between Larry Dietch and Mr. Quddus. The guy has never finished his yard from what I am reading here. Dirt needs to be brought in and so forth. That's in a man's private property. His yard just simply has not been finished. If there was something written that Bruce Hatfield said he would do it, then we need that."

Dan Swidron: "His yard is finished."

Commissioner Hunter: "That's not what this letter says."

Dan Swidron: "Right. When he moved in it wasn't finished as much."

Commissioner Hunter: "That is not what is in writing that I am looking at."

Commissioner Tuley: "This is dated September 26, 1994."

Commissioner Hunter: "But what I've got is this letter in front of me and to according to me to what it says here the yard has not been finished."

Bill Jeffers: "The next question would be does Mr. Swidron have a contract with Bruce Hatfield to finish his yard?"

Commissioner Hunter: "I don't know who built your house."

Dan Swidron: "Mr. Hatfield."

Bill Jeffers: "Do you have a contract?"

Dan Swidron: "It says that he was suppose to bring in fill for my yard and level it for proper drainage."

Commissioner Hunter: "So he built your house?"

Dan Swidron: "Yes."

Bill Jeffers: "Do you mind showing us that signed contract?"

Dan Swidron: "I could."

Commissioner Hunter: "Then you have a legal right to sue that man. He has not lived up to his contract."

Commissioner Borries: "You bet."

Commissioner Hunter: "That is what I am saying. This is a personal kind of thing."

Commissioner Borries: "There has been some suggestions here that have been made and we're talking about and if you say you have something here that he said that he was suppose to do and

he did not do, you have got to sue him. You have to take him to court."

Commissioner Hunter: "We can go after Mr. Hatfield within certain perimeters."

Commissioner Borries: "We can stop him from doing future things at this point."

Commissioner Hunter: "That's right to see that he doesn't do this again. You have a contract with this man as this neighbor apparently has a contract with his builder, and this contract has never been made good."

Bill Jeffers: "You can also make him refinish the drainage basins and then go ask for engineers approval so that it will come under a guarantee."

Commissioner Borries: "Would you prepare a letter to that affect that we could sign and endorse?"

Bill Jeffers: "Yes. Then the next question would be, does Mr. Wheeler on lot 22 have a contract with Mr. Hatfield to accomplish his yard grading?"

Dan Swidron: "He did accomplish it and then Mr. Wheeler had to go around again and do it again because it wasn't proper in the first place. Mr. Hatfield was suppose to do both lots at the same time. Again he washed his hands of it and told Larry Dietch to do the ground work."

Bill Jeffers: "But they all three have contracts?"

Dan Swidron: "I don't know if it's verbal between Larry Dietch and Bruce Hatfield. I'm not sure."

Commissioner Borries: "What about yours?"

Dan Swidron: "All I've got on mine is that no water to stand in the yard, and he would bring in fill for proper drainage."

Commissioner Borries: "Is that in writing?"

Dan Swidron: "Yes."

Commissioner Hunter: "Then you've got him, because if I'm reading the other the covenants, and restrictions on this you have committed to maintaining good turf with each lot. You shall be responsible for the maintenance of the drainage swales and tiles if any. So he hasn't done his job in order for you, that you have committed to do this."

Dan Swidron: "But the water is not coming from my property. The water is coming from uphill property. That's the drainage problem. He stops some of that drainage water, I won't have a problem. That's what the three solutions are suppose to be. If it just means a hill of dirt for a swale to go out to the east or to the west, it doesn't make any difference which way the water goes. I know I am going to get maybe fifteen hundred or two thousand square, but not fifteen and twenty thousand square."

Bill Jeffers: "Whether it goes east or west the ground has to be raised three feet. In some manner and Mr. Quddus wants it done all the way to his back lot line, apparently."

Dan Swidron: "Well he wants to build a fence close to his back lot line. There is a six foot, there's thirteen feet of easement between my lot line and his lot line."

Bill Jeffers: "He wants to build his fence as close to his back lot line as he can. As same as you did."

Lengthy discussion between Bill Jeffers and Dan Swidron with regards to lot line and easement.

Bart Gander: "I would just like to comment on that. My name is Bart Gander, 9209 Marfield Court. I heard earlier a mention of erosion control devices to be put up I think after the IDEM came out. He put some silt fences up and there is one in my corner on my lot. Then there is another vacant lot right next to my house."

Commissioner Hunter: "It has been reported to IDM that it was not done correctly."

Bart Gander: "It wasn't done at all. There was one that was not done at all."

Commissioner Hunter: "That's even better. They are very much aware of it and so is Lynn who's been out there several times."

Bart Gander: "My concern just is for one thing the mud on the streets right next to my house and between another house that is being constructed."

Commissioner Borries: "Are those streets accepted?"

Bart Gander: "Not our street. Not Marfield Court or Megan Court."

Commissioner Hunter: "Have we accepted those?"

Commissioner Tuley: "Are any of them accepted, erosion and silt?"

Commissioner Hunter: "If there is an erosion built on the street then there is a liability problem. We can shut them down."

(Inaudible Remarks)

Commissioner Tuley: "I guess where I am confused and I am just sitting there taking all of this in, we can stop him from building at all. How does that solve their problems?"

Bart Gander: "My problem is separate from Mr. Swidron. I'm up two streets and I have a neighbor who basically has a ditch running through his backyard, and then from between our property lines we've just left it there so our yards don't wash out, but it's about a foot deep. It just runs cockeyed all through our yards just to run the water out to the street. I've went and bought PVC pipe so I didn't wash my neighbors yard out. He was the one having water in his crawl space. I just did a temporary solution to help my neighbor out."

Commissioner Borries: "We are not accomplishing anything this evening. We are at a point here where we have asked Mr. Jeffers to do a review. We are compassionate Mr. Swidron. We just are not capable of working on private property. I regret that this has happened. This is not a pleasant experience for us. It is a problem. Julie what do we need to do here to advertise for a Special Drainage Board meeting? We'll order Mr. Hatfield to be here. We will at that time go back through this report. List the concerns. We can get Roger Lehman, the Building Commissioner here. I don't know what we can do to come up with three solutions, because what your saying Mr. Jeffers has said, you don't like, then you don't need to

apparently do, but there are many other things in terms of the retention basins and terms of the other violations that you have documented here. We'll get him in and tell him in no uncertain terms he is going to have to stop development and do what he said he would do in the first place. That we can do."

Dan Swidron: "Do you still recommend that we get an attorney (inaudible)."

Commissioner Borries: "Absolutely."

Commissioner Hunter: "You need to dig up the contract you have with the man that obviously has never been completed."

Dan Swidron: "I'm talking about development on hold. If he says January 1, he's turning it over to the Homeowners'."

(Inaudible Remarks)

Motion made by Commissioner Tuley to call a Special Drainage Board Meeting on November 7, 1994 after the Commissioners meeting, solely for the purpose of hearing and discussing the problems associated with Willow Place Subdivision. Request the attendance of Mr. Hatfield, Mr. Lehman, Mr. Jeffers, Mr. Darrell Rice, Lynn Miller and any persons having problems in the Willow Place Subdivision and seconded by Commissioner Hunter. So ordered.

Copy of certified letter that will be sent to Bruce Hatfield, and list of names and addresses that will receive a copy of letter also is attached to back of minutes.

Bart Gander: "For information purposes for our group that were talking about coming to this meeting, we're going to be talking about drainage issues only?"

Commissioner Borries: "Drainage issues only."

Commissioner Tuley: "The one thing that seems to be falling on deaf ears, we will do what we can from the standpoint of drainage problems only. Outside of that you all are going to have to solve your own problems through legal means. I don't mean to sound like I don't care about your problems, but we do care about your problems. We can only do what we can do within the law in regards to his failure to comply with or do what's been approved by the Board."

Commissioner Borries: "If it is County right-of-way, county property we can work on it. We can't work on private property."

Bart Gander: "So if I have a drainage problem on my private property then I need to..."

Commissioner Hunter: "That is one of the reasons we're bringing Darrell Rice and Lynn Miller as well in."

Commissioner Borries: "We can make suggestions. We can go as far as we can to force him to do this."

(Inaudible Remarks)

Dan Swidron: "There is one more problem we brought up last month. Mr. Borries said that the pond should not be dug out by the homeowners'."

Commissioner Borries: "That's right."

Dan Swidron: "He already made some kind of deal, washing his hands of it, that the homeowners' are going to dig it up."

(Inaudible Remarks)

Commissioner Hunter: "Remember the ponds have to be cleaned out and inspected and approved by the County Engineer before the homeowners' have to take them over. That has never been done."

Dan Swidron: "This particular retention that the ditch is on personal, on private property. Within the confines for homeowners'."

Bill Jeffers: "All retention basins in Vanderburgh County are on private property."

Commissioner Borries: "The way it works it goes on each individual lot owners' deed that he, she, or the family, or the owners are required to maintain. He's right, I mean we don't go on what is considered...."

Commissioner Hunter: "If you go in and dig out a retention pond that has never been accepted by the County Engineer which in this case it has not, then you may well become liable. So you have no business fooling with that."

Dan Swidron: "So there's two problems. I know we have tried to explain this to the homeowners...."

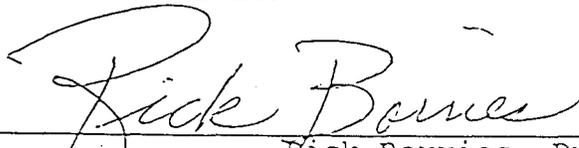
Due to problems with recording machine, the tape stopped.

Discussion went on to say that Special Drainage Board Meeting is to be called November 7, 1994 to discuss drainage problems only related to Willow Creek Subdivision.

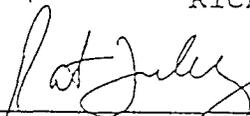
There being no further business the meeting was adjourned at 9:10 p.m.

PRESENT:

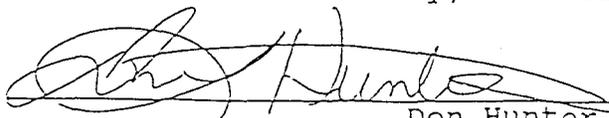
President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Secretary  
Keith Poff, Sitecon, Inc.  
Chris Weil, Sitecon, Inc.  
Dan Buck, Oaklynn Subdivision  
Kathy Nickolick, Oaklynn Subdivision  
Lewis Smith, Oaklynn Subdivision  
Jim Biggerstaff, Windsor Place  
Del Shanks, Windsor Place Subdivision  
Dan Swidron, Willow Creek Subdivision  
Bart Gander, Willow Creek Subdivision



Rick Borries, President



Pat Tuley, Vice-President



Don Hunter, Member

WILLIAM WORTMAN SUBDIVISION - SECTION II  
DRAINAGE PLAN REVIEW NOTES & RECOMMENDATIONS

I. DRAINAGE PLAN APPROVAL RECOMMENDATION:

A. Surveyor will recommend drainage plan approval if:

1. Developer will regrade the South Bank of a ditch along the North subdivision boundary to a 3:1 side slope where possible, with consideration given to preserve the large trees along said ditch.

The bank should be graded, seeded, cared for, and turned over the lot owner in a lawn-like condition.

2. The Developer will install a rock chutes from the ends of all pipes discharging onto properties adjacent to the subdivision, or into boundary line ditches; and he shall install a rock blanket on the bank opposite the pipes.

Such chutes with aprons and dissipaters are shown in detail on the preliminary drainage plan, and must be included in the street and drainage construction plans.

3. The final plat and all future street and/or drainage plans will show certain drainage easements not included on the first plan submitted for review.

These easements were added during review, but due to problems with the design engineers' AutoCADD hardware, the finished plan was unavailable at the drainage board meeting of 10/24/94.

The final drainage plan must be submitted for filing in the County Surveyors Drainage Plan Record before construction begins.

4. The design engineer will provide details of all inlets, pipes, erosion control fabrics, and other features to be installed within these additional easements and other drainage easements shown on the original submittal.

The fabrics, rip-rap, and other materials shall be installed in accordance with manufacturers' recommendations or INDOT standards.

## II. DETENTION BASINS & OPEN DITCHES:

A. The Surveyor will recommend the submitted designs of the dry bottom detention basins and open channels (waterways) if:

1. The Developer includes rock chutes, energy dissipaters, or other appropriate erosion control materials at the end of every pipe outlet from street drainage into the basin areas (see end of two cul-de-sacs.)
2. The Developer includes rock blankets on the ditch banks opposite the outlet ends of pipes leaving basins.  
  
(Off-site easements or written approval will be required from owners of property on which rock blankets will be located.)
3. The Developer give a written notice to each home builder and lot owner adjacent to any drainage easement, ditch, pipe, or basin to the effect that the easements be maintained in dense, mowed grass equal to a lawn, and that no fence or other obstruction, whether temporary or permanent, shall be placed within any easement; and that any such obstruction shall be ordered removed at the property owner's expense.
4. That concrete ribbons the same as will be required by the new drainage ordinance be placed in the flow lines of dry basins to mark the elevation and direction of low flow through the basin to its outlet.
5. All swales and ditches are shown detailed and built with side slope steepness as follows:
  - a. All ditches 3:1 or flatter.
  - b. All basin banks 4:1 or flatter.
6. All ditches are constructed by the developer to be maintained perpetually in dense lawn grass, or appropriate erosion control material.
7. Detailed drawings show ditch intersections and tight turns constructed stable and protected from erosion.
8. Ditches with grades less than 0.8% have ribbon liners.

III. MISCELLANEOUS:

- A. The Surveyor will recommend approval of the plan if:
1. The required notices (attached hereto) are printed on the plat and in the covenants and restrictions.
  2. An addition to the notice (also attached) is included on the plat and in the covenants and restrictions.
  3. That all drainage facilities be constructed and operating before house construction begins on the lots served by the drainage facilities.
  4. That the Developer repair or cause to be repaired erosion, siltation, trench settlement, or other damages to the drainage facilities that are caused by house construction, road construction, and/or utility installations that may occur during the period of time during which the Developer is supervising the project;  
  
and that the Developer transfer in writing such repair responsibility to home builders and lot owners.
  5. That the Developer, the home builders, and the Lot Owners be subject to the same enforcement of the terms of plan approval and the same enforcement with regard to maintenance of constructed drainage facilities as will be required of subdivisions under the drainage ordinance to be passed on October 31, 1994.
  6. That the Developer submit a complete and detailed set of as-built drainage plans.

*NOTE; DUE TO A HISTORY OF HILLSIDE DEVELOPMENT PROBLEMS:*

Caution should be exercised by all builders and lot owners to engineer any foundations and basement walls to be water tight, and yards graded to positively drain away from the houses.

Particular caution should be taken on Lots 3, 7, 8, 9, 12, 28, and 29 with respect to proper filling and grading of the building pads so that the uphill water drains around and away from the houses.

Final inspection by the Building Commissioner's Office is essential to insure compliance with codes regarding yard grades.

(5) "Preventing all persons or parties from causing any unauthorized alterations, obstructions, or detrimental actions from occurring to any part of the storm water drainage system and easements within or attached to this subdivision.

(6) "NOTICE: Any pipe, fence, wall, building, pool, patio, planting, stored material, excavation, fill, or other construction, improvement, addition to, or alteration of the land within a drainage easement in this subdivision requires the prior written approval of the County Drainage Board."

1502.02 PLAN B: REPAIR FUND: PAYMENT PER LINEAL FOOT:

As an alternative to Plan A, the land owner(s) and/or developer(s) shall present to the County Commissioners, at the same time and along with the submission of the Street and Drainage Plans, a Cashiers Check or a Certified Check in an amount equal to two dollars (\$2.00) per lineal foot of storm sewer pipe located outside of dedicated road rights-of-way as shown on the plans for the subdivision.

The check shall be attached to a prescribed submittal form available from the County Auditor or the County Engineer, which form shall provide specific data with regard to the subdivision for which the check is presented.

Printed clearly on the plat for a subdivision using Plan "B" method of maintenance shall be a notification stating that:

"The individual lot owner(s) shall be responsible, including financially, for maintaining that part of the storm water drainage system and its easements which exists on his or her property in proper working order including:

- (1) "Mowing grass, controlling weeds, and maintaining the designed cover the waterways, storage basins, and easements in accordance with applicable ordinances.
- (2) "Keeping all parts of the storm water drainage system operating as designed and constructed; and free of all trash, debris, and obstructions to the flow of water.
- (3) "Keeping the channels, embankments, shorelines, and bottoms of waterways and basins free of all erosion and sedimentation.

- (4) "Maintaining that part of the storm water drainage system which lies on his or her property in accordance with the conditions described on the approved street and/or drainage plans on file in the County Surveyor's Office, and/or in the County Engineer's Office, and in compliance with the County Drainage Ordinance.
- (5) "Preventing all persons or parties from causing any unauthorized alterations, obstructions, or detrimental actions from occurring to any part of the storm water drainage system and easement which lies on his or her property.
- (6) "The Repair Fund established for this Project will pay the costs of repairing structural failures in the storm sewer pipes, pipe collars, drop boxes, aprons, inlets, manholes, junction boxes, and the piped or paved outlet structures of the storm water control basins all of which are parts of the approved and constructed storm water drainage system shown on the as-built plans for this Subdivision; and which are in drainage easements and outside of the county accepted road rights-of-way as shown on the plat of this subdivision."
- (7) "NOTICE: Any pipe, fence, wall, building, pool, patio, planting, stored material, excavation, fill, or other construction, improvement, addition to, or alteration of the land within a drainage easement in this subdivision requires the prior written approval of the County Drainage Board."

1502.03 THE INCLUSION OF ALL NOTICES UPON THE PLAT AND IN THE COVENANTS IS THE RESPONSIBILITY OF THE DEVELOPER(S):

The inclusion of all notices required to be printed upon the recorded plats and within the covenants and restrictions for the subdivision, some of which notices are printed in Section 1502 above, shall be the total responsibility of the Applicant and/or the Developer of the subdivision.

Exclusion of such notices as are required upon the recorded plats and/or within the covenants and restrictions for the subdivision may result in the recording of amended plats and covenants at the expense of the Applicant and/or the Developer.

The responsibility, if it exists, for notifying home builders, home buyers, lot owners, and others of the maintenance and repair responsibilities enumerated in the various notices and sections within this Ordinance shall be the responsibility of the Applicant/Developer and his or her sales agents and assigns.

OCT 24 '94 09:36 F.C. T1034999014R

P.1 1

October 24, 1994

Mr. Bill Jeffers

RE: Oaklynn Park Subdivision

We have reviewed your recommendations concerning our subdivision and we have accepted your recommendations. We would like to advise under your plan B repair fund, payment per lineal foot would be our choice. We would like to thank you for careful consideration of our deveopment and your promptness attending to this matter.

Thank You,

Oaklynn Park LLC

Dan Buck President  
Dan Buck General Contractor Inc. President

Bradley D. Sterchi  
Bradley D. Sterchi

OAKLYNN PARK  
DRAINAGE PLAN REVIEW NOTES & RECOMMENDATIONS

I. SONNTAG-STEVENS DITCH MAINTENANCE RIGHT-OF-WAY

A. Surveyor will recommend drainage plan proposal of forty (40) foot easement line for Sonntag-Stevens Ditch as measured from Centerline of ditch if:

1. Developer will repair or replace the concrete apron at the end of the elliptical pipe at Northeast Corner of project where farmer's field drain undermined apron.

Surveyor must approve design and as-built product.

2. Developer will rip-rap South Bank of ditch from apron West to a point due South of West right-of-way line of existing Clover Drive in Clover Lawn Subdivision.

Rip-rap application must be underlaid with fabric, and stone depth must be 18" to 24"; locked in at toe.

3. Developer will lay South Bank back to a 3:1 side slope from the West end of the Clover Drive crossing, thence West to the West end of the project.

Developer may use resulting spoil in his project.

4. Developer will grade area from South top of bank South to the easement line to facilitate drainage into ditch, and to create a flat maintenance pathway 30 feet wide.

5. Developer will immediately seed and mulch all graded area within 40 foot easement including South ditch bank, and continuously maintain said area in SWCD recommended cover grass until sold and released to subsequent Lot Owner(s).

6. Developer will give written notice to all adjacent home builders and lot owners that the 40 foot easement must:

- a. Be maintained perpetually in dense grass cover,
- b. That no fences nor other obstructions of any kind whether permanent or temporary will be allowed within 40 feet of the ditch centerline;
- \* c. And that any alteration of or damage to the approved flat maintenance pathway shall result in repairs at the property owners' expense.

II. CLOVER DRIVE CROSSING SONNTAG-STEVEN'S DITCH:

- A. The Surveyor will allow and recommend the road crossing if:
1. The Developer file a copy of the street plans with the County Engineer and County Surveyor showing:
    - a. A precast box with a minimum 3 ft. x 8 ft. opening, with wingwalls designed to hold the ditch banks; or:
    - b. An elliptical pipe with a minimum 38" x 60" opening, with head walls, and sufficient berm on South bank to contain head water developing behind the pipe.
  2. The Developer will install a rock chute from the culvert to the West end of the rip-rap referred to in I-A-2.
  3. The design engineer will provide details of all inlets, scuppers, and flumes which direct storm water into Sonntag-Stevens for the Surveyor to approve and include in the file.

III. DETENTION BASINS:

- A. The Surveyor will recommend the submitted designs of the dry bottom detention basins if:
1. The Developer includes rock chutes at the end of every pipe outlet from street drainage into the basin areas.
  2. The Developer includes rock blankets on the ditch banks opposite the outlet end of pipes leaving Basin "B" and Basin "C".

(Off-site easements or written approval will be required from owners of property on which rock blankets will be located.)
  3. The Developer include a rock chute from the outlet end of the pipe leaving Basin "A" into the central ditch.
  4. The Developer give a written notice to each home builder and lot owner adjacent to the 20 foot wide easement from Basin "A" West to Jenny Place to the effect that the entire 20 foot wide easement be maintained in dense, mowed grass, and that no fence or other obstruction, whether temporary or permanent, shall be placed within said easement; and that any such obstruction shall be ordered removed at the property owner's expense.
  5. That concrete ribbons the same as will be required by the new drainage ordinance be placed in the flow lines of all three dry basins.

IV. DRAINAGE DITCHES AND SWALES:

A. The Surveyor will recommend approval of the plan if:

1. All swales and ditches are shown detailed and built with side slope steepness as follows:
  - a. Exterior (border) ditches 3:1 or flatter.
  - b. Interior waterways 4:1 or flatter.
2. All ditches are maintained perpetually in dense grass.
3. Detailed drawings show ditch intersections and tight turns stable and protected from erosion.
4. Ditches with grades less than 0.8% have ribbon liners.

V. MISCELLANEOUS:

A. The Surveyor will recommend approval of the plan if:

1. The required notices (attached hereto) are printed on the plat and in the covenants and restrictions.
2. An addition to the notice (also attached) is included on the plat and in the covenants and restrictions.
3. That all drainage facilities be constructed and operating before house construction begins on the lots served by the drainage facilities.
4. That the Developer repair or cause to be repaired erosion, siltation, trench settlement, or other damages to the drainage facilities that are caused by house construction, road construction, and/or utility installations that may occur during the period of time during which the Developer is supervising the project; or that the Developer transfer in writing such repair responsibility to home builders and lot owners.
5. That the Developer, the home builders, and the Lot Owners be subject to the same enforcement of the terms of plan approval and the same enforcement with regard to maintenance of constructed drainage facilities as will be required of subdivisions under the drainage ordinance to be passed on October 31, 1994.
6. That the Developer submit a complete and detailed set of as-built drainage plans.

\* NOTE; DUE TO FLAT GRADE OF LAND & PROXIMITY TO FLOOD PLAIN:  
Caution should be exercised by all builders and lot owners to engineer any foundations and basement walls to be water tight, and yards graded to positively drain away from the houses.

28. SIDEWALKS. All sidewalks are to be placed starting at three (3) feet off the back of the curb and are to be four (4) in width. The developers Brad Sterchi and Dan Buck General Contractor Inc., will advise as to the location of sidewalks in writing, unless advised differently sidewalks shall be constructed parallel to all roads on all lots.

29. VACANT LOTS. No lot shall remain vacant for more than a two (2) year period from date of purchase from developers unless written approval is obtained from the developers. The developers having no control over the duration of lot sales shall remain exempt from the two year period.

30. DRAINAGE AND DRAINAGE REPAIR. The individual lot owners shall be responsible, including financially, for maintaining that part of the storm water drainage system and its easements which exists on his or her property in proper working ~~order~~ including:

a. Mowing grass, controlling weeds, and maintaining the designed cover the waterways, storage basins, and easements in accordance with applicable ordinances.

b. Keeping all parts of the storm water drainage system operating as designed and constructed; and free of all trash, debris, and obstructions to the flow of water.

c. Keeping the channels, embankments, shorelines, and bottoms of waterways and basins free of all erosion and sedimentation.

d. Maintaining that part of the storm water drainage system which lies on his or her property in accordance with the conditions described on the approved ~~street~~ and or drainage plans on file ~~in~~ the County Drainage Ordinance. ~~Street~~ <sup>ORDER</sup> AND IN

e. Preventing all persons or parties from causing any unauthorized alterations, obstructions, or detrimental actions from occurring to any part of the storm water drainage system and easement which lies on his or her property.

f. The Repair Fund established for this Project will pay the costs of repairing structural failures in the storm sewer pipes, pipe collars, drop boxes, aprons, inlets, manholes, junction boxes, and the piped or paved outlet structures of the storm water control basins all of which are parts of the approved and constructed storm water drainage system shown on the as-built plans for this Subdivision; and which are in drainage easements and outside of the county accepted road rights-of-way as shown on the plat of this subdivision.

g. NOTICE: any pipe, fence, <sup>WALL</sup> ~~wall~~ building, pool, patio, planting, stored material, excavation, fill, or other construction, improvement, addition to, or alteration of the land within a drainage easement in this subdivision requires the prior written <sup>APPROVAL</sup> ~~approval~~ of the County Drainage Board.

**PRELIMINARY**

3-0

WINDSOR PLACE SUBDIVISION

DRAINAGE PLAN REVIEW NOTES & RECOMMENDATIONS

I. DRAINAGE PLAN APPROVAL RECOMMENDATION:

A. Surveyor will recommend drainage plan approval if:

1. Developer will regrade the South Bank of a ditch along the North subdivision boundary to a 3:1 side slope where possible, with consideration given to preserve the large trees along said ditch.

The bank should be graded, seeded, cared for, and turned over the lot owner in a lawn-like condition.

2. The Developer will install rock chutes from the ends of all pipes and open channels discharging on properties adjacent to the subdivision, or into boundary line ditches; in particular on the ends of any pipes or ditches discharging into Schlensker Creek.

Such chutes shall be designed according to SWCD specs, and shown in detail on the final street and drainage plan and on the "as-built" plans.

3. The final plat and all future street and/or drainage plans will show any drainage easements not included on the plans thus far submitted, if such are added.
4. Any easements not described clearly with accurate bearings and dimensions on plans thus far submitted will be so described on the final recorded plat, and all future drainage plan submittals.
5. The design engineer will provide details of all inlets, pipes, erosion control fabrics, end treatments, and other features to be installed as part of the drainage system in exact detail on the Street and Drainage Plans submitted to the County Engineer, and on the as-builts.

The fabrics, rip-rap, and other materials shall be installed in accordance with manufacturers' recommendations or INDOT standards.

## WETLAND BASINS & OPEN DITCHES:

The surveyor will recommend the submitted designs of the wetland basins and open channels (waterways) if:

The Developer includes rock chutes, energy dissipaters, and other appropriate erosion control materials at the end of every pipe outlet from street drainage into the basin areas sufficient to slow velocity and prevent erosion.

The Developer install headwalls on the outlet of the pipe leaving Lake No. 2, and on the inlet of the pipe downstream of it; and construct a stable channel between the two pipes.

The Developer give a written notice to each home builder and lot owner adjacent to any drainage easement, ditch, pipe, or basin to the effect that the easements be maintained in dense, mowed grass equal to a lawn, and that no fence or other obstruction, whether temporary or permanent, shall be placed within any easement; and that any such obstruction shall be ordered removed at the property owner's expense.

All swales and ditches are shown detailed and built with the slope steepness as follows:

All ditches 3:1 or flatter.

All basin banks 4:1 or flatter.

All ditches are constructed by the developer to be maintained perpetually in dense lawn grass, or appropriate erosion control material.

Detailed drawings show ditch intersections and tight turns constructed stable and protected from erosion.

Ditches with grades less than 0.8% have ribbon liners.

III. MISCELLANEOUS:

A. The Surveyor will recommend approval of the plan if:

1. The required notices (attached hereto) are printed on the plat and in the covenants and restrictions.
2. An addition to the notice (also attached) is included on the plat and in the covenants and restrictions.
3. That all drainage facilities be constructed and operating before house construction begins on the lots served by the drainage facilities.
4. That the Developer repair or cause to be repaired erosion, siltation, trench settlement, or other damages to the drainage facilities that are caused by house construction, road construction, and/or utility installations that may occur during the period of time during which the Developer is supervising the project; and that the Developer transfer in writing such repair responsibility to home builders and lot owners.
5. That the Developer, the home builders, and the lot owners be subject to enforcement terms similar and nearly equal to those required by the drainage ordinance to be passed on October 31, 1994; that is:  
  
That the Developer include within the covenants and restrictions for Windsor Place sufficient notification and restrictions to preserve the drainage system as constructed, and to insure that necessary repairs may be determined, designed, completed, and paid for by homeowners and/or the Homeowners' Association.
6. That the Developer submit a complete and two detailed sets of as-built street and drainage plans; one to be filed in the County Surveyor's office, and one set in the office of the County Engineer.

**NOTE; DUE TO A HISTORY OF HILLSIDE DEVELOPMENT PROBLEMS:**

Caution should be exercised by all builders and lot owners to engineer any foundations and basement walls to be water tight, and yards graded to positively drain away from the houses.

Particular caution should be taken on Lots 2, 3, 4, 5, 6, 15, 17, 68, 69, 70, 27, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 42, 45, 47, 48, 49, 53, 55, 57, 58, 59, 60, 61, 62, and 63 with respect to proper filling and grading of the building pads so that the uphill water drains around and away from the houses.

In addition, a natural waterway has been or is being filled as it ran thru Lots 6, 5, 15, 70, 69, and another channel in Lot 68.

Extreme care should be taken to engineer the fill to be sufficient to construct stable house foundations;

Footing inspections and final inspection by the Building Commissioner's Office are essential to insure compliance with codes regarding footers poured on stable fill and yard grades away from the foundations.

Also, the Developer should be aware that certain requirements of the 1990 Floodplain Management Ordinance of Vanderburgh County may apply to this project, particularly on Lots 46, 47, 48, 49, and 50.

construed or interpreted to affect the activities of the Developer, and their nominees, successors or assigns, in the development and sale of the lots as a part of the development of the Subdivision.

NO SUBDIVIDING. No lot shall be further subdivided by the owner or owners for the purpose of creating two or more residential lots without the express written consent of the Architectural Review Committee. The Developer reserves the right to subdivide any lot in this subdivision as he may deem necessary.

COMMON MAINTENANCE EXPENSES. Each and every owner of a lot in this subdivision shall have the responsibility for bearing his or her proportionate share of any maintenance expenses with respect to street lighting and entrances into the subdivision. The one time fee for each lot owner for the above mentioned expenses shall be \$500.00. Additionally, the streets situated within the subdivision shall be considered a common maintenance expense until such time as the Board of Commissioners of Vanderburgh County, Indiana, or such other appropriate governmental body, accepts the streets of said subdivision for maintenance. It is understood by all lot owners that all common areas in Windsor Place Subdivision will be conveyed to the Homeowners Association when 80% of the lots contained in this subdivision are sold.

*WINDSOR PLACE*

LAKE OWNERS' COMMON MAINTENANCE EXPENSES AND RIGHTS. Each lot owner whose lot abuts any lake located in the subdivision shall have the joint responsibility with all other lake lot owners for the maintenance and upkeep of any such lake. The responsibility for and decisions regarding the maintenance and upkeep of the lakes and dams shall be determined according to the majority rule of the owners of the lake lots which abut any lake in the subdivision. Lake privileges, including the use thereof, shall be for the immediate family and specific invited guests of the lake lot owners in the presence of the lake lot owner as that term is defined herein. Although each lake lot owner's property line may extend into the lake property, the water covered area of each lake shall be considered a common area for the use and benefit of each lake lot owner. Groups of lakes connected by drainage pipes shall be considered one lake.

MAINTENANCE OF TRACTS AND IMPROVEMENTS. The Owner of any lot in the Subdivision shall at all times maintain the lot and any improvements situated thereon in such a manner as to prevent the lot or improvements from becoming unsightly; and, specifically each such Owner shall:

- a. Mow such portion of the lot upon which grass has been planted at such times as may be reasonably required;
  - b. Remove all debris and rubbish within 5 days;
  - c. Prevent the existence of any other condition that reasonably tends to detract from or diminish the aesthetic appearance of the Subdivision;
- and:
- d. Keep the exterior of all improvements in such a state of repair and maintenance to avoid their becoming unsightly;
  - e. All houses must be termite treated at the commencement of construction.

STORAGE, REPAIR OR MATERIAL ALTERATION OF MOTOR VEHICLES, BOATS, CAMPERS, ETC. Neither the repair or storage of inoperative motor vehicles, nor the material alteration of motor vehicles, shall be permitted on any lot within the Subdivision unless entirely within a garage. Storage shall also be provided for any

the dwelling upon each lot shall maintain on site during construction of the dwelling a trash dumpster having dimensions of at least six {6} cubic yards.

{f} Telephone, Cable and Electrical Service.

All electric power, cable television and telephone service shall be carried underground from the public utility easement across the lot to each resident or other building. No overhead utility service will be permitted across any lot. No visible antennas, any wire pole to pole, or house to pole will be permitted.

BUILDING SETBACK LINES. No residence or other building structure shall be constructed nearer to the front property line along the existing roadway as shown on the subdivision plat. Side lot lines are hereby established for each lot which shall total the in width no less than twenty-five percent {25%} of a lot's width measured at that point which is the front line of the dwelling, with not less than a minimum of ten percent {10%} of such lot width being applicable to one of the two side lot lines. No residence or other building structure shall be constructed nearer to the side lot lines than as herein provided. In the event that an owner shall own two {2} or more adjacent lots in the subdivision which are used together for the purpose of developing only one {1} residential dwelling, the side line dimensions applicable to the lot on which the grade is part of the dwelling as located shall be applicable, and the side line requirements shall not apply to the common or shared side of interior lot line of any lots combined for one {1} dwelling.

WINDSOR PLACE

WATER AND DRAINAGE. The water from down spouts or other surface water drainage shall be directed to controlled drainage facilities and not to be drained into or guided to the sanitary sewer systems. ~~The natural and man made drainage facilities of the subdivision shall not be obstructed, altered, damaged or otherwise changed by the owner of any lot and it shall be the obligation of the owner of each subdivision lot to keep and maintain the drainage facility located thereon clean, open, unobstructed and mowed.~~

The Home Owners Association shall be responsible, including financially, for the maintenance and repair of the entire storm water drainage system, its parts, and easements within or attached to this subdivision and outside of county accepted roadways including:

- a. Mowing grass, controlling weeds, and maintaining the designed cover of the waterways, storage basins and easements in accordance with applicable ordinances.
- b. Keeping all parts of the storm water drainage system operating at all times as designed and as constructed; and free of all trash, debris and obstructions to the flow of water.
- c. Keeping all channels, embankments, shorelines, and bottoms of waterways and basins free of all erosion and sedimentation.
- d. Maintaining and repairing the storm water drainage system in accordance with the conditions described on the approved street and/or drainage plans on file in the County Surveyors Office and/or the County Engineers Office; and in compliance with the County Drainage Ordinance.
- e. Preventing all persons or parties from causing any unauthorized alterations, obstructions, or detrimental actions from occurring to any part of the storm water drainage system and easements within or attached to this subdivision.

## WINDSOR PLACE

**NOTICE:** Any pipe, fence, wall, building, pool, patio, planting, stored material, excavation, fill or other construction, improvement, addition to, or alteration of the land within a drainage easement in this subdivision requires the prior written approval of the Vanderburgh County Drainage Board.

Neither the Developer, nor its agents, successors or assigns, shall have any liability to an Owner or to any other person with respect to sewage on, over or under a lot or with respect to any sewage disposal system located or proposed to be located thereon. Such drainage and sewage disposal systems shall be the responsibility of the Owner of the lot upon which a residence is constructed and of the builder of such residence and an Owner, by an acceptance of a deed to a lot, shall be deemed to agree to indemnify, defend and hold Developer and its agents, successors and assigns free and harmless from any and against any and all liability arising from, related to, or in connection with drainage on, over and under the lot described in such deed or any sewage disposal system located, or to be located, thereon. Developer shall have no duties, obligations or liabilities hereunder except such as are expressly assumed by Developer, and duty of, or warranty by, Developer shall be implied by or inferred from any term or provision of this covenant.

Each lot Owner understands any approved Builder before construction begins must sign and abide by and to Rule #5 (Erosion Control as set forth by the Indiana Department of Environmental Management) as follows:

All lots in this subdivision are subject to the Indiana Department of Environmental Management General Permit Rule 327 I.A.C. 15.5. This rule requires that erosion control practices be used during development and construction that will minimize soil erosion and sediment laden water from flowing from the building sites and it requires the streets be kept free from transported soil from the building site.

As required, an erosion control plan for the subdivision has been submitted to the Vanderburgh County Soil and Water Conservation District. One part of the plan pertaining to individual lots requires that prior to the start of construction a rock driveway be installed and entrance to the building site for all deliveries and workers should be over the driveway. To minimize sediment laden water from being discharged into the streets and drainage ways, sand bags, straw bales and silt fences shall be used on the individual building site.

Adjoining lots shall not be used for any purpose. If your employees, contractors or agents are responsible for disturbing the vegetation on adjoining building sites, appropriate erosion control practices shall be started immediately.

Each owner of a lot in this subdivision agrees to assume the obligation to comply with the requirements of the General Permit Rule 327 I.A.C. 15-5 as it pertains to their individual lot.

**UTILITY TAP-IN FEES.** All utility tap-in and installation fees, whether for water, sewage, telephone, electric, gas, cable television, or any other, shall be the responsibility of the lot owner.

**ANTENNAS AND RECEIVERS.** No satellite receiver or down link shall be permitted on any lot, nor shall any exterior antenna be permitted thereon without the prior written consent from the Architectural Review Committee. The Architectural Review Committee shall not be obligated to give its consent to the installation of any exterior television antenna if television reception is available from underground cable connections serving the lot.

**ELECTRIC BUG KILLERS.** No electric bug killer, "zapper" or other similar



CERTIFICATION OF PAYMENT  
FOR MAINTENANCE TO A REGULATED DRAIN

By this Instrument, I Terry R. Johnson  
(Signature in Ink)

representing TERRY R. JOHNSON CONST., and presently  
under contract with the Vanderburgh County Drainage Board to perform

certain maintenance on HARPER DITCH, a regulated  
drain in Vanderburgh County, Indiana, do certify that I, and/or the  
firm I represent, have/has paid in full all expenses incurred for  
labor, supplies, and subcontracts except for any unpaid costs as  
specified herein under:

None

and further, that neither I, nor the firm I represent, will hold the  
Vanderburgh County Drainage Board responsible for any costs, or any  
claims arising from such expenses, except for the fifteen (15) percent  
of the total contract price which the Board presently holds in  
retainage pending the receipt of this Certification of Payment.

NAME OF DRAIN: HARPER DITCH # 234-017

CONTRACTOR: TERRY R JOHNSON VENDOR # 1052

CONTRACT # \_\_\_\_\_ AND/OR ACCOUNT # 234-017

[ ] ANNUAL MAINTENANCE COMPLETION DATE 9-28-94  
[X] ADDITIONAL MAINTENANCE INSPECTION DATE 9-30-94  
[ ] EMERGENCY MAINTENANCE

[X] WORK IS APPROVED  
[ ] NOT APPROVED: COMMENTS: \_\_\_\_\_

Robert W. Zimmerman 10/24/94  
VANDERBURGH COUNTY SURVEYOR DATE

# Proposal

Page No. \_\_\_\_\_ of \_\_\_\_\_ Pages



TERRY JOHNSON'S CONSTRUCTION CO.  
GENERAL CONTRACTOR  
1902 N. 4th Ave.  
Evansville, IN  
425-2388



VAND CO. DRAINAGE BOARD

SUBMITTED TO <b>HARPER DITCH</b>	PHONE <b>435-5210</b>	DATE <b>9-28-94</b>
STREET <b>Evansville Ind.</b>	JOB NAME	
CITY, STATE AND ZIP CODE	JOB LOCATION	
ARCHITECT/ENGINEER	ATTENTION	

We are pleased to quote:

Remove Shopping CART'S FROM HARPER DITCH

15-WALMART CART'S PICTURE'S TAKEN \$ 11.10

12-VENTURES CART'S

6-Buy Low CART'S

2-Best Buy CART'S

1- OPERATOR & TRACTOR } 4 HR'S

1-LABOR

\$ 235.00

CART'S HAULED OFF DITCH

We propose hereby to furnish material and labor — complete in accordance with above specifications, for the sum of:

Payment to be made as follows: \_\_\_\_\_ dollars (\$ 246.10)

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Authorized Signature Terry R. Johnson

Note: This proposal may be withdrawn by us if not accepted within \_\_\_\_\_ days.

**Acceptance of Proposal** — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date of Acceptance: \_\_\_\_\_

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON CONST # 1052

On Account of Appropriation for HENRY DITCH # 234-019

Invoice No.	Itemized Claim	Amount	
	1994 FALL MOW		
	3,179 LF @ \$ 0.3069 = \$ 975.63		
94-FM-19-85	PAY 85% = \$ 829.29 →	\$ 829	29
	15% RETAINAGE = \$ 146.34		

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,  
I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name  
Owner  
Title

Date OCT 13, 1994

Robert W. Brenner, Vanderburgh County Surveyor

FALL MOW

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Terry R. Johnson

for  annual --  additional maintenance to Henry Ditch, a legal drain in Vanderburgh County, Indiana, was completed on OCT. 12, 1997, and was inspected by our staff on OCT. 12, 1997, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner AWB 10/24/97  
Robert W. Brenner, Vanderburgh County Surveyor Date

Additional Comments:



Robert W. Brenner, Vanderburgh County Surveyor

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: Terry R. Johnson

for  annual --  additional maintenance to Sonntag Stevens Ditch, a legal drain in Vanderburgh County, Indiana, was completed on OCT 8, 1994, and was inspected by our staff on OCT. 10, 1994, 1994, and is  approved --  disapproved for payment per the contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner 10-9-94  
Robert W. Brenner, Vanderburgh County Surveyor Date

Additional Comments:



Robert W. Brenner, Vanderburgh County Surveyor

VANDERBURGH COUNTY  
SURVEYOR'S OFFICE  
Room 325 Civic Center Complex  
One Northwest Martin Luther King, Jr. Boulevard  
Evansville, Indiana 47708-1833  
(812) 435-5210

SURVEYOR'S REPORT

To: The Vanderburgh County Drainage Board

This report shall serve as notification to the Vanderburgh County Drainage Board that the work required by a certain contract between the Board and: TERRY R. JOHNSON CONST

for  annual --  additional maintenance to  
KEIL Ditch, a legal drain  
in Vanderburgh County, Indiana, was completed on  
OCT 1, 1994, and was inspected by  
our staff on OCT 4, 1994, and is  
 approved --  disapproved for payment per the  
contracted price indicated on the claim herewith attached.

Respectfully submitted by:

Robert W. Brenner  
Robert W. Brenner, Vanderburgh County Surveyor

10-9-94  
Date

Additional Comments:

VANDEBURGH COUNTY SURVEYOR

October 24, 1994

Mr. Richard J. Borries, President  
Vanderburgh County Drainage Board

Sir:

September 26, 1994, you asked our office to prepare a solution to a drainage problem brought before your board on that date. The problem was explained to your board by Mr. Don Swidron of Lot 12 Willow Creek Subdivision.

After much research into the history and field conditions at that subdivision, we are not sure we can provide a solution which will please everyone involved because:

- 1. Mr. and Mrs. Swidron basically do not want any storm water from uphill properties crossing onto their lot.

At present, storm runoff from about 1/4 of Lot 22, and about 1/2 of Lot 21 crosses Swidron's property in the same path as storm water took prior to the subdivision's development.

- 2. Dr. Quddus, the Swidron's uphill neighbor at Lot 21 wants the rear of his lot elevated with 5 to 6 loads of dirt.

If Quddus' lot is elevated right up to the property line, a three foot high wall will be required to hold the dirt back, and to allow for grading the lot to drain properly.

If the lot is filled without a wall, and mowable 3:1 slope is graded from the property line uphill to a level terrace, a substantial area of uphill runoff will still drain down onto the Swidron's lot.

- 3. Mr. Wheeler, Quddus' neighbor at Lot 22, does not want any of Quddus' storm water crossing Lot 22; particularly, Quddus' foundation drain that now empties near Wheeler's East line.

Mr. Wheeler is correct in that the runoff from Quddus' lot did not naturally cross the Wheeler lot prior to development.

So, taking everyone's wishes into account, the best we can come up with is constructing a wall along Swidron's North property line; filling Quddus' rear lot with clean fill; and grading the Quddus' lot to drain to Willow Creek Drive.

A report is attached providing more detailed information.

ANOTHER REPORT TO THE VANDERBURGH COUNTY DRAINAGE BOARD  
ON WILLOW CREEK SUBDIVISION

October 17, 1994

THIS SECOND REPORT IS SUPPLEMENTAL TO A REPORT ENTERED INTO THE MINUTES OF THE DRAINAGE BOARD MEETING OF SEPTEMBER 26, 1994.

The first report was assembled as quickly as possible to provide the Board with information on a subject entered on the agenda at the last minute at the request of residents of Willow Creek Sub.

THIS REPORT CONTAINS INFORMATION DISCOVERED AFTER A MORE DETAILED INVESTIGATION OF THE SAME PROBLEM AS REPORTED ON AT THAT MEETING.

THIS REPORT WILL ADDRESS CERTAIN DEMANDS, REQUESTS, AND QUESTIONS THAT HAVE BEEN PUT TO THE COUNTY SURVEYOR'S STAFF BY WILLOW CREEK RESIDENTS SINCE THE FILING OF THE FIRST REPORT; TO WIT:

- I. WHO IS RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, INSPECTION MAINTENANCE, AND REPAIR OF THE RETENTION BASINS?
- II. WHO IS RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, INSPECTION MAINTENANCE, AND REPAIR OF THE DRAINAGE SWALES, DITCHES, AND PIPES?
- III. WHO IS RESPONSIBLE FOR DIRT GRADING THE YARDS?
- IV. HOW CAN THE SPECIFIC DRAINAGE PROBLEM EXISTING BETWEEN THE BACK YARDS ON RYAN COURT AND HANNAH COURT BE FIXED?

## I. RETENTION BASINS

The retention basins were designed by the Easley Engineering group, the designs were reviewed by the County Surveyor's staff, and approved by the County Drainage Board, all in accordance with standard operation procedures for this item.

The retention basins were designed for temporary storage of the volume of storm water runoff anticipated to exceed the natural pre-development quantity of runoff calculated to occur during a twenty-five year return period storm.

Amended Subdivision Drainage Ordinance Section 150.121 requires:

1. That the developer notify the County Highway Engineer when the basins have been constructed.
2. That the County Highway Engineer inspect and give a written approval letter to the developer for the finished basins.
3. That the developer guarantee the basins for a period of one year from the date of the County Highway Engineer's letter.
4. That "the developer must form a Homeowners' Association which will ultimately be responsible for the maintenance and repair of .... the Retention Basin." (after the one year guarantee period, past the date of the Engineer's approval letter.)
5. That the developer print clearly on the plat, and in the covenants and restrictions for the subdivision specific language, required by the ordinance, with regard to the Homeowners' retention basin maintenance responsibilities.

THERE IS NO RECORD THAT THESE FIVE REQUIREMENTS WERE MET BY THE DEVELOPER FOR WILLOW CREEK SUBDIVISION. (A VIOLATOR IS SUBJECT TO A FINE OF UP TO \$2500.00 PER DAY PER VIOLATION.)

### SOLUTION:

1. The developer bring the retention basins into conformance with plans on file at the engineering firm which designed the basins.
2. That the developer follow inspection and approval procedures required by ordinance.
3. That the developer guarantee the basins for a period of one year past the date of the County Engineer's approval letter.
4. That the developer record a plat of the subdivision, and a set of covenants and restrictions all containing the specific language with regard to storm sewer and basin maintenance as required by ordinance.
5. That the developer form a Homeowners' Association to care for the storm sewers and basins in accordance with the ordinance.

## II. DRAINAGE SWALES, PIPES, AND DITCHES:

The design, review, approval, and maintenance of channels and pipes generally are the same as for basins; so the comments made on basins shall apply to the entire drainage system.

The ditch in Lot 22 is outside the easement, and the subdivision ordinance requires that all channels be housed in easements; so a replat of Willow Creek Subdivision is required to show all channels, pipes, and basins housed inside of drainage easements.

Also, the channel in Lot 22 should be regraded so that all its banks are a minimum 3:1 side slope as required by ordinance; the flow line should be stabilized by sod, erosion mats, rip-rap, or concrete; and a drop box should be constructed at the north end of the 15" concrete pipe between Lot 10 and Lot 11, since that part of the bank cannot be graded with 3:1 side slopes.

There may be other channels and pipes throughout the subdivision that will require finished treatment prior to the required final inspection and approval by the County Highway Engineer.

Also note that the guarantee period for storm sewer pipes is one year past the date of the Engineer's approval letter.

## III. YARD GRADING:

Generally, a subdivision developer attempts to grade the building sites while cutting in the streets, ditches, and basins so that dirt needed to fill in the lower yards can be obtained on site from street cuts and basin excavation.

The building codes require positive drainage away from footers, foundation walls, and crawl spaces; and if the builders in Willow Creek have not accomplished proper foundation drainage, the building commissioner's office should be consulted.

In addition, the covenants and restrictions for Willow Creek Subdivision specifically address the lot owners' responsibilities with regard to erosion control, finish grading, seeding, mulching and drainage facility maintenance.

If a copy of the covenants and restrictions is not available from the developer, anyone may obtain such a copy by asking the County Recorder for a set filed in Miscellaneous Drawer 3, Card 5359.

IV. DRAINAGE PROBLEM IN BACK YARDS ON RYAN CT. & HANNAH CT.

A more detailed investigation of the specific problems brought to the Drainage Board on September 26, 1994, requires that this report add the following findings to supplement the first report:

1. The first report stated that the unusually wide utility easements in lots 21, 22, and 23 indicated an intention to construct a wide swale to direct drainage to the 15" pipe between Lot 10 and Lot 11.

In fact, the additional width was added because the sanitary sewer was built so far out of the platted easement that more footage had to be platted to house the sanitary sewer.

(The resulting extra-wide easement still may be used for drainage in accordance with the covenants for that sub.)

2. The 15" pipe in the easement between Lot 11 and Lot 10 was not installed specifically to receive drainage from Lot 21 and Lot 22 as earlier thought; but rather to take drainage which was to be ditched along McDowell Road according to an earlier drainage plan submitted by Sam Biggerstaff.

That plan was scrapped and a new plan was designed by Easley Engineering. Easley added the pipe so that a home could be built on Lot 10 without a huge, deep ditch in the back yard.

3. THE 15 INCH PIPE WILL HANDLE ABOUT 8 CFS IF A HEADWALL OR DROP BOX IS ADDED TO THE UPSTREAM FACE OF THE PIPE TO DEVELOP TWO (2) FEET OF HEAD PRESSURE; and 8 cfs is about what will be generated by a 25 year storm from 3 1/2 upstream acres.

ADDING MUCH MORE STORM DRAINAGE COULD OVERLOAD THAT PIPE IN A HEAVY STORM, and if the pipe is overloaded, the excess storm water will cross Lot 11, possibly damaging the house.

4. A headwall or drop box is need on the 15" pipe to prevent the erosion of earth backfill into the pipe, as is happening now.
5. A contour map accompanying this report shows that all of Lot 21, and the east half of Lot 22 drained through Lot 12 in its "natural condition" prior to development.

Basically the old flow line of the "natural drainage way" or the "draw" runs through the house built on Lot 12.

6. The natural, pre-development drainage from the west half of Lot 22 and all of Lot 23 was into the draw now occupied by the 15" pipe between Lot 10 and Lot 11.

7. The owner of the house on Lot 22 does not want any storm drainage from Lot 21 crossing Lot 22 and entering the 15" pipe between Lot 10 and Lot 11.

As shown on the contour map, the drainage from Lot 21 would not naturally take that path before development, but rather would continue down the draw through Lot 12.

8. The owner of the house on Lot 12 does not want any storm drainage from Lot 21 or Lot 22 continuing downhill and across Lot 12 because it may damage improvements on Lot 12.
9. The owner of the house on Lot 21 now wants the developer to provide several loads of fill to elevate the rear of Lot 21 adjacent to the north line of Lot 12.

To accomplish the stated desires of all three lot owners involved the following proposed solution is provided:

- A. CONSTRUCT A LOW WALL FROM THE NORTHWEST CORNER TO THE NORTHEAST CORNER OF LOT 12. ALL PARTS OF THE WALL SHOULD BE BUILT A FEW INCHES NORTH OF THE PROPERTY LINE OF LOT 12.
- B. APPLY FILL ON THE NORTH SIDE OF THE WALL TO ELEVATE LOT 21.
- C. GRADE THE AREA ON THE NORTH (UPHILL) SIDE OF THE WALL SO THAT THE DRAINAGE IS DIRECTED SOUTHEASTERLY TO WILLOW CREEK DRIVE.
- D. CUT THE CURB, AND CONSTRUCT A PAVED APRON IN THE RIGHT-OF-WAY SO THAT THE RUNOFF ENTERS THE GUTTER WITHOUT UNDERMINING THE STREET SLAB, OR RUSHING OUT ACROSS THE PAVEMENT.

Some very preliminary drawings and dirt grades are provided with this report to show the approximate location and elevations of the proposed wall, fill, apron, and other parts of this solution.

The participants of this project should retain a professional engineer or architect to design and supervise the construction of the wall, fill, and apron so that it is accomplished properly.

The County Highway Engineer must give prior approval to any plan affecting the street, as it is accepted for county maintenance.

(2) Minimum slopes of other unpaved areas shall be at least six inches in 25 feet (2%). In areas subject to ground frost, minimum slopes shall be three inches in 25 feet (1%). In other areas, or in case of unusual difficulty or hardship, minimum slopes shall be not less than the minimum gradient determined by the Joint Department of Building Commissioners as adequate to prevent at all seasons any prolonged saturation of soil or standing water. If required minimum slopes cannot be attained by other means, paved gutters or other drainage structures shall be installed as acceptable to the Department.

(3) Provisions shall be made to dispose of the the entire storm water runoff from the watersheds affecting site. The maximum height and steepness of slopes and maximum gradients of unpaved drainage channels shall be such as can be maintained without erosion or land slides and such as will provide adequate usable yard areas and satisfactory movement to and around buildings.

(D) Parking area requirements.

(1) Paved parking areas and courts shall be provided to meet the needs of the use of the building without interference with normal traffic. Parking areas shall be located and designed for convenient ingress and egress. Parking stalls shall be at least 10 feet by 20 feet in size.

(2) Parking areas shall be designed to be usable during run-off from a two year frequency storm.

(3) The subgrade shall be well drained, shaped to drain properly, and uniformly graded and compacted. Flexible pavements shall have a minimum base thickness of six inches and a minimum wearing surface of 1-1/2 inches. Concrete pavements shall be not less than four inches in thickness in R-1 Districts (including nonconforming R-1 uses) and five inches in thickness in all other districts.

Traffic ways or parking area aisles shall have a minimum base thickness of seven inches and a minimum wearing surface of two inches for flexible pavements and a minimum thickness of six inches for concrete pavements. Concrete pavement shall be provided with adequate expansion and contraction joints.

(4) The maximum gradient shall generally be 5/8 inch per foot (5%) and the minimum shall generally be 1/16 inch per foot (0.5%). Gradients other than the maximum and minimum may be acceptable as determined by individual analysis considering topography and preserving existing site features and the character

and needs of the facilities being served. Vehicle barriers or wheel stops, where installed, shall be firmly anchored and shall not create ponding or pocketing of storm water runoff.

(Ord. passed 12-28-76; Am. Ord. passed 7-23-79) Penalty, see § 150.999

§ 150.120 INSPECTION.

The Joint Department of Building Commissioners shall keep files of all applications and proceedings pursuant to them, indexed by the location of the site by road name. The Department shall be responsible for the enforcement of this subchapter. The City Engineer or County Engineer shall assist the Department on technical problems which may arise. The Department or its authorized representative shall check each site upon completion of the proposed work. A written record shall be made of the improvements of the site as finally accepted.

(Ord. passed 12-28-76; Am. Ord. passed 7-23-79) Penalty, see § 150.999

§ 150.121 RETENTION BASINS AND STORM SEWERS.

(A) Definitions.

(1) "RETENTION BASIN." A man-made or natural lake used for the retention of rain waters before entering into any man-made or natural drainage channel or structure.

(2) "STORM SEWERS." Underground storm water conduit.

(B) Maintenance of retention basin and storm sewers. At developers choice, developer may require that storm sewers, outside of street easements, and retention basins, if applicable, in a proposed subdivision be maintained by either subdivision (1) or (2) below. Regardless of whether the developer chooses subdivision (1) or (2), the retention basin, if applicable, must be deeded to the lots adjoining the retention basin.

(1) Homeowners Association. The developer must form a Homeowners Association which will ultimately be responsible for the maintenance and repair of the storm sewers of the subdivision outside of the county street rights-of-way and the retention basin. Recorded on the plat and in the "Covenants and Restrictions" must be the following language:

"Maintenance of the  
Retention Basin and  
Storm Sewers Outside  
of County Street Easements

The Homeowners Association will be responsible, including financially, for:

1. Keeping the weeds cut according to the county ordinances;
2. Keeping the retention basin clear of trash and debris;
3. Keeping all storm sewers discharging out of retention basin clear at all times;

4. Keeping all storm sewers outside of the county street easements in working order and repair.

5. Keeping shoreline and embankment free from all erosion and protect all banks from erosion."

(2) As an alternative to subdivision (1) above, the developer may present to the County Treasurer a cashiers check or a certified check in an amount equal to \$.50 per lineal foot of storm sewer outside of the county street easements and \$.50 per lineal foot of shoreline for the retention basin as per recorded plat prior to commencement of construction of the subdivision. If the developer chooses this alternative, then the following must be on the plat recorded in the County Recorder's Office:

"Maintenance of the Retention Basin

Each owner of a lot that is contiguous to and is underneath part of the retention basin is responsible for:

1. Keeping the weeds, including along the shoreline and in the retention basin on their property controlled according to the county ordinances.
2. Keeping that part of retention basin on their property clear of trash and debris.
3. Keeping all storm sewers discharging out of retention basin on their property clear at all times.
4. Keeping shoreline and embankment free from all erosion and protect all banks from erosion."

(C) Installation and guarantee of storm sewers. The installation of storm sewers in the subdivision shall be subject to the written approval by the County Highway Engineer or his/her duly authorized agent. Upon written notice by the subdivision developer to the County Highway Engineer that the storm sewers for the subdivision have been completed, the County Highway Engineer will within 21 days inspect and issue either written approval of the sewers or notice listing all inadequacies of the storm sewers. Upon the correction of any inadequacies noted by the County Highway Engineer, the subdivision developer must again give written notice to the County Highway Engineer's Office that the storm sewers are ready for final inspection. Subdivision developer will guarantee the storm sewers throughout the subdivision for one year from the date of the County Highway Engineers approval letter.

(D) Installation and guarantee of retention basin. The installation of retention basin in the subdivision shall be subject to the written approval by the County Highway Engineer or his/her duly authorized agent. Upon written notice by the subdivision developer to the County Highway Engineer that the retention basin

for the subdivision has been completed, the County Highway Engineer will within 21 days inspect and issue either written approval of the retention basin or notice listing all inadequacies of the retention basin. Upon the correction of any inadequacies noted by the County Highway Engineer, the subdivision must again give written notice to the County Highway Engineer's Office that the retention basin is ready for final inspection. Subdivision developer will guarantee the retention basin throughout the subdivision for one year from the date of the County Highway Engineer's approval letter.

(E) Penalties.

(1) Any person who violates any provision of this section shall be subject to a civil penalty of not less than \$10 nor more than \$2500 for each violation.

(2) Each day a violation exists shall be considered a separate violation, and a court may assess a monetary civil penalty for each day the violation exists.  
(Ord. passed - - )

LICENSING

§ 150.125 DEFINITIONS.

For the purpose of this subchapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

"BUILDING MOVER." Any person, firm, or corporation engaged in the business of, or holding themselves out to the public as engaged in the business of moving buildings or other structures other than mobile homes or modular homes.

"BUILDING WRECKER." Includes and person, firm, or corporation engaged in the business of, or holding themselves out to the public as engaged in the business of wrecking buildings or other structures covered by this subchapter.

"CLASS A SIGN ERECTOR LICENSE." Any person, firm, or corporation engaged in the business of, or holding themselves out to be engaged in the business of installing, repairing, or contracting to install, repair, or construct signs of any type including the wiring and connection of electricity to the sign shall be required to have a "CLASS A LICENSE." The electrical requirement shall be the same as a master electrician license, and the examination for the electrical requirement shall be the same test as the master electrical test.

"CLASS B SIGN ERECTOR LICENSE." Any person, firm, or corporation engaged in the business of installing, repairing, or constructing of non-electric signs or holding themselves out to be engaged in the business of installing, repairing, or contracting for non-electric signs shall be required to have a "CLASS B SIGN ERECTOR LICENSE."

"JOURNEYMAN ELECTRICIAN." A workman qualified and competent in the trade of

6. TIM FOR CONSTRUCTION; LANDSCAPING. The construction of any structure shall be completed within one (1) year from the date of commencement of such construction. Reasonable decorative landscaping and sod or seed shall be planted on the front and sides of dwelling structures constructed upon Lots in the Subdivision as soon after completion of construction as weather conditions and planting conditions reasonably permit.

7. CARE OF PROPERTY DURING CONSTRUCTION. Each Lot owner shall be responsible to see that its respective builder or contractor exercises good erosion control practices during construction of any improvement and that said contractor and/or the owner of said Lot shall finish grade, seed and mulch the Lot as soon as possible. Straw bale for run off control during construction shall be used if necessary and all streets shall be kept free of transported soil. Thereafter a good turf shall be established and maintained and each Lot owner shall be responsible for maintenance of the drainage swales and drain tiles, if any, within such Lot owner's Lot and along the Lot owner's respective Lot lines.

8. BUILDING LINES. No residence or other structure shall be constructed nearer to the front property line of a Lot than the building setback line as shown on the recorded plat of the Subdivision.

9. EASEMENTS. Strips of real estate of the width as shown on the recorded Plat of Subdivision and marked "Easement" thereon are hereby reserved for the use and benefit of any and all public and quasi public utilities (the "Utilities") serving the Subdivision including, without limitation, installation, access to and maintenance of: water mains; sanitary sewer mains, pumps and systems; storm sewers; surface water drainage; gas lines; cable TV lines; electric lines, poles, transformers and systems; telephone lines, wires, poles and systems; and, such other lines, wires, poles, ducts, pumps and systems as may be reasonable and appropriate for use in the Subdivision, subject at all times to the requirements of all proper governmental and regulatory authorities having jurisdiction or oversight responsibility and to all other Easements and Roads herein reserved. No structure or other improvement, planting or other material shall be erected or permitted to remain within the Easements which may damage or interfere with the installation and maintenance of the Utilities. The Easement area of each Lot shall be maintained continuously by the owner of said Lot so as not to change or obstruct the intended direction of flow of surface water within the Easement as said direction of flow is set forth in the Plat of Subdivision.

FROM:  
COVENANTS & RESTRICTIONS - WILLOW CREEK

PETITION

TO: Drainage Board, Vanderburgh County, Downtown Evansville  
FROM: Munir & Tasmina Quddus, 9200 Ryan Ct  
SUBJECT: Drainage problem at 9200 Ryan Ct  
DATE: September 26, 1994

Dear Board Members:

We built and moved into our home in March, 1994. When we moved in the backyard was not developed at all. In fact for more than two months there was no yard work done by our builder, Larry Duetsch, since a big part of the yard needed to be elevated to level off the yard and to make sure that water does not drain into our neighbour's property. The builder claimed that the developer Bruce Hatfield had the committment to fix the problem. Finally, after a lot of cajoling, Bruce moved some earth/dirt and the yard was levelled. However, the dirt bought in was half of what was needed to level the entire yard so that the water would flow either into the street, or towards the storm sewage as it should. The result is now we have a good 20 feet of our property chopped off, which not only looks awful but also prevents us from putting a fence in place. In addition, every time we have a good shower, as before, water accumulates in the yard and stays there for several days creating a serious sanitation problem.

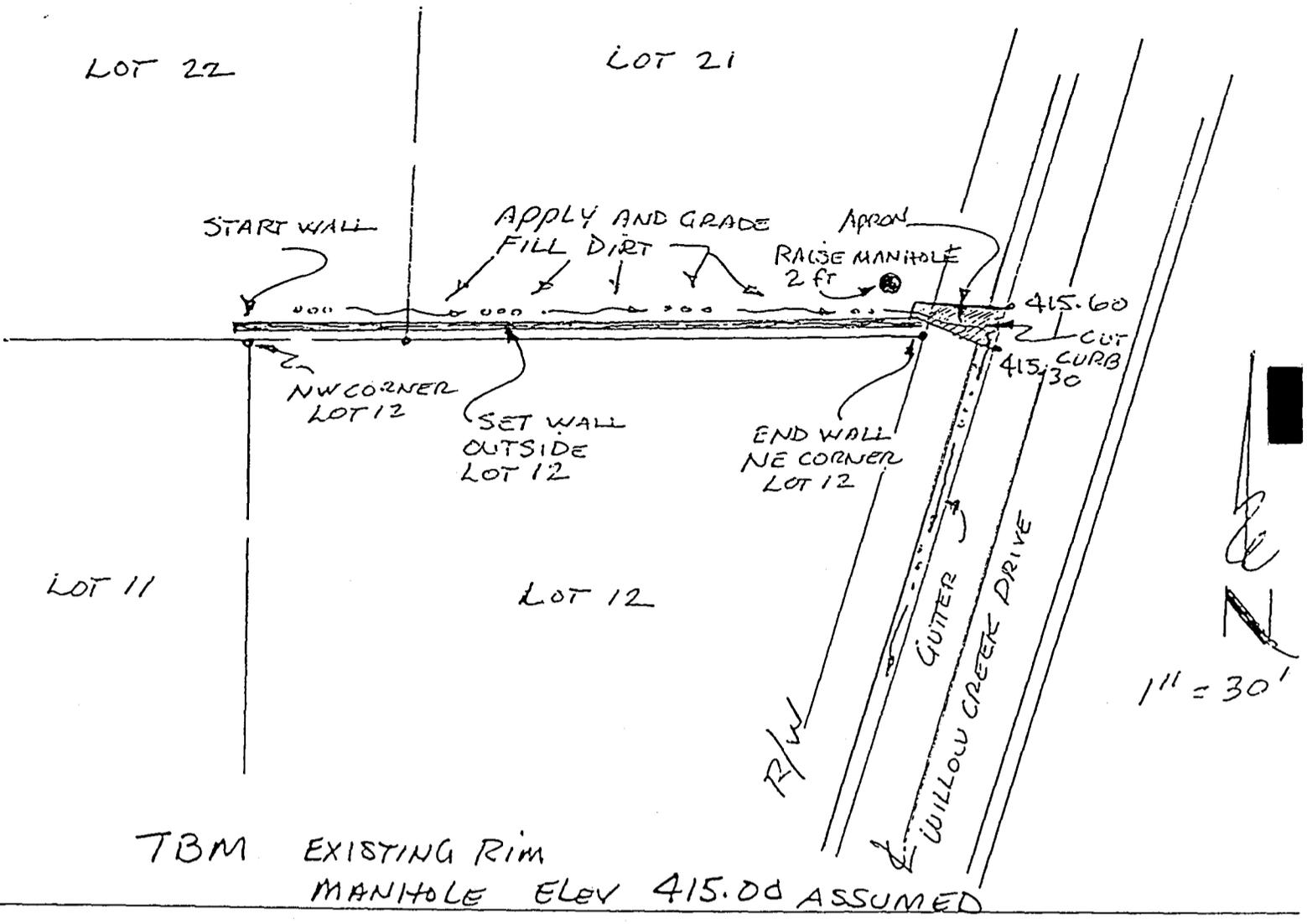
We will greatly appreciate if you convince the builder, Mr. Bruce Hatfield and the builder Mr. Larry Duetsch that it is their contractual obligation to arrange to bring in at least six more trucks of clean dirt and to level off our back yard properly for proper drainage of the water from our property into the street (Willow Creek).

Thank you.

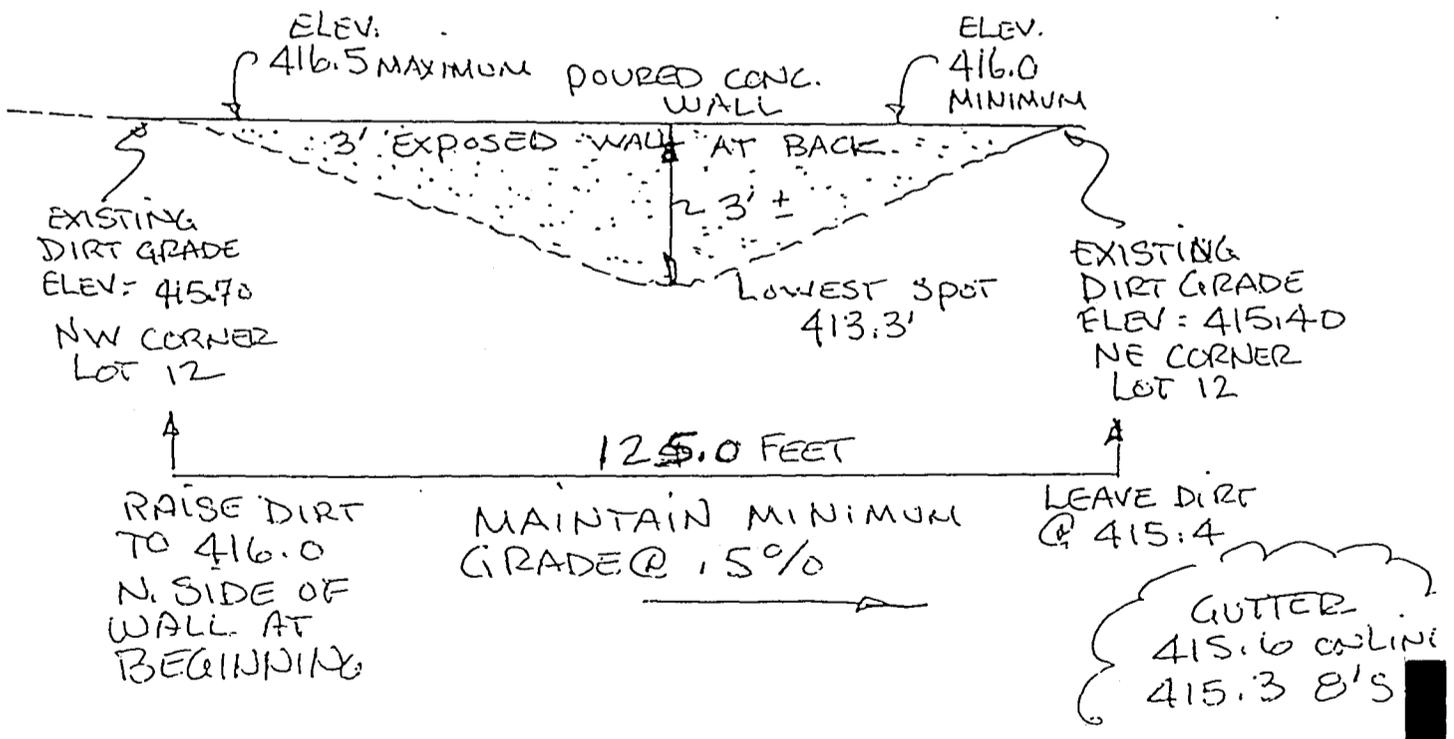
Sincerely yours,

*Munir Quddus*

Munir Quddus, Ph.D  
Tasmina Quddus  
9200 Ryan Ct  
Evansville, IN 47712



WALL MATERIAL, REINFORCEMENT, FOOTERS, DIMENSIONS, WEEP HOLES, FOOTER DRAINS, PSI, ETC., ALL TO BE DESIGNED AND SUPERVISED BY REG. ENGINEER OR ARCHITECT *MJD* 10/17/94



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MINUTES  
SPECIAL DRAINAGE BOARD MEETING  
NOVEMBER 7, 1994

The Vanderburgh County Drainage Board met in session on November 7, 1994 at 6:35 p.m., in the Commissioner's Hearing Room 307, with President Richard Borries presiding.

OLD BUSINESS

**RE: WILLOW CREEK SUBDIVISION:**

Commissioner Borries: "In the interest of time, since it's already beginning to be late, we have heard this particular matter on several different occasions. However, we have not had the opportunity from hearing from the developer of this particular subdivision, and that was one of the reasons we have scheduled this meeting for this evening. I have had the opportunity to go through, and drive through this area last week with the County Engineer, I think it was last Thursday, and so I have been able to observe this, and look at this particular subdivision. We are here tonight to hopefully end some of the confusion regarding this particular subdivision, because again what this will boil down to is the fact that Vanderburgh County cannot...cannot, I must emphasize that, do work on other persons property. What we are here is to do this evening is to decide what portions of a plan that had been submitted to Vanderburgh County at some point in previous time has not been followed, and what can be done to correct the situations out there; frankly by the developers since again this County cannot work on private property. So that's where we are this evening. There has been additional information that Bill Jeffers, our technical advisor, from the Surveyors' Office has provided us. Mr. Jeffers has indicated that he had met with Mr. Hatfield's attorney once last week, to go through the points of the detailed letter that Mr. Jeffers prepared in our behalf to notify Mr. Hatfield, and others of this meeting this evening. Also he had met with Mr. Hatfield at the subdivision on lots 12, 21, and 22 last Friday for approximately an hour, and an half (1½). Mr. Hatfield at that time gave his account of the work that had been done, and others above him. He also indicated that Mr. Hatfield had shown sketches of how he had graded the lots. Mr. Hatfield at that time had also asked for clarifications of several points made by Mr. Jeffers, and others recorded in the minutes of the previous Drainage Board, and Commissioners Meeting. Mr. Hatfield also asked Mr. Jeffers to look very closely at the various yard grading work on three lots, to show him exactly what he had thought, or what Mr. Jeffers thought was happening to storm runoff in relation to the land prior to the development, and as things stand now, and ask what could be done then to correct the situation to correct any deficiencies. He also asked what Mr. Jeffers opinion was is to who may be responsible for caring out the work. This was a rainy evening, and so it was a good time I suppose that Mr. Hatfield, and Mr. Jeffers were able to get together at that time. So that brings us to this evening. Maybe we would hear from either Mr. Hatfield at this time, or his representative."

Toby Shaw: "Mr. Borries, members of the Commissioners, my name is Toby Shaw. I am an attorney here in Evansville. I represent the developer, Bruce Hatfield, Willow Creek Development Incorporation to be specific. From your letter, from my meeting with Bill Jeffers, from a review of your minutes, the Commissioners Minutes, and all relevant facts that I know, and the inspection in front of us today. (barely audible). It appears there are two major problems. One that effects the neighbors in general. The neighborhood, and that's the retention basins. When it should admittedly, or I won't say in violation to the County Ordinance, but there's no written approval for acceptance ever been submitted to the County

Highway Engineer, for approval of these retention basins. We are now, and today Mr. Hatfield obtained the specific information on the one retention basin for submission. The other one could not be prepared because of the rain last Saturday. The engineers went out, but could not complete their work. We will be submitting those for acceptance, and showing the detailed plans on retention basin.

The other basic problem that you have is a three (3) lot problem. A drainage problem affecting three (3) lots, and I think this is what brought this matter before the Commission, and that is a change of the Drainage Plan, and the way the development was laid out by various homeowners. Today in this meeting we have representatives of the United States Soil Conservation Service, and the department of the Environmental Management, Building Commissioners are here, and County Engineers here, and the person that probably knows more about this entire situation is your Deputy County Surveyor, Mr. Jeffers. Also Mr. Hatfield is here. He has prepared if you want to take the time, he has about a two (2) hour presentation. He can go through your minutes, line item, by line item. He can explain each and every allegation that's been lodged against him by some of these homeowners in these various minutes. I don't believe that that's well serving the time aspect of this evening. Therefore, what I would suggest if it's appropriate to you Mr. President, you have the experts here that have seen the development, seen what is there, what should have been there. We will take care of the one problem under the detention basin. That was just something that he did; not submit it. We will be submitting that for approval with Mr. Stoll. The drainage between the three (3) lots as you said, that this is basically a private matter. Our position is very simple. He had a drainage plan in there, it was working, and it was altered by the homeowners; so there are some things that can be done to remedy the problem. But, one in particular, the downstream homeowner has altered a drainage plan. He's the one that is being affected the worse, because of the alteration the way I see it. As I said, Mr. Hatfield is here, and certainly willing to answer any questions you have concerning these developments (inaudible), or presently."

Commissioner Borries: "Questions of Mr. Shaw at this time?"

Commissioner Tuley: "Not at this time."

Commissioner Hunter: "No, not at this time."

Commissioner Borries: "Okay. Thank you Mr. Shaw. Would any of the persons who, or technical persons at this time, we do have a representatives from Soil, and Water Conservation Service with us. The Surveyors' Office, the County Engineers' Office, and the Building Commissioner here with us this evening. Would any of you like to make any comments at this time as to what you could see, again as in so far as recommendations. These are recommendations, again I want to emphasize to the folks here, not the things that Vanderburgh County can do since we do not own the property, but any recommendations that at this time, any of our technical offices would like to..."

Commissioner Hunter: "Mr. President, this whole issue has come before me in a different area, Soil Conservation Service. I would like to hear from Lynn Miller, who has been on the site, and as I think has made some recommendations. Lynn, would you mind to come up front, and talk to us? Lynn Miller represents IDEM, in this case?"

Lynn Miller: "I am with the department of Natural Resources, DNR. Understanding they kind of made us somewhat agents of IDEM."

Commissioner Hunter: "Okay. Your concern out there has not been the three (3) lot problem?"

Lynn Miller: "No."

Commissioner Hunter: "Your problem has been the Soil, and Erosion problem?"

Lynn Miller: "Again, the retention pond aspect doesn't fall under ours, what we call the rule five (5), 327AAC315-5. That's a different subject also. We've met with Mr. Hatfield several times. We've made some recommendations. From our angle he's met the majority of those. We had a substantial rain here in just this past weekend, and there was things. Had a few problems, but we went out there this afternoon, or this evening, and he's been working on those. So, from our end of it there's been a lot of things that have been addressed. There's a few things that need some maintenance on, but from the soil erosion standpoint, he's doing a lot of things now that we've wanted. Now there was a time that wasn't going on, but at this point we don't really have major problems from the erosion point."

Commissioner Hunter: "You mentioned that there were some things that had not been done, are these critical, or these things still need to be put into place, or what?"

Lynn Miller: "No, the major things have been accomplished. He's installed silt fences. He has seeded some vacant lots. Originally the silt fences wasn't put in properly, and we went back, and told him, and he fixed them the way we asked. The seeding, some of it came up real good, some of it that's been done later, that's just been done recently isn't up yet. Unfortunately it was at a bad time of year. It's kind of late for that. He's put sandbags around the storm inlets, which is one thing that "rule five" specifically says that storm inlets will be protected, and that is one method, but those at this time need a little bit of maintenance. That's one thing we'll mention to him, that that needs some maintenance."

Commissioner Hunter: "At this point would you recommend, or would you be willing to do any kind of a follow up inspection?"

Lynn Miller: "Yes, sure."

Commissioner Hunter: "Just to see you, or Darrell Rice or whatever."

Lynn Miller: "Yes. Well anytime, now that this one had been referred to IDEM."

Commissioner Hunter: "It has been referred?"

Lynn Miller: "It had been referred to IDEM, and the way that works, apparently various neighbors may have called IDEM. I don't know who, or what. That doesn't matter to me, but what they do in that particular instance, when they get a call they call me first and ask...to start with do they have an erosion plan, which is an requirement? Then is there actually off site erosion taking place? In this particular case there was no plan and there was erosion taking place. Now at this point there is a plan on file, and the erosion has been greatly reduced. Because we know anytime you've got housing going on there's going to be some erosion. But, for the most part things are a whole lot better than they were, from our end of it."

Commissioner Hunter: "Your end of it as you say was not the retention basins, or the three (3) lots problems?"

Lynn Miller: "Correct. Correct."

Commissioner Hunter: "Yours was in the area that was currently under construction in development?"

Lynn Miller: "Yes, and any sediment leaving the site. The best we can tell there's not a lot leaving the site. For the most part the retention ponds are catching the erosion. Now I realize that may make it inconvenient for the other folks that's their property retention ponds are on-site, but for "rule five" standpoint he needs to stay on site, and so that whole subdivision is the site."

Commissioner Hunter: "Okay. Would I be within my rights to request one more inspection in a matter of a few days, or a few weeks, whatever you would recommend?"

Lynn Miller: "Well in fact, we'll probably go by there quite often. Because any of them that get a letter from IDEM, we try to go by there from time to time."

Commissioner Hunter: "If IDEM's requirements are not met, I'm assuming there are fines that goes with this?"

Lynn Miller: "There can be, yes. They've got minimums of twenty-five hundred dollars (\$2,500.00) a day per violation. That's the minimum, and maximum is twenty-five thousand (\$25,000.00) per violation per day. At this point that's not."

Commissioner Hunter: "Okay. At this point your not concerned with that? You feel that the obligations have been met?"

Lynn Miller: "At this point, right."

Commissioner Hunter: "Okay."

Commissioner Borries: "Any of our other technical folks at this time wish to make any statements? Do the homeowners' at this time then have any?"

Bart Gander: "Bart Gander, 9209 Marfield Court. The erosion being kept on-site, at this time some of things have been cleaned. I do have some photos, if you wish to look at them at Saturday morning after the big rain of what ends up on our street, after a big rain. That's the corner of my street. That's after the rain, that's shortly after placing sandbags, keeping the erosion from running into the retention basins. So to me it does not seem that the erosion is being kept on site, when the roads end up like that after a rain."

Commissioner Borries: "Okay. Lynn, would you want to look at those pictures, and maybe at some point make some suggestions to, or for Mr. Hatfield here to...(inaudible)."

(Inaudible Remarks)

Bill Jeffers: "To address these three (3) pictures, Lynn had just said that the sandbags are required as a means of keeping this silt from entering the inlets, then traveling down through the underground storm sewer, and off site. Which his definition of off site is outside the subdivision boundaries. On site is inside the subdivision boundaries. So this gives the developers opportunity to collect the silt in this intersection for example, and then go out there with hand tools, or machinery, and gather up that silt collection, and apply it back onto a lot."

Tina Gander: "Several of the sandbags have burst, and they've been like that for weeks, so what's happening is his barriers are now going down into the storm sewers. Another thing, this is not just a three (3) lot issue. We bought our home in July, and Mr. Hatfield has been out twice to regrade our yard. Well the first time he did it, and the second time someone else did it. It is still not right. There are pictures in there of our lot. What's going to happen is, a year from now I'm going to become the Swidrons. Then a year from now the people behind me are going to be me, and then your just going to have more and more of us here, if the issue is not resolved. My drainage problem is going to be everybody's drainage problem, because my lot is at the end of that street. That's mud off of my lot, because he keeps having to come back, and regrade, because he's not getting it right the first time. He's not a yard guy. He needs to hire somebody who knows what they're doing. He built a home. He needs to hire somebody to come out, and knows what they're doing, and shoot it. I've had estimates. And do it the proper way, so we don't have to be here. That's a waste of our time, and a waste of your time."

Commissioner Hunter: "Has this mud been cleaned up?"

Tina Gander: "Today."

Commissioner Hunter: "Okay, then it happened Saturday?"

Tina Gander: "Yes, and it rained again this week, and if we don't have this agreement next week, it will be there again."

Commissioner Hunter: "But as long as the mud is cleaned up is he within..."

Darrell Rice: "Darrell Rice, with the Natural Resource Conservation Service. We had our name changed. We are no longer the Soil Conservation Service. Natural Resource Conservation Service. Erosion Control Plans are a piece of paper with what a developer perceives to be practices that will take care of erosion. Once those practices are installed on the ground, many times in given rains like we had this weekend, which we received three (3) inches in a short period of time, some of those best management practices will not work. So it's an on-going plan. When one practice fails to work then they drop back, and try to redesign a practice that will take care of that erosion. If the sandbags aren't working his management practice is to get the lot seeded, silt fence installed, and mulched like he has done, as soon as possible, after land disturbing activities. So that will keep a lot of the silt off the streets. He has done that. We didn't have enough ground cover to prevent a lot of the erosion that took place at the intersections now. So that plan is an on-going process so as one practice doesn't work he drops back, and tries another one, and he has a handbook of these practices that have been proven throughout Indiana. He can drop back, and try another one that will work for that site."

Commissioner Hunter: "So the area that provided the silt that we saw on the street was from an area where he had put in some type of conservation practice...(Inaudible)."

Darrell Rice: "Right. There is straw, mulch on the ground, it's seeded, but the seeding isn't growing right now. It's a on-growing thing."

Commissioner Hunter: "Okay, and there is something else he can do?"

Darrell Rice: "Right."

Commissioner Hunter: "Okay."

Darrell Rice: "We still need an Erosion Control Plan on the upper part, the new section that's undeveloped. We have an Erosion Control Plan on Section "B", or two, or whatever that is. Then the new additional subdivision where the street stops, he will submit a new Erosion Control Plan for it."

Commissioner Tuley: "Has he indicated to you to when he plans to have that to you?"

Darrell Rice: "As of two weeks ago, it was as soon as possible. We have found that with Bruce, once we set deadlines they work great. So he has achieved all the deadlines we've set. Setting dates with him has worked real well."

Commissioner Hunter: "Can you say at this point, because this is critical, do you recommend that we come up with a date on this submission of an Erosion Control Plan for this new subdivision? What would be a reasonable time?"

Darrell Rice: "His engineers are working on it now. So if you would give him a couple of weeks, I'm sure he would come up with something. That would be for the new development, which hasn't started right now."

(Inaudible Remarks) ?????

Commissioner Borries: "Okay, some other comments at this time? Yes sir."

Dan Swidron: "Dan Swidron, at 9200 Hannah Court. In all fairness to the Commissioners, and the (inaudible) representatives and the homeowners here. This is something that Bruce Hatfield knew about three (3) years ago. We're not here just because of Lot 12, 21, and 22. Now I've shown you pictures in the last couple of meetings of the different lots that are involved. I gave you letters of lot 1, lot 7, lot 12, lot 21, Mr. Halbig's, Mr. Ganders house. I mean we're not talking about just three (3) lots in this situation with drainage problems. Now the Building Commissioner is here, I guess? I think he should address the letters that were sent to him. He should address each one of them that drainage problems caused problems with these homes. Now all these homes have water in their crawl spaces. I thought that was a city ordinance, or a county ordinance that there should be no water in the crawl spaces. Each one of us has water in the crawl space. There is a new home, Mr. Fines home. His vents are built below the ground. Mr. Hatfield did the grading on most all these lots. Yes he has. I am going to give him some credit, yes he has some kind of an Erosion Plan that's in effect right now. Yes we did get mud this week all over the street. Four (4) inches of mud. Yes he came out there today, and dressed it up. Now this isn't the first time that it sounds like he was just told about it. He'd been asked about it, we had to go all the way counties. We had to go to IDEM to get some action here. We had to go to the County Commissioners to get action here, and finally in the last three (3) weeks, four (4) weeks, Mr. Hatfield has done some action. Now what's going to say that he's going to keep up with this action? Why did we have to keep calling, and why do we still have to worry about what happens in the future? I think that the Building Commissioners should say about the grading. There's no two percent (2%) grade around some of these homes. There should be a two percent (2%) grade ten (10) feet away from the home. My home didn't have it. When I came in my driveway collapsed. You gentlemen know that, and Bruce Hatfield knows the same situation. He says the water is going to be redirected to the west. Now he can give this two (2)

hour presentation. I would love to see it. Because, I have forty-two (42) letters, and you have read those comments that I've had forty-two (42) phone calls to Mr. Hatfield, alone just from me on my problems from drainage. That's considering other problems, personal problems that I have with the house, but drainage problems are one of them. He has been involved, and everybody else, Margaret Harp has been involved in it. These people just like Tina Gander said here, that the drainage she is going to be lot 12 someday, because the lot above her has got the same type of grading. Everybody is going to be lot 12. I think that problem has to be addressed. It's drainage in our development. It's not drainage on Dan Swidron's problem. It's drainage in the whole development. He came out there and regraded the Gander's property, you should see what the two (2) properties look like. There is still a trench there, because he cannot make it correct in order for Mr. Halbig to get rid of his water. So it is still a drainage problem in the community. It is something that we just can't say, oh well, he's doing it now. Yes he has some kind of an Erosion Control Plan, and he's got the straw bales. So I would like to hear from Building Commissioner to see what he thinks about the grading of the slopes around the house. Excuse me, one more thing. We did come here because the letter that you sent that he's in violation. So we still have to address all the violations that are on the paper that the Board sent to him."

Toby Shaw: "Mr. President, I object one thing here. Mr. Swidron makes it sounds as though Mr. Hatfield built all these homes. He did not! Secondly, he's talking about the two percent (2%) in grade is not maintained around each home. If you read the restrictions, the subdivision restrictions, that is the lot owners', and the builders' responsibility. This was a natural flow of water down a hill. Mr. Hatfield graded this area, the development for the contour of the land, and to utilize the natural drainage that God provided. Many of these homeowners' have changed their own grades. If the two percent (2%) grade for each particular house is not maintained, then Mr. Hatfield was responsible for homes he built, but he didn't build all these. So I would just like to point all that out before Roger speaks."

Dan Swidron: "Mr. Shaw, would you like to stand here, and look at some pictures of the homes that he did build, and the way he brought in some dirt, and the way he shows the grading? Would you like to look at these Mr. Shaw?"

Toby Shaw: "Sure."

Dan Swidron: "Here's one house, because he did grade this property, and he graded this house. That's his two homes. There's one trench, now there's another trench here."

Toby Shaw: "I saw that today. Isn't this the one where there's a pipe above the ground...(inaudible)."

Dan Swidron: "I'm sure the man is trying to help his neighbors, so the water doesn't drain in. Here's lot 12, how it looks."

Toby Shaw: "Now wait a minute. Isn't this the one he said when things, or when it dried out, he would correct that? He would come in and..."

Dan Swidron: "He's been out there already."

Toby Shaw: "What is this gentleman's name?"

Dan Swidron: "Mr. Halbig."

Toby Shaw: "Mr. Halbig?"

Dan Swidron: "That's right."

Toby Shaw: "Has he been working with Mr. Halbig?"

Dan Swidron: "He hasn't done anything on Mr. Halbig's. He did it on Mr. Gander's here, and he has built another trench. Here's the property that you would think that he graded, this is another house he did. He did my home. He did this home, lot 22, and lot 21 he didn't do, but he was suppose to grade lot 21, and lot 22 together. Look at the dirt he brought in there. Does that look like flat land?"

Toby Shaw: "He didn't bring that."

Dan Swidron: "He brought all this dirt in, sir."

Toby Shaw: "At the request of the Builders, I understand."

Dan Swidron: "He's the Builder."

Toby Shaw: "No, he didn't build that."

Dan Swidron: "Who built that house?"

Toby Shaw: "Larry Dietsch built that home."

Dan Swidron: "Not that home. That's lot 22. Lot 21 is Larry Dietsch's home. I've the pictures how all the land looked prior to building any home over there. This is how it looked nice, and flat. Now it looks like this. Tons of dirt was moved into here."

Toby Shaw: "This was a hill coming down."

Dan Swidron: "But it wasn't. You can see where he brought all the dirt. That's what I'm saying."

Toby Shaw: "There's not a hill up here to the north."

Dan Swidron: "There is now."

Toby Shaw: "There never was. Natural land."

Dan Swidron: "This is it right here. (referring to pictures) I can show you right here. Here's the property how it looks. See how flat. Natural land."

Toby Shaw: "I'm not talking about that. I'm talking about uphill from there."

Dan Swidron: "It wasn't. Here's the natural land. I'm showing the pictures before the houses are built. Showing you what he brought in. See, you don't want to look at the pictures?"

Toby Shaw: "Sure, I'm looking at the pictures. That's not what I saw today though."

Dan Swidron: "I know what you've seen after the fact. You have to see before, you know."

Bart Gander: "Bart Gander, 9209 Marfield Court. Comments that the houses weren't built by Mr. Hatfield. My house, Mr. Halbig's house next to me, the house behind me, all were built by Mr. Hatfield. The problem between mine, and Mr. Halbig's yard, we're afraid to do anything, because as he says, the homeowners changed the flow of water. Therefore, I hear him as

saying it's their problem. I don't want to do that. I want it to be fixed. For fear of me doing it myself, and then being in the same situation as the three (3) lots toward (inaudible) subdivision."

Commissioner Borries: "Here's what Mr. Gander, and Mr. Shaw has had to say now, and this is where we get into a catch twenty-two of these situations. The overall developer may be Mr. Hatfield, but the builder from each lot, by lot, by lot, by lot, which complicates this matter is that they vary, and it is not all Mr. Hatfield that builds all the houses. That does begin to complicate the situation here. What I would suggest is if we could get some understanding with Mr. Hatfield this evening, that he would be able to do the things that we indicated very clearly in the letter. That he could report back to us at our regular scheduled Drainage Meeting, which will be held on November 28, 1994, to see if we could get these things done. I think we would be moving forward, and taking some positive steps here to try, and resolve again an overall situation. Let's go through these, and see if this can be done by Mr. Hatfield.

First: As we have indicated in the letter, proof that the required notification language will appear on the plat, and be on the covenants, and restrictions recorded for Willow Creek Subdivision. Can Mr. Hatfield do that, and make sure that we have that language by November 28, 1994?"

Toby Shaw: "If I may Mr. Borries, that is totally impossible. The plat would have to be amended. In order to amend the plat, every homeowner is going to have to sign an amendment. So I don't know how we can at this late date four (4) years later go back, and amend the plat without every homeowner agreeing. That language is in the restrictions. That language is in the Drainage Plan approved in 1990. The language is on the Drainage Plan itself, which you approved in 1990."

Commissioner Borries: "Alright. Mr. Shaw, do you think that Mr. Hatfield then could give a written commitment to include this specific maintenance language in the bylaws of the Homeowners' Association that would be formed?"

Toby Shaw: "Of course. With the provision, is that what the lot owners want? Do they want a corporation? We can write some bylaws for Mr. Hatfield. He is, as the developer, he still has control. He will turn it over to a Homeowners' Association. The latest time being, while all the homes are developed in the entire subdivision."

Commissioner Borries: "Right."

Toby Shaw: "He can turn it over to them prior to that. Sure, we can put it in the bylaws, or we can put it in any type of document."

Commissioner Borries: "Well, particularly in so far as the maintenance of the retention basins. If he can get all the comments to include specific maintenance language in the bylaws of that Homeowners' Association, that I think would be maybe one of the best compromises that we might be able to work out at this point."

Toby Shaw: "No problem."

Commissioner Borries: "Can he provide some proof, or some documentation here, or least give some kind of written notice that these drainage retention ponds have either been approved by the County Engineer, or in some cases our designee of the

County Drainage Board, which would be our technical advisor, Mr. Jeffers, who would be signing off to give his recommendations to our Board?"

Toby Shaw: "Certainly. We will, as I said a while ago, we are going to submit those for Bill."

Commissioner Borries: "Okay."

Toby Shaw: "With the design factors, we have one (1) now of the lower one."

Commissioner Borries: "Alright."

Commissioner Hunter: "Because both basins need to be built according to the original plan."

Toby Shaw: "Sure. In a matter of fact I think their double the size of the original plan. In section "A", I don't even think there was an original, well it didn't show on the plat. On the Drainage Plan I don't recall the size, but the lower retention basin I think called for a forty-eight hundredths of an acre was the size required, and we have eighty-five hundredths acre feet, I believe. He's almost doubled the requirements. So yes, we will certainly do that."

Commissioner Borries: "Then he will provide at some point then that the proof that these basins, and the drainage system is at that point then approved by the County Engineer?"

Toby Shaw: "Yes sir."

Commissioner Borries: "Could he provide a written statement of an attempt to finish all of the required work, have this inspected, have it approved according to the Ordinance requirements? Could he guarantee this required work for a year? Could he form a Homeowners' Association? Again include that required maintenance in the notice of the bylaws for the Association. Then turn over the maintenance of that storm water drainage to the Association when it is appropriate to do so."

Toby Shaw: "We could do that at anytime. Under the restrictions he could turn it over to them today. I don't think they want it."

(Inaudible Remarks)

Toby Shaw: "But no, I don't have any problems with that."

Commissioner Borries: "Alright."

Bill Jeffers: "That maintenance notice that Mr. Borries is referring to is found in the building code, and in the subdivision code, and it consists of five (5) specific items that the Homeowners' Association will be responsible for including financially. That's the one that appeared on the one sheet of the Drainage Plan, but was inadvertently was left off of the plat."

Commissioner Hunter: "Do the Homeowners' have a copy of what we're talking about right now? So you have seen it? Okay."

Toby Shaw: "Most of it I think Mr. Jeffers would say, or tell you, most of the subdivision plats do not contain these notifications. Can you do this in maybe six? I don't even think that most plats even...."

Bill Jeffers: "Correct this notice has been overlooked on some of the other plats that are recorded in the Records Office. It will not be overlooked on future plats under the New Ordinance, that was passed last Monday."

Commissioner Borries: "I think if we would begin to move forward to begin to look to form this Association to have the Homeowners there to talk to Mr. Hatfield as he prepares, or completes the requirements for these retention ponds, and to go according to the required work that is necessary that many of these problems could be resolved at that point. There was some discussion as to whether or not various property owners should do work on those retention ponds. It was my feeling, I wanted to be very cautious that if they have not formed an Homeowners' Association, and if that had not been written down, that they were making a big mistake by doing any work, or doing anything on that particular piece of property."

Toby Shaw: "There's a difference in the two retention basins. One of them is a common area under the restrictions. It is not contained within the lot lines of any lots. The other one, the one I call the upper basin. Number two, that we don't have the plans on this yet. That is contained within the confines of the property lines of the four (4) lots. So, basically that is those lot owners responsibility. Now, it could be interpreted reading the restrictions. You could interpret it, and I think I would interpret that all lot owners' are responsible for the maintenance. But, that's an interpretational question."

Commissioner Hunter "Not until after they have been approved, and accepted by the County Engineer. Right?"

Toby Shaw: "Yes. Right now until they are accepted, they're developer, or the homeowners responsibility. Whoever has that burden under the restrictions, and he has not turned it over to the Homeowners', so it is their responsibility."

Commissioner Tuley: "Toby he doesn't have any desire, or intention of turning this over until such time that all the improvements, and recommended changes have been made, and inspected, and approved. Right?"

Toby Shaw: "No, he does not Pat."

Commissioner Tuley: "Because that was some of the concerns of that some of the homeowners expressed to me."

Toby Shaw: "He could probably bill them for some of the costs involved of the maintenance under the restrictions, but he has not discussed that."

(Inaudible Remarks)

Dave Halbig: "My name is Dave Halbig, I live at 9205 Marfield Court. I have several questions regarding these retention ponds. The whole subdivision relies on these retention ponds to keep mud on site, or hold water for a certain period of time until it can gradually drain down the drains. We don't have any pertinent dimensions, square footage, depths, slopes, regarding these retention ponds. We're basically saying, okay this retention pond is an acre big, if it's only six (6) inches deep. How much water is it going to hold?"

Commissioner Borries: "Well, he would have to provide, and I assume that if he hasn't, that has to get done. He has to provide a set of calculations to the County Surveyors' Office to be verified."

Dave Halbig: "And approved by the?"

Commissioner Borries: "Yes. It has to be approved by this Board, but what happens is, he is the one that recommends then the storm runoff event, and what he does is calculate, and basically verify the numbers that Mr. Hatfield's engineer would submit to him, and say that this will work. That is the best that we can do."

Dave Halbig: "And it's homeowners' responsibility to make sure he carries this out effectively, and also the city, or the county, the highway, something to do...it was in those laws. The guy that is suppose to have the final say on the retention ponds."

Commissioner Hunter: "If I read the rules correctly two (2) weeks ago, or whenever it was, he can't turn those over to the homeowners' until they have been approved by Surveyors' Office, and the County Engineer."

Commissioner Borries: "That's correct."

Commissioner Hunter: "Then he has to guarantee each of those for one (1) year after that time."

Commissioner Borries: "That's correct."

Dave Halbig: "Okay. Another question I have is on the commentaries regarding the storm sewers that the county is not responsible for. We need to know how many linear foot, what diameter pipe, how many feet of pipe, and as far as I'm concerned as a homeowner, he's going to have put money up the same way he puts it up for the county, so we can have a fund to repair any of this damage that might occur to our storm sewers."

Commissioner Borries: "He is required to do that to the county. I don't know if he can do that..."

Bill Jeffers: "No, we're getting a little far out there. The first question there there was in the preliminary calculations submitted by, Ralph Andy Easley, Engineering Firm that provided the original calculations, and Drainage Plan for Willow Creek. This sheet showing retention basin #1, which is the upper of the two (2) retention basins with a maximum low water surface, a maximum high water surface, four to one side slopes, and three foot (3') of depth would provide the required storage to handle a twenty-five year storm event. That would be the very minimum requirement that he would have to meet to store the amount of the cubic feet of water in there to discharge the amount of storm water that was discharged prior to development. The lower basin is very similar. It has a high water, low water surface with four to one side slopes, and a four foot (4') depth of storage. Now as far as we're concerned, we don't care if those basins have a dry bottom, and in this case fill up four feet (4') deep during a storm, and then drain dry, and that bottom is grassy, and can be mowed. We don't care if it's dry..."

Dave Halbig: "I understand that."

Bill Jeffers: "However, the developer indicated a desire to make those wet basins for beautification reasons, and for recreation reasons for his potential homeowners at the time he submitted this. He wanted wet lakes that they could stock with fish, or have recreational use of. So these basins are obviously going to bigger, and deeper than shown on the minimum required plan. So that answers that part of your question, and those calculations were checked by Mr. Dan

Hartmann. You can see his handwriting, and his highlighting, and that type of thing, that he checked the required storage, and found that it met the requirement. (Referring to map) As to submitting any money, if he chooses to use the Homeowner's Association as a method of maintenance, he's simply has to install the drainage system. Have it checked by the County Engineer, get a written letter of approval, and guarantee it for one (1) year passed the date of that letter of approval. Then he can turn that over to you, and somewhere in the drainage calculations, and plans are the linear feet of pipe, and the size that exist down the side of the driveway."

Dan Halbig: "Did he not have to acquire a permit to install that, or did he do that on his own? I know any type of a septic, drainage, or anything it has to be inspected before it's covered to make sure it is installed properly."

Bill Jeffers: "There were county inspectors on site during the period of time that he did the street improvements, and the drainage improvements. So they were on site."

Dave Halbig: "So they say that it is adequate? Okay. I just want to know just how much I'm going to be responsible for."

Bill Jeffers: "Well, he does not have to, under the Ordinance, he would not have to put up money into a fund. He simply chose Pan "A", method of maintenance, which he builds it for you, and he sells you the lot, your a homeowner, and your a member of the Homeowners' Association, and it's your financial responsibility to share in the maintenance of all the storm water drainage, and pipes, basins, etc., outside of street right-of-way."

Dave Halbig: "So in otherwords, if he wanted to from here on out, Phase II, he could install every piece of pipe outside of the counts jurisdiction?"

Bill Jeffers: "Street right-of-way."

Dave Halbig: "He could do what he wanted, basically?"

Bill Jeffers: "No. There's inspectors on site as he's doing the work."

Dave Halbig: "Oh I know that, but what I am saying is, it says right in there within twenty feet (20') of the roadway, the county will not maintain that. Correct? So he could just...now that's what I read in that paper."

Commissioner Hunter: "It's not that we won't maintain it. It's not a matter of maintaining it, it's a matter of proper installation that you're asking about. Mr. Jeffers is saying that will be inspected."

Dave Halbig: "I understand that."

Bill Jeffers: "The maintenance for any storm water drainage facility outside of county right-of-way on any subdivision in Vanderburgh County, is a responsibility of either the homeowner of the lot through which it passes, or a Homeowners' Association...the maintenance of it. That's why we want these notices on the plat, because the notices tell you specifically what you as a homeowner, or you as a member of a Homeowners Association must do, to maintain those pipes, so that they operate properly."

Dave Halbig: "So are we going to vote on this...who maintains what?"

Bill Jeffers: "No, you don't have a vote. It's a done deal."

Dave Halbig: "Well wait a minute now, you just told me that in some subdivisions some people pay for their right-of-way of pipe in front of their house, storm wise. In other places you just said this a second ago."

Bill Jeffers: "The developer at the time that he submits the plan to the Drainage Board, must choose Plan "A", which is a Homeowners' Association, or Plan "B", which forms a fund. In this case he chose Plan "A", the Homeowners' Association, which because the homeowners are notified in your covenants, and restrictions."

(Barely Audible...Various persons in the audience agreeing, and disagreeing with regard to Mr. Jeffers last statement.)

Dave Halbig: "I'm just concerned. There's so many different answers I'm getting on everything. I mean I'm confused. That's why I'm up here. I just want to be black, and white. Get everything out on the table, and find out what's what, and what's not what. Some people got the things when they signed them, and some people didn't. I don't know."

Bill Jeffers: "I understand what you're saying."

Dave Halbig: "I want to know what I'm responsible, period."

Bill Jeffers: "After the storm water drainage facilities, that includes pipes, and basins."

Commissioner Borries: "After the Homeowners' Association is formed."

Bill Jeffers: "After those are installed, and approved by the County Engineer. There is a one (1) year period during which Mr. Hatfield guarantees those. After that one (1) year period, the Homeowners' Association must maintain them, and repair them in the event that there's a failure."

Dave Halbig: "This is just storm water, or city sewers?"

Bill Jeffers: "Pipes. No, I don't say anything about city sewers, we're dealing with storm water drainage facilities."

Dave Halbig: "I understand."

Bill Jeffers: "Not sanitary sewers."

Dave Halbig: "Okay. I know the basins right now, they're being dug out down the street by somebody. I mean, I don't even know. Who is digging it out Bruce?"

(Inaudible Remark)

Dave Halbig: "Is there a deadline on this? I think he only works on weekends."

Bill Jeffers: "Well we don't need to get into barb throwing, but on page three (3) the of the covenants, and restrictions for Willow Creek Subdivision, item #7, after the initial lot grading, and so forth, thereafter each lot owner shall be responsible for maintenance of the drainage swales, which mean open channels, and drain tiles, which mean underground pipes, if any within such lot owner's lot, and along the lot owner's respective lot lines. So there's you notification that the lot owner shall be responsible for the maintenance of the open channels, and the underground tiles."

Commissioner Borries: "What are you reading from Mr. Jeffers?"

Bill Jeffers: "That is covenants, and restrictions for Willow Creek Subdivision, page 3, item #7, at the end of that paragraph number 7. At the end of the paragraph, #9, on the same page. Care of property is #7. The last sentence, thereafter each lot owner shall be responsible for maintenance of the swales, and tiles. within such lot owners' lot, and along lot owners' lot lines. Then down at the very last of paragraph 9, of course I am leaving out some of the words in the interest of our typist, but the meaning is; that the lot owners shall maintain continuously the easement area so as not to change, or obstruct the intended direction of flow of surface water within the easement."

Dave Halbig: "But your allowed to touch your swales? Your open swales?"

Bill Jeffers: "No, that's exactly what it said you couldn't do."

Dave Halbig: "No, you said they must maintain, and what...their swales?"

Bill Jeffers: "Continuously maintain so as to not to change or obstruct the intended direction of flow of surface water (inaudible)."

Dave Halbig: "So what that means, if there's a rut two foot (2') deep in the middle of your swale, you don't throw dirt in it to fill it in, and pack it in?"

Bill Jeffers: "No."

Dave Halbig: "You are going to have to maintain them, because they're going to wash out."

Bill Jeffers: "That means maintaining a continuous easement grade."

Dave Halbig: "Exactly."

Bill Jeffers: "It doesn't mean that you can't go in, and make repairs. You should go in, and make those kind repairs."

Dave Halbig: "That's right."

Dan Swidron: "It doesn't say repairs anywhere in our covenants."

Bill Jeffers: "That is why we are trying to get that notification in there, and the Homeowners' Association."

Dave Halbig: "The ponds which are full of silt mud, and what every homeowner is going to responsible for, like that thing says, you everybody's responsible for the drainage, okay. We need to figure how many feet of tile, if we're going to form a Homeowners' Association. I mean we ought to form one right?"

Commissioner Borries: "As Mr. Shaw pointed out, if you do that now, that means at that point Mr. Hatfield has not completed what he says he will do, he will when he has completed with the work out there, form a Homeowners' Association. Before that is formed, after he has finished with his work, then there will be, and must be written inspection, written statements saying that the county engineer, and the technical advisor to the Drainage Board, who will recommend to this

Drainage Board then, gives written approval that he has done what he says he would."

Dave Halbig: "So is this after all construction is done?"

Commissioner Borries: "That's correct."

Bill Jeffers: "There is a section "A", section "B", section "C", he can go section by section. He can finish what's in section "A", guarantee it for a year, turn it over to you. He can finish section "B", get a different inspection date, because it's further along."

Dave Halbig: "I understand that."

Bill Jeffers: "Okay. It might not all be at once."

Dave Halbig: "But, the thing about that is, everybody that is already phased in to maintain, and all that, is going to responsible for all the mud, silt, and all that."

Commissioner Hunter: "No. That's where the Rule Five (5) comes in, because he can't be dumping mud."

Dave Halbig: "If he does dump mud he's going to be..."

Commissioner Hunter: "Then he's going to be dealing with IDEM. That's where IDEM comes in."

Bill Jeffers: "If I owned a piece of property, and I saw that it was going to be adversely be affected by activities of others, I would notify him in writing that I felt it was going to adversely affected, and notify him that if after that date it did become adversely affected, I would hold them financially, and (inaudible) responsible to correct it."

Dave Halbig: "Thank you very much."

Bill Jeffers: "You have some very very good questions that you asked, and I would say that when the Homeowners' Association is formed, you should ask for the set of Drainage Plans that shows the exact location, and dimension, and type of material that's underground. You should ask for those to be kept in the Homeowners' Association file, so that each time you folks have to get together to make repairs, that you know where you are working, and what you're working on."

Commissioner Borries: "Okay. If we have any new information we need to move this along, because I think we are at a point here where we have asked for Mr. Hatfield to do what we have asked him to do, and that's all we can do at this point."

Dan Swidron: "There's no new information. There's nothing that looks like it's moving along. We don't want to become a Homeowners' Association at this point, until everything is completed in our development. Now those storm sewers have sediment in there for three (3) years. He's only done it three (3) weeks ago, stop the mud from going into the storm sewers. Now you put in there these five (5) listings have to be in our covenants. Now that's telling the homeowners, you have to accept these five (5). We have to accept it. Number four (4), working order, and repair. Yea the water goes through, but how much sediments inside those sewers? Now who's going to come out, and inspect? If he gives a plan, and says the pond is suppose to be so deep, is an inspector going to come out there, and measure the pond?"

Commissioner Borries: "The inspector is going to notify that the pond is set according to what he says it will do. In so far as the sediment, if it is draining at this point, Mr.

Swidron, there's probably not sediment in it. I mean if it is draining. If it was stopped up then there obviously be some blockages in there."

Dan Swidron: "We don't know where that mud is coming up the streets, because if you look at the curbs, they're not full of mud, it's all from the sewers."

Commissioner Borries: "At this point some land that has obviously been altered, pending construction, newly constructed house, and heavy rains."

Dan Swidron: "Number five (5) says keep shoreline, and embankment free from all erosion, and protect all banks from erosion. Does that mean we should have rock placed around the banks, or totally seeded? There is one house that lives on the pond, he's loosing his soil into the pond. That's erosion. So now what is Bruce Hatfield going to do to keep it from eroding?"

Bill Jeffers: "He's going to repair it, and his lawyer has already indicated that he's going to make the commitment to repair it in accordance with standard practices. There are many guidelines available from what used to called the Soil, Conservation Service, I'm sorry Darrell, I don't remember what you now call it."

Commissioner Borries: "Natural Resource Conservation Service."

Bill Jeffers: "Right. Any citizen of Vanderburgh County is free to get a copy of all the recommendations that that service can provide for the proper seeding, and care and maintenance of a shoreline of a pond like this. We would hope that Mr. Hatfield would install it, and have it ready to turn over to the Homeowners' Association in accordance with those guidelines. Those guidelines are available from that service."

Dan Swidron: "I know that Mr. Halbig asked that he put up some kind of fifty cents (\$.50) of linear foot. We're asking that maybe that could be put in some kind of cashiers check for repair, prior to his one (1) year warranty in the storm sewers."

Bill Jeffers: "It doesn't work that way."

Commissioner Borries: "It doesn't work that way. Mr. Jeffers has pointed out Mr. Swidron, he has the option of either forming a Homeowners' Association. He has that. You as the buyer sir, as an individual person, has never before, and I want to stress the limited nature of what government can do here, even local government, limited nature...from the buyers beware standpoint, you as the homeowner, and as the buyer, have to be aware of what his original intentions were as you buy the property. There is a linear foot alternative, and there is also a Homeowners' Association, and if I'm correct on this Mr. Jeffers, he opted to do the Homeowners' Association. Am I correct on that?"

Bill Jeffers: "That is correct. If he had charged a per linear foot maintenance fund charge, he would of built that cost into the cost of you buying the home. He opted to do it by the alternate method of a Homeowners' Association, and I'm sure he costed that out, and added that cost to your home. We can't double punch him at this late point, in time."

Dan Swidron: "But never in our covenants says that it has to be in working order, and repaired. Now that's being forced on

us. It's been forced on the homeowners. Never in our covenants did it say we would be responsible for that."

Commissioner Borries: "It does say it, and Mr. Jeffers read it to you. When you use the word, "thereafter" that is real clear. That means you are responsible."

Dan Swidron: "But it doesn't say repair. Thereafter means after he's turned it over we have to take care of the maintenance."

Bill Jeffers: "Keep it in working order would be a word similar to repair, and maintenance."

Dan Swidron: "So now all these swales in front of, on Strueh Hendricks Road, is going to be dug out of all the trash, the rocks, the trees that's in there right now?"

Bill Jeffers: "Those may be within county right-of-way, for Strueh Hendricks Road itself."

Dan Swidron: "How do we know that? Who's going to give us these assurances?"

Commissioner Borries: "Mr. Swidron, now we're on a different topic all together here."

Dan Swidron: "It's still swales."

Commissioner Borries: "We're trying to stick to what we called this meeting for, which was this subdivision, and this plan. We are trying to do the best we can here to get all parties here tonight to hear the same information. Hopefully Mr. Hatfield has heard this. Mr. Hatfield you are here. Are you aware of these peoples concerns here this evening sir, through you representative?"

Bruce Hatfield: "Yes."

Commissioner Borries: "Will you move forward on these recommendations that we have discussed here this evening?"

Bruce Hatfield: "Yes."

Dan Swidron: "Mr. Hatfield said he's going to turn over to the homeowners January 1, 1995. Does that still stand right now, Mr. Hatfield?"

Bruce Hatfield: "I have never said that."

Dan Swidron: "Does any of the homeowners want to speak up that was at the meeting with Mr. Hatfield?"

Dave Laine: "My name is Dave Laine, I'm at 2330 Willow Creek Drive. He said that they would turn it over, but he understands, he obviously understands that it has to be approved, and everything before he turns it over to us."

Commissioner Borries: "That is correct."

Dave Laine: "I'm not too worried about him turning it over just because of that fact. You know he has to have it all approved, and it's going to have to be up to standard, and in working order."

Commissioner Borries: "That is correct. Mr. Hatfield, for the record here, because he was not up at the microphone, did indicate on both questions that I asked, that "yes" he was going to. He had heard the concerns of these homeowners this

evening, in this Willow Creek Subdivision, and "yes" he was willing to follow all the conditions that we have talked about in here this evening."

Dan Swidron: "What about the drainage between the homeowners that the houses that he did build? He built probably eighty percent (80%) of all the homes."

Commissioner Borries: "That is a matter between you, and Mr. Hatfield at this point."

Dan Swidron: "It's drainage."

Commissioner Borries: "I know it's drainage. I understand that."

Dan Swidron: "That is why we are here, because of drainage."

Commissioner Borries: "I understand that."

Dan Swidron: "The water flows between, and you have all the list of homes that the water drains into."

Commissioner Borries: "And what we are saying is, that his plan has been submitted. There has been recommendations given to you by the Deputy Surveyor here, and that some of these apparently were either unacceptable to you. I mean all we can do is give you recommendations, but the rest is going to be a matter between you, and Mr. Hatfield in relations to working out those recommendations for those ideas. Mr. Jeffers has met with you before on those particular items. Am I correct on that?"

Bill Jeffers: "Are you talking about within the three (3) lots?"

Commissioner Borries: "Yes."

Dan Swidron: "Well the three (3) lots, lot one (1), lot seven (7), lot twenty-four (24), lot thirty-two (32). How many lots do you need?"

Bill Jeffers: "I wasn't asked to address anything on site."

Dan Swidron: "Maybe we should address all that then."

Commissioner Borries: "We're not addressing all of that this evening, because we're not capable of doing that in this particular meeting. That is what I am telling you."

Dan Swidron: "Mr. Shaw makes it sound like there is only three (3) lots that have a problem in this development, and that's not true. These homes are built by Mr. Hatfield, and they have problems. There's floors sinking. He's gotten letters, and phone calls since 1992."

Commissioner Borries: "What have we told you before Mr. Swidron?"

Dan Swidron: "Get a lawyer. Get an attorney."

Commissioner Borries: "Okay."

Dan Swidron: "But this is drainage. It's still drainage. It's a problem to the whole development. It doesn't seem we have covered anything here that is going to substantial. Other than he's promised to get all the inspection done."

Commissioner Borries: "We have covered a lot substantial. He has indicated that he is going to provide some written statements that he is going to finish the required work. He is going to have it inspected. He is going to have it approved according to the requirements. He's guaranteeing it for one (1) year. He will form the Homeowners' Association at that point. So there's a lot of things that have been discussed here this evening."

Dan Swidron: "And he's going to give us all the written plats for all the storm sewers go under, what part of easements, what part of the property lines? I mean we need to know this if it's our repair. We need to know what homes they go in between."

Commissioner Borries: "That should already be on file, shouldn't they?"

Bill Jeffers: "I think that most of the storm sewer line dimensions, and layout is on the drainage plan, except for the one that was added between lot 10, and lot 11 that goes down the street in front of your house, and cross over to the pond. I think that is the only one that we're missing in our files."

Commissioner Borries: "Can you provide that information for us Mr. Hatfield?"

Bruce Hatfield: "(Inaudible Remarks...not at the microphone)."

Commissioner Borries: "Mr. Hatfield, you know we're not intending here to take sides. This is a very difficult issue. We want to be very clear here, with what these homeowners are saying. That you as a developer, do have responsibilities, and that you understand very clearly what those responsibilities are sir, at this time?"

Bruce Hatfield: "Yes."

Commissioner Borries: "And that if in fact they are not followed, there are other methods that we can do, to inform the Building Commissioner that things aren't being done according to that thing, and some future steps could take place. Such as, at this point delaying building permits for the future. You do understand that?"

Bruce Hatfield: "Yes."

Commissioner Borries: "Okay."

Dan Swidron: "There is even a question of using the spillway into a natural creek from the ponds, that there should be a permit for that."

Bill Jeffers: "No. That is absolutely intended by the drainage plan, and properly executed it will not hurt the existing drain."

Dan Swidron: "Okay. So the homeowners will get all the warranties in writing from Mr. Hatfield? Copies of all the letters?"

Commissioner Borries: "Yes."

Dan Swidron: "Where do we bring up about our lift house station? Does that come out of the Commissioners' Meeting, or because it hasn't been approved."

Bill Jeffers: "Are you talking about a sewer lift station?"

Dan Swidron: "Yes."

Bill Jeffers: "That goes to the Sewer Utility Department."

Dan Swidron: "That doesn't come up to the Commissioners' at all?"

Commissioner Borries: "No sir."

Dan Swidron: "Thank you."

Commissioner Borries: "Thank you."

Commissioner Hunter: "Mr. Hatfield, or Mr. Shaw either one, we do have this sorted out now that you will by November 21, 1994, you will have submitted a rule five (5), Erosion Control Plan to the Natural Conservation Resource Service?"

Bruce Hatfield: "(Inaudible Remarks)."

Commissioner Hunter: "I would question that. I have read the thing, and it looks to me like it needs to be submitted before you break ground, and I see two heads shaking in front of you. So I would like to have it done by the 21st. Is there any reason why it can't be?"

Bruce Hatfield: "We are redesigning it, (inaudible) at this time."

Commissioner Hunter: "Well this gives you two weeks."

(Inaudible Remarks)

Commissioner Tuley: "Okay. You are going to have that by the 21st then, because I have been sitting here, and I haven't been saying a lot. I've just been trying to listen, and I'm a little confused as to what came out of this meeting. So I want to make sure. I want it (inaudible) somehow. Spelled out exactly what's going to happen from this point, and I'm not trying to be bias one way, or the other, but there are too many people out here sitting out here that are sitting with puzzled looks on their face. I'm not sure they understand what was agreed upon."

Commissioner Borries: "Mr. Hatfield is going to submit, as built current plans for all of the street, and drainage installation, and plans that he currently has constructed. He is going to repair basin #1, according to the plan. It must be inspected, and approved. It has to be guaranteed for one (1) year. He is going to, as I understand, do the same with the other basin. He is going to put in writing that he will intend to finish all required work that has been at this point begun by Mr. Hatfield. It has to be inspected, and approved according to all Ordinance requirements. It has to be guaranteed for one (1) year. He will at some point then form this Homeowners' Association when this work is done. Each of the homeowners at that point will have notices of the required maintenance that is their responsibility."

Commissioner Tuley: "Okay. That spells it out. Now, one final point, and we said this. Everyone of these meetings. This Board, through IDEM, and Natural Resources Conservation, and what have you, will enforce upon Mr. Hatfield to comply with the regulations, and rules that we have authority on. Once again, if there's other areas that you have problems that go back to the, "Buyer Beware" if there are other things taking place within your property that you can't get resolved, this Board can't do anything about, then you need to do just like

Mr. Hatfield, and have you a Mr. Shaw, or someone standing there in court, someone representing you. I keep stressing that because I keep hearing us getting off into things that we can't do a darn thing about."

Commissioner Borries: "One thing that Commissioner Tuley has mentioned here, when I mentioned, "as built" if there has been any modifications that Mr. Hatfield has done since these phases have started as this Homeowners' Association has formed, he will turn over to you those plans, those modifications as they are built. Not on the original plan. As they are built. So that you have the understanding of where all this information is."

Dan Swidron: "To the homeowners?"

Commissioner Borries: "To the homeowners."

Dan Swidron: "That means phase 4, and phase 5?"

Commissioner Borries: "That's correct."

Dan Swidron: "So we should follow up that when he builds the swales, and all the drainage, and everything to what the plan show?"

Bill Jeffers: "I think what Mr. Borries is trying to indicate is that there is a set of plans that were presented to the County Surveyors' Office, and then another set of plans from those that were presented to the County Engineers' Office as everything was intended to be constructed. At this point in time there may be installations in the ground, or there may be repairs, and modifications made to the installations out there that will not exactly conform to those original plans. What I think is being asked for to turn over to you, because of Mr. Halbig's request is that the homeowners know exactly what's out there, is Mr. Hatfield, either an answer from him, or Mr. Shaw are they willing to prepare an as-built set of plans that reflects exactly what is out there at the time he asked the County Engineer to come look at it, and give him a written approval of it. Is he willing to have a set of plans from his engineer, because he has had two engineers. (Inaudible) set of plans. "This is what I built", we're calling it, "As Built" here is what the Homeowners' Association gets. Are you willing to do that?"

Bruce Hatfield: "Yes."

Bill Jeffers: "Mr. Hatfield's answer to that question is yes, he's willing to do that. So that will give you exactly what's out there, and what the engineer went out there, and inspected, and approved. That's what you will maintain after his one (1) year guarantee period?"

Dan Swidron: "When will we receive a written statement... (not at the microphone..inaudible).

Commissioner Borries: "You will get that at your request. Some of it will be a part of these minutes, and you can request copies of these minutes, to again get exactly what was said here. He will tell you when that is. I mean I don't think we can get that exact date, until he asks someone from the County either through the Surveyors' Office, and the Engineers' Office to inspect it, and give the final approval on that. Then you will get that written notification."

Dan Swidron: "I mean you requested that in absence of the above a written statement that he intends to do all those

things, but tomorrow he's going to send a letter that he intends to do all this work?"

Bill Jeffers: "We have something better. We had his lawyer come up here, and agree on the record."

Commissioner Hunter: "It's in our minutes. It's in our minutes."

Commissioner Borries: "He's going to do it. He said he would do it tonight."

Mrs. Swidron: "(Inaudible...not at the microphone)

Dan Swidron: "There are a lot of inaudibles."

Commissioner Hunter: "There will be inaudibles."

Commissioner Borries: "That's what is going to happen because you are sitting out there."

Cindy Mayo: "That's because you sit out there in the audience, and talk, and don't come up to the microphone."

Dan Swidron: "So what you're saying then. This letter here where he's shows that he is in violation, which he is, we all know that he is in violation. He's not going to be penalized at this point, or building permit taken away? Nothing, right?"

Commissioner Tuley: "Not as of tonight."

Dan Swidron: "Okay. There still a possibility if he doesn't complete all the things he intended to."

Commissioner Tuley: "That's right. I think that's what Mr. Borries was making very clear."

Bart Gander: "I would like to ask one further question just to clarify something. I heard Mr. Shaw refer to my house as the one with the pipe. I installed PVC from my gutters to keep my water off Mr. Halbig's yard. It was just washing out. Can I bury that to change the flow of water without causing problems with building inspectors, with Surveyors' Office, with IDEM? Who do I need to go to, to find out about that? I don't want to make any changes."

(Inaudible Remarks)

Bill Jeffers: "You can utilize your private property in any way you wish to as long as it doesn't adversely affect another person's private property. When you get out there into the street right-of-way you might want to talk to Mr. Stoll about getting that water into the street gutter without undermining your street slab. If you undermined your street slab, that's very serious on a hillside, and that water would run under the slab, and cause the street to cave in."

Bart Gander: "But, I cannot run that through the easement though?"

Bill Jeffers: "Yes you may."

Bart Gander: "I may run it up through the easement?"

Bill Jeffers: "As long as it stays on your side of the property line."

(Inaudible Remarks)

Bart Gander: "My property line runs right through my driveway the way it sits."

Bill Jeffers: "Then you might want to try something else then."

Bart Gander: "What do you suggest?"

Bill Jeffers: "Get your driveway on your own private property. Is it on someone else?"

Bart Gander: "No, I bought the house already built, so it wasn't something I planned to have happen."

Commissioner Tuley: "The driveway is on somebody else property?"

Bart Gander: "You take a look at the property line, and the stakes are gone, and my property line runs right through the corner of my driveway."

(Inaudible Remarks)

Commissioner Hunter: "We can't make a record if everyone is talking at once."

Bill Jeffers: "Without the property corners being in the ground, you don't truly know where your property line is."

Commissioner Borries: "I would suggest Mr. Gander, that you need to..."

Bart Gander: "Is that the Surveyors' Office?"

Commissioner Borries: "Not the Surveyors' Office. You have to have again, and we're talking about Surveyor works on setting section corners on county property. You would have to hire a surveyor to get your land resurveyed. I would recommend if you have some confusions over that for future sales, and whatever, that you should do that."

Commissioner Hunter: "Yes. Definitely."

Commissioner Borries: "You're seeing some confusion here, and if no one can..."

Bart Gander: "If I ask, if I would have that done, and asked the surveyor, and if his specialty is the drainage, if I ask him for his recommendation, can I be reasonable in expecting that to be offered to me?"

Commissioner Borries: "We can give a recommendation."

Bill Jeffers: "My recommendation is to get your down spouts onto a splash plate, and then make sure that the earth underneath that splash plate is sufficiently compacted so that the water runs away from your house in a sheet, rather than these underground conglomerations of plastic pipe."

Bart Gander: "All I want to do is run it straight out. I'm not going to have a conglomeration. I just want to run it straight out."

Bill Jeffers: "Surface water drainage is preferable to underground drainage in all instances, because you can see it, and control it."

Bart Gander: "If the Erosion Plan between the two (2) houses is done correctly."

Commissioner Borries: "Mr. Hatfield, do you have a comment sir?"

Bruce Hatfield: "(Inaudible Remarks...Not at the microphone)."

Commissioner Borries: "Okay. Mr. Hatfield, and I think again, so we can get this meeting finished. Could you work with all these people? I mean sit down with them, and work through this?"

Bruce Hatfield: "With most, I think we can."

Commissioner Borries: "Because really I think of that. We can all avoid some very expensive other consequences at that point, if you all would do that, to begin to work through these problems ourselves. I mean we've set out what we think here is a clear plan. You said you would do it, but I think it would be very important for you to meet with these people to if these matters here can be addressed, some of their concerns that you've heard here this evening."

Dan Swidron: "Just one more thing to set the record straight. At the beginning of Mr. Shaw's narration he says that lot 12 which is me, changed some kind of flow of water. I want to make a recommendation, or change the minutes that I didn't change any flow of the water. The way you see it there is the way it was. Another thing in your violation says, certain building codes, and subdivision codes are violated. Is Mr. Lehman here?"

Commissioner Hunter: "He's the handsome devil over here."

Dan Swidron: "I spoke to Mr. Lehman, and he said he was going to send Mr. Nunning out with Bruce Hatfield to check out the violations of all the letters. I wish you would make some comments about that, because there's neighbors' here that live on those lots."

Commissioner Tuley: "With all due respect to Mr. Lehman, I think he started toward the podium about an hour ago."

Roger Lehman: "Roger Lehman, Building Commissioner. I did have Mr. Nunning, and Mr. Hille, the inspector to go out, and look at the situation that's been a few weeks ago. I've been out of town for several days in the last couple of weeks, and frankly I haven't really got down to the nitty gritty with them. However, based on what I hear, and have heard tonight, I do have somewhat of plan of our standpoint. We do enforce basically the drainage within ten feet (10') of the house, or six inches (6") of fall if there is less than ten feet (10'). I'm to have them go to each house in the subdivision, and we will record the address of each house that's in violation of this two percent (2%) slope. It does not apply to driveways, and patios, or porches. It does apply to the grade outside the house. We'll send a violation to each builder that is in violation. We'll require a correction by a certain date, and that date I think at this time will be established in conjunction with the homeowner, and the builder as well as the Natural Resource Conservation Service. People probably don't want their front yards torn up just right before Christmas. We will review the crawl space slopes, and sump pits, and require correction within sixty (60) days. That is something that can be done without too much of a problem in winter conditions. I think it's critical that the Commissioners, and the residents understand that the current code that we use which is a national code, which the state of Indiana adopts, and we as a county adopt the state code, does not require dry crawl spaces. That sounds incredulous, and I don't agree with it

either, but that's the way the code is set up. The only provisions are that the crawl space be sloped towards the access hole, or the crawl access place, and that a sump pit be installed in the vicinity of the access door to the crawl space. The purpose of that is to provide a means of the owner to drop in a sump pump if water happens to get under the house. Again, I'm not real thrilled with this. I would like the code to say you have got to have dry crawl space, but as far as what we can enforce is, we can enforce the slope on the crawl, and we can enforce the sump pit, and that is about all we can enforce. We will review those on the ones that comment on having a wet crawl space."

Dan Swidron: "(Barely Audible...not at microphone). Does that mean that the whole floor has to be leveled on slope? Does that mean a trench around all the footings for the sump pump?"

Roger Lehman: "The code says the floor of the crawl space has to be sloped towards the opening, so that's the whole floor."

Dan Swidron: "I have a two foot (2') trench all the way around my footings. The water stays (inaudible)."

Roger Lehman: "Okay. That would not meet the code requirement."

Commissioner Borries: "They will be doing an inspection on this."

Commissioner Hunter: "I want to thank the people from the subdivision that have taken time, and I particularly want to thank the technical people for being here tonight. This was a Special Drainage Board Meeting, and this was not a normal routine thing, and I think in some cases they've had to drive as much as an hour away to be here. You have missed dinner, and you probably have missed part of Monday night football. So again I want to thank the technical people for taking their time to be here."

Commissioner Borries: "We have accomplished a lot. I know that you are concerned. We are trying to work with you to make sure that these concerns are addressed. I think Mr. Hatfield has certainly heard them this evening, and we hope that things are going to get better in this particular area. I want to thank you for coming. If there is no further business at this time we're going to adjourn the meeting."

Motion made by Commissioner Tuley, and seconded by Commissioner Hunter. So ordered

There being no further business the meeting was adjourned at 8:00 p.m.

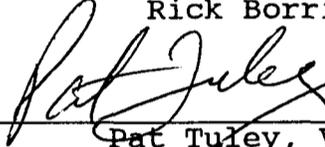
PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor

Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Recording Secretary  
Toby Shaw, City Attorney  
Bruce Hatfield, Developer Willow Creek Subdivision  
Lynn Miller, IDNR, IDEM  
Bart Gander, Willow Creek Subdivision  
Tina Gander, Willow Creek Subdivision  
Darrell Rice, Natural Resource Conservation Service  
Dave Halbig, Willow Creek Subdivision  
Dave Laine, Willow Creek Subdivision  
Dan Swidron, Willow Creek Subdivision  
Roger Lehman, Building Commissioner



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Rick Borries, President



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Pat Tuley, Vice-President



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Don Hunter, Member

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MINUTES  
SPECIAL DRAINAGE BOARD MEETING  
NOVEMBER 21, 1994

The Vanderburgh County Drainage Board met in session on November 21, 1994 at 7:30 p.m., in the Commissioners' Hearing Room 307, with President Richard Borries presiding.

**RE: NEW BUSINESS**

**A. Approval of New Drainage Plan for Azteca Project:**

Jim Farney: "For the record my name is Jim Farney. I am with Bernardin Lochmueller & Associates Inc. I am here representing Azteca Milling Company, and a Drainage Plan that they're presenting for approval. Also here with me tonight in the audience is Mr. Ed Hafer, Ed Hafer and Associates. We're here tonight as I said to present a Drainage Plan for approval for the Azteca Milling Company, which is a proposed development that's going to be situated on Baseline Road along 41 north corridor. The site is situated primarily in a flood plain, and we prepared the report with this in mind. There's a major, or a large ditch that runs north/south through the central portion of the property, which we've addressed in the report. The first part of the report addresses this ditch, and sizes the culvert that will be placed in the ditch. The site is approximately a thousand foot in depth at Baseline Road south, and the southerly half of that has facilities proposed for which trucks need to cross and everything else. For that reason that portion we proposed to put in a box culvert. The northern part of that ditch on the site will remain a ditch. We will regrade that ditch, and widen that ditch section out to improve the capacity of the ditch. In addition to that we've also addressed in this report, the storm detention requirements for the site itself. What we need to do onsite to detain the runoff that we generate from the development itself. We have proposed on the site itself primarily for basins, on site detention basins, in which we will detain or hold our increasing runoff, as per the New Drainage Ordinance requirements. Then release it into this north/south ditch, and convey it away from the property."

Commissioner Borries: "Do you know what the name of that ditch is for the record?"

Jim Farney: "It's Pond Flat Lat "B", which drains into Pond Flat Lat "A". To highlight basically the results, we concluded initially in our report that was submitted on November 7, 1994 that we were going to install a twelve by six (12x6) box culvert in the ditch. Upon submittal of that Bill Jeffers looked at the results. This culvert would pond water, or create a head elevation upstream from the culvert to elevation 441.07. In the review of the report, Bill Jeffers pointed out that there was a concern that we would backing water onto the remainder of the Sigeco property to the south to some degree, under a fifty year storm event. This is true, therefore we got with Bill, and discussed several options as to how to eliminate that problem. The conclusions of all that is we've decided now and we're proposing in a letter on November 21, 1994, that we will install instead of a twelve by six (12x6) box, a twelve by eight (12x8) box. In order to be able to install this, and to get the box low enough to cure the problem there is one thing we need to ask of the Drainage Board, would be the possibility, in order to get the twelve by eight (12x8) box to function properly, instead of sitting it in a sump condition, we would ask that the Drainage Board to consider dredging a portion of Pond Flat Lat "B", approximately about one thousand (1,000) feet from Baseline Road north. What this will do is enable us to sit that box in there, increase the capacity of the box, eliminate the flooding to the south. It will enable the project to perform better. It will also help out in a project, or in a situation where the county is going to do some bridge improvements where the bridge crosses this ditch. It will enlarge the capacity under the bridge, and help the flow characteristics of the bridge, because the bridge is actually deficient of the fifty year storm itself. So it will

help him to get the bridge so it functions under the fifty year event. It will also eliminate any subsidiary flooding under the fifty year storm that otherwise would be planned to circle, or go around the property. So these are basically the advantages of the twelve by eight (12X8). We've discussed it with the owner. He's in agreement that the twelve by eight (12X8) if required, he's in agreement to install that rather than the twelve by six (12X6) box. In addition to this going back to the site itself we have prepared as I've said for basins, Bill can stand up here in a minute and give comments on those. As far as I'm aware of they're all in conformance. All the pipes have been sized for the projects. Bill has looked at those. We presented an Erosion Control Plans. He's looked at those. I think Bill's going to express some concerns about some of the flow lines within the basins, and possibly request that a three (3) foot ribbon be installed in some of the ditches, or the flow lines within the basins. We have shown some in the basins, but I think he wants to add some more footage to that. Other than that I think everything, the report is very thick and thorough. We've met with and discussed with Roger Lehman, the hundred (100) year flood establishment. We have a whole separate report that addresses only that. That was prepared by Azteca and Associate. The hundred (100) year flood elevations are established. All buildings proposed are above the hundred (100) year flood. At least the two (2) foot that's required. Primarily all of the pavements are out of the hundred (100) year flood plain. There are some other considerations that have been suggested that really I don't know that are appropriate at this meeting, probably more so considerations for Roger Lehman, and his organization such as; storage of materials, or things with below that flood protection grade. This report of course really doesn't get into that type of thing. Bill suggested that today that that's probably Roger Lehman's, and would come out through site review that those types of things are addressed. Primarily like I say, it's very complicated sites that are as poor as you can see. You probably have copies of it, and it's fairly thick. Here is the response that the suggest the twelve by eight (12x8) box if you want to see it. Other than that I guess I'll turn the floor over to Bill, and let him go ahead and comment."

Commissioner Borries: "Okay. Thanks Jim."

Bill Jeffers: "On the map in front of you which is a planimetric map of the one square mile section within which the Azteca proposed project, lays the lightly shaded pink area is the Azteca Project acreage. Then the dark cross hatched area to the south of it is the area that would of flooded in a fifty (50) year event with the twelve by six (12x6) box. Considering that much area might of been unusable by the property owner to the south, we asked Mr. Farney to consider a larger pipe. He's explained that. Then in his letter to the County Surveyors Office by increasing to a twelve by eight (12x8) foot box culvert, rather than the twelve by six (12x6) he reduced the elevation of that tailwater flooding from four hundred forty-one (441) feet above sea level, to four hundred thirty-nine (439) feet. Which the two (2) foot drop in elevation brought that pink shaded area down to just raising the elevation of the flood water in that green shaded area within the banks of the ditch itself. In otherwords he wouldn't go over the top of the banks of that ditch, and flood that very low lying area. So we thought that was acceptable. Sigeco owns that property to the south, and they may already have someone who is looking at it to purchase."

The next sheet in front of you is the site that was presented to us by Mr. Farney. Just briefly the yellow shaded areas that have a green circle around them, we ask that he add erosion control fabric, and riprap to protect the banks of that existing channel, and, or dissipate the energy, and the concentrated flow of water that would be coming through those areas to prevent erosion, and slow down the water leaving the site, or leaving the ends of those pipes that are shaded that way. He did that on his plans."

The yellow shaded area with the pink circle around it, we still feel needs some attention. That's one area that just one particular pipe that's leaving a basin, and passing out into the proposed right-of-way for the service road that's proposed to be designed, and built by the County. That one particular area we would still like to see some erosion control out into that proposed County Right-Of-Way, so that when the County Engineer comes up with his design for that proposed service road, all that can be incorporated into the County Engineers' design. Just simply some more erosion control fabric, and some riprap, and I think it's just an area that I may have overlooked when I sent the comments back to Mr. Farney, and so that didn't direct his attention to that, and that is why it was missed.

The next shaded area is just pink highlighted stripes. Those are the flow lines of the four (4) separate detention basins. They are designed to drain dry after the rain storms, and be maintained basically as depressed areas of the green lawn around the Azteca Plant. However, they would still have moisture coming out of the saturated earth, and the paved liners would give a path for that last bit of water to travel down, and exit out the pipes. Also it would mark the base elevation of those basins so that we could monitor them from time to time to make sure those basins haven't been filled up with silt. That's your more, or less low elevation marker that's required by the New Ordinance. He has some of those liners designed in place in the pink area, or the pink stripes indicate the ones we would like him to add to his plan. We feel that it would serve the owner of the property well to have those in place, because during construction there will be a great amount of silt generated, and the measures he has designed to keep that silt on site, and not discharge onto other peoples property, will cover up the flow line of those basins. He needs to have some sort of marker to know where that is to re-excavate it after construction, and reseed it. We also don't think that it's any addition to the cost of the project because otherwise you would be putting down erosion control matt two, or three times anyway at those same locations. Before you look at that, the red dotted area up in that same strip of right-of-way I was talking about. He has that marked as a temporary outlet coming from that fourth detention basin, and that's fine because the county is going to go in there later, and build the service road. Then the County Engineer will have to design a pipe to accommodate that outlet, and at that time the County Engineer could decide where he wants that ditch. I am just calling attention to that as a temporary outlet that the County Engineer will have to turn into a permanent outlet at such time as he designs the service road.

The next sheet shows the location of Pond Flat Lat "B", with approximately one thousand(1,000) feet north of Baseline Road that we proposed to dip some silt out of. There has been some amount of silt accumulation in there up to one and half ( $1\frac{1}{2}$ ) foot, in that first thousand (1,000) feet. We think that if we dip that silt out that will give Mr. Farney an adequate channel to discharge from his twelve by eight (12x8) foot concrete box culvert. It will also give the County Engineer the opportunity to design, and install a new bridge at that location that would pass a fifty (50) year storm event, which presently goes over the top of the road. The estimated cost for that is eight hundred (\$800.00) dollars. The account for Pond Flat Lat "B" currently has one thousand (\$1,000.00) dollars in the account. It's not a major alteration of the channel in any way, it's simply putting the bucket down in the bottom of the ditch, and dipping out up to a foot and a half ( $1\frac{1}{2}$ ) of silt, the first five hundred (500) feet, and about a half ( $\frac{1}{2}$ ) foot of silt in the second five hundred (500) feet of the total thousand (1,000) foot. We would like to have that money from some other source. I indicated we have a thousand (\$1,000.00) dollars in that account. We would rather that that money come from another source if we could find it, such as economic development funds. However, the money is available in the account. The County Surveyor just wanted me to

convey to you that if there is money from some other source, we would like to get a chunk of it instead spending what we have. I have reviewed all of the designs, and calculations in Mr. Farneys' book here. I did not bring my copy with me, I'm sorry, but I reviewed those, and had conversations with Mr. Farney on those, and we agree on the figures that he used to calculate the required detention storage. We recommend approval of those. Along with his basin design with the stipulation that the flow line be paved. Present to you that we agree with his proposed Drainage Plan as a preliminary Drainage Plan. It conforms to the requirements for a preliminary Drainage Plan under the New Drainage Ordinance, with the stipulation that we want the paved bottoms in those basins. What he was referring to with regard to Roger Lehman, is that there is a Flood Plain Management Committee. Which Roger Lehman is one of the Chief Officers. Because of our experience in that area up in Pond Flat drainage area, one of our concerns was that with regard to the Flood Plan Management Ordinance, is that the dirt fill that they use to be placed in layers no greater than one (1) foot deep before compacted it to ninety-five (95%) percent of maximum density, as they're filling that area. That the fill extend five (5) feet beyond the foundation of the buildings before sloping to the base flood elevation. That the fill be protected against erosion, and scour during flooding by vegetative cover, riprap, or bulk heads. That if vegetative cover is used it would be no steeper than three (3) to one (1) side slopes. These type of things should be looked at by the Building Commissioner at such time as is appropriate. There was one thing that we wanted to emphasize, and that is that we have seen a greenhouse in this area get flooded, and several bales of peat moss float downstream along with some fertilizers and some things like that. So considering the type of installation they're proposing to put in we want to warn that locating of stored chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous, or toxic materials not be stored below the flood protection grade, unless they're stored in storage tanks, or floodproof buildings constructed according to the requirements of this Ordinance. Sanitary sewer lines, and on site waste disposal systems, are permitted providing that all the manholes, or other aboveground openings, which are located below the flood protection grade, are watertight. Now I'm not saying that there's anything on an Azteca site to be alarmed about, but there will be things on that site that could be considered chemicals, buoyant materials that might adversely effect someone downstream. Just by glogging up a pipe, or a ditch, not anything dangerous, just corn floats for example. You wouldn't want a big load of it downstream. Toxic materials, lime is not toxic to man, but it can have adverse affects on wildlife. So these types of things could be stored in flood proof buildings, or storage tanks. Then the sanitary sewers that obviously would be on site at any factory, the manhole should be made watertight if they happen to be below that flood protection grade. I just wanted to bring that to the developers attention, and Mr. Farney is aware of it. I gave him copies of that too.

With those comments, we recommend approval of Mr. Farneys Drainage Plan for Azteca, or the portion of Azteca that we're looking at today there."

Commissioner Borries: "Thank you Mr. Jeffers. Mr. Farney, any reaction to, or any comments here regarding Mr. Jeffers recommendations?"

Mr. Farney: "No, basically as Bill said, we've had a lot communication on this, and we're basically in agreement with everything that he has proposed. I think for the record, everything has been addressed, except for as Bill has pointed out he does want additional paved inverts extended inside those basins. I haven't had a chance to actually talk to the owner on that, but I did say to him several weeks back that that may be required, and it seemed not to bother him too much. So I'm sure that that's not a problem

with the owner to do that. To extend those paved inverters in those basins."

Commissioner Borries: "Do you have any suggestions regarding Mr. Jeffers comment as to where we might find eight hundred (\$800.00) more dollars? Could this be a matter that could be put into the project itself? See what happens is, this sounds like nitpicking, but it's really not. I mean basically, we administer money that landowners' put into legal drains. It's their money, and really we have a heck of a time when we have to do major work on a ditch to come up with enough money at some point. That's why we really have to look for it."

Mr. Farney: "I'm not sure what the mechanics of doing it, fiscally might be I think in terms of what your asking is, could the project, could the owner reimburse the County eight hundred (\$800.00) dollars for dredging a ditch? I'm sure that's possible. Would rather it be done that way than including that work in the project. I would rather let Vanderburgh County do it with their forces, or under their contracts, and somehow be reimbursed by Azteca."

Commissioner Borries: "Okay."

Commissioner Tuley: "(Inaudible)?"

Bill Jeffers: "As Mr. Borries pointed out, and what he's referring to is the fact that we collect a users fee from those farmers up there. The only reason we have a thousand dollars (\$1,000.00) in that account is because Ralph Rexing only charges us three hundred and thirty-nine dollars (\$339.00) a year to mow the ditch. He may decide not to do it next year, and the next guy is going to charge us a thousand (\$1,000.00) or twelve hundred (\$1,200.00), because it's worth that much. It just happens that Ralph Rexing mows the portion running through his farm for the cheapest price I've ever heard of. It's like eight cents (\$.08) a foot. We would appreciate it if we could get that eight hundred (\$800.00) dollars back."

Commissioner Borries: "Okay. I think we have Mr. Hafer on record indicating that we can talk about this. It's not a large amount, but it could well improve, and make some significant improvements to the drainage in the area. So we do need to do it. So we'll go ahead, and do it, and then we will talk to you about some kind of reimbursement if we can on that. Jim you don't have any problem with additional concrete ribbons he's talked about? Any of the other percifics here?"

Mr. Farney: "No, I'm sure the owners' are willing to do that."

Commissioner Borries: "Okay."

Bill Jeffers: "There is an Erosion Control Plan, which I don't review those. That was a part of the submittal, and that will go to Darrell Rice, and his department, but I wanted to let you know....I don't see Mr. Hunter here, but he will probably read the minutes....there is an Erosion Control Plan as a part of the submittal, for the entire site."

Commissioner Borries: "Mr. Rice at SCS will, or have they changed their name? I can't remember their name now."

Commissioner Tuley: "Natural Resources Conservation Services."

Commissioner Borries: "Yes, we'll have him bring you that."

Commissioner Tuley: "John, do you have any comments?"

Commissioner Borries: "You'll size the pipe at some point on the access road that we referred to?"

John Stoll: "We've been working back, and forth with Jim Farney with preliminary site plans, and once something has been finalized then we can coordinate whatever needs to be with our road projects, so that's not a problem."

Commissioner Tuley: "Okay. Anybody else?"

Motion made by Commissioner Tuley that the Drainage Plan that is submitted by Mr. Farney, with the exceptions noted by Mr. Bill Jeffers be approved and seconded by Commissioner Borries. So ordered.

There being no further business the meeting was adjourned at 8:00 p.m.

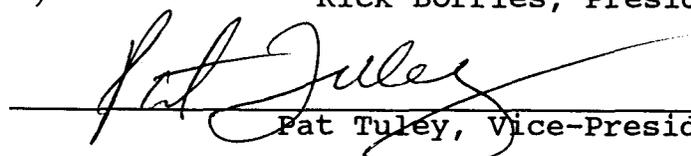
PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Recording Secretary  
Jim Farney, Bernardin Lochmueller & Assoc. Inc.  
Ed Hafer, Architect, Inc.  
John Stoll, County Engineer

ABSENT:

Member, Don Hunter

  
Rick Borries, President

  
Pat Tuley, Vice-President

\_\_\_\_\_  
Don Hunter, Member

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NOVEMBER 28, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
NOVEMBER 28, 1994

The Vanderburgh County Drainage Board met in session on November 28, 1994, at 7:05 p.m., in the Commissioners' Hearing Room 307, with President Richard Borries presiding.

**RE: APPROVAL OF MINUTES (10-24-94)**

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of October 24, 1994. So ordered.

**RE: NEW BUSINESS**

**A. JAS Corporation Request The Board To Relax 75 ft. Right-Of-Way Along Nurrenbern Ditch And To Allow Permanent Structures Therein:**

Bill Jeffers: "If the Drainage Board members don't mind sharing that one exhibit. It's a drawing of the site, and the portion that's shaded in yellow, with a dark green outline around the outside edge of the yellow, is a five and a half (5½) acre site that is being purchased by JAS. Along the west side, or the left hand edge of that area, I have shaded in a light green, twenty-five foot (25') wide strip along Nurrenbern Ditch, regulated drain in Vanderburgh County. That twenty-five foot (25') strip is measured at right angles from the top of the bank of Nurrenbern Ditch. It represents the distance down to which the Drainage Board is allowed to relax the right-of-way for maintenance on an urban drain. Also I've handed to you a copy of Indiana Statute 36-9-27-33 Right of entry over private land; extension of spoil banks beyond right-of-way. Subsection (D), says quote: The owners of land over which the right-of-way runs may use the land in any manner consistent with this chapter and the proper operation of the drain. Permanent structures may not be placed on any right-of-way without the written consent of the board. (Board meaning: Drainage Board.)

Subsection (E) of the same section 33: The Board may reduce the seventy-five foot (75') requirement to any distance of not less than twenty-five feet (25') from the top of each bank of an open ditch. That applies to urban drains. Nurrenbern Ditch is an urban drain. JAS is purchasing the five and a half (5½) acre site that I've indicated on the map. They will not be able to operate the facility that they propose on that site without us relaxing the seventy-five feet (75') down to twenty-five feet (25'), and allowing them to pave a parking lot up to within three feet (3') of the top bank, and putting light standards, and high intensity lighting on that side of their proposed building. Otherwise that entire sight of their building would be in darkness during the night hours, and would pose a security risk to their property, and liability risk for persons who may enter on to their property at night. Mr. Paul Spina, of Louisville, Kentucky, is in the audience. He has prepared an Encroachment Agreement, the first page of which identifies JAS Realty Corporation as the party of the first part, and the Vanderburgh County Drainage Board as the party of the second part. The first page basically is the legal description of the five and half (5½) acre parcel that I've outlined for you on the plat. The second page indicates their desire to enter into an agreement with us to reduce the seventy-five foot (75') strip for a distance of six hundred, and forty point thirty-five feet (640.35') along their property line. That is the full extent of their property line, north, and south. In order to do that they need to do some following things. We want them to make some improvements to that ditch; including paving the bottom of the ditch. They agreed to do that, if we allowed them to occupy that twenty-

five feet (25') as allowed by your drainage statutes with permanent structures. If we will make certain repairs, and preparations to that ditch, including removal of any silt, and basically excavating the top of the ditch, and preparing it for them to pave it. We proposed to do that with funds that are in our accounts at the present time. They proposed in exchange for that down through page three (3) to pave the bottom of the ditch which will permanently established that flow line, and make ease of maintenance much greater if we would no longer have to spray the bottom of that ditch with herbicides. If any silt accumulated in the future it could be scraped out with bobcat dozer, or by hand. They also agreed to regularly mow, and otherwise maintain in a neat manner the three foot (3') grass strip remaining at the top of the bank. They also agreed to maintain the existing side slopes of their eastern bank of the ditch along the entire six hundred, forty feet (640') free of all broadleaf, vegetative growth. Maintain the remaining grass not to exceed twelve inches (12") in height. they also agreed to keep the bottom of the ditch along their property free of obstructions and debris which would interfere with, or which would otherwise present a health, or safety hazard. Then at the bottom of page four (4) they will pass this agreement onto their successors, or in title to the property. Then you have Mr. Spina's signature line, and on page five (5) you have the signature lines of Richard Borries, President of the Drainage Board; Patrick Tuley, Vice-President; Don Hunter, Member. Then the attest by Sam Humphrey, Vanderburgh County Auditor. What I believe Mr. Spina is going to ask you is tonight is to approve this agreement, allow him to occupy the twenty-five feet (25') with a paved parking lot to display and store his vehicles for his sales facility, in exchange for the agreed-upon maintenance, and improvements to the ditch that he agrees to do in this document. The Vanderburgh County Surveyor's Office recommends approval of this agreement. If you approve it, and sign it tonight, Mr. Spino will sign it, have his signature notarized tomorrow; we'll take it down and have it recorded in the Vanderburgh County Recorder's Office. Then we have already done a survey of the ditch to determine approximately how much silt will have to be removed out of the bottom of the ditch. At this time we estimate that it will cost us approximately a dollar (\$1.00) a foot, but we intend to carry it all the way up to I-164. Not just the six hundred, and forty feet (640') of his property. So we will be doing about an half ( $\frac{1}{2}$ ) of a mile. Which is twenty-six hundred (2,600) to three thousand (3,000) feet approximately. Mr. Spina's Corporation will be spending in the neighborhood of twenty thousand (\$20,000.00) dollars to pave the bottom of the ditch. Again I would indicate to your attorney that this section of the Indiana Statute allows this to take place. The Surveyor's Office recommends it. Mr. Spina, and his Engineer are both here in the audience tonight to answer any of your questions."

Commissioner Hunter: "Bill, I have a question; on the west side of the Nurrenbern Ditch. Do we have seventy-five feet (75') there as well?"

Bill Jeffers: "On the west side of Nurrenbern Ditch all the way up to the end and a little bit beyond the yellow shaded area is owned by Regency Corporation. That part of Cross Pointe Commercial Subdivision, that has already been developed by Regency Corporation, your Board relaxed the seventy-five feet (75') to twenty-five feet (25') on that side, but did not allow any permanent structures to be placed in that twenty-five feet (25'). So it remains a grass strip from which we can spray, and maintain."

Commissioner Hunter: "That is what I was going to say. Do you have adequate room in there to do your maintenance from the western side?"

Bill Jeffers: "Yes sir. This does set a precedent in our county. It is allowable, but it is a precedent. We intend to, in the future along this ditch, and other ditches where it is a viable option, always keep one side remaining as a twenty-five foot (25') grass strip. We will try to be fair switching that side back and forth as the developments come in. One side will always have to be a grass strip if the other side is allowed to pave. We will try make that as fair, and equitable, or however you say it, as we possibly can. I would say the next time someone comes in above Virginia Street extension, we would switch sides."

Commissioner Hunter: "So from that point on we extend seventy-five feet (75').....?"

Bill Jeffers: "Well we may switch sides back, and forth."

Commissioner Hunter: "But at this point, we have seventy-five feet (75') on either side of the ditch?"

Bill Jeffers: "Yes sir. We have not relaxed it, except for Cross Pointe Subdivision, and if you do this tonight we will be doing six hundred forty, and approximately six hundred forty, and a half feet on the opposite side."

Commissioner Tuley: "Further questions?"

Alan Kissinger: "I've read the agreement. Basically the agreement seems to be in order, by the pertinent statute, supplied by Mr. Jeffers. It does appear that the Commissioners may do this if you choose."

Commissioner Tuley: "Mr. Spina, would you like to make any comments sir?"

Paul Spina: "Well Mr. Jeffers did an excellent job of presenting this. I'm not sure what I can add to this. The dilemma we had we're suppose to close on this real estate tomorrow, and this was obviously the first opportunity to get here for a Drainage Board meeting. The dilemma we had was this easement is one of two easements on the site. This right-of-way is one of two. The other burden on the site is an easement that Texas Gas has that is seventy-five feet (75') in width. The Texas Gas easement overlaps with the county's seventy-five, and also in this case the remaining twenty-five feet. The problem with the lighting, that Mr. Jeffers was alluding to, one of the requirements, Texas Gas will let you pave, but you can't put any structures like light poles, or electrical poles within their easements, because of the danger of explosion, or fire due to the gas that does leak somewhat out of the pipes, and then migrates out. So we were faced with the situation where, given the narrowness of the site to start, given approximately eighty feet (80') from the Texas Gas easement over to the bank of the Nurrenbern Ditch. Approximately one half of the site couldn't be lit. That effectively would prohibit it from being developed for a retail automobile dealership, which is our intended purpose. So that's the reason for coming in here, and requesting this tonight. The ability to park is necessary also from the standpoint of how narrow the site is. We were only able to purchase that much of the property from the Hartmans, because they couldn't part with anymore, and still leave the rest a viable development site. So normally we would be purchasing another hundred feet (100') in width for one of our properties to provide us with the necessary parking. With the Texas Gas

agreement, and we have an agreement with them to allow us to pave and park in their easement. With this agreement tonight we will just essentially be put into almost the same position we would of been in had we been able to purchase the amount of property we normally seek to purchase. This is really the last key to our being able to close on the property tomorrow, and bring another business into this community."

Commissioner Borries: "Which we appreciate."

Commissioner Hunter: "Alan are you okay with this?"

Alan Kissinger: "Yes. Mr. Hunter as I said; the statute certainly allows us to do this. Relying on the advice of the Chief Deputy Surveyor. The Drainage Board may do this, obviously it was anticipated, otherwise it would not be in the statute. It seems to be laid out in such a way that all considerations have been taken. So legally of course you may, but of course it is a judgement call on your part. You are certainly not required to do so."

Commissioner Borries: "I think by paving the ditch, that portion of it certainly establishes a benchmark, and stabilizes a lot of other things here. Mr. Jeffers has indicated there will be a way in to maintain whatever we've done. It's certainly not probably the first time that we've granted a relaxation of the legal drain at twenty-five feet (25'), but as I think he points out we normally keep both sides green, or at least get some kind of way in to maintain things. We have the recommendations. To me it seem like a far greater concern which he's hurdled there as the agreement with Texas Gas. As long as they're satisfied with that we are going to be okay."

Motion moved by Commissioner Hunter that we relax the 75 foot right-of-way along Nurrenbern Ditch, and allow permanent structures based on the recommendation of the Surveyor's Office, and seconded by Commissioner Tuley. So ordered.

Bill Jeffers: "Before we totally close the book on this project for tonight, I would like to call your attention again to the area that I've shaded yellow, and then outlined in dark green. Which is approximately a five and one half (5½) acre site. I would like to say that I have received a drainage plan from Mr. Jim Farney on the entire site you see in front of you, the entire development. However, I only would like to say at this time that we're prepared to recommend the approval of that portion of the drainage plan which serves the five and one half acre site to be occupied by JAS Corporation. The only reason I shaded anything else yellow above it is that there's about two point nine (2.9) acres which will become an out lot, because it is not of any use for anything other than a detention basin. It is so encumbered by rights-of-way, and easements of one sort or another that no building whatsoever can be built on that two point nine (2.9) acres north of the five and a half (5½) acre JAS site. So I've also shaded that in yellow. That two point nine (2.9) acres will be used for a detention basin to serve the new roadway that's proposed and still in the planning stage, and to serve the parking lots, and buildings on JAS's five, and one half (5½) acres. I would like to say at this time that the County Surveyor's Office is prepared to recommend approval of the drainage plan that was presented to us, and reviewed by me for the five and one half (5½) acre site that JAS Corporation intends to purchase tomorrow, and occupy it sometime in the very near future. The reason I bring this recommendation to you at this time is because of the possibility that you may, or may not meet December 27, 1994. I believe December 26, 1994 is a holiday.

Commissioner Borries: "We are scheduled to meet on Tuesday, December 27, 1994."

Bill Jeffers: "Will there be a quorum present here?"

President Borries, Commissioner Tuley, and Commissioner Hunter all stated that they would be here December 27, 1994.

Bill Jeffers: "I'm still willing to recommend approval of that Drainage Plan at your discretion."

Motion made by Commissioner Hunter for approval of the recommendation by the Surveyor's Office to approve the (5½) acre site that is in the process of being purchased and developed by the JAS Corporation and seconded by Commissioner Tuley. So ordered.

Paul Spina: "Do you need to obtain any of the copies, or anything you have here?"

Commissioner Borries: "Not of that. For yours I believe that those documents Julie Hinton, Sam Humphrey, the Auditor has to sign? I believe."

Bill Jeffers: "Yes. Mr. Spina would be happy to pick it up at our office, or Mr. Humphrey's office tomorrow after the signature is applied by Mr. Humphrey. We do need signatures on two (2) original copies, and I have the other."

Paul Spina: "Just to clarify the reason I'm not signing tonight is the agreement provides that we're the record owners, and that won't take place until tomorrow. So we want to just maintain the formality there."

Commissioner Hunter: "As far as signing for the Auditor, a Deputy Auditor can sign in his behalf, and initial it?"

Commissioner Borries: "Can Ms. Hinton act in that capacity?"

Alan Kissinger: "Certainly."

Commissioner Borries: "In Mr. Humphrey's absence can this Board authorize Ms. Hinton to go ahead, and sign, and initial for Mr. Humphrey at this time?"

Motion to approve made by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

Commissioner Hunter: "Before Mr. Spina disappears tonight, if you have it then, I would like to definitely welcome you to Evansville, Indiana, and Vanderburgh County. And maybe before (he leaves), I feel very strongly that it's going to be great to have another Ford Agency in Evansville, Indiana. I wish you all the best, and your people."

Paul Spina: "I would like to express our gratitude to all of the members of the board, and to all the members of the staff that we've dealt with so far. I have developed car dealerships now, and though this is my fourth city, I have to say that this has been my first pleasant experience. This is a true breath of fresh air compared to the other three places that I've developed businesses in. I just want to thank you for that. Everybody here has been extremely helpful, and supportive, and we are really looking forward to coming here. Thank you."

The Board Members all give their thanks.

**RE: REQUEST PAYMENT OF BLUE CLAIMS-DITCH MAINTENANCE**

The following Blue Claims were submitted as follows:

		AMOUNT
TERRY R JOHNSON #1052 AIKEN DITCH #234-006 94-FM-06-15	5025 LF @.4319=\$2170.30 PAY 15% RETAINAGE....\$325.54	325.54
TERRY R JOHNSON #1052 EAST SIDE URBAN N½ #234-015 94-FM-15-85	21127 LF @.2995=\$6327.54 PAY 85%....\$5378.41 RETAINAGE 15%....\$949.13	5378.41
TERRY R JOHNSON #1052 EAST SIDE URBAN S½ #234-015 94-FM-15-15	38936 LF @.4395=\$17112.37 PMT. 85%....\$14545.52 RETAINAGE 15%....\$2566.85	2566.85
TERRY R JOHNSON #1052 HARPER DITCH #234-017 94-FM-17-15	2950 LF @.3656=\$1078.52 PMT. 85%....\$916.74 RETAINAGE 15%....\$161.78	161.78
TERRY R JOHNSON #1052 KOLB DITCH #234-025 94-FM-25-15	5593 LF @.31845=\$1781.09 PMT. 85%....\$1513.93 RETAINAGE 15%....\$267.16	267.16
JOHN MAURER #1483 HOEFLING DITCH #234-020 94-FM-20-45	5571 LF @.10=\$557.10 PAY 45%....\$250.69 RETAINAGE 15%...\$83.56	250.70
REXING ENTERPRISES INC #4476 SINGER DITCH #234-037 94-FM-37-45	2450 LF @.11=\$269.50 PAY 45%....\$121.28 RETAINAGE 15%....\$40.42	121.28
DANIEL J PAUL #3590 WALLENMEYER DITCH #234-040 94-FM-40-45	8355 LF @.145=\$1211.48 PAY 45%....\$545.17 RETAINAGE=\$181.72	545.17
<b>TOTAL</b>		<b>9,616.89</b>

Bill Jeffers: "All Claims are signed by Robert W. Brenner, County Surveyor, and the 15% retainage claims have the certification of payment where Terry R. Johnson is certifying that he's paid all his debts, and costs. The other partial payments have the required Surveyor's report that they have been inspected properly, and are ready for payment. The Surveyor recommends payment of all Claims presented to you at this time."

Motion made to approve by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

**RE: OLD BUSINESS****A. SIGN ADOPTED AND APPROVED NEW DRAINAGE ORDINANCE:**

Commissioner Borries: "I guess we should probably have hired a band here to take care of this last one here, with some trumpets, to finish off an item here of old business that has been work in progress for quite sometime. Tonight we are officially at this Drainage Board going to (if this Board chooses to do so) approve a New Drainage Ordinance for Vanderburgh County, and adopt it for our usage. The Old Ordinance I think Mr. Jeffers had mentioned is normally been contained in what was it, a page and a half?"

Bill Jeffers: "Subdivision Code."

Commissioner Borries: "Subdivision Code. We are now going to an Ordinance that will contain sixty-five pages?"

Bill Jeffers: "Eighty-five."

Commissioner Borries: "Eighty-five pages. Some might say that that is an example of government bureaucracy, but I guess things change somewhere down the line. Since we don't live on the frontier anymore, growth is something that we have to continually work toward, and things do change. This Drainage Ordinance will certainly in my opinion set well as we move forward in this county for more growth and development. Perhaps lessen the chances of harming persons who have invested their life's savings literally, and life's accumulations into their homes and businesses. So we do think that it is going to be a dramatic step forward. With those items, are there any other comments from the Commissioners'?"

Commissioner Hunter: "Mr. President, I remind you that you got my four years as Commissioner. During the first two that I was President of the Drainage Board, and I would say that for the last four years the biggest problems that we've had have dealt with drainage problems that we were incapable in many cases of resolving, and solving simply because we didn't have adequate paperwork. This obviously is not the total answer, but it is an attempt with a lot of input from a lot of people. I think it is flexible enough that it can be changed when the times change, and the needs change. So with that I'd certainly be pleased to move to....would you like to say something?"

Commissioner Tuley: "I would just like to saying the short two years that I've been here, this has been something well worth taking the time to develop; and we have the input from the developers, builders, and the plastics people, and everybody else to come up with an Ordinance that I think is going to be a really positive thing for us. For the county as a whole."

Commissioner Hunter: "It may sound boring when the high point of your four years is the Drainage Ordinance, but in any respects it really is. Because I think it was the thing that we needed the most, and it's been a long time in coming."

Motion made to move the acceptance, and the adoption of the New Drainage Ordinance and seconded by Commissioner Tuley.

Commissioner Borries: "Motion has been moved and seconded. This is an Ordinance. I will call for a row call vote at this time. Commissioner Hunter. "I vote yes." Commissioner Tuley. "I vote yes." President Commissioner Borries. "I vote yes." This New Ordinance is approved, and now in effect in Vanderburgh County.

Commissioner Borries: "Do we have some copies of anything we need to sign on that Ordinance?"

Bill Jeffers: "There is a signature page that you signed as the Commissioners to enact it. That same signature page would be signed again by the Drainage Board."

#### **B. WILLOW CREEK SUBDIVISION:**

Commissioner Borries: "We have one other item that is not on our agenda. Mr. Swidron is here regarding Willow Creek Estate. Who I had a conversation with an attorney today, Mr. Paul Wallace. I think somehow been retained by some of the residents in Willow Creek Subdivision? Mr. Swidron, is that correct?"

Dan Swidron: "Yes. Mr. Wallace has been representing us for what our recourses, Mr. Hatfield."

Commissioner Borries: "Okay. Mr. Wallace suggested that one thing this board could do is to ask the Area Plan Commission, who has the final say on subdivisions, and subdivision plats,

to review what Mr. Hatfield has already submitted. And certainly also to ask Mr. Hatfield to submit as-built plans, or what he already has done at this point out in Willow Creek Subdivision, so that the Area Plan could make comments and recommendations since all that is part of the subdivision. Does this board feel that request is one that you would want to support?"

Commissioner Hunter: "Yes. I also talked to Area Plan. I had to call one of your neighbors this afternoon. Your neighbor seemed unsure if they wanted an as built review, or if they wanted to replat it, which I suggested was going to cost dollars, because they would have to hire an engineering firm. Somebody would have to pick the tab up. I assume what your real concern is that before you take over as homeowners out there, you want to make sure that you have what you are suppose to have to maintain."

Dan Swidron: "Right. Mr. Wallace recommended that the board influence, or authorize, the replatting and the reinspection of the whole development at the expense of Mr. Hatfield. Because the platting wasn't done properly in the first place."

Commissioner Hunter: "Are you willing to replat?"

Dan Swidron: "The secondary replatting he mentioned. Mr. Toby Shaw mentioned that when we had this Special Hearing."

Commissioner Borries: "I would have to look again at the minutes. I guess the only question I have on that, and I'm not trying to drag my feet on that part of it. I'm not sure the Drainage Board can order a replat of a subdivision. I think we can ask for in the Drainage Board a review of the drainage plan. Am I right on that Council?"

Commissioner Hunter: "Yes. Another thing about a replat it is not going to (I think I'm right on this) it's not going to include drainage outlets; and things will not be on the replat. They'll only be on the drainage plans that were submitted to us. So I'm not sure you want a replat really, because I gather from your neighbor that you wanted to be sure that the storm sewers, and the drains are where he claims they there, if you are going to take them over. Well a replat is not going to help you on this, because the outlets will not appear on that. They only appear on the original drainage plans that this board approved. So, there are some questions there that you need to go back to Mr. Wallace with."

Dan Swidron: "Okay. Maybe Mr. Wallace can contact one of you gentlemen, or Mr. Borries again?"

Commissioner Borries: "I think the Area Plan, they're are the final say on subdivisions. If they're the final say on subdivisions they can authorize, or they can ask for a review of that. As a Drainage Board we can certainly ask for... at this point really I think."

Commissioner Hunter: "I think a review, but I don't think that they have the authority to order a replat on this. I think a review as-built, would very definitely be (inaudible)."

Bill Jeffers: "There are two questions that are being discussed at this time. The first is Mr. Borries question. He is right in his assumption that the drainage board cannot order a replat of a subdivision. Even if the Commissioners could, you'd have to take in to consideration that in order to do a replat, legally you have to have the consent of all parties who own property within the land that is to be platted. That's an easy thing to do when one developer, or one

landowner owns all of the property. However, it's now been broken up into dozens of lots, and has dozens landowners at this time. Each one would have to consent to the replat.

The second question addressed by Mr. Hunter, is that the replat itself would only serve the purpose of correcting easements, or other deficiencies of the recorded plat. In particular what Mr. Swidron is probably getting at is the notification to the homeowners of what their maintenance responsibilities are. However, as Mr. Hunter pointed out it would better serve the purpose to have a set of as-built plans. I do believe both the Commissioners, and the Drainage Board have addressed that in previous meetings, and requested, or demanded of Mr. Hatfield that he produce a set of as-built plans showing the exact location, and operation of the various drainage facilities. I think that already has been taken care of."

Commissioner Hunter: "Legal council committed to that. The night that they appeared before us."

Commissioner Borries: "Okay. That's well said, so Mr. Swidron are you clear then on this? I think our Board's clear on this. We can request as-built drainage plan for Willow Creek. Are you clear on what we're...?"

Dan Swidron: "I understand what you are saying here. Mr. Wallace says it would be better for the county, and the homeowners that a secondary replat would be taken with reinspection. That's the way he stated it."

Commissioner Borries: "That's why he was speaking to Area Plan Commission, and that's why Mr. Jeffers addressed it. I'm not sure as a drainage board we can tell the Area Plan Commission to replat the subdivision."

Dan Swidron: "Mr. Shaw brought that up when he first made his presentation. He said you don't want the homeowners to sign. Tell you the truth, all of us overlooked it; because, yes, we all should of stood up, because we were all at Mr. Wallace's office when he said; yes you do want to do that. So we all missed it at the last meeting; and yes, we, did want to sign the cards that say that we want, a second replat. None of us jumped on it when it was presented."

Commissioner Borries: "If you do that, I think then it's my understanding from what Mr. Wallace told me on the phone today, and I hesitate doing this, but I want to make sure that I am exactly right on what I've said here. He told me that Mrs. Cunningham agreed to go, and she would be willing to do that."

Dan Swidron: "If the board authorized her, and that's the way she stated it."

Commissioner Borries: "This board can't authorize that. This board can't do that. This board can authorize and request a review, or a submittal of an as built drainage plan."

Dan Swidron: "Then is he talking about the Commissioner Board? The Commissioners itself, or not the Drainage Board?"

Commissioner Borries: "I think we can request the Area Plan to do that. I'm not sure...if they have the final say on subdivisions.."

Alan Kissinger: "We can make a formal request as the Drainage Board, which basically carries no weight; or we can indicate that the Drainage Board has no objection to them proceeding."

Dan Swidron: "Okay."

Motion made to move that this Board request of the developer, an as-built drainage plan for Willow Creek Estate Subdivision by Commissioner Hunter, and seconded by Commissioner Tuley. So ordered.

Dan Swidron: "Wasn't that suggested the last time with modifications?"

Commissioner Borries: "That's what we're talking about, "as built." He needs to give you exactly what he's done."

Dan Swidron: "Mr. Wallace said that wasn't enough. I'm just here representing the homeowners."

Commissioner Borries: "We'd have to re-reconvene the Commissioners' Meeting to do the other part, but I don't have any problem if we give a formal request to Area Plan Commission. You do understand that this is none binding. Okay?"

Dan Swidron: "Right."

Motion made to request a review perhaps of a possible replat of the Willow Creek Subdivision by Commissioner Hunter and seconded by Commissioner Tuley. So ordered.

Commissioner Borries: "What we have not requested here, or what we have not demanded is for example: Who's going to pay for that?"

Commissioner Hunter: "Now didn't you say that all the owners would have to approve a replat?"

Commissioner Borries: "I think they would."

Bill Jeffers: "Isn't your motion just to ask them to consider advisability under any conditions?"

Commissioner Borries: "Right."

Commissioner Hunter: "Didn't I understand you to say that in order for a replat to occur, all the owners involved in that had to sign."

Bill Jeffers: "That's my understanding, but I'm not a lawyer."

Commissioner Hunter: "This is true, because this is the same thing I got from Area Plan this afternoon. That there had to be an agreement among every owner in that area."

Commissioner Borries: "If you for example objected to all the other people who bought property, and said; hey I don't want mine done, then it can't go. You've got to get an agreement from all of the people who now own property. If Hatfield owned the whole thing there would be no problem there, because he in fact was the owner of all that property. Which he was at one time, undeveloped. Now that it has been subdivided everybody has to sign on."

Dan Swidron: "So what we are saying if it's not just the homeowners, it's the lot owners too? Which it would include, anybody?"

Commissioner Hunter: "Right. Anybody that owns anything in that....(inaudible remarks)."

(Inaudible Remarks...Including Mr. Hatfield)

Commissioner Tuley: "Does he still own some?"

Dan Swidron: "Yes. He owns twenty lots in phase III."

Commissioner Hunter: "You're going to have a lot of people you're going to have to deal with."

Dan Swidron: "We would have a problem right there, because Mr. Hatfield would vote against it."

Commissioner Tuley: "He's not going to sign that is he?"

Commissioner Borries: "I wouldn't count on it."

Dan Swidron: "I wouldn't recommend, because Mr. Shaw says, well you don't want us to do that, so...yes we do want him to do that."

Commissioner Borries: "Well, we've requested it; but again stopped short of saying who's going to pay for it. I'm not sure that Mr. Hatfield, well his property, and everybody else who's bought in there he would not pay for that request with that. That could be a tough situation. (inaudible)

Dan Swidron: "Two more questions. One was, have you received any word from Mr. Hatfield of what he did so far, and what he's going to do? I know this is the twenty eighth, and I think there was some statement that he was going to have...any letters in?"

Commissioner Borries: "No. I've not received any letters. Nothing has crossed my desk yet from Mr. Hatfield."

Dan Swidron: "Mr. Jeffers did say before the meeting that Mr. Hatfield plans on starting phase IV, and phase V. I know at the last meeting we stated that he would not be able to build phase IV, or Phase V until he completes phase III, phase I through III. So that what was stated."

Commissioner Hunter: "Correct me if I'm wrong. We had given him until the twenty eighth to submit his Erosion Control Plan to Soil Conservation Service. You might want to give Bill, Darrell Rice a call in the morning to see if indeed he has."

Commissioner Tuley: "I believe your right."

Commissioner Hunter: "He would not had submitted it to us. It would go directly to SCS, and that's 867-0729. Ask if they have received an Erosion Control Plan. That should have been submitted before ground was broken out there."

Dan Swidron: "That's on phase IV, and V your saying? Because he's already submitted for the first three phases."

Commissioner Hunter: "Yes. Phase IV, and V. That was the second problem, as I understand, where silt was coming from."

Dan Swidron: "Right. Any drainage plan he was suppose to resubmit, or submit them before he does anything."

Commissioner Hunter: "He was suppose to submit it before he broke ground on phase IV, and V. So Darrell Rice would be the person to call in the morning about that."

Dan Swidron: "We asked that he doesn't start phase IV, or V until he completes phase I through III. That's with the retention ponds involved, and everything else. The drainage properly..."

Commissioner Borries: "He can't start phase IV, and V until it gets approval from this board. Before it will get approval from this board it has to be reviewed by the Surveyors Office."

Dan Swidron: "Okay."

Commissioner Borries: "He's going nowhere with that."

Commissioner Hunter: "The Erosion Control Plan has to be approved by the SCS."

Dan Swidron: "I would want to say that Roger Lehman was out to inspect several of the lots. He's got letters going to the people that are in violation, or Mr. Hatfield's in violation of the building codes. There must be at least six or seven homes that he's in violation. So he did make some kind of attempt to correct some of the conditions."

Commissioner Borries: "I think you are making some kind of progress here to air your concerns, and demonstrate them. Again you've taken our advice. You now have secured of council. You do have further remedies as things go on here. If Mr. Hatfield says that he will do these things, and doesn't."

Dan Swidron: "Okay. I appreciate the board's efforts. Thank you."

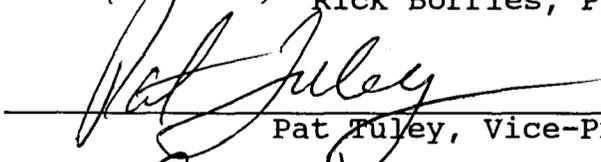
Commissioner Borries: "Thank you."

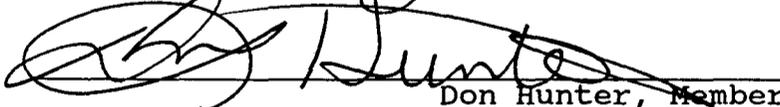
There being no further business the meeting was adjourned at 8:00 pm

PRESENT:

President Rick Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Cindy Mayo, Chief Deputy Auditor  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Recording Secretary  
Paul Spina, JAS Corporation  
Dan Swidron, Willow Creek Subdivision

  
Rick Borries, President

  
Pat Tuley, Vice-President

  
Don Hunter, Member

~~30-9-21-33~~ Right of entry over private land; extension of spoil banks beyond right-of-way

Sec. 33. (a) The county surveyor, the board, or an authorized representative of the surveyor or the board acting under this chapter has the right of entry over and upon land lying within seventy-five (75) feet of any regulated drain. The seventy-five (75) foot limit shall be measured at right angles to:

- (1) the center line of any tiled drain; and
- (2) the top edge of each bank of an open drain; as determined by the surveyor.

(b) Spoil bank spreading resulting from the construction, reconstruction, or maintenance of an open drain may extend beyond the seventy-five (75) foot right-of-way if:

- (1) the county surveyor finds that the extension is necessary; and
- (2) the extension has been provided for in the engineer's report on the construction, reconstruction, or maintenance.

(c) All persons exercising the right given by this section shall, to the extent possible, use due care to avoid damage to crops, fences, buildings, and other structures outside of the right-of-way, and to crops and approved structures inside the right-of-way. The county surveyor shall give oral or written notice of the entry on the land to the property owner of record, and in the case of a municipality, to the executive of that municipality. The notice must state the purpose for the entry.

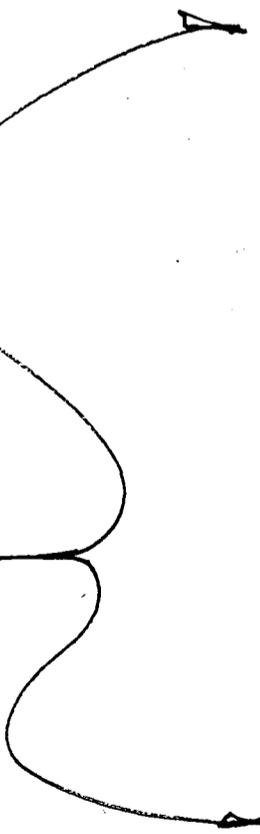
(d) The owners of land over which the right-of-way runs may use the land in any manner consistent with this chapter and the proper operation of the drain. Permanent structures may not be placed on any right-of-way without

the written consent of the board. Temporary structures may be placed upon or over the right-of-way without the written consent of the board, but shall be removed immediately by the owner when so ordered by the board or by the county surveyor. Crops grown on a right-of-way are at the risk of the owner, and, if necessary in the reconstruction or maintenance of the drain, may be damaged without liability on the part of the surveyor, the board, or their representatives. Trees, shrubs, and woody vegetation may not be planted in the right-of-way without the written consent of the board, and trees and shrubs may be removed by the surveyor if necessary to the proper operation or maintenance of the drain.

(e) This subsection applies to new regulated drains established after September 1, 1984, and to urban drains. The board may reduce the seventy-five (75) foot requirement of subsections (a) and (b) to any distance of not less than twenty-five (25) feet from the top of each bank of an open ditch and fifteen (15) feet from the center line of any tiled drain as measured at right angles.

(f) The surveyor, the board, or an authorized representative of the surveyor or the board acting under this chapter does not commit criminal trespass under IC 35-43-2-2. *As added by Acts 1981, P.L.309, SEC.101. Amended by P.L. 206-1984, SEC.3; P.L.76-1989, SEC.6.*

PRESENTED TO BOARD WITH REGARD TO PAUL SPINNA'S REQUEST















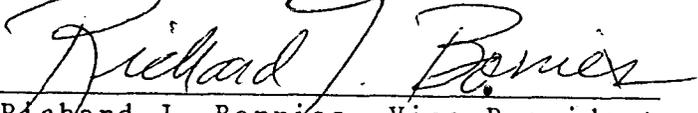


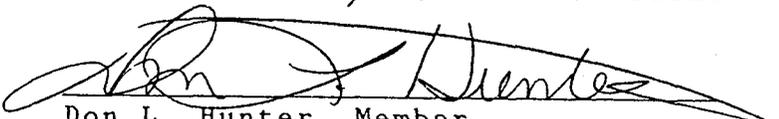


ENACTED at Evansville, Indiana on this 31st day of October, 1994.

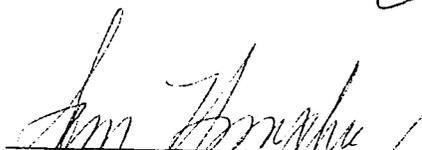
THE BOARD OF COUNTY COMMISSIONERS  
OF THE COUNTY OF VANDERBURGH  
STATE OF INDIANA

  
Patrick Tuley, President

  
Richard J. Borries, Vice President

  
Don L. Hunter, Member

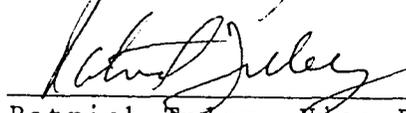
ATTEST:

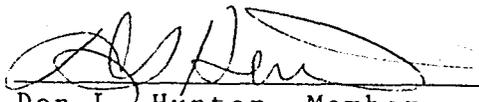
  
Sam Humphrey, Auditor  
Dated October 31, 1994

Adopted and Approved by the Vanderburgh County Drainage Board  
at Evansville, Indiana, on this 28th day of November, 1994.

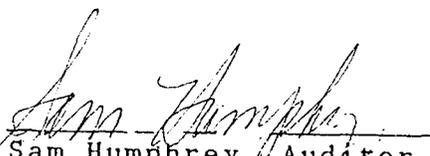
THE VANDERBURGH COUNTY DRAINAGE BOARD

  
Richard J. Borries, President

  
Patrick Tuley, Vice President

  
Don L. Hunter, Member

ATTEST:

  
Sam Humphrey, Auditor  
Dated November 28, 1994

ENCROACHMENT AGREEMENT

KNOW ALL PERSONS BY THESE PRESENTS, that on this the 29<sup>th</sup> day of November, 1994, JAS REALTY CORP. II, an Indiana corporation, the party of the first part (hereinafter "JAS"), and the VANDERBURGH COUNTY DRAINAGE BOARD, of Vanderburgh County, Indiana, the party of the second part (hereinafter "THE BOARD"), do hereby agree as follows:

WHEREAS, JAS, is the owner of record of the following described real estate (hereinafter "JAS's property") located in Vanderburgh County, Indiana, to wit:

A part of the West Half of the Southeast Quarter of Fractional Section Nineteen (19), Township Six (6) South, Range Nine (9) West of the Second Principal Meridian, in Vanderburgh County, Indiana, described as follows:

Commencing at the Southwest Corner of the West Half of the Southeast Quarter of said Fractional Section Nineteen (19); thence along the West Line of said Half Quarter Section North 00 degrees 33 minutes 16 seconds East Two Hundred Thirty-four and Four Hundredths (234.04) feet to the North right-of-way of I-164 Interstate Highway Project Number I-164-1(2)9 L.S.R. No. 4, as described in a certain deed to the State of Indiana, recorded in Deed Drawer 3, Card 7031 in the office of the Recorder of Vanderburgh County, Indiana, and being the POINT OF BEGINNING of this description; thence continuing along said West Line North 00 degrees 33 minutes 16 seconds East Six Hundred Forty and Thirty-five Hundredths (640.35) feet; thence South 89 degrees 26 minutes 44 seconds East Three Hundred Fourteen and Thirteen Hundredths (314.13) feet; thence Two Hundred Fifty-nine and Forty-six Hundredths (259.46) feet along a curve concave to the West, said curve having a radius of Nine Hundred Twenty-four and Ninety-three Hundredths (924.93) feet and a chord of Two Hundred Fifty-eight and Sixty-one Hundredths (258.61) feet bearing South 13 degrees 59 minutes 04 seconds East; thence South 05 degrees 56 minutes 53 seconds East One Hundred Seventy-six and Thirty-five Hundredths (176.35) feet; thence South 00 degrees 43 minutes 44 seconds West Ninety-four and Fifty-nine Hundredths (94.59) feet; thence One Hundred Ninety-six and Thirty-five Hundredths (196.35) feet along a curve concave to the Northwest, said curve having a radius of One Hundred Twenty-five (125.00) feet and a chord of One Hundred Seventy-six and Seventy-eight Hundredths (176.78) feet bearing South 45 degrees 43 minutes 44 seconds West; thence North 89 degrees 16 minutes 16 seconds West One Hundred Ninety-four and Eighty-five Hundredths (194.85) feet; thence North 00 degrees 17 minutes 19 seconds West Nine and Ninety-nine Hundredths (9.99) feet; thence South 86 degrees 03 minutes 02 seconds West Seventy-eight and Fifty-eight Hundredths (78.58) feet to the aforesaid Point of Beginning; and containing Five and Fifty-one Hundredths (5.51) acres, more or less.

3. Following the BOARD's repairs and preparations as in Paragraph 2 above, JAS shall construct, at its sole cost and expense, a concrete liner along the bottom of the Nurrenbern Ditch for the above described Six Hundred Forty and Thirty-five Hundredths (640.35) feet along the West Line of JAS' property, and to the specifications as delivered to JAS by the Vanderburgh County Surveyor, as attached hereto as Exhibit "A." Said concrete liner of the ditch bottom may be constructed by JAS prior to or simultaneously with the development and construction of an automobile dealership facility upon JAS's property, so long as said concrete liner is to be completed prior to the granting to JAS of a certificate of occupancy for said facility. THE BOARD shall be responsible for providing to JAS all permits, right-of-way or encroachment agreements, and/or temporary easements necessary for the construction of said concrete liner at the bottom of the Nurrenbern Ditch on any properties not owned by JAS;

4. In conjunction with the construction of the concrete liner, as provided in Paragraph 3 above, JAS shall have, within the remaining and above described Twenty-five (25.00) foot right-of-way on JAS's property, on a perpetual basis, and subject only to the conditions provided in Paragraph 5 below, the right to:

(a) pave the land within the right-of-way to within three (3) feet of the top of the bank of the Nurrenbern Ditch, and thereon to display for sale, to park and to store motor vehicles;

(b) install light standards and poles, in such locations as are reasonably acceptable to the County Surveyor, so as to illuminate JAS's property to the illumination standards required by JAS's retail automotive tenant; and

(c) install such other utilities on or under said Twenty-five (25.00) foot right-of-way as are reasonably acceptable to the County Surveyor, and as are necessary for the construction and operation of an automobile dealership upon JAS's property;

5. Following construction of the concrete liner, as provided in Paragraph 3 above, JAS shall have the responsibility, on a perpetual basis, for the performance of the following maintenance activities in the remaining twenty-five (25.00) foot right-of-way along the above described Six Hundred Forty and Thirty-five Hundredths (640.35) foot West Line of JAS's property:

(a) regularly mowing, and otherwise maintaining in a neat manner, the three (3) foot grass strip running along the top of the bank of Nurrenbern Ditch the length of JAS's property;

STATE OF INDIANA )  
 ) ss  
COUNTY OF VANDERBURGH )

SWORN TO AND SUBSCRIBED before me by PAUL J. SPINA, the  
President of JAS REALTY CORP. II, this 29<sup>th</sup> day of  
November, 1994.

Vanessa A. Adams  
NOTARY PUBLIC-STATE OF INDIANA  
VANESSA A. ADAMS

My Commission Expires: 2/10/96 Residence: Vand. Co.

THE VANDERBURGH COUNTY DRAINAGE BOARD

Richard J. Borries  
Richard J. Borries, President

Patrick Tuley  
Patrick Tuley, Vice President

Don L. Hunter  
Don L. Hunter, Member

ATTEST: Sam Humphrey, Jr.  
Sam Humphrey, Auditor

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DECEMBER 27, 1994

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MINUTES  
DRAINAGE BOARD MEETING  
DECEMBER 27, 1994

The Vanderburgh County Drainage Board met in session on December 27, 1994 at 7:00 p.m., in the Commissioners' Hearing Room 307, with President Richard Borries presiding.

Commissioner Borries: "At this time I would like to convene the Drainage Board Meeting. Last Drainage Board Meeting of 1994, and certainly Commissioner Hunters' last Drainage Board Meeting, and his distinguished tenure. We'll at this point consider approval of the transcribed minutes of the following."

**RE: APPROVAL OF MINUTES (03-28-94)**

Motion made by Commissioner Tuley and seconded by Commissioner Borries to approve the minutes of March 28, 1994. So ordered.

**RE: APPROVAL OF MINUTES (11-07-94) (SPECIAL DRAINAGE BOARD MEETING) "WILLOW CREEK SUBDIVISION"**

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of November 7, 1994. So ordered.

**RE: APPROVAL OF MINUTES (11-21-94) (SPECIAL DRAINAGE BOARD MEETING) "AZTECA PROJECT"**

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of November 21, 1994. So ordered.

**RE: APPROVAL OF MINUTES (11-28-94)**

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the minutes of November 28, 1994. So ordered.

Commissioner Borries: "Mr. Bill Jeffers from the County Surveyor's Office, is here as our technical advisor. I have one (1) amended agenda, but there maybe another amendment here, with the gentleman in the audience. First item that I have it would be a request for approval of the following Subdivision Drainage Plan. The first one is Baehl Subdivision."

**RE: NEW BUSINESS:**

**REQUEST OF APPROVAL FOR THE FOLLOWING SUBDIVISIONS DRAINAGE PLAN:**

**A. BAEHL SUBDIVISION:**

Bill Jeffers: "That's on the agenda, because it's on the Area Plan Commission Agenda. However, I have not seen submitted any Drainage Plan for Baehl Subdivision."

Commissioner Borries: "Okay."

Bill Jeffers: "So that will be omitted from the agenda."

Commissioner Borries: "I think we also had a letter regarding an Alexander Estate Subdivision?"<sup>1</sup>

**B. ALEXANDER ESTATES SUBDIVISION:**

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<sup>1</sup>Copy of the Alexander Estates Report to the Drainage Board included with the 12-27-94 minutes.

Bill Jeffers: "Right. Alexander Estates is a small Subdivision which is a part of a Subdivision that was done back in 1950's, but was never submitted for recording. It comes back to you because a part of it is being resubdivided so that the children of the Alexanders, who live there on lot 5, in the large existing house with the tennis court, can redivide this ground, and the children can build houses on lot 1, lot 3, and lot 4, I believe is the plan. There is also a lot 2 in this. The lakes already exist, and the roadway already exists. There is also a roadway that goes up through the flag lot, number 4, and crosses the dam that's on lot 5 at the northwest end of the lake. Mr. Easley is here in the audience. Mr. Easley is the engineer for the Alexanders. I've examined his calculations, which he submitted. I agree with his calculations. In addition I've prepared a report to you accompanied by a letter from Mike Wathan, from the Vanderburgh Soil and Water Conservation District. Which I understand has been renamed Natural Resource Conservation Service. In my report to you I'm saying that Mr. Easley's plan is a "Preliminary Drainage Plan" under the terms of the New Ordinance. That a final Drainage Plan would have to be submitted, which would include about another seven (7) items in addition to what he's submitted already. The additional items that I'm asking for on a final Drainage Plan, which would come to us after Area Plan Commission approves the Subdivision, and after any further plans would be given to you, or the County Engineer, would be the seven (7) items listed A through G, in paragraph 3. There are details that I want added to this plan before you. I submit that for Mr. Easley to agree to, and for those conditions to be added to the minutes of this meeting.

In addition in item 5, where these are recommendations, or suggestions that were given the developer, or the landowner. They're not requirements of the Ordinance, and they're not requirements for our positive recommendation. (a) Those are listed as extending the large concrete pipe about twenty feet (20'), and covering over it. (b) Removing some loose debris, and construction material that has been dumped into the channel at that end of the dam. (c) That the dam, and shorelines be maintained so the trees don't get any bigger in the dam basically. I have those listed in paragraph 5. These are not requirements, but they're suggestion from us. Then attached is Mr. Wathan's letter.<sup>2</sup> Basically, what this is is a subdivision that's been there fifteen, twenty, thirty years. Never been recorded. The lake has been built for twenty years, or more. It seems to be in working condition. To bring it up to par with our New Ordinance, I'm asking for seven (7) items to be added to the final Drainage Plan submitted to us, and we'll check those off in the office, if they agree to it. If they agree to this we'll recommend that you accept the Drainage Plan for Alexander Estates."

Andy Easley: "Bill, I think Tom has got that on a drawing here, and I thought that he'd had maybe given this to you. (Andy Easley, engineer for Alexander Estates.) We need this approval before we can go to the Plan Commission on the 4th of January, don't we?"

Bill Jeffers: "I would think they would take preliminary approval."

Andy Easley: "If they can give us preliminary approval then we can catch all the details."

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<sup>2</sup>Copy of Mr. Wathan's letter included with the 12-27-94 minutes.

Bill Jeffers: "Apparently most of the seven items that I've asked for, and I did ask for those over the telephone before Christmas holidays to Tom Keith, at Mr. Easley's office. We discussed that, and apparently he's added most of these to the new plan. Except possibly extending the easement to include both dams. You know what I'm saying...so that any person from any one of the lots could cross over another lot, and do repairs on the backside of this dam, and that type of thing. That would be about the only thing that looks like he hadn't done."

Andy Easley: "I thought he had done that, because he wanted the whole dam to be in an easement. Let's see, what's this line? Well alright, that, may be that needs to...(inaudible)."

Bill Jeffers: "I may just have to check that off."

Andy Easley: "Okay."

Commissioner Hunter: "Let's go back on this dam thing. There's no intention of the County ever excepting these roads that go across these dams, are there?"

Andy Easley: "John Stoll indicated that the County would not want to except."

Commissioner Tuley: "Good indication."

Andy Easley: "That the county would want to accept the road across the dam. It will be a privately maintained road in an accepted right-of-way."

Commissioner Hunter: "We're all on the same page then."

Commissioner Tuley: "It sounds like it so far."

Commissioner Borries: "Oh yes, very definitely. (Referring to a vote to accept a road on a dam) This member won't vote for it. We have too many liability questions all the way through."

Andy Easley: "He was very adamant about, I wouldn't say adamant, but he was quite..."

Commissioner Borries: "Andy we're having to ask a few more questions simply because we are now in this new mode with our Drainage Ordinance. So, do you understand that what your going to be able to submit then to the Area Plan Commission is the final, or it will be an "as-built" plan?"

Andy Easley: "We need if you want to, make it a conditional approval, so we can go to the...we would like to have a conditional approval."

Commissioner Borries: "We can do that."

Andy Easley: "So we can go to the Plan Commission on the 4th of January, and we can say that prior to the recording of the secondary plat we will make sure Bill can check everything off that he wants."

Commissioner Borries: "It has just put us all now in a different mix, and so we're going to have to ask the same question to you as well as others, because what was it Bill, our deadline was after the end of November?"

Bill Jeffers: "November 28, 1994 I believe is when it was enacted."

Commissioner Borries: "That was our last Drainage Board Meeting, so we want to make sure that we're not deviating from this, and we've always had some confusion just as in this kind of case, of course again this was in 1950, so things have really changed. Whatever is recorded needs to be done in an "as-built" fashion with our technical advisor signing off on that to verify that, so that we are acting in accordance of our New Drainage Ordinance."

Andy Easley: "We did some more field work, and got information on the spillway, and got everything that Bill wanted I believe."

Commissioner Borries: "You have a copy of the New Drainage Ordinance?"

Andy Easley: "Yes."

Bill Jeffers: "Basically what's happened here is, Mr. Easley's office worked Friday, and Monday. Our office was on holiday Friday, and Monday. He has added five (5) of the seven (7) items I listed under paragraph 3. What the Area Plan Commission is saying is they still want some type of drainage approval before it comes before them. That's what we are asking for here."

Commissioner Borries: "I don't have any problem with that."

Bill Jeffers: "And what your Ordinance requires is final approval before the recording of the plat. Before he can get a building permit they have to have final approval. The Area Plan Commission understands that, and they'll bring it over when it goes to recording, and say; "did they finish everything that they were required to do?"

Commissioner Borries: "In addition do you agree then, Andy, on the points in number five (5), that Mr. Jeffers also has indicated here?"

Bill Jeffers: "Those were suggestions. I don't know if you've been out there Andy, but they've been dumping some construction debris, and stuff in this channel that leaves the dam."

Andy Easley: "I didn't see it."

Bill Jeffers: " There's some railroad ties, and stuff. I'm just saying we can't make them remove that, but they ought to."

Andy Easley: "I think the Alexanders have been very cooperative in my relationship with them, and I would say that they would go along with that. They would accept that."

Bill Jeffers: "Mike Wathan, and I discussed the trees in the dam, and right now they're very small. They've done a very good job of maintaining it, but if they let some of those get big it would not be to their advantage."

Commissioner Borries: "The pipe, part (a) is the one I would like to have a commitment on."

Bill Jeffers: "The extension of pipe?"

Commissioner Borries: "Yes."

Andy Easley: "Is that a practical extension, or should that best be an open channel? It's rip-rap. Grouted rip-rap, Bill. I haven't looked at that."

Bill Jeffers: "Mike Wathan, and I looked at that. Presently it's relatively stable, but we feel that it would be in their best interest to extend that pipe, or possibly to rip-rap it, and go to Soil Conservation, and get some ideas, because it could, especially with the debris that's in the channel, it could whirlpool there, and eat away at that earthwork over a period of time, and cause a problem to the dam."

Andy Easley: "I think Tom Alexander would agree to either extend it or give it a good coat of rip-rap."

Bill Jeffers: "There are several materials that are allowed in pipes now. Some of them are less expensive than that large diameter of concrete, or one of the channel treatments would be helpful. The only other thing then that I don't see is the report that ought to be prepared by your office on how to take care of the dam, and everything."

Andy Easley: "I have a report. This is what we can give, and it's pretty much in good form. You can have that."

Bill Jeffers: "That's what we were asking for, a report that included suggestions from Soil Conservation Service on how to take care of all that. The dams, the pipes, and that type of thing."

Commissioner Hunter: "Okay. These are the things that Mike Wathan wanted?"

Bill Jeffers: "Mike and I thought that the landowner should have a report to guide him in the care of these two lakes."

Commissioner Hunter: "I guess the other question I would have for you Andy, would be in regard to Mike Wathan, is submitting it for you to start disturbing land out there. To submit a "rule five" plan so that there is something on record."

Andy Easley: "I spoke to Mr. Alexander about that, and he did say; that if the regulation say; if you disturb more than five (5) acres, he didn't see how he could disturb two (2) acres in building houses."

Commissioner Hunter: "The only thing is is that if his sediment comes down on somebody else then it doesn't make any difference if it's a square inch or not, if he's negatively impacting his neighbor, then we have a problem."

Andy Easley: "I understand that, and I told him that there had been in some subdivisions that got their tail in hot water for that. I will urge him to give us permission to submit something that will satisfy them. I saw Mike Wathan, and he hadn't seen the property when he made that recommendation, and he had to admit that if they build one (1) house every three (3) years, and with all the lakes there, I don't see how he can possibly get any silt. Your concerned about the silt going to the north west."

Commissioner Hunter: "Right."

Andy Easley: "Since half ( $\frac{1}{2}$ ) of this property, almost half ( $\frac{1}{2}$ ) of it drains to the lake, doesn't it Bill?"

Bill Jeffers: "Yes sir."

Andy Easley: "He's just going to be polluting his own lake. I don't think he intends to do that. He's got a lovely homesite back there, and he does have enough room to build, if his kids want to build. He's not making them. He doesn't think that lot 4 will ever be built on, but I think he does have a daughter

who is now married that doesn't like apartments, and would like to see if they could get financing from a friendly banker to build a home there."

Bill Jeffers: "Mr. Wathan, and I looked at the subdivision with regard to what you men are discussing at this time, and we didn't feel that there would be any one time in which five (5) acres, or more was disturbed, because the road is constructed basically. However, Mr. Wathan included in his letter that he thought the present plan would work fine as long as exposed areas are protected during construction. So he's offering his help as an officer of Soil Conservation Service to give you a friendly hand, and methods of protecting those lakes, and off site properties from being silted from activities on this ground."

Andy Easley: "I'll ask Tom for permission to submit it. We have no idea where the homes are going to be built. It's not like a half ( $\frac{1}{2}$ ) acre lot subdivision. In other words, you can pretty much guess where the footprints are going to be. We can make I think an intelligent estimate of where it may be."

Bill Jeffers: "The only neighbor that we had contact with was Mr. Leo Schultheis, of 1012 Campbell Road, who is a neighbor to lot 3, at it's south west corner. He has been here on various projects. Mr. Schultheis who I believe is a retired school teacher now, owns quite a bit of property back there. One piece of property, this one adjacent to lot 3 has a lake on it. His only concern that he expressed to our office is that he would like to see the field bed for the sanitary sewage, or the household sewage, the field bed to be in this area on the north end of lot 3, approximately where the three (3) is on the map, so that if it were to malfunction that the grey water would not enter his lake, but would go off in this direction."

Commissioner Hunter: "Wouldn't the Health Department probably recommend something?"

Bill Jeffers: "I sent him to the Health Department who may, or may not require you to show an area for the field bed, but I sent him to the Health Department."

Andy Easley: "His report said he wanted us to show the field beds for lot 1, and lot 2. He wasn't concerned about...Fred Townsend wasn't concerned about lot 3."

Bill Jeffers: "I just wanted to let the Commissioners know that that was the only person who came in on this, and his concern was the field bed. Mr. Bill Wedekindt is also a neighbor, and I haven't heard from him. So with those comments, we would recommend that the Drainage Board, accept Mr. Easley's plan, as a "Preliminary Plan", and that any final, or "as-built" plans come back through our office for a check off before the plats are recorded. We don't see any serious problems with it."

Motion made by Commissioner Hunter and seconded by Commissioner Tuley to approve the Drainage Plan for Alexander Estates Subdivision. So ordered.

#### C. KIRKOFF SUBDIVISION:

Bill Jeffers: "I don't think anybody's here for Kirkoff Subdivision. I don't think they want to argue the point tonight."

Commissioner Tuley: "Okay."

D. RELAXATION OF THE SEVENTY-FIVE FOOT EASEMENT FOR  
STOCKFLETH DITCH:

Bill Jeffers: "I also apologize. I failed to put a relaxation of the seventy-five foot easement for Stockfleth Ditch. Down to a thirty (30) foot easement. I have examined the plan from the gentleman in the audience from Morley & Associates. It's a requirement of Area Plan Commission to have a certain amount of parking for the employees, and the clients of this piece of property. We feel that we can get by with the thirty (30) feet from the parking lot to the top of the bank of Stockfleth Ditch, I would recommend to your Board that you relax the seventy-five (75) foot drainage right-of-way for Stockfleth Ditch along the subject property to thirty (30) feet. This gentleman can get up, and give you the exact description of that property that we're recommending that on."

Commissioner Borries: "Here are these other plans incase you need them."

David Hynes: "My name is David Hynes, and I am with Morley & Associates. The lot that we're talking about is located on Kimber Lane. It's 520 Kimber Lane. It's just north of the intersection of Virginia, and Kimber."

Commissioner Hunter: "Kimber Lane is north of the LLOYD Express Way?"

David Hynes: "Yes. Like Bill said; in order to meet the parking requirements our clients had to go over the seventy-five (75) foot regulated drain easement. In order to meet the requirements, he's going to need some area back there for additional parking. We had originally requested that it be relaxed back to twenty-five (25) feet, but I believe that thirty (30) feet will still work."

Commissioner Hunter: "May we ask who your client is?"

David Hynes: "Yes. His name is Frank Forbes."

Commissioner Hunter: "Okay. This regency?"

David Hynes: "No it isn't. He's a financial planner, and he's in the process of tripling the size of his building out there right now. So there is an existing building on the site."

Commissioner Borries: "Bill, do you have any problems with that?"

Bill Jeffers: "No. On the westside of the ditch is Metro Center East, Kenny Kent Toyota, and all of that big development there. Everything south of your extension of Virginia Street, on the west bank has been relaxed of twenty-five (25) feet with grass. Several parcels on the east bank have been relaxed to thirty (30) feet with grass. There's no pavement within either the thirty, (30) or the twenty-five (25) feet at this time. This would be following that (inaudible) that we've set before others who have come in. Everything you are going to see on eastside is going to be piece mill. Everything on the eastside of Stockfleth Ditch is going to be piece mill property by property. So far we have not relaxed any less than thirty (30) feet that I can remember."

Commissioner Hunter: "You can still do maintenance with thirty (30) feet with no problem?"

Bill Jeffers: "Yes sir. The only problem that we're going to encounter by relaxing these down from seventy-five (75) to

thirty-five (35), or thirty (30), or twenty-five (25), is that we're going to have to haul off anything that we dip out of there. We're not going to be able to spread it. That's going to be your incase, and cost on your future contracts. Anytime we go in, and dip out silt it will have to be trucked out. It won't be any problem. You won't have to truck it very far, because everybody out there wants the dirt."

Commissioner Hunter: "They're going to be paying for a part of it anyway. If they're on the Legal Drain, they're paying into aren't they?"

Bill Jeffers: "They pay the assessment. That's correct. Also it's going from \$1.50 an acre to \$22.50 an acre, as soon as they develop it urban. The assessment goes up fifteen (15) times what it is as a soil bean field. The only increased expense is bringing a dump truck in, and hauling that dirt away. Everybody out there wants that dirt to build parking lots with, because everybody out there is below the hundred (100) year flood plain. So we won't have to truck very far."

Commissioner Hunter: "So you recommend we pass this?"

Bill Jeffers: "Yes sir."

Motion made by Commissioner Tuley and seconded by Commissioner Hunter to approve Drainage Plan for Kirkoff Subdivision. So ordered.

**RE: REQUEST PAYMENT OF BLUE CLAIMS-DITCH MAINTENANCE:**

Commissioner Borries: "In the interest of time Mr. Jeffers would knowledge if you have reviewed these, and if the County Surveyor has recommended these, and through his signature that we enter them into the record as approved if you acknowledge those."

Bill Jeffers: "Yes sir, that is correct. Everyone has been reviewed either by myself, or by Mr. Brenner. All of them are signed by the Surveyor. Each is accompanied by the proper piece of paper prescribed by statute to accompany a claim. Surveyor recommends that each be paid in the amount that's noted on the claim."

**THE FOLLOWING BLUE CLAIMS<sup>3</sup> WERE SUBMITTED AS FOLLOWS:**

		AMOUNT
ALBERT STECKLER #1234 BAIHL DITCH #234-007 94-FM-07-40	6,890 LF @ \$0.125=\$861.25 PREV. PMT. @45%=\$387.56 PAY 40%...\$344.50 RETAINAGE 15%...\$129.19	344.50
BIG CREEK ASS'N INC. #0986 BUENTE UPPER BIB CREEK #234-010 94-FM-10-40	20,668 LF @ \$0.17=\$3,513.56 PREV. PMT. @ 45%=\$1,581.10 PAY 40%...\$1,405.42 RETAINAGE 15%=\$527.04	1405.42
BIG CREEK ASS'N INC. #0986 MAIDLOW #234-028 94-FM-28-40	18,671 LF @ \$0.15=\$2,800.65 PREV. PMT. @ 45%=\$1,260.29 PAY 40%...\$1,120.26 RETAINAGE 15%=\$420.10	1120.26
BIG CREEK ASS'N INC. #0986 POND FLAT MAIN #234-029 94-FM-29-40	36,852 LF @ \$0.13=\$4,790.76 PREV. PMT. @ 45%=\$2,155.84 PAY 40%...\$1,916.30 RETAINAGE 15%=\$718.62	1916.30

<sup>3</sup>Copies of Blue Claims included with the 12-27-94 minutes.

DRAINAGE BOARD MEETING  
DECEMBER 27, 1994

BIG CREEK ASS'N INC. #0986 POND FLAT MAIN LAT "C" #234-032 94-FM-32-40	9,036 LF @ \$0.12=\$1,084.32 PREV. PMT. 45%=\$487.94 PAY 40%...\$433.73 RETAINAGE 15%=\$162.65	<b>433.73</b>
BIG CREEK ASS'N INC. #0986 POND FLAT MAIN LAT "E" #234-034 94-FM-34-40	3,616 LF @ \$0.12=\$433.92 PREV. PMT. @ 45%=\$195.26 PAY 40%...\$173.57 RETAINAGE 15%=\$65.09	<b>173.57</b>
BIG CREEK ASS'N INC. #0986 RUSHER #234-035 94-FM-35-40	4,444 LF @ \$0.12=\$533.28 PREV. PMT. @ 45%=\$239.98 PAY 40%...\$213.31 RETAINAGE 15%=\$79.99	<b>213.31</b>
DANIEL J. PAUL #3590 WALLENMEYER #234-040 94-FM-40-40	8,355 LF @ \$0.145=\$1,211.48 PREV. PMT. @ 45%=\$545.17 PAY 40%...\$484.59 RETAINAGE 15%=\$181.72	<b>484.59</b>
ELDON MAASBERG #1485 KNEER #234-024 94-FM-24-45	3,036 LF @ \$0.10=\$303.60 PAY 45%...\$136.62 RETAINAGE 15%	<b>136.62</b>
ELDON MAASBERG #1485 MAASBERG #234-027 94-FM-27-45	2,206 LF @ \$0.07=\$154.42 PAY 45%...\$69.49 RETAINAGE 15%=\$23.17	<b>69.49</b>
JOHN MAURER #1483 HOEFLING #234-020 94-FM-20-40	5,571 LF @ \$0.10=\$557.10 PREV. PMT. @ 45%=\$250.70 PAY 40%...\$222.84 RETAINAGE 15%=\$83.56	<b>222.84</b>
RALPH REXING #1228 POND FLAT MAIN LAT "A" #234-030 94-FM-30-45	5,311 LF @ \$0.14=\$743.54 PAY 45%...\$334.54 RETAINAGE 15%=\$111.53	<b>334.59</b>
RALPH REXING #1228 POND FLAT MAIN LAT "B" #234-031 94-FM-31-45	2,797 LF @ \$0.14=\$391.58 PAY 45%...\$176.21 RETAINAGE 15%=\$58.74	<b>176.21</b>
RALPH REXING #1228 POND FLAT MAIN LAT "D" #234-033 94-FM-33-45	4,579 LF @ \$0.14=\$641.06 PAY 45%...\$288.48 RETAINAGE 15%=\$96.19	<b>288.48</b>
REXING ENTERPRISES INC. #4476 SINGER #234-037 94-FM-37-40	2,450 LF @ \$0.11=\$269.50 PREV. PMT. 45%=\$121.28 PAY 40%...\$107.80 RETAINAGE 15%=\$40.42	<b>107.80</b>
TERRY R. JOHNSON #1052 AIKEN #234-006 94-SM-06-15	2,450 LF @ \$0.2895=\$709.28 PREV. PMT. 85%=\$602.89 RETAINAGE PAY 15%=\$106.39	<b>106.39</b>
TERRY R. JOHNSON #1052 HENRY #234-019 94-FM-19-15	3,179 LF @ \$0.3069=\$975.63 PREV. PMT. 85%=\$829.29 RETAINAGE PAY 15%=\$146.34	<b>146.34</b>
TERRY R. JOHNSON #1052 KEIL #234-022 94-FM-22-15	3,012 LF @ \$0.3069=\$924.38 PREV. PMT. 85%=\$785.72 RETAINAGE PAY 15%=\$138.66	<b>138.66</b>
TERRY R JOHNSON #1052 SONNTAG STEVENS #234-038 94-FM-38-15	10,050 LF @ \$0.3184=\$3,199.92 PREV. PMT. 85%=\$2,719.93 RETAINAGE PAY 15%=\$479.99	<b>479.99</b>
UNION TOWNSHIP ASS'N #1259 BARNETT #234-008 94-FM-08-45	8,358 LF @ \$0.06=\$501.48 PAY 45%...\$225.67 RETAINAGE 15%=\$75.23	<b>225.67</b>
UNION TOWNSHIP ASS'N #1259 CYPRESS DALE MADDOX #234-012 94-FM-12-45	23,887 LF @ \$0.06=\$1,433.22 PAY 45%...\$644.95 RETAINAGE 15%=\$214.98	<b>644.95</b>

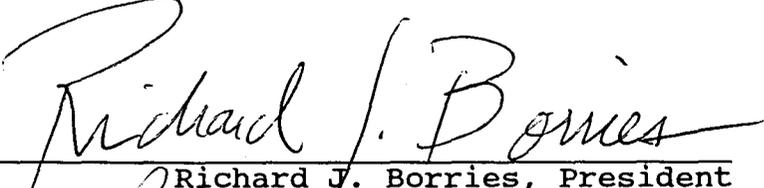
UNION TOWNSHIP ASS'N #1259 EDMOND #234-016 94-AD-16-40	15,395 LF @ 0.45=\$6,927.75 PAY 40%...\$2,771.10 RETAINAGE 15%=\$1,039.16	2771.10
UNION TOWNSHIP ASS'N #1259 EDMOND #234-016 94-AD-16-45	15,395 LF @ \$0.45=\$6,927.75 PAY 45%...\$3,117.49 RETAINAGE 15%=\$1,039.16	3117.49
UNION TOWNSHIP ASS'N #1259 HELFRICH HAPPE #234-018 94-AD-18-40	12,698 LF @ \$0.45=\$5,714.10 PAY 40%...\$2,285.64 RETAINAGE 15%=\$857.11	2285.64
UNION TOWNSHIP ASS'N #1259 HELFRICH HAPPE #234-018 94-AD-18-45	12,698 LF @ \$0.45=\$5,714.10 PAY 45%...\$2,571.35 RETAINAGE 15%=\$857.11	2571.35
UNION TOWNSHIP ASS'N #1259 KAMP #234-021 94-FM-21-45	11,160 LF @ \$0.06=\$669.60 PAY 45%...\$301.32 RETAINAGE 15%=\$100.44	301.32
TOTAL		20,216.61

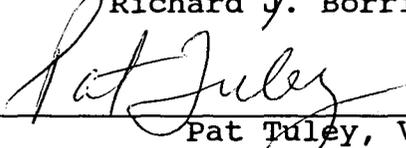
Motion made to approve by Commissioner Tuley and seconded by Commissioner Hunter. So ordered.

There being no further business the meeting was adjourned at 7:30 p.m.

**PRESENT:**

President Richard J. Borries  
Vice-President Pat Tuley  
Member Don Hunter  
Alan Kissinger, Attorney  
Bill Jeffers, Chief Deputy Surveyor  
Julie Hinton, Recording Secretary  
Andy Easley, Engineer Alexander Estates

  
Richard J. Borries, President

  
Pat Tuley, Vice-President

Don Hunter, Member

ALEXANDER ESTATES  
REPORT TO DRAINAGE BOARD  
12/27/94

1. The plan submitted by Ralph A. Easley, Jr., will be classified as a "Preliminary Drainage Plan" under the terms of the new drainage ordinance.
2. A "Final Drainage Plan" must be submitted subsequent to subdivision approval by APC, and any further plan approval by the Commissioners or the County Engineer.
- ③. The "Final Drainage Plan" must include the following:
  - (a) The exact location, sizes, lengths, materials, and conditions of all pipes entering or leaving either of the two lakes which pipes are on lands within this subdivision. (The preliminary plan only gives the approximate location, and none of the other data.)
  - (b) The exact location, cross section, condition, and materials applied to the channel serving the large concrete pipe at the west end of the larger lake. (The preliminary plan gives approximate location.)
  - (c) An easement which extends twelve (12) feet either side of the top of bank of the channel noted in (b) above.
  - (d) The exact location, size, length, and condition of a pipe which exists or is planned to drain surface water from the obviously impounded area near the southwest corner of proposed Lot One.
  - (e) An easement of appropriate width for any pipe and/or channel serving such a pipe as referred to in (d) above.
  - (f) Drainage maintenance easements enlarged to include the entire earthwork for any part of any lake dam existing on any land within this subdivision.
  - (g) A brief and concise report prepared and delivered to the owners of any land within this subdivision which report will provide directions on the proper operation, maintenance, and repairs needed to keep the lakes, pipes, channels, embankments, and earthworks in good working condition.

The Natural Resources Conservation District (formerly SCS) can provide help in this regard.

A copy of the report must be filed with the Surveyor.

F1



12445 HIGHWAY 41 NORTH • EVANSVILLE, INDIANA 47711 • 867-0729

December 20, 1994

Mr. Bill Jeffers  
Surveyor's Office  
Room 325 Adm. Bldg.  
Evansville, IN 47708

Dear Bill,

I appreciate your meeting with me on December 20, 1994 at 7:45 a.m. to look at Alexander Estates Subdivision. As we discussed I agree that the present plan should work fine as long as exposed areas are protected during construction. All things considered I feel that the subdivision offers good building sites.

Please feel free to call our office (867-0729) if we can be of assistance.

Sincerely,

*Mike Wathen*

Mike Wathen  
Resource Conservation Specialist  
Vanderburgh County  
Soil & Water Conservation District

cc: Andy Easley

MW/bb

All programs and services of the Soil and Water Conservation District are offered on a Nondiscriminatory Basis, Without Regard to Race, Color, National Origin, Religion, Sex, Age, Marital Status or Handicap.



F2



































Dec

Form Prescribed by the  
State Board of Accounts

1245

Revised County  
Form No. 17

A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME TERRY R. JOHNSON CONST. # 1052

On Account of Appropriation for KEIL DITCH # 274.022

Invoice No.	Itemized Claim	Amount	
	1994 FALL MOUL		
	$3,012.66 \times 0.3069 = 924.38$		
	PREVIOUS PNT 85% = \$785.72		
94-FM-22-15	15% RETAINAGE DUE = 138.66 →	138	66

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Terry R. Johnson  
Name

Owner  
Title

Date OCT 5, 1994

F3













A claim to be properly itemized, must show: Kind of service, where performed, dates service rendered, by whom, rate per day, number of hours, rate per hour, price per foot, per yard, per hundred, per pound, per ton, etc.

VANDERBURGH COUNTY, INDIANA

VENDOR NAME Union Township Ditch Assn. # 1259

On Account of Appropriation for Helfrich Happe Ditch 234-018

Invoice No.	Itemized Claim	Amount
	12698 L.F. 0.45 \$5714.10	
94-AD-18-45	Pay 45% →	2571.35
	15% Retainage = 857.11	

Pursuant to the provisions and penalties of Chapter 155, Acts of 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

x John A. Rollitt  
Name  
Treasurer UTDA  
Title

Date DEC. 22, 1994

F3

