

MINUTES OF THE REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD JUNE 6, 1973.

The regular meeting of the Tippecanoe County Drainage Board held on Wednesday, June 6th, 1973 at 9:00 o'clock a.m., in the Tippecanoe County Court House with the following members present: Edward Shaw, Robert Fields, Bruce Osborn, A. D. Ruth, Jr. Fred Hoffman, and Gladys Ridder.

Minutes Approved

Upon motion by Bruce Osborn, seconded by Robert Fields, and made unanimous by Edward Shaw, the minutes of the May 2, 1973 meeting were approved as read.

Ditches Referred

The following ditch was referred to the Surveyor to prepare for a maintenance hearing: L. B. Wilson, Jackson Twp. in Tippecanoe County and Davis Twp. in Fountain County.

Problem with house being built on Amstutz Ditch

The County Surveyor brought to the attention of the Board and Mr. Joseph Fletcher, Area Plan Acting Director, that a house was now being constructed within sixty (60) feet of the Amstutz ditch and the required distance or easement is (75) seventy five feet. Mr. Fletcher said he would alert his staff by placing a place on the building permits to check when the easement had been checked.

9:30 a.m.
Maintenance Hearing on John Dooley ditch (Continued)

The Surveyor opened the maintenance hearing on the John Dooley ditch by reading his report and the minutes of the June, 1972 meeting of the Board and making his recommendations to the Board.

Those present were: Robert E. Stradling, Keith McMillin, Chester W. Dill, Iness L. Brown, Lawrence G. Treece and Michael P. Norris. Mrs. Ridder related Mr. Leon Howey's wishes of wanting a maintenance fund established. The opinions of those present, however, was against establishing a maintenance fund as they preferred to take care of the ditch themselves. Keith McMillin said he had removed a tree that was in question as to it's hindrance to the drainage and Mr. Treece said he had cleaned his portion of the ditch until he felt it would pass any inspection. Others related same and although the Surveyor advised a small maintenance fund for future years, they persisted in asking the Board not to establish a fund. After assurance from the Attorney that they could postpone it indefinitely the Board so moved.

10:15 a.m.,
Maintenance Hearing on the John M. Blickenstaff Ditch (Continued)

The Surveyor opened the maintenance hearing on the John M. Blickenstaff ditch by reading the minutes of the June, 1972 meeting and reporting that the job they were doing was a fine job. Last year they asked the Board to give them a year to bring their ditch into good repair and they had complied. Those present were: Theodore Dieterle, Charles Kennedy and Keith Barger. With Mr. Ruth's recommendation of a small maintenance fund, those present asked the Board if they would set a ten cents (10¢) an acre assessment.

Upon motion by Mr. Bruce Osborn, seconded by Robert Fields and made unanimous by Edward Shaw a ten cents (10¢) an acre assessment was approved. Some discussion of whether the Sheese and Byron Skinner properties should be left in this watershed because they were not assessed for the repairs and Keith Barger said he felt they should be left in for the maintenance fund. Mr. Kennedy reported that his tile needed to be cut-off and he was assured that that job would be done before the contractor was released.

10:30 a.m. Martin V. Erwin Ditch Maintenance Hearing

Mr. Ruth read the minutes of last month's meeting where those present felt the problem with the Martin Erwin ditch lay in the obstruction caused by the Indiana Bell Telephone Co. line. Mr. Ruth had suggested then that he would contact them and the Board had postponed the hearing one month until this answer could be found. The only person present was Mr. Walter Shackelford. Mr. Ruth reported Telephone Company has been contacted and that the problem at the Intersection of Jackson Highway just East of 600W would be taken care of by Mr. Cohee of Cohee Construction Co. and the bill would be sent directly to the Construction Supervisor of the Indiana Bell Telephone Co. of Fowler, Indiana. With no objection to the one dollar (\$1.00) per acre assessment, the motion of Mr. Robert Fiels, seconded by Bruce Osborn and made unanimous by Edward Shaw established the assessment.

11:00 a.m.
James N. Kirkpatrick Ditch Maintenance Hearing

The Engineer opened the meeting by reading his report and making his recommendations to the Board. He read the remonstrances of Gladys Sterrett and Donna Kirk. He recommended to the Board after visiting the Gladys Sterrett property that her acreage should be reduced by nine acres. The Board so moved. Those in attendance were: Walter Pendleton, Robert Brady for Mary Brady, James Williamson for prairie Oaks, Inc., Porter Kirkpatrick, C. L. Thompson, Homer M. Kerlin, and Eileen Kerlin. Mr. Pendleton reported that he felt his acreage in the watershed was too high and that the seventy five cents (\$0.75) an acre assessment was also too high. Mr. Pendleton and Mr. Williamson reported that hog manure from the Howard Daugherty farm was flowing out on the surface of the ground thru the branch of the Kirkpatrick ditch. They relayed their contact with the health department with no results and asked the Drainage Board to please see what they could do to relieve the very bad situation. Mr. Hoffman, the County Attorney said he would talk to the health officer and meet with Mr. Ruth later and see what could be worked out. Many of those present felt that a fifty cent (\$0.50) per acre assessment would be adequate to maintain this ditch so the Board respecting their request unanimously voted to establish a fifty cents per acre maintenance fund.

Certificate of Assessments and Order & Findings Signed

Upon the establishment of a maintenance fund on three ditches., the Board signed the Order and Findings forms and the Certificate of Assessment forms. All maintenance funds established will be placed on the Treasurer's books for collection in 1974.

The business of the day completed, the Board so moved to adjourn.

Edward J. Shaw
Edward J. Shaw, Chairman

Robert Fields
Robert Fields, Vice Chairman

Bruce Osborn
Bruce Osborn, Board Member

ATTEST:

Gladys Ridder
Gladys Ridder, Exec. Secretary

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD JANUARY 9, 1974

The regular meeting of the Tippecanoe County Drainage Board was held in the County Commissioner's room on January 9, 1974 at 9:00 a.m., with the following members present: Bruce Osborn, Robert F. Fields, Edward Shaw, Ron Melichar, A. D. Ruth, Jr and Gladys Ridder.

Election of Officers Upon motion of Bruce Osborn, seconded by Edward Shaw, Robert F. Fields was elected to serve as Chairman of the Drainage Board for the year 1974. Upon motion of Edward Shaw and seconded by Robert Fields. Bruce Osborn was elected to serve as Vice Chairman of the Drainage Board for the year 1974. Upon motion of Bruce Osborn, seconded by Edward Shaw and made unanimous by Robert Fields, A. D. Ruth, Jr. and Fred Hoffman and Gladys Ridder were appointed by the Board to serve in their respective jobs as Drainage Engineer, Drainage Board Attorney and Executive Secretary.

Minutes of November Meeting Upon motion of Edward Shaw, seconded by Robert Fields and made unanimous by Bruce Osborn, the minutes of the November 7, 1973 meeting were approved as read.

Montgomery Ward Warehouse Mr. Ruth reported to the Board that the Montgomery Ward warehouse on Imperial Parkway had been constructed directly over the tile ditch that is a Branch of the S. W. Elliott ditch. In checking with Area Plan, Mr. Ruth reported that construction had been started without a building permit or a check with the Surveyor's office as to whether any drains were in the area. The acting County Attorney, Mr. Ronald Melichar, instructed Mr. Ruth to notify the owners of the land and building to remove the building immediately.

January 14, 1974

Mr. Steven Rachlin
17 Academy Street
Newark, New Jersey 07102

Re: Building on Imperial Drive
south of the City of Lafayette, Ind.

Dear Mr. Rachlin,

This is to advise that the building owned by you at the above location is setting over branch #14 of the Elliott Ditch legal drain, and in part is well within the easement of this drain. (The enclosed sketches show the location of this branch.)

After discussing this matter with the members of the Tippecanoe County Drainage Board and their attorney, I was instructed to inform you that the building in question must be removed from the easement of the legal drain.

If this matter is not resolved of within the next 30 days appropriate legal action will be taken.

Sincerely,

/S/ A. D. Ruth, Jr.
A.D. Ruth, Jr. Tipp. Co. Surveyor

ADR/res

Kirkpatrick Drain Problem Mr. John Fisher and Mr. Dow Orrell came before the Board to discuss drainage problems connected with the development in the area of the James N. Kirkpatrick ditch. The subject was discussed but no decision was reached. Both gentlemen were invited to return at a later date.

A discussion was held as to the possibility of the Drainage Board having jurisdiction over the holding ponds in the subdivisions. No decision was reached.

9:30 a.m.
JAMES S. KELLERMAN
Maintenance Hearing The Engineer opened the hearing on the James S. Kellerman ditch by reading his report and making his recommendations to the Board. Because none of the individuals in this watershed appeared at this hearing and because of the road conditions being hazardous, the Board moved to continue this hearing until February 6, 1974 and instructed the Secretary to notify those people of same.

10:00 a.m.
N. W. BOX MAINTENANCE
HEARING The Engineer opened the hearing on the N. W. Box ditch by reading his report and making his recommendations to the Board. There were no remonstrances filed against this ditch. Some corrections in the acreage were necessary because of overlaps with the Motsinger, E. W. Andrews and McFarland ditches.

Those in attendance were: John B. Randolph, Atty. for Wilma B. Creson, Charles Kerkhove, Jordan McCarty, Robert C. Kerkhove, Roland D. Halleck for Purdue Research Foundation and Frank J. Welch.

The changes in acreage are as follows:

Leota L. & Jordan McCarty's 38A deleted from the Box assessment role.

Raymond R. & Ruth Calvert) Und $\frac{1}{2}$ (each) S. Side S.W. Fr. Sec 19-24-5
Carl J. & Catherine M. Trout

27 Acres taken out of McFarland ditch and left in the Box watershed.

Purdue Research Foundation as follows: S. NE Sec 19-24-5 remove 10 A from McFarland watershed, NW SW & W NE SW of Sec 17-24-5 remove 37A from McFarland watershed, SE SW & E NE S^W of Sec 17-24-5 remove 60A from McFarland watershed, SW SW of Sec 17-24-5 remove 38A from the McFarland watershed, a total of 145A remove from McFarland and claims for an erroneous tax filed for the Trouts and Purdue to reimburse them for the years 1972 and 1973 in which they paid on this acreage to the McFarland Maintenance Fund.

Bruce Osborn asked those present if they had any objections to the proposed seventy five cents per acre assessment and they all said they thought that a fair assessment.

Upon motion of Bruce Osborn, seconded by Edward Shaw and made unanimous by Robert Fields, the Board so moved to establish a \$0.75 per acre Maintenance Fund assessment.

On motion made and carried the meeting adjourned.


Robert F. Fields, Chairman


Bruce Osborn, Vice Chairman


Edward J. Shaw, Member


Gladys Ridder, Exe. Secretary

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD SEPTEMBER 18, 1974

The regular meeting of the Tippecanoe County Drainage Board was held in the County Commissioner's Room in the Tippecanoe County Court House at 9:00 a.m., on September 18th, 1974. The following members were present: Robert F. Fields, Bruce Osborn, Edward Shaw, A. D. Ruth, Jr., Fred Hoffman, and Gladys Ridder.

Signing of Minutes Upon the reading of the minutes of the July 3, 1974 drainage board meeting (there was no meeting in August) Robert Fields moved to accept the minutes as read. The motion was seconded by Bruce Osborn and made unanimous by Edward Shaw.

9:00 a.m. Maintenance-Ann Montgomery ditch

At 9:00 a.m., the Engineer opened the maintenance hearing on the Ann Montgomery Legal drain by reading his report and making his recommendations to the Board. In attendance were: Robert Stradling, Neal Simison, Robert L. Plaster, Larry Treece, Lucille Banes Williams, Keith McMillin, Nyle Royce, Harley W. Rust and Ralph H. Crowder. Robert Stradling said he had overlaps with other ditches. Mr. Ruth assured him after receiving Mr. Stradling's letter to that affect, the acreage in the Ann Montgomery ditch had been deleted. Mr. Ralph Crowder had been in the Surveyor's office seeking assistance in correcting the amount of acreage assessed against his land and upon recommendation of the Engineer, the Board his total acres assessed as fifty (50) instead of the original eighty five (85). Mr. Ruth reported that he had had complaints from the officers of the Little Wea Conservancy District that the Ann Montgomery ditch was dumping mud deposits into the Little Wea and causing problems. Larry Treece wanted the Board to assure him that before any monies were spent on the repair of this ditch that the Engineer check the cause for the needed repair and if it was a man made error of negligence in keeping the ditch clean, not to use any of this money to correct the problem. The Board told him that it was not easy to determine the cause but that they would instruct the Engineer to check as best he could. With most of those present in favor of establishing a maintenance fund Robert Fields moved to establish a \$ 1.00 per acre assessment maintenance fund. The motion was seconded by Bruce Osborn and made unanimous by Edward Shaw.

9:30 a.m. Informal hearing E. Branch of J.McFarland ditch

At 9:30 a.m., the Board held an informal hearing on the reconstruction of the East branch of the John McFarland ditch. Mr. Charles Vaughan had asked the Engineer to do some ground work and give them an estimate of what it would cost to reconstruct the East branch of the John McFarland legal drain. Those in attendance were: Gene L. Rooze, Russell Slayton, Ralph Manier, O. C. Greives, Chas. R. Vaughan and H. Franklin Dunwoody. Mr. Ruth told them that a figure of \$ 20.00 per acre was a pretty good estimate of the cost of reconstruction for that branch. Some were in favor but others felt that constructing an open ditch would give them no relief. One said that Pine Creek, the outlet for the McFarland ditch, was so in need of dredging that no matter what was done to increase the flow of water without an outlet no relief would be given. A waterway with possible financial help from the SCS office was suggested but Mr. Vaughan felt that although it would probably benefit him, it would only dump more water onto his neighbor. The Engineer felt there was need of more time to study the problem further. Upon motion of Bruce Osborn, seconded by Robert Fields and made unanimous by Edward Shaw to continue this meeting for ninety days.

10:00 a.m. Elmer Thomas Reconstruction hearing

The Engineer opened the reconstruction hearing on the Elmer Thomas ditch by reading his report and making his recommendations to the Board. He pointed out the difference in price since his first estimate. Because of building costs, materials, etc. the original figure was no longer valid. Those in attendance were: Mr. & Mrs. Lyle Loomis, E. E. & Robert Franklin, Dale Remaly, Earl Ziegler, Mr. & Mrs. Robert Buker, Gordon DeBoy, Mr. Floyd. Mr. Lyle Loomis said after Mr. Gib Connelly had cleared his wooded area the swamp became decidedly worse. His one time beautiful home and garden were no longer beautiful for the garden was now swamp. He felt it could be drained and when he retired he could again have his lovely home. No amount of money to drain the area would seem too high. Mr. Floyd said he was in the exact same position as Mr. Loomis as he, too, had lost his garden and would surely be in favor of reconstruction of the Elmer Thomas ditch if it would bring he and his neighbors relief. Mr. Buker said he had purchased the Connelly property and had need of tilling the soil but with a swamp he could not farm his land. Mr. Osborn asked Mr. Buker since he would no doubt benefit more than others would he be willing to accept more of the cost. Mr. Buker said he certainly would. And Mr. Osborn said "how much" and Mr. Buker said "double". Gordon DeBoy said his acreage was in error that 43 acres couldn't drain this way and the Board asked the Surveyor if he would take elevations and determine the correct assessment. Mr. Ruth told all those present that he wanted it understood that even if the swamp was drained, the land was in the flood plane and could not be used for building. ** Mr. E. E. Franklin and his son Robert both explained that their dam did not hold back any of the water that was now so controversial. At one time there was a dam in their area and being very poorly constructed was taken out by a flood, but after it was out the problem of the swampy area was still there. Mr. Williams and Mr. Ziegler spoke out against the reconstruction and felt some were carrying the blunt of the assessment while others were benefitting with a lesser assessment. After hearing all the pros and cons, Mr. Bruce Osborn said he could not possibly vote for the reconstruction as the assessment role is now set up. He asked the Engineer to re-allot the amount of money to build the ditch according to the individual benefits. Then a new hearing would be held. The entire Board felt this would be more fair so the hearing was continued. ** Mr. Dale Remaly said there were some fallen logs and quite a baracade of brush on the John Garrott property and asked the Engineer to check it out for he felt those logs surely were causing some of the problems. Dale said his portion of the assessment was well over four thousand dollars and he doubted if he could ever benefit to that extent but he knew how much it would help others and he'd like to feel when he left this world he would have left it a little better than when he came into it, so he would vote for the reconstruction.

11:00 a.m. Maintenance hearing-E. F. Haywood ditch

The Engineer opened the maintenance hearing on the E. F. Haywood ditch by reading the minutes of the 1972 and 1973 hearings on this ditch. In those minutes the people present had said they would take care of their own ditch and would bring it up into good repair. When asked what had been done in the last two years, Mr. Joe Rund said, " Nothing, only more mud has piled up." Mr. James Kellerman said he was in favor of a maintenance fund because all farmers know that if there's no drainage there's no farming. As in the two years before the Moore's and the Kirkpatrick's were much opposed to any maintenance assessment. Mr. Moore asked the attorney for a copy of the law that instructed this Board to set up a maintenance fund and Mr. Hoffman, the County Attorney, provided him with same. Mr. Joe Ratcliff attacked the Board by saying, " I talked to a fellow who said he'd paid money into the county for a ditch but when he came in to ask for help on his ditch, he was told there wasn't any money. What did you fellas do with the money?" "Spend it on Welfare."

Those in attendance were: Robert W. and Keltie Kirkpatrick, Robert and Jane Moore, Joe Ratcliff, Frank Royer, John Kerkhoff, Joe Rund, James S. Kellerman.

Mr. Ruth explained the need for a dollar per acre assessment. In cases where there's been a lesser assessment it has not proven adequate.

With those against the assessment (or ever having a maintenance fund established) so vehement in their demands, the Board moved to set this ditch up for vacation, with the exception of Robert Fields. The Secretary was instructed to notify all persons on the ditch of a hearing to vacate. The Attorney advised the Secretary to set up the hearing as to vacate or establish a maintenance fund.

Mr. R. M. Stoepfelwerth, John Gams and Thomas Schubert came before the Board with their request to empty treated wastewater into the J. B. Anderson ditch.

11:45 a.m.
Meeting with
Clarks Hill
Disposal Plant
Board

September 16, 1974

Mr. Dan Ruth
Tippecanoe County Surveyor
Court House
Lafayette, Indiana 47902

RE: Clarks Hill Wastewater Treatment Plant
Effluent Discharge to Anderson Ditch

Mr. Ruth:

You will find enclosed for your use a location and site plan for the above referenced facility. We have also enclosed the plan and profile of the effluent sewer connection to Anderson Ditch.

The 12-inch effluent sewer from the wastewater treatment plant is proposed to discharge into the existing 30-inch pipe approximately 1100 feet from the existing outfall on Anderson Ditch. We propose to discharge approximately 75,000 gallons per day (0.116cfs) of treated wastewater within the first year after the plant is completed. When the plant is at maximum capacity which is estimated to take approximately 20 years the discharge will be 150,000 gallons per day (0.232 cfs).

The water discharged from the plant is to be better than 98 per cent pure. The plant is designed to produce an effluent containing a effluent biochemical oxygen demand (BOD) of 5 mg/l and suspended solids (SS) of 8 mg/l. The plant meets all requirements of the Environmental Protection Agency and the Indiana Stream Pollution Control Board.

If you have any questions regarding the proposal to discharge the effluent to Anderson Ditch, please feel free to contact us at any time.

Very truly yours,

STOEPPELWERTH AND ASSOCIATES

S/ Thomas M. Schubert, P.E.

TMS/srn

1:30 p.m.
Alvin Pilotte

Attorney Thomas Brooks representing Alvin Pilotte appeared before the Board along with Mr. Pilotte and Robert Lahrman. Mr. Pilotte's complaint was with the Board's having made a waterway through his farm a part of the Ilgenfritz legal drain. The Board had done so because of a petition drawn up by the majority of the neighbors in that area. Mr. Pilotte said he was in Florida when it was done and objected strenuously. The Board listened to his side of the story and then suggested that he bring a petition with the signatures of the proper amount of acreage involved and again the Board would consider removing the addition.

Gary Williby
2:30 p.m.-drainage
study

Professor Spooner from the School of Civil Engineering at Purdue University came before the Board and presented a young student by the name of Gary Williby who had been working for several months on a project involving the ground North of West Lafayette and it's drainage problems. This work was done in response to a request made by Mr. Ruth for a drainage study in this area. Copies of the study were left for the Surveyor's office use. It was beautifully presented and quite an involved study. Professor Spooner also did a presentation on soils and gave the possibilities of future studies on the types of soils etc. He also said all he needed was another student like Gary.

John Fisher
J.Kirkpatrick drain

Mr. John Fisher made a presentation of the philosophy of drainage in the James N. Kirkpatrick Legal drain watershed. He asked the Board only to listen and consider all the possibilities of long range planning-no decisions would be asked of them.

Order & Findings
and
Certificate of
Assessments

Upon the establishment of a maintenancé fund on the Ann Montgomery Ditch, the Board signed the Order and Findings and the Certificate of Assessments. The meeting had lasted until 4:00 p.m., and they gladly adjourned.

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD JANUARY 7, 1976

The regular meeting of the Tippecanoe County Drainage Board was held in the County Council Room in the Tippecanoe County Court House on January 7th, 1976 at 9:00 a.m., with the following members present: Robert F. Fields, William Vanderveen, Bruce Osborn, Robert L. Martin, Fred Hoffman and Gladys Ridder.

Upon motion of Bruce Osborn, seconded by William Vanderveen, Robert F. Fields was re-elected Chairman of the Board. Also by motion of Bruce Osborn, seconded by Robert Fields and made unanimous by William Vanderveen, William Vanderveen was re-elected Vice Chairman, Fred Hoffman was re-appointed Attorney and Gladys Ridder was re-appointed Executive Secretary.

The minutes of the meeting of the 10th day of December, 1975 were read and upon motion of Robert Fields, seconded by William Vanderveen and made unanimous by Bruce Osborn were accepted as read.

John Fisher, Surveyor for the John E. Smith Enterprises, spoke to the Board showing the proposed plan to build an open ditch along side of the James N. Kirkpatrick ditch. It would be developed in phases, would not disturb the present tile of the James N. Kirkpatrick ditch but would serve to relieve the already overburdened Kirkpatrick drain. Mr. Fisher told the Board he would like a letter from them showing the Board's approval for the proposed handling of the run-off water to take to the Area Plan Commission when applying for preliminary approval of the Valley Forge Subdivision.

Mr. Martin informed Mr. Fisher and Mr. Smith of the quick sand hazard that exists in the area. Both gentlemen said they were aware of the problems and had planned to handle the situation by using stone in the bottom of the open ditch. Mr. Martin suggested they take soil borings to locate those problem spots.

Mr. Osborn said he was also aware of some of the hazards of an open ditch such as proposed, namely mosquitoes, odors from stagnant water, problems with children falling into the open ditch, etc. Mr. Smith said that on his property there would be a fence for protection. He said the law made the property owner responsible for all of those things and the County should not be liable in any way.

The question of having to hold a hearing to inform all of the landowners in the watershed of Mr. Smith's plans, came up and Mr. Osborn referred the question to the county attorney. Mr. Hoffman said as long as Mr. Smith was not changing any part of the James N. Kirkpatrick legal drain there would be no need to hold a new hearing.

Mr. Fields opened the maintenance hearing of the Perry Davis ditch by asking the Surveyor to make his recommendations for this ditch. Mr. Martin said that since the secretary had sent out the notices for a hearing on the Davis ditch, he had learned from some of the landowners in the watershed, that the landowners along with the SCS office had made an open ditch that changed the legal ditch considerably. Mr. Martin also suggested that the Board table this hearing until he could study the work done by SCS and he would have the secretary schedule a new hearing.

In 1958-9 the property owners created a Kirkpatrick Ditch Association and at the time Mr. Kenneth Kepler is the President. They collected their own monies and cleaned out the ditch whenever the ditch was in need.

Those in attendance were: Bruce Parker, Bill Runner, Phillip L. Birge, Don Barker, Don Perkins and Eldon Horney.

A petition having been filed in the Surveyor's office, was presented to the Board. The petition was to have a tile branch emptying into the Jacob Taylor ditch be made a part of the Jacob Taylor Legal drain. The Board moved to refer the petition to the Surveyor for study and recommendation.

With business completed, the Board moved to adjourn.

Robert F. Fields
Robert F. Fields, Chairman

William Vanderveen
William Vanderveen, Vice Chairman

Bruce Osborn
Bruce Osborn, Board Member

ATTEST:

Gladys Ridder
Gladys Ridder, Executive Secretary

Election of Officers

Minutes Signed

John Fisher and John E. Smith

9:30 a.m. Perry Davis Maintenance Hearing

Jacob Taylor Petition

MINUTES OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD APRIL 7, 1976

The Tippecanoe County Drainage Board met in the County Council Room at 9:15 a.m., on April 7, 1976 with the following members present: Robert Fields, William Vanderveen, Bruce Osborn, Fred Hoffman, Robert L. Martin and Gladys Ridder.

Minutes Upon reading the minutes of the March 3rd, 1976 meeting a motion was made by Bruce Osborn, seconded by Approved William Vanderveen and made unanimous by Robert Fields to accept the minutes as read.

9:30 a.m. A called hearing on the James N. Kirkpatrick ditch to increase the maintenance fund assessment was opened with the County Surveyor explaining to those present the need for additional monies. Mr. Martin James N. Kirkpatrick Main-tenance In-crease said that the ditch was now over sixteen thousand dollars in debt and there was still work to be done on the ditch. Because of quick sand conditions and the price of repairs always being larger than anticipated this ditch should probably have a two dollar per acre assessment but he felt the one dollar per acre assessment was a must.

Those in attendance were: Walter Pendleton, Robert Brady, Bob Browning, Porter Kirkpatrick, Homer Kerlin and Harry P. Schultz.

Walter Pendleton and Robert Brady said the tile, a thirty inch one, that serves them was running full most of the time. The run-off in heavy rains could not get into the tile and ponded on their farms. Mr. Martin said when the work planned to be done in the near future was completed it should help their situation. Mr. Osborn said he felt only an open ditch could alleviate that problem and with quicksand as a base, he felt an open ditch would prove unsuccessful. Mr. Osborn said that if an open ditch was constructed it could not be done with maintenance money. He thought the Board's responsibility was to keep the tile operational. Mr. Pendleton asked if the subdivisions being built in the area were dumping their water into the Kirkpatrick ditch and the Board assured them that the engineers were instructed to build holding ponds and Mr. Pendleton said he felt the engineers could not always be trusted and sighted a case where they did not do as promised.

Mr. Vanderveen and Mr. Hoffman explained how the newly proposed ditch being built by John E. SMith would relieve a part of the water problems of the James N. Kirkpatrick ditch.

When the question of the one dollar assessment was asked, no one objected so Bruce Osborn made the motion to establish a one dollar per acre assessment, William Vanderveen, seconded the motion and Robert Fields made it unanimous.

John Fisher and Tom McCully for N & W Railroad John E. Fisher, representing the N & W Railroad showed profiles of a newly proposed track to service the Staley Company and General Foods. When the new tracks are built the Railroad would like permission to remove an old legal tile and replace it with a 36 inch twelve gauge steel pipe. Those in attendance were: Thomas McCully, John Fisher, Mike and Rocky Romanage. Thomas McCully, Attorney for the Railroad, said they would use a steel pipe for they felt it was sturdier. Mr McCully said the Railroad would ask the Drainage Board to take over the maintenance and Mr. Osborn said with the experience in the past with the Railroads, he would not accept that responsibility. Mr McCully said he would ask the Railroad to maintain the pipe under their tracks and write a letter to that affect. With that change, the Board said they would approve the replacement of the old tile on Branch No. 14 of the S. W. Elliott ditch.

Agreement from N & W

AGREEMENT

THIS AGREEMENT, made this ___ day of April, 1976, by between THE TIPPECANOE COUNTY DRAINAGE Board (hereinafter referred to as the "Board") and the Norfolk and Western Railway Company (herein- after referred to as the "N & W")

WITNESSETH:

WHEREAS, due to industrial development along it's main line in Wea Township, Tippecanoe County, Indiana, it has become necessary for the N & W to construct additional yard and support facilities to provide adequate service to it's customers;

WHEREAS, the construction and drainage plans for such yard and support facilities have been submitted to and reviewed by the Board and are identified as _____.

WHEREAS, a portion of said facilities will be in the One Hundred Fifty foot (150') statutory right-of-way for branches twelve (12) and fourteen (14) of the S. W. Elliott Ditch; and

WHEREAS, the Board is willing to approve said plans and grant written permission for construc- tion in accordance therewith on the rights-of-way for branches twelve (12) and fourteen (14) of the S. W. Elliott Ditch provided the N & W agrees to permit access to the area by proper agents of the Board for purpose of inspection and to maintain the tile forming a part of those branches under it's own right-of-way at it's own expense.

NOW, THEREFORE, for and in consideration of the premises and the mutual covenants and agree- ments hereinafter set

1. The N & W agrees:

- a. to permit proper agents of the Board to enter upon its right-of-way in the area of branches twelve (12) and fourteen (14) of the S. W. Elliott Ditch for the purpose of inspection at all r-easonable times at their own risk.
- b. to maintain the portions of branches twelve (12) and fourteen (14) which it proposes to replace on its own property in accordance with the plans identified above, all at its own expense. It is understood that this agreement covers maintainance only and shall not apply to relocation or enlargement of said lines at the request of the Board.

2. The Board hereby:

- a. Approves the construction and drainage plans identified as _____.

S.W. Elliott

- b. Grants permission to the N & W to construct the additional grade and tracks on the statutory right-of-way for branches twelve (12) and fourteen (14) of the S. W. Elliott Ditch in accordance with said plans.

IN WITNESS WHEREOF, the parties have executed this agreement the day and year first above written.

NORFOLK AND WESTERN RAILWAY CO.

/s/
Robert F. Fields, Chairman

By: _____

/s/
William Vanderveen, Vice Chairman

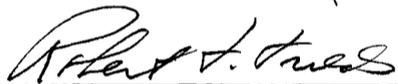
/s/
Bruce Osborn, Board Member

Mr. William Martin of the SCS office, appeared before the Board to ask for permission to tap onto a branch of the S. W. Elliott Ditch. He explained how Mr. Gary Hitchcox had developed the Hitchcox-Robinson subdivision. A perk test had been taken by Mr. Burton Vester and showed approval that the water would get away. Although all of the lots have been sold, Mr. Hitchcox feels greatly responsible to help those persons to whom he sold the lots to find the answer as to how to relieve the water that now wicks up and fills their basements. Mr. Martin said he had spent considerable time trying to find the answer as to how to relieve that water and the only way he could figure any relief was into a branch of the S. W. Elliott ditch.

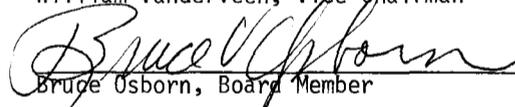
Wm Martin
for
Gary Hitchcox

Mr. Osborn said he fully understood and sympathized with the situation but that the Elliott Ditch is now overburdened. The branch in question is the same branch that is supposed to relieve Mr. Richard Smith's pond. As it does not do that job, Mr. Smith has threatened to sue the Board. To add one bit more water to an already bad situation does not seem an intelligent answer. Mr. Martin told the Board he would be happy to go to the sight of the problem and explain what he had already learned. The Board asked the surveyor to set up a time when they could all go out there.

Upon establishing an increase of maintenance funds on the James N. Kirkpatrick ditch, the Board signed new Certificate of Assessments and Order and Findings.


Robert F. Fields, Chairman


William Vanderveen, Vice Chairman


Bruce Osborn, Board Member

ATTEST:


Gladys Ridder, Executive Secretary

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD JUNE 7, 1978

The regular meeting of the Tippecanoe County Drainage Board met in the Community Meeting Room in the County Office Building at 9:30 a.m. with the following members present: William Vanderveen, Bruce Osborn, Robert F. Fields, J. Frederick Hoffman, Michael Spencer, Kenneth Miller, Dan Ruth and Ethel Kersey.

The minutes of the May 3, 1978 meeting were read and approved.

Minutes
Approved

The Tippecanoe County Drainage Board all read a copy of the Petition to Reconstruct a portion of Branch No. 14 of the S. W. Elliott Ditch and the Waiver of Notice and Consent. The Petition and Waiver of Notice and Consent were filed with the Surveyor and read as follows:

STATE OF INDIANA)
) SS: BEFORE THE TIPPECANOE COUNTY
TIPPECANOE COUNTY)

Branch #14
S.W.Elliott
Ditch

IN THE MATTER OF THE)
RECONSTRUCTION OF A PORTION)
OF BRANCH NO. 14 OF THE)
S. W. ELLIOTT DITCH.)

PETITION TO RECONSTRUCT DRAIN

The undersigned Petitioners respectfully petition The Tippecanoe County Drainage Board and show the Board as follows:

1. This Petition is filed pursuant to Section 110 of The Indiana Drainage Code (IC 19-4-1-10).

2. Petitioner The First National Bank of East Chicago is the owner, and Petitioner Richard E. Cochran is the purchaser under a binding offer to purchase, of a 4.09-acre tract in the Southeast Quarter of Section 3, Township 22 North, Range 4 West, Wea Township, Tippecanoe County,

Indiana. A legal description of said tract is annexed hereto as Exhibit A.

A plat of survey of said tract is annexed hereto as Exhibit B.

3. Petitioners' tract, like all of the real estate which adjoins it, is zoned for use for industrial purposes. Most of said adjoining land is presently being used for industrial purposes. The remained, like Petitioners' tract, is lying idle, awaiting development for industrial purposes.

4. As shown on said plat of survey, a portion of the tiled drain known as Branch No. 14 of the S. W. Elliott Ditch runs through the middle of Petitioners' tract, and renders the same unusable for industrial purposes.

5. Petitioners propose that the course of that portion of Branch No. 14 which runs across Petitioners' tract be relocated to run along a line which is parallel to and ten (10) feet east of the entire west line of said tract of real estate. Petitioners further propose to install therein new tile or corrugated pipe having a capacity at least as great as that of the present drain and to connect it up to existing portions of Branch No. 14 at the north and south lines of their tract, and to do so at their sole expense and in accordance with plans and specifications approved by the Board or its representative.

6. Petitioners submit that none of the other lands drained by Branch No. 14 will be in any way affected by the proposed change in course and reconstruction of that portion of said Branch No. 14 which runs through their tract.

7. Petitioners further request the Board to narrow the right-of-way provided by Section 601 of The Indiana Drainage Code (IC 19-4-6-1) to a forty (40) foot strip of even width, lying ten (10) feet on the west side and thirty (30) feet on the east side of the relocated centerline of that portion of Branch No. 14 which runs across their tract, and to permit the construction of permanent structures on any and all parts of their tract except said forty (40) foot strip. Petitioners submit that said forty (40) foot strip is more than adequate to provide for inspection and maintenance of Branch No. 14.

8. As stated above, Petitioners submit that the reconstruction of Branch No. 14 of the S. W. Elliott Ditch and the narrowing of the statutory right-of-way, as prayed for herein, will make their tract usable for industrial purposes and will have no effect whatsoever on any other lands served by Branch No. 14, and that therefore the granting of this Petition by the Board will serve the public welfare.

9. The Petitioners wish to have the date on which the matter will be referred to the Surveyor for report advanced in accordance with Section 110 (g) of The Indiana Drainage Code (IC 19-4-1-10 (g)).

10. The Petitioners will not be represented by counsel in this proceeding.

WHEREFORE, the Petitioners pray that the Board

a. Serve notice of intention to reconstruct that portion of

Branch No. 14 of the S. W. Elliott Ditch described above on the owners of land affected by said reconstruction;

b. Advance the date on which the matter will be referred to the Surveyor for report;

c. Fix a date for and hold a hearing on the proposed reconstruction;

d. Issue an order (i) relocating that portion of Branch No. 14 of the S. W. Elliott Ditch which runs across Petitioners' tract along the new route prayed for herein, and (ii) narrowing the statutory right-of-way provided by Section 601 of The Indiana Drainage Code to a strip of land forty (40) feet in width, lying ten (10) feet along the west side and thirty (30) feet along the east side of said relocated drain.

THE FIRST NATIONAL BANK OF EAST
CHICAGO

By /S/ Edward D. Ryan
Edward D. Ryan, Sr. Vice President

Attest: /S/ Ronald D. Sevier
Ronald D. Sevier
Assistant Cashier

/S/ Richard E. Cochran
Richard E. Cochran

STATE OF INDIANA)
) SS:
TIPPECANOE COUNTY)

BEFORE THE TIPPECANOE COUNTY
DRAINAGE BOARD

IN THE MATTER OF THE)
RECONSTRUCTION OF A PORTION)
OF BRANCH NO. 14 OF THE)
S. W. ELLIOTT DITCH)

WAIVER OF NOTICE AND CONSENT

The undersigned is the owner of real estate affected by the petition to reconstruct drain filed by The First Nation Bank of East Chicago, regarding the reconstruction of a portion of the Branch No. 14 of the S. W. Elliott Ditch; The undersigned has received and read a copy of the petition to reconstruct drain, is agreeable to such reconstruction and waives all notice of hearing on such petition and consents to an order by the Tippecanoe County Drainage Board, granting the relief sought in said petition and the reconstruction of said drain, such reconstruction is to be done entirely at the cost of Petitioner.

/S/ Fairfield Mfg. Co, Inc.

/S/ Charles E. Kramer
President

Robert F. Fields made a motion to approve the Petition along with that we, Tippecanoe County Drainage Board have an inspector and they, The Petitioner pay for the inspection. Bruce Osborn, seconded the motion and made unanimous by William Vanderveen.

After approving the Petition the Board signed the "Order and Findings".

Mr. Alvin Pilotte was again present at the Drainage Board meeting. William Vanderveen asked Pilotte what he would like to talk about and of course it was the Ilgenfritz Ditch. Mr. Pilotte started out by complaining about the tile ditch he said is under the open ditch, which his property is still draining into. Apparently in his opinion when the open ditch was cleaned out there were some tile at the bottom of the ditch that were broken and this is letting the tile ditch fill up with dirt so that his property is not draining. Mike Spencer reported that the legal description for the Ilgenfritz was all an open ditch. Alvin insisted and repeated that there was only a waterway over the tile ditch but didn't know if the tile ditch is a legal or private drain. Ilgenfritz Alvin Pilotte

After a discussion about the work that had been done on the Ilgenfritz ditch and the work that is to be done, the above complaint of Mr. Pilotte was dropped and the meeting returned to the problem of the obstruction that Pilotte had placed in the ditch. After, Alvin talked for awhile, he was reminded by Mr. Vanderveen that he had been order to remove the obstruction. He said he would take the culvert out and then asked when he could look forward for a bridge. He was told in the next four years.

Mr. Hoffman told Mr. Pilotte he could have fifteen (15) days to removed the obstruction and that he would tell the Judge.

William Vanderveen opened the informal reconstruction hearing on the Michael Binder ditch.

Some of the people of this ditch asked for the hearing and the Surveyor needed to know how many of the people in this watershed were in agreement on the reconstruction of this ditch and what was there opinion of the report of the SCS concerning this ditch before he did all of the field work necessary.

Informal Reconstruction Hearing Michael Binder Ditch

Those in attendance were: Raymond C. Bender, Charles Shelby, John Shelby, Raymond Bennett Ser., Norman Bennett Doug Sheets, Charles E. Kerber, Paul W. Ade, Robert C. Ade and Ralph W. Patrick, Ann Clark and Mark De Poy from SCS.

The property owners and the Surveyor's office had both asked the Soil Conservation Service for any technical assistance their agency may be able to provide in reviewing or any changes that may provide for the reconstruction of this drain. The property owners was mailed a copy of the report from SCS along with the notice of the informal reconstruction hearing. Job Investigation

A discussion on the pros and cons of reconstructing the drain, with most of the question being answer by Ralph Patrick. Mr. John Shelby was the only one that had an objection to the reconstruction plans. He was objecting to the open ditch on his property, because he would be losing some farm ground.

Mr. Vanderveen asked for a show of hands from those in favor of going ahead with the plans to reconstruct the Michael Binder Ditch. The vote was unanimous.

All were informed that when the Surveyor was finished with his work, a new hearing with the results would be called. The Surveyor is to recheck the watershed.

Branch #5 J.N. Kirkpatrick Ditch

Pat Cunningham, Representing David Price, came before the Drainage Board asking permission to relocate a portion of Branch #5 of the James N. Kirkpatrick Ditch, the Board approved the proposed relocation with the following conditions:

1. That the owner petition to reconstructed a portion of Branch #5 of the James N. Kirkpatrick ditch.
2. That the expense of creating this legal entity as well as the installation of the improvements be borne by the petitioner.
3. That the construction plans for said legal drainage be approved by the Tippecanoe County Drainage Board.
4. That the owners up stream be notified by the legal notice procedure or have a Waiver of Notice and Consent signed.

Eugene Johnson Ditch

The repair work under the railroad on the Eugene Johnson Ditch, came under reconstruction not maintenance. Meeting for Reconstruction before work is done.

Upon motion made and carried the meeting adjourned.

William G. Vanderveen

William G. Vanderveen, Chairman

Bruce Osborn

Bruce Osborn, Vice Chairman

Robert F. Fields

Robert F. Fields, Board Member

ATTEST:

Ethel Kersey
Ethel Kersey, Exec. Secretary

A Letter from the Tippecanoe School Corporation reads as follows;

June 1, 1978

Board of Commissioners County of Tippecanoe
County Office Building
20 North Third Street
Lafayette, Indiana 47901

Gentlemen:

Subject to your approval and the approval of the Tippecanoe County Drainage Board, the Tippecanoe School Corporation will construct and thereafter maintain a storm water drainage system to serve Battle Ground Junior High School located in Tippecanoe Township, Tippecanoe County, Indiana, in accordance with the plans and specifications for such drainage system prepared by Fanning/Howey Associates, Inc., which plans and specifications have been submitted to and approved by you.

It is understood and agreed that Tippecanoe School Corporation shall be solely responsible for the construction and future maintenance of the drainage system and will save and hold harmless the County of Tippecanoe from any expenses, damages, and/or causes of action arising from the construction, maintenance, or lack of maintenance of said storm water drainage system.

TIPPECANOE SCHOOL CORPORATION

By: /S/ Richard W. Harlow
President

Attest /S/ Mary I. Sherwin
Secretary

Battle Ground Junior High School

The regular meeting of the Tippecanoe County Drainage Board met in the Community Meeting Room in the County Office Building at 9:30 a.m. on Wednesday, June 6, 1979 with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert F. Fields, J. Frederick Hoffman, Michael J. Spencer and Gladys Ridder.

Minutes
Approved

Upon a motion of Robert F. Fields, seconded by William G. Vanderveen, the minutes of the May 2nd, 1979 meeting were approved as read.

Potter
Hollow
South
Part 9

At approximately 9:30 a.m. Paul Coutts and Bruce Gunstra appeared before the Board to discuss the drainage in the Potter Hollow South Subdivision Part 9. Robert F. Fields asked Mr. Coutts if there was a possibility of making a restriction on the deed for Lot 6 in this part of the subdivision. Mr. Coutts assured him that it could and would be done. The restriction was to state that the earthen detention structure could not be altered or impaired in any way.

William G. Vanderveen asked Mr. Coutts if he would put his Engineer's stamp on this plat and he said, "Yes".

With no particular problems in the proposed drainage area, the Board moved to approve the plans.

Saltzman
Ditch

Earl Miller and Glen Rodgers appeared before the Board to inquire of the progress being made on the Saltzman ditch. Michael Spencer assured them that the office of Surveyor was getting close to letting bids and holding a reconstruction hearing on the ditch.

Wakerobin
Subdivision

Mr. Herb Schwetman, Bob Pierret and Don Twiddy appeared before the Board on behalf of the Wakerobin Subdivision and asked for a new time to meet again with the Board for they were not ready for this meeting. The Board suggested they try to make a Commissioner's meeting if they were pressing for time for to call a special meeting of the Drainage Board would cost them one hundred and five dollars.

Claim of
Fairfield
Bldrs.

Michael J. Spencer presented a claim from the Fairfield Builders asking for thirty six percent of their bid on the Binder ditch now under reconstruction. Mr. Fields asked if thirty six percent had been completed and Michael Spencer said much more than that was completed. The Board so moved to pay the claim.

Valley
Forge
SD Phase I
Sec I

Those present for the Valley Forge Estates Subdivision Phase I Sec I hearing were: Richard Boehning, John E. Smith, James Hilligoss and John E. Fisher. Richard Boehning opened the hearing by explaining that when they had filed with the APC for the preliminary approval of this subdivision, both the Commissioners and APC were not willing to approve the drainage. Since that time Mr. John E. Smith has spent twenty two thousand dollars trying to devise a plan that was acceptable. Mr. Smith said he was willing to place one thousand dollars per lot in Phase I Sec I or eighteen thousand dollars for to show good faith in finishing the project. That eighteen thousand would be placed in escrow and then applied to the permanent system.

John E. Fisher explained that there were three detention ponds to handle the run-off water and tile along side the J. N. Kirkpatrick ditch for subsurface water. He said the tile along the Kirkpatrick ditch should relieve the overburdened Kirkpatrick of water, too.

Mr. Frederick Hoffman reminded Mr. Smith that the tile in the watershed of the J. N. Kirkpatrick drain should be petitioned to make it a legal drain, also.

It was noted that this subdivision has city sanitary and water services.

The Board requested of Mr. Boehning that he draw up the agreement showing the eighteen thousand to be held in escrow and that they would ask for no more than forty lots before completing the full drainage trunk system. Mr. Smith said that any more than forty lots would exceed the limitations for this interim storage facility and that if by the time he came back to the Board for approval of more lots it was more economically feasible to build the whole trunk line that's what he would do.

Bruce Osborn asked that the record show John E. Smith assured the Board he would not place more than forty lots on this interim storage facility and that he would put eighteen thousand dollars in escrow. Mr. Osborn asked John E. Fisher if he would put his stamp on this project and John said, "Yes." Robert F. Fields moved to approve the eighteen lots with eighteen thousand placed in escrow within ten days and a written request approved by the County Attorney.

The Board discussed with John E. Smith a deed from him to the Board of Commissioners for the detention pond in Rolling Hills Subdivision and told Mr. Smith they had deeded it back to him. They did not want it! They also informed Mr. Smith that the Health Department wanted it cleaned up. The Board suggested to Mr. Smith he petition to have the drain made into a Legal Drain and place a maintenance fund for it's upkeep.

Rolling Hills Detention Pond

Dale Koons, John E. Fisher and Richard Boehning appeared on the problems with the Layden Legal Drain in the area of the Creasy Lane Industrial-Commercial Park. Mr. Koons said that at their last meeting with the County Drainage Board they were told to locate the tile in the field which they have done and it does not lay in the position as the old records show. It does not go into a NW direction as they thought but instead it makes a swing to the west and follows their N property line where the Kepner Storm Drain intercepts.

Creasy Lane Industrial Park

Michael Spencer said when they went to the site last Friday they found the clay tile broken down and it had been replaced with concrete tile. The Kepner Storm Drain is a 48" CMP at this point.

Jim Murtaugh said the reconstruction of the old clay tile was done by the CCC and said he would bring the plans that he had at home for the Surveyor's office to make copies.

Mr. Koons noted that when the Hamman ditch was built they had relocated the old Layden ditch with no authority to do so.

After much discussion it was decided that the best way to dispose of the problem was to have John E. Fisher prepare a drawing and note to mail to those people involved and explain the need to vacate this portion of the old Layden drain. Mrs. Ridder said she would have the notices in Friday's mail giving enough time to appear before the Board in the July 11, 1979 meeting.

Mr. Koons said this Creasy Lane Park area was served by the City Storm Sewer and he had a letter from the city accepting their water. However, he said a pond was needed for additional storage. The pond contains 1.3 acres.

Before they present a final plat for approval they will incorporate covenants that require each purchaser to incorporate into his design 3000 cubic feet per acre of storage to provide 1.5 A of freeboard for the project between elevation 54 7 55. The grading plan will then be reviewed by the Board.

The pond in question is to be fenced and policed by Mr. Koons. When Mr. Vanderveen said his only objection was another retention pond, John E. Fisher said the only answer he had at the moment was to take a 20 ft blade and blow the water back into the atmosphere.

The Board asked the Secretary if she would write a letter to the Caterpillar Company requesting their presence at the July 11, 1979 hearing.

Caterpillar Company

William G. Vanderveen moved to adjourn.

William G. Vanderveen

William G. Vanderveen, Chairman

Bruce V. Osborn

Bruce V. Osborn, Vice Chairman

Robert F. Fields

Robert F. Fields, Board Member

ATTEST:

Gladys Ridder, Acting Secretary

May 16, 1979

Mr. Clark Druessedow
General Telephone Company
P. O. Box 1201
Ft. Wayne, Indiana 46801

Letter to General Telephone Company

Sir:

This is to confirm our conversation concerning the drainage of the land adjacent to Navco Drive. My statement to you was that if the land General Telephone Company was considering could drain into the storm sewer in this street, it would be satisfactory, and there would be no problem having the drainage outlet from the property approved.

However, this does not mean that the water on the proposed land will not have to be metered so that it does not leave at any greater rate than it does presently.

Very truly yours,

/s/ A. D. Ruth, Jr.

A. D. Ruth, Jr.
Tippecanoe County Highway
Engineer

ADR/mlw

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD Held March 5, 1980

The Tippecanoe County Drainage Board met in the Community Meeting Room in the County Office Building at 9:30 a.m. on Wednesday, March 5, 1980, with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert Fields, Michael J. Spencer, George Schulte, David Lohman for Fred Hoffman, and Marsha Tull.

Valley Forge Subdivision: The Drainage Board received a letter from Richard Boehning requesting a continuance. William Vanderveen read the letter as follows:

March 4, 1980

Tippecanoe Drainage Board
Courthouse
Lafayette, In 47901

Re: Valley Forge

Dear Sirs:

This letter is to respectfully request a continuance of our hearing which is presently scheduled to take place on the morning of Wednesday, March 5, 1980. Your kind consideration of this request is appreciated.

Very truly yours,

BENNETT, BOEHNING, POYNTER & CLARY

/S/ Richard A. Boehning

Richard A. Boehning
RAB:bst

Mr. Vanderveen also read the letter from George Schulte (Drainage Engineer) as follows:

February 27, 1980

Tippecanoe County Drainage Board
Tippecanoe County Office Building
20 North Third Street
Lafayette, In 47901

Attention: Mike Spencer, County Surveyor

Reference: Valley Forge Subdivision Storm Drainage Detention System

Dear Mike,

In our review of the proposed storm detention and floodway system for the referenced project, it is evident that major drainage problems for the upper watershed may be created if the proposed system is approved as submitted.

The proposed detention basin lies within the 150 foot drainage easement for the legal drain and the flow line for the proposed basin is at or near the invert elevation of the existing tile drain. Also, embankments will be constructed to create a defined floodway within and on each side of the drainage easement to get the house pads above the 100 year storm elevation.

With these conditions it is apparent that the location and elevation of the proposed detention basin will block or obstruct any easily accessible area to provide a positive drainage outlet for the upper watershed as it is developed. Also, the confines of the proposed floodway channel may significantly increase the upstream high water elevation and the existing 30 inch drain tile may be damaged from heavy construction equipment working in this area.

Since much of the land that lies within the J.N. Kirkpatrick drain watershed is prime land for development, we feel an adequate storm drainage system should be established to provide a positive outlet for the entire watershed. If a positive outlet is not provided, it will be necessary for the upstream developers to provide wet detention storage which is not very desirable and hard to accomplish. Also, utilization of lands may be decreased if an effective and positive outlet is not provided. A positive outlet can be provided by either constructing an open channel and/or an underground conduit system.

We will be glad to meet with you and discuss our review of this project in more detail.

Sincerely,

/S/ George J. Schulte P.E.

George J. Schulte, P.E.
H. STEWART KLINE & ASSOCIATES, INC.

GJS/seh

Mr. Vanderveen asked- if there were any questions that the Board could answer.

Mr. Standiford: "Is it normal for a meeting to be cancelled?"

Mr. Vanderveen explained that since the proposal was turned down, they probably were working on a new plan.

It was also stated that there has been definite problems with the J.N. Kirkpatrick Drain in the past.

Mr. Vanderveen suggested that they choose a committee of 3 people. Mike Spencer, the County Surveyor, will keep those 3 people informed as to the happenings of the Valley Forge S.D. Those 3 people can then inform the other property owners. The 3 people who were chosen:

Dan Dexter

Mrs. Purdy

Gary Standiford

Valley
Forge
S.D.

Mike Spencer: "I would like to have the following put in the Drainage Board minutes. The Tippecanoe County Surveyor's Office has received a petition concerning the Martin Grey Drain. They want to establish a Maintenance Fund on this Drain. This drain involved Tippecanoe and Montgomery Counties. Don Maxwell will represent Montgomery County Drainage Board.

Martin Grey Drain

Joe Booher called March 4, 1980 and talked to Bruce Osborn concerning the Gosma Ditch. He requested to attend the Drainage Board meeting March 5, 1980. The County Commissioners, Mike Spencer, and Joe Booher discussed the matter. Mr. Booher claims he was not properly notified of the meeting or of his assessment, also that he did not know that open ditch was to be going through his land.

Joe Booher

MOTION: William G. Vanderveen made the motion to adjourn.
Bruce Osborn: 2nd the motion.
Robert Fields: Unanimous.

William G. Vanderveen

William G. Vanderveen, Chairman

Bruce V. Osborn

Bruce V. Osborn, Vice Chairman

Robert L. Fields

Robert Fields, Board Member

ATTEST: Marsha Tull
Marsha Tull, Exec. Secretary

The Tippecanoe County Drainage Board met in the Community Meeting Room in the County Office Building, on April 2, 1980 at 9:30 a.m. with the following members present: Bruce V. Osborn, Robert F. Fields, Ed Shaw for William Vanderveen, Michael Spencer, Fred Hoffman, George Schulte, and Marsha Tull.

Crum Reality-Mountain Jacks: Brent Clary, attorney, explained that he was before the board concerning the Mountain Jacks tract of land. It is an 18.9 acre tract, located on the South side of Highway 26 adjacent to the Mountain Jacks Resturant area. They have a problem arranging a drainage system to serve the 6 tracts of land that are located in that area. This eventually flows into the Treece Meadows system. A design was put together to serve all 6 tracts.

Crum
Reality
Mountain
Jacks

The before development runoff for the area is something in excess of 9.5 cfs. With the plan as presented, that rate drops to something less than .05 cfs. As far as controlling the runoff, this is a very excellent plan. It makes use of the natural flow in the area to the south, with natural swails and construction of the channel.

The system will connect over in the Southwest corner, to the Farrington Apartments system. There is an existing pipe there. To fit into the system, it does require a substantial reduced rate. All the calculations in regard to the system have already been presented to the Engineering office, and they have reviewed them completely.

There is no detention in that area at the present time. There is going to be just one retention pond. A constant water level of 6 feet will be in the pond. There will be a 12" outlet pipe with Orifice Plate. Mike Spencer mentioned that this will be a private system, and that they will need an adequate maintenance agreement that satisfies the County Drainage Board and the restrictions and covenants that will cover this.

The County Engineering Office has recommended approval of the plan with recommendations.

It was stated that one person owns everything except Mountain Jacks. Mountain Jacks has agreed to participate.

Mike Spencer: "One of the reasons that we requested it be built all at once is for existing conditions, as they are right now. Even if they are not built immediately, at least the pond will be there to take care of what water does drain off there now. Let's leave the condition concerning the 6 parcels of land in the recommendations, until you can come up with something that will tie it down tighter."

Brent Clary: "That is acceptable". He also mentioned that they do have commitments from the owners of the existing pipe to tie into it. There is a letter forthcoming. These people will be assessed on the Elliott Ditch and Treece Meadows Drain.

Robert Fields went over what the Drainage Board wanted concerning the proposal.

- a) A letter concerning the tile, stating that Farrington Apartments approves of the tie in.
- b) A Maintenance agreement.
- c) If you are going to build this in stages, then building permits must be tied with these different areas.

Fred Hoffman recommended that they complete this in one phase.

Brent Clary: "We will agree to that right now."

MOTION: Bruce Osborn made the motion to approve the plans subject to a proper maintenance agreement, an agreement to install the detention pond at once, an agreement from the present owners of the drain-permission to hook on, an agreement in writing from Mountain Jacks, that they will participate, and the conditions in the letter from the Drainage Engineer.

Ed Shaw: 2nd the motion.

Robert Fields: Unanimous.

Britt Drain: Brent Clary explained that they were before the Drainage Board with the proposal of a Private Drain situation instead of a public drain. What they are talking about, is a drain to serve area East of Creasy Lane and coming across down St. Rd. 26 North side of the road. The function and purpose is to limit the runoff in that area to a pre-development stage. It will be a split system which will help to control the flow from various areas. The flow will be maintained at less than the present level. It does require the use of a detention storage area.

The flow was based on 10 year and 100 year calculations.

It was the conclusion of the Drainage Engineer that the proposed system is adequate and will relieve the downstream erosion problem to some extent.

The Drainage Engineer does recommend approval of the plan with some recommendations.

- a) There is to be an emergency overflow outlet.
- b) The structure must be designed so that the outflow from the detention basin can be limited to the before development runoff of the area.
- c) Present to the Drainage Board the final plans and specifications with a design report. This is being prepared right now.
- d) Subsoil investigation. This can be done. It is the county's desire to run soil test to determine whether a hard surface must be included, there is no objections to doing that. This will be done to prevent unwanted vegetation growth.

The cost of the Private Drain will be assessed to the property owners it helps.

The proposed plan does not divert the flow of water.

It was mentioned that the property owners East of I-65 in the downstream area should be invited to a meeting to be advised of the proposed plan.

The Drainage Board set up a Special Meeting on April 7, 1980 at 1:30 p.m. for the purpose of notifying Troy Moore and the other property owners, of the proposed plan and to here their ideas on the matter.

MOTION: Bruce Osborn made the motion to approve the concept of the plan subject to notification of the property owners East of I-65 and the recommendations made by the Drainage Engineer.

Ed Shaw: 2nd the motion.

Robert Fields: Unanimous.

Coleman Ditch: Bob Grove before the Drainage Board with his Drainage plan of the Kenny Habbon Property, just West of Crouch School. The Coleman Ditch runs down the property line so he was told to get Petition to Vacate the drain, before the Drainage approval will be given, also, the entire Watershed is in the city.

Robert Fields: Go ahead and file the petition, then come back for the Drainage Board approval.

Bruce Osborn: 2nd the motion.

Ed Shaw: Unanimous.

Indiana Gas: Gordon Pritchard was before the Drainage Board to get a gas line in to serve Staley's and Caterpillar. It will go from County Rd. 600 S. straight north along the Powerline easement.

To do so, they will be crossing several Legal Drains. Several Branches of the Elliott Ditch, and the main open on the Elliott, and the J.N. Kirkpatrick Drain.

The Drainage Board required that the Board hire a full time inspector at Indiana Gas expense, to make sure that all tile is repaired and everything is done legal and correct.

MOTION: Bruce Osborn made the motion to approve their request with the condition that the Board hire a full time inspector at Indiana Gas's expense.

Robert Fields: 2nd the motion.

Ed Shaw: Unanimous.

MOTION: Bruce Osborn made the motion to adjourn.

Ed Shaw: 2nd the motion.

Robert Fields: Motion carried and Unanimous.

ATTEST: Marsha Tull
Marsha Tull, Exec. Secretary

Ed Shaw, Member

Robert F. Fields
Robert F. Fields, Chairman
Bruce Osborn
Bruce V. Osborn, Vice Chairman

TRI-COUNTY DRAINAGE MEETING
RECONSTRUCTION OF MCLAUGHLIN DRAIN

June 4, 1980

An informal Drainage Meeting was held June 4, 7:30 p.m. at the home of Mr. & Mrs. Don Maxwell. Those present were Tippecanoe County Commissioners, Bruce Osborn & Bill Vanderveen, Surveyor, Mike Spencer; Clinton County Commissioners, Ellsworth Biesecker & William Lucas; Surveyor, Don Snyder; Montgomery County Chairman, Don Maxwell; Vice-Chairman, Sam Boots; Member, Bob Thayer; Attorney, Warren McGaughey; Surveyor, Russ Nelson, and Secretary, Lee Swank.

Don Maxwell introduced all members, then the meeting was turned over to Mr. Mike Spencer. Each Surveyor presented maps of their respective counties. A very rough estimate of 35,000 acres as stated as the total acreage. This is the McLaughlin Ditch and the Potatoe Creek areas combined.

After much discussion, the Surveyors were instructed to draft maps separating the McLaughlin Ditch and the Potatoe Creek Drainage area.

There will be petitions carried in each county, but landowner's may sign on any petition regardless of which county they live in. Fifty-one per cent of the total acreage involved signatures are needed for a petition.

A committee was nominated as follows; Don Maxwell, Chairman of Montgomery County Drainage Board; Bill Vanderveen, Commissioner of Tippecanoe County; Ellsworth Biesecker, Commissioner of Clinton County; Attorney, Warren McGaughey; and Secretary, Ms Lee Swank.

Bob Thayer made a motion to accept the committee as stands. Sam Boots seconded the motion. The motion passed.

Ellsworth Biesecker made a motion Don Maxwell be appointed Chairman of the Tri-County Board. Bill Vanderveen seconded the motion. The motion passed.

The secretary was instructed to send copies of the minutes to Clinton and Tippecanoe Counties.

There being no further business, Bob Thayer made a motion to adjourn the meeting. Bill Vanderveen Seconded the motion. Motion passed.

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD

June 4, 1980

The Tippecanoe County Drainage Board met in the Community Meeting Room on June 4, 1980 at 9:30 a.m. with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert F. Fields, and Mike Spencer, Surveyor.

Valley Forge: Before the Drainage Board asking for approval of additional 22 Lots. The Board has given approval of up to 40 Lots. Mr. Hilligoss agreed at that time to put \$1,000.00 per lot in Escrow.

Valley Forge

Robert Fields: "The Board only approved 18 Lots until the Temporary Drainage is in".

At this time, there is \$18,000.00 in Escrow.

William Vanderveen: "The \$18,000.00 was put in Escrow to build up for a permanent facility. You are proposing doing the same now for the 22 Lots, making a total of 40 Lots."

Bruce Osborn: "The Temporary Storm System must be completed before building starts".

Mr. Smith stated that they will not be ready to build until September. Temporary retention will be built before then.

Robert Grove went over the plans.

John Gams, the Attorney representing the Purdy family, explained that the Purdy's were concerned about the 15" tile that will run through the Purdy farm, along the Kirkpatrick Drain.

Mr. Grove stated that he was under the impression that the 15" tile was approved.

Robert Fields: Stated that the 15" tile had not been approved by the Drainage Board.

MOTION: Bruce Osborn made the motion to Postpone to further date.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

Indiana Gas Co.: Bob Grove was before the Drainage Board representing the Indiana Gas Co., he explained the plans to the Board. It involves .87 acre.

Indiana Gas Co.

Robert Fields asked George Schulte, the Drainage Engineer, if it meets with his approval.

George Schulte stated that it is about the only way to handle it.

William Vanderveen made the suggestion to have a 12" pipe with an Orifice Plate.

Bob Grove said that he did not see any problem with doing that.

MOTION: William Vanderveen made the motion to approve.

Robert Fields: 2nd the motion.

Bruce V. Osborn: Unanimous

June 4, 1980 Meeting Continued

Union
Park

Union Park: Bob Grove was before the Drainage Board representing Union Park, for Drainage approval. Union Park is in the city. Bob Grove stated that they went in for preliminary approval for the plat, and received it, contingent upon Joint Drainage approval from the City and the County. "The City has approved the concept. We will be submitting calculations as quick as we can, because we want to go to final next month".

There are 4 outlets for this property. The main one being a 6" tile, which has been replaced with new tile. This tile ties into the ravine system that goes thru PSI land.

There is a 12" culvert that runs under Union Street, discharges to the ditch on the East side of Psi entrance.

Bob Grove explained where the remaining 2 outlets were.

William Vanderveen: "Do you propose retention"?

Bob Grove explained that it will dump into a retention pond and then be metered out to the Storm Sewer. There will be 150' easement located on 4 Lots. This would be the detention pond. Its only outlet would be through a catch basin into a manhole that exists now over a 6" tile. There is an existing 12" CMP for Surface Water. The only outlet now from that manhole is a 6" tile. Plan to connect the manhole with the catch basin on the culvert and tie system together and keep it under ground. It will be coming out with a 6" deep and 12" top.

MOTION: William Vanderveen made the motion that Union Park Drainage Plan should be given to the Drainage Engineer and the County Surveyor for their study and recommendations.

Robert Fields: 2nd the motion.

Bruce V. Osborn: Unanimous.

Willowood East III: Bob Grove was before the Drainage Board representing Willowood East III for Drainage approval.

Robert Fields: "It should be an open ditch along the road".

Bob Grove: "We are trying to keep this water out of the Legal Drain".

MOTION: Robert Fields made the motion that Willowood East III plans should be given to the Drainage Engineer and the County Surveyor for their study and recommendations.

Bruce V. Osborn: 2nd the motion.

William Vanderveen: Unanimous.

Sawmill Run on Durkee Run: Bob Grove was before the Drainage Board representing Sawmill Run Drainage on 4th Street across from 3 Sons Shopping Center. He explained the planned development-retention storage. The concept is to detain the water in the gully as much as they can, and not devastate the area.

D & R says we can not detain water in the flood way.

We want to come down the ravine system and meter the water before it crosses the road and gets into the stream itself.

Bob Grove: "We are asking you to agree to the general plan at this time".

MOTION: Robert Fields made the motion that the Drainage Plans be given to the Drainage Engineer and the County Surveyor for their study and recommendations.

Bruce V. Osborn: 2nd the motion.

William Vanderveen: Unanimous.

Treece Meadows South: Bob Grove explained the Drainage Plans to the Drainage Board. South of McGarty Lane on the West side of the property.

MOTION: Bruce V. Osborn made the motion that the Drainage Plans be given to the Drainage Engineer and the County Surveyor for their study and recommendations.

Robert Fields: 2nd the Motion.

William Vanderveen: Unanimous.

MOTION: Bruce Osborn made the motion to adjourn.

William Vanderveen: 2nd the motion.

Robert Fields: Unanimous.

Motion made and carried, meeting adjourned.

William G. Vanderveen

William G. Vanderveen, President

Bruce V. Osborn

Bruce V. Osborn, Vice President

Robert F. Fields

Robert F. Fields, Board Member

ATTEST: *Marsha Tull*
Marsha Tull, Exec. Secretary

Willowood
East IIISawmill
RunTreece
Meadows
South

The Tippecanoe County Drainage Board met in the Community Room on September 3, 1980 at 9:30 a.m. with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert F. Fields, Fred Hoffman-Attorney for the County, George Schulte-Drainage Engineer, Mike Spencer-County Surveyor, and Marsha Tull-Secretary.

Croxton Woods: Mike Spencer showed the plans to the Drainage Board.

Croxton
Woods

William Vanderveen asked Mike Spencer and George Schulte if they had any objections.

Mike Spencer replied that they wanted to get in touch with Dan Pusey, the man that did the drainage for this, and go over it with him and give Bob Martin an Answer by the Area Plan Meeting September 17, 1980.

MOTION: Bruce Osborn made the motion to approve Croxton Woods subject to George Schulte and Mike Spencers approval, before the Area Plan Meeting September 17.

William Vanderveen: 2nd the motion.

Unanimous.

Camelot II: Pat Cunningham came before the Drainage Board requesting Drainage Approval for Camelot II.

Camelot II

Pat went over the plans with the Drainage Board.

William Vanderveen asked Pat if there would be any problems with the Dam in the Detention area?

Pat Cunningham: "We're anticipating problems building it, but we are not anticipating any problems with it".

It was mentioned that there will be a spillway.

George Schulte asked what kind of material would be used on the spillway.

Pat Cunningham: "A Unigreen paver. It is an interlocking concrete block, that is placed on the top of the spillway and on the side slopes".

Robert Fields asked George Schulte what he thought about the plans.

George Schulte replied that he could take the majority of the Lot area and shed everything into the street and on into the Detention Basin.

It was mentioned that there is a problem with the existing side ditch along Eisenhower Road.

Bruce Osborn stated that: "We have problems there today, and they have not been solved. So, I don't think we should approve anything until the existing condition is solved". (This just involves the red area on the plans where the slopes are.)

MOTION: Bruce Osborn made the motion to give the plans to Dan Ruth-Highway Engineer, for his approval. We will not turn it down and we won't approve it until the existing problem is corrected.

William Vanderveen: 2nd the motion.

Unanimous.

Valley Forge: Robert Grove went over the basic concept of the Drainage Plans with the Board. He mentioned that this is an Interim Detention Facility to serve Phase I Section 1, 2, & 3.

Valley
Forge

Bob Grove stated that they were not putting any more water in than there was before.

Robert Bauman, attorney for the Purdy family stated that a few of the property owners want to see a consulting engineer and let him see the plans to see if there are any alternatives, and would like the Drainage Board not to give any approval until all the possibilities have been explored. He also mentioned that, the property owners are concerned with the Long Range proposal.

William Vanderveen made the statement that there could be a public hearing for the landowners and their consulting engineer.

November 5, 1980 was the date set for a public hearing.

MOTION: Bruce Osborn made the motion that November 5, 1980 that there will be a public hearing involving the Kirkpatrick Drain regarding Valley Forge.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

Twychenham: Bob Grove was before the Drainage Board to keep the Board up to date on Twychenham. There was a brief discussion on the plans. Bob Grove submitted a preliminary set of plans to the Drainage Board and the Surveyor.

Twychenham

MOTION: Bruce Osborn made the motion to adjourn.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

Motion made and carried, meeting adjourned.

ATTEST: Marsha Tull
Marsha Tull, Executive Secretary

William G. Vanderveen
William G. Vanderveen, President

Bruce V. Osborn
Bruce V. Osborn, Vice President

Robert F. Fields
Robert F. Fields, Board Member

The Tippecanoe County Drainage Board met in the Community Meeting Room on November 5, 1980, at 9:30 a.m. with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert F. Fields, Fred Hoffman-Attorney, George Schulte-Drainage Engineer, Mike Spencer-Surveyor, and Marsha Tull-Secretary.

Great Lakes Chemical

George Schulte came before the Drainage Board with a drainage proposal concerning the expansion of Great Lakes Chemical.

Mr. Schulte mentioned that they had located the Legal Drain. Mr. Schulte went over the Drainage Plans with the Board. The water eventually drains into the McClure Ditch. There was some discussion concerning the proposal. Great Lakes Chemical

MOTION: Bruce Osborn made the motion to approve the Drainage Plan for expansion of Great Lakes Chemical.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

J. N. Kirkpatrick

Richard Boehning came before the Board asking for approval of the Temporary Drainage Plan that was submitted last February, so that they can complete and get Final Plat approval on 22 lots of Valley Forge Subdivision. "This is 22 of the 40 lots. As you know, there have been previous conversations in the past, I will say approvals, to J. N. the effect that the Interim System would be approved for the first 40 lots. 18 of those have been approved by Kirkpatrick the Area Plan Commission. 22 are under submission now as the Final Plat approval on Phase 1, Section 2-Section 3 22 lots. Area Plan Commission says come to the Drainage Board and get approval of the Interim System so that we can get Final Plan approval on those 2 sections. We are asking for approval today."

238

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD (contin ued) HeId November 5, 1980

John Gambs stated that he represented some of the landowners involved with the Kirkpatrick Drain. He stated that the landowners had hired an Engineer, who has gotten together with John Smith's Engineer and discussed the situation. It is his conclusion after the discussion with Smith's Engineers and landowners represented, that the Interim Plan is acceptable with modifications that are in the letter that has been submitted to the Board as follows:

November 3, 1980

Mr. John R. Gambs
Heide Gambs & Mucker
214 First Federal Building
Lafayette, IN 47901

Re: Valley Forge Estates Phase I
Interim Storm Water System
Kirkpatrick Drain

Dear Mr. Gambs:

This letter is wr-itten pursuant to your request that we review the interim storm water system for Valley Forge Estates Phase I.

Our review of the project consisted of reviewing plans and storm water calculations, inspecting the project site, and meetings with Robert R. Grove, P.E., of the John E. Fisher Co., Inc., who prepared the plans. The Phase I program calls for the development of 40 single-family residential lots in Valley Forge Estates Section 1, 2, and 3. The interim stor-m water management program covers only Phase I development.

We have reviewed the storm water calculations prepared by Mr. Grove and believe them to be accurate. The volume of storm water stored also appears to be adequate.

The technique of interim storm water storage by building a levee in the low are with controlled discharge is also adequate. Our questions about the proposed plan revolve around the finished product. Following are a list of comments regarding the plan.

1. The levee as designed does not have any free-board. The minimum acceptable free-board is 2 feet above maximum water level.
2. The levee and storage area should be completed prior to subdivision construction. The levee and pond area should be seeded to prevent erosion. The seed and fertilizer used should be as recommended by the Soil Conservation Service for this condition.
3. The control discharge piping should have rip-rap placed on the influent and effluent side of the pipes to prevent erosion. In order to prevent levee deterioration we would also recommend that anti-sepage collars be used on the control pipe.
4. An erosion control plan to be followed during construction should be made a part of the subdivision plans.
5. No storm water storage areas should be placed within the 150 foot legal drain right-of-way.

If you have any questions regarding our review of the plans, please feel free to contact us.

Very truly yours,

TRIAD ASSOCIATES, INC.

/S/

Thomas M. Schubert, P.E.
Vice President

Richard Boehning stated that they had no objections to the letter.

There was \$1,000.00 per lot to be put in escrow toward the completion of a final drainage system for the entire subdivision.

MOTION: Bruce Osborn made the motion to approve the Interim Drainage System for Valley Forge Estates Phase 1, with the 5 stipulations listed and \$1,000.00 per lot, for a total of 40 lots, should be escrowed until a permanent solution to the Drainage problem be found and established.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

L. J. N.
Kirkpatrick

Richard Boehning submitted and read a petition to the Board, as follows:

November 5, 1980

Tippecanoe County Drainage Board
20 North 3rd
Lafayette, IN 47901

Attn: Michael J. Spencer

Subject: Tippecanoe Development Corporation
Valley Forge Estates
Storm Water Management System

Dear Mr. Spencer:

We have submitted several storm water management plans for the subject development to your Board in the past. Although these plans have met the Board's criteria, they have been rejected for other reasons. As we understand, the two main reasons for rejection have been (1) encroachment on the Kirkpatrick drainage easement with detention facilities, and (2) potential conflict with long range improvements and maintenance to the Kirkpatrick drain.

239

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE (continued) Held November 5, 1980

Although we do not agree with this reasoning, we are proposing a new concept for managing the storm water from Valley Forge Estates, which eliminates these two concerns. This plan involves collecting the storm water from the subdivision through a system of storm sewers as previously presented. The storm water from the proposed development, both the area North and South of Kirkpatrick drain, will be piped to the West under Ninth Street where it will be detained. This storm water will then be metered at the allowable predevelopment flow rate to the surface of the existing Kirkpatrick drain. The detention facility will be located entirely off of the Kirkpatrick drain easement; thus eliminating one concern. The discharge will be held to the allowable predevelopment flow rate and discharged to the existing surface elevation. This will eliminate the second concern of potential conflict. Any future improvement to Kirkpatrick drain will no doubt involve a lowering of the existing channel as opposed to raising the flow line.

We have not authorized the Engineering work for this proposal. We have already incurred the cost for developing three storm water management plans which were not acceptable to your Board.

Therefore, we are requesting conceptual approval at this point. Thereafter, we will meet your criteria in developing the above described plan. We anticipate your approval of the final Engineering Plan.

In other words, we will proceed with the fourth "storm water management plan" upon the approval of our concept.

Very truly yours,

TIPPECANOE DEVELOPMENT CORPORATION

/s/

John E. Smith
President

CC Richard A Boehning
Robert R Grove
James C Hilligoss
Harry A Meshberger

John Gambs also submitted and read a petition to the Board, as follows:

J. N.
Kirkpatrick TO THE TIPPECANOE COUNTY DRAINAGE BOARD

J. N.
Kirkpatrick

PETITION FOR THE PREPARATION OF A MASTER PLAN FOR DRAINAGE IN THE WATERSHED SERVED BY THE KIRKPATRICK DITCH

The undersigned, being owners of property within the watershed and assessed for the Kirkpatrick Ditch, do hereby petition the Tippecanoe County Drainage Board to undertake the preparation of a master plan for drainage in the watershed served by the Kirkpatrick Ditch and in support of their petition show the Board as follows:

1. That there are currently problems with the drainage of both surface and subsurface waters in various places in the watershed.
2. That the watershed is currently undergoing some conversion from agricultural to other uses and development thereof and that, under existing patterns of growth, this will continue in the future.
3. That currently, individual landowners within the watershed are proposing various solutions to individual drainage problems without taking into account the overall problems and needs for drainage.
4. That unless a master plan is prepared for the entire watershed, individual solutions to drainage problems of particular tracts will result in waste and duplication in solving the overall drainage problem which can only be solved by coordinated action based upon an overall master plan.
5. The best time for the preparation of an overall master plan for the watershed is prior to the approval of any permanent drainage plans for any tract in the watershed.

Wherefore, petitioners pray that the Board undertake a master plan for drainage in the Kirkpatrick Ditch watershed including specifically the following:

1. A study of any necessary and feasible maintenance and/or reconstruction of the existing buried tile ditch;
2. A study of improvements to handle the surface water drainage;
3. A study of existing and proposed structures at railroad and highway crossings; and
4. Any and all other improvements necessary to enable the Kirkpatrick Ditch drainage system to handle the agricultural run off from a 10-year storm.

It was mentioned that there is 3,100 acres in the watershed area.

There was some discussion on the schedule of assessments and the cost of reconstruction.

Richard Boehning made the statement that they are asking approval of the above mentioned petition or letter so that they can hold their water on the other side of 9th Street.

MOTION: Bruce Osborn made the motion to take the petition under advisement.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

Twychenham Apartments

Bob Grove came before the Board to seek Final Approval on the Twychenham Apartment detention area. He briefly went over the plans with the Board.

Mike Spencer asked Mr. Grove if he had received City approval.

Bob Grove: "No."

Twychenham
Apartments

It was stated that the water will be metered into the May Ditch, which is vacated, and eventually drain into the Ortman Ditch. They will be retaining the water in a permanent retention pond and metering it into the surface drainage.

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD (continued) Held November 5, 1980

MOTION: Bruce Osborn made the motion to approve the drainage plans for Twychenham Apartments.

Robert Fields: 2nd the motion.

William Vanderveen: Unanimous.

Treece Meadows South

Joe Bumbleburg came before the Drainage Board for approval so they can get the Final Plats.

George Schulte and Mike Spencer submitted a letter of review and recommendations.

Bob Grove stated some of the minor problems to take into account. They have not calculated the effect of the 100 year flood, but they plan to lower the entire system to 2'. "We were dealing with Treece Meadows South only and in the process of creating on our plan we have provided some relief up stream. If the right restrictions up through that system were removed, we could handle more water through the entire system, this was based on the design of Treece South."

There is a legal drain that goes through Treece Meadows South property.

George Schulte stated that as far as their criteria for the Treece Meadows South that it does meet the Drainage Board requirements.

William Vanderveen mentioned that for Treece Meadows South they have accurate drainage plans but there will still be a problem with the First Treece Meadows.

Fred Hoffman stated that the two problems must be dealt with separately.

MOTION: Robert Fields made the motion to approve Treece Meadows South.

Bruce Osborn: 2nd the motion.

William Vanderveen: Unanimous.

Carriage House Apartments

Richard Boehning came before the Board in regards to Lot 13 in Carriage House Estates. The tile drains into Branch 13 of the Elliott Ditch with the statutory 150' easement. He stated that they would like the easement reduced to a 40' set back. All of 75' easement on the South side of the tile and 15' on the North side.

MOTION: Robert Fields made the motion to approve the easement reduction on Lot 13 in the proposed Carriage House Estates, that the North line of the easement be reduced down to 5' North of the 40' set back. 45' from the right-of-way line.

Bruce Osborn: 2nd the motion.

William Vanderveen: Unanimous.

MOTION: Robert Fields made the motion to adjourn.

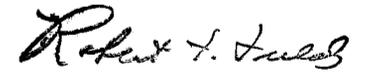
Bruce Osborn: 2nd the motion.

William Vanderveen: Unanimous.

Motion made and carried, meeting adjourned.


William G. Vanderveen, President


Bruce V. Osborn, Vice President


Robert F. Fields, Board Member

ATTEST: Marsha Tull, Secretary

Treece
Meadows
South

Carriage
House
Apartments

The Tippecanoe County Drainage Board met in the Community Meeting Room on December 8, 1980 at 10:30 a.m. for a special meeting, with the following members present: William G. Vanderveen, Bruce V. Osborn, Robert F. Fields, Fred Hoffman-Attorney, Mike Spencer-County Surveyor, and Natalie Boyer-Secretary.

Indiana Gas Company

Larry Fisher was before the Drainage Board representing the Indiana Gas Company concerning the gas line over the JN Kirkpatrick Ditch. When the pipe line was constructed, it was constructed over the Kirkpatrick Drain tile.

A request was made to the gas company to lower the 12" pipe line below the existing tile.

Larry Fisher submitted a proposed agreement to the Drainage Board that states the intention of the gas company to comply with the statute to lower the pipe line so that it has sufficient coverage and clearance. It reads as follows:

December 8, 1980

Tippecanoe County Drainage Board
Tippecanoe County, Indiana

Members of the Board:

The Indiana Gas Company has constructed a 12 inch gas pipeline which crosses over the top of the existing 20 inch James N. Kirkpatrick ditch tile at its location north of County Road 450 South and north of the existing Penn Central Railroad track. The Indiana Gas company has been advised that at some future date a grass waterway, ditch, or larger tile may be constructed in the vicinity of the existing 20 in James N. Kirkpatrick ditch tile and the 12 inch gas pipeline, as now constructed. The exact location of the changes in James N. Kirkpatrick ditch has not been determined. Since the nature, date and exact location of any proposed changes have not been determined, Indiana Gas Company and the Tippecanoe County Drainage Board do not believe it would be appropriate to require changes in its gas pipeline at the present time. The Indiana Gas Company understands its obligations under IC 19-4-6-3 (Burns Ind. Stat. Annot.) and assures the Tippecanoe County Drainage Board that if the 12 inch gas pipeline, as now constructed, interferes with the possible future project for the James N. Kirkpatrick ditch tile, that Indiana Gas Company will lower its 12 inch gas pipeline at its expense so that the pipeline has sufficient cover and clearance. The lowering of the gas line will be done at the expense of the Indiana Gas Company and at no expense to the Tippecanoe County Drainage Board, Tippecanoe County, Indiana, or the property owners.

/S/
Edward J. Weast
Lafayette District Superintendent
Indiana Gas Company, INC.

Approved:
/S/
William G. Vanderveen
/S/
Robert F. Fields
/S/
Bruce V. Osborn

Tippecanoe County Drainage Board
This Instrument Prepared by Larry R. Fisher

Fred Hoffman stated the proposed agreement would be a reasonable way to handle the matter.

There was some discussion with Ed Weast, Lafayette District Superintendent, and the Commissioners.

MOTION: Bruce Osborn made the motion to accept the agreement.

Robert Fields: Seconded the motion.

William Vanderveen: Unanimous.

MOTION: Bruce Osborn made the motion to adjourn.

Robert Fields: Seconded the motion.

William Vanderveen: Unanimous.

Motion made and carried, meeting adjourned.

William G. Vanderveen

Bruce Osborn

Robert F. Fields

Robert F. Fields

ATTEST: Natalie Boyer
Natalie Boyer-Secretary

The Tippecanoe County Drainage Board met on Wednesday, April 1, 1981 at 9:30 a.m. with the following members present: William Vanderveen, Bruce Osborn, Sue Reser, Fred Hoffman-Attorney, George Schulte-Engineer, Mike Spencer-Surveyor, Natalie Boyer-Secretary.

Ken-Do-Lake Mobile Home and R.V. Campground

George Schulte was before the Board seeking Drainage Board approval for Ken-Do-Lake Mobile Home and R.V. Campground. The area consists of about 15 acres. The area lies about two miles east of Munroe; it is on the Clinton-Tippecanoe County Line on CR 900 S. Ken-Do-Lake

George Schulte has talked with the State Board of Health and is awaiting their approval.

It was stated the lake has adequate capacity to handle the runoff.

Motion: Bruce Osborn made the motion to approve the Ken-Do-Lake Mobile Home and R.V. Campground Drainage Plans.

Sue Reser: Seconded the motion.

William Vanderveen: Unanimous.

Welborn Industrial Park

John Fisher was before the Board seeking Drainage Board approval on Welborn Industrial Park.

Welborn Industrial Park

Motion: Bruce Osborn made the motion that Welborn Industrial Park Drainage Plans be approved.

Sue Reser: Seconded the motion.

William Vanderveen: Unanimous.

J.N. Kirkpatrick Ditch-Petition

A petition was submitted to the Drainage Board from the landowners on the J.J. Kirkpatrick Ditch.

J.N. Kirkpatrick

The attorney stated they will have to have a public hearing. All the people on the ditch will have to be notified because of the cost involved.

William Vanderveen explained to the landowners at the meeting the cost will be assessed to the ditch whether or not the project ever goes through.

The Board decided to have a public hearing to be held on June 3, 1981. At this meeting, the assessments on the ditch will also be discussed.

Appoint Members for the Joint Board-Wetherill-Darby Ditch

The motion was made by Bruce Osborn to appoint Sue Reser and William Vanderveen as members of the Joint Board of Benton and Tippecanoe Counties. Joint Board

Sue Reser: Seconded the motion.

William Vanderveen: Unanimous.

Pheasant Run Phase VII

Bob Williams submitted calculations and drawings to the Drainage Board for their approval of the drainage on Pheasant Run Phase VII.

Pheasant Run-PhaseVII

William Vanderveen asked if it would require a new pipe to be put in underneath.

Mike Spencer: "No, that is the same pipe."

There was some discussion on the types of pipe that is involved. The pipes are designed to carry the water, not drain the ground.

Bruce Osborn made the motion to approve Pheasant Run Phase VII Drainage Plans.

Sue Reser: Seconded the motion.

William Vanderveen: Unanimous.

246

MOTION: Bruce Osborn made the motion to adjourn.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

Motion made and carried, meeting adjourned.

William B. Vanderveen
William Vanderveen-President

Bruce Osborn
Bruce Osborn Vice Chairman

Sue M. Reser
Sue Reser-Board Member

ATTEST: *Natalie Boyer*
Natalie Boyer-Secretary

The Tippecanoe County Drainage Board met in the Community Meeting Room on June 3, 1981 at 9:30 a.m. with the following members present: William Vanderveen, Sue Reser, Fred Hoffman-Attorney, George Schulte-Engineer, Mike Spencer-County Surveyor, and Natalie Boyer-Secretary.

J.N. Kirkpatrick

Notices were sent to all landowners in the J.N. Kirkpatrick watershed area notifying them of the June 3 hearing. The estimated cost of the study was set at \$6,000.00. The assessment set for the study was \$1.00 per lot and \$1.83 per acre.

William Vanderveen opened the meeting by reading a letter received from George Schulte.

April 20, 1981

J.N. Kirkpatrick
Mr. Michael J. Spencer
Tippecanoe County Surveyor
20 North 3rd Street
Lafayette, IN 47901

Re: James N. Kirkpatrick Ditch
Cost Estimate for Preliminary Engineering Study

Dear Mike:

In accordance with your request, we are submitting a cost estimate to complete a preliminary engineering report with recommendations for a storm water management program for the referenced legal drain watershed. We are recommending that the study be made using existing available data and maps along with field surveys to obtain pertinent data for the study. The estimated cost using this procedure is as follows:

1. Field Survey	\$3,360.00	
2. Engineering Study and Report	\$2,630.00	
		<u>\$5,990.00</u>

The estimated cost of an aerial map for the watershed, drawn to scale of 1" = 200' with 2' contours, is \$9,500.00. If it is desired that this map be used in conjunction with the preliminary study, the estimated cost would be \$15,490.00. We feel the aerial map should be used as part of the final construction plans and to determine the watershed break (ridge line) and property located within the watershed limits.

If you have any questions, please give me a call.

Sincerely,

/s/

George J. Schulte, P.E.
H. STEWART KLINE & ASSOCIATES, INC

GJS/mjw

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD ---- Held June 3, 1981 (continued)

William Vanderveen read over the list of remonstrators who signed the petition against the study. The petition consisted of 34 landowners representing 546.545 acres and 11 lots. There was one other letter from Lester Rafferty, Jr., who owns one lot in Rolling Hills, opposing the study.

Mr. Vanderveen asked those landowners present if they had any comments at this time.

A question was directed to Fred Hoffman asking what authority does the Drainage Board have assessing the fees for this study.

Fred Hoffman referred to the Indiana Drainage Code 19-4-3-2.

One landowner asked what was the purpose of the drainage survey, and who requested it.

Mike Spencer read portions of the petition that was presented to the Board from the landowners requesting that the study be done. The petition consisted of 20 property owners, representing 1,273.99 acres and 4 lots.

William Vanderveen: "Historically there have been a lot of problems with the Kirkpatrick Ditch, and they will not get any better. A lot of the ground out there is prime development area, and it will be developed eventually. We better find out what we have got to do."

Tom Wagner, General Foods, asked if the study would redefine the lines of the watershed area.

George Schulte: Not in the preliminary study, but it will eventually.

The fees would be reassessed based on where the watershed area will be located. Currently there are 3,084.91 acres and 337 lots in the watershed area.

Walter Pendleton stated that about 75% of the landowners that signed the petition requesting that the survey be done, also signed the petition opposing the survey.

There was some confusion on who was going to pay for the study. Many landowners thought that the County would pay for the survey.

William Vanderveen: "Well, if we misrepresented it I am sorry, but that is the way we have always handled it in the past. The surveyor is not responsible, and the County does not have any funds for that. We have always assessed that to the ditch. I thought that we had made it clear at the beginning. If a study is done, that the landowners affected will pay for that study."

The question was asked if they consider the acreage or the number of people in their making of a decision.

Fred Hoffman: "Normally look at the acreage. It is the Board's decision to determine whether they should or shouldn't go ahead with the study."

Since there was some mixed feelings about misrepresentation, can a person remove his or her name from one list and add it to the other list?

Fred Hoffman: "Certainly."

Is there any predetermination by the Drainage Board that if the study shows that an "x" number of dollars has to be spent to reconstruct the ditch; that is automatic and it will be reconstructed.

J.N. Kirkpatrick

William Vanderveen: "Not unless the property owners want to do it. The study is for its own sake."

Tom Wagner, General Foods, asked what was the purpose of leaving the aerial survey off.

George Schulte: "We can gather the field data we need to make a preliminary study without the aerial survey. The aerial survey is pretty costly--about a \$9,500 item."

George Schulte: "We would contact each property owner to see what their problems are with the ditch. The other thing we would be looking at in this analysis, this area is prime development area. We would be looking at a solution for an easy outlet as this area develops. The outlet right now is inadequate."

Is there a time element for the completion of the survey, if approved?

George Schulte: "Three to six months."

William Vanderveen took a general survey, by the show of hands, of those in favor of, in opposition of, and those indifferent of the survey. By the show of hands, the majority were in opposition of the study.

Jane Kenny mentioned that many of the farmers were not present.

William Vanderveen proposed to delay hearing on the Kirkpatrick Ditch and have a continuance of the meeting in August, where more landowner involved could be present.

The meeting was set for August 5, 1981 at 9:30 a.m.

MOTION: Sue Reser made the motion to continue the meeting until August 5, and that notices be sent to all landowners affected.

William Vanderveen: Made the motion unanimous.

MOTION: Sue Reser made the motion to adjourn.

William Vanderveen: Made the motion unanimous.

Motion made and carried, meeting adjourned.

William S. Vanderveen
William Vanderveen, President

Sue M. Reser
Sue Reser, Board Member

ATTEST: *Natalie Boyer*
Natalie Boyer, Secretary

The Tippecanoe County Drainage Board met in the Community Meeting Room on August 5, 1981 at 9:30 a.m. with the following members present: Bruce Osborn, William Vanderveen, Fred Hoffman-Attorney, George Schulte-Engineer, Mike Spencer-County Surveyor, and Natalie Boyer-Secretary.

J.N. Kirkpatrick Ditch

This meeting was continued from the June 3, 1981 hearing on the petition for the preparation of a master plan for drainage in the watershed served by the Kirkpatrick Ditch and on the schedule of assessments.

William Vanderveen read the totals of the remonstrances received. Totals of those in opposition to the proposal were as follows: 574.55 assessed acres-18.6%, 37 lots, for a total cost of \$1,087.63-18.1%.

William Vanderveen stated the estimated cost to be approximately \$6,000.00, \$1.00 per lot and \$1.83 per acre.

The cost of an aerial map would be another \$9,500.00. Mike Spencer stated they could do the study without the aerial photograph at this time.

William Vanderveen asked for further remonstrators against the proposal.

Lester Rafferty of Rolling Hills stated there were a number of people in Rolling Hills in opposition of the project who did not sign the petition.

Linda Tague, a lot owner in Rolling Hills, asked the question why is it their expense to make sure there is proper drainage in Rolling Hills. We bought our house there thinking that the drainage was proper, but now we find that it is not. "Why is that our responsibility by law?"

William Vanderveen: "It is somebody's responsibility, but it is certainly not the County's responsibility."

William Vanderveen asked for any further statements.

Jeffrey A. Cooke, an attorney representing Howard Daughtery, Gary Standiford, Robert Peabody, stated they are most concerned about the survey being done. "We need to find the cause and work on the remedy. The farmers are the primary users in that area. We believe that it should be done, and we encourage you to proceed ahead as rapidly as possible to get the survey finished."

MOTION: Bruce Osborn made the motion to proceed with the Engineering Study.

William Vanderveen made the motion unanimous.

William Vanderveen stated that the Engineering Department is preparing some specifications for the pipe underneath Ninth Street on the Kirkpatrick Drain.

Mike Spencer suggested to wait on the Engineering Study to get the right size pipe they need, rather than guess.

Petition to Vacate the Police Barricks Branch of the Cuppy-McClure Ditch

A petition was received by the Board on May 6, 1981 to vacate the Police Barricks Branch of the Cuppy-McClure Ditch.

Notice was sent to the affected landowner, Navco Incorporated.

William Vanderveen asked if there was anyone in objection to the vacation of that branch of the legal drain.

No one present was in opposition of the vacation.

MOTION: Bruce Osborn made the motion to vacate the Police Barricks Branch of the Cuppy-McClure Ditch.

William Vanderveen made the motion unanimous.

William Vanderveen stated that the property owners are still part of the Cuppy-McClure Ditch watershed area.

Cuppy-McClure Ditch

Patrick Cunningham was before the Drainage Board representing John Tse and K & D Developers.

The West Lafayette City Engineer, Paul Coutts, has requested that they come to the Drainage Board and obtain conceptual drainage plan approval for the area so they can assure proper flood stage, proper maintenance of the surface water run-off in the area, so the area can continue to be developed.

Future development is being proposed in the area which consists of a 5 acre tract just West of the Sheraton Inn.

There is a flood problem in that area and there is no guarantee as to what flood stage the water can reach in this area, because there is no emergency routing system.

Patrick Cunningham stated the problems with drainage in this area. There is no sort of maintenance fund on the system. It is not working properly in all areas. Another problem with the area is it was one big basin area. Birms have now been put in four different areas. What is happening then is the basin areas are seeking different elevations. There is not even distribution of water throughout the area. The area needs to be stabilized for the land to be utilized for any further development.

Pat Cunningham: "What we are asking from the Drainage Board is to approve a conceptual drainage plan in order to stabilize this area and provide emergency routing for this area."

What we are proposing first, is to provide an emergency outlet in the area so that once the area has obtained a certain elevation the water can seek an emergency route in order to guarantee a stabilization of a flood stage in the basin area.

In order to do that, you would need to stabilize the flood stage throughout the basin area. At each one of the birms a spillway would need to be constructed so we can guarantee a stable flow throughout the basin area, so the water will seek the same elevation.

The tile needs some kind of insurance as to whether it is going to continue to work or not. I am suggesting the installation of man holes along the tile every 400 feet, so a phased reconstruction or a phased maintenance program can be established and set up so the system can be easily maintained. With the installation of man holes,

J.N. Kirkpatrick

Petition to Vacate the Police Barricks Branch of the Cuppy-McClure Ditch

Cuppy-McClure Ditch

if there are breakdowns they can be pin pointed, and it would be easier to maintain the system. The man holes would also provide access to the tile.

It is a natural basin area, and you are not going to eliminate it. So we are trying to utilize the basin area as it already exists by being able to control what is going to happen.

Fred Hoffman asked if they are moving water from one drainage area to another with the overflow.

Mike Spencer: "It is in the same watershed area."

Pat Cunningham: "So what we want to propose is the area be designated as a detention basin area, that a maintenance fund be established for the existing tile, that man holes be constructed along the tile, that catch basins be constructed at key points along the tile within the basin area. The reason for the catch basins is they would eliminate the lag time. The catch basin will not do anything to increase the capacity of the tile."

Dan Pusey added some comments.

Fred Hoffman: "When does this surface ditch carry water?"

Dan Pusey: "The surface ditch would carry water if the pond got to the point where we have a 100-year-1 hour duration storm today, and the ground was saturated as it was this Spring, and we got a 100 year-1 hour duration storm tomorrow."

Cuppy-
McClure

William Vanderveen: "If we allow an overflow access what will happen to Hadley's Lake?"

Dan Pusey: "This is for emergency, Bill."

Pat Cunningham: "The thing with the overflow, when we have emergency conditions, everybody has got problems."

William Vanderveen: "I realize that, but there is no emergency outlet for Hadley's Lake."

Pat Cunningham: "We are proposing more storage; we are proposing man holes be installed; we are requesting a maintenance fund so the system can be assured to continue to work, and we are asking for the emergency routing. The system has to have emergency routing, without emergency routing you can't guarantee or stabilize the area."

William Vanderveen: "The trouble is Hadley's Lake doesn't have any emergency routing."

MOTION: The Board will take the proposal under advisement and give them a decision at a later date.

Eckman Subdivision Part II

William Koerner was before the Drainage Board requesting drainage approval for an 8 unit, one building apartment, on a one lot subdivision.

Eckman
Subdivision
Part II

It has been approved by the Area Plan Commission.

Joe Bumbleburg, an attorney, was present in regards to Mrs. Rees tile.

Mr. Koerner proposes to clean out the underbrush along the property and to hook onto Mrs. Rees tile and bring it down to where she would have a positive outlet.

Mike Spencer suggested to use hard tile instead of plastic so that it doesn't get smashed.

MOTION: Bruce Osborn made the motion to approve the request with the condition he guarantees Mrs. Rees a positive outlet for the existing drain.

William Vanderveen made the motion unanimous.

MOTION: Bruce Osborn made the motion to adjourn.

William Vanderveen made the motion unanimous.

Motion made and carried, meeting adjourned.

William S. Vanderveen

William Vanderveen, Chairman

Bruce Osborn

Bruce Osborn, Vice-Chairman

ATTEST:

Natalie Boyer
Natalie Boyer, Secretary

The Tippecanoe County Drainage Board met in the Community Meeting Room on April 21, 1982 at 10:00 a.m. with the following members present: Bruce V. Osborn, Sue M. Reser, Fred Hoffman-Attorney, George Schulte-Drainage Engineer-, Mike Spencer-Surveyor, and Natalie Cronin, Secretary.

J.N. Kirkpatrick Ditch

Notices were sent to all landowners affected, informing them of the hearing on the master plan for drainage in the watershed served by the J.N. Kirkpatrick Ditch and the schedule of assessments.

The total cost of the drainage plan is estimated at the sum of \$142,490.00 This figures to be \$42.68 per lot and \$42.68 per acre. The bridge structures are not included in the assessment costs. The county highway is responsible for the cost of the bridge structures; therefore, the property owners will not be assessed for the bridge structures.

George Schulte, drainage engineer, explained to those present at the meeting his recommendation and solution for the drainage in the watershed area.

The study we are making includes recommendations for an agricultural waterway through the watershed as well as recommendations for a waterway to serve the urbanizing area of the watershed.

Urbanizing is occurring between South 9th Street on the west and South 18th Street on the east and C.R.-350 South on the north and C.R.-430 South on the south.

To provide an adequate drainage system through the urbanizing area, we are recommending that a defined channel be constructed adequate to convey runoff from a 100-year storm event with bridge structures located on South 9th Street and C.R.-75 East.

The reconstruction area is 19,000' or 3.6 miles long.

Several landowners voiced their opinion in opposition of the drainage plan. Stating that they are making an investment in someone elses land, but not getting anything in return. They are not paying for their benefit or for public good, but rather for someone elses private gain.

264

Miles Biery was before the board, and he explained he lived on the east side of 52, wher-e no construction will be taking place. He is requesting to the board that he be taken off the assessment list.

The board will look into this matter further, and check over the people who feel that they are not in the watershed area.

Fred Hoffman read over the list of remonstrators. The total remonstrators include 5 lots-330.91 acres, which is 10.06% for a total sum of \$14,336.60.

A recommendation was made to continue the meeting at a later date.

J.N. Kirkpatrick The board set the next hearing date for September 8, 1982 at 10:00 a.m.

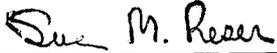
MOTION: Bruce Osborn made the motion to adjourn.

Sue M. Reser: Unanimous.

Motion made and carried, meeting adjourned.



Bruce V. Osborn



Sue M. Reser

ATTEST: Natalie Cronin
Natalie Cronin, Secretary

The Tippecanoe County Drainage Board met in the Community Meeting Room on September 1, 1982 at 9:30 a.m. with the following members present: Bruce V. Osborn, Eugene R. Moore, Fred Hoffman-Attorney, George Schulte-Engineer, Michael Spencer-Surveyor, and Natalie Cronin-Secretary.

Kellerman-Leaming Ditch--Indiana Gas Company

A letter was sent to the Indiana Gas Company in regard to the Kellerman-Leaming Ditch. The letter reads as follows:

August 11, 1982

Kellerman-
Leaming
Ditch

Indiana Gas Company, Inc.
600 North 4th Street
Lafayette, IN 47901

Attention: Robert E. Schley

Re: Gas Main Crossing under Kellerman-Leaming Ditch at Romney, Indiana.

Dear Mr. Schley:

After reviewing your application for the installation of a 4" natural gas line under the Kellerman-Leaming Ditch just west of Romney, Indiana on County Road 1150 South.

The Tippecanoe County Drainage Board authorizes you to install a 4" natural gas line under said legal drain in accordance with submitted plans.

Very truly yours,

/s/
Michael J. Spencer, Surveyor
Tippecanoe County, Indiana

Mary Southworth Ditch

The Mary Southworth Ditch will be placed on the agenda for the October 6, 1982 Drainage Board meeting. Purdue and the Kerkers will be notified by mail as to the purpose, time and date of the meeting.

Mary
Southworth
Ditch

Valley Forge Estates

Robert Grove, representing John Smith on Valley Forge Estates, appeared before the Board requesting final approval of the interim system--there are approved construction plans for this system, and preliminary approval of the permanent basin.

Bob Grove explained they had the interim system reviewed by a consultant out of Indianapolis. He made some suggestions on raising the dike elevation, which was done, and rip rapping the outlet. He included those in the construction plans and submitted those plans to the County Surveyor. "We would like to have the option of building the interim system or going directly to the final system, at the time we get approval for that, so we do have the flexibility to go both ways."

Valley
Forge
Estates

The Board granted final approval of the interim system for Valley Forge Estates.

Robert Grove explained he had submitted the data for the permanent basin to George Schulte for his review.

The facility would be for roughly 85 acres. It is the bulk of the system.

George Schulte: "The main thing I looked at was the location of the detention facility to see that it met the criteria that we established before, being outside the easement of the J.N. Kirkpatrick Drain, for one thing. I think that was one of our main concerns."

The Board granted preliminary approval of the permanent detention basin for Valley Forge Estates.

P.S. Land

Robert Grove was before the Board requesting preliminary approval on P.S. Land.

George Schulte: "My opinion is with what they are proposing it should actually benefit Treece Meadows Drain by detaining the additional run off, and they are making a larger detention basin than they are required to do. The only fact is we are having problems with Treece Drain."

P.S.
Land

Fred Hoffman advised the Board not to take any action on this matter until Mr. Treece and Mr. Bumbleburg can be notified, and an informal meeting be set up so that they may be made aware of the situation concerning the Treece Drain.

Checker Subdivision

Checker Subdivision Russ Ticen appeared before the Drainage Board to request final approval for Checker Subdivision.

Russ Tice, "We are proposing two restaurants, and Arby's and a Long John Silvers. Most of the area will be paved and the structures will be put in according to plans. The water is being diverted into the state highway side ditch and it eventually goes over to the interstate." There is detention storage.

The Board granted final approval for Checker Subdivision.

Valley Forge Estates

John Smith explained to the Board he will build the interim system for Valley Forge Estates within a week. He would like to be able to obtain building permits. There is a \$22,000.00 performance bond posted in regards to the detention area.

John Smith: "I was trying to wiggle out of building the interim system to try and get approval for the permanent system to build it, but I am afraid that might be a month from now."

Bruce Osborn: "How near are your plans to being done on the permanent system?"

John Smith: "Well we think we are o.k. Mike and George think we are o.k. But we haven't designed it yet. Until they see it in final design form, it is a guessing game."

George Schulte: "All you are looking at is the 40 lots, right John. I can't see any problem with him going ahead and building the permanent structure, divert those pipes into it, and then come to us with your construction plans."

John Smith then explained they will be working on the permanent pond within one week.

John Smith was instructed to have Bob Grove get with Mike and George to show them how they will get the 30 inch pipe over to the pond.

Mike Spencer: "That is the major outlet for the first 40 lots. We get that pipe into the permanent pond you are going to start building within a week, and I see no problem."

John Smith: "Can we get the three building permits then if we go this route?"

Bruce Osborn: "I wouldn't see much difference as long as George and Mike are satisfied."

John Smith: "If you have a problem with Bob today in regards to the pipe, I am going to say right now I will revert and go back and build the interim system. I will do one or the other within a week."

Mike Spencer: "Let's get with Bob, and we will get you your building permits this afternoon."

Camelot Subdivision Part III

Russ Ticen explained to the Drainage Board that Camelot Subdivision Part III is a two lot subdivision immediately north of Camelot Subdivision Part II. The roadway and the drainage system-side ditches-were installed without approval. Camelot Subdivision Part II construction plans were approved, and the contractor extended the driveway on up and put the side ditches in the same as Camelot Subdivision Part II.

Russ Ticen: "Basically what we are asking for is approval for something that was already built."

The Board approved drainage for Camelot Subdivision Part III.

Camelot Subdivision Part VI

Russ Ticen appeared before the Drainage Board to receive final approval for Camelot Subdivision Part VI.

Fred Hoffman: "Does this involve Wetherby's Dam? There has been some problems about that dam."

Mike Spencer: "Yes."

Bruce Osborn: "Has the dam been approved?"

Mike Spencer: "No, not finally approved."

Fred Hoffman advised the Board that nothing should be approved until the dam is fixed."

Mike Spencer and George Schulte will give approval on the completion of the dam.

John Fisher: "If I may, I did not design the dam, and I would not design it the way it was constructed. I would go out and be responsible for certifying that it is built in accordance to the way it was approved."

Elmer Thomas Ditch

The Board received a petition from several landowners within the watershed of the Elmer Thomas Ditch for a reconstruction.

Buck Creek Ditch

At the September 8, 1982 meeting the Board will appoint a member to replace William Vanderveen on the Joint Tippecanoe and Carroll County Board regarding the Buck Creek Drain.

Eugene Moore made the motion to adjourn.

Bruce Osborn: Unanimous.

Motion made and carried, meeting adjourned.

Bruce V. Osborn

Bruce V. Osborn, Chairman

Eugene R. Moore

Eugene R. Moore, Board Member

ATTEST: *Natalie Cronin*
Natalie Cronin, Secretary

Valley
Forge
Estates

Camelot
Subdivision
III

Camelot
Subdivision
VI

Elmer
Thomas

Buck
Creek
Drain

The Tippecanoe County Drainage Board met in the County Office Building on September 8, 1982 at 10:00 a.m., with the following members present: Bruce V. Osborn, Eugene R. Moore, Sue M. Reser, George Schulte-Engineer, and Michael J. Spencer-Surveyor, Natalie Cronin-Secretary.

J.N. Kirkpatrick Ditch

This is a continued meeting from April 21, 1982 concerning the reconstruction of the J.N. Kirkpatrick Drain.

J.N.
Kirkpatrick

Those present: Howard Daugherty, Gary G. Standiford, Kenneth Emdee, Edgar Beeler, John E. Smith, Walter Pendleton, Ed Purdy, Dan Dexter, Jane Kenny, John Rice, Ed Brunson, and Andy Slavens.

This meeting is necessary to see whether the landowners want to continue with the engineering on the Kirkpatrick Ditch.

Kenneth Emdee: "As far as I am concerned, we should just table the whole thing to a future date."

Gary Standiford: "It doesn't make any difference to me, as long as the work that has been done will still be valid."

John Smith: "Would this also delay raising South Ninth Street Road?"

George Schulte: "I recommend that Ninth Street and C.R. 50 be fixed. I think those two structures need looked at and reconstructed mainly because the area is urbanizing. If something isn't done to take care of the storm water, you will have problems."

Ed Purdy: "I hate to see it done half way."

The preliminary drainage study is done. The construction plans and all that would still have to be done.

Mike Spencer: "In our estimate we had an engineering number of \$18,000.00. The \$18,000.00 would finish the project, if it was decided to go ahead and start building, that would get the construction plans and the construction engineering while construction is actually going on."

The \$6,000.00 spent for the engineering study will be paid at the time of the reconstruction.

John Smith: "Until the problem is solved, the value of that whole basin is in questions. I will go along with the decision to postpone it, but the problem will not go away."

The general opinion was to forget the reconstruction as of this point.

All landowners in the watershed area of the J.N. Kirkpatrick Drain would be notified by mail on any further action concerning the reconstruction of the Drain.

Appointment to the Joint Tippecanoe and Carroll County Drainage Board

Sue Reser made the motion to appoint Eugene R. Moore to replace William Vanderveen on the Joint Tippecanoe and Carroll County Drainage Board in the matter of the Buck Creek Drain.

Joint
Board

Bruce Osborn: Unanimous.

Camelot Subdivision

George Schulte submitted the following to the Board for their review:

September 3, 1982

Camelot
Subdivision

Mike Spencer, Surveyor
Tippecanoe County, Indiana
20 North Third Street
Lafayette, Indiana 47901

Re: Storm Drainage Approval for Camelot Subdivision

Dear Mike:

In our review of Camelot IV storm drainage plans, there is one consideration we overlooked and that is the future maintenance of the existing detention storage system. In a comparison of the lot lines for Camelot II and Camelot IV, it appears the back lot lines of these two parts are the same and run through the existing detention storage system that is to serve the entire proposed development. With this condition, the question arises whose responsibility is it to provide future maintenance for the detention storage system? If it was intended to have the adjacent lot owners maintain the system, this condition is unrealistic and probably not enforceable.

Since a major detention storage system has been initiated for the Camelot development and to insure future maintenance and a properly functioning system, the detention area should be declared an urban or legal drain. With this provision, all property owners in the urbanizing area would share in the cost of maintaining the detention storage system. If it is determined that the detention storage system should be made an urban or legal drain, the following conditions should be considered before giving final approval to Camelot IV and they are as follows:

The Tippecanoe County Drainage Board met in regular session in the Community Meeting Room of the Tippecanoe County Office Building on June 1, 1983 at 9:00 a.m.

In attendance: Bruce Osborn, Chairman; Eugene Moore, Boardmember; Sue Reser, Boardmember; Michael Spencer, Surveyor; George Schulte, Engineer; Fred Hoffman, Attorney; and Frances Bates, Secretary.

Agenda: Willowood Subdivision

Willowood Subdivision representatives declined to attend.

Michael Spencer reported that they had failed to provide all necessary materials prior to the scheduled meeting.

Valley Forge- Interim Detention Basin. Represented by Bob Groves.

Michael Spencer reported that about one year ago, Valley Forge had submitted plans and received approval for an Interim Pond, that Bob Groves had submitted the certificate verifying that as-builts as to storage volume, spillway height, and elevations had been built according to plans. George Schulte, he reported, had confirmed the construction to be in working order, and that basin plans had been reviewed in hearings.

George Schulte noted this to be an interim, not a permanent basin, for the first 40 approved lots near 9th St.

Michael Spencer recommended approval of the Interim Detention Basin for Valley Forge.

Sue Reser made the motion that Drainage Board approval be granted to Valley Forge for the Interim Detention Basin.

Eugene Moore seconded the motion.

The Tippecanoe County Drainage Board gave unanimous approval to Valley Forge for the Interim Detention Basin.

Michael Spencer requested if a maintenance bond would now be posted.

Bob Groves explained the need yet for storm sewer approval of the area, and that a maintenance bond would then be posted for both.

Michael Spencer asked if storm sewers were within County road right of ways. Bob Groves verified these to be County roads except for some back lots.

Michael Spencer stated that the Performance Bond to be for both storm sewers and for the Interim Basin for Phase I, Sections 1,2, and 3.

Mr. Groves requested a copy of the minutes for persons holding letters of credit.

Watkins Glen

Michael Spencer reported that he and George Schulte had done an on-site inspection of Watkins Glen due to their submission of construction plans for 16 more lots. He reported that plans submitted did not include drainage plans. Due to fairness to all County construction, Mr. Spencer stated that Drainage Board approval be required for Watkins Glen as it was for Willowood, which is in the same area. Watkins Glen, he reported, to be an older subdivision with only swails along streets and no ponds. Due to flatness of the area and anticipated growth of the subdivision and future construction, future drainage needs of the area should be addressed.

The Tippecanoe County Drainage Board was adjourned at 9:10 a.m.

Bruce Osborn

Bruce Osborn, Chairman

Eugene A. Moore

Eugene Moore, Boardmember

Sue M. Reser

Sue Reser, Boardmember

Attest: Frances Bates, Secretary

Frances Bates

Willowood
SD

Valley
Forge

Watkins
Glen

Regular Board Meeting May 1, 1985

TIPPECANOE COUNTY DRAINAGE BOARD MEETING

The regular meeting for Tippecanoe County Drainage Board met Wednesday, May 1, 1985, in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana at 8:30A.M..

The meeting was called to order by Chairman Bruce V. Osborn with the following in attendance: Bruce V. Osborn, Chairman, Eugene R. Moore and Sue W. Scholer, Board Members, Michael J. Spencer, Surveyor, Fred Hoffman, Drainage Attorney, George Schulte, Drainage Engineer, and Maralyn D. Turner, Executive Secretary, others in attendance are on file.

FAITH BAPTIST CHURCH

Jim McClain, engineer of Master Design Inc., of Fort Wayne, Indiana representing the property owner Faith Baptist Church presented Preliminary Plans for Faith Baptist Church. Property is located 26 East and 550 East, Perry Township, 23N, Sec.19, Range 4 W., consisting of 12 Acres. Jim had previously met with Michael Spencer and George Schulte for a preliminary review. He has followed ordinance using existing flow based on a 10 year storm event and using 100 year storm event for the developed sight, all calculations are on one sheet. The acreage flows to the East and to South, except for the very north end of the property (2.15 Acres) drains north and east. This 2.15 acres is not considered for the south detention basin. When developed detention measures will be established. Remaining area (9.85 Acres) flows to the south basin. At the present time there is no developing planned for the north end of the property, however at a later date a ball field maybe developed, there is a power easement at this area of the property, this will have a bearing on the development. Normal spill way for the basin is proposed to exit along the right of way 100' to east where there are two (2) existing 18" storm culvert pipes under Highway 26 East an existing inlet in field goes into a 10" tile 400' away into an open drain. They are asking to allow the water to come to same point as it does today. Detention is 316' long and 85' across which will blend well with the development. Water on 100 year return storm at the low end would be 2' deep, 0-2' always positive drainage to the normal spill way. Engineer is prepared for the future to either expand the existing basin or add another basin for any future development.

FAITH
BAPTIST
CHURCH

QUESTIONS: Legal Drain? NO. Where does the water eventually end up? Water goes through Hickory Hills into the Wildcat Creek. Inlet, what if it isn't capable of taking discharge from detention basin for a heavy storm, what will happen? There is no official side road ditch on the church property. Open ditch is 400' east of Church property. Michael Spencer ask if he had looked into the 10" tile catch basin, this he has concern. Fred Hoffman, is the water being channeled in along the Highway Right of Way? Jim, we are proposing the outfall of detention basin about 1½' above the invert of the 10" tile with a small channel earth constructed on the Highway Right of Way. Fred, do you have permission of State Highway? Answer, they are aware they need to go before the State Highway. Is there a grate on tile? YES. Top around tile inlet is higher than invert out of the two (2) 18" culvert pipes. This is not uncommon. MAINTENANCE, he it noted that after water leaves the church property the church still has responsibility for maintenance of the 10" tile. Ravine system carries runoff from the area. Erosion is minimal. George Schulte had concern for detention storage volume required plus 6% and he wants to see stage discharge from outlet. Mr. McClain was aware of these two subjects and wanted to discuss with George and Michael. Fred requested that the adjoining property owners be notified of the drainage plans, Hickory Hills and on the south side of 26, Shaw Farms, Francis Albrechts is tenant on the Shaw Farm, Richard (Dick) Shaw is owner, Mr. Allman is manager. Sue W. Scholer moved that Preliminary Approval be given to Faith Baptist Church with the Condition of getting State permit to use Right Of Way and permission to use mutual drain. Seconded by Eugene Moore, Unanimous approval was given by Bruce V. Osborn.

Pastor William Goode ask if a special meeting could be held if all necessary final plans were ready before June Drainage Board meeting, reason for this question, engineer is submitting to the State A.B.C. building plans for approval and hopefully they will have a release for this in a week or two. State Board of Health has given approval of Plans and Specifications, this is on file in the surveyor's office in the file of Faith Baptist Church. Mr. McClain ask if Building plateau could be done prior to receiving final on drainage plans or is a special meeting required prior to the June Board meeting. Can Church apply locally for building permit to do earth work only if State approves Foundation release? Bid contracts for earth construction are being written up, Mr. McClain stated that in the bid they can include that the detention pond will be built during the earth work constructions. The board is agreeable, but if the Highway Department does not give permission a special meeting would have to be held before the board could give final drainage approval should the church have to go another way with their drainage plans.

INTERNATIONAL FOUR GOSPELS CHURCH

John Fisher representing International Four Gospel Church property owners of land at Southwest corner of South Eighteenth Street and 350 South, north of Valley Forge Subdivision, in the Kirkpatrick watershed area. Surface area will be of compacted stone. Mr. Fisher has talked with Dan Ruth in regards to the entrance and intersection. He has looked at the future of the development, as at a later date they may want to have paved surface. Plans were not presented in time to grant preliminary approval of drainage plans.

INTERNATION
AL FOUR
GOSPELS
CHURCHMCCUTCHEON HEIGHTS

John Fisher representing the property owner of McCutcheon Heights ask the board if they would consider a larger detention basin. Originally plans were proposed to go down through large channel into lower basin of Wea Creek. George ask if this was on their ground? YES? Bruce ask if this was in the flood plain? Yes, can't construct in a flood plain, this would be in the fringe of flood plain area. George ask if the outlet of McCutcheon Heights drain directly into Wea Creek without crossing any other property or is there adjoining property involved? Originally it was their won property, but since then it has been sold, so therefore it now crosses other real estate. The board ask Mr. Fisher to come back with Preliminary drawings and at that time they will act on his request, not enough information had been presented for action by the board. Mr. Osborn requested a study be done on site. Michael and George will proceed with this request.

MCCUTCHEON
HEIGHTSMOSS CREEK SUBDIVISION

Robert Grove representing Moss Creek Subdivision requested final drainage approval.. Preliminary approval was granted at the March 6, 1985 board meeting. Michael Spencer state that the construction plans comply to the preliminary approval, George Schulte agreed. Sue W. Scholer moved that Moss Creek Subdivision be given final approval for the drainage plans presented. Seconded by Eugene R. Moore, Bruce V. Osborn making motion unanimous.

MOSS CREEK
SUBDIVISIONHOFFMAN DITCH

Michael J. Spencer, surveyor ask the board if he could request a Tri-County Drainage meeting for the Hoffman Ditch, he wants to ask for authorization to appropriate money from General Drain Fund so that he can dig test holes for elevation. Request granted.

HOFFMAN
DITCHCAMELOT IV AND V

Per Fred Hoffman, drainage attorney Special Meeting minutes of March 29, 1985 held by Tippecanoe County Commissioners should be attached in the Drainage Board minute record book, as original agreement of bond was voided and another agreement was approved. See attached copy of minutes. This is reference to Drainage Board minutes of February 6, 1985.

There being no further business to come before the board, meeting was adjourned at 9:30 A.M.

Bruce V. Osborn
Chairman

Eugene R. Moore
Board Member

Sue W. Scholer
Board Member

ATTEST: Maralyn D. Turner
Maralyn D. Turner, Executive Secretary

The Tippecanoe County Drainage Board met in regular session on Wednesday, January 8, 1986 at 8:30 A.M. in the Tippecanoe County Office Building, Community Meeting Room, 20 North Third Street, Lafayette, Indiana.

Chairman Bruce V. Osborn called the meeting to order. Those in attendance were: Bruce V. Osborn Chairman, Eugene R. Moore and Sue W. Scholer, Board Members, Michael J. Spencer Surveyor, Fred Hoffman Drainage Attorney, and Matalyn D. Turner Executive Secretary.

Chairman Osborn turned the meeting over to Attorney Fred Hoffman for the election of officers.

Mr. Hoffman ask for nominations from the floor for President of the Board, Eugene Moore nominated Bruce V. Osborn President of the Board, seconded by Sue W. Scholer, there being no other nominations, Sue Scholer moved the nominations be closed, seconded by Eugene Moore. Mr. Osborn was unanimously elected President of the Drainage Board for 1986. Bruce Osborn ask for nominations for Vice-President, Sue Shcoler nominated Eugene R. Moore Vice-President, unanimously approved that Eugene Moore serve as Vice President.

334

January 8, 1986 Regular Meeting Continued

Sue W. Scholer was nominated by acclamation as Secretary of the Board. Sue W. Scholer moved to appoint Maralyn D. Turner Executive Secretary, Mr. Fred Hoffman Drainage Attorney, and George Scholte Drainage Engineer. Unanimously approved by the Board.

986
SSESS-
ENTS

1986 ASSESSMENTS:

Fred Hoffman attorney read the list of 1986 Ditch Assessments for approval. Those to be made active are Charles Daughtery, Thomas Haywood, F.E. Morin, William Walters, Luther Lucas ditch to be assessed two consecutive years (1986&1987). Those that will continue to be active are: Jesse Anderson, E.W. Andrews, Julius Berlovitz, Herman Beutler, Michael Binder, John Blickenstaff, N.W. Box, A.P. Brown, Buck Creek (Carroll County) Orrin Byers, County Farm, Darby Wetherill (Benton County) Marion Dunkin, Christ Fassnacht, Martin Gray, E.F. Haywood, Harrison Meadows, Lewis Jakes, Jenkins, James Kellerman, Frank Kirkpatrick, John A. Kuhns, Calvin, Lesley, Mary McKinney, Wesley Mahin, Samuel Marsh (Montgomery County) J. Kelly O'Neal Emmett Raymon (White County) Arthur Richerd, John Saltzman, Abe Smith, Mary Southworth, William A. Stewart, Gustaval Swanson, Treece Meadows, Lena Wilder, Wilson-Nixon (Fountain County), Simeon Yeager, S.W. Elliott, and Dismal Creek. Sue W. Scholer moved that the ditch assessment list for 1986 be approved as read, seconded by Eugene R. Moore, Unanimous approval given. A letter to the Auditor with attached list of 1986 Ditch Assessments will be forwarded.

ODRIDGE
UTH

WOODRIDGE SOUTH

Michael Spencer surveyor, presented the drainage plans for the Woodridge South, at the December 4, 1985 board meeting it was decided that the landowners would take care of the detention basin behind the two lots and they they would check into increasing the release rate from a 10 year storm event to 25 year storm to make the basin smaller. George Schulte has looked at the plans and finds the plans in order, Michael Spencer recommended the board give final approval to the detention area for Woodridge South. Eugene Moore made motion to give final approval to Woodridge South, seconded by Sue W. Scholer, Unanimous approval.

Sue W. Scholer ask the board to review Allen County's proposed section pretaining to Subdivisions in their Drainage Ordinance, the board members agreed to study.

JAMES
KIRPATRICK
DITCH

JAMES KIRPATRICK DITCH

Need to assess landowners within the James Kirpatrick watershed in order to get back \$6,000.00 spent for the drainage study in 1981, December. State Board of Accounts requested this be done.

MCLAUGHLIN
DITCH

MCLAUGHLIN, JOHN DITCH

A letter needs to be sent to Montgomery County requesting total amount of expenses to date on the John McLaughlin ditch so that we can collect our share of expenses in Tippecanoe County.

ELLIOTT
DITCH

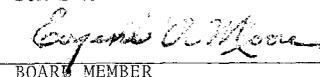
ELLIOTT DITCH

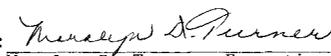
A hearing will be set sometime in 1986 for increasing maintenance fund on the Elliott ditch.

There being no further business, meeting adjourned at 8:50 A.M.


CHAIRMAN


BOARD MEMBER


BOARD MEMBER

ATTEST: 
Maralyn D. Turner, Executive Secretary

The Tippecanoe County Drainage Board met Wednesday, June 4, 1986 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, In 47901. Chairman Bruce V. Osborn called the meeting to order at 8:30 A.M. with the following in attendance: Bruce V. Osborn Chairman, Eugene R. Moore and Sue W. Scholer Board Members, Michael J. Spencer Surveyor, George Schulte Drainage Board Engineer, Fred Hoffman Attorney, and Maralyn D. Turner Executive Secretary, others in attendance are on file.

RIVER BLUFFS PART III

RIVER
BLUFFS
PART III

Patrick Cunningham on behalf of Greg Sutter owner and himself presented Topography map, and requested preliminary approval of drainage plans for the subdivision. Drainage from subdivision goes down through ravine and ditches across David Stevenson property drains into Harrison Creek to the Wabash river. Behind River Bluffs there is a pond (10 acres), which Harrison Creek drains through the pond and continues onto the Wabash river. In the Subdivision there are four outlets areas- 1. 6.28 Acres, 2. 10.56 Acres, 3. 1.77 Acres, 4. 3.25 Acres each have their own watershed area, proposing to put a small detention pond at each outlet through the subdivision looking at 3 cfs runoff 4' deep, 8" orifice through 12' pipe, maxium storage .16 of Acre feet. (1). (2) 10.56 Acre-4.8' storage.35 Acre feet, (3)1.77 Acre 2.8'storage.8acre storage, (4) 3.25 Acres .8' .12 Acres feet storage.

Mr. Osborn ask if he had gotten into the proposal for the maintenance? NO. George Schulte had the same question, he felt there were no other problems to Mr. Cunninghams request as the proposal meets ordinance requirements. Michael felt that possibly the idea of having one big detention area was a better idea, he ask if he was calculating storage of 200 acres in the 100 year storm event? Answer yes, Michael stated that he could let it pass, wouldn't need to calculate for what he needed for his development. Mr. Cunningham had calculated in manner that he would not increase the greater runoff of the subdivision any more than what it is from the 10 year. Michael flet he was figuring for storing on a 100 year storm event for the whole 200 acre watershed, he would only need to figure for his own development. Question as to where the flood plain is in the area, flood plain is about 530 contour elevation.

Fred Hoffman ask where the pond was located in regards to the subdivision, and would it have any affect on the Stevenson property, no. The only affect would be during the construction phase. Mr. Cunningham has told Mr. Stevenson what he is planning to do, he hasn't seen the specific plans.

Maintenance will be the only problem and Mr. Cunningham will have to work that out when he presents his final drainage plans. Eugene R. Moore moved to give approval for preliminary plans for River Bluffs Subdivision, seconded by Sue W. Scholer, Unanimous approval. The Subdivision consists of 34 lots and the developer has petitioned for tap in for water and sewer with the Town of Battle Ground.

VALLEY FORGE

VALLEY
FORGE

Robert Grove appeared before the board stated that the subdivision had previously been approved, owner has changed hands, the new owner wants to continue to develop additional 14 lots, construction plans will have to be submitted, improvements are in with the exception of the streets. Mr. Grove ask to come to the next Drainage Board meeting July 2, 1986 for final approval of basin, Michael and George will have to go over previous plans and the new plans. Minutes will have to be read of previous meetings in regards to Valley Forge. Department of Resource report for Kirkpatrick ditch should be on file.

LOCKWOOD IV

LOCKWOOD
IV

Robert Grove appeared before the board requesting to increase allowable discharge requirements

LOCKWOOD IV CONTINUED

June 4, 1986 Drainage Board Meeting Continued

reason is first, Lockwood IV system drains into the existing Lockwood III system considerable offsite water (34 Acre area) comes through Buckridge, in order to meet the ordinance would need to put something in the back yards, which the drainage board does not want done, as there is no access to easement, there is no way to control, too much water runs off, the only way to stop this is put a basin along the edge of the channel, which has been designed for a 50 year and a portion for 100 year storm event, feel it would be better to get water into the channel and out of the development and detain as much as they can, he had discussed with Michael and George the requirements for this outlet, at this point there is no outlet. Michael feels that putting a 3' sq orifice over a 12" pipe would be asking for trouble. Michael stated Robert had proposed putting a 12" pipe coming out of the detention basin without an orifice plate. Question would this have an effect on Mr. Mahan's bridge? NO. Michael stated he doesn't care to see a construction plan until a petition is in for a legal drain and an easement which there has been a question. The other ponds included would be 2 in Camelot, 1 in first section of Lockwood, and 1 in Buckridge. Enough time has elapsed, before going any further a petition will have to be submitted. Before Mr. Grove can go any further with construction plans he will have to know whether the board will consider an increase discharge at this point he could slap an orifice plate over the 12" pipe.

CROXTON WOODS
CROXTON WOODS

Robert Grove stated the owner of the flower shop has been found, name he could not recall, he requested the board to write a letter to the owner stating the problems in the area. After much discussion, it was decided for the board not to write a letter, but have the owner write the board a letter stating that he doesn't care what is done in regards to an inlet and that he doesn't intend to pay for anything, and he does not have any problems with the situation. Question what about the next owner of the flower shop? Problem would be transferred to the next owner. Mr. Hoffman ask Mr. Grove to contact Ms Klinkhammer have her get something from the owner now that would be recordable so that if the property is ever sold the next owner would be aware of the situation.

BRAMPTON APARTMENTS
BRAMPTON APARTMENTS

Dennis Grump engineer from Schneider Engineering Corporation representing Cardinal Industries, Inc. and Jack Cagaly land representative for Cardinal Industries, Inc. requested the approval of drainage plans for Phase I of Brampton Apartments located at northeast corner of Haggerty Lane and Windemere Drive, Fairfield Twp., Section 35, Twp.23N, Rge.4 W, SE $\frac{1}{4}$. The development will eventually be a Three Phase on 11 acres located east of Briarwood. The development is in the area of Branch 13 of Elliot, legal drain runs along the north side of Haggerty Lane across the frontage of the property, which would be their outlet, in talking with Michael Spencer they discussed the present condition of the drain and the potential future development for the area, Michael ask Mr. Grump to ask the board for approval of Phase I drainage only, using the legal drain. Mr. Grump has talked with Cardinal Industries, Inc. and they wish to present a petition in the next month for reconstruction of the legal drain (Branch 13 of Elliot). They have other property owners interested in signing a petition to this effect. Pipe size for this particular area is 14" clay tile. Problem in the area is there is no positive outlet.

Fred Hoffman attorney, stated there is a problem of increasing one part of the Elliot drain and not the other, if you increase the branches and not the main one you have a problem. After much discussion in regards to the problem. George Schulte discussed surface run off and a positive outlet, this would control all the runoff by retention or detention basins. Peak rate would be control, a volume problem is with any development, if some provision isn't made to provide a positive outlet for the watershed area big problems are going to continue, in regards to ordinance stipulations and the concern of Maple Point the run off can be controlled and will not effect the Elliot Ditch. Mr. Grump stated that their site would only be allowed to release water at a 10 year predeveloped area.

Mr. Hoffman attorney, ask if the development increased rate of run off why do you need a bigger pipe? This is an agricultural drain and should not be used for this type of drainage.

Mr. Grump stated they would like to reduce the north side legal drain easement from 75' to 30' to make additional room for buildings in the area, same thing was done in the Briarwood Apartments, reduced on one side, Brampton wants to leave 75' on south side of drain. Jack Cagaly pleaded with the board for approval of the reduction of easements in Phase I, and conceptually look at Phase II and Phase III, time has ran out on their options to do anything else. Need the units to justify economics with the project up front.

Bruce V. Osborn ask if Phase I could be accomplished without disturbing the tile? Michael Spencer surveyor, had told them to come in with Phase I and a petition as he does not recommend letting the developer put all three phases into the 14" tile. Sue ask if Phase I would be Ok, Michael stated the board needs to look at the calculations.

Mr. Grump stated they would be using a combination of tile in Phase I, there will be 67 units they would be maintaining the detention requirements. He feels they can safely control the drain. They feel that it will be three years before Phase III is developed and hopefully the board will come up with a solution prior to that time so they can proceed with their plans. Mr. Osborn stated that if Phase I could be accomplished without disturbing the tile with the understanding that Cardinal Industries, Inc. may not be able to develop the rest Phase II and Phase III until something is done on Elliot which could be 10 years, but he didn't want to lead the developer on.

Jack Cagaly stated that if the community was going to go after growth and development, the board has to come up with some solution to the drainage problems. Mr. Moore pointed out that the board doesn't set those goals it's the landowners, if they want to clean the Elliot ditch or Wilson branch, the landowner petition and agree to have the work completed.

Mr. Cagaly stated they are willing to comply with a petition or whatever it takes to get things working. Michael Spencer pointed out to Mr. Cagaly that they are assessed now for maintenance for the Elliot Ditch. George Schulte stated he would like to look over the plans of Phase I before a decision (final) is made. George sees problems, if something is done later and the tile is improved an open channel or whatever is done, how are you going to get across to get to the detention storage, some changes need to be made on Phase I in order for it to work with future plans. After much discussion the board wanted George to look over the Plans of Phase I and see what could be accomplished with the existing tile before make a final decision and also have Mr. Hoffman in on the decision and discussion, the board dismissed to reconvene at 1:30 P.M.

The Board reconvened at 1:30 P.M., Wednesday, June 4, 1986 with Chairman Bruce V. Osborn calling the meeting back to discuss Brampton Apartments Phase I Preliminary Drainage Plans. Mr. Grump presented the revised plans of Phase I only doesn't concern future phases. Going to relocate the 14" tile tying back in offsite, possible open ditch situation in the future if reconstruction comes about, locating the center of tile a typical ditch cross section of about 28' top of bank to top of bank, using the right of way behind as a starting point coming

June 4, 1986 Board Meeting Continued Brampton Apartments

out of 14' to center of tile. 44' of easement on the north side with a 14' $\frac{1}{2}$ channel width and a 30' permanent easement, if channel comes about, this would make a total of 44' easement on north side. South side 75' easement, middle of Haggerty Lane, propose to reduce one building for the detention area, release into tile, would not increase the volume of water to the tile, still be the same volume as it is now. Plan to depress the area over the tile so the farm drainage that comes down would continue to flow over the over land in same manner as it does now, (same rate no changes) it's an existing rate. Mr. Hoffman ask George if he felt it would not increase the rate with the swail? Yes, from the existing farm land, all basic comes down that way now, once it reaches that point, basically what they have done is shifted it over the new tile. Fred wants to know if it is going to go over to Maple Point area any faster than it does now from the offsite? Fred ask if Maple Point had any objections to this? Mr. Cagaly responded that he had contacted them indirectly. Fred had no objections to the proposals. Sue W. Scholer moved to grant approval of Preliminary Drainage Plans for Brampton Apartments Phase I only as amended, seconded by Eugene R. Moore, unanimous approval given. Meeting adjourned at 1:50 P.M.

Bruce V. Thorne
Chairman

Sue W. Scholer
Board Member

Eugene R. Moore
Board Member

ATTEST: Maralyn D. Turner
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD

Wednesday, July 2, 1986

The Tippecanoe County Drainage Board met Wednesday July 2, 1986 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Eugene R. Moore Vice Chairman of the board called the meeting to order at 8:30 A.M. with the following in attendance: Eugene R. Moore Vice Chairman, Sue W. Scholer Board Member, Michael J. Spencer Surveyor, George Schulte Drainage Engineer, Tom Bush Acting Attorney, and Maralyn D. Turner Executive Secretary. Other in attendance are on file.

CAMELOT AND LOCKWOOD SUBDIVISION

Robert Grove engineer representing Tippecanoe Builders and Chris Kovich owner requesting to make Camelot and Lockwood Subdivision a legal drain, and developer wants to include Lockwood IV in legal drain. Mr. Grove presented earlier plans and stated that he had surveyed from the center line, he pointed out that the existing flow line comes out of the easement, this was Camelot IV & V when it was developed, there was a requirement to make the entire drainage system a legal drain, Chris Kovich has started the petition requirement and Mr. Grove has gone out and established the actual location of the drain. A decision needs to be made as to what the legal drain is going to be how wide, as this would be different from a standard legal drain, the 75' centerline or top of bank, as this would be going through a developed area. Revision will have to be made, Mr. Grove stated that they need to go through piece by piece to determine what the legal drain will consist of, everything has been done up to that point.

Michael Spencer ask Chris how he would propose the part that is so far out of the easement, how would they cover that? Can't plot a new easement across the lot. Subject being discussed is Lot 11 and Lot 12, that is 95' out of easement. Robert Grove stated that if you come with a legal drain which ends up showing an easement jump and it goes through the Whole procedure of the hearing and the drainage board approves at that point and time, it becomes a legal drain easement on that land regardless of what was there before. Mr. Grove stated he does not know how it effects the plotting process. Chris Kovich feels it is up to the board now as how the mapping will go, exactly where it is going to be and how wide, then make a determination of the feasibility of legal drain itself. Tom Bush, acting attorney said he would like to take this subject under advisement before stating a decision. Mr. Kovich stated that when notices are sent out it will have to be informed that the drain will be in an area where it will be 95' higher up on their property in respect to the other people. Every property owner will have to be notified as to what the proposed legal drain is going to look like, therefore all property owner will have the opportunity to voice their opinion. Once it is done under the statute of the legal procedures there would be no problem, it will be on their title insurance and abstract, new individuals will know that it will be attached to the property. Chris Kovich stated that the next step would be getting description and getting notices out, Mr. Kovich has a list of property owners, there should be a lot by lot description, this would give an opportunity to change the easement width in every platted lot.

Michael Spencer stated that as long as it stays withing the existing easement he doesn't see any problem. Width is major concern, Michael stated they should go out to site and go over 15' to 20' to see what it does. Dave Kovich felt that if it was kept at the flow line it would be ok, Michael stated as long as it did not eat in. Lot 12 is for sale. Robert Grove stated the other portion would be coming up through Lockwood IV, this is the one to be approved as soon as possible, this would be a continuation of legal drain up to the property line and up to the basin. Michael as if Buckridge would be coming a portion? Will there not be any more basin? Answer maybe one, do not know how they are going to handle this matter at this time. Robert Grove felt there was no problem as there is one owner. Robert Grove stated the other thing in question is how is it going to affect Lockwood IV they are wanting to get preliminary approval as soon as possible and continue on with approval process at the same time.

Eugene Moore ask if there wasn't an agreement previous that the developer would petition for legal drain before going any further, the developer did get petition. Chris Kovich stated they are going to proceed, need to keep in mind that it may work and it may not, have to have people in. If the developer makes a good faith effort along while developing the area to proceed simultaneously with legal drain that they could continue developing as the

developer could come to a point that the people could say no., that depends on the county. The Developer has agreed to cooperate on the legal drain, they have not had any complaints with respect to the drainage area, the detention that has been put in upper and lower things have been running smoothly. Again Mr. Grove pointed out that they can only do so much up to a certain point, developer can't make it a legal drain that has to be done in proper procedure. Mr. Grove stated that they would like to continue on with the construction plans. He felt that things could get going in a couple of weeks and as soon as Micheal gets out to look at the project and describe it, get the petition, then things will proceed.

George Schulte recommended the following: Lockwood IV

1. Put filter cloth under spillway riprap at detention pond.
2. Require IDOH P-12 inlet at detention basin outlet instead of that shown.
3. Require concrete pipe anchors on the 50" X 31" CMP arch pipe and a strap anchor over the pipe.
4. Drainage easement for offsite storm runoff.
5. Easement to provide a positive outlet for the upper watershed, offsite watershed area consisting of 30 A, which would rain into the 50"X31" pipe.

David Kovich had questiin, were they to approach the two homeowners? Mr. Grove stated the way to handle would be to decide what would be needed, then inform them through the legal drain petition process. They would be notified the same as other property owners. Petition is in compliance, was amended

Sue W. Scholer moved to give preliminary approval for Lockwood Subdivision Part IV including the list of stipulations that had been given to Robert Grove, seconded by Eugene R. Moore, motion carried.

VALLEY FORGE

Robert Grove representing the Developer requested final approval subject to any changes. Area is Phase 2 Section I along Ninth Street South edge of Kirkpatrick legal drain. Construction Plans for the Permanent Basin for Valley Forge were submitted. These plans were requirement for the development of the remaining fourteen lots in Phase I and is sized to serve both Phase 1 and Phase 2. Runoff calculation and pipe sizes were submitted for both Phase I and Phase 2 at the time the Interim Basin was approved, the interim basin is to be removed after the completion of the permanent basin. Plan included the grading and utility plan for Phase 2 showing the approved pipe system, the plan has been revised to create an outlet for the proposed basin with a twenty-foot wide access to the Cul-De Sac. The development started in three phases which consisted of 40 lots, drainage board stopped development beyond the 40 lots at the time the interim detention basin was put in. Mr. Grove though there was an \$18,000.00 bond posted. The owners want to develop the 14 lots. In order to do so do so they need to build the permanent basin and storm sewer to it, another piece of storm sewer that exist now goes to an open ditch to the interim basin. There are 2-30" main pipes on the inside at the present time, in order to meet the requirements for the 14 lots the development will have to continue the whole system into the basin. Mr. Grove thought they would keep the interim basin as long as possible, not use it, but just use it for silt, then when they get into Phase 3 and it begins to work they can leave the interim basin, then when they get it seeded and a good stand of grass in the future take it out, he stressed it should be left in throughout the construction as it is a good silt basin. George ask in the basin that they are proposing, will it take care of the four phses, 40 lots plus the 14 lots? Answer -Yes, plus proposed Phase 3. The proposal is not platted, they had to come up with a lot configuration grading and utilities in order to make things work, so that in the future they will know everything is going to work. When construction plans are done a well defined swail needs to be put in to make sure that all the 100 year storm water does get into the basin, pipes in the development are proposed for a 10 year storm, not a 100 year storm then 100 year has to get into the basin by going down the streets behind the lots.

Michael stated the board would need to know if changes were going to be made how they were going to get the water over to the other basin. The developer has given up 1 lot instead of having an easement area, it is actually an out lot, which would be a part of the platted subdivision. Robert Grove felt an easement would be needed for the 14 lots, the easement being within the proposed right of way, if the county proposes to maintain, the developer proposes to give an easement right over the right of way for now including the out lot when it platted then there would be no problem.

George Schulte stated the detention area should be made a legal drain. The 40 lots would be included in the legal drain as those lots would have to be assessed to maintain. Valley Forge people would pay a separate assessment. Geogre Schulte had some recommendations if the county was going to maintain the detention basin.

1. P-12 inlet used on outlet structure from detention basin.
2. Place filter cloth under spillway riprap.
3. Paved gutter from strom pipe to outlet structure.
4. Easement around detention basin fro future maintenance.
5. Double inlets should be placed at low point on vertical curve, this could be something that should be discussed with the Highway Engineer Dan Ruth, as there are new rules in regards to state highway specification, as the streets will be county.

Mr. Moore ask if there were any petitions at this time for legal drain? NO. At the present time nobody is taking care of the area, only the developer would take care. Mr. Moore as if the county had accepted the streets? Nobody was sure, but assumed they have been accepted.

George stated the major drainage system going across the back lots need to have enough easement to maintain the pipe (30") anything out of the right of way(outside) should be included as a part of the legal drain, things in the right of way technically could be taken care of by the county highway, but things between lots would be outside the right of way. There would be no maintenance there. Developer is Tippecanoe Building Corporation, Drew Freeman, Don Smith and Bradsha. They were partners with John Smith, John is no longer a part of the Corporation. Sue W. Scholer moved to give preliminary approval on Valley Forge Phase 2 Section I and proceed with a petition for legal drain and stipulations given before final approval, motion seconded by Eugene R. Moore, motion carried.

HOFFMAN DITCH

Robert Gross with Stewart Kline Associates presented Estimated Construction Plans for the Hoffman ditch, the ditch drains in an area of Carroll, Clinton, and Tippecanoe County. Currently is a combination tile and open ditch. A petition had been presented approximately

July 2, 1986 Hoffman Ditch Continued

two years ago to have the drain reconstructed. Mr. Gross is the engineer working on the estimates, defining the watershed area and determining what needs to be done. At 90° E, pipe structure needs to be lowered, grade is real flat, needs to be lowered to get better grade back up stream, there would be more channel excavation, priced probably to the County Highway for dropping the pipe. Cost would possibly be \$40,000.00, if the pipe isn't lowered or grade restricting there would be alot of siltation in the channel, base of the channel will silt full in 5-10 years, then it would have to be cleaned out again this would keep the velocity up and keep it clean(AltII).

PhaseII would entail alot of County Highway since several roads would be crossed, which would cause a need for new culverts or larger tile. The estimates were based on the assessed acreage. Correct acreage will be determined when a hearing is held. At this time we have different figures. Michael feels that we need to call a Tri-County Board meeting and have Mr. Gross present his Construction estimates, then let the board decide what to do. The board wants to get Dan Ruth involved in this project since 900 East needs to be lowered. Letters need to be sent out to the Tri-County Board members and have a hearing, just a board meeting.

See attached presentation of Robert Gross, engineer.

RIVER BLUFFS SUBDIVISION PART III

Patrick Cunningham engineer, representing Gregg Suttter and hisself as developers of Rover Bluffs Subdivision PartIII. June 4 Board Meeting Mr. Cunningham came before the board asking for preliminary approval of storm water management program, at that meeting Michael Spencer surveyor, and George Schulte Drainage Board engineer, suggested to the board a possibility of a waiver for the requirement of detention ponds in the subdivision, because of the proximity of the flood plain area and the Wabash river. At that time Mr. Cunningham did not look at that as he felt the board could not grant the waiver as drainage would go across the David Stevenson property. Mr. Cunningham is now requesting a waiver of the requirement for detention storage within the subdivision. Mr. Cunningham presented map showing the location of subdivision and drainage showing the channels as the drains come off the subdivision and drains down into the Wabash river with flood plain area having a 530' elevation. He stated that detention ponds are not an assest to subdivision, they are a continual maintenance problem, he feels that it would not be an impact upon the Wabash river, therefore a waiver could be allowed. Mr. Cunningham presented a letter from Mr. David M. Stevenson dated June 23, 1986 which reads:(Copy in River Bluffs File)

June 23, 1986

Drainage Board of
Tippecanoe County
County Office Building
20 North Third Street
Lafayette, Indiana 47901

Subject: River Bluffs Subdivision Drainage

Dear Commissioners:

I have no objections if your baord allows subject subdivision to be developed without detention storage ponds or any other form of storm water detention.

Respectfully yours,

David M. Stevenson
1000 Ortman Lane
Lafayette, Indiana 47905

Michael Spencer stated that he thought the board had ask for something that would be recordable, in checking minutes of June 4, 1986 meeting there was no discussion in regards to a document that would be recordable. The letter presented today is just a personal concept between himself and River Bluffs Subdivsion Part 3 developers. Should he sell his property this agreement would go with the property and the next owner may object. Mr. Cunningham felt there would be no problem getting a legal document from Mr.Stevenson as he has agreed. Michael Spencer has no objection to waiving requirements to detention storage if he has a recordable document that will run with the land.

George Schulte felt that the board was giving an opinion here in regards to the flood plain and the impact is going to be minimal in this area. What we are lookingat now is the legal issue on the subject from moderating the ordinance. Can that be done? The impact being minimal really won't affect the downstream area from this development. As far as the issue , can you say no you don't need detention storage this is up to the board and legal counsel. Mr. Cunningham stated there were some property owners sitting in the meeting and have an attorney here representing proeprty owners in the area. They are concerned about the effects of the detention storage in the area verses the over all impact of what the drianage might be in the flood plain area. Attorney Cy Gerde, stated there are property owners who have no financial interest in the development, but live in the first Phase of the development, these property owners are very much opposed to having detention ponds within the development for mosquitos, nuisance, and other complication, they support the waiver.

Sue W. Scholer moved the board go on record as being in favor of granting a waiver of detention if consultation with legal counsel indicates that it is advisable, seconded by Eugene R. Moore, motion carried.

ELLIOT

Sue W. Scholer ask what has been done toward the Elliot ditch? Michael stated we are not on it right now in regards to working with Data Processing in getting notices out for a hearing. The material is ready as soon as Data Processing Department gets a programmer and as soon as that person gets aquainted with the system we can proceed with Elliot Ditch.

Tippecanoe County Drainage Board adjourned meeting at 9:35 A.M., with a recess until 10:00 A.M. when a hearing was held with Tippecanoe and White County Joint Drainage Board meeting to combine the Herman Beutler Ditch and Gosma Ditch. White County secretary is the Executive Secretary for the board and will furnish Tippecanoe County with a copy of the minutes. Minutes are in file.

July 2, 1986

HOFFMAN DITCH
CONSTRUCTION ESTIMATE SUMMARY

PHASE I, ALTERNATE I

TOTAL ESTIMATED CONSTRUCTION COST	\$ 260,116.00
ESTIMATED COST PER ACRE	\$ 104.00

PHASE I, ALTERNATE II

TOTAL ESTIMATED CONSTRUCTION COST	\$ 323,839.00
ESTIMATED COST PER ACRE	\$ 130.00

PHASE II

TOTAL ESTIMATED CONSTRUCTION COST	\$ 191,580.00
ESTIMATED COST PER ACRE	\$ 77.00

Bruce V. Johnson, absent

Lee W. Schuler

Eugene R. Moore

attest: *Therese D. Turner*
Executive Secretary

Tippecanoe County Drainage Board
October 1, 1986

The Tippecanoe County Drainage Board met Wednesday October 1, 1986 in the Commissioners Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indianat at 8:30 A.M.

Vice-Chairman Eugene R. Moore called the meeting to order with the follwoing being present: Sue W. Scholer Board Member, George Schulte Drainage Board Engineer, Michael J. Spencer Surveyor, Fred Hoffman Drainage Board Attorney, and Maralyn D. Turner Executive Secretary, others present are on file.

CRACKER BARRELL

George Schulte ask to be excused from the board during discussion of the Cracker Barrell. Robert Gross engineer from Stewart Kline Associates representing Cracker Barrell. Mr. Gross stated that the board had already approved one system, but he had came back with a revised system per the owners request, they want a change in the original approval. The design is the same with the exception of storing all the drainage water in the underground tanks, the revision is to store the drainage water in the parking lot. Mr. Moore ask if they were going to put an underground tank in, there will be both an underground tank and storage on the surface. Mr. Hoffman ask if they were going to have both. Mr. Gross answered that was correct. Mr. Hoffman ask if the storage tank would be the same size. Mr. Gross said they would be storing the same vlume, both on the surface and tank as the original was designed in the tanks. Fred ask what they were going to do on a rainy day, have it there in the parking lot for the customer? Answer no, it should run down into the tank then meter out into the side ditches. Michael Spencer stated that this was totally owned and maintained by the owners. Fred ask if the customers would have to get out into water at any time? Mr. Gross answered unless it's a big extensive storm event. Michael stated that it meets the ordinance, they just changed the original to reduce the size of pipes that they are going to put underground. It isn't a great depth of water, they all lead to inlets then into the tanks. In the ordiance it allows for 6" of water on the parking lot that's the maximum amount that will be allowed, it tapers from 10" water down to 6" water at the curb, if it gets any higher it will overflow. Mr. Hoffman ask what would run over the curb? Michael answered excess of 100 year storm event. Sue Scholer had ask Dan Ruth to come into the meeting in regards to the discussion of the side ditches. Michael Spencer pointed out that these side ditches were State side ditches, not County. Mr. Hoffman stated he would hesitate to have commerical customers come in where they are going to get out in water, because you are going to get people suing, someone is going to slip sometime, having just defended a firm on a suit where someone had slipped when the parking lot was wet, [he knows what kind of Liability that they get into, that' their problem. Michael stated he doesn't know any business that does not store any water on the parking lot. Michael stated there are areas in the parking lot that would not be in the area of water standing. Dan Ruth ask if they were adding any water that the overflow could not handle? Bob Gross stated they are releasing a 10 year event, should not be increasing in the side ditch. Tanks were pulled from under the parking lot, but within their property. Dan Ruth stated that the way he understands he is like Mr. Hoffman, the problem is the owners as long as the water can get across the road, if there is any problem now is the time to work on it as they are going to work on Frontage Road. This road maybe turned back to the County. Michael stated there was a 30" pipe underneath the road, this was put in when the Interstate was built. Fred ask if it would handle the water? Yes. Mr. Moore ask Mr. Hoffman if he thought it would be alright? Again Mr. Hoffman stated if he were the owner he would certainly worry about the possible Liability of people slipping on the parking lot in the rain, as far as the board, everything is OK, the Liability isn't the boards problem. The board has pointed the problem out to the owners. Sue W. Scholer moved to grant final approval on hte revised drainage plans for Cracker Barrell, seconded by Eugne Moore, motion carried.

CRACKER
BARRELL

CHEKER COMMERCIAL SUBDIVISION

Richard Boehning representing Carl Ritchie developer for Cheker Commerical Subdivision they are requesting approval of final drainage plans, plans had previously been submitted with insufficient information, they had a change of engineers and submitted new plans hopefully with the sufficient information. Mr. Boehning stated he had not talked with George or Michael in regards to the new plans since they were submitted. Micheal stated, he had called the Schneider Engineering Corporation and talked to Paul Maves requesting 1. Calculations for Detention Storage Volume & Limits of proposed storage. 2. Calculations for discharge storage structure from the detention basin (empty the detention basin), he sent the very same calculations that already had in the file. They do not show either one. They were received September 29, 1986. The plans shows the acre footage of what is needed, but don't know if it is in hte plan as it doesn't show a cross section of the pond, and don't know how he sized the 10" pipe. Mr. Boehning ask for a continuance until the information is received.

CHEKER
COMMERCIAL
S-DIVISION

Sue W. Scholer moved to grant a continuance on Checker Commercial Subdivision, seconded by Eugene R. Moore, motion carried. (a meeting will be scheduled when the information is received)

RIVER OAKS SUBDIVISION RIVER OAKS

John Fisher engineer, for the River Oaks Subdivision appeared before the board stating he had sent plans to the surveyor on September 10, 1986. Michael Spencer called him back on September 11, 1986 stating that he needed more information in regards to the plans, Mr. Fisher failed to get the requested information to the surveyor in time to be on the October 1, 1986 Agenda, after much discussion the board stated that if Mr. Fisher got all the information to the surveyor by Monday, October 6, 1986, they would hold a special hearing on Wednesday October 15, 1986 at 1:30 P.M. providing all information is to the surveyor by Monday, October 6, 1986.

VALLEY FORGE VALLEY FORGE

Robert Grove engineer representing Tippecanoe Development Corporation requesting Final Approval for the Expansion of the Interim Basin at Valley Forge to serve Phase II which consists of 14 lots. Mr. Hoffman ask if this was a temporary basin? Mr. Grove stated, that they had talked with the board at the September Board meeting and discussed some of the problems at the present time Valley Forge is not complete, basically it is a mess, as the last 14 lots were never completed, the Phase to the north not completed, one of the former developers is getting out from under Chapter 11, the new developers inherited a financial mess, they can not afford to develop the permanent basin, nor the piping to it to serve the 14 lots, they want to develop the 14 lots get it cleaned up expand the interim basin, then in Phase III provide the Permanent Basin, they have enough lots in Phase III to justify the expense of the up front cost of developing the system, can not do it and the bank agrees the numbers will not work. Mr. Hoffman ask how long has the interim been in for the other part? Approximately 5 years. As previously recorded the first interim was for the first 40 lots when they were completed they were to come in, put in the permanent detention pond and all the piping. Robert Grove stated they had agreed to go back in an regrade and reseed the existing basin which is in weeds, they did go out into the field and took the cross section coming up with the volume that is there now, they have added alot more volume than would be required for just the 14 lots to help the problems that are there now. What happens there is a large area that drains into it directly, when it rains it over flows the basin. By adding the additional volume will help the over flow. Michael asked what happens if this is it? What you will have is a larger interim basin that's going to be better than the small one that is there now, problem is that the basin is growing weeds, at some point and time the area north will develop depending on the economy. Mr. Hoffman ask what happens if the developer comes in and ask for 10 more lots? Mr. Grove stated, that they understand that the answer would be NO. Mr. Grove stated that if it is any consolation a sketch plan and preliminary plat has been submitted for the Third Phase which shows the out lot in the basin area, it is platted right in there, there is no guarantee that once the plat is up before APC it will be locked in, the preliminary plat. Mr. Hoffman ask what is going to happen if there is a change of ownership between the Third part&the present plat? The third party says, hey we don't have any obligation to do this for the first two parts all we have to do is take care of our water. Mr Hoffman feels that something should be done to prevent the situation arising, such as a bond that will say these people will be responsible for their part. They will say under the ordinance we don't have to take care of any body elses water therefore we don't have to do anything for the permanent pond for the first two phases, we are going to have a different system for our third part. This would have the board in a bind. Mr. Grove stated that it needs to be kept in mind the 54 lots has been accepted by the board as a master plan concept, anybody who would buy the current developer for the third phase would have to come back to the board. Mr. Hoffman ask how much it would cost to put in the permanent basin? Approximately \$50,000.00. Mr. Hoffman felt a bond should be put up for the share of the first two parts. Piping is the biggest cost, the piping takes care of everthing done at the site, really need the pipe to take it to the detention storage area. Piping stops at the 14 lots. Mr. Grove stated, he has no problem with putting a bond up, but it has to be taken back to the developer. George Schulte stated, there is a problem with the first 40 lots that were built, there has been nothing installed for those lots that are permanent so the detention area still needs to be constructed for the first 40 lots. Mr. Hoffman suggested the bond be sufficient to cover the proportion of the cost for both the First and this phase at this time. Michael Spencer pointed out at the previous meeting it was suggested the developers petition to make it a legal drain while they are still working with it, now is the time to make it a legal drain. Mr. Grove said there was 54 in this Phase and as time progresses on there will be approximately 70 more. The property owners of the 40 lots would be notified of petition and hearing. There is enough land for a petition. Mr. Grove then requested approval with the conditions. Mr. Hoffman wants to see the bond before approval. Bond would be in favor of the Commissioners. Mr. Hoffman suggested that approval be given when all things are completed. Sue W. Scholer moved that the board grant approval for the expanded interim basin in the Valley Forge Subdivision subject to conditions, 1. Bond to cover portion of the permanent construction that runs with the first two phases and (2). that a petition for legal drain be submitted when these conditions are satisfied approval will be granted, seconded by Eugene R. Moore, motion carried. Mr. Moore ask about the amount of the bond? Mr. Grove will have to certify the cost of the project, then 50% of the final cost should be the amount of the bond.

TRAIN COE DITCH Michael Spencer surveyor, wanted the board to be informed and the drainage attorney that notices have been sent out for the reconstruction of the Train Coe ditch, hearing will be Wednesday, November 5, 1986 at 10:00 A.M.

ELLIOTT DITCH Mr. Hoffman ask what has happened in regards to the Elliott Ditch? Sue W. Scholer ask if the letter has been composed? Mr. Rahe has proposed assessments, the amounts have been determined. Mr. Spencer has sent the Chamber of Commerce copies of the proposed letter so they know what the drainage board is talking about in regards to the Elliott ditch.

There being no further business the meeting adjourned at 9:20 A.M.

Eugene R. Moore
Eugene R. Moore, Vice Chairman
Sue W. Scholer
Sue W. Scholer, Board Member

ATTEST: *Maralyn D. Turner*
Maralyn D. Turner, Executive Secretary

February 4, 1987

February 4, 1987
Tippecanoe County Drainage Board

The Tippecanoe County Drainage Board met Wednesday February 4, 1987 at 8:30 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Chairman Bruce V. Osborn calling the meeting to order.

Those present were: Chairman Bruce V. Osborn, Board Member Sue W. Scholer, Surveyor Michael J. Spencer, Drainage Attorney J. Frederick Hoffman, and Executive Secretary Maralyn D. Turner. Others present are on file.

BRAMPTON APARTMENTSBRAMPTON
APRTMENTS

Dennis Grump engineer of Schneider Engineering representing Cardinal Industries, Inc. project Brampton Apartments. Mr. Grump turned the meeting over to Richard Bovey attorney as he is the counsel for Cardinal Industries, Inc. Mr. Grump also introduced Jack Cogley Land Representative, Bill Martin District Representative, and Don Thomas from Cardinal Industries, Inc.. Jack Southerland Director of Engineering Services and Bruce Nicholson Registered Professional Engineer from Schneider Engineering Corporation.

Richard Bovey attorney representing Cardinal Industries, Inc. the developer of Brampton Apartments Phase I. They are requesting the board to fulfill its commitment to the developer to issue final approval of the plans for the drainage for Phase I. The records of the hearings held June 1986, through December 1986, and January 7, and January 12, 1987 reflects that the board has basically committed upon one final condition to issue clearance for the development of Phase I provided the developer submit a petition to reconstruct the legal drain namely Branch 13. The developer has met these conditions, it did retain counsel, it did cause a petition for reconstruction to be drafted prepared to be duly signed and notarized by one of the effected landowners involved. Mrs. Janet Lanie, Trustee of Krick Land Trust who owns more than 10% of the land involved that petition was submitted and filed on January 29, 1987 in the surveyor's office at 3:50 P.M. They are now requesting final clearance from the board. The developer is very anxious to get along with the construction of Phase I. Phase I has approximately 4 acres. There are not other Phases being developed at this time.

Bob Gross from H. Stewart Kline Associates reviewed the storm calculations for the area, he had prepared a drainage map and stated that it is close to what Dennis Grump had presented. Mr. Grump agreed, however area 5, they had more area going back to the basin. Mr. Gross stated he used the rational method to get the predeveloped condition, came up with a Q 10 of 4.8 cfs. Mr. Gross stated that post development uncontrolled runoff would be 1.8 cfs, therefore the post development release rate would be 4.8 cfs minus 1.8 cfs uncontrolled leaving 3 cfs as their post development release rate from the basin. Mr. Grump's calculations showed 2.2, this was less than the 3. Storage volume would be 1.33 acre feet. Using that storage volume the depth would be about elevation 42.5. Dennis Grump stated that their invert where the water flows out was elevation of 40 and storing (about) to elevation 42.05, storing about 2 feet in the detention area. Mr. Gross said the only problem is with the out flow control device with that much head of 42.5 you are pushing down over the capacity of the tile. The way he arrived the capacity was from the ACS tile drain. Mr. Grump ask what he arrived at for the tile capacity? For a new tile capacity between 1.6 and 2.5. Mr. Grump stated that they were indicating under manning's equation for that type of material they were indicating a 2.58. Mr. Gross's concern is the amount of acreage draining into the tile, the minimum drainage coefficient is $\frac{1}{4}$ per 24 hours and the maximum area that will drain into the tile at full capacity would be around 200 acres. if he were to design a tile for 200 acres he would use $\frac{1}{2}$ " drainage code efficient which would put it into an 18" tile. The present tile is a 14". Question was does it drain more than 200 acres, the answer is yes Michael doesn't think there is 200 acres upstream from the development as the tile goes down stream it is obviously larger, 18" at the outlet. Mr. Osborn ask Judith Hammon how many acres she had in her development, she has 90 acres. Michael stated that what Mr. Gross has told us the predevelopment run offs are fine, after development are fine, detention basin is sized right, release rate is alright except what they have on the plans. Dennis Grump again stated the fact all understand that this is an agricultural tile and this is why Cardinal is committed to spearhead the petition in order to get something done. The area is beginning to develop and the drain will not be adequate for an urbanized situation. He doesn't disagree about the large amount of water in the area. Judith Hammon ask question. Not only is the area inadequate for development as she understands it if they are putting that much water into the tile in their holding pond, the acreage above that tile that uses the tile won't be able to do so. The development would be hurt from the first tile down flow, but the agricultural tile will have to hold water longer than what it usually does. Therefore it isn't only urbanization that is being the problem. Agricultural land is hurt too. Mr. Grump agreed to some degree with Judith Hammon, but it is important to look at the time frame with which the different areas contribute to the tile. Subsurface drains that the tile provides to the agricultural area typically the maximum capacity of that pipe is achieved approximately a day after the rain because the water is absorbed through the ground. In their situation they get a detention area and a direct link to the tile. In a matter of 4-6 hours are contributing and then it begins to decrease long before the agricultural drain or agricultural requirement is achieved. Bruce V. Osborn asked about reconstruction? Michael Spencer stated a petition has been received that is more than 10% of the watershed area. A hearing will have to be set, notify all landowners which will take 30-40 days, have the hearing, this could be 6 months to a year by the time engineering is completed and physically have the construction done. Judith Hammon ask if all the overland came to this pipe through Branch 13? She stated right now predeveloped all is overland water which flows onto her land. Schneider Engineering personnel stated not necessarily does the overland water go onto her land, just as it exists now. Judith stated they are getting overland water off of Haggerty Lane into her property. Will this tile system take care of the overland water? Answer was it was not designed to when it was installed. Surface drainage and subsurface drainage water can't get into the tile unless it seeps through the ground or has an open inlet. Judith ask what the development overland water was going to do with this system. The overland water in two basin would flow into inlets which does come back to an overland situation, but it is the same water that she is getting now. They will be solving the area in building the experience would be no worse that what it has been. The condition that is happening now is preventing Maple Enterprises from developing, this is a constant battle. Question is: This isn't a natural drainage course. It is a common drainage procedure handle offsite water.

Mr. Grump stated he was not saying that there would not be any overland water he is saying that the rate that it goes to Judith's land will be no worse than it is now. This has been explained above. Some of the area does go into the culvert therefore some is backed off and routing it back through the Brampton Apartment system. Sue W. Scholer ask how long it would take to drain their detention area? Take between 6-10- hours from beginning of rainfall. Judith Hammon is concerned about the overload on the branch. Until the branch is reconstructed this is a potential situation. Bruce Osborn ask if Ms. Hammon's land was on the west side of Ross. Property is on both sides of Ross. The thin narrow line between Ross Road and 38, then 70 acres on the other side to 52. Branch 13 and Wilson Branch of the Elliott ditch converge on her property. She is dealing with two watersheds. Judith explained that the overland water from the area in question goes under a 12' culvert under 38 and then spews openly onto a 13 acre strip between 38 and Ross Rd, at the present time it is agricultural, it either stands or eventually drains through Branch 13. Sue W. Scholer ask what total acreage was in the watershed? Michael is not sure how many acres are above 38 or below 38.

Mr. Hoffman stated that Mr. Bumbleburg is going to take his name off the petition for reconstruction and Richard Bovey's name as attorney will appear, a letter to that fact was attached to the petition. With these changes Mr. Hoffman found the petitions to be in order.

Sue W. Scholer stated the board is obligated to go on with Phase I, the board can not allow any more Phases to be developed until reconstruction of Branch 13 is underway. The board is addressing additional problems that are associated with development as it moves farther into the watershed area. Mr. Hoffman ask the total number of acres on the petition. Michael Spencer stated that the property owners who signed have more than 10%.

Sue W. Scholer ask about additional right of way was dedicated she wanted to know if it was 50' from the center line. Correct. There is a 100' total right of way for road reconstruction, at least 50' on their side. Mr. Cogley stated his engineers have told him they are going to allow for four lanes with ample room to construct. He stated they are a very short distance from road that merges with State Road 38 if there is an issue of necessary or increased roadway beyond project after preliminary approval he doesn't feel this is another issue that will affect their development. Mr. Osborn just wanted everybody to understand so if something happens later you can't come back and say we did not tell you.

Michael Spencer stated the only comment he might have which could be a personal one is: He would still like to see Cardinal petition even though they do not have 10%. Representative of Cardinal stated Cardinal Industries, Inc. filed the petition in the Recorders office 2/3/87. Michael J. Spencer's recommendation is that Cardinal Industries, Inc. not be allowed to outlet into the tile. Their surface run off and their release rate is less than their 10 year before development run off.

Dennis Grump commented that he had discussed this with Michael Spencer surveyor and George Schulte who at that time was with H. Stewart Kline and Associates about using the tile understanding that they had an agricultural tile and the detention would have to be provided. This discussion was back in 1986, it was decided to proceed that way. Drainage Board gave preliminary approval at that point they proceeded to use the tile and want to continue to do so.

Mr. Bovey ask to make a few brief comments. It is Cardinal's understanding after a fairly long process of going through repeated hearings that after the last hearing January 12, 1987 the only condition would be the submission of the petition for reconstruction of legal drain Branch 13. No other conditions. That condition has been filled and on file. They are willing to place it on record, Cardinal's signature. He felt it improper and certainly beyond commitment they do consider it to be a binding commitment made at the January 12, 1987 meeting with Cardinal Industries, Inc. and any new conditions be added with respect to final approval of drainage plan for Brampton Apartments Phase I. This was the only issue properly before the board today.

Mr. Osborn ask if he wasn't going to have problems with Michael Spencer's statement? Mr. Bovey said there was some mention that they couldn't use the outlet. If that new condition is thrown in now it will cause a whole new scheme. They don't feel this is appropriate or proper. Mr. Osborn stated, drainage isn't an ordinary element. You have to live together and give. Mr. Bovey stated Cardinal has been a very responsible developer. They have in good faith complied, but if conditions continue to be added to final conditions they will never get out of a never ending battle. This has gone too long and the developer is anxious to be a good neighbor. They are not out to hurt anybody down or up stream. It is obvious that there is an inadequate situation with respect to the existing legal drain. They are willing to cooperate and work with all people involved after a cost benefits study is done by the County Surveyor, they will do their fair share. They feel their 4 acres which is less than 1% will not create adverse impact upon any one.

Mr. Hoffman wanted to make sure that petitions had been signed. Cardinal Industries, Inc. has signed and there's was recorded the petition signed by Mrs. Janet Lanie has not been recorded, it is in the surveyors office.

Judith Hammon stated that 200 acres southeast of Lafayette are creating alot of drainage problems. A Task Force has been developed to address the problems in 1600 acres. Extensive research has been done. She isn't trying to stop the project, she is asking for a sense of responsibility. Mr. Cogley and a witness sat in her office as she tried to explain the problems. Mr. Cogley stated he didn't have the time nor did he care. She cares about the community and the development. It was her understanding and she will check with George Schulte as she understands he always advised against the use of agricultural tile for urban development. If thats how it is used a year before reconstruction there will be alot of problems. She feels the problems can be worked out, but the kind of cooperation from Mr. Cogley hasn't been satisfactory. She feels that we can't have 12 acres cause so many problems in a large area and act like no one else is around. She was ask in what way does she want cooperation?

Sue W. Scholer made the statement that everybody has to realize that there are many problems facing the board in the drainage area and they will have to be looked at differently. she feels that what Ms. Hammon is asking and the board would ask as well that once the approval is given your concerns and interest remain at the same level.

Sue W. Scholer moved to give final approval to Brampton Apartments Phase I drainage plans as submitted and petitions for reconstruction of legal drain Branch 13 be in and recorded.

Mr. Osborn apologized to Cardinal Industries, Inc., mistakes have been we are all human, it was an effort to stop Cardinal Industries to keep it in proper context only to save them money. After this statement Unanimous approval was given to the motion.

TWYCKENHAM

TWYCKENHAM
M

Robert Grove engineer representing Twyckenham Building Company requested Preliminary approval for drainage plans in residential area in the South portion of Twyckenham Estates. Northern portion contains Twyckenham Apartments is no longer in Twyckenham Building Company. It is held by the Lafayette Bank and Trust Company bank. Back in 1981 the whole design process with approval of all calculations at that time John Smith felt he would continue into the residential area with economy the project sat. The area is in the City as well as in the County. This will complicate things in some ways. Three basins are planned, one at the outlet point which is to the Ortman Legal drain across Ortman Lane it is an open ditch. They are reducing their flow down to 52 cfs through the detention system. Aslo picking three points up stream (offsite) for 10 yeare predevelopment flow conditions, they are not detaining, roughly a 100 cfs from offsite runs through the system. When they develop they have to detain and cut their flow down. when this was done it was based on a Master Plan instead of trying to piece meal. There is R-3 and R-1 even though it is in the County the potentials are there for the development. Main concern at this point is the process of vacating the Ortman legal drain. An area of main drain has been vacated, but the Ortman drain has not. Mr. Grove stated they are asking for preliminary approval of everything. Later they will come in and ask for final approval of Construction Plans on the first three sections at that time once work is completed they would like to have the drain vacated with surveyor inspecting, making sure that the tiles are tied back into the system properly. Nextion section would work same, eventually the entire drain would be vacated upon completion of the project. Michael Spencer stated there would be a problem of vacating a piece out in the middle of a legal drain or vacating an outlet of a legal drain and leaving it a leagl drain upstream. He has a problem with the stroage area on the plan, he realizes it will be in the City, but still a problem. He prefers one large basin down by the outlet structure at Ortman Lane. Like to see something done south of 300 south. In other words let's see something that shows the open channel on the south side of 300 sourth, this will handle the proposed runoff. Ortman drain is legal and has had no maintenance done. John Smith ask to make comment concerning the existing drain. The existing drain is not working very well it is full of dirt (for more). When they put in the new pipe with manhole so you can see in and be able to clean out with whats there now this can't be done. Sue W. Scholer stated that Michael is recognizing that system. They are going to have to study what will be happening later. Michael doesn't want something something happening down stream because of new flow and new pipe. He wants to make sure the downstream will be able to handle the flow that the developer will be putting in. Michael has not walked the drain. Mr. Smith stated it had plenty of flow line.

Mr. Hoffman stated he did not like the fact that they were going to have a ditch without a positive outlet. Control is a concern where there isn't a legal drain, it is Mr. Hoffmans recommendation that there be a legal drain through the entire area or vacate the whole thing. Mr. Smith ask since they were going to take the storm drain to County Road 50 East, the pipe being 36" they would be intercepting the two existing tiles with one being 10" and the other 8" run into 36" the people upstream should not object. The last time the developer came before the board they did not want to vacate the drain, this is the reason they were proceeding with the present system. Michael stated that all should be vacated. A petition to vacate will have to be presented and a hearing, this process will take approximately 2-4 months. They feel that there are only 3 property owners involved. Mr. Grove feels that there will be no problems this will help their drainage system later. Mr. Smith stated he really did not want to run a large pipe over to the ditch, but he has no choice.

Michael ask how the City felt in regards to the problem? Mr. Grove has gone through all the calculations with Mr. Callahan City Engineer, his comments were that he had no problems. His only concern was that the developer make sure they bring in South 9th Street at Ortman Lane (the storm water into the system). The way it is now it runs down side ditch. A letter was to have been sent to the Drainage Board from Mr. Callahan. The letter was basically to say they accept the plans and the concerns. Michael stated the plan does meet the Drainage Ordinance as far as run off and providing outlet upstream the only question City acceptance of plan and vacation of the legal drain, Ortman.

Sue W. Scholer moved to give preliminary approval on Twykenham Drainage Plans with the condition that the petition to vacate Ortman drain be filed and granted, and a letter be received from the City of Lafayette accepting the plan, unanimous approval was given.

ACTIVE DRAINS AND INACTIVE LEGAL DRAINS

ACTIVE
INACTIVE
LEGAL
DRAINS

Mr. Hoffman ask Sue W. Scholer to read the letter to the County Auditor in regards to ditch assessments for 1987. A list is compiled and on file in the surveyors office. Those ditches made active for 1987 assessment were: Train Coe, Thomas Ellis, Hester Motsinger, Audley Oshier, and Shawnee Creek. Ditches made inactive for 1987 were: Jesse Anderson, A.P. Brown, James Kirkpatrick, and John Saltzman.

Sue W. Scholer moved to send this notification to the auditor, motion carried.

ELLIOTT DITCH

ELLIOTT
DITCH

Mr. Hoffman presented a petition received from the Lafayette City Controller requesting the Auditor, Assessor and Treasurer of Tippecanoe County to petition the State Board of Tax Commissioners for Cancellation of Certain taxes on City property, a copy is on file. Mr. Hoffman stated this was on the streets and a couple pieces of property. Mr. Hoffman stated that the laws stated that the County Highway has to pay, therefore there are no exceptions for the City. His recommendation was that the petition be denied. Sue W. Scholer moved that based on the research done by Mr. Hoffman Drainage Attorney, not finding any legal reason to grant the petition the board deny the City's petition for removing real estate from the ditch assessments, unanimous approval was given. A letter should be sent to the City of Lafayette in regards to the denial.

VALLEY FORGE BOND

VALLEY
FORGE

Sue W. Scholer read and presented letter and bond for Valley Forge Phase II, Sec. I. This is for the addition of 14 lots. The board agreed to this only if they secured

a Construction Bond and petitioned for a legal drain, this has been done. A hearing will be set soon in regards to the petition. Bons is post for half the total cost on the detention basin.

Sue W. Scholer moved to accept the Construction Bond secured by Depoist from Tippecanoe Development Corporation for Vally Forge Phase II, Sec. I as submitted, unanimous approval was given. Mr. Hoffman ask that the board have the bond recorded and present it to the Auditor.

After discussion in regards to a form for Secured Deposit Bonds the board ask Mr. Hoffman and Mr. Joseph Bumbleburg to work together in forming a Standard Form for Secured Deposit Bonds.

ELLOITT
DITCH
TASK
FORCE

ELLIOTT DITCH TASK FORCE

Sue W. Scholer announced that the next meeting would be March 9, 1987 at 9:00 A.M.. They would like to set the week of March 16, 1987 for a hearing, with Michael setting the final date and use the Fairgrounds. Sue had a rough cover letter to send with the Notice of Hearing. They will present slides at the hearing as the video they are preparing will not be completed at that time. The rough cover letter was sent by Sue's request to some members of the Task Force on Wednesday, February 4, 1987, a copy is on file.

The board discussed the presence of George Schulte County Engineer, in the Drainage Board meetings. They feel that since he is most familiar with the Drainage Ordinance and his involvement with the County Highway he should receive the agenda and attend the meetings.

There being no further business the meeting adjourned at 10:10 A.M.

Bruce V. Osborn
Bruce V. Osborn, Chairman

Sue W. Scholer
Sue W. Scholer, Board Member

ATTEST: Maralyn D. Turner
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
 Wednesday, September 30, 1987
 Hearing of Ortman Legal Drain Vacation

The Tippecanoe County Drainage Board held Public Hearing for vacation of the Ortman Legal Drain Wednesday, September 30, 1987 in the Community Meeting room of the Tippecanoe County Office Building 20 North Third Street, Lafayette, Indiana at 9:00 A.M.

Chairman Bruce V. Osborn called the hearing to order with the following being present: Eugene R. Moore and Sue W. Scholer, Board Members, J. Fredrick Hoffman Drainage Attorney, Michael J. Spencer Surveyor, and Maralyn D. Turner Executive Secretary, others present are on file.

ORTMAN LEGAL DRAIN

ORTMAN
LEGAL
DRAIN

G. Mark Smith representative of Smith Enterprises developer of Twyckenham Estates along Ortman Lane 300 South and West Ninth Street consisting of 62 lots in Phase I. Ortman Legal drain runs through the middle development. A proposed storm water sewer system which they have submitted construction drawings to the surveyor, this system would drain the development as a condition of the final plan approval by APC the developer is requesting the legal drain be vacated and substitute with storm water system. The developer intends to put in the system before final platting. They are requesting vacation with the condition that the developer put in the improvements in the beginning. They intend to pick up any field tile from the upper watershed drainage system that flows through their property. These pipes would be hooked onto the new storm water sewer system.

Eugene R. Moore asked how they were going to identify the tiles that come across 50 East? Mr. Smith stated they know there are three tiles and should they find any others they will pick them up and hook onto.

Mr. Smith presented a proposed covenant as a part of maintenance fund procedure.

Covenant read:

Twyckenham Estates Phase I & II Restrictive Covenants

The Developer shall furnish the City of Lafayette a Maintenance Bond equal to 20% of the cost of the storm drainage system as indemnification for 3 years for engineering and workmanship. Said indemnification to include the connection of any existing on site field tile found to be crossing the new drainage system.

Mr. Osborn asked what the little spur was? It is branch of Ortman drain to the East 200' long, Michael feels that it was just an extension of a new tile to pick up an existing tile.

Mr. Hoffman asked where is the outlet? The existing outlet is on North side of County Road 300 South, Ortman Lane, the tile daylights at that point then it is open to the extension of the Elliott ditch.

Joe Bumbleburg attorney representing Margaret Purdy and Max Wastl both who are landowners in the watershed area. Mr. Bumbleburg stated that the Purdy family has owned and farmed the ground for many years. Tiles have been placed in the area to drain the farmland. There are two additional tiles that run from the Wastl property also from the Warren Thompson property. Identification of where all these tiles are is a problem. Several suggestions have been made has to find a way of finding these tiles, witching or cut side ditch, cutting side ditch would be creating another problem. One suggestion was that the developer provide as conditions to his approval certain maintenance and repair covenants. As Mr. Bumbleburg understands when this is all in and developed it will become the City's problem to maintain. Finding the tiles is an engineer job. When earth moving starts this creates a problem of crushing tiles underneath the ground, this problem would not be discovered after the houses are in or after a big rain.

Mr. Bumbleburg stated that Mark Smith had presented a restricted covenant and he wasn't sure he was ready to suggest or accept until he had consultation with Mr. Hoffman. It occurs to him that the maintenance bond has to provide not only the protection of the governmental agency responsible for maintenance under the statute. The bond should have benefits in it for the adjoining landowners. The depth of the covenant needs to be studied. The property owners fear that they will have damages from this. As he reads the covenant it appears that all this covenant would do would be to hook the tile back up. Damages should be covered. Three years would be sufficient time to find problems after construction. He asked the board to impose upon the developer asked for a bonding requirement that runs in favor of the joining landowners so that they will not suffer from this development.

Mr. Osborn asked how much of the area was to be vacated? 620' north for Phase I.

Mr. Hoffman asked if there was going to be a pond? Answer-yes, water is running south.

Mr. Hoffman asked where does the Ortman drain end?

Ortman Legal Drain Hearing Continued

Mr. Bumbleburg asked if the two pieces across from Poland Hill road, the one runs into the Wastl ground and through Judge Thompson they are both part of the drain as it exists today? Answer-Yes. Mr. Bumbleburg asked if they would continue to be a part of the drain after the project is over? Answer - yes, unless they are vacated by someone in the area.

Mr. Hoffman asked what are we vacating? We are vacating a section that is from Ortman Lane to a point 620' north as shown on drawings submitted.

Mr. Bumbleburg asked there are two branches of the Ortman drain that exist west of Poland Hill road? Mr. Spencer showed map of the legal drain to clarify all questions.

Mr. Hoffman asked about the run off, would it be an increase.

Mr. Spencer stated that their after development runoff is less than their before development runoff from the detention basin.

Mr. Osborn asked if there was any questions or concerns from the audience.

Eugene R. Moore asked John Klaiber if the people in his area across the road had any problems. Mr. Klaiber stated that their concern was that the development be put in proper. He has concern when a heavy rain comes and water goes across 300 S. Mr. Moore asked Mr. Spencer if there would be more water? Mr. Spencer answered that there would be no more water go through than what goes through there now.

Mr. Klaiber had concern about swale as they have built that up and there is water there now. Mr. Klaiber would like to see drains put in before they starting building. Another concern is where the natural drain is.

David Bloan stated he is confused in the statement made that the water would be decreasing that is going through the ditch at this time. He asked how much run off would roof tops and streets create? Will the ponds take care of water and will water be going over 300 south? Rise of the land goes to the NW when that area is developed his concern about the small retention ponds taking care of the water. Sue Scholer and Mr. Hoffman explained the Drainage Ordinance, as development is made upstream each developer has to meet drainage ordinance.

Mr. Mark Smith explained what they have in drainage plan at this point. Mr. Bloan has a personal feeling as he has experienced a problem at South 9th (Valley Forge).

Mr. Bumbleburg asked if there were any ponds in the 62 lots area? Answer-yes. Mr. Bumbleburg asked the size of tile? 72" -30 "-36".

Mr. Klaiber asked if the pond would be dry after rain? Answer-Yes.

Mr. Hoffman asked if it was going to be lined? It will be grass. Sue W. Scholer asked what the arrangements were for maintenance on the pond area? The pond is divided and each property owner will be responsible for his portion of the basin. Mr. Hoffman asked if it was going to be a part of the legal drain. Michael pointed out that new part was not going to be a legal drain. Mr. Hoffman stated that we have a legal drain going into a private pond into a ravine in to the Elliott Ditch a legal drain, Michael Spencer pointed out that the Elliott Ditch is not a legal drain at this point, it is west of Ninth street.

Robert Grove engineer pointed out that the whole system will be maintained by the City when it is accepted. Mr. Hoffman asked if they had an agreement in writing? Mr. Grove stated they are working on that.

Sue W. Scholer asked if the city was going to take over maintenance in the pond area? Do they have an easement for that? Mr. Grove stated they are taking over the whole storm system.

Mr. Eugene R. Moore asked what happens if tile breaks down that comes from Mrs. Purdy's farm in the development, will the City take care of that? Mr. Grove answered that the whole tile system is incorporated into the storm sewer system when the project is totally developed. Mr. Grove pointed out there would be no tiles in the subdivision from Mrs. Purdy.

Mark Smith stated they would be substituting Mrs. Purdy's tile with their structures. Mr. Moore asked if Mr. Bumbleburg was asking for a bond to make sure this is done? Answer No. His problem is that when you dig down and unravel things that you don't know about. His concern is if they wait till they get to Poland Hill to tie in and have water back up and cause damaging across the road Mr. Bumbleburg stated they want a bond that if and at any point there land is damaged by the destruction of the currently existing and operating drainage system, that the property owners system be made whole again and if property owner have damages they be paid for these damages. He realizes there is and end and time on this. He doesn't know how long it is going to take them to complete the development.

Ortman Legal Drain Hearing Continued

Mr. Osborn stated to Mr. Bumbleburg that he (Joe) is concerned about the private tile. Mr. Bumbleburg answered this is correct. Mr. Bumbleburg stated that the two branches that will become orphans will be the county's responsibility. When they become orphans Mr. Hoffman stated the county has control of the orphans, but not the private pipes in which the orphans go. Much discussion on private tiles went on.

John Smith read the covenant to the board.

Mr. Hoffman stated he had two problems with the covenant. Maintenance Bond should run in the three years from the time the construction is completed. Mr. Smith stated this was the intent. Extent of indemnification is another question. Joe states he wants it to cover any damages to his people. In the covenant it states reconnection. Mr. Osborn asked if reconnection covered cut tile up stream? Mr. Hoffman stated it would mean hooking up the pipe. Mr. Hoffman stated that it would mean reconnecting any field tile crossing the new drainage system, it would not cover any damages to the property owners. Reconnecting where ever it happens. The covenant needs to be rewritten.

Mr. John Smith asked what Mr. Bumbleburg met by broken down? Joe stated if developer broke it along the street or disturbed so it doesn't run, that needs to be put back like it was before.

Mr. John Smith thought they were talking about legal drains. He has agreed to hook the private tiles into the storm system that he installs, he is not going to take on the responsibility of maintaining those private tiles.

Mr. Osborn thought they were talking about during construction. Bruce stated reconnecting and repair is different.

Property owners want to be assured that it is maintained should the developer destroy or disrupt the private tile. Mr. Smith stated he would reconnect or repaired.

Sue W. Scholer asked if he was saying, in doing the work they could disturb the tiles without really cutting them and not be aware and they would not run? They could crush them and not be aware, this is a concern. Sue W. Scholer asked if the developer would be willing to deal with this as long as it is on the area they are developing? Mr. John Smith answered no, if it is on a private tile. He will fix a tile if it is in an easement should they damage the tile during construction.

Mr. John Klaiber asked what happens if some child get down in the pond area and drowns, who is responsible? This is a court decision. Water would only be there 2-3 hours. This is not a fishing pond.

Sue W. Scholer asked how much of the system was going to go into the system with the first development? Everything shown in First Phase Construction Plans.

Mr. Hoffman asked how much of the system is going to chop off after it starts going the other way after the other pipe is in?

Sue W. Scholer asked how much prior to development?

Mark Smith explained from their development construction plan map.

Mr. John Bloan asked what would happen in the future at 300 south with the private ravine and private drain, would it be wise to incorporate the whole system into a legal drain.

Mr. Hoffman answered that it would be a wise thing, but read Code 36-9-27-54 on how to establish a new regulated legal drain. This has to be initiated by the people in the watershed area, it is something the board can not do. To do this it would be a substantial cost and time would take another year.

Mr. Osborn asked John Smith if he was having problems with the covenant and the things that Joe Bumbleburg is asking?

Mr. John Smith stated he will not be responsible for damage to crop etc. The legal drain is on the developer's property, water from upstream is draining across his property, there are sink holes. The developer is improving the system. Much discussion on Three years after construction and maintenance responsibility took place.

Mr. Hoffman stated that he has two concerns with the covenant. 1. Covenant needs to be reworded in regards to crossing legal drain. 2. City is going to take over system. A letter should be received from the city stating the fact.

Mr. Bumbleburg stated that in a meeting with the City they implied that they do not want to assume responsibility for any damages done to the tile.

Ortman Legal Drain Hearing Continued

The board requested that the covenant be reworded to read:

The developer shall furnish the City of Lafayette a Maintenance Bond equal to 20% of the cost of the storm drainage system as indemnification for 3 years for engineering and workmanship. Said indemnification to include the connection of any existing private field tile and repair the private tile as it travels through the development to the legal drain connection.

Mr. John Smith agreed to the revised wording of covenant.

Sue W. Scholer moved the amended wording of the covenant be made a requirement and a part of the drainage plan, seconded by Eugene R. Moore, unanimous approval.

Fred Hoffman read the letter of recommendation of the surveyor.
September 29, 1987

Mr. Bruce V. Osborn, President
Tippecanoe County Drainage Board

Dear Mr. Osborn:

It is my recommendation that the Portion of the Ortman Drain be vacated as petitioned when the following stipulations are met:

1. The new drainage system be installed, approved, and functioning properly.
2. That all field tiles from offsite be properly connected to the new system.
3. Certified As-Built drawings be submitted.
4. The drain will be completed and approved before the Final Plat can be Recorded and Building Permits issued.

Very truly yours,
Michael J. Spencer
Surveyor

Mr. Hoffman stated the letter needed to be amended to recommend a letter be received from the City indicating approval and acceptance for maintenance. Michael Spencer surveyor agreed to have his recommendation to include this statement.

Mr. Bumbleburg stated that this does not address their second issue in regards to results from damage that can occur by breaking down of tile. Mr. John Smith stated he is not going to do anything in regards to this.

Mr. Hoffman feels that this has been covered.

Mr. Bumbleburg stated that Mr. Hoffman has answered in regards to damages, but he doesn't like it and neither does his clients, he feels it is not right.

Mr. Osborn stated a letter is needed from the city regarding the future maintenance and that the city approve the plans that have been submitted to the Drainage Board. This acceptance can not be done until the work is completed.

Sue W. Scholer moved to approve the vacation of the Ortman Legal drain for the requested area subject to the five conditions, 1. that the new drainage system be installed, approved, and functioning properly, 2. that field tiles from offsite be properly connected to the new system, 3. Certified As-Built drawings be submitted, 4. Letter be received with notification that the city has accepted and approved the plans and that all this will be done before the final plat can be recorded and Building Permits issued, seconded by Eugene R. Moore, unanimous approval.

VALLEY
FORGE

VALLEY FORGE

Michael informed the board that Tippecanoe Development has sold to another developer and they have requested the original letter of credit, but in checking files we do not have this original. The surveyor is checking this out. He will bring this to the board as soon as he finds the original for them to take action.

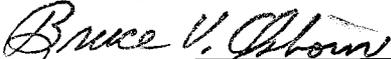
FRIENDLY
VILLAGE

FRIENDLY VILLAGE

Michael Spencer presented plans and request received from Louis Pearlman for reduced easement for Friendly Village.

After studying the plans and request, Sue W. Scholer moved in the request for reducing easement for Friendly Village that the board determined there is no need to reduce the 75' easement, but will allow encroachment on the easement pursuant to the plans submitted to surveyor which shows road way only, on September 30, 1987, seconded by Bruce V. Osborn, unanimous approval.

There being no further business the meeting was adjourned at 10:25 A.M.



Bruce V. Osborn, Chairman



Sue W. Scholer, Boardmember



Eugene R. Moore, Boardmember

ATTEST:



Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, DECEMBER 2, 1987

The Tippecanoe County Drainage Board met Wednesday December 2, 1987 with Chairman Bruce V. Osborn calling the meeting to order at 8:30 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana .

Those present were Eugene R. Moore and Sue W. Scholer Boardmembers, J. Frederick Hoffman Drainage Attorney, and Maralyn D. Turner Executive Secretary, others present are on file.

VALLEY FORGE

Robert Grove engineer representing developer of Valley Forge stated he has had review processes with George Schulte and Michael Spencer, changes have been made in the inlet configuration. He ask to continue this till the January Board meeting and ask for final approval at that time.

Sue W. Scholer moved to honor the request of continuance till the January meeting, seconded by Eugene R. Moore. Unanimous approval given.

SHERWOOD FOREST III

Robert Grove engineer representing Chuck Sherwood requested preliminary approval of drainage plan for Sherwood Forest III consisting of 11 acres. Mr. Grove stated meetings have been held in regards to the drainage plans, two meetings were with the board and the other was with Mark Houck drainage consultant and Michael Spencer. He presented a revised submittal with the detention basin from what had previously been submitted. Previous submittal was a dry bottom basin that only handled the flow from the proposed subdivision. Concerns are with the downstream people of what they are and how they are handling the water. After talking with Mr. Sherwood it was decided that everyone would benefit if they made an effort to retain or detain water from the entire watershed. Proposal now is to handle all the waters of the undeveloped area from the 79 acres from the 164 acres, 164 acres does not have direct run off it has to through the road culvert system. How this effects the downstream area is not certain. The 79 acres does have a direct routing to the subdivision. Mark and Michael had two concerns: 1. The developer show they are handling the additional runoff from the 100 year storm in the developed area. 2. Some idea to the generation of hydrograph of what is going up stream. Mr. Grove presented study.

They are proposing to reduce run off from a peak of around 18 cfs to 2 cfs. The second thing they are looking at a wet bottom basin which would be a permanent pool (lake), reason for doing this they would get much more volume by starting from a flat surface from wet bottom. Second consideration was to contain everything in the 79 acres plus additional flow from the subdivision south. They chose a 15 cfs outlet which is a combination of 12 inch pipe which is put in to handle the subdivision with an elliptical pipe to handle the upstream area. Mr. Grove explained the permanent pool elevations. A dyke would be built 30 feet across the base which would help to elevate problems downstream, this will some point and time overflow, it will effect the peak flow that the people downstream will see from the entire watershed. They feel this will help everyone. Mr. Grove ask the board to consider the ordinance requirements that they are to reduce only the flow from the development itself. He pointed out the natural swale area.

Mr. Hoffman asked how deep will the water be? Answer 6 feet deep was proposal could be deeper.

Mr. Hoffman asked if a fence would be around the lake? No. Mr. Grove stated it was not a requirement on that type of lake. Construction plans have bank treatment around lake, there will be safety shelves. This will be presented in final plans.

Tom Jordan homeowner representing himself and other homeowners in Sherwood Forest stated he and the neighbors have concerns about the proposal. The memo of November 16, 1987 to the Drainage Board in second paragraph is concern.

They had Mr. Dan Pusey look at the plans, because of illness in Mr. Pusey's family he was unable to attend todays meeting. Mr. Jordan submitted notes of Mr. Pusey's concerns in his study of the plans. They are:

1. It is obvious to me that the reason for a permanent pool is that Mr. Sherwood needs soil to build up pad elevations for the new house sites. (This is just a statement).
2. No information is given relative to the proposed depth of the permanent pool on outlot #1.
 - a) One should question the depth.
 - b) the safety of a pond in this local.
 - c) who is going to maintain the storm water storage facility.
 - d) is it going to be deep enough for prevention of a eutrification.
3. They did not address the relative elevations of adjoining properties immediately South of OL-4-3&2. The relative pad elevations (Minimum floor elevations) should not be higher than yours. No information provided as to your protection.
4. The present flood way is being constricted by the new fill proposed for building sites. Has this decrease in potential storage been addressed in the Pool storage area.
5. The only reason I can see for digging a pool is the need

- for dirt. Economics of construction. A dry bottom storage facility would be safer, but more costly to develop due to the need to haul in fill dirt.
6. I wonder if the half foot protection grade above the spillway grade is adequate to hold back flash runoff. I was always taught that 18"-24" was needed for what is termed free board. What is the capacity of the spillway before total overspill.
 7. No dimensions on drawing?
No North arrow on drawing?
No scale on drawing?
No vicinity map.?
 8. What is flow rate of spillway before total overspill?
Will 52" CMP and ditch carry the outlet pipes plus the spillway?

Mr. Jordan stated the property owners concerns are the safety of the pond and in number 2 b,c, and d. The third one is one of his personal concern and interest. They did not address the relative elevation of the new properties in relation to adjacent homeowner properties. He is immediately South of Lot 4. Concern is elevation which Mr. Jordan has addressed the board in an earlier meeting which is on record. It is a concern of other property owners. Again Mr. Jordan requested a study to be made.

Again Mr. Jordan stressed the concern in regards to the pond in safety, health, and hazards.

John Schwab property owner representing himself and other property owners. His concern was the runoff of the subdivision with the new holding pond. Another personal concern is: What kind of protection does the property owners have against their property becoming a swamp?

Mr. Jordan asked is it legal to build up land to create a low spot in neighborhood? Mr. Hoffman stated he did not think there was anything wrong with building land up as long as water doesn't run on someone else.

Mr. Jordan is not satisfied with proposal.

Mr. Jordan asked the board on behalf of his neighbors and himself to address the eight points of Mr. Pusey's and his concerns. He stated he has talked to all the neighbors and there is no one against Mr. Sherwood developing. They are not here to stop development, but want their concerns addressed.

Michael Spencer left notes which Mr. Osborn read. His concern: Need to prove that the lowest pipe from the lake will detain the water from the development (per the Ordinance) before the upper pipe begins to run water.
Free board rip-rap etc, maintenance of water level, and water fall.

Mr. Grove addressed some of the questions, after much discussion. Mr. Jordan asked who would maintain? Mr. Grove stated that the Homeowners Association of Sherwood III would.

After much discussion, Sue W. Scholer moved to have Michael Spencer, and Mr. Grove meet with the property owners and continue this meeting Friday, December 11, 1987 at 8:30 A.M.

Mr. Spencer is to contact Mr. Jordan for meeting date.

PARKER DITCH/200 South

George Schulte gave report on 200 South and Parker Ditch. He had attended meeting with Utilities, County Highway Department, Indiana Department of Highway, Department of Commerce and other people involved with Parker Ditch project. The County Highway Department is getting involved in it due to requirements of drainage with the new roadway. Planning to improve 200 South from 475 East to Dayton Road. At this time talking about existing capacities that will be provided in the proposed Parker Drain. It is his understanding that S.I.A. is limited to a certain release rate approximately 180 cfs, he isn't sure of the exact numbers. There is an access of approximately 50 cfs in the proposed Parker drain, it goes from a 66" to 72". In order to build a County Road 200 South an outlet will be needed. A study is being made of what the County's needs are. The thing that concerns Mr. Schulte is the 72" pipe going in it is going straight, the out flow and possible developments for anybody in the same area. The capacity of 50 cfs isn't much. He doesn't know what the watershed area is. He is guessing 200-250 acres. Mr. Schulte's recommendation to the property owners in the area would be to put an open channel from the Interstate to County Road 650 East. Grant it the channel is going to be deep, going to take a lot of right-of-way or easement for maintenance, but there will be adequate capacity to provide for future development, and to give adequate drainage off of property. Another concern is the area lying to the Northeast of the Interstate and North of 200 South which Mr. Carr is involved. It needs to be considered to, make sure that has an adequate outlet. When you start putting pipe structures in that pretty well restricts what you can do unless it is more economical. Usually as a general rule it is more economical to go in with an open channel than it is with pipe. Presently they are utilizing the 72" pipe having excess capacity with about 50 cfs more than the S.I.A. requirements. He feels this may create some problems for the future development occurring in that area. He feels the best way to address that is possibly increase the size of pipe underneath the Interstate, and provide an open channel east of the Interstate rather than the pipe structure to County Road 650 East.

Mr. Osborn asked if there were other questions.

Mr. Osborn stated: What Mr. Schulte is stating there isn't going to be much excess

capacity. Correct. Mr. Schulte stated even if the area develops and complies with the Drainage Ordinance they will still have a hard time obtaining adequate drainage. Mr. Schulte stated what needs to be proven is that the excess capacity is at least adequate for future development. Some drainage problems would be created like alot of ponding, water standing, etc.

Kelly Carr commended Mr. Schulte on his report and thanked him for looking at the future in a long range view point on the project.

Mr. Schulte stated it is a fine line when you get a development coming into the community. How far and what are their responsibilities as far as providing and eliminating existing problems. There is an existing drainage problem there now. You may not know it now, but if you over develop the property you soon find out there are problems. Again there is a fine line of how much we tell I.E.D.C. what we want done. From his stand point and as far as the County is concerned we would work with I.E.D.C. and pay our fair share to make sure that we have an adequate outlet through the Parker Ditch. Mr. Schulte stated that the pipe was put in to serve S.I.A. only. The County is looking at resolving some other problems, therefore the county wants to say to I.E.D.C., "Hey we have other problems and want to resolve at the same time you are providing a positive outlet for S.I.A.". Mr. Osborn stated which was caused by S.I.A. in the fall out process. Mr. Schulte stated basically you might say this, but at some time or other it would occur. It has come to a head quick because of S.I.A.. Mr. Schulte stated what is there now is a surface outlet.

Mr. Carr stated he would like to hear what Mr. Frauhiger has to say in regards to Mr. Schulte's recommendations. Mr. Frauhiger stated he didn't totally agree with everything said, therefore he would rather not make any comments.

STATE ROAD 38/I-65

Allen Egilmez representing Indiana Highway Department stated the board has the calculations and what he wants to present today is Alternates to the Areas.
Area A

Area starts from future 475 East west to Elliott ditch. Three alternatives were submitted:

1. Storing water to 100 year storm runoff in the ditches. The way the ditches were designed they were not able to handle the runoff.
2. Considered Vaughan's property on North side of 38 close to Elliott ditch at the end of the drainage path where they would like to put detention ponds. Problems with the easements and the narrow strip left in and came in with a pond they would end up taking the whole property, even though they would not be using the whole property for the detention pond. This would result in property damages on the North side of 38.
3. Mrs. Louise Schroeder on south side of 38 at the end of the drainage path, the drainage flows from 475 East down to Elliott ditch. They got as close to Elliott ditch outside the 75' easement to build a detention pond. They made it long and narrow in order to provide her frontage and minimize the damage on her property. Calculations were included in the last packet presented.

Area B

The area had three areas.

1. Triangle SR 38/CR 475 East and Elliott Ditch. Drainage area starts at the West ramp entrance along 38 all the way to County Rd 475 East. Problem with the area which was appropriate location, was routing the water from the east side of Elliott ditch over to the pond and then back to Elliott ditch. More or less a pump station would have to be built to get the water to the triangle.
2. Between SR38 & RR east of Elliott ditch North of 38 (SIA property). Ponds along SR38 on both sides, this would result in multiple ponds, this they want to get away from because of maintenance.
3. Ditches. Would be able to store 100 year storm water runoff within the ditches because of the length of the ditches.

Area C

Area of the Interstate.

1. Interstate loops. Problems of liability caused by standing water inside the loop, outlet problems, limited depth in the loop, multiple ponds much lower ditch elevations.
2. North of County Road 200 South. Not enough area without pond extending over Parker ditch. Larger pipe under 200 South.
3. Ditches along I-65. Would require more right-of-way along I-65. Not able to back up water because of pipe at M mile Marker 169. Not able to store 100 year runoff with standard ditches.
4. S.I.A. In the agreement the existing ponds would be filled in for future plan expansion. New Detention ponds was needed S.I.A. offered ditches along I-65, however not able to handle 100 year storm runoff would jeopardize S.I.A.'s ISPCB

permit as water is monitored and can't use 66" outlet pipe. New pipe under 200 South resulted in larger pipe at I-65. Main reason they didn't build on S.I.A. property is that 87% of the drainage area is on the east side of the Interstate. If the detention pond was put on the west side there would be a problem of rerouting water back across to pond where the water is being monitored..

This concluded Mr. Egilmez presentation.

Bruce V. Osborn stated the Department of Highways has fulfilled their obligation relative to the Ordinance. Mr. Osborn asked for questions.

W. Kelly Carr and Lewis Beeler asked questions and they were answered by the representatives of Indiana Department of Highway.

W. Kelly Carr asked the Drainage Board to have Michael Spencer to check the acreage as he feels the acreage isn't accurate. After checking figures and if it is found that the figures are correct and if the Board would approve the plan, the Board should ask them to include in their arrangement the opportunity for Mr. Carr to drain water through the detention pond into the pipe to the north and they should be instructed to give Mr. Carr a written agreement to this effect. Mr. Frauhiger stated that he and Mr. Carr need to pursue that further.

Area C addendum states that Mr. Carr's property has access to a positive outlet to Parker Ditch through Department of Highway he detention pond for the 10 year undeveloped flow. When Mr. Carr develops the property he will be responsible for building a pond system to detain the 100 year storm. Discussion continued.

Loren Schroeder representing his mother Louise Schroeder asked the representatives questions and expressed their concerns of maintenance, damages, the 75' easement, and turning the pond around the narrow end being to the front. State Highway representatives answered questions asked.

Mr. Schroeder asked if Elliott ditch was going to be recut and have enough volume to drain all the adjoining land. Mr. Osborn and Sue W. Scholer stated that a Task Force is studying the Elliott ditch and it is 80% completed. Upon completion a report will be submitted to the Drainage Board.

Eugene R. Moore asked Mrs. Schroeder if she had had all her questions answered. She stated that at the present time she has no drainage problems and she has great concern of having problems in the future with the changes being made. The 75' foot easement, maintenance and damages she was instructed by Mr. Egilmez to put them in writing and send her concerns to the District office. Mr. Frauhiger wants to meet with Mrs. Schroeder and have discussion in regards to field tiles.

Mr. Osborn stated taking, in consideration of Mr. Carr and Mr. Beeler's statements, in concern about the mileage, the total acreage he entertained a motion for approval of plans submitted by the Indiana Department of Highway.

Sue W. Scholer moved to give Indiana Department of Highway approval for the final drainage plans submitted contingent upon Michael Spencer's confirming acreage and mileage to Mr. Carr's property as being correct, seconded by Eugene R. Moore. Unanimous approval.

OSHIER DITCH

OSHIER DITCH

A letter received from Audley Oshier signed by Bernice Hawkins etal, Gene Brummet, Lynn Hawkins Trust Farm by Wayne Buck requesting an added tax be added on the present rate of .50¢ per acre assessment. The Oshier ditch needs to be finished up on a clean out as existing tiles in some areas are beneath the existing ditch bottom. The letter ask the board to give this immedaite attention to prevent future crop damage. The board will set a hearing date in early 1988 and act accordingly. Letter was dated November 9, 1987.

There being no further business to come before the board, the meeting was recessed at 10:40 A.M. and will reconvene Friday, December 11, 1987 at 8:30 A.M.

Bruce V. Osborn

Bruce V. Osborn, Chairman

Sue W. Scholer

Sue W. Scholer, Boardmember

Eugene R. Moore

Eugene R. Moore, Boardmember

ATTEST: *Maralyn D. Turner*

Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, JANUARY 6, 1988

The Tippecanoe County Drainage Board met Wednesday, January 6, 1988 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana 47901.

Chairman Bruce Osborn called the meeting to order at 8:30 A.M. with the following being present: Eugene R. Moore and Sue W. Scholer Boardmembers, Michael J. Spencer Surveyor, Mark Houck Drainage Consultant, J. Frederick Hoffman Drainage Attorney, and Maralyn D. Turner Executive Secretary. Others present are on file.

This being the first meeting of the year Chairman Osborn ask Mr. Hoffman to preside over the meeting to conduct the election of officers.

Mr. Hoffman asked for nominations for Chairman, Sue W. Scholer nominated Bruce V. Osborn Chairman, seconded by Eugene R. Moore, there being no other nominations Mr. Osborn was elected Chairman of the Board.

Mr. Hoffman asked for nominations for Vice-Chairman, Sue W. Scholer nominated Eugene R. Moore, seconded by Bruce V. Osborn, there being no further nominations Eugene R. Moore was elected Vice-Chairman of the Board.

Sue W. Scholer moved to appoint J. Frederick Hoffman Drainage Board Attorney, seconded by Eugene R. Moore, unanimous approval.

The Board had agreed to have Mark Houck as Drainage Board Consultant.

Sue W. Scholer moved to appoint Maralyn D. Turner as the Executive Secretary of the Drainage Board, seconded by Eugene R. Moore, unanimous approval.

Mr. Hoffman read the Active Ditches for the year of 1988.
E.W. Andrews, Julius Berlovitz, Herman Beutler, Michael Binder, John Blickenstaff, M.W. Box, A. P. Brown, Buck Creek (Carroll County) Train Coe, County Farm, Darby Wetherhill (Benton County), Christ Fassnacht, Marion Dunkin, Christ Fassnacht, Issac Gowen (White County) Martin Gray, Thomas Haywood, E.F. Haywood, Harrison Meadows, Lewis Jakes, Jenkins, James Kellerman, Frank Kirkpatrick, John A. Kuhns, Mary McKinney, Wesley Mahin, Samuel Marsh (Montgomery County) F.E. Morin, Hester Motsinger, Audley Oshier, Emmett Raymon (White County) a letter of January 5, 1988 is on file from White County requesting ditch be active, Arthur Rickerd, Abe Smith, Gustavel Swanson, Treece Meadows, Wilson-Nixon (Fountain County) Simeon Yeager, S.W. Elliott, Dismal Creek, and Shawnee Creek.

Ditches which have been inactive and need to be made active are Jesse Anderson, Dempsey Baker, Floyd Coe, Shawnee Creek.

Inactive ditches John Amstutz, Delphine Anson, Newell Baker, Nellie Ball, A.P. Brown, Alfred Burkhalter, Orrin Byers, Grant Cole, J.A. Crips, Chas Daughtery, Fannie Devault, Jess Dickens, Thomas Ellis, Martin V. Erwin, Elijah Fugate, Rebecca Grimes, Fred Hafner, E.F. Haywood, George Ilgenfritz, George Inskeep, Eugene Johnson, F.S. Kerschner, Amanda Kirkpatrick, James Kirkpatrick, Calvin Lesley, John McCoy, John McFarland, Absalm Miller, Ann Montgomery, J. Kelly O'Neal, Lane Parker, James Parlon, Calvin Peters, Franklin Resor, Peter Rettereth, Alexander Ross, James Sheperdson, John Saltzman, Ray Skinner, Joseph C. Starrett, Wm A. Stewart, Alonzo Taylor, Jacob Taylor, John Toohay, John VanNatta, Harrison Wallace, Sussana Walters, William Walters, McDill Waples, J&J Wilson, Franklin Yoe.

Luther Lucas ditch is made inactive and to be combined into the Dismal Creek ditch.

Mr. Osborn asked if first and second alternates could be appointed to be representatives for Tri-County ditches? Mr. Hoffman advised the board to go ahead and appoint them, if this isn't proper action can be taken later. The following representative and alternates were appointed for the following ditches.

Hoffman ditch, Eugene R. Moore, Sue W. Scholer was appointed first alternate and Bruce V. Osborn second alternate.

McLaughlin ditch, Bruce Osborn, Eugene R. Moore first alternate, and second alternate Sue W. Scholer.

Michael stated he had received a letter from Benton County in regards to the Darby Wetherhill ditch and he asked the board to appoint a representative and alternates for this ditch.
Sue W. Scholer is representative, first alternate Eugene R. Moore, second alternate Bruce V. Osborn.

Otterbein Ditch representative will be Sue W. Scholer, first alternate Eugene R. Moore, second alternate Bruce V. Osborn.

Michael asked that the Secretary send letters to each county informing them of the appointments.

Michael Spencer presented a Petition received from Purdue Research Foundation to vacate a portion of the Dempsey Baker Ditch lying south of the north right-of way line of County Road 350 North and lying in the east half of the southeast quarter, Section 1, Township 23 North, Rge 5 West, and the North 50 acres more or less of the West half of

January 6, 1988 Drainage Board Meeting Continued

the south west quarter, Section 6, Township 23 North, Range 4 West, all in Wabash Township, Tippecanoe County, Indiana.

Michael stated a hearing date would have to be set when assessment list is received.

Bruce Osborn asked where they were going with the water? Michael stated he felt it was through holding ponds then metered out to the same place it has always gone, Hadley Lake.

Bruce Osborn stated the board has never vacated a portion where it still drains through the existing legal drain. Mr. Hoffman answered no, if they are going to use the drain they can't vacate, if they are not going to use it then it can be vacated. Mr. Hoffman stated there would be a question of taking them out of the Watershed in regards to assessments. They will still have to pay their assessment as they are remaining in the watershed, the Purdue Research should be notified of this. If this is for the upper end this will help. Mark Houck stated there is a problem of metering at the same rate, but it will increase the volume of water going to Hadley Lake. They will have to meet the ordinance.

Many questions need to be answered before action is taken.

VALLEY FORGE

Valley Forge

Michael J. Spencer informed the board that a letter of Credit for \$62,000.00 to cover half the cost of installation of the permanent drainage system, this was through Tippecanoe Development Corporation. Roy Prock is new owner of Valley Forge he wants to substitute a new \$62,000.00 letter of credit for the other one since he is the new owner. Michael has talked with Mr. Hoffman there will be no problem to do this, accept the construction bond needs to be secured for deposit for Mr. Prock just like originally had been presented by Tippecanoe Development Corporation before the old one can be released and except new one from Mr. Prock. Mr. Hoffman stated they will have to present an agreement along with the Letter of Credit then the other can be released.

MEETING TIME CHANGE

Eugene Moore moved to change meeting time of the Drainage Board from 8:30 A.M. to 9:00 A.M., seconded by Sue W. Scholer, motion carried.

JOHN HOFFMAN DITCH

JOHN HOFFMAN DITCH

Bruce Osborn called the meeting to order at 9:15 A.M.

Tri-County Board representatives are Eugene R. Moore Tippecanoe County, William Lucas Clinton County, and Charles Sutton Carroll County.

Mr. Hoffman conducted election of officers.

William Lucas nominated Eugene R. Moore as Chairman, seconded by Charles Sutton, there being no other nominations Eugene Moore was elected Chairman.

Eugene R. Moore nominated William Lucas as Vice-Chairman, seconded by Charles Sutton, there being no other nominations William Lucas was elected Vice-Chairman.

Eugene R. Moore nominated Maralyn D. Turner as Secretary, seconded by Charles Sutton, there being no other nominations Maralyn D. Turner was elected Secretary.

Mr. Hoffman was chosen to serve as the Attorney for the board when the board was first formed, he will continue to serve.

Mr. Osborn thanked the property owners for coming to this informal meeting. He informed them that nothing would be decided officially, it is an opportunity for the property owner to see what has happened up to this time.

After Michael J. Spencer presents the project questions may be asked.

Michael J. Spencer, surveyor introduced those present Maralyn D. Turner, Secretary, J. Frederick Hoffman Attorney, Sue W. Scholer, Bruce V. Osborn, and Eugene R. Moore Tippecanoe County Commissioners, William Lucas Clinton County Commissioner and Neal Conner Clinton County Surveyor, Grover West Carroll County Surveyor, and Charles Sutton Carroll County Commissioners, and Mark Houck Tippecanoe County Drainage Consultant.

Mr. Spencer presented Construction Estimates in Phases I, Alternate I, Alternate II, Alternate III, and Alternate IV, and Phase II. This estimate was done by Robert Gross engineer with Stewart Kline and Associates.

Mr. Spencer asked for questions.

Bob Power asked if there was tile in there at the present time? Answer yes, Phase I the tile would come out. Alternate I would be to dig the tile out approximately 6" below the existing tile, under Alternate II lowering it 4'. This is to gain grade. The area being discussed on the ditch is at 900 E.

Lola Harner asked how are you digging 4' and stopping at 900 East wouldn't you have to continue on west? Michael answered they would have to continue west of 900 East, this wouldn't be to far west as the ravine system drops off.

Mr. Power asked if a bridge would have to be put across 900 East? Michael stated they

felt the culvert was the right size and would carry the water, it is just too high.

Mr. Power asked if a tile could be put in without tearing up the road? Michael stated he did not think this could be done without tearing up the road.

Mr. Moore asked how many acres in the watershed? Total acres 2420. There may be a difference of 80 acres, this would be checked.

Mr. Power asked how much is coming out of maintenance fund? There is no maintenance fund on the ditch at this time, if a tile hole breaks it is up to the landowner to do the repairs.

Jesse Barr asked would the soil change? Answer the dirt will not be changed, just better drainage. Mr. Barr asked if the ditch was going to be the same size at 1025 East. Answer at the road 1025 108" round pipe, two 72" round pipe, two 84" and at 900 East 14'10" X 9'1" structural plate pipe arch.

Neal Dexter asked how much water will come down into Coffee Run ditch. Michael stated the same amount of water would be coming down. Mrs. Harner and Mr. Dexter were concerned about the erosion and damage.

Mr. Hoffman asked if there was a positive outlet. Answer it goes into a ravine system that eventually gets to the Wildcat creek. Mr. Hoffman asked how far from the end of the legal drain to the Wildcat. Answer give or take one and half to two miles.

LaVonne Scheffee had concern of gravel and the culvert being closed shut. Michael stated this is the reason he has pointed out the culvert sizes at the different road crossings.

Elwood Burkle asked that the cost be discussed. Mr. Spencer pointed out that the last page of the estimate summarizes the cost.

Mr. Spencer explained the Indiana Drainage Codes to the landowners. The decision is made by the property owners.

Mr. Barr asked who is responsible for drainage on property? County is responsible for the road crossings, property owners is responsible for drainage on their own property.

Elwood Burkle asked what depth would tile be? Answer some of the cuts would be 10-11 feet deep from the existing ground. Banks would be a lot higher than they are now. Michael stated at 900 East 1/4 mile east it is 5 feet below the bottom of the existing water way.

Mr. Hoffman stated the property owners should consider extending the legal drain down to the Wildcat to maintain the valleys, as there is problems if you don't have a positive outlet especially one with this size. There is no control over the valleys as it is now. He felt this would not add that much to the cost.

Jerry Frey stated he is constantly fixing blow holes. It is getting continuously worse. They are finding that the tiles are shifting. He feels the major problem is at the outlet. It has been severely neglected. There are tree roots and tiles that have floated up out of the system. He feels the first thing to do would be fixing and opening up the outlet.

Mr. Power asked in the estimate has consideration been taken in the area west of 900 East? No. Mr. Power felt this would be essential. Michael answered until a legal drain is extended down that way they can't do anything with it, they can do some corrective measures directly downstream from the road. He has to work with the starting and stopping points of the ditch, this is what he had to work with.

At this point Mr. Hoffman explained the procedures of making legal drain west of 900 East.

Malcomb Miller stated he agrees with Jerry Frey's statement. Mr. Miller's concern is the hardship the assessments would make for the property owners.

Jerry Frey stated they can't seem to hold the blow holes, each spring they are back and bigger holes. Mr. Frey doesn't know what causes this except another ditch was added about four years ago this makes more pressure from the upland it's coming down in such a velocity causing the problem.

Debbie Lineback asked what kind of time frame are you talking about as she carried petition in 1982. Mr. Hoffman stated it probably wouldn't take the time that he did previously.

Mr. Moore asked the feeling of the property owner.

LaVonne Scheffee asked if there was any rules in regards to health and sanitation? Thirty years ago when they purchased their property you couldn't jump over the ditch, now there is refrigerators and other debris making the ditch level. She doesn't understand why the farmer doesn't have to keep it cleaned out. She complained about the road grader grading gravel making a wall at the ditch.

Mr. Osborn stated the board is powerless in regards to debris in the ditches until there is a maintenance fund set up. Maintenance fund is needed.

January 6, 1988 Drainage Board Meeting Continued

Jerry Frey asked who has authority? Mr. Hoffman explained the board is the authority.

Mr. Frey is for starting a legal drain with a maintenance fund, but he feels that the money should be brought forward to be spent on opening up the outlet and fixing the main tile. Try to get by with what they have with maintenance.

Malcomb Miller supports Mr. Frey's statement.

Mr. Moore asked Michael if a maintenance fund could be set up and just clean or does it come under reconstruction?

Michael stated they would be maintaining what there is now.

Mrs. Scheffee asked how this would help? Mr. Hoffman stated it would be taking the ditch back to it's original condition.

Mr. Lucas asked if there was an estimate for a maintenance clean out? NO. Michael felt it would just take a week to get an estimate put together. Mr. Lucas stated it would probably take two years to get a maintenance fund set up. Michael stated for a few years the fund could be set at a high figure and then lowered.

Debbie Lineback stated when she carried the petition around and 80-90% of the property owners stated it should be an open ditch, it never worked from day one.

Elwood Burkle stated that those living north and east of the Clinton and Carroll County line would receive no benefits by opening the bottom portion yet they would be paying for it. There are too many obstruction.

Dale Fossnock stated: His ancestors stated that when the ditch was put in, it never worked.

Glen Kelly stated there were six of them that worked on the ditch where the tile comes out. This was 30 years ago.

Mrs. Glen Kelly stated it cost her \$100.00 to get a petition in 1982 out of her pocket. She was informed that there is a standard petition form now and there would be no cost for the petition. Mrs. Kelly stated they have willows and to get rid of them the water has to be taken care of.

Glen Kelly stated there are two 6" raises in the ditch, one is on the Bogan property and the woods.

Question was asked was it constructed that way? Yes. When the ditch was built it was built by the people.

Michael stated the grade can be checked.

Mr. Barr would agree to keep the water going.

Mr. Scheffee stated when they first came to the area there were no problems he feels it has to be open all the way.

Mrs. Kelly stated they have two ponds on their property, water is over the road most of the time, getting out is a problem most of the time. Even when it was dry this summer it was wet.

Mrs. Harner stated this has been a problem for many years.

Mrs. Scheffee stated a lot of the problem was created when 900 East was reconstructed.

Grover West asked how many small acreages were in the watershed. His concern is the break down in lots and acreage.

Mrs. Harner stated the assessment doesn't seem fair.

Kenneth Walker stated there is peat in the area of the Ford property, reason for so much water in the area.

Neal Conner stated that it would be spring of 1989 to get a maintenance fund in to affect.

After much discussion Mr. Spencer asked for show of hands.

Phase I Alternate I, Phase II Dig Open ditch up to where the two branches come together and tile system. Approximate Cost \$200.00 acre. Vote 7.

Open Ditch all the way. Approximate Cost \$242.00 per acre. Vote 8.

Maintenance. Assessment per acre to be set possible classifications. Vote 5.

The vote going for an open ditch all the way Mr. Spencer will get estimates and hold another meeting to present findings to the property owners.

There being no further business the meeting adjourned at 10:30 A.M.

Bruce V. Osborn

Bruce V. Osborn, Chairman

Sue W. Scholer

Sue W. Scholer, Boardmember

Eugene R. Moore

Eugene R. Moore, Boardmember

ATTEST:

Maralyn D. Turner

Maralyn D. Turner
Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD MEETING
WEDNESDAY, FEBRUARY 3, 1988

The Tippecanoe County Drainage Board met Wednesday, February 3, 1988 in the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Bruce V. Osborn called the meeting to order at 9:00 A.M. in the Community Meeting room. Those present were: Sue W. Scholer Boardmember, Michael J. Spencer Surveyor, Mark Houck Drainage Consultant, David Luhman Acting Drainage Attorney, and Maralyn D. Turner Executive Secretary., others present are on file.

VALLEY FORGE PHASE III

Robert Grove engineer, representing Roy Prock developer ask for final drainage approval for Valley Forge Phase III with the condition that Michael Spencer and Mark Houck have a chance to review the last request presented. Calculations were requested for 10 year calculations with storm sewer, 100 year storm sewer with direct run off with predevelopment flow, also detention calculations. This has been prepared and presented.

Michael stated they had met with Bob and this is his response.

Mr. Grove this is the last thing to be presented.
stated

Michael asked if Mr. Schulte was satisfied with the inlet capacity? Mr. Grove stated he felt that Mr. Schulte was satisfied, however Mr. Schulte had other requirements and they have been submitted to Mr. Schulte.

Mark Houck stated he and Michael had asked for 100 year calculations, the 10 year was just brought up in the last week. Mark stated at this point there will be no problems, it is just a matter of demonstrating the fact that the water will go where it is suppose to go at the time it is to go. One of the issues is getting water out of the culdesac into the detention ponds during a high return period storm. Mr. Grove stated they have shown that, it will go through the pipes on the 100 year calculations.

Mr. Houck stated that the issues have been laid out, the response is that Michael and he need to look at the calculations.

Sue W. Scholer moved to give conditional final drainage approval on Valley Forge Phase III, subject to Michael and Mark reviewing the technical information and in compliance with the County Highway Engineer that everything is satisfactory, seconded by Bruce V. Osborn, unanimous approval given.

BULLOCK BUILDERS

Robert Grove engineer, representing Bullock Builders owner asked for final drainage approval, location of property is south on Highway 231, south of the bowling alley consisting of 1 acre. Developer is building two garages that will be and office and the other a display for sales. Michael pointed out that this area has a problem of having a positive outlet. Mr. Grove's presentation of drainage control structure is on file.

BULLOCK BUILDERS CONTINUES-FEBRUARY 3, 1988

Mr. Osborn asked if they had worked on the right of way from the State Highway Department? Mr. Grove stated they are working on this.

Michael stated the plans presented are okay.

Sue W. Scholer moved to give Bullock Builder final drainage plan approval, seconded by Bruce V. Osborn, unanimous approval.

KIRKPATRICK DITCH

Eugene Moore and Bruce V. Osborn will serve on the Joint Drainage Board for the Kirkpatrick ditch. A hearing will be set sometime in March. Tippecanoe County has the most length of drainage and Montgomery County has the most acreage in the watershed area. Michael stated that Montgomery County did not want to set on the board, they wanted to waive their rights. Micheal told Russ Nelson Montgomery County surveyor that they had more acreage and that they should set on the board, they have agreed. This is why Michael is handling the procedures for the open ditch. What we are trying to do is get the outlet under maintenance. They have appointed two board members, those members are Bob Thayer and Dr. Marion Kirtley.

ELLIOTT DITCH

Sue W. Scholer asked if the board has started a procedure to get the flood plain defined for the report of the Elliott Ditch? Michael answered-yes. Mr. Christopher Burke has submitted that request to the Department of Natural Resources.

Sue W. Scholer presented a letter to Michael from Fred Hoffman attorney, in regards to Legislation of Districts, Indiana 8-1. 5-5-1- to 26 inclusive.

The board asked that the minutes reflect that the Elliott Ditch Task Force Special meeting was held January 21, 1988. The board wanted the minutes to state that the Study Booklet is in the surveyor's office, a cost of \$15.00 will be charged. Minutes are on record.

RAYMOND MILLER PROPERTY OWNER

Mr. Miller stated he has had drainage problems on his property created from drainage of an adjoining property owner. It has been since 1983 that he has asked that something be done to correct this matter. It came before the Court in May 1987, at that time a decision came forward, but to this date nothing has been done to the Court order. Mr Miller has lost \$8,000.00 with top soil and he has lost more since. Plans have been presented by Mr. Robert Grove to the surveyor, there are questions in regards to the plans, and Mr. Miller wants to know when he can get something done.

Mr. Osborn stated that Mr. Miller has been more than patient in this matter.

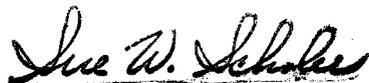
Robert Grove stated he did submit a design for structure that best meets the Court order. Mr. Grove stated that Mr. Spencer and Mr. Houck and he have agreed on the runoff from small rain storms, however they still question on the larger rain storms runoff. They may have to reduce the outlet control structure. They are trying to match the low rain fall.

Michael stated the problem is figuring out what the Judge has ordered. After much discussion the board asked that Robert Grove present a new proposal with new calculations of the structure design. A meeting was set for Friday, February 5, 1988 at 9:00 A.M. in the surveyor's office.

There being no further business the meeting adjourned at 9:25 A.M..



Bruce V. Osborn, Chairman



Sue W. Scholer, Boardmembers

Not Present

Eugene R. Moore, Boardmember

ATTEST:



Maralyn D. Turner, Executive Secretary

Otterbein Ditch-February 3, 1988

TIPPECANOE COUNTY DRAINAGE BOARD
Wednesday, February 3, 1988

The Joint Drainage Board for Benton and Tippecanoe County met for an organizational meeting for the Otterbein ditch in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, In.

David Luhman acting drainage attorney, called the meeting to order with the following being present. Sue W. Scholer Tippecanoe County Commissioner, Steve Conner Benton County Commissioner, Michael Spencer County Surveyor, and Jack Steele Benton County Surveyor. Others present are on file.

Mr. Luhman stated that Sue W. Scholer and Eugene R. Moore are to be the representatives for Tippecanoe County Joint Board and Steve Conner and Don Clute the representative for Benton County. Mr. Moore and Mr. Clute were unable to attend.

Mr. Luhman nominated Sue W. Scholer to serve as Chairman of the Joint Board, there being no further nominations, nominations were closed and Sue W. Scholer was unanimously elected Chairman of the joint board.

Sue W. Scholer appointed Maralyn D. Turner secretary to the board.

Sue W. Scholer asked Michael J. Spencer to make presentations in regards to the Otterbein ditch. Michael stated that a petition had been received requesting reconstruction of the Otterbein ditch and it accounted for 2,145.6 acres of the watershed area. Total watershed area is 2,820.8 acres. The petition represents 75% of acreage. Tippecanoe County has the most acres and length of drain.

Mr. Luhman stated the records should show that Michael J. Spencer County Surveyor by statue is an ex-official member of the board.

Michael stated what needs to be decided now is, what are we actually going to do. Acres and landowners, acres assessed and benefited by the project. A hearing will have to be held. Michael asked the board how they wished to hand the surveying and getting construction plans together and estimates. Go with an engineering firm or have the county's do it with their own personnel.

Chairman Scholer asked Michael how much information he had available? His answer is the legal description of the legal drain is all that he has.

Chairman Scholer asked if the board recommended that an outside firm do the findings. Michael stated that would depend on how fast. Michael stated we should get estimates of how much it is going to cost and get the approval from the landowners on the cost, as this will be a part of their assessment. A time will be set for a meeting after this has been done.

Mr. Conner asked what the reconstruction would entail?

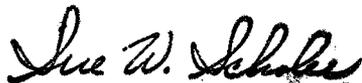
Michael stated the clearing and dredging of the ditch, leveling spoil etc. Michael asked if any one had contacted the Town of Otterbein Board about this request. The Town had signed the petition. This would be the ditch that runs west from the open ditch through the town. It is not a part of the legal drain. Mr. Steele stated this ditch is in terrible condition.

Mr. Conner is to contact the board and then let Michael Spencer and Sue W. Scholer know when they can meet with the Town board. First Monday of March is the Town's regular meeting.

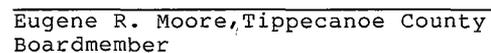
Michael stated if the Town wanted it to be taken into the Otterbein legal ditch the Town would have to petition to have the branch added to the legal drain.

Mr. Ernest Widmer stated that the branch they are talking about would take in some farm land on the west side of town.

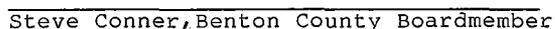
There being no further business the meeting adjourned at 1:45 P.M.



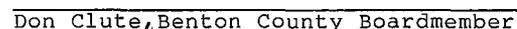
Sue W. Scholer, Chairman



Eugene R. Moore, Tippecanoe County Boardmember



Steve Conner, Benton County Boardmember



Don Clute, Benton County Boardmember



Maralyn D. Turner, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
Wednesday, March 2, 1988

The Tippecanoe County Drainage Board met Wednesday, March 2, 1988 in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Bruce V. Osborn called the meeting to order at 9:00 A.M. with the following being present: Eugene R. Moore and Sue W. Scholer Boardmembers, Michael J. Spencer Surveyor, J. Frederick Hoffman Drainage Attorney, Mark Houck Drainage Consultant, and Maralyn D. Turner Executive Secretary, others present are on file.

WESTON WOODS SECTION I

WESTON
WOODS
SECTION I

Tom McCully representing Bill Long and Lee Treece stated they are seeking approval of Weston Wood Section a single family residential subdivision on McCarty Lane east of Creasey Lane. There are 17 lots in the first section. Mr. Coutts explained how it will tie in with an apartment project proposed west of and to the over all Treece drain.

Mr. Osborn asked how many sections there were? Mr. Coutts answered this has not been determined. Acres involved 32, Section I consists of 5.1 acres,

Area within the 200 foot PSI easement will be used for detention storage areas utilizing a 1.00% bottom slope with a 3.1 slope at the edge of the easement. This being a very usable and mowable rear yard area that will function as storage when needed.

Mr. Coutts explained Weston Place Apartments will have two detention storage areas with base storage are proposed to replace the inadequate "dry" storage area as part of the Treece Meadows Legal Drain. Each pond will be capable of storing four feet of additional water volume above the normal low water elevation. The southern pond has a mid-level are of 1.9 acres and the northern pond is 1.5 acres at the mid-level storage height. This provides a total of 13.6 acre-feet of storage. For a 100-year, one-hour storm (2.72 inches), the total volume of water with no ground absorption would require 4.37 acre-feet of storage with no release rate. Table B with no release rate and no other inflow indicates a need of about 5.6 acre-feet for heavier storms.

As a result, an additional 7.8 acre-feet of storage is created over and above with this particular project would require. The 24" outlet pipe is overlay restrictive when the upstream inflow from McCarty Lane (approximately 18 cfs) is taken into account and the inflow from Weston Woods Subdivision (1.59 cfs) is also included. Too much water comes in from the north at McCarty Lane and Too little is allowed to leave the site. As a result, even with the additional storage proved as part of this project. Table C indicates that additional downstream detention storage need to be made as part of future developments.

Mr. Coutts presented the tables and they are on file. The proposed Storm water management system for West Woods Subdivision utilizes three rear yard areas for temporary storage of storm water being northern, southeastern, or southwestern detention areas. Pipes leading to these areas checked against a 100 year storm. The outfall pipe from West woods Subdivision (12" rcp @ 0.20%) will discharge into the Treece Meadows. Legal Drain in the proposed Weston Place apartment project.

Lots are deep and are in easement they have 100' rear yard. Mr. Osborn asked if this was for all easements? Answer No. They would restrict electric and telephone to 10' easement inside the PSI easement, they don't want it at the bottom of the detention area.

Mr. Hoffman asked if they were going to have the detention area for storing water underneath electric lines? Answer correct. Mr. Hoffman stated we have had this problem before and the board doesn't like this.

Mr. Coutts stated that they are talking about no more than a 3' depth situation and for a heavy rain there would be water in basin for 3-4 hours. Mr. Hoffman stated again this is a liability concern. Discussion continued.
Mr. Osborn asked how they proposed to maintain? Mr. Coutts answered, people maintain.
Mr. Osborn asked if this would be written in? Yes.

Mr. Hoffman asked if there would be a restriction of them covering it up? Mr. Coutts answered this would come in with Area Plan Commission for the enforcement.

Mr. Osborn asked about the outlet. Mr. Coutts stated they have discussed their proposal with Michael Spencer in regards to the outlet pipe in working out with the Treece Meadows Legal Drain. What they would like to do is put a pass through situation around the western end, use the extra storage and tie it into the Treece Meadows Legal drain in regards to the release.

Mr. Moore has questions in regards to the south holding pond. Michael stated they would be putting in a new holding pond.

Fred Hoffman asked if they had written permission from the PSI to store water underneath their lines on their easements? Mr. Coutts stated they have talked with them, and verbally they do not have a problem with it, nothing in writing, they wanted to come before the board to get approval before asking for permission from the PSI. They have two parts that they will need to get permission for. Beside the detention area they have to get permission to take the road underneath the power lines. PSI wants a firm construction plan. PSI's concern was that they did not want any permanent storage underneath the lines.

Sue W. Scholer asked if they were doing away with the detention pond at the apartment development? Yes and they are replacing it. She asked what they were wanting to pass through? Mr. Coutts explained the one problem in the total watershed area either they will have to take an put in alot larger area upstream and restrict it more severely or pass something through and consider adding more storage area. They feel they can't handle all the flow through their project.

Eugene Moore asked how they were going to get rid of water coming out to Creasey Lane? Mr. Coutts stated this had been discussed, the question is should they actually run another pipe down to discharge into Wilson ditch? The feeling of Michael Spencer and Mark Houck was that no more water should go into Wilson ditch. They are proposing to hold in their ponds and use the existing outlet pipe and not put any more water into the Wilson ditch.

Mr. Osborn asked if the holding ponds they are showing, are they for the entire 32 acres. Yes. Mr. Coutts went through tables presented and they are on file.

Mr. Hoffman asked how close will the water come to the houses. Mr. Coutts stated the pads will be 2' higher. For 100 year flood talking about 20' away. Depending how far house will be built to the easement. Discussion continued.

Michael Spencer stated alot of the Weston Woods area is not in the Treece Meadows Legal drain it is tributary to the Elliott ditch, it drains into a low area then into an existing agricultural field tile into the Wilson branch. This he has question. Much discussion.

Discussion of transferring water from one watershed area to another.

Michael stated the Elliott ditch and Treece Meadows are combined. Problem is with the branch they want to bring the water into.

Sue asked if the proposal was to become a part of the Treece Meadows legal drain? They are not anxious to become a part of the legal drain. A hearing would have to be held.

Mr. Coutts asked what great advantage would the board have as far as that becoming a legal drain? Maintenance. Discussion of maintenance was held.

Mark Houck has concern in regards to water running from Weston Woods into Weston Place. Partial development of Weston Woods would need to come in with a permanent plan. There will be alot of water coming down out of Treece Meadows, there would be flooding. The 100 year design storm is not accommodating with ordinance. This is Mark's concern. Won't be holding new water.

Michael Spencer recommended to have more time to study calculations presented today.

Sue W. Scholer moved to take under advisement the plans submitted to allow Michael Spencer to look at the calculations, seconded by Eugene R. Moore, unanimous approval to motion.

PARKER DITCH

DICK DONAHUE attorney representing Indiana Employment Development Commission filed a petition to vacate eliminate and reconstruct Parker Drain. This being a result of a meeting held at the SIA site. Petition presented asked to remove two segments from the earlier petition presented, to reconstruct part of the now existing Parker Ditch and that a hearing be set by the Drainage Board. Surveys are attached to the petition.

Michael stated the original petition was filed June 12, 1986, they are deleting a part/adding another part.

A date for the hearing will be set as soon as a 30 day notice is sent to the property owners. A special meeting will be set.

WILDER DITCH

Mark Houck wanted the board to know that Robert Grove had done an excellent job. The board expressed their appreciation for the efforts that Mr. Grove had done. The structure is to be in by April 10, 1988.

VALLEY FORGE PHASE III

Robert Grove engineer representing developer was back to ask for for final approval he had been before the board in February approval was given subject to further review of technical information and that plans be in compliance with the Tippecanoe County Highway Engineer.

Michael stated plans have been submitted they are in compliance with the Drainage Board, he stated there are some problems with the vertical curve and the road which Mr. Schulte isn't satisfied with. Mr. Hoffman asked if this would effect the drain? Michael stated some what. This doesn't meet highway ordinance in length of vertical curves. Hoffman stated any approval was going to have to be subject to approval by Drainage Board.

Sue W. Scholer moved to give approval subject to Michael Spencer surveyor's approval of construction plans, seconded by Eugene R. Moore, unanimous approval

SHERWOOD FOREST SUBDIVISION PART III

Robert Grove engineer representing Chuck Sherwood requesting preliminary approval of

PARKER
DITCH

WILDER
DITCH

VALLEY
FORGE
PHASE
III

SHERWOOD
FOREST
PART
III

March 2, 1988, Sherwood Forest Part III Continued

Sherwood Forest Part III, 14 lots on 11. acres. Mr. Grove has been before the board before.

Mr. Grove went through plans. Original proposal was to provide some relief downstream from upstream watershed. What they want to do now is handle their own water allow the upstream water to pass through, proposal is a structure across the waterway which provides only a 12" outlet for subdivision water only. Lake/pond would have permanent pool elevation of 644.00. They have 100 year storm plan.

Property owners John Schwab and Robert Pierret were present.

Mr. Hoffman asked whose property does the water back up on? The water right now stands is constricted downstream in Sherwood Forest, there are difference in structures in the subdivision.

Mr. Grove stated they don't have the 100 years have to pass the 50 year through their facilities. They want to set it up so it will pass the 100 year so water is not backed up.

Mr. John Schwab and Robert Pierret representing property owners expressed concerns and had questions as following:

1. From the retention structure what kind of channel improvements are planned to accommodate 100 year storm runoff?
2. On the small dam, type of material to be used (note ground back in there is poor) solid material is needed. This would have to be brought in from outside 6" of rip-rap on spillway. The silt when wet won't have the proper structural integrity. Clay is needed.
3. Requirements in drainage ordinance about permanent pool; Who will have the responsibility for it? Maintenance of lake. Safety is a very major concern.
4. Has location for high pressure gas main in the vicinity been taken into consideration?

Mr. Grove answered the questions as follow:

The channel will see slightly less water and they plan to clean it up and that's it.

Michael Spencer asked if they planned to dig a new channel? No, just clean out.

Michael asked if the fill on the side of the road would push wide expanse of water as it is now further off to the east.

They don't see any problems. Their not changing elevation.

Mr. Schwab's concern is if it is a big wide flood plan there won't be much vertical increase, mean a big horizontal increase.

In discussion one major concern of the property owners is the safety with the pond/lake.

Much discussion on plans presented and how they effect the property owners of Sherwood Forest. Mr. Grove stated the developer doesn't have to pass the 100 year storm, 50 is all they are required to pass, any changes in the channel should be based on the 50. They are doing the 100 year storm to keep minimize problems upstream, not trying to solve any problems down stream.

Mr. Schwab had concerned about the cleaning of the channel, it will be grown up within a years time, the area is marshy.

Mr. Grove stated as far as maintenance he thought Mr. Sherwood was going to have it put into Homeowners Associations, however he would not object to having the County maintain, if set up on County standards. The Board stated that it would have to be a legal drain for the county to maintain. Mr. Grove stated they don't want a legal drain, there's no reason to form a legal drain.

Mr. Pierret stressed his concern about the safety around the pond. Mr. Grove stated the ordinance calls for a safety ledge no more than 3' under water, 4-6' out from sides of pond. They will address it fully in the final plans.

Mark Houck asked if they were going to redirect water out from the field tile? If it is operating upstream they will tie into it.

Mark Houck stated if they were to encroach on an area that is under water during a 100 year storm by putting building pads out there, this would be okay as they are reducing the flow in the area, this would reduce water surface elevation also below the dam. Mr. Houck asked, putting in the pads would increase it and be compensating? Mr. Grove stated he wasn't saying that for the 100 year storm, he is saying all they have to take care of is the 50 year storm. Michael asked where it states that in the ordinance? Discussion of ordinance Page 15-2. Section 29

Michael stated the big questions is where they are crossing other property, he is not convinced that they won't be pushing the flood plane off. Discussion continued on the 50 year storm.

Mark stated that the responsibility of Mr. Grove is to not pass more water through than what is going through there now, and not reduce the flow upstream.

Mr Schwab stated that the property owners are concerned about Mr. Sherwood and Mr. Grove meeting with them, especially Mr. Jordan, they feel a meeting as a group should have been held.

Again discussion took place on all the questions asked by Mr. Schwab, plus Mr. Jordan's concern about being flooded as he is below what Mr. Grove has designed. Much discussion in regards to elevation at Mr. Jordan's property.

Michael Spencer stated in regards to the pond, the developer has the choice of going wet

or dry bottom.

Mr. Hoffman stated this is correct, however if they go wet bottom they have to put the safety ledge in, bank treatment, access, a number of items in the ordinance address this.

Mark Houck stated the big issues are the encroaching and the effect of water surface elevation, erode ability of structure and the effect of down stream channel. These need to be addressed in the Construction Plans.

Mr. Grove stated at the base it is 35' wide at the top there is a 10' wide bank or berm, channel runs about 20' cover the whole thing with rip-rap, the water for the 100 year storm backs up 2' an additional 9" of water will go through the spillway. He feels this is nothing major.

Mr. Hoffman asked about putting water on a neighbor, much discussion.

Mr. Grove stated that the swale is not a sheet run off, it is a swale that serves 220 acres.

Mark Houck stated he isn't sure how deep the water is now coming down during 100 year storm it is over a wide expanse, what is going to happen it will run into the block and will not be channeled through weir or between two pipes, which means the width of flow is going to be restricted and when it goes below the structure the velocity right below the structure will be a little higher and will cause eroding until the water spreads out again into the existing width of the flow, and over the area erosion control needs to be provided. This needs to be addressed.

Mr. Grove again asked for preliminary approval on one condition in regards to the 50 year storm, Mr. Jordan's property elevation. He asked not to hold them up any longer on their plans.

Michael stated he didn't think they were talking about Mr. Jordan's property, they were concerned about Mr. Schwab's property.

Michael again stated they need to know if the water is going to spread.

Mr. Grove asked the board to let him loose to design the project. Mr. Grove feels there is no problems with the Jordan property. Mr. Grove is willing to check out the water elevation in the flatter area.

Michael stated that if Mr. Grove can show the board that the elevation does not change and is not different from what happens today, he would agree with Mr. Grove as long as he doesn't make it worse. This is what were here for. Michael will look for this in the construction plans.

Eugene R. Moore moved to give preliminary approval conditional on Michael's review and approval of water elevations due to encroachment on existing flood plan, seconded by Sue W. Scholer, unanimous approval.

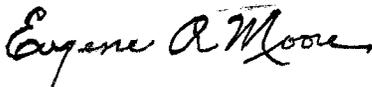
There being no further business the meeting was adjourned at 10:50 A.M.



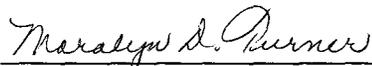
Bruce V. Osborn, Chairman



Sue W. Scholer, Boardmember



Eugene R. Moore Boardmember

ATTEST: 
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, JANUARY 4, 1989

The Tippecanoe County Drainage Board met in regular session Wednesday, January 4, 1989 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

The meeting was called to order by J. Frederick Hoffman, County Attorney for the reorganization of the Drainage Board for 1989. Those present were: Bruce V. Osborn, Eugene R. Moore, Sue W. Scholer, Michael J. Spencer, J. Frederick Hoffman, and Maralyn D. Turner, others in attendance are on file.

Mr. Hoffman asked for nominations for Chairman of the Board. Bruce V. Osborn nominated Eugene R. Moore as Chairman seconded by Sue W. Scholer, there being no further nominations Eugene was elected Chairman of the Board.

Mr. Hoffman asked the newly elected Chairman Eugene R. Moore to preside over the meeting.

Eugene Moore asked for nominations for Vice-Chairman, Bruce V. Osborn nominated Sue W. Scholer for Vice-Chairman, seconded by Eugene R. Moore, there being no further nominations Sue W. Scholer was elected Vice-Chairman.

Eugene R. Moore asked for nominations for Secretary, Bruce V. Osborn nominated Maralyn D. Turner as Secretary, seconded by Eugene R. Moore, no further nominations from the floor for secretary Maralyn D. Turner was elected.

Bruce V. Osborn moved to appoint J. Frederick Hoffman as Drainage Attorney for the year 1989, seconded by Sue W. Scholer, unanimous approval.

Mr. Hoffman read the Ditch Assessments for Active and Inactive ditches. The following ditches being Inactive for 1989 are: John Amstutz, Jesse Anderson, Dempsey Baker Newell Baker, Nellie Ball, A.P. Brown, Orrin Byers, Floyd Coe, Grant Cole, J.A. Cripe, Fannie DeVault, Jess Dickens, Martin V. Erwin, Elijah Fugate, Rebecca Grimes, Geo Ilgenfritz,

George Inskeep, Lewis Jakes, E.Eugene Johnson, F.S. Kerschner, Amanda Kirkpatrick, John A. Kuhns, Calvin Lesley, Luther Lucas, John McCoy, John McFarland, Absalm Miller, Ann Montgomery, J. Kelly O'Neal, Lane Parker, James Parlon, Calvin Peters, Franklin Resor, Peter Rettereth, Alexander Ross, James Sheperdson, John Saltzman, Ray Skinner, Joseph C. Sterrett, Wm. A. Stewart, Alonzo Taylor, Jacob Taylor, John Toohey, John VanNatta, Harrison Wallace, Sussana Walters, McDill Waples, Lena Wilder, J&J Wilson, Franklin Yoe.

The following ditches read are Active Ditches: E.W. Andrews, Delphine Anson, Juluis Berlovitz, Herman Beutler, Michael Binder, John Blickenstaff, N.W. Box, Buck Creek(Carroll County), Train Coe, County Farm, Darby Wetherill(Benton County), Marion Dunkin, Crist/Fassnacht, Issac Gowen(White County), Martin Gray, E. F. Haywood, Thomas Haywood, Harrison Meadows, Jenkins, James Kellerman, Frank Kirkpatrick, Mary McKinney, Wesley Mahin, Samuel Marsh(Montgomery County), Hester Motsinger, Aduley Oshier, Emmett Raymon(White County), Arthur Richerd, Abe Smith, Mary Southworth, Gustavel Swanson, Treece meadows, Wilson-Nixon(Fountain County), Simeon Yeager, S.W. Elliott, Dismal Creek, Shawnee Creek.

The following ditches read were made Active for 1989: Alfred Burkhalter(Clinton County), Charles Daugherty, Thomas Ellis, Fred Hafner, James Kirkpatrick, F. E. Morin, William Walters, and Kirkpatrick One. Michael Spencer wanted the Martin Gray to be included in the Active, it had been read as active, but for the records read in the Make Active. Sue W. Scholer moved to activate the ditches as read, seconded by Bruce V. Osborn, unanimous approval.

Alfred Burkhalter ditch joint with our County the Board secretary should send a letter to the Tippecanoe County Auditor and the Clinton County Auditor.

Michael stated in June 1987 a hearing was held to combine the Treece Meadows branch with S. W. Elliott ditch. These maintenance funds need to be combined and treated as the S.W. Elliott ditch. Sue W. Scholer moved to combine the maintenance funds on the Treece Meadows with the S. W. Elliott ditch treat them all as one, seconded by Bruce V. Osborn, unanimous approval.

J. Frederick Hoffman asked if the Treece Meadows was considered designated branch under the S. W. Elliott ditch? Michael answered it is; Treece Meadows has a beginning point and ending point.

Michael Spencer received a letter signed by two property owners, Malcomb Miller and Jerry Frey on the John Hoffman requesting that the board set up a maintenance fund. A hearing was held in 1988 for reconstruction, this did not go too well. Some were going to try to contact the downstream property owners to make it a legal drain all the way down to Coffee Run. Hearing nothing these property owners are requesting a maintenance fund.

Mr. Hoffman stated this is the ditch that does not have a positive outlet. Correct. They hope to make a positive outlet with the maintenance funds.

Michael will have to make a maintenance report before a hearing can be held. Discussion continued.

Jim Strother property owner 3876 Kensington Drive concerned about drainage of the Orchard Park Subdivision. Michael told Mr. Strother he had received Preliminary submittal that was requested from the engineer to supply with more information, but that

HOFFMAN
DITCH

information has not been received. Michael will notify Mr. Strother when he receives the information and when the project comes before the board.

Sue W. Scholer asked Don Sooby, of the Lafayette City Engineer office where are we on McCarty Lane, is it progressing. Mr. Sooby stated a public hearing will be held January 26, 1989, no other meeting has been set up.

There being no further business the meeting adjourned at 9:25 A.M. Next meeting will be February 1, 1989.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

Sue W. Scholer

ATTEST: *Maralyn D. Turner*
Maralyn D. Turner, Executive Secretary

The Tippecanoe County Drainage Board met Wednesday, February 1, 1989 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana. Those present were: Sue W. Scholer, Bruce V. Osborn, Michael J. Spencer, J. Frederick Hoffman, Drainage Attorney, and Maralyn D. Turner, others on file. Bruce V. Osborn Board Member called the meeting to order in the absence of Vice-Chairman Sue W. Scholer at 9:00 A.M..

Michael Spencer presented Certificate of Insurance received from Fairfield Contractors, Inc. naming the Tippecanoe County Drainage Board as Certificate Holder. Gray and Associates, Inc. as agent for the insured. Monroe Guaranty Insurance Company affording coverage. Certificate is on file in the Surveyors office. Policy period 7-7-88 - 7-7-89.

THOMAS COLEMAN DITCH

Fred Hoffman attorney, read the Resolution as follows:

RESOLUTION

WHEREAS, THE THOMAS COLEMAN DITCH is a legal drain located in Fairfield Township, Tippecanoe County, Indiana; and

WHEREAS, THE THOMAS COLEMAN DITCH is all within the city limits of the City of Lafayette, Indiana; and

WHEREAS, THE THOMAS COLEMAN DITCH is an "urban drain" and drains only "urban land" within the definitions of the Indiana Drainage Code, I.C. 36-9-27; and

WHEREAS it is the desire of the Tippecanoe County Drainage Board to wave and relinquish its jurisdiction over the THOMAS COLEMAN DITCH.

NOW, THEREFORE, BE IT RESOLVED by the Tippecanoe County Drainage Board that it hereby does relinquish its jurisdiction to the City of Lafayette, Indiana, over the THOMAS COLEMAN DITCH, which is legally described as:

Start at a point on North side of Lafayette and Wildcat Gravel Road 12 feet North of the SE corner of Sec 22 Twp. 23 Range 4; W along road 1100 feet; N $3-1/4^{\circ}$ W 1655 feet; N $36-1/2^{\circ}$ W 185 feet to appoint 10 feet E of the line dividing the E and W half of the SE $1/4$ of Sec. 22 Twp. 23 Range 4; N 580 feet; N $36-1/4^{\circ}$ 270 feet; N $17-1/2^{\circ}$ W 35 feet to a point on the Union Street Road 160 feet W of the NE corner of the NW SE Sec. 22 Twp 23 Range 4; N $8-1/4^{\circ}$ E 355 feet; N $38-1/4^{\circ}$ E 340 feet; N $39-1/4^{\circ}$ East 150 feet; N 100 feet terminating in a large open drain about 400 feet W of the center of the SE NE Sec. 22 Twp. 23 R 4 on land owned by John Heath.

Branch - Tile

Start at a point $56-3/4^{\circ}$ E 972 from the SW corner of the SE SE NE Sec. 22 Twp. 23 R 4, N $9-1/4^{\circ}$ E 700 feet; N $23-3/4^{\circ}$ W 300 feet to a point on N side of road running E & W thru center of Sec. 22 Twp. 23 Range 4; W along S side said road 1680 feet terminating at this point in the Main Ditch, where said Main Ditch crosses the line running E & W thru the center of Sec. 22 Twp. 23 Range 4.

Adopted at Lafayette, Indiana, on the 1st day of February, 1989.

THE TIPPECANOE COUNTY DRAINAGE BOARD

By: _____
Eugene R. Moore, President

Sue W. Scholer

Bruce V. Osborn

ATTEST: _____
Maralyn D. Turner, Secretary

0967H

Mr. Hoffman explained there are two bodies in charge of the ditch. The idea is to turn everything over to the City and let them handle the maintenance etc. The code provides it in a case of Urban Drain that drains only land within the City, therefore the County could go ahead and relinquish their jurisdiction to the City. The City would have to accept the jurisdiction.

Bruce V. Osborn asked if it would be a legal drain? Answer-yes a Legal Urban Drain.

Bruce asked if we could relinquish the County jurisdiction without notice to the landowners. Answer- Yes. After discussion it was decided that the landowners should be notified. Michael Spencer stated: He feels the property owners should know what the County is doing before they do it. Michael stated a hearing had been held to vacate the ditch and it was not vacated as the property owners were told they had to provide at least the easement for a future storm system of some type. Agreement.

Sue W. Scholer asked how does this work when it comes to the maintenance fee, collection, and disbursements? Answer the City would take over responsibility of handling everything.

Michael stated the work the City did north of Union Street on the sanitary sewer lines last summer, they did fix up the outlet of the Coleman ditch north of Union Street all the way to the outlet. They put a manhole on it and have done work on it. Michael's question to the City was; since you did this work have you accepted the responsibility of the maintenance? One official answered yes, and the other stated he did not know. Michael stated there is a misunderstanding. Sue stated she had the same concern as Michael.

Sue asked if they worked in the right-of-way of the easement of the legal drain? Michael stated he did not know.

Sue stated the Resolution is a very good idea, she would like to put it on an agenda and notify those involved.

Michael asked what happens if the City does not accept the the resolution? Mr. Hoffman stated under the law if they won't accept the County can't relinquish. Mr. Hoffman read Code, I.C. 36-9-27.

The developers of the old theater site ask the question: Who approves the drainage plan, city or county? Discussion

Bruce V. Osborn made the motion to put the Thomas Coleman ditch resolution on the Agenda for the March 1, 1989 Drainage Board meeting, and notify the property owners, seconded by Sue W. Scholer, motion carried.

Fred read Waiver of Jurisdiction forms he has prepared.

WAIVER OF JURISDICTION

The Tippecanoe County Drainage Board does here by waive and relinquish any jurisdiction that it may have over the drainage on the following real estate located in the City of Lafayette, Indiana to the City of Lafayette, Indiana, pursuant to the provisions of I.C. 36-9-27-20.

OWNER _____

STREET ADDRESS _____

BRIEF DESCRIPTION OF REAL ESTATE

Dated: _____

THE TIPPECANOE COUNTY DRAINAGE BOARD

By: _____
AUTHORIZED AGENT

The above Waiver is accepted by the City of Lafayette, Indiana, pursuant to the provisions of I.C. 36-9-27-20, and the City accepts jurisdiction over the drainage in the area described.

Dated: _____

THE CITY OF LAFAYETTE, INDIANA

By: _____
AUTHORIZED AGENT

0967H

WAIVER OF JURISDICTION

The City of Lafayette, Indiana does hereby waive and relinquish any jurisdiction that it may have over the drainage on the following real estate located in said city to the Tippecanoe County Drainage Board:

OWNER	STREET ADDRESS
BRIEF DESCRIPTION OF REAL ESTATE	

Dated: _____

City of Lafayette, Indiana

By: _____
AUTHORIZED AGENT

0976H

Mr. Hoffman stated with these four forms this would clarify things and the idea was to have it on check list for the Area Plan Commission so that when developers develop land they get one signed and then they only have to deal with one of the two entities. Discussion. Mr. Hoffman presented two forms for the City of Lafayette and two forms for the City of West Lafayette.

Bruce V. Osborn moved to adopt the four Waiver of Jurisdiction forms; one for each City to relinquish to the County, and one for the Tippecanoe County Drainage Board to relinquish to each City, seconded by Sue W. Scholer, motion carried.

Sue asked what procedures need to be taken? Mr. Hoffman stated both Cities should be notified and send copies of the forms; also notify Area Plan Commission to see if they can add this to their check list.

✓ VALLEY FORGE CONSTRUCTION BOND/LETTER OF CREDIT

Michael Spencer stated he has to come before the Commissioners at their next board meeting, but is presenting to the Drainage Board today. The board needs to release the Construction Bond and Letter of Credit for the final detention basin in Valley Forge Subdivision. The bond was required by the Drainage Board that the bond be payable to the Tippecanoe County Board of Commissioners.

Michael stated a bond had gone through the Commissioners for the final seeding for other areas in the subdivision, but the seeding in the detention basin have been completed and approved.

Bruce V. Osborn moved to release the Bond for Construction and Letter of Credit for Valley Forge Subdivision, seconded by Sue W. Scholer, motion carried.

✓ ELLIOTT DITCH

Michael Spencer presented a letter from Chris B. Burke Engineering, LTD. with the proposal to provide engineering services to do the design of the regional detention basin on the Elliott ditch. Estimated cost \$8,350.00.

Michael stated he had met with Mr. Hoffman and he researched how it falls under I. C. 36-9-27-32. This will be added on to Reconstruction cost for this work. Payable out of General Drain.

Bruce V. Osborn moved to accept Christopher B. Burke Engineering, LTD as the consulting engineer for work to be done on the Elliott ditch study for the amount of \$8,350.00, seconded by Sue W. Scholer, motion carried.

The proposal was signed by the board, and copy sent to Mr. Burke.

STATE ROAD 38 EAST

Mr. Hoffman stated he had received a letter from the Department of State Highway with proposed agreement of State Road 38 East and the regional detention pond which he has given to Michael Spencer to read. Mr. Hoffman and Michael do not feel the proposal is quite the same as discussed earlier. They will study and report later. This has to be approved by the Commissioners instead of the Drainage Board.

There being no further business to come before the board the meeting adjourned at 9:30 A.M. until March 1, 1989 regular drainage board meeting.

Not Present

Eugene R. Moore, Cahirman

Sue W. Scholer

Sue W. Scholer, Vice-Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

ATTEST:

Maralyn D. Turner

Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, AUGUST 2, 1989

The Tippecanoe County met in the Community Meeting room of the Tippecanoe County Office Building 20, North Third Street, Lafayette, Indiana, at 9:00 A.M.

Chairman Eugene R. Moore called the meeting to order with the following being present Bruce V. Osborn, and Sue W. Scholer, Board members; Michael J. Spencer, Surveyor; Tom Bush, Acting Drainage Attorney; George Schulte, County Highway Engineer; and Maralyn D. Turner, Executive Secretary; others present are on file.

CONCORD
CORNER
INDUSTRIAL
SUBDIVISION

CONCORD CORNER INDUSTRIAL SUBDIVISION

Robert Gross, Registered Land Surveyor representing Concord Corner Industrial Subdivision presented Preliminary Storm Drainage and requested Conceptual approval of his presentation. Location of property is at the N.E. Quadrant of the CR 350 S and Concord Road intersection consisting of approximately 25 acres, and at the present time the land use is agricultural. The site is located in the James Kirkpatrick Drain watershed which is a water shed of the Elliott Ditch. The area is basically a self contained site that does not have a positive overland outlet. Drainage from this site and Sub-basin III, shown in Figure A of Plans is through an 8 inch agricultural field tile that drains in a southwest direction into the Kirkpatrick drain tile. They had to look for an alternative storm water outlet from the site. When General Foods developed their site, they installed a 36 inch RCP drain from their detention basin to the Elliott Ditch. This drain parallels the railroad track from Concord Road to the Elliott Ditch. General Foods was contacted concerning use of this drain to provide a positive outlet for the Concord Corner site and they tentatively agreed with final approval after reviewing the calculations and plans.

General Foods had two representative present. Roland Winger General Foods, Site Engineer stated they are waiting for a definite answer from New York, but they have given a tentative approval based on what they have seen the study. Much of it is around the uncertainty of the site at this time, not so much the effectiveness of the study done.

Presentation and discussion continued.

Michael Spencer asked if they were going to petition or vacate that portion of Kirkpatrick ditch. Bob stated they were going to ask today to get permission to either vacate or re-locate the 8 inch field tile. They want to put it along their lot line, then connect it back in.

Sue W. Scholer ask if he had talked with George in regards to the entrances. He has and it has all been approved. 2-3 entrances.

They want to bring the easement down to a 40 foot easement and re-route the drain.

George Schulte and board discussed the intersection of Concord and 350 South. The intersection was built up when General Foods developed. The water use to flow across the intersection. What has happened the intersection blocked the surface drainage water going across down to the Kirkpatrick drain. Robert Gross the tile is now draining surface water, it has a catch basin on it. They are asking for two entrance off of Concord and one on 350 South. George stated they have had a preliminary review with Area Plan and there is no problem with it. They are not sure what the right-of-way requirements are, but they are aware that the county is going to be asking for right-of-way on 350 South.

Sue asked if the proposal of relocating the legal drain easement had been taken into consideration. The problem is they don't know what is going to be in the right-of-way as it is in a preliminary phase. George stated the grade view plan should go in next week. May have a tentative approximate right-of-way requirement along there, he will check into it. Robert Gross asked if George thought 80 feet was far enough off from the existing center line? George stated he is guessing they will need about 60 feet, unless there are some special side ditches and that would be 120 foot right-of-way. They are proposing to put it in the middle on a 40 foot easement on top of that. George asked how big the tile was in there. Possibly 2 feet. George stated they may pick it up in the side ditches. Michael stated it is shallow as they have had a lot of trouble with it.

Bruce was concerned about entrances. George stated they are going to be looking at distances apart 500-1000 feet. Michael stated he felt there were some type of field entrances there now and wasn't sure if there was a piped entrance, but any where along there a person could drive into the field as the side ditches are not very deep. Length from the Railroad tracks to Concord Road is about 1800 feet. Discussion continued.

Michael stated the only two questions he had was the relocation of the branch of James Kirkpatrick ditch, and the approval letter from General Foods.

Robert Gross again stated his request for preliminary approval on the design presented. There are two details that need to be looked at. According to the Chris Burke study of the Elliott ditch after they put in the ponds that is suppose to lower the high water elevations by two feet. Could they use that lower elevation for their design? The high water elevation at the 36" outlet is now 640. According to the study it will be 638 after both ponds are built. This has not been finalized at this time. Bruce asked how this was going to affect this project? Two more feet that they will have to fill to stay above. Discussion continued.

Bruce asked if they wanted conceptual approval today? One item is the high water. The other is the re-location of the drain and the 40 foot easement instead of the 75 foot each side along the road right-of-way for an 8" tile. For an 8 inch tile Michael stated he did not have a problem with the 40 feet, but he thinks there is a section in the drainage code that says the easements are a minimum of 25 feet. He needs to check if that is each side or total. He feels this is something they could work out. Robert Gross asked if they went with an open ditch as shallow as it is would that make a difference. Michael stated they would have to look at the side slopes of the proposal and make sure there would be a way of maintaining it.

Bruce asked where the water come from (relocation of branch), the upstream part of it? Michael stated the tile comes from underneath the railroad tracks and back through General Foods property and again crosses 350 South then down to about the General Foods entrance. At the present time it goes through the concrete pipe that is under the railroad swings out on the south side, there is a catch basin in the side ditch right across from the entrance, this is not a legal part of the drain, just a branch.

Sue asked Michael if he had problems with relocating the legal drain, he does not as long as it enters and leaves at the same place.

There is 150 foot easement through the middle of the legal drain. Branch is called the Cochran and Holmes branch. Easement footage has to be checked out with the Indiana Drainage Code.

Eugene Moore asked what the board was going to do with the two foot drop? The board felt they would be running a risk to do that at this point. Discussion continued.

Michael stated that Robert Gross and he should get with Chris Burke in regards to the two foot elevation difference.

Bruce V. Osborn moved to give approval to the conceptual design for Concord Corner Industrial Subdivision as presented, seconded by Sue W. Scholer, unanimous approval.

SEC 14 (S) - DRAINAGE ORDINANCE

Section 14 (S) now reads in the Drainage Ordinance.

Section 14 (S)

S. Detention Systems Shall Be Regulated Drains:

All storm water detention systems shall be incorporated into a regulated drain under the jurisdiction of the Tippecanoe Drainage Board; and, if no regulated drain exists in the area, the Developer shall petition to establish such regulated drain

August 2, 1989 Drainage Board

pursuant to the provisions of I.C. -36-9-27-54, and the drainage plans shall not be approved until such petition is submitted in a form approved by the Surveyor to the Drainage Board.

Tom Busche acting drainage attorney read the proposed amendment to Section 14 (S) with change recommendations made by J. Frederick Hoffman drainage attorney after being presented and read in the July 5, 1989 drainage meeting.

Section 14 (S)

S. Detention Systems Shall Be Regulated Drains:

All storm water detention systems which include detention or retention basins, conveyance systems, structures and appurtenance located outside of road right-of-way, shall be incorporated into a regulated drain under the jurisdiction of the Tippecanoe County Drainage Board. The developer shall petition to establish such regulated drain pursuant to the provisions of I.C. -36-9-27-54 and the drainage plan shall not be approved until such petition is submitted in a form approved by the Surveyor and the Drainage Board.

Bruce W. Osborn moved to accept the amendment proposal change to Sec 14 (S) as read, and add to the last sentence, as amended August 2, 1989 to the section, seconded by Sue W. Scholer, unanimous approval.

Melvin Simon and Associates, Inc. had requested to be on the agenda, but no one appeared.

FARMINGTON LAKE

This project has been setting on hold for some time. Harold Palmer from Ft. Wayne was present and he would like to proceed with the project.

One problem has been the high cost of the lake system and the community water system. The developer is proposing to abandon the central water system and develop no more than twenty lots at one time. Also he is proposing to replace the lake areas in the center of the development with easement areas reserved for recreational areas and detention basins.

The volume originally proposed for the project was 15.5 acre feet which would have reduced the 100-year runoff from 72.84 to 3.6 cfs. The actual volume used for this reduction was 9.65 acre feet. Maintaining lake #3 as a retention facility and replacing the center lakes with detention basins will provide a total of 5.77 acre feet of storage or 60 percent of that originally approved. The proposed basins would take up the entire area originally platted for the center lakes.

The allowable discharge from this site is 35.73 cfs. They are proposing to over detain the runoff for the entire watershed, but not to the degree originally proposed. The 60 percent level of storage would reduce the 100-year runoff from the watershed to an estimated 20 cfs as compared to 3.60 cfs.

The developer has agreed to the proposed over detention to the 60 percent level and to keep the lake easement areas as shown on the preliminary plan. The easement areas will be for detention and recreational use. The proposal will exceed the ordinance requirements and provide storm water relief for the down stream area.

It is felt that the project will never be built as proposed originally. A re-plat of the area could end in a project which meets the ordinance with substantially less detention and hardly any relief for the downstream area. The proposal would not have the effectiveness at runoff reduction, but would provide significant improvements in the watershed and is a reasonable compromise between minimum detention and the lakes originally proposed.

They are asking support of the board in conceptual changing the plan and hopefully they can do this without re-platting.

Question was asked if this is what would run down on Willowood? Answer yes, underneath the culvert at Willowood.

Michael asked if they were going to use one of the residential lots for the club house in the area? Yes.

Outlet will be in ditch that goes across Willowood (surface water). Water would continue down the east side. Discussion continued.

This is a compromise between the previous developers dream and what the ordinance would allow. Bruce stated this should help Willowood.

In the originally they had ditch all along the west line where they had pick up points to run the water in through the detention, and they could still do that, which might bring it down to 3.2 cfs.

Michael stated he did not have any problem with the concept, just need to work out all details and get the calculations. The board is requiring a petition for legal drain.

FARMINGTON
Lake

August 2, 1989 Drainage Board Meeting Continued---SPECIAL MEETING AUGUST 16, 1989

Mr. Palmer stated it would be a Community Association owned area, all the community area would be responsible of the homeowners for the maintenance. They are not sure at this time if it will take a full lot to giving access to the easement.

Discussion of Maintenance if it becomes a legal drain. The outlets etc is the responsibility of the drainage board, but the recreation area maintenance should come under the Community Association. Discussion continued.

ORCHARD PARK

Orchard
PARK

Michael reported on the Orchard Park drainage review by Chris Burke, it is underway. A report should be received soon.

Michael stated David Dilling was present and he is entertaining a petition to make the outlet pipe on his property to become a legal drain.

There being no further business the meeting recessed at 9:45 a.m. as Orchard Park reports may get back and a special meeting could be called.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

Sue W. Scholer

Sue W. Scholer, Board Member

ATTEST: *Maralyn D. Turner*
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR Meeting January 3, 1990

The TIPPECANOE County Drainage Board met Wednesday, January 3, 1990 in the Community Meeting room of the TIPPECANOE County Office Building 20 North Third Street, Lafayette, Indiana.

Those present were Bruce V. Osborn and Sue W. Scholer, Board Members; Michael J. Spencer, Surveyor; Todd Frauhiger, Drainage Consultant; J. Frederick Hoffman, Drainage Attorney; and Maralyn D. Turner, Executive Secretary, others present are on file.

The meeting was called to order at 9:00 a.m. by Drainage Attorney J. Frederick Hoffman. Mr. Hoffman stated that it is time for election of officers for a new year.

Bruce V. Osborn nominated Sue W. Scholer for chairman of the board, seconded by Sue W. Scholer, motion carried, there being no other nominations from the floor Sue was elected Chairman of the Board.

Sue W. Scholer chairman continued the meeting asking for nomination for Vice Chairman, Sue W. Scholer nominated Bruce V. Osborn as Vice-Chairman, seconded by Bruce, motion carried, there being no other nominations from the floor Bruce was elected Vice-Chairman.

Bruce V. Osborn nominated Maralyn D. Turner as Secretary, seconded by Sue W. Scholer, there being no other nominations from the floor Maralyn was elected Executive Secretary.

Bruce V. Osborn moved to accept J. Frederick Hoffman's continued services as Drainage Attorney for the year 1990, seconded by Sue W. Scholer, motion carried.

Michael J. Spencer recommended to continue the services of the Chris Burke Engineering, LTD as Drainage Engineer Consultant for the year 1990. Bruce V. Osborn moved to accept Michael's recommendation, seconded by Sue W. Scholer, motion carried.
1990 DITCH ASSESSMENTS

Fred Hoffman read the following ditches to be made Active for assessments in May 1990. Jesse Anderson, A.P. Brown, Orrin Byers, John McFarland, Ann Montgomery, and the J. Kelly O'Neal.

Ditches that are In Active are: John Amstutz, Dempsey Baker, Nellie Ball, N.W. Box, Alfred Burkhalter, Floyd Coe, Grant, Cole, J. A. Cripe, Fannie Devault, Marion Dunkin, Jess Dickes, Martin V. Erwin, Crist/Fassnacht, Elijah Fugate, Rebecca Grimes, Harrison Meadows George Ilgenfritz, George Inskeep, Lewis Jakes, Jenkins, E. Eugene Johnson, F. S. Kerschmer, Amanda Kirkpatrick, James Kirkpatrick, John A. Kuhns, Calvin Lesley, John McCoy, Mary McKinney, Absalm Miller, Lane Parker, James Parlon, Calvin Peters, Franklin Resor, Peter Rettereth, Arthur Richerd, Alexander Ross, James Shepherdson, John Saltzman, Ray Skinner, Joseph C. Sterrett, Wm A. Stewart, Alonzo Taylor, Jacob Taylor, John Toohey, John VanNatta, Harrison Wallace, Sussana Walters, McDill Waples, J. & J. Wilson, Franklin Yoe, and Shawnee Creek.

Ditches that are Active are: E. W. Andrews, Delphine Anson, Herman Beutler, Michael Binder, John Blickenstaff, Buck Creek (Carroll County), Train Coe, Darby Wetherill (Benton County), Thomas Ellis, Issac Gowen (White County), Martin Gray, Fred Hafner, E.F. Haywood, Thomas Haywood, James Kellerman, Frank Kirkpatrick, Wesley Mahin, Samuel Marsh (Montgomery County), Hester Motsinger, Audley Oshier, Emmett Raymon (White County), Abe Smith, Mary Southworth, William Walters, Wilson-Nixon (Fountain County), Simeon Yeager, S. W. Elliott, Dismal Creek, and Kirkpatrick One.

Bruce V. Osborn moved that the ditches that were read to be made active become active on the May 1990 Assessment, seconded by Sue W. Scholer, motion carried.

COUNTRY CHARMS

John Fisher asked that this be continued until next meeting February 7, 1990.

TRASH TRANSFER

John Fisher presented site drawings. Outlet goes into the Flood Plan. Mr. Hoffman asked who owns the Flood Plan? Leroy Barton. Question as to if it would increase the flow and the speed onto Barton. Question do you have permission from Mr. Barton? Answer - No. Mr. Hoffman stated that permission should be received from Leroy Barton. Mr. Fisher stated they are providing rip-rap, it will not increase the velocity. Mr. Fisher pointed out that they had met with the Soil Conservation and have worked out the one condition of erosion control. Mr. Hoffman asked if Mr. Barton knew about this meeting? NO. Presentation and discussion continued.

Bruce V. Osborn asked John Fisher to explain the plans to the Barton's.

Michael stated that the water is tributary to that area now, it will go through a pond now instead of sheet drainage.

Mr. Hoffman stated they should have their chance to object, so that they can't say we are damaging their property.

Sue W. Scholer stated there are two recommendations made.

1. The erosion control. 2. The calculations.

Bruce V. Osborn moved to give approval to the drainage control for the Trash Transfer with exception of #9 and the other recommendations as stated in the Christopher Burke

COUNTRY
CHARMS

TRASH
TRANSFER

Engineering, LTD review, plus letter from downstream from Burton's, seconded by Sue W. Scholer.

✓
DIMMENSION

DIMENSION CABLE

CABLE

George Schulte engineer from Ticen and Associates presented site plans. Property is located in the Treece Drainage Watershed area. The water shed area was analyzed to determine the high water elevation that would be in the channel. Their detention storage volume that they calculated was above the high water elevation of the ditch along north property line. They did decrease the allowable release rate from 2.11 cfs down to .4 cfs, there is about 3.3 acres in the site. They are increasing the volume required for storage on site.

Sue W. Scholer asked about the plans for maintenance on that ditch? Basically they are assuming that the owner would maintain the entire site, this is reason for putting 3-1 slopes on the ditch.

Mr. Hoffman asked if it was a new ditch, George again stated it is an existing ditch. The ditch at this time is full of brush, weeds, etc, it is not a legal drain.

George stated they are asking for final drainage approval.

Mr. Hoffman asked if George's client would be willing to participate in the cost of a more substantial drainage improvement in the area. Mr. Shulte stated he could not answer that question, but he feels he would be willing.

Bruce asked if conditions had been met? Michael Spencer answered, no, there is one other conditions and that is that the City of Lafayette review this project, as of January 2, 1990 this area is in side the City Limits as is Wal-Mart.

Mr. Sooby has not seen the plans presented. Discussion continued.

Mr. Hoffman stated this is not a subdivision, but should have the same kind of restriction as subdivisions. Mr. Hoffman asked that a letter be received from the developer stating they will participate in their fair share of the improvement when the major improvement is made. Michael asked if he was talking about facility on site. Answer-yes. Maintenance on site and that they would assist in making that area a part of the legal drain, and that they will participate in the cost of improving the Wilson Branch. Michael asked if they should provide a letter stating that they will maintain their on site system. Mr. Hoffman stated he would like for it to be in form that can be recorded, so it will run with the land should the land be sold.

George asked what things are needed for approval? 1. Participate in the improvements of the Wilson Branch. 2. Cost of improvements. 3. Maintain the one on the premises, and if they don't the County would have the right to maintain it and assess the cost. Incorporate the existing drain on the north side of the site into the Treece drain or Wilson Branch.

A letter is needed from the owner for the above mentioned items to Michael. Michael asked that the city review and give their approval be added as they are involved.

Sue asked if the board understands correctly that the City still wants that maintenance to run to the County on the regulated drain. Mr. Sooby answered, he thinks that is correct.

Bruce V. Osborn moved to give approval with the four recommendations being met, seconded by Sue W. Scholer.

WAL-MART

WAL- MART

Clifford Norton representing Wal-Mart and George Davidson of Horne Properties presented drainage plans. Michael stated the plans meet the county restriction on the limited release rate. Michael pointed out at the last meeting Mr. Long was present and brought up the fact of emergency routing for drainage which is a problem in this area, and at that time Michael stated he had Christopher Burke Engineering LTD looking at the Wilson Branch from Ross Road where the Simon improvement would end with the 100 year design flow in the channel. He had him look all the way up through Treece Meadows on what design would be required or Channel section would be required to get from Ross Road up to Treece Meadows. Michael has received the report this morning. Basically what he says in his report is to properly move the 100 year storm event from the north end of Treece Meadows or where open channel turns and goes back west through the Subdivision, looking at approximately 40 foot bottom width on the channel and 2-1 side slopes from there down to the Wilson Branch in some fashion. They have had some preliminary locations for the channel so he would have some idea for lengths to work with as far as grades to get the water down there, basically at this time to pass the 100 year storm event is to provide a 40 foot bottom width channel with 2-1 side slopes down to the Wilson Branch, then continue down the Wilson Branch taking out the trees and re-grading the bottom and side slopes down to Ross Road in order to get the water to the regional detention facility that will be constructed. Michael stated this is a starting point as there are allot of alternatives that can be put in there. This is basically what Channel section they are looking at. The crossings of Creasey Lane and McCarty Lane will need bridge openings of approximately 600 square foot openings to pass the 100 year storm event. Bruce asked if this was visible? Mr. Norton stated anything is visible. Bruce asked if this was to go in during the other construction? Michael answered it would take a petition for re-construction of the Wilson Branch of the Elliott ditch. Michael feels that we are at the point now where a petition is needed from the watershed area. More study is needed. While the land is open is the time to get something started. Cost estimates and plans will have to be put together. Michael can not put a time element on it, the area is hot enough for development and something needs to be done. Discussion of petition.

WAL-MART CONTINUED
JANUARY 3, 1990 DRAINAGE BOARD MEETING

Mr. Davidson stated that Wal-Mart has no problem at all to work with the rest of the watershed and are willing to pay their fair share of the assessment.

Tom McCully representing Long Tree Limited went over what Long Tree Limited went through when they were developing Burberry Subdivision. The problem is at the South end at Treece drain and Wilson Branch, pipe put in 1978 creates constriction of everything upstream from there. Discussion of Cost in 1978, and the over all problem of the area. At that time the owners agreed to put an assessment based upon the cost, which amounted to approximately \$1,000.00 per acre. Today's presentation does try to address the problem all the way from the north end of Treece down to the Wilson Branch on down to the Elliott ditch. Tom stressed that if we don't look at an over all picture we are not going to get anything accomplished. What has to be done is as property is developed everybody agrees to participate to get the problem corrected. At this time we have an open ditch going into a 24" pipe. Discussion continued.

Tom McCully stated that probably this should be an Urban drain not a rural drain. Convert to Urban drain and reconstruct. Long Tree Limited is willing to cooperate. Again he stressed that everybody is going to have to be in agreement that the problem needs corrected and go from there. The longer this goes the more expense it is going to be. Discussion continued.

Michael stated that in the interim there is a plan that could be done temporarily to get the emergency routing out of the Subdivision. This is going to take cooperation from the people involved.

Bruce asked Mr. Norton if they are going to be asking for road cuts on Creasey, answer yes, they have two entrance, and one on Highway 26.

Mr. Hoffman stated Wal-Mart will have to have some type of document stating they will participate in and pay their fair share of the cost of the improvement, and maintain what else they will be putting in there, if they don't the county will have the right to go in and maintain, then assess them for the cost.

Sue Scholer suggested that Michael call a meeting with all property owners involved in the development.

Michael stated that Burke Engineering brought to his attention that this could be a lengthy project, but in the mean time the board should look at a temporary diversion swale, not a major structure. Mr. Hoffman asked if there was a place for it and Michael replied it can be done, however it will not be easy. Michael stated this would be everybody north of Treece Meadows who wants to develop. Michael wanted more time to think. Mr. Sooby was concerned about property owner saying let the other guy do it.

Mr. Davidson asked Michael if he was satisfied with their drainage analysis, answer - yes.

Mr. Norton stated there are two ways that Wal-Mart can go. He asked if the board could give approval subject to meeting the qualifications to avoid another meeting or bring up all the criteria that they need to submit and have another meeting.

Sue W. Scholer stated that the board would be requiring all the essential things stated and final approval passed would be subject to all things presented to Michael and approved by the attorney and the City of Lafayette. Sue stated possibly the board should make a requirement as Wal-Mart goes through the process of their development some of the other things needed will be based on getting a meeting and something temporary with all people involved who are developing in that area.

Mr. Davidson again stated they would agree in participating in what ever effort is made out in that area. They would like to leave the meeting this morning with some idea of construction cost so they can build their budget. He stated they could have a letter back to Michael tomorrow committing to the things the board is trying to accomplish.

Michael Spencer and Don Sooby will work together to come up with satisfactory proposals. Don stated that lionslyng share of the burden may fall on Wal-Mart to do something temporary, as no body wants to do anything until their development is ready to move. Wal-Mart wants to move ahead with their development and if the interim facilities are necessary for this to get board approval, but not the total cost is going to fall on Wal-Mart. Discussion continued.

Michael asked if a credit could be given back to Wal-Mart at a later date of what they would put in on the interim? Mr. Sooby stated that the interim facility is not going to contribute much toward the long term, it really isn't a down payment on the ultimate facilities.

Mr. Davidson asked how will the development fully affect the Treece Meadows. Michael answered hopefully up to a 100 year storm event by calculations it should reduce the downstream affect, its above the 100 year storm event that is of concern. Currently there is 80 cfs coming off for a 10 year storm. Discussion continued.

Sue W. Scholer asked what needs to be done to get the total process going?

Mr. Hoffman stated if Michael feels there is a need for reconstruction as an Urban drain Michael should report that to the Board and then the process can start for making it an Urban drain for reconstruction. That's on the long term. A Petition is not needed all that is necessary is a letter from Michael Spencer surveyor stating that it needs to be an Urban drain and it can be done as an Urban drain. Statement should state that if it is reconstructed as an Urban drain it will drain the area properly. Michael should present a letter to the Board.

Mr. Hoffman agreed with Mr. Sooby's statement that Wal-Mart is going to have to pay most of the cost of the temporary facility as the other property owners can say they are not ready to develop and we don't see the need for this until we develop. Discussion continued.

Items needed from Wal-Mart are: Letter of Commitment for Maintenance of the drain facilities that they build. In the letter a commitment for participation in the original program and that Wal-Mart pay their fair share of reconstruction and if they do not maintain the drainage on their property the county would have a right to come in and do the maintenance and make assessment for the cost. Mr. Hoffman wanted this to be in a recordable fashion so it will run with the land.

The Wal-Mart was asked to come back Tuesday January 9, 1990 at 9:30 A.M. for re-convened session. Due to not having a quorum of Board Members the January 9 meeting was postponed until Wednesday January 17, 1990 at 9:00 A.M..

STATE ROAD

STATE ROAD 38 PROJECT AGREEMENT

38 PROJECT AGREEMENT

Agreement with the State on Hwy 38 the detention pond and drainage. The County will receive \$50,000.00 if it is installed prior to the time the State goes to work on the 38 Project, if the County does not have it installed the County does not get the \$50,000.00 and the State puts it in. This is based on when the work starts. Discussion.

Fred stated that he and Michael had reviewed the agreement and it meets the standards. This goes along with the meeting held October 1988 on the Highway 38 Project. Agreement is on file.

Bruce V. Osborn moved to accept the agreement of State Highway 38 and the water problems, seconded by Sue W. Schuler, unanimous approval.

ORCHARD

ORCHARD PARK

PARK

Michael Spencer Surveyor, presented Fee Proposal prices to provide field survey for the Orchard Park Legal Ditch Project. Earlier two different companies had presented prices for doing surveying work for the project. There was quite a bit of difference in the prices submitted so a more defined scope of work was presented to different companies and Michael has received the following submittals.

Todd Frauhiger read the Companies and their figures this is for the entire watershed area. This would include aerial mapping, contour map for the watershed, all existing pipes within the water shed, their reaches and sizes, inverts, the ravine system all the way down to the Wildcat creek.

Ticen Shulte and Associates	\$31,900.00
John E. Fisher	\$22,372.00
MTA	\$21,680.00
Vester's and Associates	\$24,990.00

The services that were included are:

Aerial Control Survey. Vertical and Horizontal survey to provide control for aerial mapping will be provided.

Establish Baselines. Baselines will be established, referenced, and tied to the horizontal mapping control. These base lines will follow, as closely as possible, the flow lines of the defined ravines.

Investigation of Existing Storm Sewer Facilities. Existing storm sewers and culverts within the watershed will be located, identified and surveyed for length and elevation. This information will be provided in the form of survey field notes. Aerial Mapping of the ravine will be provided, scribed on mylar. Contours will be at one foot intervals, scale will be 1"=100' or as other wise specified. Baselines will be superimposed on the mapping.

THE ITEMS READ ARE NEEDED FOR THE ENTIRE WATERSHED

Descriptions of Easements. Descriptions of proposed easements from each land owner involved will be provided. Easements will most likely be described as a horizontal distance beyond a specified elevation on the bank of the ravine.

Todd stated the quicker the surveyors could get started the better they could get a proper survey, each would like to get to it as soon as possible and no later than February as leaves will be starting and they can not get a true picture. One of the figures presented is only good through February. After that date it may increase the aerial photography figure. If it is delayed longer it could be late 1990 before work could be completed.

Time is needed to go through the presentations, Michael will come back at the next meeting with findings.

Meeting recessed until Tuesday January 9, 1990, January 9, 1990 meeting was re-scheduled for Wednesday January 17, 1990.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING, WEDNESDAY, April 4, 1990

The Tippecanoe County Drainage Board met Wednesday, April 4, 1990 in the meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Sue W. Scholer, Chairman called the meeting to order at 9:00 A.M. with the following being present: Eugene R. Moore and Bruce V. Osborn, Board members; Michael J. Spencer, Surveyor; Todd Frauhiger, Drainage Consultant; J. Frederick Hoffman, Drainage Attorney; and Maralyn D. Turner, Executive Secretary. Others present are on file.

STOP & RUSH CONVENIENCE

✓
STOP AND
RUSH
CONVENIENCE

Pat Cunningham was not present for any presentation.

Michael Spencer asked Mr. Hoffman if he had anything in regards to the easement. Mr. Hoffman stated he had given Mr. Cunningham the papers for easements last week. Michael stated he had not heard anything from Pat Cunningham in regards to the revised plan as far as the storage volume. This was tabled until Michael hears from Mr. Cunningham.

WESTON WOODS

✓
WESTON WOODS

Michael Spencer stated he had received a phone call this morning asking to withdraw from today's agenda. Michael had met with Mr. Coutts and requested several things to be done before presentation to the Board.

QUAIL RIDGE SUBDIVISION

✓
QUAIL
RIDGE

Michael stated they had come before the Board late last year, Michael had asked them to get together with the Homeowners Association for Quail Ridge to approve the encroachment and the Lot owner whose lot this happen to be on. This has been accomplished as an Encroachment agreement has been received for a structure located on Lot 41.

Mr. Hoffman has reviewed the agreement and he agrees with it, the only question he had was that the encroachment was not too great. Michael stated the tile is not under the structure; therefore it is acceptable.

Bruce V. Osborn moved to accept the Quail Ridge Encroachment agreement as submitted, seconded by Eugene R. Moore, unanimous approval.

DRAINAGE ORDINANCE

✓
DRAINAGE
ORDINANCE

Michael stated at last meeting it was discussed about notifying downstream land owners of developments upstream that may be effected by the drainage flows. Mr. Hoffman has written up a section that can be included and added as subsection (t) to Section 14 of the Drainage Ordinance.

It would require a written notice to the downstream property owner by the developer of the water flow and change in the watershed, and how it may effect the drainage on their property, also invite them to the Drainage Board meeting when the development is going to be heard. This doesn't mean the developer has to meet with all the property owners, but just make those people aware of the change in the watershed area. Suggested Addition reads:

"Where the outfall from the Storm Water Drainage System of any Developer flows through real estate owned by others then the Developer prior to reaching a regulated drain or natural waterway, no approval shall be granted for such Storm Water Drainage System until all owners of real estate crossed by such outfall, either consent in writing to such use of their real estate or are notified of such proposal at least five (5) days prior to, and the time and place of, a hearing thereon personally or by certified mail at least five (5) days prior to the hearing thereon and proof of such notice to each landowner is filed with the Drainage Board prior to such hearing.

Where the Drainage Board deems it appropriate, it may require the Developer to obtain easements from the owners of real estate crossed by such outfall permitting such use of their real estate."

Bruce Osborn stated he was getting technical and asked how is the proposed developer to contact the downstream? Mr. Hoffman stated with their consent in writing or give them a written notice by Certified letter, and bring proof of affidavit.

Discussion - Notification and wording to be added after hearing paragraph I. The wording to be added-which proof shall be by affidavit.

Eugene R. Moore moved to accept the Ordinance to be added as subsection (t) to Section 14 of the Drainage Ordinance with Mr. Hoffmans correction to paragraph I, seconded by Bruce V. Osborn, unanimous approval.

C. R. 350 SOUTH

✓
C.R.350 S

Stewart W. Kline of Stewart Kline and Associates, Inc. presented Conceptual Drainage Plan for C.R. 350 South.

Mr. Kline stated they had been asked by the Highway Engineer's Office and the County Surveyor to prepare a "Conceptual Drainage Plan" for the entire C.R. 350 South project. Area is from US 231 to US 52.

Highway Engineer Steve Murray assisted with presentation.

The are concentrating on the first Phase at this time which is coming up for right-of-way acquisition.

Mr. Kline presented drawings of Phase I Part I, Phase I Part II, and Phase II would be tributary drainage areas delineated. He pointed out the right of ways and the major pipe structures that they plan along the road and the off site coming into the pipes. They will be reconstructing the J N Kirkpatrick ditch from old C. R. 50 approximately 2,000 feet of reconstruction of ditch installation and new pipe culvert structure under new 350 South.

Phase I Part II will have two major off site drainage systems, the first being at the Valley Forge development as they are going to develop a drainage system and upgrade the J N Kirkpatrick they are directed to use that as an outlet path. The other would be to construct a new drainage system down to the existing J N Kirkpatrick ditch. They will be getting acquisitions from property owners Daugherty farms and Dexter property. The area is between 18th Street and Concord.

Michael stated that the road is so low in that area and it made sense to go south with it instead of making the side ditches so deep, it is in the same watershed area it just gets there in a different way.

Mr. Kline stated that they would also be going down 9th and 18th Street. All this is overland flow.

Eugene Moore asked if they can drain 350 and Concord Road corner? Discussion.
Structure 10

Bruce V. Osborn asked if that was going to be an easement?

Mr. Kline stated being a Federal Aid acquisition the roadway right of way is set up to be a simple acquisition, the ditch will probably be a drainage easement acquisition.

Mr. Osborn asked who is going to maintain it? Answer-The County. County will have a legal drain. Steve Murray Highway Engineer stated this would be the best way otherwise the Highway Department would have to maintain it. It is necessary to provide drainage for the road therefore they would be allowed to by statue to work on it off the right of way. Discussion.

Mr. Kline stated that 75% of the water that is in the system is off site water.

Mr. Murray stated the section across U S 52 to Highway 38 is flat and there isn't any adequate size legal drains in the area with no place to take the water. A good alternative that they have is to do some off site ditching work to get over to the railroad tracks and Elliott ditch.
Discussion.

Mr. Kline continued presentation.

Michael Spencer asked what the red and yellow areas were at the corner of 9th Street and 350 South? Answer-they are break points. Michael asked if all the water would come to the right of way to that area with the new Subdivision coming in? Answer-Mr. Kline is assuming at this time they will push it in the same direction as they are now, if they would develop and pull it back it would cause a problem, this would cause the control structure to become meaningless as there is nothing going to it, you lose the overflow so you don't have the flow to create storage. The thought was to catch it where they can to make it simple, there are a couple of exceptions explanation continued.

Single point storage is; they are looking at reconstructed section of J N Kirkpatrick ditch, they will rebuild and deepen it allow the use of box culvert and better flow condition. The Federal Highway has already given their approval it is in the hands of the Department of Natural Resources. It is cost effective to reconstruct this section of ditch deepening it rather than building a 100 foot long bridge structure with only 3 feet of depth.

There will be a drop structure at old C R 50 - Station 79 (this is the start of the new ditch) running down to Station 89 about 1,000 feet to another drop structure. They are wanting to pick up the existing tile and bring it into the ditch running on a 50% fall trying to keep the velocities manageable. At this time they do not have soil test complete to know what kind of share values to use. The existing channel is way too steep and very erosive.
Explanation of the box structure continued.

Bruce V. Osborn asked if right of way to be obtained how wide will it be? Steve Murray stated it varies from spot to spot depending on how deep of cut you have to put in to get the ditches through. Thinking 60' half width, total 120'.
Concord-52, that is an existing 60' or 80'. The actual pavement section will be more like the 200 South Phase I.

This Conceptual presentation is on file. Steve stated this being Conceptual at this point they will generate the necessary numbers etc. and submit back to the Board, Michael has been involved as they have worked on the it conceptually so that everybody's view point is in it and it appears to be the best way to come up with final submission to the Drainage Board.

Michael stated he is comfortable with the Conceptual Plan.

OTTERBEIN/MCFARLAND DITCH CONTINUED

Melvin J. Hasser a property owner at US 52 and 800 West (Shelby Township). The Otterbein and McFarland ditch crosses his property and join inside his boundaries. He asked who he should contact in regards to putting a culvert across the Otterbein ditch so he could drive from one side of his property to the other with out going down the highway and 800 West. Michael stated he would talk with him after the meeting.

CONTRACT- ATTORNEY

CONTRACT
ATTORNEY

Mr. Hoffman presented a proposed contract agreement with "The Board". Basic annual salary shall be (\$5,000.00) due and payable by the County in monthly proration on proper claims and allowances.

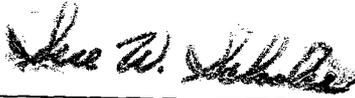
Bruce V. Osborn moved to accept the contract for the Drainage Board Attorney and the Tippecanoe County Drainage Board, seconded by Eugene R. Moore, unanimous approval.

ENGINEERING BUDGET

ENGINEERING
BUDGET

Michael stated that the Board needs to go before the Council to ask for additional appropriation for the Engineering budget as the Board only has \$79.66 as a balance. The Board had requested \$10,000.00 at Budget time, but the Council only allowed \$8,000.00. Michael suggested \$8,000.00 additional appropriation be asked for. Bruce V. Osborn moved to have the Chairman of the Board present the proper forms to ask for additional appropriation for the Consulting Engineer fee, seconded by Eugene R. Moore, unanimous approval.

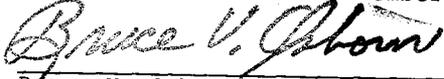
There being no further business to come before the Board. Eugene R. Moore moved to adjourn, seconded by Bruce V. Osborn. The meeting adjourned at 9:45 A.M.



Sue W. Scholer, Chairman



Eugene R. Moore, Board Member



Bruce V. Osborn, Board Member

ATTEST:



Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING, WEDNESDAY, JANUARY 9, 1991

The Tippecanoe County Drainage Board met Wednesday, January 9, 1991 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Nola Gentry calling the meeting to order for the re-organization of the board, therefore she invited J. Frederick Hoffman drainage attorney to preside

Those present were: Keith E. McMillin, Hubert D. Yount, Board Members; Michael J. Spencer, Surveyor; Ilene Dailey Consultant Drainage Engineer; J. Frederick Hoffman Drainage Board Attorney; Don Sooby, City Engineer; and Maralyn D. Turner Executive Secretary.

Mr. Hoffman asked for nominations from the floor for board chairman. Keith McMillin nominated Nola J. Gentry as chairman, seconded by Hubert Yount, there being no other nominations from the floor Nola J. Gentry was unanimously elected chairman of the board.

Mr. Hoffman turned the meeting over to Ms. Gentry to conduct the remainder of the meeting.

Ms. Gentry asked for nominations from the floor for vice-chairman of the board. Keith McMillin nominated Hubert Yount as vice-chairman, seconded by Nola J. Gentry, there being no further nominations from the floor, Hubert D. Yount was unanimously elected vice-chairman of the board.

Ms. Gentry asked for nominations from the floor for Executive Secretary, Keith McMillin nominated Maralyn D. Turner as executive secretary, seconded by Hubert D. Yount, there being no further nominations from the floor Maralyn D. Turner was unanimously elected executive secretary.

Mr. Hoffman read the following ditches to be made active for the year 1991 J. A. Kuhns, Ray Skinner, Gustav Swanson, and Shawnee Creek. A letter from White County Surveyor was read to collect maintenance assessments on the Emmet Rayman ditch for 1991. Keith E. McMillin moved to make these ditches active for assessment in the year 1991, seconded by Hubert D. Yount, unanimously approved.

(See bottom of page for active and inactive ditches.)

ROAD 350 SOUTH

Stewart Kline of Kline and Associates presented final drainage plans for the project Road 350 South. A preliminary plan had previously been presented and a conceptual approval had been granted.

At this time they are developing plans for three separate projects along County Road 350 South as follows: Phase I Part I Cr 350 South from US 231 to CR 100 E. (9th Street) Phase II Part II CR 350S from CR100 E to 250 E (Concord Road) Project II CR 350 S from CR 250 E to approximately 0.3 miles west of US 52. All three projects fall in the Kirkpatrick ditch watershed except for a small section at the western terminus which outlets along US 231 and eventually into Wea Creek. The existing conditions for drainage are poor. Mr. Kline continued presentation which is on file. What they propose to do with the three projects is to use some road side channels and clean up allot of the existing problems. They have broken down three major off-site locations. Presentation continued on the new off-site surface flow channel.

Structure # 1 will be providing storage on the north side of new County Road 350 South and outletting into the Wea Watershed.

Second point of discharge is at the Kirkpatrick ditch itself where a new box culvert will be installed and channel improvements for downstream, at that point they will be opening up the existing tile. The channel will be deepened going with the box culvert sections allowing the existing pipe to be opened into the open flow channel, run down and spill eventually into the extension of Elliott ditch. This will allow them to bring more water more efficiently. This makes for a more economically feasible structure. At this time the bridge would be extremely long and very shallow because it is more of swale by defining the channel and dropping the depth will be able to cross in a much shorter distance.

County Road 100 East they are basically discharging down 100 east the existing path that flows down and back into the Kirkpatrick open ditch and tile system. Detention will be provided at this point to try to minimize any affects there.

The fourth at Station 135+94 line "A" where water will be routed through the proposed Valley Forge Subdivision storm water sewer system which eventually outfalls into the Kirkpatrick. They have coordinated with Dale Kuhns with Valley Forge, they are accepting the off-site water into their storm sewer system.

The fifth is at CR 150 E running down the existing side ditches again providing storage.

The last is a new overland ditch at Station 185+40 line "A" which runs south to the northernmost branch of the Kirkpatrick surface flow. This will provide detention ahead that and bring the channel out to match the existing surface flow which is very shallow and almost a sheet flow condition.

Detention is provided at several location. Presentation continued.

The two major points of detention are east of the Conrail Railroad at that point they will be holding the water before it ever crosses, catching the water that sheet flows to the south to the Kirkpatrick ditching it and doing major detention at the point holding both north and south prior to reaching CR 150.

Mr. Kline stated all in all it is an improvement of a very poor situation up and down the line. By holding at the top of the shed they eliminate problems from all the way down the watershed. Mr. Kline asked if there were any questions.

Hubert Yount asked at Valley Forge going into the storm sewer, what is the capacity realization for the future as it is developed, are you in good condition there so we won't have any problems the back up in Valley Forge? Mr. Kline stated as Valley Forge develops the storm water going into the County system should decrease because they are designing for existing flow conditions. As developers come in there they are going to have to meet drainage ordinance and hold back the 10 year pre-developed, so they are assuming that their peak that we are giving to Mr. Kuhns now is the maximum. Mr. Yount stated then we are still going to be in a safe condition when the developers come in. Mr. Kline stated as the developers come in we will actually have excess capacity.

Michael Spencer, surveyor asked what they were going to do in the mean time before the development takes place over on Valley Forge? If there system is not in place how is yours going to work? Mr. Kline answered if it comes to a point where Valley Forge is not going to be in place prior to our development we will have to go on down to 150 and take it south.

Nola Gentry asked then there is capacity at 150? Mr. Kline stated they would have to rebuild the ditch, but that is the existing path and will be reduced. It would mean greater construction expenses, which they are trying to avoid. One of the big problems in the shed is that there is not enough fall. To get the water down to the Kirkpatrick, they would have to take the larger volume of the water that they were going to route throughout Valley Forge they would have to do considerable ditch work to get it there.

Mr. Hoffman asked how much additional distance would you have? Mr. Kline asked to go around Valley Forge? Yes, at least a half of a mile.

Hubert Yount stated they would have to do some reconstruction on those existing ditches down there. Mr. Kline stated right, they would have extend Project I. Hubert asked if they had enough right of way to do that? Mr. Kline asked down 150? Yes, under the present plans the answer is no. It is assumed that the present plans is that the Valley Forge development occurs prior to our development. Hubert stated if it does not, then we will have to acquire the right of way to do that. Mr. Kline stated we will have to acquire right of way, this is 100 E (South Ninth).

Michael stated comes back west along the south side of 350 South, then south along the east side of Ninth Street. If they plat subdivision they would have to grant that additional right of way which is not platted today, therefore we do not have it. Stewart Kline stated we do not have the right of way to build the ditch if they don't build, then we don't have their storm sewer system in place. Hubert stated then we are ahead of them if we acquire right of way on South Ninth Street prior to that platting. Mr. Kline stated this is right.

Steve Murray Highway Engineer, stated he does not anticipate that being a major problem in that we have met with the developer and supplied him with information. He has been cooperative. The half width right of way dedication for that side of South Ninth Street, 50 or 60 feet based on the thoroughfare plan. He thinks if the worse case develops here where Valley Forge did not have or was not ready to put their storm improvements in at the time we go to construction that the developer would be willing to grant us the extra right of way knowing full well that when he plats he has to give that right of way up. We would use that primarily as a temporary solution to drain the water from this small portion of 350 South, south along South Ninth along the east side of the road down to the Kirkpatrick. Basically that is just a back up solution, and rather than to go into it without a back up we feel we have ourselves covered from both sides.

Hubert asked what does that do to our road construction?

Steve asked as far as the 350 South job? Yes. Steve - Nothing substantial. Hubert - How about on Ninth Street? Steve - It should not affect that either. Hubert, but you are ultimately going to have to widen there? Steve - Eventually, yes they are hoping to. There is going to be a need for it in a very few short years.

Nola J. Gentry asked if there were any questions or comments from those present.

Ed Purdy property owner on Road 231 South. His family farm is on the south end of the drainage system. He is very concerned about removing the existing tile, it is functional and performs adequately for the agricultural commitment that it was initially built for. He realizes that with the development upstream there probably is a need for a better drainage system. He would like for the system not to be opened if anything improving the size of tile. The area that it runs through is real rough ground and he feels if it is opened there will be allot of erosion in that area. The sub base is sand & gravel and he thinks that all of us know it would be difficult to maintain slopes on a ditch with a base of sand and gravel. What is there now is the existing system, the excess water runs over the surface and there appears to be no erosion. He stated since the board (Commissioners) are new, he would like for them to come out to the site and look over the area and see what is being talked about and presented. He thinks to do some of these things at this time the way they are proposing to do they are short sided for the future for the whole system. If the board would come out he would be more than happy to show them the area.

Michael asked Ed if he was talking about the part of the ditch at the Kirkpatrick north of the proposed Road 350 South. Steve stated basically where the tile is going to be taken out and replace it with an open channel. Ed stated he is not familiar with the other thing they are talking about on US 231 where your talking about some other detention area, this is new to him. Steve stated it is the water that is going to be stored in the ditches, the controlled structure will be a cross pipe under 350. Ed pointed out the area he was talking about is a habitat for wildlife. Tearing that out the wildlife is going to be disturbed. Discussion continued.

Fred Hoffman asked how long of a stretch are you talking about? Mr. Kline 800-900 feet. Mr. Hoffman asked how big is the pipe? Michael stated the existing pipe is approximately 27-30 inch. Nola asked if it would hold or would it have to be open for this to work. Michael stated they are not going to be allowed to put the road water into the tile. It drains overland today, after construction release rate is acceptable it could drain the same way today. Mr. Purdy stated what you have is the tile in there now is performing, there is no surface drainage. Mr. Purdy hates for them to jerk that tile out and always have surface drainage there, if the tile is left in and if the

system was regraded and cut back and smoothed out, then maybe you could take care of the run off easier. It is simply not a problem to his farm as it is today. Today there is no problem, if you tear it out it is going to be a continuous flow of water. There is flow in the tile at all times, if you remove it there will surely be continuous flow in the ditch.

Mr. Hoffman asked how deep is the tile from the surface? Mr. Purdy stated he did not know, he feels it is quite deep because the elevation of the banks is probably 25 feet. Discussion continued.

Mr. Purdy stressed again he is requesting the board to see the project before they grant approval to the proposed drainage plans.

Mr. Hoffman asked how deep were they going to have the water in the side ditches where they are going to have storage? Stewart Kline - 4 feet or less in compliance with the ordinance. Discussion continued.

Nola asked if we had a major storm what would be the depth in the side ditches on storage? Steve Murray stated this can't really be answered without computer calculations. Mr. Hoffman asked how long is it going to be before it drains out and will it create a traffic hazard? Answer - In a matter of hours, and no hazard to traffic as it is in the side ditches. Discussion continued.

Jack Coffman property owner of Fairfield Contractors 3310 Concord Road. Property is at NE corner of 350 and Concord Road. He recommended that the board not give approval to the proposed drainage plans submitted until they have a chance to review the affect on their property of this design.

Nola asked if there were any other comments on this project.

Steve Murray stated an over all comment of this project is that it takes up a very large area an improvement that the county highway department has been working on for quite some time, do to the SIA plant being put into Tippecanoe County. It has gone through the normal channels. Basically according to the drainage boards consultant it meets the drainage codes. He realizes that Ed Purdy has some concerns and he certainly has no problem delaying judgement on this for another month if the board would like to come out and become more familiar with the project and what is actually going to happen. He did point out that we have had conceptual approval, as stated the drainage board consultant has reviewed the calculations and documentation with some additional information to be supplied to them they do recommend conditional approval. Back to the out fall to the Kirkpatrick and removing a portion of the tile. The primary reason that was done was what Stu had mentioned to begin with, if we would try to put a bridge in there or a battery culverts, we would have a long very expensive part to maintain bridge structure, so at that time they took a look at putting in concrete box structures to keep the cost down, plus maintenance cost down for the future and looking at it they found out that from the hydraulics by taking that portion of the tile out it would actually cause the rest of the tile up stream to function better. Again we would have no objection to delaying this for a month. Delaying he feels will not affect the development of the project.

Hubert D. Yount moved to table the action on the Road 350 South project until next meeting so the board can go out to the project and give Mr. Coffman of Fairfield Contractors a chance to review the plans, seconded by Keith E. McMillin, unanimous approval.

MCCARTY LANE

Nola J. Gentry stated that McCarty Lane was not an agenda item, but that some of the preliminary drainage report is ready for the McCarty Lane. We will listen to the report, but no action will be taken today.

Stewart Kline presented the preliminary drainage plans. Presentation was given in the July 11, 1990 meeting and at that time conceptual approval to McCarty Lane drainage plan and LUR as presented for the over all regional detention plans.

Stewart Kline stated this is an interesting drainage problem with the existing Kepner ditch being overwhelmed.

They will be coming with a four lane urbanized roadway section.

Again he stated the solution is to build a regional detention facility which will be built in three phases that have already been presented. Phase I is to be built by the City. Phase II LUR. Phase III Caterpillar Tractor Inc.

It uses property currently owned by LUR and Caterpillar Tractor to detain the already existing problem. Presentation continued and is on file. Discussion continued.

Phase III will be built as they develop. Caterpillar is retaining the rights to enlarge the Phase I pond to meet their development needs. Hubert asked if this would occur as they developed. Answer - yes.

Nola Gentry asked how wide is Phase I? Mike Peterson stated about 100 feet. Hubert asked how deep? Mike Peterson stated the maximum depth in the whole basin is 8 feet, and a 7 foot chain length fence is around Phase II. Mr. Hoffman stated there would be a fence because of the requirement to the ordinance. Hubert asked how much water would it hold. Mike Peterson stated there is 18 acre feet in Phase I, 16 acres feet Phase II, and 26 acre feet in Phase III. Hubert asked if they are talking about carrying water in that at all times. Mike Peterson stated there will be a flow of water because of the Layden ditch to the north which brings water across from McCarty Lane down through the system. It is not actually a wet bottom pond, it is a ditch that will be used to detain.

Stewart Kline stated the city will have ownership of the entire property Phase I, Phase II, and Phase III properties. LUR will install the maintenance road in the Phase II pond and fence in that section. City will install the fence, the ultimate ownership and maintenance will be the city for the entire project.

Nola J. Gentry asked if there were some down stream problems that this is going to create? Michael Spencer stated this should help down stream property because they are making a regional facility. Currently there are some flooding problems along McCarty Lane. The pipe going into the Wilson branch is not going to change from what it is today as a certain capacity. Nola asked, then this would be a controlled. Michael stated it will be controlled by the existing pipes. Mr. Hoffman asked if this storage was going to help on the storage that is needed on the Wal-Mart project and on the Wilson (below)? Is it going to assist in our need there for the whole Elliott ditch system storage. Michael stated it will help, it is not connected with the Wal-Mart other than they both drain to the Wilson branch. They are not going to take water away from one and the other. The Caterpillar area when it is developed it will come south instead of going east. Technically it is going to help, it is not going to create any additional problems. Mr. Hoffman asked if this storage will help on the storage problem at Elliott ditch that has been talked about at Ivy Tech? Michael stated at this time it won't make a difference.

Hubert asked how big of pipe is it that is coming out of there going to Wilson ditch?
Answer - 48 inch.

Stewart Kline stated at this time the outfall will be reduced. The pipe that outfalls to the Wilson is capable of discharging 108 cfs. What happens now that there is like road way flooding on surface. Water isn't taken into the tile and spills out over land and kind of floods the properties along Creasey and gets into the Wilson. This is an additional 100 cfs plus the will be integrated into the system and stopped. Won't have that surface flow condition that you have now, everything will be held and the release will be held to the capacity of the existing tile. It will still be the 48 inch pipe with 108 cfs. They will eliminate the run around that happens now where all the surface flow seeps and eventually gets down to the Wilson, that will all be trapped by the LUR development and the roadway. This will bring it into the pond and still hold the water way to the 108 cfs, this should be improved with the downstream.

Michael Spencer stated when Caterpillar develops it will be rerouted and the water will come south instead of going east into Treece.

Mr. Hoffmans asked if this required Core of Engineer approval. Answer - No.

Don Sooby, City Engineer stated this is the project the City has been working quite some time. They are getting close to right of way acquisition and hope to complete getting those by the end of 1991. Hopefully in 1992 get the project program for Federal funds for construction work to begin. They have worked with Caterpillar and LUR in developing this regional detention pond to the benefit of the whole drainage area. On behalf of the city he encourage the drainage board approval at the earliest opportunity on this project.

Stewart Kline stated the project has been reviewed the county drainage consultant. The pond itself and the watershed analysis and there is no problem with the water construction capacity. The consultant is wanting at this point is that this being a fairly large shed and the master model that is being developed by Burke and Associates for the Elliott system. They want to be able to bring this into their master model since it is significant.

Ilene Dailey, drainage consultant stated that would help answer some of the questions in regards of what affect this would have on other basins. Stewart Kline stated it will increase the accuracy of the model we are looking at a 2 hour storm event and they are looking at a 24 hour storm event. That controls for the Elliott as a whole, but does not control for us, so what we have to do to provide for them or work with them in some manner in updating their report as to convert this model to the 24 for the master. He thinks as far as the design for this, there is a consensus that this is where it stands, and this is what is good for the Kepner ditch watershed.

Hubert Yount asked at Navco and Farbee problem does it all go into this watershed? Yes.

Discussion and presentation continued.

Jim Shook representing LUR recommended approval at the right time.

Michael stated this project will be on the agenda of the February, 1991 meeting.

Mr. Hoffman asked if notices had been mailed to property owners? Per Kline notices had been sent stating this would be presented at todays meeting, but no action would be taken, copies of these letters are in the file.

Michael stated that basically the same pipes are being used that are there now, not changing, and there is no assessments.

WETLANDS - 1990 USDA

Michael Spencer presented copies of information on Wetlands - 1990 USDA. Discussion of Wetlands. Michael asked Mr. Hoffman how this affects the drainage board in regards to Maintenance and Reconstruction. Mr. Hoffman will check into this and brush burning. He has written legislatures in regards to brush burning, and he will check on Michaels concern in regards to the reconstruction schedules. Mr. Hoffman stated we all should write our legislatures in regards to these two subjects. He will make a report to the board as soon as he has an answer.

There being no further business, Hubert Yount moved to adjourn the meeting at 10:05 A.M.

Nola J. Gentry
Nola J. Gentry, Chairman

Keith E. McMillin
Keith E. McMillin, Board Member

Hubert D. Yount
Hubert D. Yount

Attest: Maralyn O. Turner
Maralyn O. Turner, Executive Secretary

ACTIVE AND INACTIVE DITCHES

Mr. Hoffman read the following ditches to be made active for the year 1991 J. A. Kuhns, Ray Skinner, Gustav Swanson, Charles E. Daugherty, John Hoffman and Shawnee Creek. A letter from White County Surveyor was read to collect maintenance assessments on the Emmet Rayman ditch for 1991. Keith E. McMillin moved to make these ditches active for assessment in the year 1991, seconded by Hubert D. Yount, unanimously approved.

The following ditches were made Inactive for the year 1991 John Blickenstaff, O. J. Byers and Beutler/Gosma, Keith E. McMillin moved to make these ditches inactive, seconded by Hubert D. Yount, unanimously approved.

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
FEBRUARY 5, 1992**

The Tippecanoe County Drainage Board met Wednesday, February 5, 1992 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Keith E. McMillin calling the meeting to order.

Those present were: Keith E. McMillin, Chairman, Nola J. Gentry and Hubert Yount, Tippecanoe County Commissioners, Michael J. Spencer, County Surveyor, Ilene Dailey, Chris Burke Consulting Engineers, J. Frederick Hoffman, Drainage Board Attorney, and Dorothy M. Emerson, Executive Secretary Drainage Board.

The first item on the agenda was to approve to the minutes of the meeting for the last Drainage Board meeting on January 8, 1991. Nola Gentry moved to approve the minutes, seconded by Hubert Yount. Unanimously approved.

CARROLL COUNTY JOINT DRAIN

Mike Spencer, County Surveyor stated Keith McMillin and Hubert Yount needed to be appointed to the Carroll County Joint Drain for the Andrew and Mary Thomas Drains.

Nola Gentry motioned to appoint Keith McMillin and Hubert Yount to the Carroll County Joint Drain for the Andrew and Mary Thomas Drains.

Hubert Yount, seconded. Motion carried.

DRAINAGE BOARD ATTORNEY CONTRACT

Mike presented the Board with a contract for the Drainage Board Attorney J. Frederick Hoffman, that needed to be executed for 1992.

Hubert Yount moved to approve the contract between Tippecanoe County Drainage Board and J. Frederick Hoffman as Attorney for said group.

Nola J. Gentry, seconded. Motion carried.

ACTIVE AND INACTIVE DITCHES

Nola Gentry moved to include the active and inactive ditches into the February minutes and mail the appropriate notices to the surrounding counties. Hubert Yount, seconded. Motion carried.

The following is a list of the active and inactive ditch assessment list for 1992.

DRAINAGE BOARD ASSESSMENT LIST				
DITCH No.	DITCH	TOTAL 4 YEAR ASSESSMENT	1991	1992
1	Amstutz, John	\$5,008.00	Inactive	Inactive
2	Anderson, Jesse	\$15,675.52	Active	Active
3	Andrews, E.W.	\$2,566.80	Active	Active
4	Anson, Delphine	\$5,134.56	Active	Active
5	Baker, Dempsey	\$2,374.24	Inactive	Inactive
6	Baker, Newell	\$717.52	Inactive	Inactive
7	Ball, Nellie	\$1,329.12	Inactive	Inactive
8	Berlovitz, Juluis	\$8,537.44	Inactive	Inactive
9	H W Moore Lateral (Benton Co)			Active
10	Binder, Michael	\$4,388.96	Active	Active
11	Blickenstaff, John	\$7,092.80	Inactive	Inactive
12	Box, NW	\$11,650.24	Inactive	Inactive
13	Brown, A P	\$8,094.24	Active	Active
14	Buck Creek (Carroll Co)		Active	Inactive
15	Burkhalter, Alfred	\$5,482.96	Inactive	Active
16	Byers, Orrin	\$5,258.88	Inactive	Inactive
17	Coe, Floyd	\$13,617.84	Inactive	Inactive
18	Coe, Train	\$3,338.56	Active	Inactive
19	Cole, Grant	\$4,113.92	Inactive	Inactive
20	County Farm	\$1,012.00	Active	Active
21	Cripe, Jesse	\$911.28	Inactive	Inactive
22	Daughtery, Charles E.	\$1,883.12	Active	Active
23	Devault, Fannie	\$3,766.80	Inactive	Inactive
25	Dunkin, Marion	\$9,536.08	Inactive	Inactive
26	Darby, Wetherill (Benton Co)		Active	Active
27	Ellis, Thomas	\$1,642.40	Active	Inactive
28	Erwin, Martin V	\$656.72	Inactive	Inactive
29	Fassnacht, Christ	\$2,350.56	Inactive	Inactive
30	Fugate, Elijah	\$3,543.52	Inactive	Inactive
31	Gowen, Issac (White Co)		Inactive	Active
32	Gray, Martin	\$6,015.52	Active	Inactive
33	Grimes, Rebecca	\$3,363.52	Inactive	Inactive
34	Hafner, Fred	\$1,263.44	Active	Active
35	Haywood, E.F.	\$7,348.96	Active	Active
36	Haywood, Thomas	\$2,133.12	Active	Active
37	Harrison, Meadows	\$1,532.56	Inactive	Inactive
39	Inskeep, George	\$3,123.84	Inactive	Inactive
40	Jakes, Lewis	\$5,164.24	Inactive	Inactive
41	Johnson, E. Eugene	\$10,745.28	Inactive	Inactive

41 Johnson, E. Eugene	\$10,745.28	Inactive	Inactive
42 Kellerman, James	\$1,043.52	Active	Inactive
43 Kerschner, Floyd	\$1,844.20	Inactive	Inactive
44 Kirkpatrick, Amanda	\$2,677.36	Inactive	Inactive
45 Kirkpatrick, Frank	\$4,226.80	Active	Inactive
46 Kirkpatrick, James	\$16,637.76	Inactive	Active
47 Kuhns, John A	\$1,226.96	Active	Inactive
48 Lesley, Calvin	\$3,787.76	Inactive	Active
50 McCoy, John	\$2,194.72	Inactive	Inactive
51 McFarland, John	\$7,649.12	Active	Inactive
52 McKinny, Mary	\$4,287.52	Inactive	Inactive
53 Mahin, Wesley	\$3,467.68	Active	Active
54 Marsh, Samuel (Montgomery Co)		Inactive	Inactive
55 Miller, Absalm	\$3,236.00	Inactive	Active
56 Montgomery, Ann	\$4,614.56	Active	Inactive
57 Morin, F.E.	\$1,434.72	Active	Active
58 Motsinger, Hester	\$2,000.00	Active	Active
59 O'Neal, J. Kelly	\$13,848.00	Active	Active
60 Oshier, Aduley	\$1,624.88	Active	Active
61 Parker, Lane	\$2,141.44	Inactive	Active
62 Parlon, James	\$1,649.96	Inactive	Active
63 Peters, Calvin	\$828.00	Inactive	Inactive
64 Rayman, Emmett (White Co)		Active	Active
65 Resor, Franklin	\$3,407.60	Inactive	Active
66 Rettereth, Peter	\$1,120.32	Inactive	Inactive
67 Rickerd, Aurther	\$1,064.80	Inactive	Inactive
68 Ross, Alexander	\$1,791.68	Inactive	Inactive
69 Sheperdson, James	\$1,536.72	Inactive	Inactive
70 Saltzman, John	\$5,740.96	Inactive	Inactive
71 Skinner, Ray	\$2,713.60	Active	Active
72 Smith, Abe	\$1,277.52	Active	Active
73 Southworth, Mary	\$558.08	Active	Active
74 Sterrett, Joseph C	\$478.32	Inactive	Active
75 Stewart, William	\$765.76	Inactive	Active
76 Swanson, Gustav	\$4,965.28	Active	Active
77 Taylor, Alonzo	\$1,466.96	Inactive	Inactive
78 Taylor, Jacob	\$4,616.08	Inactive	Inactive
79 Toohy, John	\$542.40	Inactive	Inactive
81 VanNatta, John	\$1,338.16	Inactive	Inactive
82 Wallace, Harrison B.	\$5,501.76	Inactive	Inactive
83 Walters, Sussana	\$972.24	Inactive	Inactive
84 Walters, William	\$8,361.52	Active	Active
85 Waples, McDill	\$5,478.08	Inactive	Active
86 Wilder, Lena	\$3,365.60	Inactive	Inactive
87 Wilson, Nixon (Fountain Co)		Inactive	Inactive
88 Wilson, J & J	\$736.96	Inactive	Inactive
89 Yeager, Simeon	\$615.36	Active	Active
90 Yoe, Franklin	\$1,605.44	Inactive	Inactive
91 Dickens, Jesse	\$288.00	Inactive	Inactive
92 Jenkins	\$1,689.24	Inactive	Inactive
93 Dismal Creek	\$25,420.16	Active	Active
94 Shawnee Creek	\$6,639.28	Active	Active
95 Buetler/Gosma	\$19,002.24	Inactive	Active
96 Kirkpatrick One	\$6,832.16	Active	Inactive
97 McLaughlin, John	\$0.00	Inactive	Inactive
98 Hoffman, John	\$72,105.03	Active	Active
99 Brum, Sarah (Benton Co)		Active	Active
100 S.W.Elliott	\$227,772.24	Active	Active

DISCUSSION ON TILE BIDS

Mike Spencer presented a tile bid that had been inadvertently returned to the bidder. Fred Hoffman opened the bid.

Mike stated he had received two proposals for Professional Services on the Berlovitz Watershed Study, one from Christopher Burke Engineering and one from Ticen, Schulte and Associates. Mike recommended Christopher Burke Engineering the lowest bidder.

Nola moved to approve the proposal from Christopher Burke Engineering for the Berlovitz Ditch Study. Hubert, seconded. Motion carried.

JOHN HOFFMAN DRAIN

Mike stated to the Board that work will be done on the Hoffman Drain at a cost less than \$25,000.00. Since it was under \$25,000.00 Mike requested quotes be done on the project rather than bids since quotes are faster.

Mike read the proposal into the minutes.

TO WHOM IT MAY CONCERN:

The Tippecanoe County Drainage Board is interested in taking quotes for maintenance work on the John Hoffman Ditch, beginning at the tile outlet which is located along County Road 900 East just north of State Road 26 East.

Work will consist of dredging approximately 1000 feet of channel down stream of the tile outlet, cleaning out road culvert under 900 East. Then clearing trees over and along the tile for some 4000 feet to the east.

After the clearing all tile holes will be fixed and or wide joints patched, then the waterway over the tile will be graded as directed by the Surveyor. When all work is completed all disturbed areas will be seeded.

There will be a pre-quote site visit held at the site on February 19th, 1992 at 9:00 am.

Written quotes will be on a per foot basis for dredging, clearing and grading of waterway.

Tile repair will be on time and material basis. Seeding will be lump sum.

Quotes will be due on March 4th at 11:00 am in the Tippecanoe County Auditors Office.

For further information please contact the Tippecanoe County Surveyor, Mike Spencer at 423-9228.

Discussion followed.

Hubert Yount moved to accept quotes for the John Hoffman Drain. Nola, seconded. Motion carried.

HADLEY LAKE DRAIN

Mike stated that West Lafayette Wetland Delineation Study will be done on February 15. We need to have that before we advertise for the proposals for engineering work.

PINE VIEW FARMS

Roger Kottlowski, Weitzel Engineering and Tom Stafford, Melody Homes presented their drainage plans for Pine View Farms to the Drainage Board.

Discussion followed.

Mike Spencer recommended preliminary approval to the Board.

Nola moved to grant preliminary approval contingent on completion of restrictions and receipt of the recorded easements or agreements.

Hubert Yount, seconded. Motion carried.

Being no further business, Hubert Yount moved to adjourn the Drainage Board meeting. The next regular scheduled meeting will March 4 at 8:30 AM and will reconvene at 11:00 AM for quotes on the John Hoffman Drain.

Keith E. McMillin
Keith E. McMillin, Chairman

Nola J. Gentry
Nola J. Gentry, Member

Hubert D. Yount
Hubert D. Yount, Member

ATTEST: Dorothy M. Emerson
Dorothy M. Emerson, Executive Secretary

Tippecanoe County Drainage Board
Minutes TRANSCRIPT
Regular Meeting
January 6, 1993

The Tippecanoe County Drainage Board met Wednesday, January 6, 1993 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana, with Nola Gentry calling the meeting to order for the re-organization of the Board. She then turned it over to J. Frederick Hoffman, Drainage Board Attorney to preside.

Those present were: Nola J. Gentry, Hubert Yount, Bill Haan, Tippecanoe County Commissioners, Michael J. Spencer, County Surveyor, Ilene Dailey, Christopher Burke Consulting Engineer, J. Frederick Hoffman, Drainage Board Attorney, Hans Peterson, Paul Elling, Project Engineers SEC Donohue, Greg Griffith, Great Lakes Chemical Corporation, Josh Andrews, West Lafayette Development Director, Opal Kuhl, West Lafayette City Engineer, and Shelli Hoffine Drainage Board Executive Secretary.

J. Frederick Hoffman, Drainage Board Attorney asked for nominations from the floor for the Board President. Commissioner Gentry nominated Commissioner Haan for President, seconded by Commissioner Yount. Unanimously approved.

Mr. Hoffman then turned the meeting over to Commissioner Haan to preside over the remainder of the meeting.

Commissioner Haan asked for nominations from the floor for the Board Vice President. Commissioner Haan nominated Commissioner Gentry for Vice President, seconded by Commissioner Yount. Unanimously approved.

Commissioner Haan asked for nominations from the floor for the Board Executive Secretary. Commissioner Gentry nominated Shelli Hoffine for Executive Secretary, seconded by Commissioner Yount. Unanimously approved.

The first item on the agenda was to approve the minutes of the meeting for the Drainage Board meeting on December 2, 1992. Hubert Yount moved to approve the minutes of December 2, 1992, seconded by Commissioner Gentry. Unanimously approved.

Hire the Attorney

Commissioner Gentry moved to appoint J. Frederick Hoffman as Attorney for the Drainage Board, seconded by Commissioner Yount. Motion carried.

Active and Inactive Ditches for 1993

Mr. Hoffman suggested putting the active and inactive ditches in the January minutes. Mr. Hoffman also read them aloud to the Board.

ACTIVE DITCHES

<u>Number</u>	<u>Names</u>
2	Anderson, Jesse
3	Andrews, E.W.
4	Anson, Delphine
9	See #103
12	Box, N.W.
13	Brown, Andrew
18	Coe, Train
20	County Farm
22	Daughtery, Charles
26	Darby, Wetherill (Benton Co.)
29	Fassnacht, Christ
34	Haffner, Fred
35	Haywood, E.F.
37	Harrison Meadows
38	Ilgenfritz, George (combined with Dismal)
45	Kirkpatrick, Frank
46	Kirkpatrick, James
48	Lesley, Calvin
49	Lucas, Luther (combined with Dismal)
53	Mahin, Wesley
55	Miller, Absalom
57	Morin, F.E.
58	Motsinger, Hester
59	O'Neal, J. Kelly
60	Oshier, Aduley
61	Parker Lane
62	Parlon, James, (combined with Shawnee)
65	Resor, Franklin
71	Skinner, Ray
72	Smith, Abe
73	Southworth, Mary
74	Sterrett, Joseph C.
76	Swanson, Gustav

- 84 Walters, William
- 89 Yeager, Simeon
- 91 Dickens, Jesse
- 93 Dismal Creek
- 94 Shawnee Creek
- 95 Buetler, Gosma
- 98 See #101
- 99 See #102
- 100 Elliott, S.W.
- 101 Hoffman, John
- 102 Brum, Sophia (Benton Co)
- 103 Moore H.W. (Benton Co)

INACTIVE DITCHES

<u>Number</u>	<u>Names</u>
1	Amstutz, John
5	Baker, Dempsey
6	Baker, Newell
7	Bell, Nellie
8	Berlovitz, Julius
10	Binder, Michael
11	Blickenstaff, John M.
14	Buck Creek (Carroll Co.)
15	Burkhalter, Alfred
16	Byers, Orin J.
17	Coe, Floyd
19	Cole Grant
21	Cripe, Jesse
23	Devault, Fannie
24	Deer Creek
25	Dunkin, Marion
27	Ellis, Thomas
28	Erwin, Martin
30	Fugate, Elijah
31	Gowen, Isaac (White Co.)
32	Gray, Martin
33	Grimes, Rebecca
36	Haywood, Thomas
39	Inskeep, George
40	Jakes, Lewis
41	Johnson, E. Eugene
42	Kellerman, James
43	Kerschner, F.S.
44	Kirkpatrick, Amanda
47	Kuhns, John
50	McCoy, John
51	McFarland, John
52	McKinney, Mary
54	Marsh, Samuel (Montgomery Co)
56	Montgomery, Ann
63	Peters, Calvin
64	Rayman, Emmett (White Co.)
66	Rettereth, Peter
67	Rickerd, Arthur
68	Ross, Alexander
69	Sheperdson, J.A.
70	Saltzman, John
75	Stewart, William
77	Taylor, Alonzo
78	Taylor, Jacob
79	Toohey, John
81	Van Natta, John
82	Wallace, Harrison
83	Walters, Sussana
85	Waples, McDill
86	Wilder, Lena
87	Wilson, Nixon (Fountain Co.)
88	Wilson, J & J
90	Yoe, Franklin
92	Jenkins
96	Kirpatrick One
97	McLaughlin, John

Storm Water Drainage Improvement Plan

Hans Peterson and Paul Elling from SEC Donohue presented the Stormwater Drainage Improvement Plan for the Cuppy-McClure watershed. Mr. Peterson discussed the project overview and objectives, project design criteria and constraints, hydrologic/hydraulic analysis, alternative improvements and recommendations, permits, and the schedule.

Mr Peterson discussed the alternative improvements.

Alternative #1 Low flow pipe and high flow channel.

The cost of the low flow pipe and high flow channel - \$930,000.00

The pipe in this alternative would be two to three feet deep under the ground from the Celery Bog to U.S. 52 then opens up and flows under US 52 with the existing pipe, then drops down into another pipe and flows on down to Hadley Lake.

Mr. Hoffman asked how big the pipe would be?

Mr. Peterson answered the pipe ranges in size from 36 inches to 42 inches.

Alternative #2 All pipe improvements.

The cost of all pipe improvements - \$1,570,000.00

Pipe size ranges from 54 inches to 60 inches.

This alternative would run completely under the ground from Celery Bog to Hadley Lake that is the main reason for the high cost. Mr. Peterson said this would look the nicest after it is complete.

Alternative #3 All channel improvements.

The cost of all channel improvements - \$755,000.00

This alternative does not have any pipe. It is a standard open channel all the way from Celery Bog down to Hadley Lake. There would have to be a concrete lining treatment at the bottom of the channel.

Mr. Peterson recommended alternative was #1 the low flow pipe and high flow channel.

Mr. Hoffman asked on these changes of easement are they giving and taking from the same landowners or taking from some landowners and giving others?

Mr. Peterson said based on the assessment map that we have, it is generally give and take on the same properties except for one parcel. Parcel #13 looks like we are taking.

Mr. Hoffman assumed there will be a petition for reconstruction to make those changes in easement.

Commissioner Gentry answered there will be a reconstruction hearing.

Discussion followed.

Bening no further business Commissioner Gentry moved to adjourn until February 3, 1993 at 8:30 a.m., seconded by Hubert Yount.

Meeting adjourned.


William D. Haan, President


Nola Gentry, Vice President


Hubert Yount, Member

ATTES: 
Shelli Hoffine, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MARCH 10, 1993

The Tippecanoe County Drainage Board met Wednesday March 10, 1993 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Hubert Yount, County Surveyor Michael J. Spencer, Drainage Board Attorney J. Frederick Hoffman, Christopher Burke Engineering Consultant Ilene Dailey, and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held on February 3, 1993 Commissioner Gentry moved to approve the minutes. Seconded by Commissioner Yount. Unanimously approved.

APPOINT MEMBERS FOR PHILLIP DEWEY JOINT DRAINAGE BOARD

Mike Spencer had a request from the Montgomery County Drainage Board to appoint two drainage board members to a Joint Drainage Board on the Phillip Dewey Drain that crosses the South County Line in Section 35 Randolph Township. That also effects the watershed of the Miller McBeth tile drain in Tippecanoe County and a small portion of open channel.

Commissioner Gentry asked if Montgomery County is going to do reconstruction on the Phillip Dewey drain?

Mr. Spencer replied yes.

Mr. Spencer stated that the Montgomery County Drainage Board would also like the Board to set a date when they could meet in Montgomery County for a meeting of the Phillip Dewey Joint Drainage Board.

After some discussion of when the Board could met with Montgomery County, they decided that March 30, 1993 would be favorable.

Commissioner Haan appointed himself and Commissioner Gentry to be members of the Phillip Dewey Joint Drainage Board.

Commissioner Gentry moved to approve the appointment of members. Seconded by Commissioner Yount. Unanimously approved.

APPOINT MEMBERS FOR ARBEGUST JOINT DRAINAGE BOARD

Mr. Spencer had a request from the Clinton County Drainage Board to appoint Drainage Board members to a Joint Drainage Board concerning the Arbegust branch of the McLaughland Drain. The Arbegust branch is south of Clarks Hill and affects 120 acres of Tippecanoe County.

Mr. Hoffman questioned if there had already been board members on that before?

Mr. Spencer said yes, but there has been such a change over in both counties that Montgomery County found it necessary to appoint new members.

Commissioner Haan appointed himself and Commissioner Yount to be members of the Arbegust Branch Joint Drainage Board.

Commissioner Gentry moved to approve the appointment of members. Seconded by Commissioner Yount. Unanimously approved.

VALLEY FORGE ESTATES PHASE IV

Pat Cunningham of Vester and Associates is the Drainage Designer on the Valley Forge Estates Phase IV project and also is a developer along with Greg Sutter. Valley Forge Estates Phase IV is located on South 9th Street and County Road 430 South. Phase IV is a continuation of the existing Valley Forge Estate with the existing storm sewer and detention pond which outlets overland into the drainage swale on top of the Kirkpatrick ditch. The Kirkpatrick Ditch has a thirty inch (30") underground field tile. This system does not inlet into the tile, the system outlets overland under South Ninth Street across to the West. Mr. Cunningham analyzed the existing Valley Forge because what Vester and Associate would like to do is outlet into the existing system. Available capacity of a pipe that is eighteen inch (18") has about nine feet (9 CFS) and one that has twenty one inch (21") has about ten feet (10 CFS) which means that Phase IV would need both outlets to be able to get this Phasethrough the system. Vester and Associates has evaluated the runoff in the overall area. Mr. Cunningham said they have 34 1/2 acres within the site, there is also 5 acres off site which drains through the 34 1/2 acre site. Mr. Cunningham wants to develop two areas and put a detention storage pond in the area. The storm sewer would run down and over to the pond. Depth of the pond will be 3.61 feet at maximum. The emergency routing for the pond will be at the Northeast and Northwest corner of the pond which will flow down the two existing streets. The flood protection grade between the maximum pond elevation of 637.11 feet. The worst area for existing homes will be 641 feet, approximately 4 feet of flood protection between the maximum pond elevation and the first floor elevation of the nearest home site.

Mr. Spencer asked if it would flood out the existing intersection in Valley Forge Estates?

Mr. Cunningham answered yes.

Commissioner Gentry asked in a 100 year event what depth would be flowing down the streets?

Mr. Cunningham said that he had not evaluated the depth as far as flowing down the street.

Commissioner Yount asked what is the elevation at the intersection?

Mr. Cunningham answered the elevation 635.6 feet which is 2 feet below the maximum pond elevation.

Mr. Spencer asked if the intersections are already flooded potentially there would be more water there by the fact that the pond would over flow?

Mr. Cunningham stated that sense the field is row crop that causes more runoff on the site than what it would if it is developed.

Mr. Hoffman asked if what Mr. Cunningham was saying was that if he developed the site there would not be as much runoff as if the site was kept row crop?

Mr. Cunningham said that is correct. If the site is developed the land has an increased rate of runoff which is velocity, but that runoff will be collected and held so actually there will be a decrease rate of runoff.

Mr. Hoffman asked what happens when the pond becomes full and overflows, will the water flow down the street?

Mr. Cunningham replied Yes.

Mr. Hoffman stated that there is not that problem now.

Mr. Cunningham acknowledged that if you have a 100 year storm event the system surcharges, it does not function. The system is designed for a 10 year storm event and what Mr. Cunningham is proposing to do with this system is continuing on with the existing system. The system will detain anything up to 100 storm event. Anything up to or over a 100 year there is less water coming into this system after it is developed. By developing the area it decreased the volume of runoff that comes across the site now. Presently we have row crop increasing the runoff because of development of road system and channel patterns but we resolve the volume of runoff because we have much more yard space and green space. Total volume of runoff from the site is 6.54 acres pre developed and 5.88 acres post develop, that is a decrease of volume of runoff and a decreased volume of runoff to the Kirkpatrick ditch. The problem is with South 9th Street two 30" corrugated pipe that run underneath South 9th Street to the west and all of the land is farmed around the area, and there is not a defined drainage swale. Because of the farming and development siltation has taken place and filled the swale on both sides of South 9th Street higher than the two inverts. With those two pipes the water is starting to pond behind the pipe on the east side of South 9th Street and with development there will be a catch basin put in to relieve the situation. Mr. Cunningham and Mr. Sutter are offering any assistance, go into any type of agreement, or agree to any kind of maximum not to exceed participation fee in helping resolve the Kirkpatrick drain problems.

Mr. Hoffman asked if that would add to the situation and add to the problem?

Mr. Cunningham answered no it will not. One reason is development decreases the rate of runoff in to this system. If there was a 100 year rain now the runoff would come across the Valley Forge area and the system would surcharge. If Mr. Sutter and Mr. Cunningham develop the land the system will not surcharge. They are proposing to decrease the volume of runoff based of the current ground condition and the proposed water condition.

Mr. Hoffman asked if Mr. Cunningham was saying that with the thirty inch pipe that is there now it would not have as much water in the swale after development.

Mr. Cunningham replied that is correct.

Commissioner Yount asked what length of time would it take for runoff to cease in any given flood?

Mr. Cunningham said within a 24 hour time period as far as runoff time.

Ilene Dailey stated that with development the runoff would decrease about 3 hours. Post development starts at 4 hours and ends at 24 hours and pre development starts at 3 hours and ends at 27 hours.

Commissioner Gentry asked if the terrain could be changed since there is a natural swale?

Mr. Spencer said yes, that is what we will find out with the study on the James N. Kirkpatrick ditch.

Commissioner Gentry asked if the project approval should wait until the Board has the study on this watershed?

Mr. Spencer stated that is a policy decision the Board will have to make. That has been done in the past, but Mr. Cunningham is asking for a preliminary approval not final approval.

Mr. Cunningham stated that he planed to be back by the end of the month with the final plans.

Mr. Hoffman asked if this is going to cause a flood in the streets whenever there is a 100 year storm?

Mr. Cunningham stated that with development it would not change any condition that is there now.

Mr. Hoffman asked if the development would cause any flood to the farmers below South 9th Street?

Mr. Cunningham replied not any more than what is there now.

Commissioner Yount asked if the developers are willing to put up "X" amount of money, is there any law that says we can not put that money in trust to be applied at a determined date and amount?

Mr. Hoffman said if the developers want to put up the money there is not any reason why the they can not do so.

Ms. Dailey asked what would be the schedule for the Kirkpatrick study?

Mr. Spencer stated that he could not give a completion date on the study because a company has not been selected.

Lary Troutner a home owner in the Valley Forge Estates expressed some concerns as to how the project would affect the existing Valley Forge Estates.

Commissioner Yount moved to approve the preliminary plans for the Valley Forge Estate Phase IV. Seconded by Commissioner Gentry. Unanimously approved.

CREASY LANE PHASE II

Bill Davis of Hawkins Environmental had a proposal for Creasy Lane Phase II, there will be three phases in all. Mr. Davis explained that he wanted to bring the Board up to date on Phase II, identify a couple of potential problems and ask for some assistance from the Drainage Board. Phase II starts at State Road 26 and ends just North of Kensington Drive. The South end of the drain will continue to drain into the Britt, while a new main trunk sewer will drain to the

North discharging into the existing ravine system. A secondary system will go to a regional detention basin on the Park property at the corner of Union and Creasy, that is a control device. Hawkins Environmental plans to pick up all the standing water and direct it to the regional detention basin. The basin is also sized to accept the water off Union Street when it is reconstructed. In this proposal Ashley Oaks run off will be removed from the Britt drain and routed to the North, that will decrease the Britt drain flow by 3.8 CFS. In the reconstruction of Creasy Lane all of the existing Britt drain will be reconstructed. All the piping system will be reconstructed to comply with the Ashley Oaks drainage report. Mr. Davis explained that Hawkins Environmental is proposing the City and the County work together to develop the information to determine the capacity of the off site channel. Hawkins Environmental is also asking for permission to proceed with the Creasy Lane Phase II project with a couple of conditions, first is that Hawkins Environmental not make the North connection, second is to jointly develop the necessary information to determine capacity of the off site channel.

Commissioner Yount asked at what time would the connections be made?

Mr. Davis said not until the time it is paved.

Commissioner Yount moved to authorize Hawkins Environmental to proceed with Creasy Lane Phase II reconstruction and for a study of the two connections. Seconded by Commissioner Gentry. Unanimously approved.

SAGAMORE POINTE SUBDIVISION

Jim VanNess, Bob Grove and John Smith representing Smith Enterprises had three items to discuss with the Board: First, reduction of easement to the Dempsey Baker drain that is currently 75 feet either side of the tile that was reconstructed last year. Smith Enterprises request a reduction to approximately 92 or 94 feet and add 25 feet either side for maintenance. Second, request for partial vacation of the two existing field tile that comes in from the South. Smith Enterprises will replace those with a permanent drainage system when section two of the project is developed. Third, request for waving storm water detention do to the proximity of Hadley Lake.

Mr. Spencer responded to the request, first the reduction of easement is fine as long as it is 25 feet from the top of the bank. Also in that 25 foot easement the City of West Lafayette Parks Department would like to have at least a 10 foot greenway easement within the drainage easement. On the second request, the two vacations of the field tile from the South would work with the plans of Smith Enterprises showing the tiles being picked up with construction. The third request, waving storm water detention requirement of the ordinance might cause a problem for down stream land owners. That lake is a privately owned and without the permission of the land owner Mr. Spencer could not recommend approval for direct discharge.

Commissioner Gentry moved to approve with proper language the alteration of the width of easement to 25 feet on top of each side of the existing drainage structure. Seconded by Commissioner Yount. Unanimously approved.

The Board indicated they support the vacation of field tile.

Commissioner Haan asked for a motion on the direct discharge to the Hadley Lake. No motion was made. The request failed.

Commissioner Haan asked for a 5 minute recess.

At 10:08 A.M. the meeting reconvened.

ASHTON WOODS SUBDIVISION PHASE III

George Schulte of Ticen, Schulte and Associates presented the Ashton Woods Subdivision plan located off of Old Romney Road in Wea Township. Phase III will go west to Wea Creek. Mr. Schulte is asking for preliminary approval on Phase III and to build a detention basin for a 9 1/2 acre area. The detention pond will be sized for the development of Phase III only. Ticen, Schulte and Associates will install a pipe structure which will be large enough to serve the entire area, they also plan to design Phase III so that all building pads will be at least 2 feet above the 100 year storm event overflow.

Commissioner Yount moved to approve preliminary approval for the Drainage of Ashton Woods Subdivision Phase III. Seconded by Commissioner Gentry. Unanimously approved.

Other Business

Bill Davis asked the Board to change the language of the Drainage Ordinance to incorporate Rule 5 of the new Urban Erosion Control Law that is in effect. Rule 5 would change the Drainage Board Ordinance to have the Board responsible for erosion and not the Area Plan Commission.

Commissioner Yount made a motion that the Drainage Board Attorney Frederick Hoffman address this with the Area Plan Commission Attorney, Robert Mucker. Seconded by Commissioner Gentry. Unanimously approved.

Commissioner Gentry asked if the Board will need to amend the Drainage Ordinance to incorporate rule 5?

Mr. Hoffman answered Yes.

Commissioner Gentry made a motion to incorporate Rule 5 in the Drainage Board Ordinance. Seconded by Commissioner Yount. Unanimously approved.

Commissioner Gentry made a motion requesting Mr. Hoffman to prepare an amendment to the Drainage Ordinance to include reference to Rule 5 and the Indiana Handbook for Erosion Control in Developing Areas prepared by the Soil and Water Conservation Service. Seconded by Commissioner Yount. Unanimously approved.

Being no further Business Commissioner Gentry moved to adjourn. Seconded by Commissioner Yount. Unanimously approved.

DRAINAGE BOARD MINUTES MARCH 10, 1993 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JUNE 2, 1993

The Tippecanoe County Drainage Board met Wednesday June 2, 1993 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Hubert Yount, Tippecanoe County Surveyor Michael J. Spencer, Drainage Board Attorney J. Frederick Hoffman, Christopher Burke Engineering Consultant Ilene Dailey, and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held on May 5, 1993 Commissioner Gentry moved to approve the minutes. Seconded by Commissioner Yount. Unanimously approved.

BROOKFIELD FARMS SUBDIVISION

John McBride representing the Developer, Cedar Run Limited, asked for variance on Section 14 (h) 8 requiring a six (6) foot chain link fence surrounding permanent lakes which had been previously denied, be approved after modifications have be made to make the lake less responsibility to the County Drainage Board and safer to the public.

Dale Koons and Roy Prock from Civil Engineering Services joined the meeting and Mr. Koons explained that the chain link fence would be on three sides of the lake leaving the back of the lots open to the lake.

Commissioner Yount asked who is going to own the outlots?

Mr. Koons replied the Homeowners Association.

Commissioner Yount stated that he could foresee the County paying the taxes because the Association could not maintain the lake and that would cause a liability on the County.

Mr. McBride stated that having the fence on three sides of the lake the general public would have to either climb the fence or trespass.

Mr. Hoffman suggested that if the people in the subdivision are the only ones that have access to the lake then why not give each of the homeowners a undivided interest in the lake. That would relieve any responsibility to the County on liability and taxes do to the fact that the home owner would be taxed along with the rest of their property.

Commissioner Gentry moved to approve a variance on Section 14 (h) 8 requiring a six (6) foot chain link fence surrounding the lake and grant the south side be open to give land owners in Brookfield Farms Subdivision access to the lake. Also, approval of the developer granting an undivided interest to each lot owner along the lake in Brookfield Farms Subdivision. Seconded by Commissioner Yount. Unanimously approved.

WESTON WOODS II

Mr. Spencer indicated that review of Weston Woods II Subdivision is not complete and will be heard at a later date in a special Drainage Board meeting.

ABBINGTON FARMS SUBDIVISION

George Schulte asked for preliminary approval of Abbington Farms Subdivision. The subdivision will be approximately forty (40) acres with forty (40) lots and is located South of County Road 350 and East of South 18th Street in the Kirkpatrick watershed area. Drainage for the subdivision drains in two directions approximately fourteen (14) acres drains to the west and approximately twenty seven (27) acres drain to the north into the Kirkpatrick watershed area. There is a sixty six (66) acres off site watershed associated with the subdivision, a channel for the off site watershed will be constructed to carry the runoff through the subdivision and continue on to the Kirkpatrick watershed area. The field tile have been located and as part of the storm drainage system they will be rebuilt or replaced. Also proposed is two ponds one on the East end and the other on the West end of the development with a dry bottom basin. This site will increase the rate of runoff, but it will decrease the volume of runoff by twenty to thirty percent because it is going from agricultural land to low density subdivision which the majority of the lot is grass.

Ed Beeler land owner of 3816 S 150 E expressed concern of creating more runoff on his land.

Mr. Schulte stated that it will not create more runoff, it decreases because of the construction of dry bottom basins and the subdivision will be low density.

Commissioner Yount moved to approve preliminary plans for Abbington Farms Subdivision. Seconded by Commissioner Gentry. Unanimously approved.

Other Business

Mr. Spencer passed around a letter from Mid States regarding the Parker ditch into the Wildcat Creek. The designers of Parker ditch were out to look at it, they reported that the damage to the farmland on Mr. Chamberland's land is more of "Mother Nature" and the creek than Parker ditch. The designers offered some solutions on fixing the ditch, but that would mean a new permit from the Department of Natural Resources (DNR). If the ditch was put back exactly the way it was done at first the Board would not need a permit. Mr. Spencer did not recommend doing that sense it did not hold the first time the construction was done.

Commissioner Gentry asked if the creek was eroding into the Parker Ditch?

Mr. Spencer said not yet, most of the damage is down stream.

Mr. Spencer stated that he had a representative from DNR out to Otterbein Ditch and they determined that the Otterbein ditch is the longest arm of Pine Creek and sense the length is over ten (10) miles from the outlet of the Wabash River up to the end of Otterbein ditch, a DNR permit and Army Corp of Engineering permit from Louisville will be required before any work can be started.

Being no further business Commissioner Yount moved to adjourn. Seconded by Commissioner Gentry. Unanimously approved.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JULY 7, 1993

The Tippecanoe County Drainage Board met Wednesday July 7, 1993 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Hubert D. Yount, Tippecanoe County Surveyor Michael J. Spencer, Christopher Burke Engineering Consultant Ilene Dailey, and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held June 2, 1993. Commissioner Gentry moved to approve the minutes. Seconded by Commissioner Yount. Unanimously approved.

VALLEY FORGE PHASE IV

Pat Cunningham from Vester and Associates represented the developers, Greg Sutter and Pat Cunningham, they asked and received preliminary approval at the March 1993 drainage board meeting. Mr. Cunningham proposed final approval for Valley Forge Phase IV, Part 1, Section 1, 2, 3, and 4, which is located on 430 South and South Ninth Street. Phase IV is a continuation of the existing Valley Forge Subdivision, phase IV consist of 34.94 acres in the watershed area and 5 acres tributary in total there will be 52 lots. Mr. Cunningham stated that the 52 lots drain through the storm sewer into two different catch basins. There will be an uncontrolled watershed area around South Ninth Street that will continue to drain to the south into an existing pipe. Mr. Cunningham also stated some details need to be worked out between the developers and the County Highway department.

Commissioner Yount asked if the uncontrolled area will continue to flow into the tile it currently flows into?

Mr. Cunningham answered yes.

Mr. Spencer said for the Kirkpatrick drainage study there are preliminary figures on run off values, maps showing the Sub areas and the possible location of two regional storage basins. One basin located upstream of the new 350 South crossing and another located East of 18th Street. Preliminary storage volumes are around 480 acre feet of storage needed to reduce the totally developed flow back to the 10 year rate. The study should be completed within the next thirty days.

Commissioner Yount asked what is going to happen when the next phase is built.

Mr. Cunningham stated the storm sewer system will be identical to the phase IV and the run off will drain into the existing pond that is proposed for phase IV.

Commissioner Gentry asked if it would be more prudent to wait until the study of the Kirkpatrick watershed is completed?

Mr. Spencer stated that would be his preference. The area which the pond occupies was not included in the proposed after development condition. The Board recommended approval of the preliminary drainage plan with the condition of item #1 and that has not been resolved.

Commissioner Yount asked if the study shows a problem with the intersections, what would the developers do to correct it?

Mr. Cunningham stated that there may be a problem with the intersections and if that is the case the plan is to move the catch basin so that there is no uncontrolled run off.

Commissioner Gentry asked if the TR-20 model was received?

Ms. Dailey stated that she received a revised TR-20 model, but it still did not include the acreage of the pond. She interrupted sub area F as being a separate area.

Mr. Cunningham said he would go back and check to see whether the pond was included on the calculations.

Commissioner Gentry moved to continue Valley Forge Phase IV until the Highway Department and the Surveyor's Office have received the necessary information then a special drainage board meeting will be held for the final approval. Seconded by Commissioner Yount. Unanimously approved.

MEIJERS STORE

Pat Cunningham from Vester and Associates represents the land owners of the proposed Meijers Store. This project received preliminary approval in February and is now seeking for revised preliminary approval. Currently in Sub area B there is a 520 acre tributary that flows under I-65 onto area B. Sub area A drains to the South and initially the plan was Sub area B and part of Sub area A drain to the pond and the tributary drain across the pond and to another outlet. With the revised plan it will take the entire Sub area A and add the run off to the wet bottom pond.

Mr. Spencer stated that he has taken a look at calculations on the pond and how it would affect the Alexander Ross watershed. The only condition is Mr. Cunningham, Christopher Burke Engineering and Mr. Spencer will have to work together on the configuration of the pond to make sure that it will fit in with the overall plan for a regional storage basin on the site.

Commissioner Gentry moved to approve the revised preliminary design for the Meijers property. Seconded by Commissioner Yount. Unanimously approved.

HAWK'S NEST SUBDIVISION

Jack Kovich asked preliminary approval for Hawk's Nest Subdivision located off county road 600 North, East of State Road 43 North which consists of 84.67 acres. The entire Subdivision drains from the South to the North and the plan is to try and utilize the natural configuration of the property and avoid disturbing the trees that exist. There will be two detention areas with one utilizing the ravine.

Ms. Dailey stated the existing channel which runs through some of the lots has a 40 foot drainage easement that will have to be maintained. It needs to be clear to the lot owners that there are restrictions as to what can be done to the ravine and the trees.

Mr. Kovich said they have covenants that are preliminarily complete and one of the restrictions is related to tree removal. If the trees do not exist in the basic foundation of the house, the driveway area or the sidewalk the trees are not to be removed without consulting the developers.

Commissioner Yount suggested giving an undivided interest to any lot owner that has part of the ravine attached to the lot.

Ms. Dailey stated that there are some items that need to be refined before final approval can be given, but should not hold up preliminary approval. Emergency overflow spillways over the top of the pond are not shown, erosion control measures are a concern, for example the proposed dam that is planned for basin A seems to extend into the flood plan. There is potential for erosion on the lot's side but also on the other by the water being diverted around the corner. Intercon is showing the proper amount of storage, but there are some detailing of outlet structures that need to be carefully considered. Ms. Dailey recommended that a backwater analysis be done for the ravine that runs up through the middle of the development. They have also requested two variances for their detention.

Commissioner Yount asked how deep the detentions basins will be.

Ms. Dailey stated that basin A will be 7 feet deep.

Mr. Spencer said the reason for basin A to be higher than 4 feet is the developers want to use the natural ravine lines instead of excavation.

Commissioner Yount moved to approve preliminary approval of Hawk's Nest Subdivision subject to the seven conditions set forth on the report also subject to the outlots being deeded an undivided interest to the outlots and subject to the approval of the two variances. Seconded by Commissioner Gentry. Unanimously approved.

SIRLOIN STOCKADE

Robert Grove asked for final approval on the Sirloin Stockade located west of the Olive Garden and involves .53 acres. The property drains to the Northwest into a drainage swale that the developers plan to use as a detention area it would discharge to an existing shallow ditch along the frontage road which is State Road 26. That required a drainage permit from the State of Indiana and it is on file in the Surveyor's Office.

Mr. Spencer asked what type of slope is at the bottom of the swale?

Mr. Grove stated that the slope gets up to .5.

Ms. Dailey requested the stage storage calculations, for example if the elevation is 66 there will be so many acre feet, be presented before approval.

Commissioner Gentry moved to approve final approval with the condition that the stage storage calculation be provided and approved by the Surveyor. Seconded by Commissioner Yount. Unanimously approved.

ORTMAN LEGAL DRAIN - Vacation

Jim VanNess from Smith Enterprises presented a fourth petition to vacate the Ortman legal drain that effects Twykenham Estates. He asked for conditional

vacation subject to the letter from the City indicating approval and that the drain will be completed and approved before the final plat.

Mr. Spencer added that the upstream land owners have been notified thirty (30) day in advance of this hearing. The mail receipts are on file in the Surveyor's office.

Mr. Spencer read the two conditions that need to be met before vacation of the Ortman legal drain can be approved.

1) A letter needs to be received from the City indicating approval and acceptance for maintenance and that the city has approved the construction drawings for this area of the storm sewer that is proposed.

2) That the drain will be completed and approved before the final plat can be recorded and building permits issued.

Commissioner Yount moved to approve conditional approval of vacation subject to the City's acceptance letter and the drain being completed before the final plat. Seconded by Commissioner Gentry. Unanimously approved.

Being no further business Commissioner Gentry moved to adjourn. Seconded by Commissioner Yount. Unanimously approved.

JULY 7, 1993 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
AUGUST 4, 1993

The Tippecanoe County Drainage Board met Wednesday August 4, 1993 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Hubert D. Yount, Tippecanoe County Surveyor Michael J. Spencer, Christopher Burke Engineering Consultant Jon Stoltz, and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held July 7, 1993. Commissioner Gentry moved to approve the minutes. Seconded by Commissioner Yount. Unanimously approved.

VALLEY FORGE

Pat Cunningham from Vester and Associates represented the developers, Greg Sutter and Pat Cunningham, they asked for final approval on Valley Forge Phase IV Subdivision. The 1.01 acres that were not included in the preliminary approval plan have been added to the final plan and it does not change the pond elevations of 637.5 or the release rate of 9.65 CSF. The project covers a small area and includes a pond between the existing Valley Forge and Phase IV. A larger area drains through the existing Valley Forge before the rest of the storm water reaches the pond, therefore it does not change the elevations or the release rate.

Mr. Cunningham stated some concerns on the drainage of Valley Forge. It currently drains to the Kirkpatrick Ditch and there is a problem with the runoff at the location of South Ninth Street as to whether or not the pipe has enough capacity for the runoff to get under South Ninth Street. Also a concern was if this subdivision is approved, it would leave the door open to other developers that want to develop in the Kirkpatrick Watershed. The ordinance allows this development to proceed and would allow the Board to request any other developers that creates a point of release and cause a flood hazard situation to solve the problem downstream.

Mr. Cunningham also stated that the Board requested Vester & Associates to analyze the pipe in the existing Valley Forge. There was some question as to whether or not the sag conditions would have enough capacity in the catch basins, if the 2 1/2 lots of uncontrolled runoff were added to the catch basin. It was evaluated and there is more than enough capacity in the catch basin. Mr. Cunningham thinks that they comply with all the ordinances and they are prepared to proceed with Valley Forge Phase IV.

Commissioner Yount asked if there is going to be any problem controlling the runoff during construction?

Mr. Cunningham stated that they have submitted an erosion control plan with the construction plans and the runoff will be controlled.

Commissioner Gentry asked what the progression of the construction for Phase IV?

Mr. Cunningham stated that construction is scheduled to start right away. There are four developers that would like to build model homes starting in the fall.

Commissioner Gentry asked if the Highway department had any requirements?

Mr. Cunningham said that the Highway department asked for the ditch to be regraded along South Ninth Street and the developers have agreed.

Mr. Beeler 3816 South 150 East expressed concerns of having more runoff onto his property. He stated that the existing Valley Forge created a problem with the drainage of his property and he wants to make sure Valley Forge Phase IV will not contribute to the problem.

Mr. Cunningham assured Mr. Beeler that Valley Forge Phase IV will not add to his existing problem.

Mr. Spencer stated that Mr. Beeler's problem was compounded by the construction of the existing Valley Forge along with a narrow watershed area for the Kirkpatrick drain. Mr. Beeler is in the middle of the watershed area so he has water from upstream that gets trapped between South Ninth Street and Eighteenth Street. The problem is with the road crossing and a flat grade, the water runs through Mr. Beeler's property and can not get away fast enough above and below South Ninth Street making it back up on Mr. Beeler's property.

Commissioner Yount moved to grant final approval of Valley Forge Phase IV Subdivision. Seconded by Commissioner Gentry. Unanimously approved.

WESTON WOODS II SUBDIVISION

Paul Coutts from C & S Engineering asked for preliminary approval of Weston Woods II Subdivision. It includes the leftover land area between Weston Woods Subdivision and the east side of Treece Meadows relief drain. Mr. Coutts indicated that they have increased the pipe size for the area and the discharge for the curb inlets drains toward the west. The direct discharge of the runoff from Weston Woods II will run into the Treece Meadows relief drain. The extra storage in Burberry Place Apartments will allow an increased runoff from Weston Woods Subdivision while providing for no additional downstream runoff at Creasy Lane.

Commissioner Yount moved to approve preliminary plans for Weston Woods II Subdivision. Seconded by Commissioner Gentry. Unanimously approved.

DRAINAGE BOARD SCHEDULE

Mr. Spencer explained that the budget hearings are going to be held in the Community Meeting Room on the regularly scheduled Drainage Board for September 1, 1993. He requested the Board change the Drainage Board meeting to September 8, 1993 at 9:00 a.m. in the Community Meeting Room.

Commissioner Yount moved to change the Drainage Board Meeting to September 8, 1993 at 9:00 a.m. in the Community Meeting Room. Seconded by Commissioner Gentry. Unanimously approved.

DRAINAGE BOARD MINUTES AUGUST 4, 1993 REGULAR MEETING

VALLEY FORGE PHASE V

Dale Koons, Engineer for Civil Engineering Services and Roy Prock, Developer of Valley Forge Phase V, asked for preliminary approval of the project. Mr. Koons stated this project has been on hold because the City of Lafayette had refused to give sewer and water to the area of development until the issue of 9th street had been resolved, the City has waved that decision for this project. Mr. Koons presented the Board two different plans of development for Valley Forge Phase V, plan A and plan B. Plan B has 172 lots and plan A has 171 lots, the major difference between the two plans is plan B has two detention ponds onsite and extends 80 feet into the Kirkpatrick floodplain area. Plan A is back 80 feet from plan B and uses the natural storage of the Kirkpatrick drain between 9th Street and 18th Street. Both plans will lower the water level back to the pre-develop water level before Valley Forge Phase III. Plan A lowers it by adding storage to the Kirkpatrick floodplain area that Phase III took away and plan B will bring the water level back down by adding two detention basins that will hold the excess water that was added to the floodplain from Phase III.

Mr. Spencer asked what would happen to the project if 9th street was raised and a structure like what is under 18th street installed?

Commissioner Yount stated that the storage capacity would be gone.

Commissioner Gentry stated that means it would be a direct discharge situation.

Mr. Koons stated that nothing can be done with 9th street until the offsite work is done.

Mr. Hoffman asked if there would be rear yard storage for either of the plans?

Mr. Koons stated there will be four to five feet of water standing in a 100 year storm event on both plans. Both plans also suggest regrading the Kirkpatrick drain from 18th Street to 9th Street to create enough fall to eliminate the standing water.

Commissioner Yount wanted to know how this could fit with the overall plan of the Kirkpatrick watershed area, which is to create a regional basin instead of all the small detention ponds?

Mr. Prock stated both plans will comply with the overall plan to create a regional detention pond, but plan A would be the easiest to convert because it does not have any onsite storage.

Mr. Koons stated with the regional detention storage basin there would have to be a complete change to the drainage ordinance. As the ordinance states now, the project has to accept water onto itself in a ten year pre-developed flow. With the regional detention pond in affect, the ordinance can not apply. Mr. Koons stated that the developer will have to size all offsite facilities to handle the 100 year developed storm and every storm sewer that is build will be a 100 year developed storm sewer.

Commissioner Yount stated there needs to be a meeting with the Drainage Board and the Developers to discuss what changes need to be made to incorporate this idea. The idea of the regional pond is to create one or two large detention ponds instead of all the small ponds that are being designed in each individual subdivision. If the Board can get the developers to incorporate a regional pond in their developments that would greatly decrease the County responsibility on maintenance and liability and improve each subdivision.

Mr. Hoffman asked how close the houses will be to the water line?

Mr. Koons stated twenty five feet.

Mr. Hoffman stated that would prevent the homeowner from building a basement.

Mr. Spencer stated there needs to be a meeting between our Engineering Consultant and Mr. Koons to discuss what requirements are needed.

Mr. Koons asked if this plan is approved and 9th Street improvements are done, can we by law put in a berm across 9th Street to restore the 100 year floodplain?

Mr. Hoffman said probably not without paying the landowner for compensation

Commissioner Yount asked Mr. Spencer if a structure is constructed on 9th Street and the improvement done before Phase V was ready to begin, how would that affect the project.

Mr. Spencer stated that would help the project and would take the water off the back of the lots that now are showing standing water.

Commissioner Yount moved to continue Valley Forge Phase V. Seconded by Commissioner Gentry. Unanimously approved.

HOLIDAY INN EXPRESS

Scott Falk, Falk Architecture & Planning, asked the Board for final approval of Holiday Inn Express. The project is located at the Northeast corner of State Road 26 and I-65, beside Budget Inn. A detention area is planned in the parking lot and a grassy area as short term water detention. The grassy area will drain to the parking lot and flow down Tudor Trail in the same direction as the rest of the parking lot drainage which is to an existing drainage swale along Vermont Drive.

Commissioner Gentry asked how deep the water will be in a 10 year storm event?

Mr. Falk stated in a 100 year storm event there will be 6.5 inches, maximum depth with emergency spillage over the top of the curb or through the driveways then to the drainage swale along Vermont Drive

Mr. Spencer stated there is an existing storm sewer along Tudor Trail that is equipped to handle the runoff from Holiday Inn Express.

Commissioner Yount moved to grant final approval of Holiday Inn Express. Seconded by Commissioner Gentry. Unanimously approved.

HAWKS NEST SUBDIVISION

Jack Kovich asked for final approval of Hawks Nest Subdivision located east of State Road 43 North on the north side of 600 North. Mr. Kovich stated that it was his understanding that all the information was submitted to the Board's Engineer and the project was ready for approval.

Mr. Spencer read the four conditions that need to be met, but recommended final approval.

1) Support data, including drainage area mapping and time of concentration determinations, for the gutter spread, inlet capacity, and pipe sizing calculations be submitted.

2) Revision to the emergence spillway plans be made to clearly detail their construction.

3) An IDNR Construction in a Floodway permit or justification for the lack of this permit be provided for the Basin A construction.

4) Verification that drainage along the western property line will be adequately conveyed behind lots 102 - 109.

Commissioner Yount stated Mr. Kovich was informed of what needed to be submitted for final approval. All the information was not completed therefore, he moved to continue Hawks Nest Subdivision until the information to make a complete review is submitted. Commissioner Yount also informed Mr. Kovich that his Engineer needs to contact the Surveyor for any questions that he may have. Seconded by Commissioner Gentry. Unanimously approved.

CHILI'S RESTAURANT

Pat Cunningham of Vester and Associates, representing Quality Dining and Floyd Britt, asked for final approval of Chili's Restaurant located on lot one of Britt Subdivision. Mr. Cunningham introduced Andrew Slavens, a new Engineer with Vester and Associates. Mr. Cunningham explained that the entrance for Shoney's will be used and is being reworked, then another entrance will be put in west of the Shoney's entrance. There is a new street being designed to drain Chili's parking lot, the runoff will drain into catch basins, then drain to the detention pond.

Commissioner Yount moved to approve grant approval of Chili's Restaurant with the following four conditions. Seconded by Commissioner Gentry. Unanimously approved.

1) Verification be provided that the curve numbers used in the analysis of this site match the Master Plan values of this project.

2) Support data for the pipe-sizing, inlet capacity and gutter spread calculations be supplied.

3) Additional drainage area maps, pipe-sizing calculations and reserve capacity calculations be provided.

4) Swale relocation information and easement be supplied.

HARRISON & MCCUTCHEON HIGH SCHOOL EXPANSION

Mr. Spencer stated Jon Stolz and himself are working with Triad and Associates on the plans that were submitted for the expansion of Harrison High School and McCutcheon High School.

OTHER BUSINESS

Mr. Spencer asked the Board to give a waiver of encroachment permit to a lot in Red Oaks Subdivision because an individual wants to change the easement. In the platting of Red Oaks there was a 50 foot minimum build line and drainage easement that does not need to be there. The individual want to change the easement, so that his house foot print will be off the easement.

Mr. Hoffman stated that the individual needs to have a lawyer describe the area in writing and present it to the Board.

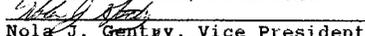
ORCHARD HEIGHTS SUBDIVISION

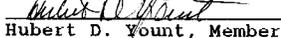
Mr. Spencer stated that he shot the elevation for Orchard Heights Subdivision and based on the gutter elevation it would be impossible to drain the rear yard to the front yard because the rear yard is much lower. The water would have to go south along the rear of several lots before it could drain to the street. One problem is that the utilities use the same easement as the drainage easement.

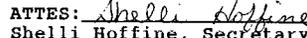
Commissioner Gentry stated the only other solution would be have the landowners hire an engineer to draw up a set of plan to examine other options.

Being no further business Commissioner Gentry moved to adjourn until January 5, 1994. Seconded by Commissioner Yount. Unanimously approved.


William D. Haan, President


Nola J. Gentry, Vice President


Hubert D. Yount, Member

ATTES: 
Shelli Hoffine, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JANUARY 5, 1994

The Tippecanoe County Drainage Board met Wednesday January 5, 1994 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Hubert D. Yount; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Drainage Board Engineering Consultant Jon Stolz and Drainage Board Secretary Shelli Hoffine.

ELECTION OF 1994 OFFICERS

Mr. Hoffman asked nominations for the President of the Tippecanoe County Drainage Board. Commissioner Haan nominated Commissioner Gentry, seconded by Commissioner Yount. Unanimously approved.

Mr. Hoffman turned the meeting over to Commissioner Gentry to preside.

Commissioner Gentry asked nominations for Vice President of the Tippecanoe County Drainage Board. Commissioner Gentry nominated Commissioner Haan, seconded by Commissioner Yount. Unanimously approved.

-APPOINTMENTS-

Commissioner Haan moved to appoint Shelli Hoffine for Executive Secretary of the Tippecanoe County Drainage Board, seconded by Commissioner Yount. Unanimously approved.

Commissioner Haan moved to appoint J. Frederick Hoffman as Attorney for the Tippecanoe County Drainage Board pending an agreement of a contract, seconded by Commissioner Yount. Unanimously approved.

Commissioner Yount moved to extend the existing contract into 1994 for Christopher Burke Engineering, LTD. to provide engineering services to the Tippecanoe County Drainage Board pending review of the contract, seconded by Commissioner Haan. Unanimously approved.

-MEETING DATES FOR 1994-

January 5, 1994	July 6, 1994
February 2, 1994	August 3, 1994
March 9, 1994	September 7, 1994
April 6, 1994	October 5, 1994
May 4, 1994	November 2, 1994
June 1, 1994	December 7, 1994

Commissioner Haan moved to accept the meeting dates for the Tippecanoe County Drainage Board, seconded by Commissioner Yount. Unanimously approved.

Commissioner Yount moved approve the minutes from the last Drainage Board meeting held December 1, 1993. Seconded by Commissioner Haan. Unanimously approved.

Joe Bumbleburg asked the Board to approve a resolution for vacation of a drainage easement located on a part of lot 5 in Capilano By the Lake Subdivision, Phase I. The drainage easement ended up in the middle of lot 5 when it was replatted.

Mr. Spencer stated he has been out to the site, Mr. Cunningham of Vester and Associates checked the easement and it definitely will not cause a problem with the lot or any of the adjoining lots. Mr. Spencer recommended the vacation of the drainage easement in lot 5, Capilano By the Lake Subdivision, Phase I.

The petition and the resolution to vacate a portion of a drainage easement on lot 5, Capilano by the lake subdivision, Phase I is on file in the Tippecanoe County Surveyor's Office.

Commissioner Yount moved to approve the resolution to vacate a portion of an easement on lot number 5, Capilano by the Lake Subdivision, Phase I, seconded by Commissioner Haan. Unanimously approved

HAWKS NEST SUBDIVISION, PHASE I

Greg Hall, Intercon Engineering, asked the Board for final approval of Hawks Nest Subdivision, Phase I and the detention ponds for the entire project. Mr. Hall also, requested a variance for exceeding the four foot of depth in Basin A.

Mr. Spencer stated he recommended approval of Phase I and the detention ponds.

Mr. Hall stated there will be eighteen lots in Phase I, one detention basin will be located in this phase.

Commissioner Haan asked if the permits from the IDNR have been processed?

Mr. Stolz stated that the portion that was requiring a permit has been moved from the floodplain and no longer requires a permit.

Commissioner Yount moved to grant the variance to exceed the maximum four foot depth in Basin A, seconded by Commissioner Haan. Unanimously approved.

Commissioner Yount moved to grant final approval of Hawks Nest Subdivision, Phase I and the detention basin for the entire project, seconded by Commissioner Haan. Unanimously approved.

TRIPLE J POINTE SUBDIVISION

Bob Grove, representing Smith Enterprises, asked for preliminary approval of Triple J Pointe Subdivision, which involves fifteen acres with 75 lots, located off Old Romney Road and County Road 250 South. The proposal is to detain the water offsite which will hold seventy two acres of offsite runoff, then take the ten year flow through the subdivision to a basin that will hold the 15 acres of developed subdivision, a pipe will carry the runoff from the basin to an existing structure of Ashton Woods Subdivision detention system. The ditch will be used as overflow for runoff that exceeds the 10 year flow.

Commissioner Yount asked if pipe along Old Romney Road would be in the road right-of-way if so, has the County Highway Department approved a permit for the pipe?

Mr. Grove stated yes, we are proposing to put the pipe in the right-of-way and no, we have not obtained a permit from the Highway Department.

Mr. Spencer stated the Highway Department has a set of plans, but he has not heard a report from them.

Commissioner Yount asked about the use of the pond offsite easement?

Mr. Grove stated that G. Mark Smith will be preparing an agreement for the easement.

Mr. Spencer stated John Fisher did a drainage study of the Wea-Ton drainage area, in the report it shows the watershed area delineated certain runoff values for sub-areas within the watershed area. Ashton Woods kept in compliance with the idea for sub-areas to be within the watershed area, at that time, the Board accepted the idea. Ashton Woods created an outlet for the Wea-Ton watershed area and during construction they have created the outlet channel and incorporated their storage area with Old Romney Heights storage area. In the study, there are recommendation about how water moves to the east as development progresses. A pipe was sized under Old Romney Road at the end of the channel to pick up water to the east. Triple J Pointe Subdivision does not comply with this idea as far as construction of proper pipe size under Old Romney Road to convey the water from the east.

Mr. Grove stated Smith Enterprises asked John Fisher for the drainage study, but were not able to obtain a copy. It was decided to make an alternate route from the project's outlet to go along the east side of Old Romney Road in an easement just outside the right-of-way, provide a manhole and a crossing based on a 10 year predeveloped flow from the Wea-Ton area.

Commissioner Gentry suggested getting a meeting set up between the Commissioners, the Surveyor, Smith Enterprises, Mr. Gloyeske, and Mr. Fisher.

Commissioner Yount moved to continue Triple J Pointe Subdivision with Mr. Grove's consent until after the above meeting has been held, seconded by Commissioner Haan. Unanimously approved.

HARRISON & MCCUTCHEON HIGH SCHOOLS IMPROVEMENTS

Kyle Miller, Triad and Associates, presented the Board with the plans to improve Harrison High School and McCutcheon High School. Harrison and McCutcheon will be adding approximately one acre of roof to the existing structures over what is now parking lot signifying no increase in the volume of runoff for either plan. Harrison's storm sewer pipes run around the perimeter of the school, some of the pipe are undersized and will be replaced along with all new pipe to go around the perimeter of the constructed area. All roof drainage will run into the storm sewer then to an existing pipe and discharge into the **Cole Ditch/"Burnett Creek"**. Mr. Miller indicated a portion of one existing outfall pipe will be replaced and a permit from the IDNR is required for construction in the floodway area.

Commissioner Gentry asked what the design is of the outfall pipe into the creek?

Mr. Miller stated there will an end section on the pipe and that rip-rap will be placed on both sides of the banks.

Mr. Miller explained that McCutcheon High School storm sewer pipes run the perimeter of the existing structure and outlets into the **Wea Creek**. The

improvements will replace what is now asphalt and the storm sewer pipe around the perimeter of the constructed area.

Commissioner Yount moved to approve Harrison High School's final improvement plan subject to the approval of the permit from the IDNR, seconded by Commissioner Haan. Unanimously approved.

Commissioner Yount moved to approve McCutcheon High School's final drainage improvement plan, seconded by Commissioner Haan. Unanimously approved.

ACTIVE DITCHES FOR 1994

Ditch No.	Ditch Name	Four Year Assessment	Balance Fund 94
2	Anderson, Jesse	\$15793.76	\$11549.19
3	Andrews, E.W.	2566.80	987.71
4	Anson, Delphine	5122.56	1365.36
8	Berlovitz, Juluis	8537.44	7288.07
13	Brown, Andrew	8094.24	4625.60
14	Buck Creek (Carroll Co.)		
15	Burkhalter, Alfred	5482.96	4285.72
20	County Farm	1012.00	(994.25)
26	Darby, Wetherill (Benton Co.)		
27	Ellis, Thomas	1642.40	760.68
29	Fassnacht, Christ	2350.56	965.04
31	Gowen, Issac (White Co.)		
33	Grimes, Rebecca	3363.52	3357.75
37	Harrison Meadows	1532.56	-0-
48	Lesley, Calvin	3787.76	1622.08
53	Mahin, Wesley	3467.68	2864.18
54	Marsh, Samuel (Montgomery Co)		
57	Morin, F.E.	1434.72	-0-
58	Motsinger, Hester	2000.00	1090.53
59	O'Neal, J. Kelly	13848.00	7398.17
60	Oshier, Aduley	1624.88	-0-
64	Rayman, Emmett (White Co.)		
67	Rickerd, Arthur	1064.80	842.58
71	Skinner, Ray	2713.60	(64.53)
72	Smith, Abe	1277.52	1053.33
73	Southworth, Mary	558.08	314.04
74	Sterrett, Joseph C.	478.32	-0-
76	Swanson, Gustav	4965.28	(1473.83)
84	Walters, William	8361.52	6716.94
87	Wilson, Nixon (Fountain Co.)		
89	Yeager, Simeon	615.36	342.15
91	Dickens, Jesse	288.00	-0-
93	Dismal Creek	25420.16	86.15
94	Shawnee Creek	6639.28	-0-
95	Buetler, Gosma	19002.24	16368.00
100	Elliott, S.W.	227772.24	76956.82
101	Hoffman, John	72105.03	34631.86
102	Brum, Sophia (Benton Co)		
103	Moore H.W. (Benton Co)		
104	Hadley Lake	65344.56	4402.77
105	Thomas, Mary (Carroll Co)		
106	Arbegust-Young (Clinton Co)		

INACTIVE DITCHES FOR 1994

Ditch No.	Ditch Names	Four Year Assessment	Balance Fund 94
1	Amstutz, John	\$5008.00	\$5566.86
5	Baker, Dempsey	2374.24	2814.71
6	Baker, Newell	717.52	2016.73
7	Bell, Nellie	1329.12	2077.51
10	Binder, Michael	4388.96	5513.73
11	Blickenstaff, John M.	7092.80	7994.87
12	Box, N.W.	11650.24	15333.92
16	Byers, Orin J.	5258.88	7337.50
17	Coe, Floyd	13617.84	18262.88
18	Coe, Train	3338.56	7923.36
19	Cole Grant	4113.92	9940.56
21	Cripe, Jesse	911.28	1557.87
22	Daughtery, Charles	1883.12	2290.95
23	Devault, Fannie	3766.80	7764.58
25	Dunkin, Marion	9536.08	12390.41
28	Erwin, Martin	656.72	1095.68
30	Fugate, Elijah	3543.52	5114.39
32	Gray, Martin	6015.52	8253.80
34	Hafner, Fred	1263.44	1559.07
35	Haywood, E.F.	7348.96	7564.29
36	Haywood, Thomas	2133.12	2799.85
39	Inskeep, George	3123.84	7655.03
40	Jakes, Lewis	5164.24	6026.73
41	Johnson, E. Eugene	10745.28	14592.35
42	Kellerman, James	1043.52	1063.29
43	Kerschner, F.S.	1844.20	4618.29
44	Kirkpatrick, Amanda	2677.36	3110.15
45	Kirkpatrick, Frank	4226.80	4440.35
46	Kirkpatrick, James	16637.76	16816.54
47	Kuhns, John	1226.96	1528.87
50	McCoy, John	2194.72	3182.80
51	McFarland, John	7649.12	8766.27
52	McKinney, Mary	4287.52	5791.10
55	Miller, Absalm	3236.00	5168.30
56	Montgomery, Ann	4614.56	5250.77
61	Parker Lane	2141.44	3261.19
63	Peters, Calvin	828.00	2327.12
65	Resor, Franklin	3407.60	5659.22
66	Rettereth, Peter	1120.32	1975.43
68	Ross, Alexander	1791.68	3895.39
69	Sheperdson, J.A.	1536.72	3609.60
70	Saltzman, John	5740.96	6920.20
75	Stewart, William	765.76	900.58
77	Taylor, Alonzo	1466.96	3447.90
78	Taylor, Jacob	4616.08	6544.52
79	Toohey, John	542.40	1069.50
81	Van Natta, John	1338.16	2714.51
82	Wallace, Harrison	5501.76	6573.81
83	Walters, Sussana	972.24	2061.09
85	Waples, McDill	5478.08	9188.51
86	Wilder, Lena	3365.60	4921.20
88	Wilson, J & J	736.96	5639.22

90	Yoe, Franklin	1605.44	2509.75
92	Jenkins	1689.24	2549.43
96	Kirpatrick One	6832.16	11352.18
97	McLaughlin, John		

OTHER BUSINESS

Mr. Spencer asked if section six, letter F of the Drainage Ordinance, Submittal and Consideration of Plans, could be clarified to clear up questions pertain to the twenty days submittal deadline being twenty working days or twenty calendar days.

Commissioner Yount suggested changing the twenty days to thirty calendar days and requiring a review memo from the County Engineering Consultant to the petitioner, ten days prior to the hearing date.

Mr. Hoffman stated he will write an amendment to the Drainage Ordinance, letter F in section six, Submittal and Consideration of Plans, to change the twenty days submittal to thirty calendars days and the Surveyor will make a report to the petitioners not less than ten days prior to the hearing date.

GREAT LAKES CHEMICAL

Mr. Spencer stated all the landowners along the proposed channel have been informed of the Great Lakes project, the County has a complete set of construction plans, a drainage report, and Army Corp of Engineers permit. The County does not have IDNR or the IDEM, but those have been filed and should be approved soon. Ken Baldwin had some question for insurance reasons on fencing around the sediment basin before the water goes into **Hadley Lake**. The County will contribute \$700,000.00 dollars out of that the County has spent approx \$150,000.00 on Engineering, the Engineer's construction estimate is 1,040,000.00.

Commissioner Gentry asked what the time table is on advertising for reconstruction, and does the project have to be advertised before the bidding or concurrent with the bid process?

Mr. Hoffman stated the advertising has to be done before the bid processing. The County would have to give thirty to forty day notice and then have the hearing, if approved the bidding can go out, all that together would take about three months.

Judy Rhodes asked if there was any legal document showing West Lafayette committing to an agreement of participation in this project?

Commissioner Gentry stated that the County has a signed worksheet by Nola J. Gentry and Mayor Sonya Margerum showing the break down of contribution between the State of Indiana, Tippecanoe County and the City of West Lafayette for Great Lakes Chemical Corporation/**Cuppy McClure** watershed project

Ms. Rhodes asked and received a copy of the worksheet.

Being no further business Commissioner Yount moved to adjourn until February 2, 1994, seconded by Commissioner Haan. Unanimously approved.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MARCH 9, 1994

The Tippecanoe County Drainage Board met Wednesday, March 9, 1994, in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Nola J. Gentry calling the meeting to order.

Those present were: Tippecanoe County Commissioners Nola J. Gentry, William D. Haan, Hubert D. Yount; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Drainage Board Engineering Consultant Jon Stolz and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held February 2, 1994, Commissioner Haan moved to approve the minutes, seconded by Commissioner Gentry. Motion Carried.

HAWKS NEST SUBDIVISION PHASE II

Greg Hall, Intercon Engineering, presented the Board with final drainage plans on Hawks Nest Subdivision, Phase II.

Mr. Spencer explained the developer is asking for a variance to allow for onlot storage within the drainage easement at the north end of the subdivision.

Mr. Hall stated the four lots are part of the ravine bank which are steep enough it would take a 100 year storm event to reach the top of the bank. The land owner will be aware of the possible on-lot storage through their restrictive covenants.

Mr. Spencer recommended the drainage swales that run north & south taking water to the detention basin be clearly shown to run within the drainage easements. When the developers request a building permit, they need to submit a site drainage plan for each lot showing how the lots will be graded.

Commissioner Haan moved to grant the variance for lots 58, 60, 82, and 83 for on-lot stormwater storage within the drainage easement and the developer add the language to the restrictive covenants. Seconded by Commissioner Gentry. Motion carried.

Mr. Spencer read the conditions:

1. The applicant should include both proposed easements on the final plat. The applicant should also provide verification to the surveyor that the swales will lie within the platted easements.

2. The applicant should include the drainage areas for the storm sewer system and the proposed pad elevations for each lot on plans. A note should also be added to those plan sheets stating that each individual lot must be graded to be compatible with the drainage divides shown.

Commissioner Haan moved to grant final approval of Hawks Nest Subdivision, Phase II, subject to the two conditions read by the Surveyor. Seconded by Commissioner Gentry. Motion carried.

ROMNEY RUN SUBDIVISION, PHASE I

Jerry Kittle, Schneider Engineering, asked for final approval of Romney Run Subdivision, Phase I. Mr. Kittle asked for two variances: the fence requirement around the two detention basins and lots 45-49 having onlot storage. The water in a 100 year storm event will encroach on the lots approximately 2 to 3 feet within the drainage easement and will not exceed 1 foot of depth.

Mr. Spencer suggested each lot owner own a 1/186 interest in the detention ponds instead of having the Homeowners Association responsible for the maintenance of the ponds.

Mr. Hoffman asked where the ponds are located within the subdivision and the depth of the ponds?

Mr. Kittle stated one pond is surrounded by lots and the other has frontage along County Road 300 South. The pond's depth will not exceed 10 feet.

Mr. Hoffman felt there should be a fence.

Mr. Kittle proposed putting a larger shelf in the pond that runs along 300 South.

Commissioner Gentry stated there needs to be a barrier between the road and the pond, so that people are not able to see the pond from the road.

Mr. Kittle suggested using landscaping mounds as a barrier between the road and the pond.

Mr. Spencer stated the mounds could not block the emergency spillway that is currently planned on the southwest corner of the detention pond. The developer could use a hard surface emergency spillway that would also serve as an emergency access.

Commissioner Yount joined the meeting at 9:25.

Mr. Spencer brought to the Boards attention the gutter spread calculations have not been approved by the County Highway Engineer. The gutter spreads are at 9 feet instead of 10 feet with the major one in the southwest cul-de-sac.

Commissioner Yount moved to grant the variance for lots 45-49 to store up to a foot of onsite storage.

Commissioner Yount moved to grant final approval of Romney Run Subdivision, Phase I subject to the gutter spread calculations being approved by the County Highway Engineer, subject to lots 45-49 onlot storage not to exceed one foot in depth, and subject to the emergency spillway and emergency access on the south pond be located at the southwest corner of the pond and the surface be approved by the County Surveyor. He also approved the variance for a fence around both ponds and a berm to be constructed between County Road 300 South and the south pond, seconded by Commissioner Haan. Motion carried.

Paul Coutts, C & S Engineering, asked for preliminary approval of Wake Robin Estates II. The southwest portion of the subdivision drains to the south and the north portion of the subdivision drains to the east both outletting into detention ponds.

Commissioner Gentry asked what the plan is for the pond along Lindberg Road?

Mr. Coutts stated a berm has been planned as an obstruction between the pond and Lindberg Road.

Commissioner Yount asked who would be responsible for maintaining the detention ponds?

Mr. Coutts stated the landowners will be responsible for maintenance by each having an undivided interest in the pond.

Mr. Spencer read the conditions that need to be met before final approval is granted.

1. The applicant has proposed to utilize twelve 36" CMPs for the outlet of the north detention pond. The applicant has shown general compliance with the ordinance with this configuration however, re-evaluation of this design may be warranted based on maintenance issues of the facility.
2. The applicant provided storm sewer calculations with the first submittal. However, the second submittal indicates that the applicant has revised a portion of the lot and street layout. These revisions require changes to the watershed map and the calculations that should be completed before submitting for final approval. The first submittal does indicate a general compliance with the ordinance.
3. The submitted calculations indicate that a culvert will be constructed under Yeoman Lane. The applicant should provide the location for this culvert and details for the conveyance system to the proposed detention pond in the submittal for final approval.
4. The January 17, 1994 memorandum stated that there may be a wetland in the area of the proposed north detention pond. The applicant has provided a letter from the Corps of Engineers regarding this issue. Based on this letter, it appears that a permit may be required for the construction in the wetland. The applicant should clarify this issue before submitting plans for final approval.
5. The detention ponds are located on lots 175-177 and 86-91 and not on common areas. The applicant will be requesting a variance for this issue and will include wording in the covenants and restrictions for maintenance by the lot owners.
6. In addition to the concerns listed above, the applicant must also provide items such as erosion control plans, gutter spread calculations, proposed grading plans, etc. in the submittal for final approval.

Commissioner Yount moved to give preliminary approval of Wake Robin Estates II, subject to the six conditions being met before final approval. Seconded by Commissioner Haan. Motion carried.

Other Business

DARBY-WETHERHILL JOINT BOARD

Commissioner Gentry stated Benton County has asked the Board to appoint Drainage Board members to a Joint Drainage Board for the Darby-Wetherhill Ditch. She appointed herself and Commissioner Haan to serve on the Board.

J.N. KIRKPATRICK WATERSHED STUDY

Mr. Spencer asked the Board to approve payment for additional work that was done to the J.N. Kirkpatrick Watershed Study by Ticen, Schulte and Associates. The original agreement to do the study was \$12,500.00. The Board asked for additional work to be done to the study in December which included analyzing detention storage requirements for 25, 50 & 100 years pre-development release rates. They have charged an additional \$1,833.00 for the work.

Commissioner Yount moved approve payment on the additional work which was conducted on the J.N. Kirkpatrick Watershed Study, seconded by Commissioner Haan. Motion carried.

LEWIS JAKES DITCH

Mr. Spencer presented the Board with a request from Don Caddy, 8231 North 300 West, to reduce the easement on both sides of the Jakes Ditch from 75' to 25' for the portion of ditch that runs through his property. The 75' easement overlaps an existing building that was built before the drainage code was implemented.

Commissioner Yount moved to approve the reduction of easement on the portion of Jakes Ditch that runs through Mr. Caddy's property from 75' to 25'. Seconded by Commissioner Haan. Motion carried.

CUPPY-MCCLURE PROJECT

Commissioner Gentry asked Mr. Spencer to update the Board on the progress of the Cuppy-McClure project.

Mr. Spencer stated he received a denial of the Section 401 Water Quality Certification for the Cuppy-McClure Watershed from IDEM. An item of concern when Mr. Maupin, Mr. Peterson, and Mr. Spencer walked the section of project which is planned for reconstruction was the sediment basin needed to have flatter slopes to create more vegetation in the shallow water, but the denial letter did not mention the sediment basin. Mr. Peterson and Mr. Spencer prepared a formal appeal letter to be sent certified mailed. Until approval of certification the project can not move forward.

WET BOTTOM BASIN DESIGN REQUIREMENT

Commissioner Gentry asked Mr. Stolz, Mr. Spencer and Mr. Hoffman to help with a plan to eliminate the request for variances on a fence surrounding detention storage ponds. As the ordinance reads now, basins designed with permanent pools or containing permanent lakes shall be surrounded by a nonclimbable chain link fence at least six (6) feet in height plus a barb wire suitably posted to prevent unauthorized entry into the pool area. Commissioner Gentry would like to see a plan to give the developer a choice, either have specified safety ledges or a fence will have to surround the pond.

Mr. Stolz stated he can look through studies that have been done on detention basins to see what is being done in other counties and how they are handling the safety issues of ponds.

Being no further business Commissioner Gentry moved to adjourn until April 6, 1994, seconded by Commissioner Haan. Motion carried.

DRAINAGE BOARD MINUTES Dan Gentry MARCH 9, 1994 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
SEPTEMBER 7, 1994

The Tippecanoe County Drainage Board met Wednesday, September 7, 1994, in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Nola J. Gentry calling the meeting to order.

Those present were: Tippecanoe County Commissioners Nola J. Gentry, William D. Haan, Hubert D. Yount; Tippecanoe County Surveyor Michael J. Spencer; Acting Drainage Board Attorney David Luhman; Drainage Board Engineering Consultant Jon Stolz and Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held August 3, 1994, Commissioner Yount moved to approve the minutes, seconded by Commissioner Haan. Motion carried.

WESTRIDGE ESTATES

Richard Fidler, Craig & McKnight Engineers and Architects, represented Mr. Weildbaker who is the current property owner and developer of Westridge Estates, located off Taft Road north of Klondike Road. The proposed Subdivision involves 13 acres and will contain 12 lots. Indian Creek is to the east of the development and is planned to be the outlet for the runoff.

Mr. Weildbaker plans to use 10 acres west of the development for his personal use.

Mr. Fidler asked the Board for two variances:

1. Section 14.f.2 to exceed the four foot depth in a 100 year storm event.
2. The dry-bottom detention pond to be a part of lots 1 and 2.

They requested the first variance to exceed the four foot depth because more trees would have to be removed due to the existing ravine. The second variance was requested because the responsibility of maintenance will be attained by the landowner.

Mr. Spencer recommended final approval with three conditions.

1. The 100 year pool elevation of the pond must be shown on the plans.
2. An emergency spillway must be provided as required by Section 14.f.8 of the Ordinance.
3. Section 14.f.13. states that no residential lots shall be used for any part of a detention basin or for the storage of water. It appears that the current plan includes lot lines that extend into the proposed detention pond.

Commissioner Haan stated the concern of having a dry bottom detention pond as part of lots 1 & 2 is the landowners assume ownership of the property and landscape over the easement restricting the flow.

Commissioner Gentry suggested putting all the pond area in the easement.

Mr. Fidler stated the entire area of the pond is within the easement.

Commissioner Yount moved to grant final approval of Westridge Estates with the two variances and subject to the three conditions, seconded by Commissioner Haan. Motion carried.

Drainage Easement Vacation lot 61, Brookfield Heights

Mr. Spencer presented the Board with a signature page that will acknowledge the approval from the Board to vacate the Drainage Easement in lot 61 of Brookfield Heights Subdivision.

Commissioner Haan moved to acknowledge and recommend Ordinance 94-34-CM, seconded by Commissioner Yount. Motion carried.

Valley Forge Drainage

Richard Chafin, 3920 George Washington Road lot 9, and Joseph Seele, 3932 George Washington Road lot 6, came to the Board to express their concern on the drainage of Valley Forge Subdivision. There are two drains one from Church and another from the intersection of Valley Forge and 9th Street that outlet into a manhole in Mr. Chafin's lot then north through one drain. The system works fine until the single pipe outlets onto the lots north of Mr. Chafin's lot and causes water to stand in their lots. Mr. Chafin wanted to know what the County was going to do about this problem. He suggested putting an open ditch in front of his lot and the adjoining lots to direct the water to the J.N. Kirkpatrick Ditch. Mr. Chafin had heard the County was going to tile the water in the back of his lot and adjoining lots.

Mr. Spencer explained that the County Highway Department has been doing field work and collecting data. The data will help determine what action needs to be taken to correct the drainage problem of Valley Forge.

Commissioner Gentry reassured Mr. Chafin and Mr. Seele there will be notification as to when a discussion on the alternatives to the drainage problem will be held.

Mr. Chafin brought to the Board's attention the easement in the back of his lot. He stated there is a 15' easement, but the pipe is 5' outside the easement.

Commissioner Yount stated the Board is aware of the easement situation, but they do not know the reason the pipe is outside the easement.

ORDINANCE DISCUSSION

Commissioner Gentry suggested getting the various Surveyor/Engineers together to discuss the upcoming changes to the Drainage Board Ordinance. The fee schedule which will incorporate a review time limit of a maximum of 10 hours and the fence issue on a wet bottom basin design.

ROWE TRUCKING AGREEMENT

Mr. Spencer presented the Board with the properly executed Rowe Trucking Agreement, which the Commissioner acknowledged and signed.

CUPPY MCCLURE - up-date

Mr. Spencer informed the Board of a letter he received from J.F. New stating he can do the tree mitigation work for the Cuppy McClure Drain for \$1,300.00.

Commissioner Haan moved to accept the price for the tree mitigation plan, seconded by Commissioner Yount. Motion carried.

Mr. Spencer stated he will send Mr. New a letter letting him know of the Board's acceptance, also ask him for a letter stating the price per hour and he will stay within the agreed cost.

JOHN HOFFMAN DITCH - Easement

Mr. Spencer received a letter from a landowner along the John Hoffman Ditch requesting the easement through his property be reduced from 150 feet to 50 feet. Mr. Spencer felt that the easement reduction should not be granted until the Board knows the tile is in good working order.

being no further business Commissioner Yount moved to adjourn until October 5, 1994, seconded by Commissioner Haan. Motion carried.

DRAINAGE BOARD MINUTES SEPTEMBER 7, 1994 REGULAR MEETING 09/15/9409/06/94

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JANUARY 4, 1995

The Tippecanoe County Drainage Board met Wednesday January 4, 1995 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Nola J. Gentry calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Gene Jones; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Drainage Board Engineering Consultant pro-tem David Eickelberger and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held December 7, 1994. Commissioner Haan moved to approve the minutes, Seconded by Commissioner Gentry. Motion carried.

ELECTION OF 1995 OFFICERS

Commissioner Gentry made a motion to nominate Commissioner Haan as President of the Tippecanoe County Drainage Board, seconded by Commissioner Jones. Motion carried.

Commissioner Haan made a motion to nominate Commissioner Gentry as Vice President of the Tippecanoe County Drainage Board, seconded by Commissioner Gentry. Motion carried.

APPOINTMENT TO THE BOARD

Commissioner Gentry moved to appoint Shelli Muller as Executive Secretary of the Tippecanoe County Drainage Board, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry moved to approve the contract with Christopher B. Burke Engineering, LTD. and authorize the Drainage Board President to sign the contract pending review by the Drainage Board Attorney, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry moved to approve the contract of J. Frederick Hoffman as Attorney for the Tippecanoe County Drainage Board for a hourly rate of One hundred and thirty five dollars (135.00), seconded by Commissioner Jones. Motion carried.

HADLEY MOORS SUBDIVISION PART 2

Dale Koons, Civil Engineering, representing Dave Lux the developer of Hadley Moors Subdivision part 2 which is located North of the existing part one. A detention pond located West of the development has been sized to retain runoff from parts one and two. The storm system consist of a thirty-six inch pipe which outlets into the detention pond.

Mr. Spencer stated changes to the initial review have been made to correct the plan therefore final approval is recommended.

Commissioner Gentry moved to grant final approval of Hadley Moors Subdivision Part 2, seconded by Commissioner Jones. Motion carried.

DRAINAGE ORDINANCE - Review Fee

Commissioner Haan discussed the change to the Drainage Ordinance that will enact a review fee.

Mr. Spencer explained a review fee will be implemented to anyone that submits a project to be reviewed by the County and exceeds the ten hour review time limit. All accounts receivable and payable will go through the Surveyor's Office and final approvals will be subject to payment in full.

Commissioner Haan stated the review fee has taken affect January 1, 1995.

Mr. Hoffman confirmed any project that was submitted for this meeting is subject to a charge if exceeding the ten hour review time limit.

PENTECOSTAL CHURCH OF GOD

Mr. Spencer recommended to continue the Pentecostal Church of God review due to the absence of representation. Commissioner Gentry moved to continue review, seconded by Commissioner Jones. Motion carried.

VALLEY FORGE ESTATES PH 4 PT 2

Andy Slavens, Vester and Associates, presented the Board with final drainage plans for Valley Forge Estates, Phase 4 Part 2 which is located east of the existing Phase 4 Part 1. Part 2 contains 15.1 acres and will be divided into 53 lots. The existing detention pond that retains the runoff of part 1 will also retain part 2.

Mr. Spencer mentioned the memorandum dated December 27, 1994 from Christopher B. Burke Engineering concerning Valley Forge Estates Phase 4, Part 2 which indicates the contour lines are shown to go uphill instead of downhill and the pipe-sizing calculations for the rainfall intensity vary. Mr. Spencer stated he discussed the changes needed with Mr. Slavens and he was able to get the corrected information. Mr. Spencer felt by the end of today the corrected plan will meet the requirements of the Drainage Ordinance therefore he recommended approval.

Commissioner Gentry moved to grant final approval with the condition that Mr. Spencer and Mr. Slavens come to an agreement on the corrected plans, seconded by Commissioner Jones. Motion carried.

US231 PROJECT - SOUTH SECTION

Mr. Spencer recommended to continue the US231 project due to the absence of representation. Commissioner Gentry moved to continue the project, seconded by Commissioner Jones. Motion carried.

WILSON BRANCH RELOCATION

Mark Harris, American Consulting, presented the Board with final plans for the Wilson Branch relocation of the Elliott Ditch. Mr. Harris referred to the relocation as Phase 2 which will connect and replace most of Phase 1 relocation. Starting on the North side of Ross Road the relocation will go southwest of the recently relocated Wilson Branch. The relocation will outlet back into the old existing Wilson Branch before entering the regional retention pond. Mr. Harris mentioned the project has been submitted and is being reviewed by the DNR for construction in a floodway.

Commissioner Gentry asked how this affects the other agreement of the Wilson Branch and does this relocation affect the agreement with Judy Hammond, Maple Point Enterprises?

Mr. Spencer asked if all the land that the relocation will be taking place is owned by the Payless Corporation?

C. Buzz Weisiger, Payless Corporation, stated the land is owned by the Simon Corporation, Maple Point Enterprises and by Payless Corporation.

Mr. Spencer asked if all the land is going to be owned by the Payless Corporation at the end of the relocation?

Mr. Weisiger stated the center of the ditch will lie on the property line between the Payless Corporation and Maple Point Enterprises.

Mr. Hoffman requested American Consulting to get the consent of Maple Point Enterprises and Simon Corporation before the Board approves the project.

Mr. Weisiger stated both parties are aware of the project and asked if approval could be granted subject to the consent of Maple Point Enterprises and Simon Corporation.

Mr. Hoffman suggested approval be denied until a letter of consent has been received by Maple Point Enterprises and Simon Corporation. The letter asking for consent should contain the legal description and the description of the drainage easement.

Mr. Spencer stated American Consulting is asking for a reduction in easement width from 75 feet from the top of the bank on either side of the ditch to 35 feet from the top of the bank on either side of the ditch.

Commissioner Gentry moved to grant the variance to reduce the easement of 75 feet to 35 feet either side of the ditch from the top of the bank, seconded by Commissioner Jones. Motion carried.

CREASY/BRADY CONNECTOR

Todd Warrix, Hawkins Environment, asked the Board for final approval of the Creasy/Brady Connector. This project is in conjunction with the proposed Wilson Branch Reservoir and lies completely within the Elliott Ditch watershed area. The roadway will increase the existing condition .25 percent, but only increase the water surface elevation by .01 feet. With this project the flooding at Ivy Tech will be reduced, however it will not be eliminated. Upon completion the "F" lake the majority of the runoff from the Creasy/Brady roadway will be contained in County owned detention storage facilities.

Mr. Hoffman asked if the project is going to increase the volume of the nonexisting lake.

Mr. Warrix stated the 3.3 cfs increase is insignificant to the size of the Elliott Ditch Watershed and represent a total increase of .25 percent.

Mr. Spencer stated the only concern is the project needs to be clarified as to whether or not it is in the floodway. If so, there needs to be a permit from the DNR allowing construction in a floodway.

Bill Davis, Hawkins Environment, stated the contour data showing Creasy/Brady Roadway Extension was submitted with the Wilson Branch reservoir to the DNR and that permit has been issued.

Mr. Spencer stated the problem with the permit from the DNR is there is no mention of the roadway in the project description.

Mr. Davis stated the Wilson Branch contract contains all the dirt work for the roadway. The dirt from the reservoir will be used to build up the roadway and that was explained in the request for the permit.

Mr. Hoffman stated it needs to be clear that the roadway is not in the floodway otherwise the Board will require DNR approval of construction in a floodway.

Commissioner Gentry moved to grant final approval of Creasy/Brady Roadway with the condition of proof the roadway is not in the floodway or a DNR permit for construction in a floodway, seconded by Commissioner Jones. Motion carried.

CONCORD CORNERS SUBDIVISION

Dan Lee, Ticen Schulte and Associates, asked the Board for a reduction in Drainage Easement for Concord Corners Subdivision located at the Northwest corner of Concord Road and 350 South. Mr. Lee asked for the easement on the East and North sides of the ditch to be reduced from 75 feet to 25-30 feet.

Mr. Spencer stated the County has road right-of-way on the South and West of the eight inch pipe therefore the reduction will not interfere with maintaining the ditch.

Commissioner Gentry moved to approve the reduction of easement from 75 feet to 25-30 feet on the East and North side of ditch in Concord Corners Subdivision, seconded by Commissioner Jones. Motion carried.

Being no further business Commissioner Gentry moved to adjourn until February 1, 1995, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES JANUARY 1, 1995 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
 REGULAR MEETING
 FEBRUARY 1, 1995

The Tippecanoe County Drainage Board met Wednesday February 1, 1995 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, Gene Jones; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney pro-tem David Luhman; and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held January 4, 1995. Commissioner Gentry moved to approve the minutes, Seconded by Commissioner Jones. Motion carried.

ACTIVE AND INACTIVE DITCH LIST 1995

Mr. Luhman read the active ditch list into the minutes.

Ditch No.	Ditch Name	Four Year Assessment	Balance Fund 94
2	Anderson, Jesse	15793.76	\$15745.45
3	Andrews, E.W.	2566.80	1385.41
4	Anson, Delphine	5122.56	1302.37
13	Brown, Andrew	8094.24	5365.93
14	Buck Creek (Carroll Co.)		
16	Byers, Orrin	5258.88	4453.68
18	Coe Train	3338.56	112.19
20	County Farm	1012.00	(724.45)
26	Darby, Wetherill (Benton Co.)		
27	Ellis, Thomas	1642.40	874.96
29	Fassnacht, Christ	2350.56	630.15
31	Gowen, Issac (White Co.)		
33	Grimes, Rebecca	3363.52	(5780.23)
35	Haywood, E.F.	7348.96	6405.57
37	Harrison Meadows	1532.56	399.99
42	Kellerman, James	1043.52	513.73
46	Kirkpatrick, James	16637.76	13804.40
48	Lesley, Calvin	3787.76	511.43
51	McFarland, John	7649.12	6823.11
52	McKinney, Mary	4287.52	2344.53
54	Marsh, Samuel (Montgomery Co)		
57	Morin, F.E.	1434.72	264.90
58	Motsinger, Hester	2000.00	184.36
59	O'Neal, J. Kelly	13848.00	9902.13
60	Oshier, Aduley	1624.88	429.56
64	Rayman, Emmett (White Co.)		
65	Reser, Franklin	3407.60	(1799.25)
71	Skinner, Ray	2713.60	2003.50
73	Southworth, Mary	558.08	470.62
74	Sterrett, Joseph C.	478.32	120.35
76	Swanson, Gustav	4965.28	(314.21)
87	Wilson, Nixon (Fountain Co.)		
89	Yeager, Simeon	615.36	515.63

91	Dickens, Jesse	288.00	93.96
93	Dismal Creek	25420.16	5408.64
94	Shawnee Creek	6639.28	1004.91
100	Elliott, S.W.	227772.24	95756.64
102	Brum, Sophia (Benton Co)		
103	Moore H.W. (Benton Co)		
104	Hadley Lake	65344.56	15588.62
105	Thomas, Mary (Carroll Co)		
106	Arbegust-Young (Clinton Co)		

Mr. Luhman read the inactive ditch list into the minutes

Ditch No.	Ditch Names	Four Year Assessment	Balance Fund 94
1	Amstutz, John	\$5008.00	\$5797.94
5	Baker, Dempsey	2374.24	2931.55
6	Baker, Newell	717.52	2100.45
7	Bell, Nellie	1329.12	2163.76
8	Berlowitz, Julius	8537.44	9835.71
10	Binder, Michael	4388.96	4844.52
11	Blickenstaff, John M.	7092.80	7352.92
12	Box, N.W.	11650.24	14523.89
15	Burkhalter, Alfred	5482.96	5661.22
17	Coe, Floyd	13617.84	19021.00
19	Cole Grant	4113.92	10353.24
21	Cripe, Jesse	911.28	1622.55
22	Daughtery, Charles	1883.12	2386.04
23	Devault, Fannie	3766.80	8086.91
25	Dunkin, Marion	9536.08	11422.15
28	Erwin, Martin	656.72	1141.16
30	Fugate, Elijah	3543.52	5326.70
32	Gray, Martin	6015.52	6440.23
34	Hafner, Fred	1263.44	1380.75
36	Haywood, Thomas	2133.12	2916.09
39	Inskeep, George	3123.84	7972.80
40	Jakes, Lewis	5164.24	5493.58
41	Johnson, E. Eugene	10745.28	13692.14
43	Kerschner, F.S.	1844.20	4165.28
44	Kirkpatrick, Amanda	2677.36	3239.28
45	Kirkpatrick, Frank	4226.80	4754.52
47	Kuhns, John	1226.96	1592.33
50	McCoy, John	2194.72	3185.39
53	Mahin, Wesley	3467.68	3878.12
55	Miller, Absalm	3236.00	5382.84
56	Montgomery, Ann	4614.56	5468.74
61	Parker Lane	2141.44	3276.36
63	Peters, Calvin	828.00	2423.73
66	Rettereth, Peter	1120.32	2057.43
67	Rickerd, Arthur	1064.80	1148.17
68	Ross, Alexander	1791.68	4057.08
69	Sheperdson, J.A.	1536.72	3759.44
70	Saltzman, John	5740.96	7207.47

72	Smith, Abe	1277.52	1430.16
75	Stewart, William	765.76	937.96
77	Taylor, Alonzo	1466.96	3591.02
78	Taylor, Jacob	4616.08	6759.96
79	Toohy, John	542.40	1113.90
81	Van Natta, John	1338.16	2827.20
82	Wallace, Harrison	5501.76	6195.61
83	Walters, Sussana	972.24	2146.65
84	Walters, William	8361.52	8906.49
85	Waples, McDill	5478.08	9569.95
86	Wilder, Lena	3365.60	5125.49
88	Wilson, J & J	736.96	5873.30
90	Yoe, Franklin	1605.44	2613.93
92	Jenkins	1689.24	2655.25
95	Butler-Gosma	19002.24	20988.51
96	Kirkpatrick One	6832.16	11653.93
97	McLaughlin, John		
101	Hoffman, John	72105.03	55880.51

Mr. Spencer stated the John Hoffman Ditch is on a three year assessment which started in 1991 with a ten dollar an acre assessment. It is now necessary for the Board to schedule a meeting between Clinton, Carroll and Tippecanoe Counties to reduce the assessment.

Commissioner Haan appointed himself and Commissioner Gentry to serve on the Tri County Board.

CHRISTOPHER B. BURKE ENGINEERING CONTRACT

Mr. Luhman stated after reviewing the original contract from Christopher B. Burke Engineering a few items were discussed and changes were made. The contract was revised with one exception on page 6 paragraph 24. The suggested revision was if a contractor was doing work based upon the Engineers plans the contractor would indemnify Burke for any damages to Burke because of the contractors negligence. Also suggested was to include Burke as a named insured on the insurance policy. Mr. Luhman explained the main reason for the suggestion was so the County and Christopher B. Burke Engineering would not be held liable.

Commissioner Gentry moved to approve the contract with Christopher B. Burke Engineering, LTD., and authorize the President of the Board to sign the contract, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

Mr. Spencer presented the Board with the reforestation proposal for the Cuppy-McClure Drain, which will comply with the DNR requirements for a 2 to 1 mitigation on tree removal. The Parks Department for the City of West Lafayette suggested sites for the trees replacement. Mr. Spencer explained he wanted the Board to be aware of the progress and that Mr. Ditzler of J.F. New will submit the plan to Dan Ernst of the Indiana Department of Natural Resources.

Being no further business, Commissioner Gentry moved to adjourn until March 1, 1995, seconded by Commissioner Jones. Meeting adjourned.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MARCH 1, 1995

The Tippecanoe County Drainage Board met Wednesday March 1, 1995 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, & Gene Jones; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Engineering Consultant Jon Stolz and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held February 1, 1995. Commissioner Gentry moved to approve the minutes, Seconded by Commissioner Jones. Motion carried.

PENTECOSTAL CHURCH OF GOD

Bob Grove asked the Board for final approval of the Pentecostal Church of God. The Church will be located West of South 9th Street, South of 350 South where an existing homestead is located. The current plan shows the outlet at the 100 year elevation for the James N. Kirkpatrick Ditch

Mr. Spencer recommended final approval.

Commissioner Gentry moved to grant final approve of the Pentecostal Church of God drainage submittal, seconded by Commissioner Jones. Motion carried.

SAGAMORE POINTE SUBDIVISION

Bob Grove explained the first time Sagamore Pointe Subdivision was discussed the plan was to use the Hadley Lake for storm water storage. At that time the Board informed Mr. Grove written approval from the owner of Hadley Lake would have to be obtained. The second submittal was to use rear yard storage, but was unacceptable to the Board. This last submittal goes back to the first submittal with a tentative agreement between Martin, Chuck, & Tim Galama, the landowners of the Hadley Lake, agreeing to the use of the lake as storage for storm water from Sagamore Pointe Subdivision. Mr. Grove stated another option if the agreement is not agreeable would include two detention basins which would take the place of four residential lots. Basin #1 would store storm water from 18.95 acres North of the legal drain and Basin #2 would store storm water from 6.24 acres South of the legal drain. Mr. Grove asked the Board for conceptual approval of the onsite detention if an agreement could not be reach between the owners of Hadley Lake and Smith Enterprises.

Martin, Chuck, and Tim Galama joined the discussion.

Commissioner Gentry asked Martin Galama if there is a tentative agreement between him and Smith Enterprises to use Hadley Lake for storm water storage?

Mr. Martin Galama stated he wanted to discuss some issues with the Board before they entered into an agreement with Smith Enterprises. Mr. Galama stated there is no tentative agreement.

Mr. Hoffman asked if there would be any other landowner affected by the increase of storm water being stored in Hadley Lake?

Mr. Spencer stated at the outlet elevations of the pipes under Morehouse Road the water does not affect any other landowners, when the elevation gets above the outlet pipes it could affect John Schmidt's property.

Mr. Hoffman stated anyone who may be effected should be notified and a public hearing held.

Mr. Spencer explained the drainage will not affect anyone else at the 648 elevation.

Commissioner Gentry moved to grant conceptual approval of the two onsite detention basins in Sagamore Pointe Subdivision, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry moved to continue Sagamore Pointe Subdivision until the April 5, 1995 Drainage Board Meeting, seconded by Commissioner Jones. Motion carried.

Mr. Martin Galama expressed his concern as to why they were not willing to go into an agreement with Smith Enterprises. The main reason was if the Galamas wanted to develop their land they want to be sure that Hadley Lake would have enough capacity to handle the drainage from their development.

Mr. Spencer explained there are questions which need to be answered before the Board can answer whether or not the lake could handle the storm water from Sagamore Pointe Subdivision and the Galama's development. The only way to get the answers is to do a study of a simulated development of Galama's property and determine how many acre feet of storage would be available in the lake. There is also the option of making the lake bigger at the permanent pool elevation which is the outlet elevation of Morehouse Road.

Mr. Tim Galama indicated the Ordinance states developments that surround the lake are required to have there own detention for their storm water. If we decide to go into an agreement with Smith Enterprises would other developers remonstrate?

Commissioner Haan stated the same Ordinance would apply to other developers, they would have to receive permission from Hadley Lake's owner or have onsite detention.

Mr. Spencer had asked Mr. Stolz to do an analysis on work that was done by Cole and Associates when the Dempsey Baker Ditch was created. The road elevation on Morehouse Road is approximately 653.6 and that accounts for 464 acre feet of storage in Hadley Lake before overflowing Morehouse Road. The Sagamore Pointe Development storage requirement is 1.13 acre feet out of the 464 available storage.

Mr. Hoffman asked how much more storage could Hadley Lake handle before Morehouse Road would overflow?

Mr. Spencer stated there are 464 acre feet available and the Sagamore Pointe Development would use 1.13 acre feet. The 5.6 feet height of storage is from the outlet structure under Morehouse Road to the top of the Road and the 1.13 is acre feet of storage is a volume. The development is not using 1.13 feet off the 5.6 feet of storage, it is using 1.13 acre feet off the 464 acre feet of volume up to the top of Morehouse Road before it would overflow.

Commissioner Gentry stated the only way to make sure Galama's would have enough storage for their development would be to have an Engineer determine the maximum density of the proposed development.

OTHER BUSINESS

ASHTON WOODS SUBDIVISION PHASE IV

Joseph T. Bumbleburg and Derrin Sorenson asked the Board to take a look at Ashton Woods Subdivision Phase IV. Mr. Bumbleburg stated the County owns a dry bottom retention pond east of Phase IV and asked if it would be possible to deed the two outlots designed for detention within the Subdivision to the County and a covenant that the lot owners could not remonstrate against a petition to create a County Regulated Drain for this watershed area in the future?

Commissioner Haan explained responsibility would be assumed by the County if the basins were deeded to the County. That is something the County does not want.

Mr. Hoffman asked where the water from the two basins would outlet?

Mr. Spencer stated the water will be taken under the new US231 and follow a natural course to the Wea Creek.

Mr. Hoffman asked about the possibility of making the route a legal drain?

Mr. Spencer stated when the Wea-ton area was developed the possibility of a legal drain was discussed, but nothing ever came about. The watershed area would include the Rostone Circle area, Triple J, Old Romney Heights and Ashton Woods Developments.

Mr. Bumbleburg reviewed what needs to be done to establish a legal drain is to create a watershed area, get a legal description of the drain, and to get a list of landowners in the watershed area.

ROMNEY STOCK FARM DITCH

Mr. Spencer presented the Board with a petition he received from Marvin McBee to extend the Romney Stock Farm Ditch and establish a maintenance fund for the upper end of the ditch. There are seven signatures on the petition, but it does not include the signature of Paul Kirkhoff which 95% of the ditch is on his property.

Commissioner Gentry asked if 51% of the landowners effected have signed the petition?

Mr. Spencer stated yes.

US231 RELOCATION

Mr. Spencer stated Mr. Stolz provided him with a synopsis of the review comments concerning the relocation of US231 by Christopher B. Burke Engineering, LTD. for the Board's review.

Cuppy-McClure update

Mr. Spencer reported the plan for the tree mitigation has been sent to Will Ditzler of J.F. New & Associates.

Being no further business the Commissioner Gentry moved to adjourn until April 5, 1995, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES MARCH 1, 1995 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JANUARY 3, 1996

The Tippecanoe County Drainage Board met Wednesday January 3, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana with William D. Haan calling the meeting to order.

Those present were: Tippecanoe County Commissioners William D. Haan, Nola J. Gentry, and Gene Jones; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Drainage Board Engineering Consultant Dave Eichelberger, and Drainage Board Secretary Shelli Muller.

ELECTION OF OFFICERS

The first item on the agenda was to elect new officers for 1996.

Mr. Hoffman opened the floor to nominations for President.

Commissioner Haan nominated Commissioner Gentry.

Commissioner Haan moved to close nominations for president, seconded by Commissioner Jones. Motion carried, Commissioner Gentry was elected.

Mr. Hoffman turned the meeting over to the President.

Commissioner Gentry asked for nominations for Vice President.

Commissioner Haan nominated Commissioner Jones for Vice President.

Commissioner Haan moved to close nominations for Vice President, Commissioner Gentry seconded. Motion carried, Commissioner Jones was elected.

APPOINTMENTS TO THE BOARD

The next item on the agenda is to renew the contracts with Hoffman, Luhman & Busch as the law firm.

Commissioner Haan moved to renew the 1995 contract with Hoffman, Luhman and Busch, seconded by Commissioner Jones. Motion carried.

Mr. Spencer presented the Board with two proposals for the contract with Christopher B. Burke Engineering Limited.

- 1) A proposal for professional engineering services on a varied rate depending on specified standard charges.
- 2) a proposal for professional engineering services on a fixed rate of \$50.00 per hour.

Commissioner Gentry asked for a report on the number of engineering review hours in 1995 for all the projects submitted in 1995. The discussion of which contract to be used will be continued at the February meeting.

Commissioner Haan moved to extend the 1995 contract with Christopher B. Burke Engineering Limited for one month into 1996, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to reappoint Shelli Muller as Drainage Board Secretary for 1996, seconded by Commissioner Jones. Motion carried.

1996 ACTIVE/INACTIVE DITCH LIST

Mr. Hoffman asked for the active and inactive ditches to be placed in the minutes.

Commissioner Haan moved to place the 1996 active/inactive ditch list the minutes, seconded by Commissioner Jones. Motion carried.

1996 - ACTIVE/INACTIVE DITCH LIST

ACTIVE

E.W. ANDREW, ANSON-DEPHINE, JULIUS BERLOWITZ, BEUTLER-GOSMA, ANDREW BROWN, TRAIN COE, COUNTY FARM, THOMAS ELLIS, FASSNACHT-CRIST, REBECCA GRIMES, HARRISON MEADOWS, EUGENE JOHNSON, JAMES KELLERMAN, AMANDA KIRKPATRICK, FRANK KIRKPATRICK, JAMES KIRKPATRICK, CALVIN LESLEY, MARY MCKINNEY, F.E. MORIN, KESTER MOTTSINGER, J. KELLY O'NEAL, AUDLEY OSHIER, FRANKLIN RESER, SKINNER RAY, JOSEPH STERRETT, GUSTAV SWANSON, JACOB TAYLOR, JESSE DICKENS, DISMAL CREEK, SHAWNEE CREEK, SAMUEL ELLIOTT, JOHN HOFFMAN, BUCK CREEK, DARBY-WETHERHILL, ISSAC GOWEN, SAMUEL MARSH, EMMETT RAYMAN, WILSON-NIXON, SOPHIA BRUMM, H.W. MOORE, MARY THOMAS, ARBEGUST-YOUNG

INACTIVE

JOHN AMSTUZ, JESSE ANDERSON, DEMPSEY BAKER, BAKER VS NEWELL, NELLIE BALL, MICHAEL BINDER, JOHN BLICKENSTAFF, NATHANIEL BOX, ALFRED BURKHALTER, ORIN BYERS, FLOYD COE, GRANT COLE, JESSE CRIPE, CHARLES DAUGHERTY, FANNIE DEVAULT, MARION DUNKIN, MARTIN ERVIN, ELIJAH FUGATE, MARTIN GRAY, FRED HAFNER, E.F. HAYWOOD, THOMAS HAYWOOD, GEORGE INSKEEP, LEWIS JAKES, FLOYD KERSCHNER, JOHN KUHN, JOHN MCCOY, JOHN MCFARLAND, WESLEY MAHIN, ABSOLEM MILLER, ANN MONTGOMERY, PARKER LANE, CALVIN PETER, PETER RETTERETH, ARTHUR RICHERD, ALEXANDER ROSS, JAMES SHEPHERDSON, JOHN SALZMAN, ABE SMITH, MARY SOUTHWORTH, WILLIAM STEWART, ALONZO TAYLOR, JOHN TOOHEY, JOHN VANNATTA, HARRISON WALLACE, SUSSANA WALTERS, WILLIAM WALTERS, WAPLES-MCDILL, LENA WILDER, J&J WILSON, SIMEON YEAGER, FRANKLIN YOE, JENKINS, KIRKPATRICK ONE, MCLAUGHLIN, JOHN HOFFMAN

Commissioner Gentry mentioned the ditches that are in red:

COUNTY FARM, REBECCA GRIMES, FRANKLIN RESER, GUSTAV SWANSON

Mr. Spencer read a letter he received from Betty J. Michael.

"December 29, 1995

Nola J. Gentry, President
Board of Commissioners

Michael J. Spencer
County Surveyor

Re: Interest on Drainage Funds

At the Fall County Auditor's Conference held by the State Board of Accounts, a session was held concerning drainage ditches, charges, billings, investments, interest, etc.

The County Board of Accounts supervisors instructed the Auditors and personnel concerning the above issues. We were informed that most Counties put interest earned on Drainage funds into the County General Fund since County general pays for expenses such as tax bills, Surveyor and Drainage Board Budgets.

An alternative in some cases is to credit this interest to the County Drain Fund (unapportioned). When we inquired about the feasibility of apportioning the monthly interest into more than 100 separate drainage funds, the answer was a dead silence of incredibility that this was being done.

We have double-checked this information with District Board of Accounts personnel and have been told that there is nothing in the statutes that mandates interest should go into each Drain fund or even into the County General Drain Fund.

Therefore, as of January 1, 1996, we will be willing to allocate the monthly interest to either the General Drain Fund or to the County General Fund but NOT to each individual Drain account. Please let me know your preference.

Sincerely,

Betty J. Michael"

Mr. Hoffman stated the ditches are trust funds and the landowners in the watershed areas know the ditches are earning interest, it would not be appropriate to discontinue the investment.

Commissioner Haan moved to direct Mr. Hoffman to write a letter stating per the agreement that was made when the ditches were established the interest was to be allocated, but the Board is willing to distribute the interest on a semimonthly bases to coincide with the spring & fall settlements, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to approve the 1996 Drainage Board schedule, seconded by Commissioner Jones. Motion carried.

APPROVAL OF MINUTES

Commissioner Haan moved to approve the minutes from the December 6, 1995 Drainage Board meeting, seconded by Commissioner Jones. Motion carried.

BRENTWOOD COMMUNITY

Mr. Spencer stated Brentwood Manufacture Home Community is located off US52 West, South of the Elk's Country Club. They asked for preliminary drainage approval, which he recommended as long as the IDNR approved the construction within a floodway. There are approximately 280 lots on 60 acres with a dry bottom retention pond.

Mr. Spencer explained the retention pond does not comply with the Ordinance therefore the developer is asking for a variance. The Ordinance requires a 48 hour discharge time, the plans actual peak discharge is closer to 75 hours.

Commissioner Haan moved to grant preliminary approval to Brentwood Community contingent on the approval of construction in a floodway from IDNR, revised calculations and the request for the variance to the Ordinance, seconded by Commissioner Jones. Motion carried.

SOUTHERN MEADOWS

Mr. Spencer recommended granting Southern Meadows Subdivision final approval. The development is located at the corner of South 18th Street and 350 South within the City of Lafayette. Mr. Spencer explained the development needs approval from the County Drainage Board because it drains to the Elliott Ditch. At the Urban review meetings it was determined any development below the railroad tracks draining into Elliott Ditch would be allowed to direct release into the Ditch without onsite detention. The development includes a water amenity onsite, which water will flow into and out, but is not being planned as a detention pond and does not comply with the requirements of the Ordinance. Mr. Spencer had a question as to whether or not the pond would have to comply with the requirements of the Ordinance.

Mr. Hoffman stated the pond would not have to meet the Ordinance requirements as long as it does not affect the drainage.

Mr. Spencer explained the site drains to the pond.

Commissioner Haan stated if the majority of the site drains to the pond it is a retention pond and should meet the requirements of the Ordinance.

Ron Miller, Schneider Engineering, stated the current discharge in a one hour storm duration to Elliott is 2.7 hours. With the installation of a 42 inch pipe draining from the water amenity discharge into the Elliott in a one hour storm will be a little over an hour.

Commissioner Haan moved to grant final approval of Southern Meadows Subdivision with the condition the pond meets the Drainage Board Ordinance requirement for a non-fenced pond, seconded Commissioner Jones. Motion carried.

VILLAGE PANTRY #564R

Mr. Spencer introduced Village Pantry #564R, which is located at the corner of Brady and Concord, East of the existing Village Pantry. Weihe Engineering submitted final drainage plans and after the review it was recommended to grant final approval with the variance of a 12 inch pipe to a 10 inch concrete pipe for the outfall of the proposed detention area in order to limit the discharge.

Commissioner Haan moved to grant the variance of the Ordinance from a 12 inch required pipe to a 10 inch proposed pipe, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to grant final approval of Village Pantry #564R, seconded by Commissioner Jones. Motion carried.

PETITION TO ESTABLISH O'FERRALL LEGAL DRAIN

Mr. Hoffman excused himself from the meeting 9:45 a.m.

Mr. Spencer asked the Board to acknowledge the petition to establish the O'Ferrall Legal Drain, branch of the Alexander Ross Ditch as a valid petition.

Commissioner Haan moved to acknowledge the petition as a valid petition to establish the O'Ferrall Legal Drain, branch of the Alexander Ross Ditch and the petition represents over 10 percent of the effect landowners, seconded by Commissioner Jones. Motion carried.

Mr. Hoffman returned to the meeting at 9:57 a.m.

ALEXANDER ROSS DITCH EASEMENT REDUCTION

Mr. Spencer explained on the Meijer site two branches of the Alexander Ross Ditch were described, one on the Southeast corner of the site and the other along the West side of the site. After the construction of the site it was discovered the pipe described along the West side of the site is not actually on the Meijer site. Meijer is asking the description of the pipe on the West side be corrected and the easement on the Southeast corner be reduced from 75 feet to 25 feet center of the pipe either side.

Mr. Hoffman stated Mr. Spencer will have to define the easement as only being on the Southeast corner of the site and redefine the easement on the West side of the property.

Commissioner Haan moved to reduce the easement of the Alexander Ross Ditch located at the Southeast corner of the Meijer site from 75 feet to 25 feet either side of the center of the pipe, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to direct Mr. Spencer to correct the Survey maps to show the actual location of the Alexander Ross Ditch and document that the ditch does not run through the West side of the Meijer property, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry asked Mr. Spencer to do a field check on the erosion of the Alexander Ross Ditch bank behind Meadowbrook Subdivision.

SANWIN APARTMENTS

Bob Grove presented the Board with Sanwin Apartments drainage plan and asked for preliminary approval. Located North of US52 West and East of County Road 250 West, the site consist of 3.11 acres and is planned to include a multi-family development with 63 units and a commercial area along the highway. After review from Christopher B. Burke Engineering consultant a revised preliminary plan was submitted addressing the concerns of the memo. The majority of the site, in the

revised plan, drains to the Northeast and Ken Baldwin will provide a 20 foot easement for a 12 inch outlet pipe that runs from the Northeast corner of the site to the existing McClure Ditch.

Commissioner Haan moved to grant preliminary approval of Sanwin Apartments, seconded by Commissioner Jones. Motion carried.

Cuppy-McClure - update

Mr. Spencer stated the notices for the hearing to be held February 7, 1996 on the reconstruction of the Cuppy-McClure Drain were sent January 2, 1996.

Mr. Spencer stated RUST Environmental & Infrastructure has submitted several proposals for construction inspection.

Commissioner Gentry suggested Mr. Spencer get other bids for the construction inspection or consider in-house inspections.

Being no further business Commissioner Haan moved to adjourn until February 7, 1996, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES JANUARY 3, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
FEBRUARY 7, 1996

The Tippecanoe County Drainage Board met Wednesday, February 7, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana with Nola J. Gentry calling the meeting to order.

Those present were: Tippecanoe County Commissioners Nola J. Gentry, Gene Jones and William D. Haan; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney Pro-tem David Luhman; Engineering Consultant Dave Eichelberger and Drainage Board Secretary Shelli Muller.

CUPPY MCCLURE BRANCH OF THE HADLEY LAKE DRAIN

The first item on the agenda was the Reconstruction Hearing for the Cuppy McClure Branch of the Hadley Lake Drain.

Those present were: Jack Coffin, Mark Hatton, Al Parker, Lynford Chaffee, Robert Cox, John Harbor, W.R. Baldwin, Hans Peterson and Paul Elling.

Mr. Spencer stated all affected landowners in the watershed area of the Cuppy McClure Branch of the Hadley Lake Drain have been notified. Mr. Spencer asked the two remonstrance letters and his response letters be placed in the minutes.

"Richard K. Maier
107 Tealwood Drive
Bossier City, LA 71111
11 January, 1996
318-741-9864

Tippecanoe County Drainage Board
20 N 3rd St
Lafayette, IN 47901

Dear Sir:

I received your notice of the hearing on the schedule of assessments for the Cuppy-McClure and Hadley Lake drain. As I do not live in-state, I will not be able to attend the hearing, however, I would like to dispute the number of acres benefitted by my farm. Although I am not familiar with the specific location effected, I do know that most of my land drains to the south and not toward the ditch. I have included a map of the areas and direction of shed for my farm. The blue line divides the flow from the south and east. The 8.9 in the "Acres in Tract". Outside the woods, I would estimate 3 to 4 additional acres that drain east. Tile shown on the map all drain south. The farm to the west of me was listed as 3 acres benefitted.

I would appreciate your attention to this matter to correct the acres benefitted. I would be glad to arrange for the tenant farmer to accompany anyone who wishes to confirm the flow directions and number of acres effected. Thank you.

Sincerely

Richard K. Maier"

Mr. Spencer's response letter.

"January 19, 1996

Richard K. Maier
107 Tealwood Drive
Bossier City, LA 71111

Dear Mr. Maier:

This letter in response to your letter of January 11, 1996, Concerning acres benefitted by the Cuppy McClure Branch of the Hadley Lake Drain.

I agree that the 8.92 acre woods was not included in the "acres in tract" and it should have been.

I have reviewed the topo maps for the watershed for your property and I have determined that your acres benefitted should be reduced from 25.00 acres to 15.00 acres. For your information I have enclosed a copy of the amended recommended plan for the Cuppy McClure branch of the Hadley Lake Drain stormwater improvement plan.

Please call or write if you have any questions or concerns.

Very truly yours,

Michael J. Spencer,
Tippecanoe County Surveyor"

The second letter received.

"January 26, 1996

TO: Shelli Muller, Executive Secretary
Tippecanoe County Drainage Board

Letter of objection

Dear Sir:

- 1) It will be a mess in our daily life, in and out of our house especially when we have a visitor.
- 2) It will destroy the surrounding trees and flowers, I have planted 15 years ago. It will destroy the lot.
- 3) It will be very inconvenient for us being elderly couple in and out of the house. I truly object strongly to your digging! It will destroy the beautification I did some 15 years ago.
- 4) It will depress our feelings my wife and myself of your digging those dirt. It will hurt our feelings after living here X 15 years ago. All the mess we can not stand looking! It all the dirt and dust not healthy for my wife's asthma.
- 5) It will mess our life thinking of those digging. It will depress our feeling the mess you are going to make.

6) I can not attend your meeting. I am too busy at the hospital. We don't care about the cost, its the mess.
Sincerely

Romuld Jardenil, M.D."

Mr. Spencer's response to letter.

"January 30, 1996

Mr. Romuld Jardenil
1925 Carlisle Street
West Lafayette Indiana 47906

Dear Mr. Jardenil:

I have received your letter of objection to the proposed construction of the Cuppy McClure Branch of the Hadley Lake Drain.

I would be willing to meet with you at your convenience to show you the project plans and hopefully satisfy your concerns.

Please call me at 423-9228 and we can set a meeting date and time.

Very truly yours,

Michael J. Spencer,
Tippecanoe County Surveyor"

Mr. Spencer referred to a watershed map of the Cuppy McClure Branch. He explained the stormwater improvement plan, a clean out and regrading of the existing open channel. A 48 inch pipe to a 11' x 5' box culvert under U.S. HWY 52 West is designed, South of U.S. 52 a low flow 42 inch pipe with a high flow side swale to another 10' x 5' box culvert across Great Lakes Chemical property and connect with another 36 inch pipe with a swale running on top of the pipe. There is a proposed structure at North end of the Celery Bog.

Commissioner Gentry asked what the schedule is for construction.

Mr. Spencer stated after this hearing, advertisements for bids will be published, then begin construction this spring.

Commissioner Gentry asked for questions and comments from the audience.

John Harbor, 2512 Nottingham Place, asked what the need is for this project?

Mr. Spencer stated there is an existing old clay tile that was installed in the early 1900's, the soils have moved causing the tile to no longer function properly. In 1992 a petition was filed to reconstruct the Hadley Lake Drain, the Cuppy McClure Ditch is a Branch of this Drain. It will provide a positive outlet for Celery Bog Park and the future development of West Lafayette.

Mr. Harbor asked how the size of the pipe was determined and if such a large size of pipe really is necessary?

Hans Peterson, RUST Environmental & Infrastructure, stated the main reason for the designed sized pipe is so it can handle future development in West Lafayette.

Mr. Harbor asked if the project included the funding for any environmental ratification for this project?

Mr. Peterson stated I.D.E.M. has required the project include a four to one tree mitigation plan. Also, the construction will be a one sided channel clean out and the portion of open channel just south of Hadley Lake will be a channel bottom clean out.

Mr. Spencer pointed out another hearing will be set up after the completion of construction to establish a maintenance fund.

Mark Hatton, Great Lakes Chemical, asked what the easements are for the ditch.

Mr. Spencer stated the current easements for the ditch are 75 feet either side of the center of the pipe or 75 feet either side of the top of the bank on the open channel portions. A landowner can make a request to the Board to reduce the easement on their property to a minimum of 25 feet either side of the center of the pipe or the top of each bank on an open channel.

Mr. Hatton asked what the restrictions are for construction of a parking lot or road in the easement?

Mr. Spencer stated with the approval from the Board, parking lots or roads can be constructed in the easement, but a structure has to be outside the easement.

Lynford Chaffee, 1411 Ferry Street, stated he owns the property south of U.S. 52, just east of Cheswick Village Apartments. He explained his back yard floods and wondered if the construction of this pipe was going to help his problem?

Mr. Spencer stated the 42 inch pipe with the swale running along side of it will be constructed to the southwest of Mr. Chaffee's property. The swale will collect the water off the property and take it to a manhole from there the pipe will carry the water on downstream.

Being no further questions or comments from the audience, Commissioner Gentry read the findings and orders.

BEFORE TIPPECANOE COUNTY DRAINAGE BOARD
IN THE MATTER OF THE CUPPY-MCCLURE BRANCH OF THE HADLEY LAKE DRAIN:
FINDINGS AND ORDER FOR RECONSTRUCTION

This matter came to be heard upon the reconstruction report and schedule of assessments prepared by the Surveyor and filed on January 2 1996.

Certificate of mailing of notice of time and place of hearing to all affected landowners filed. Notice of publication of the time and place of hearing in the Lafayette Journal & Courier, & Lafayette Leader were filed.

Remonstrances were (were not) filed.

Evidence was presented by the Surveyor and many of those landowners affected were present. A list of those present is filed herewith.
After consideration of all the evidence, the Board does now FIND THAT:

- 1) The reconstruction report of the Surveyor and the schedule of assessments were filed in the office of the Surveyor on _January 2, 1996.
- 2) Notice of the filing of the reconstruction report and schedule of assessments and their availability for inspection and the time and place of this hearing was mailed to all those landowners affected more than thirty (30) and less than forty (40) days before the date of this hearing.
- 3) Notice of the time and place of this hearing was given by publication in the Journal and Courier, a newspaper of general circulation in Tippecanoe County, Indiana, and Lafayette Leader a newspaper of general circulation in Tippecanoe County, Indiana more than ten (10) days prior to this hearing.
- 4) The legal drain consists of 1550 feet of open ditch, 4990 feet of tile in the Main ditch and 0 feet of tile in branches.
- 5) The largest diameter tile is 48 inches.
- 6) The drain drains 900 acres.
- 7) The total estimated annual volume of water handled by the drain is 69,200,000 cubic feet.
- 8) The land drained consists of approximately 700 acres of wetland, golfcourse, & cropland, 200 acres of urban, industrial, business or subdivision land.
- 9) Soil types involved are: Houghton Muck, Mahalasville, sloan clay loam, wea silt, toronto-octagon silt loam, langlois silt, throcmorton silt loam, stark-fincastle silt loam .
- 10) The present condition of the drain is: poor .
- 11) The drain needs the following reconstruction: Open ditch needs cleaned out, new storm sewer installed to provide positive outlet for the watershed .
- 12) The estimated cost of reconstruction is: \$1,035,455.00 _.
- 13) Estimated annual benefits to the land drained exceeds _the costs_ and consists of: Providing a positive stormwater outlet for the watershed.
- 14) Reconstruction would result in the following damage to the following landowners. No damages
- 15) There is now due the General Drain Fund for the past work on said drain \$0.00
- 16) The drain should be reconstructed.
- 17) In order to provide for the reconstruction an assessment of _\$0.00_ should be levied on each acre benefited.

- 18) A Maintenance fund for annual maintenance should be established.
- 19) In order to provide for the annual maintenance an annual assessment of \$5.00 per acre benefited and \$10.00 per patted lot benefited should be levied.
- 20) The Reconstruction Report and the Schedule of Damages and Assessments presented by the Surveyor should be amended as follows:
- 21) The Schedule of Damages and Assessments (as amended) including the annual assessments for periodic maintenance are fair and equitable and should be adopted.
- 22) The first assessments should be collected with the N/A taxes.

HOW, THEREFORE, IT IS ORDERED THAT:

- 1. The Cuppy-McClure Branch of the Hadley Lake Drain be reconstructed.
- 2. The Reconstruction Report filed by the Surveyor is adopted (as amended).
- 3. The Schedule of Damages and Assessments for Reconstruction filed herein (as amended) is adopted.
- 4. The annual maintenance fund (is not) established.
- 5. The Schedule of Assessments for reconstruction filed herein by the Surveyor (as Amended is adopted).
- 6. The assessments shall be collected with the _____ taxes.

Dated at _____, Indiana this _____ day of _____, 19____.

Nola J. Gentry, Chairman
 Gene Jones, Member
 William D. Haan, Member

ATTEST: _____
 Shelli L. Muller, Executive Secretary

NOTE: The Final Report by the Surveyor, the Notice to the Landowners, the list of landowners in the watershed area and the Advertisements from the Journal & Courier and Lafayette Leader are on file along with the Finding and Order in the Tippecanoe County Surveyor's Office.

Commissioner Haan moved to approve and adopt the finding and order of the Cuppy McClure Branch of the Hadley Lake Drain, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry recessed the meeting until 10:00 a.m.

DRAINAGE BOARD MEETING
 Commissioner Gentry called the meeting to order.

Approval of Minutes

Commissioner Haan moved to approve the minutes from the meetings held December 21, 1995, a special meeting and January 3, 1996, a regular meeting, seconded by Commissioner Jones. Motion carried.

WABASH NATIONAL

Jennifer Bonner, Hawkins Environmental, asked for preliminary approval of Wabash Nation's parking lot located near the corner of U.S. 52 and 350 South, previously the General Foods property. Changes were made from the original report in regards to the area that drains to the current outlet under U.S. 52 to the Elliott Ditch. Ms. Bonner stated the memorandum from Christopher B. Burke Engineering will be addressed before final approval.

Mr. Spencer recommended preliminary approval.

Commissioner Haan moved to grant preliminary approval of Wabash National parking lot drainage plan, seconded by Commissioner Jones. Motion carried.

Elliott Industrial

Jennifer Bonner, Hawkins Environmental, asked for preliminary approval of Elliott Industrial located at the southeast corner of C.R. 250 East (Concord Road) and C.R. 150 South (Brady Lane). The site includes 17.5 acres, 3.88 acres of the total will be for future development, but 13.6 acres is proposed for seven light industrial lots. Commissioner Haan excused himself from the meeting at 10:04 a.m.. There are two dry bottom detention areas designed for the site, they are both located along C.R. 250 East (Concord Road) and divided by a driveway, both will outlet into the Elliott Ditch.

Mr. Spencer recommended preliminary approval with four conditions:

- 1) The applicant must submit an analysis of the proposed detention ponds using the TR-20 computer model when submitting for final approval.
- 2) When submitting for final approval, the applicant must clarify the existing tailwater elevation on Elliott Ditch for the 100 year frequency, 1.5 hour duration storm and use this value in the stage-discharge calculations for the proposed detention ponds.
- 3) The applicant should clarify the existing drainage for the site east of the subject site when submitting for final approval. The clarification should include delineation of the off site area, determination of the 100 year frequency runoff, comparison with the estimated contribution utilized in the preliminary analysis and determination of flow paths for any excess runoff.
- 4) The applicant must obtain a construction in a floodway permit from IDNR before final approval is granted.

Commissioner Jones moved to grant preliminary approval of Elliott Industrial Park with the four condition read by the Surveyor, seconded by Commissioner Gentry. Motion carried.

Commissioner Haan returned to the meeting at 10:08 a.m.

SANWIN APARTMENTS

Bob Grove asked for final approval of Sanwin Apartments located off State Road 25 West. At the last meeting Mr. Spencer requested the owners make a request to the Board for a variance to reduce the building setback from a 25 foot distance between the buildings and detention facilities. The second request from Mr. Spencer was that landowner acknowledge the restrictions for the front 125 feet of the site.

Mr. Spencer recommended the Board grant the variance and final approval.

Commissioner Haan moved to approve the variance of the 25 foot requirement for a setback between buildings and a detention facilities, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to grant final approval of Sanwin Apartments, seconded by Commissioner Jones. Motion carried.

WAKEROBIN ESTATES II PHASE I

Allen Jacobsen, C & S Engineering, asked for preliminary plan approval for Wakerobin Estates located north of Lindberg Road, west of McCormick Road and east of the railroad. A detention basin is proposed as a wet bottom facility located at the southern end of the site. The storm runoff will be routed through the basin and discharge into the 30 inch culvert under Lindberg Road. The majority of the site, 32.76 acres, will drain south to the basin and the remaining 1.89 acres will drain uncontrolled to the northeast similar to the current pattern and will be picked up by the future development of Wakerobin Estates II Phase II.

Mr. Spencer asked if phase I was going to be done all at once or will it have different sections?

Mr. Jacobsen stated phase I will probably be done in three different sections.

Commissioner Jones asked what size of discharge pipe is proposed?

Mr. Jacobsen replied the pipe will be 24 inch corrugated metal pipe. Mr. Jacobsen explained the outlet structure outlets into a concrete gutter, upstream from the existing culvert under Lindberg Road. He stated another thought is to extend the 30 inch culvert to connect with the outlet structure. The off-site area to the west enters the site in two areas, half of the off-site runoff will enter the existing ditch on the north side of Lindberg Road. A pipe has been designed at the entrance to convey the flow under the entrance to the subdivision. The other off-site runoff comes over the ingress and egress of the driveway to the west of the development and will flow into an inlet to capture the flow. Mr. Jacobsen asked for a variance for the detention facility to be located on lots 176 and 177 of the subdivision.

Mr. Harbor, Sherwood Forest stated he reviewed the plans for Wakerobin and submitted a report of his concerns. He wanted to know what impact the development would have on the existing Wakerobin and Sherwood Forest.

Mr. Eichelberger stated he read the review comments from Mr. Harbor and incorporated them into his review memorandum.

Mr. Spencer recommended preliminary approval with twelve conditions:

1) Starks Fincastle Silt Loam was presented in the submittal as a B/C hydrologic soil group and calculations make as a group B, when this soils is a group C. This value used in curve number determinations was used for both existing and developed conditions for both on and off-site CN determinations. All curve number determinations should be revised to reflect this fact. Also, Rockfield and Kalamazoo soils have been incorrectly assumed to be C group soils in the off-site drainage area.

2) All TR-20 runs have Huff 3rd quartile distribution that is different than the values in the Tippecanoe County Ordinance. Although not a large difference between values, there may be enough difference to make changes in discharge values, thus warranting a correction by the applicant.

3) HY-8 tailwater conditions for the Lindberg Road culvert are analyzed using a normal flow cross section of the receiving swale. No information has been provided regarding the receiving system or the cross section. Slope and condition of the swale need to be provided to confirm this assumption.

4) Although not required by the Ordinance for this project, the TR-20 analysis of the 50-year event of the Lindberg Road culvert did not include the 8.74 acres of off-site drainage area.

5) The following comments are related to the time of concentration calculations:

a. The developed conditions Tc value has been incorrectly computed for the Sheet Flow condition. The slope value was incorrectly entered as a value of 2 versus the correct value of 0.02 foot per foot. In addition, the flow path for the developed condition should be provided in order to confirm the values provided with the submittal.

b. The off-site Tc value has been incorrectly computed for the Sheet Flow condition. The slope value was incorrectly computed as a value of 1 versus the correct value of 0.01 foot per foot. (the calculation sheet does show a value of 0.01 though). In addition, the flow path for the off-site area should be provided in order to confirm the values provided with the submittal.

c. The applicant has not provided a calculation for the uncontrolled runoff time of concentration.

6) It appears that the construction plans differ from the ILUDRAIN calculations at reach 1-3, 0.4 vs 0.5%. The grassed flow length for the area contributing to reach "AS" (5-0) appears to be too long (540 feet).

7) All grading information and subbasin areas assume, in general, that the individual lots will be graded to split front and back yard drainage. The noted grades do not always show a clear indication of the drainage breaks. The acceptance of the provided analysis assumes that the noted drainage peaks will be adhered to during construction of the subdivision.

8) No mention of emergency access nor a safety ramp has been provided for the proposed pond. It appears that lots 176 and 177 contain all of the proposed detention facility on the lot not in common area. If the applicant plans on having detention on lots 176 and 177, a variance request should be submitted.

9) The applicant has not provided indication of drainage easements around critical flow areas between lots 9 & 10 nor near the primary storm outlet into the pond on lot 178.

10) No capacity calculations for the back-yard beehive inlets were provided. Maintaining the minimum 1.5 foot depth of emergency and rear yard swales does not appear possible in a few locations. This appears to be the case near lots 167-168, between lots 9-10 along 6-7(to collect the west off-site flow), and lots 36-37.

11) It does not appear that the applicant has noted erosion control measures for the uncontrolled runoff in the north part of the subdivision.

12) The applicant appears to provide an adequate drainage area map for the off-site area, however, it appears that the 8.76 acres may actually need to include slightly more area above the 702 contour.

Commissioner Haan moved to grant preliminary approval of Wakerobin Estates II, Phase I, with the twelve condition as listed, seconded by Commissioner Jones. Motion carried.

CROSSPOINTE COMMERCIAL SUBDIVISION

Allen Jacobsen, C & S Engineering, asked for final drainage approval of Crosspointe Commercial Subdivision located east of Creasy Lane and south of Burberry Place Apartments. The site consists of a total of 80 acres, with Crosspointe Commercial Subdivision being the first of three different sections, consisting of 25 acres and 16 lots. A road is planned through the middle of the subdivision off Creasy Lane and another entrance to the south of the site for access to the future development of apartments. There are two major drainage facilities that run through the site, the open Treece Meadows Legal Drain and the Treece Meadows Relief Drain. The project proposed not to have any on-site detention facility, direct the water to the Treece Meadows Relief Drain then south to the Wilson Branch, which outlets into the regional retention facility. The portion of the relief

drain that runs through the site is very shallow, to eliminate that problem it is proposed to widen the ditch by 10 feet without altering the existing flowline. Also, change the culvert size under Amelia Avenue to accommodate the full 100 year flow and to extend the culvert under Creasy Lane to the northeast to connect with the relief drain.

Commissioner Gentry asked if the existing culvert under Creasy Lane is large enough to accommodate the runoff?

Mr. Jacobsen stated the culvert is designed to convey a 100 year storm event, the plan is to continue the culvert at the same size, so it should function the same as it does currently.

Mr. Jacobsen explained on-site there is an existing 15 inch clay tile, which is proposed to be rerouted and increase the size of the pipe to 18 inches.

Mr. Spencer stated there is a grade conflict with the new storm sewer going down the access road and the back of the lots.

Mr. Jacobsen stated he would make sure in the final submittal there will be no conflict. He also, agreed that with each development of the individual lots approval from the Board will be needed.

Mr. Spencer recommended final approval with three conditions:

- 1) IDNR response to the applicant's January 31, 1996 letter.
- 2) Verification of the cross-section reach lengths through the modeled section of the Treece Meadow Relief Drain.
- 3) Comparison plots of the cross-section.

Ms. Bonner, Hawkins Environmental on behalf of the City of Lafayette, stated many of the easements are not shown and the easements for the Treece Meadows

Relief Drain need to be shown on the construction plans. The developer also, needs to coordinate the proposed construction plans for the widening of Creasy Lane. The Treece Meadows Legal Drain will be extended south approximately 350 feet, which will cross the proposed Amelia Avenue and will affect lots to the south of the access road.

Pat Clancy, Tippecanoe County Highway Engineer's Assistant, asked for a meeting to be held to discuss the future widening of Creasy Lane and the proposed Crosspointe Subdivision. The County Surveyor, the developer, the City and the County Highway should be represented.

Commissioner Haan moved to grant final approval of Crosspointe Commercial Subdivision with the above listed conditions and an agreement be made between the developer, County Highway Engineer and County Surveyor, seconded by Commissioner Jones. Motion carried.

HUNTINGTON SUBDIVISION

Andy Slavens, Vester and Associates asked for preliminary approval of Phase I and II of Huntington Subdivision located upstream from State Road 26 and west of the existing Green Meadows Subdivision. A concern from the review of the proposed subdivision is the existing culvert under SR 26, the watershed area included 374 acres to the northeast of Huntington Subdivision, which is tributary to the culvert. After further review, the result was the Subdivision utilizes 20% of the culvert, to control the discharge into the culvert an additional pond was designed at the northwest corner of the site. Another concern from the review was an existing 12 inch tile that is a legal drain, which has the 75 foot easement either side of the pipe.

Commissioner Gentry stated since this is not going into a legal drain what happens when the property owners say they are getting a lot of adverse water and put fill in the drainage area, what happens to the drainage system?

Mr. Slavens stated the drainage plan is designed to handle the water.

Pat Cunningham, Vester & Associates, stated that currently the ten year release rate off the proposed site is between 40 and 50 cfs runoff, per Mr. Spencer's requirement, after development there will only be 10 cfs.

Mr. Spencer recommended preliminary approval with the five conditions David Eichelberger provided in the memorandum dated February 6, 1996.

Commissioner Haan moved to grant preliminary approval of Huntington Subdivision subject to the five condition of the memorandum dated February 6, 1996, seconded by Commissioner Jones. Motion passed.

WATERSTONE SUBDIVISION

Dale Koons, Civil Engineering, asked for final approval of Waterstone Subdivision, located between 9th and 18th Streets, south of County Road 350 South and North of the Kirkpatrick Ditch. The approval is to relocate a surface inlet into the Kirkpatrick Ditch along the south end of the proposed subdivision. Two options were proposed for the design of the subdivision in the fall of 1993, the first was to minimize the encroachment into the existing floodplain, and not provide any on-site detention storage. Instead, 77 acre-feet of storage would be provided in the Kirkpatrick Ditch. The second option was to increase the encroachment into the existing floodplain, and provide on-

site detention that is distinct from the drainage way of the Kirkpatrick Ditch. This option would provide approximately 4 to 5 acre-feet of on-site storage above the 100 year flood elevation. In an informal meeting with the Board in December it was decided to pursue the first option and maximize the storage of the Kirkpatrick Ditch. The Commissioners expressed concern about the depth of the flooding and asked that it be fenced off.

Some reconstruction of the Kirkpatrick Ditch will be required from County Road 350 to 9th Street to alleviate the problem of standing water at the 9th Street crossing.

Mr. Spencer recommended final approval, with the condition the proposed invert elevations of the reconstructed Kirkpatrick Ditch should be clarified between the downstream invert of the 18th Street crossing and the 622 contour line. For example, the cross-section labeled as Sta. 79+00 on sheet 51 indicates an invert elevation of 622.30. This cross-section appears to be located at Sta. 25+00 of the Kirkpatrick Ditch centerline as shown on Sheet 10. The invert elevation according to Sheet 10 appears to be approximately 621.7. The applicant should clarify this issue.

Commissioner Haan moved to grant final approval of the drainage relocation connection to the Kirkpatrick Ditch for the Waterstone Subdivision, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

ROMNEY STOCK FARM DITCH

Marvin McBee stated he submitted a petition to the Board for the reconstruction of the Romney Stock Farm Ditch and wanted an update on the progress.

Mr. Spencer stated there was a joint board meeting between Tippecanoe County and Montgomery County. Montgomery County was suppose to get the landowners, names, address, and acreages to him so the County could notify the landowners in the watershed. Mr. Spencer explained shortly after the meeting he received a letter stating Montgomery County was withdrawing from the joint board. Mr. Spencer suggested Mr. McBee ask the Montgomery County Surveyor to send the information of the landowners in the watershed area of Montgomery County.

CONTRACTS

Commissioner Haan moved to sign the contract for the Tippecanoe County Drainage Board Attorney with Hoffman, Luhman and Busch, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to sign the contract for the Tippecanoe County Drainage Board Engineering Consultant with Christopher B. Burke Engineering Limited, seconded by Commissioner Jones. Motion carried.

Being no further business, Commissioner Haan moved to adjourn until March 6, 1996, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES FEBRUARY 7, 1996

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MARCH 6, 1996

The Tippecanoe County Drainage Board met Wednesday, March 6, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana with Nola J. Gentry calling the meeting to order.

Those present were: Tippecanoe County Commissioners Nola J. Gentry, Gene Jones and William D. Haan; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Engineering Consultant Dave Eichelberger and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held February 7, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

HUNTINGTON SUBDIVISION PHASE I and PHASE II

Andy Slavens, Vester and Associates, asked for final approval of Huntington Subdivision located west of Green Meadows Subdivision and upstream from State Road 26. Mr. Slavens explained Phase I and II will be built at the same time with the portion of the site draining to the existing detention pond for Green Meadows Subdivision, which is large enough to handle the current and post conditions of Huntington Subdivision. Mr. Slavens asked for a variance to change the cross-section for the Green Meadows pond to meet the requirement of a non-fenced detention facility. Mr. Slavens asked for a second variance on the Green Meadows pond to exceed the required drain down time of 48 hours. A portion of the southeast corner of the subdivision, runoff from the rear yard will be picked up by a swale and directed along State Road 26 under the entrance to the subdivision. Another detention facility located north of State Road 26, will handle the future development of Huntington Subdivision. The outlet for that pond will be an eighteen inch pipe, which outlets at an existing thirty six inch culvert under State Road 26.

Mr. Spencer recommended final approval with conditions:

1. The applicant has addressed items 2a - 2c, 2f, 2g, 3a, 3d, 4b-4d, 5 of the February 22, 1996 memo. However, the following items must still be clarified.
2. Item 1 dealt with the grading of the northwest pond. The applicant supplied specific elevations in the cover letter. The applicant should note that the details of the grading for the west bank of the pond, including proposed spot grades, should be specified when construction plans for the northwest pond are provided.
3. Item 2d requested support for the time required for the Green Meadows Pond to return to normal pool. An elevations vs time table has been provided. After 60 hours time, the pond still did not return to its normal pool. Although a change in the TR-20 INCREM value would provide the requested data, it is apparent that the pond will not return to its normal pool in less than 60 hours. The applicant has requested a variance from the Ordinance for the pond drain time.
4. In support of Item 2e, the applicant has supplied proposed pad elevations on a grading plan. However, pad locations for the proposed grading of the Green Meadows Pond. Therefore, the pad

distances to this revised pond could not be verified. The revised grading of this pond and the house pad locations are required on the same sheet to allow verification that the homes are at least 25 feet from the detention pond.

5. A pond cross sections for the southwest pond has been supplied as requested in Item 3b. However, a vertical dimension is required for the distance between the safety ledge and maintenance ledge, or proposed ledge elevations should be specified.
6. In response to item 3c, the applicant has supplied an emergency spillway for the southwest pond. However, the profile view of the flow path does not have a positive grade along SR 26. The grading and specific emergency flow path must be clarified. In addition, the house pad locations are required to verify that the homes are minimum of 25 feet from this detention pond.
7. Item 4a requested information concerning the off-site area to the southeast. The applicant has sketched proposed flow paths on the grading plan, with a portion of the runoff diverted around the site and to the west, and a portion to the north. However, additional information is required to clarify these flow paths. This information should include: Proposed spot grades along the flow paths; swale cross sections; swale capacity calculations; and possibly a culvert design for Man O'War Drive. If the proposed grading design results in changes to the inlet drainage area delineations, then a new drainage area map and possibly storm-sewer sizing/inlet capacity calculations must be provided. The applicant should also provide proposed spot grades to clarify how runoff from the noted off-site area will by-pass sub-area 2. In addition, the applicant should clarify how sub-area 2 will by-pass Structure 1.
8. Revised Sheet 4 notes that there is additional grading information on Sheet 12. It appears that a new sheet 12 may be required for review. A new sheet 5 which includes the revised grading for both ponds and any erosion control features associated with that distribution is required.
9. A revised full set of construction plans should be provided.

Commissioner Haan moved to grant the variance to the Green Meadows Pond to exceed the required 48 hour drain down time, seconded by Commissioner Jones. Variance granted.

Commissioner Haan moved to grant the variance to re-construct the Green Meadows Pond to meet the requirements of a non-fenced detention facility, seconded by Commissioner Jones. Variance granted.

Mr. Slavens explained the emergency route for the Green Meadows Subdivision is not shown on the present set of plans, but one is planned and will be shown on the final construction plans.

Commissioner Haan moved to grant final approval of Huntington Subdivision, Phase I and II with the conditions set forth by the County Surveyor, seconded by Commissioner Jones. Motion carried.

WAKEROBIN ESTATES II PHASE I

Allen Jacobson, C & S Engineering, asked for final approval of Wakerobin Estates II, Phase I drainage plans, and displayed a topographical map outlining the location of the subdivision, which is north of Lindberg Road, west of McCormick

Road, and east of the railroad. Mr. Jacobson referred to the March 5, 1996 memorandum from Christopher B. Burke Engineering and read number one of the memorandum:

1. Adjustments to the provided TR-20 analyses are necessary to confirm hydrologic conditions of the site in both pre and post-development conditions. These adjustments are:
 - a. The time of concentration for the off-site area of 8.74 acres needs to be revised. The flow length in segment E of 810 feet was extended into the site and should have terminated at the property line. The revised value should be used in the analysis.
 - b. The rainfall distribution for the pre-developed conditions still makes use of a slightly varied Huff 3rd quartile distribution. The corrected distribution should be incorporated into this model.
 - c. Additional storm durations should be provided to verify that the 4 hour storm is still the critical duration rainfall event.

Mr. Jacobson explained he does not anticipate any problem resolving condition number one or changing the design of the subdivision significantly.

2. The applicant should verify pre- and post-conditions discharge values for the uncontrolled runoff to the northeast. The applicant should also confirm the effect these flows have on the affected receiving system.

Mr. Jacobson addressed number two of the memorandum. The uncontrolled runoff from the northeast of the site will not have an adverse affect on the existing Wakerobin Estates I or the Sherwood Forest Subdivisions. Wakerobin Estates II, Phase I will be done in three sections starting with the proposed pond and the bottom third of the site, then the middle section and last the northern part of the subdivision. The last section is where the uncontrolled runoff is a concern, the post-development conditions will increase the runoff by 2 cfs in a 100 year storm event, but the total post-development of the subdivision is not increased. Wakerobin Estates II, Phase II will intercept the uncontrolled runoff and direct the runoff to the Phase II storm sewer.

Mr. Eichelberger stated after reviewing the uncontrolled runoff area it was his understanding the drainage area of the pre-developed area is 3.6 acres in the post-developed condition the drainage area is reduced to 1.9 acres in the rear yard. The pre-developed area is farm field and post-developed is grassed rear yard, which means a lower curve number.

Mr. Hoffman stated the condition of number two is no permits will be granted to any part of phase I, until the Surveyor is satisfied the uncontrolled runoff will not have an adverse affect on the exiting conditions and will not increase the runoff.

3. The applicant must confirm the last revisions to plans details by providing a complete set of final design plans with the noted changes.

Mr. Jacobson explained there have been adjustments made from the preliminary construction plans and condition number three is requiring the final construction plans reflect the changes.

4. A variance has been requested by the applicant to allow a detention facility to be located on residential lots. The proposed pond in Phase I of the development is proposed to be placed on lots 176 and 177.

Mr. Jacobson stated the forth conditions is the request for a variance of the proposed pond to be located on lots 176 and 177. This will allow the landowners of lots 176 and 177 to maintain responsibility of the pond. In the covenant it will stated if the landowner chooses to fence the pond than they will provide emergency access to the pond.

Commissioner Haan moved to grant the request of the variance to allow detention on lots 176 and 177 of Wakerobin Estates II, Phase I, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to revise condition number two of the memorandum from Christopher B. Burke Engineering dated March 5, 1996 to include the post-developed condition will not increase the uncontrolled runoff of the existing conditions of the northeast corner of the proposed site, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to grant final approval of Wakerobin Estates II, Phase I, with the conditions of the memorandum and the revision of condition number two, seconded by Commissioner Jones. Motion carried.

LIGHTHOUSE HOMES CENTER

Don Shapiro, Kaln Consultants, stated Lighthouse Homes Center is located off the south side of State Road 38. Mr. Bumbleburg stated they wanted to report to the Board that discussion with the Surveyor and Christopher B. Burke Engineering are continuing over the memorandum dated February 13, 1996. Mr. Bumbleburg expects further discussion by the next Drainage Board Meeting.

EVANGELICAL COVENANT CHURCH

Patrick Sheehan, Schneider Engineering, asked the Board for final approval of the Evangelical Covenant Church located at the southwest corner of County Road 350 South and South 9th Street. The entire site is approximately 18 acre, 12 acres will consist of the main church building, a family life center and a parking lot between the two buildings. The remaining portion is future expansion of additional parking, tennis courts, a soccer field and softball field. The J.N. Kirkpatrick Ditch is located near the southwest corner of the site and will serve as the release point for a proposed dry bottom detention facility located at the south property line. Approximately 11 acres will drain to the detention facility and the remaining acres drain offsite at the existing drainage pattern.

Mr. Spencer explained the remaining acres that drain offsite will be reduced due to the pre-developed condition of farm field to post-developed conditions of a

sodded grassy area. Mr. Spencer recommended final approval with three conditions.

1. Certified plans must be submitted.
2. The grading in the southeast corner of the site should be revised to ensure that:
 - a. The 100 year elevation of the detention pond is confined to the pond area.
 - b. The post-developed grading plan matches the post-developed drainage basin divides in the southeast corner of the site.
 - c. The allowable release rate for the site is not being exceeded.
3. The applicant should submit background/support information to verify the submitted stage-storage relationship in the TR-20 model for the proposed detention pond and revise this relationship, if necessary.

Mr. Clancy, Tippecanoe County Highway Engineer's Assistant, stated permits for work in the right-of-way are needed also further discussion of the entrances to the site is necessary.

Commissioner Haan moved to grant final approval of Evangelical Covenant Church with the three listed conditions, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

Cuppy-McClure Drain - update

Mr. Spencer stated he spoke with Opal Kuhl, West Lafayette City Engineer, concerning the progress of their Consultant's review of the Cuppy McClure project, they should be done Friday, March 8, 1996. The West Lafayette Consultant has done a more in depth hydrologic study of the wet land over the Celery Bog and think there is more natural storage available in the Celery Bog than the County's study indicates. This could relax the DNR requirement release rate into the Celery Bog and allow a smaller box culverts across the Great Lakes Chemical property.

Commissioner Haan asked if the West Lafayette Consultant does find that the culverts do not need to be as large, will the permit process have to go through again?

Mr. Spencer stated that will have to be answered.

RIVER BIRCH TRACE SUBDIVISION EASEMENT

Mr. Hoffman presented an easement for the Point West Mobile Home Park and River Birch Trace Subdivision has been filed.

Being no further business Commissioner Haan moved to adjourn until April 3, 1996, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES MARCH 6, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
SPECIAL MEETING
MAY 15, 1996

The Tippecanoe County Drainage Board met in a special session, Wednesday, May 15, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana.

O'FERRALL BRANCH OF THE ALEXANDER ROSS DITCH HEARING

Those present were: Tippecanoe County Commissioners Nola J. Gentry, Gene Jones and William D. Haan; Tippecanoe County Surveyor Michael J. Spencer; and Drainage Board Secretary Shelli Muller. also in attendance were: Walter Fassnacht, 5091 State Road 26 East; Patrick Cunningham, Vester & Associates; Francis Albregts, 3901 East 100 South; and Joseph Gaskill, 4228 East 100 South.

Mr. Spencer asked the Board to accept the petition of the O'Ferrall Branch as part of the Alexander Ross Ditch. No additional assessment will be implemented since the O'Ferrall Branch is located within the Alexander Ross Watershed area. The branch includes the new detention basin located west of the Meijer Store and the outlet structure. There were several phone calls concerning the notification, but after an explanation there were no objections to the petition.

Mr. Albregts asked if Mr. Spencer had received any plans for the proposed development west of the interstate.

Mr. Spencer stated he has seen a plan of Park East which is located west of the interstate. The Alexander Ross Ditch Watershed study includes two detention facilities one on the east and west side of the Interstate 65.

Commissioner Haan moved to accept the O'Ferrall Branch as part of the Alexander Ross Ditch, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to recess until 9:30 a.m., seconded by Commissioner Jones. Meeting recessed.

Commissioner Gentry called the meeting to order at 9:30 a.m.. Thomas H. Busch of Hoffman Luhaan and Busch joined the meeting.

Commissioner Haan moved to approve the minutes from the May 1, 1996 regular Drainage Board Meeting, seconded by Commissioner Jones. Motion carried.

BERLOVITZ REGIONAL RETENTION BASIN

Robert Foley, Hawkins Environment presented the Board with the plans of the Berlovitz Regional Retention Basin located in the southeast corner of County Road 50 South and 550 East. Mr. Foley asked the Board for final approval which will satisfy the last condition before the construction of Saddlebrook Estates Subdivision, Arlington Commons and Bridlewood Subdivision.

Mr. Spencer stated the 30 inch concrete tile that will pass under the proposed basin is in good condition and there is no plan to make any connection to the tile from the basin. The basin is currently planned to be a dry bottom pond, but in the future it will become a wet bottom basin as other developers are allowed to widen the pond to create storage for their developments. There will be a 2'x 4' box culvert under 550 East and a new road crossing under 50 South with a new box culvert which needs further discussion between Mr. Spencer and Mr. Murray.

Mr. Albergts asked what the depth between the top of the tile and the bottom of the basin will be.

Mr. Spencer stated the plans do not show what the elevation is, but he would find out and get back with Mr. Albergts.

Mr. Spencer recommended final approval with the condition of County Highway Department and the County Surveyor approval of the box culverts.

Commissioner Haan moved to grant final approval with the condition of both box culverts be studied and approved by the County Highway Department and the County Surveyor, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

ELLIOTT DITCH WATERSHED STUDY

Mr. Spencer stated there is money available through the Department of Natural Resource to do some watershed mapping. Mr. Spencer presented the Board with a letter draft requesting assistance in the form of aerial topographic mapping, surveying or technical guidance from the DNR. Mr. Spencer stated the money would be used to further update the Elliott Ditch Watershed study done in 1987.

RUST Environment & Infrastructure - work agreement

Mr. Spencer presented the Board with a letter from RUST Environment and Infrastructure, Inc. stating the two IDNR permits had expired and must be renewed this additional work will increase the contract by \$1,500.00 above the current contract amount of \$99,985.00. RUST asked that an agreement for the additional work to be performed be signed by the Tippecanoe County Board of Commissioners.

Commissioner Gentry agreed to sign the agreement at the next Commissioners meeting.

Cuppy McClure - update

Mr. Spencer stated copies of the bids for the Cuppy McClure project were sent to the West Lafayette Engineer for his review. Mr. Spencer expects to hear from West Lafayette by the end of the week.

Valley Forge Subdivision

Mr. Spencer informed the Board of a drainage problem in Valley Forge Subdivision. The situation was viewed by the Commissioner last summer where a catch basin outletted in Mr. Roden's back yard which he disliked. Another landowner in Valley Forge Subdivision contacted Mr. Spencer complaining of water backing up in her back yard. When Mr. Spencer investigated the complaint he found the catch basin full of rock, concrete pieces and debris that was larger than the grate size on the catch basin. The County Highway Garage removed the debris and will fasten the grate down so that it cannot be lifted.

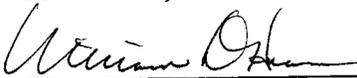
Being no further business Commissioner Haan moved to adjourn, seconded by Commissioner Jones. Motion carried.



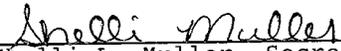
 Nola J. Gentry, President



 Gene Jones, Vice President



 William D. Haan, Member

ATTES: 

 Shelli L. Muller, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
SEPTEMBER 4, 1996

The Tippecanoe County Drainage Board met Wednesday, September 4, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana.

Those present were: Tippecanoe County Commissioners Nola J. Gentry, Gene Jones and William D Haan; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Engineering Consultant David Eickelberger and Drainage Board Secretary Shelli Muller.

ROMNEY STOCK FARM DITCH HEARING

Commissioner Gentry called the hearing to order.

Commissioner Gentry explained the proof of publication were not received for the Notice to Landowners in the watershed area of Romney Stock Farm Ditch, therefore the hearing cannot proceed. Another hearing will be set for October 2, 1996 at 9:00 a.m.

Commissioner Haan moved to continue the Romney Stock Farm Ditch Hearing until October 2, 1996 at 9:00, seconded by Commissioner Jones. Motion passed.

HIGH GAP ROAD DITCH HEARING

Commissioner Gentry stated the proof of publication were not received for the Notice to Landowners in the watershed area of High Gap Road Ditch, therefore the hearing cannot proceed. Another hearing will be set for October 2, 1996 at 9:15 a.m.

Commissioner Haan moved to continue the hearing for High Gap Road Ditch until October 2, 1996, seconded by Commissioner Jones. Hearing continued.

DISCUSSION

Commissioner Gentry asked the audience for any questions on either ditch.

Mr. William Windle, 6835 S 375 W, Lafayette Indiana, stated he opposed the idea of creating a maintenance fund for High Gap Road Ditch. He explained in the past the landowners maintained the ditch and it should continue to be that way.

Mr. Spencer stated Mr. Windle has an undivided 1/2 interest in parcel #128-02200-0030, the other half belongs to his sister, Phyllis Windle. The tax statement shows William & Phyllis Windle at Mr. Windle's address which is where the notice was sent. Should a notice of the October 2 hearing also be sent to Phyllis Windle?

Mr. Hoffman replied Phyllis Windle should receive a notice of the hearing.

Mr. Windle questioned the paragraph in the notice which states "The County Surveyor has estimated that the total cost of periodically maintaining such drain is estimated at the sum of \$6,000.00 dollars per annum." Mr. Windle stated when he spoke with Mr. Spencer concerning the \$6,000.00 dollar assessment he understood it to be only for the first year, then set at a rate of \$1.50 per acre thereafter.

Mr. Spencer stated the notice does not confirm the reduction after the first year, but a copy of the Surveyor's report was sent along with the notices, within the report and on the findings & order it clearly states an assessment of \$13.72 per acre for the first year which is for the excavating expense and then reduced to \$1.50 per acre thereafter for maintenance.

Mr. Windle asked the Board if the \$1.50 per acre will always be on the taxes?

Mr. Hoffman explained the ditch will have an assessment until it exceeds the 4 year annual assessment, when the ditch exceeds the 4 year annual assessment it will go dormant until money is depleted below the 4 year annual assessment, then the ditch assessment will become active.

Lloyd Leamon stated the notice on High Gap Road Ditch should have been sent to the Town of Shadeland, not the Union Township Trustee.

Mr. Spencer stated the assessment list will be corrected so that the Town of Shadeland will receive the notice.

There was no more discussion on either hearing so the meeting moved on to the discussion on Prairie Oaks Subdivision.

PRAIRIE OAKS SUBDIVISION - outlot "A"

Mr. Hoffman mentioned Dave Lux contacted him about the County buying outlot "A" which serves McCutcheon Heights, but is located and more accessible to Prairie Oaks Subdivision. This was discussed at the June 1996 meeting, but the County was not willing to buy the outlot. Commissioner Gentry suggested making it part of a legal drain. It was also suggested to have the landowners that border the outlot to have an undivided interest with restrictions concerning the landowners maintain the outlot as a functioning dry bottom detention basin. Mr. Hoffman stated he would share the suggestion with Mr. Lux and let him decide the next step.

JAMES N KIRKPATRICK - petition to reconstruct

Mr. Spencer stated he received a petition from the City of Lafayette to reconstruct the Kirkpatrick Ditch. The location of the portion that is being petitioned is south of 350 South, between US231 and south 9th Street then east to US52. Mr. Spencer stated an engineering study needs to be done on the ditch.

Mr. Hoffman stated the petition needs to be referred to the County Surveyor for his study and recommendation of the J.N. Kirkpatrick Ditch.

Commissioner Haan moved to refer the petition from the City of Lafayette on the reconstruction of J.N. Kirkpatrick legal Ditch to the County Surveyor for a study, seconded by Commissioner Jones. Motion carried.

CUPPY-MCLURE - update

Commissioner Gentry asked for an update on the progress of the Cuppy-McClure drainage project.

Mr. Spencer stated he spoke with Gab Horn of Atlas Excavating and the structures are being built for the project. When the structures are delivered they will get started, which should be within the month of September.

APPROVAL OF MINUTES

Commissioner Haan moved to approve the minutes of August 7, 1996 regular Drainage Board Meeting, seconded by Commissioner Jones. Motion carried.

Commissioner Haan moved to recess until 10:00 a.m., seconded by Commissioner Jones. Meeting recessed.

REGULAR MEETING

Commissioner Gentry reconvened the meeting.

26 CROSSING PHASE II

Andy Slavens, Vester & Associates, asked for final approval of 26 Crossing, Phase II which is located on property of the O'Ferrall Estates south of State Road 26 behind the Meijer store off County Road 500 East.

Mr. Hoffman stated he represents the O'Ferrall Estate, but is not involved in this development because it is being sold to the developer.

Mr. Slavens explained runoff from the site will be stored in the existing detention pond located between the Meijer store and I-65. The drainage design is for the site only and does not include development of lots. As the lots are being developed each individual lot will have to receive Drainage Board approval. Mr. Slavens asked for a variance in the length of 400 feet between manholes. Line 1 and 2 of the south leg of the storm sewer system are longer than 400 feet between manholes. Mr. Slavens asked for a second variance on the cover over the pipe at structure 4, it is only 14 inches and the ordinance requires 18 inches of cover. Mr. Slavens felt with the development of the lots additional cover will be created.

Mr. Spencer stated he would agree to the second variance as long as the pipe is re-enforced concrete pipe. The plans currently show plastic pipe.

Mr. Slavens withdrew the request for a variance on the 14 inches of cover at structure 4 and stated they will provide addition cover to comply with the ordinance.

Mr. Spencer recommended final approval with conditions.

1) The applicant must provide additional information to verify that the inlet capacity and gutter spread calculations meet the ordinance requirements.

2) The applicant must obtain a U.S. Army Corps of Engineers permit for the proposed activity in the existing on-site wetland, if required.

3) Additional information must be provided to ensure that the proposed culvert under Meijer Drive is sized so that there is no adverse impact to Meijer Drive or County Road 500 East.

4) The applicant must petition the Drainage Board to vacate a portion of the Alexander Ross Ditch south of the Meijer store, east of Interstate 65 and west of County Road 500 East.

Commissioner Haan moved to grant the variance on the pipe length between structures for lines 1 and 2 on the south leg, seconded by Commissioner Jones. Motion carried

Commissioner Haan moved to grant final approval subject to the four condition stated by the Surveyor, seconded by Commissioner Jones. Motion carried.

WATKINS GLEN SUBDIVISION PART II

Mr. Spencer stated on behalf of R.W. Gross & Associates he asked for the Watkins Glen Subdivision part II hearing be continued.

Commissioner Haan moved to continue the hearing of Watkins Glen Subdivision part II to a future date, seconded by Commissioner Jones. Motion passed.

WOODS EDGE II MOBILE HOME PARK

Roger Fine, John E. Fisher & Associates, asked the Board for discussion on the proposed Woods Edge II Mobile Home Park and turned the discussion over to Doug Miller of Consulting Engineering.

Mr. Miller stated Woods Edge II Mobile Home Park consist of 95 acres located north of County Road 650 North. The site is designed to direct release into the north fork of Burnett Creek. Mr. Miller stated there will be no adverse affect on the peak discharge and asked the Board for a variance from the ordinance which requires on-site detention.

Mr. Spencer asked if the development is bounded by Burnett Creek along the north property line? If not, the developer will have to receive approval of the landowner(s) that will be affected.

Commissioner Gentry was concerned on granting the direct discharge because the surrounding area is not heavily developed and if the Board grants the variance for this project other projects to follow will except to be allowed to direct discharge. Commissioner Gentry felt that would eventually cause a problem with the Burnett Creek. Commissioner Haan and Commissioner Jones agreed with Commissioner Gentry's concern.

Mr. Miller stated he will continue to look at other solutions.

HERITAGE COVE

Todd Warrix, Schneider Engineering, asked the Board for a discussion on Heritage Cove Subdivision located south of Brookfield Heights and north of Heritage Estates. Mr. Warrix asked for a variance regarding the first floor elevation which should have 2 feet of freeboard above the 100 year flood elevation or have the flood protection grade. The lowest pad is 662.7 which is .59 feet of

protection above the 100 year flood elevation and 3/10 above the emergency routing for higher intensity storms. The second variance is no detention basin or water storage area shall be constructed under or within 10 feet of any power lines. The location of the detention basin are within PSI Energy easement and under high voltage lines. PSI has indicated to the developer approval of the location of the planned detention basins, all basins are dry bottom.

Mr. Spencer understood PSI did have a problem with the location of the basins because of pole access. The Board will need written documentation of PSI approval or denial of the detention basin located within the easement and under the lines.

Mr. Warrix stated the third variance is the maximum plan depth of dry bottom storm water storage shall not exceed 4 feet in depth. The maximum depth for this development is 4.11 feet of storage for the 100 year storm event this creates an increase of .11 feet over the maximum depth. The last variance is the peak runoff rate after development for the 100 year storm event must not exceed the 10 year storm event pre-development peak runoff rate. The existing 10 year runoff rate is 1.28 cfs at the post-development 100 year runoff rate is 1.51 cfs creating an increase of .23 cfs over the existing conditions. The overflow will go into the Brookfield Height system.

Mr. Hoffman stated the development will have to receive approval from Brookfield Heights Homeowners Association and approval from the landowner of the lot at which the hookup will occur.

Commissioner Haan stated his major concern is with the first variance. The second variance needs clarification, the third variance is acceptable and the last variance depends on Brookfield Heights and providing prove of the capacity of the existing pipe.

Being no further business, Commissioner Haan moved to adjourn until October 2, 1996, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES SEPTEMBER 4, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
OCTOBER 2, 1996

The Tippecanoe County Drainage Board met Wednesday, October 2, 1996 in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette, Indiana.

Those present were: Tippecanoe County Commissioners Nola J. Gentry and William D Haan; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; and Drainage Board Secretary Shelli Muller.

ROMNEY STOCK FARM DITCH HEARING

Commissioner Gentry called the hearing to order.

Mr. Spencer read the maintenance report for the Romney Stock Farm Ditch.

"The portion of the Romney Stock Farm Ditch as petitioned for maintenance needs the ditch bottom cleaned starting at County Road 1300 South then South for six hundred (600) feet then the ditch bottom needs cut to grade for twenty nine hundred (2900) feet to provide a better outlet for tile drains at the very upper end.

The first year assessment (\$12.13 per acre) should be sufficient to do the proposed ditch excavating then the annual assessment will be reduced to \$1.50 per acre."

The estimated cost for the first 600 feet equals \$750.00 and the following 1700 feet estimated cost of \$4,250.00 for a total estimated cost of \$5,000.00.

Commissioner Haan asked how many acres are within the watershed of the proposed clean out?

Mr. Spencer stated there are 412.18 acres within the watershed area of the Romney Stock Farm Ditch. Mr. Spencer stated he did not receive any remonstrance letters, but did receive a letter from Carol DePlanty. The notice she received indicated her owning 13.33 acres, this was incorrect she owns 6.76 acres the remaining 6.57 acres are owned by Doc Widmer.

Commissioner Gentry mentioned that Paul Kerkhoff was not in favor of the ditch becoming a county regulated drain because Mr. Kerkhoff is concerned about crop damage when maintenance is being done to the ditch.

Mr. Spencer replied that he spoke with Mr. Kerkhoff on his concerns and reassured him it is not the County's intention to do the maintenance while crops are in the field.

Mr. Hoffman asked the length of the extension?

Mr. Spencer stated 1600 feet is what the petition request to become county maintained.

Marvin McBee was present, representing his acreage in the watershed area, and confirmed he is agreeable with the petition to create a maintenance fund for the Romney Stock Farm Ditch.

Mr. Hoffman stated there are two request, the first is to add 1600 feet to the existing legal drain. The second request is to create a maintenance fund for the entire drain starting at County Road 1300 South.

Commissioner Haan moved to extend the Romney Stock Farm legal drain 1600 feet southeast from the ending point of the existing legal drain, seconded by Commissioner Gentry. Motion carried.

Commissioner Haan moved to establish a maintenance fund for the Romney Stock Farm Legal Drain, the first year assessment is \$12.13 dollars per acre and thereafter be reduced to \$1.50 per acre per state statute, seconded by Commissioner Gentry. Motion carried.

Marvin McBee asked if the landowners in the Grimes Ditch watershed pay for the proposed portion of the Romney Stock Farm ditch?

Mr. Spencer stated the Grimes Ditch is considered a separate ditch from the portion that is being petitioned today. The only way the landowners upstream will pay for the proposed ditch is if the two ditches are petitioned to become combined. Mr. Spencer stated after the quotes are received and a contract awarded, the annual assessment will be lowered if the cost is lower than the estimate.

HIGH GAP ROAD DITCH MAINTENANCE HEARING

Commissioner Gentry called the hearing to order.

Mr. Spencer read the maintenance report:

"The High Gap Road Ditch needs to be cut to grade the twenty two hundred (2200) feet to provide for a better tile outlet at the South end of the ditch at County Road 800 South. To provide a better tile outlet the drive culvert at station 15+40 must be removed and or replaced at a deeper depth. The first year assessment (\$13.72 per acre) should be sufficient to do the ditch excavation, then the annual assessments will be reduced to \$1.50 per acre."

Commissioner Gentry inquired about the estimated cost for construction?

Mr. Spencer stated the estimated cost of construction is \$6,000.00. Hugh Pence, the farm manager for the Baugh property, would like to extend the excavation to the west property line of the Baugh's eighty acre tract. The petition does include the ditch through the Baugh property, but the estimated cost of construction was based on the clean out of two thousand two hundred feet north of 800 South. Mr. Spencer stated he did another cost estimate which includes continuing the clean out to the west two thousand five hundred fifty feet (2550 ft) for a total cost estimated of nine thousand eight hundred twenty five dollars (\$9825.00). There was one written remonstrance from Jeanne Snoddy.

"Dear Mr. Spencer:

As an absentee landlord I am not as knowledgeable as someone who is living on the premises and operating the farm.

However, I am not in favor of paying for the maintenance and excavation of High Gap Road from which I will not derive any benefit. Our family has been able to maintain our drainage ditch and replace tiles as needed.

I am therefore registering in opposition to the hearing on maintenance report on September 4, 1996 at 9:30 a.m. at the Community Meeting Room of Tippecanoe County Courthouse." signed Jeanne J. Snoddy. Mr. Spencer stated she

owns an eighty acre tract east of High Gap Road and along with Bill Windle who expressed his objection to the ditch at the last Drainage Board Meeting, Mr. Spencer thinks they would agree to the ditch becoming a legal drain if the project extended over to the west property line of the Baugh property.

Commissioner Gentry stated it is possible to continue the project over to the Baugh's west property line by doing the necessary improvements and continue assessment until the drain maintenance fund repays the general drain improvement fund in full.

Commissioner Haan moved to establish High Gap Road Drain as a legal ditch as described in the petition filed, seconded by Commissioner Gentry. Motion carried.

Commissioner Haan moved to clean out and maintain High Gap Road Drain and create a maintenance of \$13.72 per acre for the first year assessment and then reduce the assessment to \$1.50 per acre per statute, seconded by Commissioner Gentry. Motion carried.

WATKINS GLEN SUBDIVISION PHASE IV PART II

Mr. Spencer stated on behalf of Vester & Associates, he asked Watkins Glen Subdivision Phase IV part II be continued.

Commissioner Haan moved to continue to Watkins Glen Subdivision Phase IV part II, seconded by Commissioner Gentry. Motion carried.

APPROVAL OF MINUTES

Commissioner Haan moved to approve the Drainage Board minutes from September 4, 1996, regular meeting, seconded by Commissioner Gentry. Motion carried.

ARNETT CLINIC SOUTH

Todd Warrix, Schneider Engineering, asked for final approval of Arnett Clinic South. The proposed site consists of 3.00 acres located at the southwest corner of U.S. Highway 231 South and County Road 240 South in the Wea-Ton Subdivision. The development will include a medical facility which will accommodate an urgent care center and various medical offices. Mr. Warrix explained there is a proposed dry bottom detention basin along the east property line, between US231 and the proposed parking lot area. The emergency overflow that will not be held in the detention basin and any additional storm water not contained within the basin will be routed at the southeast corner of the property into the west roadside ditch of US231 South.

Mr. Spencer stated a study was done of the Wea-Ton area and an agreement was created concerning the development of the area. Wea-Ton agreed to design the drainage system for the area and now the City of Lafayette wants the design finished for this development. Mr. Spencer suggested the developer of this site meet with the Wea-Ton members and get a letter of commitment which states before any more construction can be done the drainage system must be implemented. After further discussion it was decided that Mr. Spencer will write the Wea-Ton members and let them know that the Drainage Board will not approve additional construction within the subdivision until the drainage system is constructed.

Mr. Warrix read the two conditions suggested by Christopher B. Burke Engineering.

- 1.) Orifice calculations or revised outlet detail must be provided which indicate that the pond will release flows at or below the allowable discharge rate of 1.64 cfs.
- 2.) Additional spot elevations must be added to the construction plans on the northern and northeast sides of the pond to verify that overflow from the pond will exit via the emergency overflow indicated at the southeast corner of the pond.

Mr. Spencer recommended final approval with the two conditions read by Mr. Warrix and the client must submit a copy of the permit from the State Highway approving the discharge into the US231 side ditch.

Commissioner Haan moved to grant final approval of Arnett Clinic South subject to the three conditions, seconded by Commissioner Gentry. Motion carried.

OTHER BUSINESS

Osco Drug Store

Commissioner Gentry referred to the Osco Drug Store located at the the northwest corner of US231 and Beck Lane, she stated she has received complaints of standing water on Beck Lane.

Commissioner Haan stated the Drainage Board needs to analyze the situation at Osco Drug Store before granting approval of that type of drainage system for any other development. The Commissioners asked the Surveyor to investigate the complaint and look into what can be done to correct the drainage system at Osco Drug Store.

Lighthouse Homes Center

Mr. Spencer referred to the Lighthouse Homes Center agreement with the Drainage Board on the Elliott Regional Retention Basin. They have a proposal to excavate the dirt they need for their development out of the area where the future regional basin is planned. There are questions in paragraph 7 of the proposal dated August 27, 1996 that need to be answered before entering into an agreement.

Paragraph 7

"Not withstanding Paragraph 4 hereof, the Board grants to Light House the right to commence construction of the Regional Detention Basin and to remove dirt therefrom to Light House land and use. The excavation will be in compliance with the design and specifications of the Board. In the event Light House completes removal of dirt from the area of the Regional Detention Pond equal to 4.4 acre feet of storage, its share of the costs of the design and construction of such Regional Detention Pond shall be reduced in an amount equal to the costs of removal of such 4.4 acre feet of dirt, such amount to be determined by dividing the total costs of dirt removed for such facility divided by its capacity and the resulting number multiplied by the storage capacity of 4.4 acre feet."

Mr. Spencer stated the questions are:

1. How much dirt does Lighthouse Homes need?

2. Do they have an estimate of the cost of moving the amount of dirt which they need?
3. Does this volume of dirt equal 4.4 acre feet?

Mr. Spencer stated Mr. Hoffman wrote Light House Homes a letter asking these questions September 23, 1996. Per telephone conversation with Amy Moore of Butler Fairman & Suifert, representing Lighthouse Homes, she stated they will need seventy-five thousand yards of dirt, it will cost \$.75 per yard to move, and equal more volume of dirt than 4.4 acre feet.

Commissioner Gentry thought the proposal would not be rational because no time table has been determined for the start of the design on the Elliott Regional Retention Basin.

Mr. Spencer felt it not the County's responsibility to get the DNR permits needed for them to work within the floodplain. The design of the basin has not been discussed because of lack of funding, if Lighthouse Homes were to make a cash contribution it would allow the design of the basin to begin.

JN Kirkpatrick Ditch - reconstruction

Mr. Spencer asked to be placed on the Commissioners Meeting agenda to determine dates for the James N. Kirkpatrick Ditch pre-proposal meeting and submittal date for the proposals.

Mr. Spencer asked if October 15, 1996 would be an agreeable date for Woolpert to meet with the Commissioners for the "kick off" of the GIS pilot program?

Commissioner Gentry stated October 15th is available and Commissioner Haan stated he is available October 15th in the morning only.

Being no further business Commissioner Haan moved to adjourn until November 6, 1996 meeting, seconded by Commissioner Gentry. Meeting adjourned.

TIPPECANOE COUNTY DRAINAGE BOARD
 REGULAR MEETING
 FEBRUARY 5, 1997

The Tippecanoe County Drainage Board met Wednesday February 5, 1997 in the Tippecanoe Room of the Tippecanoe County Office Building, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

Those present: Tippecanoe County Commissioners Kathleen Hudson and Gene Jones, Tippecanoe County Surveyor Michael J. Spencer, Tippecanoe County Drainage Board Attorney Cy Gerde, Engineering Consultant David Eichelberger, and Drainage Board Secretary Shelli Muller.

Commissioner Hudson stated Commissioner Chase resigned Monday February 3, 1997 which created a vacancy in the position of Vice President to the Drainage Board. She nominated Commissioner Jones to fill the vacancy, seconded by Commissioner Jones. Motion carried to elect Commissioner Jones as Drainage Board Vice President.

The first item on the agenda was to approve the minutes from the meeting held December 11, 1996. Commissioner Jones moved to approve the minutes, seconded by Commissioner Hudson. Motion carried.

Commissioner Jones moved to approve the minutes of the last meeting held January 8, 1997, seconded by Commissioner Hudson. Motion carried.

Mr. Gerde asked for the active and inactive ditch list to be placed in the minutes and a motion be made to approve the list.

ACTIVE DITCH LIST 1997

DITCH NO	DITCH	PRICE PER ACRE	TOTAL 4 YEAR ASSESSMENT	1996 YEAR END BALANCE
4	Anson, Delphine	\$1.00	\$5,122.56	\$2,677.72
8	Berlovitz, Juluis	\$1.25	\$8,537.44	(\$2,933.43)
13	Brown, A P	\$1.00	\$8,094.24	\$7,921.94
14	Buck Creek	\$0.00		\$1,385.55
15	Burkhalter, Alfred	\$1.50	\$5,482.96	\$4,129.61
18	Coe, Train	\$0.50	\$3,338.56	\$1,306.84
20	County Farm	\$1.00	\$1,012.00	(\$381.25)
25	Dunkin, Marion	\$1.50	\$9,536.08	\$9,285.65
26	Darby, Wetherill	\$1.50		\$1,106.43
27	Ellis, Thomas	\$1.00	\$1,642.40	\$1,483.50
29	Fassnacht, Christ	\$0.75	\$2,350.56	\$2,124.49
31	Gowen, Issac	\$0.00		\$101.76
33	Grimes, Rebecca	\$3.00	\$3,363.52	(\$10,770.77)
35	Haywood, E.F.	\$0.50	\$7,348.96	\$1,283.61
37	Harrison, Meadows	\$1.00	\$1,532.56	\$463.71
41	Johnson, E. Eugene	\$3.00	\$10,745.28	\$8,137.10
42	Kellerman, James	\$0.50	\$1,043.52	\$693.98
43	Kerschner, Floyd	\$1.00	\$1,844.20	(\$2,254.41)
44	Kirkpatrick, Amanda	\$1.00	\$2,677.36	\$781.97
45	Kirkpatrick, Frank	\$1.00	\$4,226.80	(\$7,821.61)
48	Lesley, Calvin	\$1.00	\$3,787.76	\$2,440.88
51	McFarland, John	\$0.50	\$7,649.12	\$7,160.70

54	Marsh, Samuel		\$0.00		\$0.00
55	Miller, Absalm		\$0.75	\$3,236.00	\$2,221.92
57	Morin, F.E.	\$1.00	\$1,434.72		(\$1,130.43)
58	Motsinger, Hester	\$0.75	\$2,000.00		(\$348.42)
59	O'Neal, J. Kelly	\$1.50	\$13,848.00		(\$1,975.03)
60	Oshier, Aduley		\$0.50	\$1,624.88	\$1,048.80
64	Rayman, Emmett	\$0.00			\$326.57
65	Resor, Franklin	\$1.00	\$3,407.60		(\$2,025.96)
74	Sterrett, Joseph	\$0.35	\$478.32		\$276.65
76	Swanson, Gustav	\$1.00	\$4,965.28		\$1,351.62
82	Wallace, Harrison		\$0.75	\$5,501.76	\$5,408.79
84	Walters, William	\$0.00	\$8,361.52		\$7,999.20
87	Wilson, Nixon		\$1.00		\$158.62
89	Yeager, Simeon		\$1.00	\$615.36	(\$523.86)
91	Dickens, Jesse		\$0.30	\$288.00	\$206.26
93	Dismal Creek		\$1.00	\$25,420.16	\$8,652.86
94	Shawnee Creek		\$1.00	\$6,639.28	\$3,411.51
95	Buetler/Gosma		\$1.10	\$19,002.24	\$9,981.77
100	S.W.Elliott	\$0.75	\$227,772.24	\$174,474.74	
102	Brum, Sarah		\$1.00		
103	H W Moore Lateral				
104	Hadley Lake Drain	\$0.00			\$38,550.17
105	Thomas, Mary		\$0.00		
106	Arbegust-Young	\$0.00			
108	High Gap Road	\$13.72			0.00
109	Romney Stock Farm	\$12.13			0.00

INACTIVE DITCH LIST 1997

	DITCH	PRICE	TOTAL	1996
	PER ACRE	ASSESSMENT	4 YEAR	YEAR END
			BALANCE	
AA				
1	Amstutz, John	\$3.00	\$5,008.00	\$5,709.97
2	Anderson, Jesse	\$1.00	\$15,793.76	\$21,291.57
3	Andrews, E.W.	\$2.50	\$2,566.80	\$2,847.14
5	Baker, Dempsey	\$1.00	\$2,374.24	\$3,270.71
6	Baker, Newell	\$1.00	\$717.52	\$2,343.45
7	Ball, Nellie	\$1.00	\$1,329.12	\$2,414.08
10	Binder, Michael	\$1.00	\$4,388.96	\$5,244.63
11	Blickenstaff, John	\$1.00	\$7,092.80	\$8,094.49
12	Box, NW	\$0.75	\$11,650.24	\$15,935.84
16	Byers, Orrin	\$0.75	\$5,258.88	\$5,266.89
17	Coe, Floyd	\$1.75	\$13,617.84	\$19,495.56
19	Cole, Grant	\$1.00	\$4,113.92	\$9,688.52
21	Cripe, Jesse	\$0.50	\$911.28	\$1,810.25
22	Daughtery, Charles	\$1.00	\$1,883.12	\$2,662.08

23	Devault, Fannie	\$1.00	\$3,766.80	\$8,650.12
28	Erwin, Martin V	\$1.00	\$656.72	\$1,273.19
30	Fugate, Elijah		\$1.00 \$3,543.52	\$6,272.90
32	Gray, Martin		\$1.00 \$6,015.52	\$7,478.52
34	Hafner, Fred		\$1.00 \$1,263.44	\$1,336.75
36	Haywood, Thomas	\$1.00	\$2,133.12	\$3,253.45
39	Inskeep, George	\$1.00	\$3,123.84	\$8,267.68
40	Jakes, Lewis		\$1.00 \$5,164.24	\$6,039.76
46	Kirkpatrick, James		\$1.00 \$16,637.76	\$21,244.63
47	Kuhns, John A		\$0.75 \$1,226.96	\$1,467.00
50	McCoy, John	\$1.00	\$2,194.72	\$3,009.24
52	McKinny, Mary		\$1.00 \$4,287.52	\$4,326.98
53	Mahin, Wesley		\$3.00 \$3,467.68	\$4,346.05
56	Montgomery, Ann	\$1.00	\$4,614.56	\$4,717.40
61	Parker, Lane		\$1.00 \$2,141.44	\$3,658.56
63	Peters, Calvin		\$1.00 \$828.00	\$2,704.13
66	Rettereth, Peter	\$0.75	\$1,120.32	\$1,511.11
67	Rickerd, Aurthur	\$3.00	\$1,064.80	\$1,281.00
68	Ross, Alexander	\$0.75	\$1,791.68	\$4,348.39
69	Sheperdson, James	\$0.75	\$1,536.72	\$4,194.37
70	Saltzman, John		\$2.00 \$5,740.96	\$6,867.50
71	Skinner, Ray		\$1.00 \$2,713.60	\$2,961.68
72	Smith, Abe	\$1.00	\$1,277.52	\$1,595.63
73	Southworth, Mary	\$0.30	\$558.08	\$677.23
75	Stewart, William	\$1.00	\$765.76	\$1,046.47
77	Taylor, Alonzo		\$1.00 \$1,466.96	\$4,006.46
78	Taylor, Jacob		\$0.75 \$4,616.08	\$5,066.61
79	Toohy, John		\$1.00 \$542.40	\$1,207.75
81	VanNatta, John		\$0.35 \$1,338.16	\$3,089.01
83	Walters, Sussana	\$0.75	\$972.24	\$2,395.01
85	Waples, McDill		\$1.00 \$5,478.08	\$9,781.97
86	Wilder, Lena		\$1.00 \$3,365.60	\$5,718.48
88	Wilson, J & J		\$0.50 \$736.96	\$6,552.77
90	Yoe, Franklin		\$1.00 \$1,605.44	\$2,916.35
92	Jenkins		\$1.00 \$1,689.24	\$3,014.50
96	Kirkpatrick One	\$0.00	\$6,832.16	\$13,956.64
97	McLaughlin, John	\$0.00	\$0.00	\$0.00
101	Hoffman, John		\$1.00 \$72,105.03	\$3,502.62

Commissioner Jones moved to approve the active and inactive ditches for 1997, seconded by Commissioner Hudson. Motion carried.

1997 CONTRACTS

ENGINEERING CONTRACT

Mr. Gerde stated he commends the contract written for Christopher B. Burke Engineering, Limited, but some verbiage was changed to better protect the County's interest.

Mr. Eichelberger stated the changes will be made and the contract ready for signature at the March meeting.

ATTORNEY CONTRACT

Mr. Gerde stated the contract for Drainage Board Attorney is ready for approval and the signature of the Drainage Board. The contract is the same format as Mr. Hoffman's contract with a few changes; date, name and hourly rate changed to \$140.00 per hour also, the last paragraph was added to the contract.

Commissioner Hudson read the paragraph that was added:

"All parties hereto agree not to discriminate against any employee or applicant for employment with respect to his hire tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, handicap, national origin or ancestry. Breach of this convenient may be regarded as a material breach of the contract."

Commissioner Jones moved to approve the contract for Drainage Board Attorney, seconded by Commissioner Hudson. Motion carried. The entire contract is on file in the County Surveyor's Office.

JAMES N. KIRKPATRICK DITCH

Mr. Spencer asked that the **James N. Kirkpatrick Ditch** proposal discussion be continued until the March meeting allowing time to fill the vacancy of the third Drainage Board member.

Commissioner Hudson moved to continue the discussion of the James N. Kirkpatrick Ditch proposals until the March Drainage Board Meeting, seconded by Commissioner Jones. Motion carried

OBSTRUCTION OF DRAINS

Mr. Spencer referred to the following "PETITION TO TIPPECANOE COUNTY DRAINAGE BOARD TO REMOVE OBSTRUCTION IN MUTUAL DRAIN OF MUTUAL SURFACE WATERCOURSE" the "DRAINAGE BOARDS POWER EXTENDED TO PRIVATE DRAINS" article in "Indiana Prairie Farmer" and Indiana Code amendment act No. 1277. All of these documents are on file in the County Surveyor's Office. Mr. Spencer wanted the Commissioners to be aware of and have a discussion on this issue. Mr. Spencer felt this law was to protect against man-made obstructions and asked Mr. Gerde to examine the possibility of the law including natural obstructions.

Mr. Gerde gave an example of where this law could be taken into effect. The first being on North 9th Street Road, north of Burnetts Road, the current condition causes water to travel across the road producing a hazardous condition. The reason for the water across the road is due to drainage problems outside the County Road Right-of-Way.

Mr. Steve Murray, Executive Director, Tippecanoe County Highway Department, stated another persistent problem is 200 South, east of the South fork of the Wildcat Creek. Mr. Murray explained no actual source of funding is available to work on obstruction of drains which do not have a maintenance fund. Mr. Murray asked the Drainage Board to consider creating a fund which would help the Surveyor's Office and the Highway Department to determine what action could be taken. Mr. Murray stated when a problem becomes severe enough the County Highway Department will clean out an obstruction that is off county road right-of-way to protect the road way, but the funds used for the clean-up are funds that could be used elsewhere.

Commissioner Jones stated Steve Wettschurack told him that FEMA was going to help out with the situation on North 9th Street.

Mr. Murray pointed out with the older residential subdivision the storm water system were allowed to outlet into privately owned ravines, there is no funding available to help with maintenance on these situations. If the storm water system becomes plugged or breaks down causing the streets to flood the County Highway Department has repaired the problem, using funds that were not intended for that type of repair.

Mr. Gerde's understanding is that in the majority of those situation the County does not have an easement, which cause a legal problem for the County.

Mr. Spencer stated in all cases where the County has worked out side the easement a complaint was filed therefore the landowners are willing to grant entry onto their land.

MARCH DRAINAGE BOARD MEETING DATE

Mr. Spencer explained the March 1997 Drainage Board meeting date needs to be changed, if possible. Mr. Gerde is going to be out of town on the scheduled meeting date of March 5, 1997.

Discussion of the next Drainage Board Meeting, after an agreed date and time, Commissioner Hudson stated the next Drainage Board meeting will be Tuesday, March 11, 1997 at 9:00 a.m.

Being no further business Commissioner Hudson moved to adjourn until Tuesday, March 11, 1997 at 9:00 a.m., seconded by Commissioner Jones. Meeting adjourned.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MARCH 11, 1997

The Tippecanoe County Drainage Board met Wednesday March 11, 1997 in the Tippecanoe Room of the Tippecanoe County Office Building, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

Those present: Tippecanoe County Commissioners Kathleen Hudson and Ruth Shedd, Tippecanoe County Surveyor Michael J. Spencer, Tippecanoe County Drainage Board Attorney Cy Gerde, Engineering Consultant David Eichelberger, and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last meeting held February 5, 1997. Commissioner Shedd moved to approve the minutes, seconded by Commissioner Hudson, motion carried.

RIVER BLUFF SUBDIVISION, PART 2 AND 3, PHASE II

Tim Beyer, Vester & Associates, asked for final approval of River Bluff Subdivision, Part 3, Phase II. The site is located off Pretty Prairie Road and is in the east half of section 2 of Burnett's Reserve. The developer withdrew Part 2 of River Bluffs Subdivision because it is not included in an agreement signed by the down stream landowner allowing for drainage across the his land to Harrison Creek and the Wabash River. Part 3, Phase II is located in the southern portion of the Subdivision consisting of 21.8 acres.

Mr. Spencer explained this development was before the Board in 1986 requesting no onsite detention because of the proximity to the Wabash River. The Board approved the request, subject to the downstream landowner agreeing to allow the water across his land without detention. An agreement was made and has been recorded in the County Recorder's Office (Record Number 87-07673). The agreement is still valid, but it did not include Part 2 of River Bluffs Subdivision. Mr. Spencer recommended final approval of this development.

Commissioner Shedd moved to grant final approval of River Bluffs Subdivision, Part 3 Phase II, seconded by Commissioner Hudson. Motion carried.

WESTON WOODS SUBDIVISION, REPLAT OF LOTS 70-82 & 87-101

Paul Coutts, C & S Engineering, asked the Board to approve the replat of lots 70-82 and 87-101 of Weston Woods Subdivision. Weston Woods Subdivision is located east of Creasy Lane and south of McCarty Lane, the replat of lots 70-82 and 87-101 are in the southeast corner of the overall Weston Woods Subdivision. The revised plan eliminates detention storage by routing it through the existing Weston Woods Detention areas, the Treece Meadows Relief Drain and the Wilson Branch to the regional detention basin. Runoff along the southern portion of Sourgum Lane and adjacent backyard areas to the east will flow south and eventually be picked up with the development of the proposed Amelia Station.

Mr. Eichelberger stated final approval is recommended with four conditions.

1. The storm sewer line "G" pipe length shown in the Storm Pipe Table on sheet 6 of the construction plans does not match the length shown in the storm sewer profile also provided on sheet 6. The storm sewer sizing calculation were completed based on the 170 foot length shown in the profile. Therefore, the applicant should revise the storm sewer line "G" pipe length inthe Storm Pipe Table to match the length shown inthe storm sewer profile.

2. The proposed grading plan provided on Sheet 3 of the construction plans includes proposed elevation along the south and east property lines of the project. These proposed elevation appear to be several feet higher than the existing elevations along the property line. The applicant should provide additional information to show how the proposed elevation along the south and east boundaries of the property will tie-in to the existing contours, without impacting adjacent properties.

3. The proposed grading plan provided on Sheet 3 of the construction plans also includes a proposed swale along the east property line of the project. Based on the proposed elevations along the east and south property lines, it appears that this swale does not have an outlet. The applicant should provide additional information to show the location of the outlet for this swale.

4. The proposed pad elevations for lots 71 and 81 appear to be about 0.5 feet above the high point of the emergency overflow swales adjacent to these lots. The applicant should review the proposed grading plan increase the emergency overflow clearance, if possible.

Commissioner Shedd moved to grant final approval of Weston Woods Subdivision, replat of lots 70-82 & 87-101, subject to the four condition, seconded by Commissioner Hudson. Motion carried.

WATKINS GLEN SOUTH, PHASE V

Bob Gross, R.W. Gross & Associates, asked for final approval of Watkins Glen South, Phase V Subdivision located North of County Road 200 North and County Road 400 East.

Mr. Spencer stated there are two phases of Watkins Glen Subdivision currently being planned. Phase IV Part II is being designed by Vester & Associates, Inc. and Phase V is being designed by R.W. Gross & Associates, Inc. Mr. Spencer asked for clarification as to which development will be first, because Phase V will drain from four 24 inch pipe along the south and west boundary line of Phase IV, Part II. There is a concern as to when the offsite outlet structure will be built.

Andy Slavens, Vester & Associates, stated there will be an easement along the South and West boundary lines of Phase IV, Part II to the offsite outlet structure.

Mr. Spencer recommended final approval with five conditions from Christopher B. Burke Engineering memorandum of February 28, 1997:

1. The off-site watershed area, located south of pre-development watershed 1, appears to be tributary to the subject site and should be included in the existing and proposed condition analysis.

2. Final approval of the stormwater management plan will not be recommended until the ultimate outlet from the subject site has been approved by the Tippecanoe County Drainage Board and constructed.

3. Storm sewer profiles for each storm sewer line from the first inlet to the proposed outfall should be provided on the plans.

4. The construction plans should be revised so that the slopes and channel bottom elevations of the conveyance channels are more obvious.

5. The proposed condition TR-20 analysis should be revised so that the proper watersheds are routed through the proposed detention ponds.

Mr. Spencer explained that the fifth condition has been addressed and is no longer an issue.

Mr. Gross referred to condition number two of the memorandum dated February 28, 1997. Mr. Gross asked if the developer could submit a letter of credit.

Mr. Spencer stated the developer can make it part of the construction bond as an offsite item.

Mr. Gerde stated the issue on the construction bond will need to be added to the list of conditions.

Mr. Spencer suggested changing item number five of the memorandum dated February 28, 1997 from Christopher B. Burke Engineering to read: The developer must include the offsite outlet structure as part of the construction bond.

Commissioner Shedd moved to grant final approval of Watkins Glen South Subdivision Phase V, subject to the said conditions, seconded by Commissioner Hudson. Motion carried.

J.N. KIRKPATRICK DITCH PROPOSALS

Mr. Spencer asked for the discussion of the J.N. Kirkpatrick proposals be continued until the next Drainage Board Meeting held April 2, 1997.

HIGH GAP ROAD DITCH AND ROMNEY STOCK FARM DITCH QUOTES

Mr. Spencer read the quotes for cleanout of the High Gap Road Ditch and the Romney Stock Farm Ditch, which were due in the Auditor's Office March 10, 1997.

HIGH GAP ROAD DITCH

Birge Farm Drainage	7,923.00
F & K Construction	9,040.00
	5,775.00
R.W. Davis Contracting	9,924.30
Merkel Excavating	12,150.00

ROMNEY STOCK FARM DITCH

R.W. Davis Contracting	4,701.00
F & K Construction	

Commissioner Shedd moved to award Birge Farm Drainage the contract for cleanout of the High Gap Road Ditch, seconded by Commissioner Hudson. Motion carried.

Commissioner Shedd moved to award R.W. Davis Contracting the contract for cleanout of the Romney Stock Farm Ditch, seconded by Commissioner Hudson. Motion carried.

Being no further business Commissioner Hudson moved to adjourn until the next meeting of April 2, 1997, seconded by Commissioner Shedd. Meeting adjourned.

DRAINAGE BOARD MINUTES MARCH 11, 1997 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD

REGULAR MEETING

May 7, 1997

The Tippecanoe County Drainage Board met Wednesday May 7, 1997 in the Tippecanoe Room of the Tippecanoe County Office Building, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

Those present: Tippecanoe County Commissioners Kathleen Hudson and Ruth Shedd, Tippecanoe County Surveyor Michael J. Spencer, Tippecanoe County Drainage Board Attorney Cy Gerde, Engineering Consultant David Eichelberger, and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the last meeting held April 2, 1997. Commissioner Shedd moved to approve the minutes, seconded by Commissioner Hudson, motion carried.

2. **WEA-TON DRAIN EXTENSION**

Pat Sheehan, Schneider Engineering, representing The Sterling Group asked for conditional approval of the Wea-Ton drain extension located along County Road 250 South just east of Old Romney Road the extension will go from Old Romney Road east to U.S. 231 right-of-way ending close to County Road 50 East.

Mr. Sheehan explained the reason for the extension is to provide a positive outlet for the proposed Coppergate Subdivision. A 42 inch pipe will be installed from Old Romney Road east along the County Road 250 South right-of-way. Then from U.S. 231 North to the Coppergate Subdivision an open channel will be constructed.

Dale Lehnig, Assistant City Engineer, stated she reviewed the Wea-Ton drain extension and provided a memorandum of items which do not comply with the City of Lafayette drainage ordinance.

Ms. Lehnig added the grated box end section be positioned to face the flow line of the open ditch along U.S. 231.

Mr. Spencer asked about the 100 year storm event vs the 10 year storm event.

Mr. Sheehan explained the Wea-Ton drain project was modeled using the TR-20 program, and was modeled to start out with the 10 year flow to size the pipes for the extension east of Old Romney Road to U.S. 231 and the open portion on to Coppergate. After that was completed the 100 year flow was ran to determine how the proposed pipe system would react. The ditch area west of the site going to the grated box end section at U.S. 231 would convey the 100 year flow. At the grated box end section that flow for the 100 year flow would be conveyed under U.S. 231 after some adjustments to the pipes because the pipes were sized for a 10 year flow. The 100 year flow will continue down the storm sewer system and the emergency routing on the west side of U.S. 231 would continue to just south of 250 South through an existing drainage path and into the Triple J Subdivision storm sewer system.

Mr. Spencer asked about the subsurface drain proposed along the open channel.

Mr. Sheehan stated originally proposed was a subsurface drain in the area located east of U.S. 231, after the review from Christopher Burke Engineering, the plan has been revised to have a paved gutter to create a better flow.

Mr. Spencer asked about the easements for the land that is not directly owned by the developer of Coppergate Subdivision.

Mr. Sheehan replied the easements are being worked on by Kent Heckman, The Sterling Group.

Mr. Heckman stated easement across the southern part of the site which goes from U.S. 231 to Coppergate Subdivision is Mary Wastl property, final easement agreements are being prepared and could be secured within the next 8 to 10 days.

Mr. Spencer asked who owns the property between Wastl and U.S. 231., along the right-of-way.

Mr. Sheehan stated that is within a right-of-way and easement that is located for an existing sanitary sewer system. Kurt Beech with the City of Lafayette verified the easement.

Mr. Spencer asked about the maintenance of the proposed extension?

Mr. Heckman stated along with the easements a maintenance agreement has been drafted which states the Sterling Group and the Wastls equally maintain the drain. There is also the possibility of the drain becoming a County regulated drain.

Mr. Eichelberger stated Schneider has re-submitted plans after they received the review memo from April 24th therefore many of the comments may have already been addressed.

Mr. Sheehan asked for conceptual approval of Wea-Ton Drain Extension subject to the items discussed in Christopher Burke Engineering review memo.

Mr. Gerde asked if the watershed for the drain is larger than the two properties that are involved, if so, than the other properties will be benefiting from the drain, but not contributing to it until it is a regulated drain.

Mr. Spencer agreed other property owners will benefit, and that is one of the condition in the review memo.

Ms. Lehnig brought up the question if someone wants to tie into the drain, will they have to receive approval from the County and/or City?

Mr. Spencer stated at this time the drain is considered a private drain. When the drain becomes a County regulated drain then approval would have to be obtained from the County.

Mr. Heckman stated the time frame scheduled six months ago was to start getting building permits for the 30th of May. Mr. Heckman asked the Board for approval subject to the items in the review memo.

Mr. Gerde stated part of the easement for the drain is located within the road right-of-way for County Road 250 South.

Mr. Gerde suggested conducting a special meeting giving the county time to review the most recent submittal from Schneider.

Commissioner Hudson suggested the date of May 21, 1997 at 9:00 a.m. Commissioner Shedd, Mr. Sheehan and Mr. Heckman agreed to the date and time.

Commissioner Shedd moved to grant preliminary approval of the Wea-Ton Drain Extension subject to the condition of the County and the City, seconded by Commissioner Hudson. Motion carried. (a list of the conditions are on file in the County Surveyor's Office)

3. OLYMPIA PARK INDUSTRIAL SUBDIVISION

Mr. Spencer recommended Olympia Park Industrial Subdivision be continued until the next regularly scheduled meeting June 5, 1997.

Commissioner Shedd moved to continue Olympia Park Industrial Subdivision until June 5, 1997 at 10:00 a.m., seconded by Commissioner Hudson. Motion carried.

4. WEA RIDGE ELEMENTARY SCHOOL

Roger Fine and David Ayala, John Fisher & Associates, presented the Board with Wea Ridge Elementary School drainage plans located south of County Road 430 South and on the east side of County Road 150 East (South 18th Street). Mr. Fine stated Christopher Burke Engineering reviewed the submittal, and provided comments via memo on April 23, 1997. Mr. Fine replied to the memo with another submittal addressing the comments made in the memo, Christopher Burke Engineering review the re-submittal and recommended via memo dated May 6, 1997 final approval with conditions. Mr. Fine referred to drawing "B" developed conditions and explained the site consist of approximately 40 acres which contains two drainage directions and are distinguished by a heavy dash line. Mr. Fine stated the area to the south drains southwesterly outletting into the Wea Creek, the area to the north flows overland to a series of pipes in the northwest part of the site and under County Road 430 South. Mr. Fine explained it was decided to develop only the portion of the site in the Kirkpatrick Ditch watershed area, which is the portion to the north of the heavy dash line on drawing "B" consisting of approximately 27 acres. There are two detention facilities being designed, the west facility will drain the area to the south and west of the building and the runoff from the roof. The northern facility will drain the area north and east of the building and parking lot. The west basin will drain into the northern basin and then discharge into the existing 24 inch pipe. Mr. Fine asked for a variance from Section 14.f(1) of the Ordinance to allow a storage time of grater than 48 hours for the northern basin, the calculations indicate a time of 51 hours.

Mr. Spencer recommended final approval of Wea Ridge Elementary School with two conditions:

A complete set of certified construction plans must be submitted.

The stormwater management plan must be revised to comply with Section 14.f(1) of the ordinance or the Board must grant a variance from this Ordinance requirement.

Commissioner Shedd moved to grant the variance to allow storage time of 51 hours rather than the required 48 hours, seconded by Commissioner Hudson. Motion carried.

Commissioner Shedd moved to grant final approval of Wea Ridge Elementary School, subject to the condition of the May 6, 1997 Christopher Burke Engineering review memo, seconded by Commissioner Hudson. Motion carried.

5. ROCHESTER COMMERCIAL SUBDIVISION

Jennifer Bonner, Hawkins Environmental, asked for final approval of Rochester Commercial Subdivision located on 3.05 acres east of Beck Lane and south of State Road 25 West. Drainage from Mr. Cederquist, landowner to the south of the site, will be picked up by the drainage system. Ms. Bonner asked for two variances, the first variance is for the 25 foot setback requirement from a building and detention ponds there are two locations were it would be less than 25 foot. One at the north end of the north-south apartment building and at the northeast corner of the east-west apartment building. The second variance is for the pipe velocities to be less than the minimum 2.5 fps.

Commissioner Shedd moved to grant the two variances, the 25 foot setback distance and the velocities flow of less than 2.5 fps, seconded by Commissioner Hudson. Motion carried.

Commissioner Shedd moved to grant final approval of Rochester Commercial Subdivision subject to the condition the applicant addresses the comments in the memo from Christopher Burke Engineering dated May 5, 1997, seconded by Commissioner Hudson. Motion carried.

6. WINFIELD FARMS SUBDIVISION

Jennifer Bonner, Hawkins Environmental, presented the Board with Winfield Farms Subdivision. Ms. Bonner explained she wanted the Board to have a discussion only on this project and requested it be on the agenda for the Special Drainage Board meeting on May 21, 1997. Ms. Bonner stated the site borders the existing Ashton Woods Subdivision to the south, west of Old Romney Road and east of

the newly relocated U.S. 231 South, consisting of approximately 30.65 acres. The proposed subdivision will contain 48 duplex lots and 7 (16-unit) apartment buildings.

7. JAMES N. KIRKPATRICK RECONSTRUCTION PROPOSALS

Commissioner Shedd moved to accept Christopher B. Burke Engineering and Hawkins Environmental proposal for engineering services concerning the reconstruction of the James N. Kirkpatrick Ditch, seconded by Commissioner Hudson. Motion carried.

8. OTHER BUSINESS

OTTERBEIN DITCH - appointment of member to a Joint Board

Commissioner Shedd moved to appoint Kathleen Hudson and Ruth Shedd to the Joint Drainage Board with Benton County regarding the Otterbein Ditch, seconded by Commissioner Hudson Motion carried.

9. BROOKFIELD FARMS SUBDIVISION HOMEOWNERS ASSOCIATION

Eric Burch, president of the Brookfield Farms Homeowners Association, asked the Board for assistance in resolving an issue that was recently presented to the association. Brookfield Farms Subdivision is located south of State Road 26 East and east of County Road 500 East. There are two permanent lakes within the Subdivision the one located along the south of State Road 26 East approximately 200 yards long is the lake in question. The Drainage Board in 1993 granted a variance from the required six foot chain link fence to surround the pond.

Mr. Burch read the variance from the June 2, 1993 Drainage Board minutes.

“Commissioner Gentry moved to approve a variance on Section 14 (h) 8 requiring a six (6) foot chain link fence surrounding the lake and grant the south side be open to give land owners in Brookfield Farms Subdivision access to the lake. Also, approval of the developer granting and undivided interest to each lot owner along the lake in Brookfield Farms Subdivision, seconded by Commissioner Yount. Unanimously approved.”

Mr. Burch explained the lake is owned half by the landowners along the south side of the lake and the common area owned by the association. At a meeting with the developer, Roy Prock Cedar Run Limited, he stated he received the variance from the Board allowing no fence. With the minutes from June 2, 1993 the association questioned Mr. Prock as to what could be done since the majority of the landowners along the lake do not want the fence. The idea of planting bushes, trees or shrubs as a barrier between the common area and State Road 26 East was suggested to Mr. Prock and he is receptive to paying for the trees, and/or bushes. Also, an issue is the association has been contacted by the State of Indiana to survey the property for the future widening of State Road 26 East from the Meijer site east to County Road 550 East. Mr. Burch stated the concerns of the association are there is going to be less common area between the lake and State Road 26 East, the association wants to know can the original variance from June 2, 1993 be overwritten to change the barrier to trees and/or bushes instead of a six (6) foot chain link fence? The association is asking for action from the Board to help alleviate the possibility of liability to the association if an accident was to occur. The Homeowners Association has directed that there be no boating, ice skating or swimming in the lakes, but they landowners in Brookfield Farms are allowed to fish in the lakes.

Mr. Spencer felt the fence should have been constructed on the north, east and west side of the lake, subsequently it was not, so therefore the association should be compensated for the cost of constructing a six foot chain link fence.

Commissioner Hudson suggested that a representative from the Homeowners Association and the developer of Brookfield Farms Subdivision need to come before the Board with an agreement stating the intent to override the variance granted June 2, 1993 replacing the six foot chain link fence with trees, scrub, and/or bushes along the north, east and west sides of the existing lake south of State Road 26 East. Then present the agreement to the Board for approval.

Mr. Burch agreed to contact Mr. Prock of Cedar Run Limited, of what the Board is requiring and ask him to attend the next regularly scheduled meeting June 5, 1997 at 10:00 a.m., but could someone from the County also contact Mr. Prock of the meeting?

Mr. Spencer stated he will in writing notify Mr. Prock of the meeting on June 5, 1997 at 10:00 a.m..

Being no further business, Commissioner Shedd moved to adjourn until the next special scheduled Drainage Board meeting May 21, 1997 at 9:00 a.m., seconded by Commissioner Hudson. Meeting adjourned.

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
OCTOBER 15, 1997**

Those present were:

Tippecanoe County Commissioners Kathleen Hudson, Ruth Shedd, and John Knochel, County Surveyor Mike Spencer, Drainage Board Attorney Cy Gerde, Engineering Consultant Dave Eichelberger, Drainage Board Secretary Shelli Muller.

The Tippecanoe County Drainage Board met Wednesday October 15, 1997, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

The first item on the agenda was to approve the minutes from August 12, 1997 and September 3, 1997 regular Drainage Board meetings. Commissioner Shedd moved to approve the minutes from August 12th and September 3rd Drainage Board meetings, seconded by Commissioner Knochel. Motion carried.

WOODS EDGE II MOBILE HOME PARK

Roger Fine, president of John E. Fisher and Associates, asked the Board for final approval of the drainage plans for Woods Edge II Mobile Home Park. Mr. Fine introduced Doug Miller, a co-consultant of Douglas E. Miller Consulting-Engineering and Steve Duczynski of Schostak Brothers & Company. Mr. Fine turned the presentation over to Doug Miller.

Mr. Miller asked the Board for any questions and requested a variance from the Drainage Ordinance (section 14 (f) 2) which will allow for 13 feet of water to be attained under very severe storm conditions.

Mr. Spencer stated he did not see any reason deny to the request for a variance. The Ordinance does allow developers to use existing valley cross-sections for storage areas to prevent the removal of vegetation when there is a natural valley cross-section already created.

Mr. Spencer asked about the stage-storage values not agreeing with the grading plan submitted.

Mr. Eichelberger suggested the applicant revise the grading plan to provide the storage used in the TR-20 model or provide additional information to confirm the grading plan as submitted.

Mr. Miller stated he will look at the situation and check the calculations and grading plan.

Mr. Spencer stated he received a letter from Sun Communities stating they will maintain the dam and pond area on a regular scheduled basis. The maintenance will consist of mowing of grass and weeds on and around the dam and periodic inspections of the dam itself for structural integrity and rodent infestation.

Mr. Miller stated they received an approval letter from Doug Wolf of the Soil and Water Conservation office on the erosion control plan.

Mr. Eichelberger asked if the letter mentioned any type of erosion protection at the outfall pipes into the pond? The Board should require grouted rip-rap at the outfall structure do to the high velocities and discharges expected which will reduce the potential for excessive erosion.

Mr. Spencer recommended approval with the conditions stated in the memo from Christopher B. Burke Engineering, dated October 14, 1997.

Commissioner Shedd moved to grant the variance to allow 13 feet of water to be attained under a very severe storm conditions, seconded by Commissioner Knochel. Motion carried.

Commissioner Shedd moved to grant final approval of Woods Edge II Mobile Home Park with conditions, seconded by Commissioner Knochel. Motion carried.

OTHER BUSINESS

Elliott Ditch Encroachment Request

Mr. Spencer stated Tom and Susan Aschenberg, 4220 Newcastle Road, requested an easement reduction from 75 feet to 25 feet on the portion of the Elliott Ditch that runs through their back yard. They are going to construct a pole barn approximately 40 feet off the existing drain tile. Mr. Spencer stated he recommends the encroachment.

Commissioner Shedd moved to approve the encroachment of the pole barn into the Elliott Ditch easement, seconded by Commissioner Knochel. Motion carried.

Otterbein Ditch

Mr. Spencer asked on behalf of Tom Busch of Hoffman, Luhman and Busch, if they need to represent the Tippecanoe County Drainage Board at the Otterbein Ditch hearing on October 27, 1997.

Mr. Gerde stated the meeting on October 27, 1997 is going to be more of an organizational meeting and did not see any reason for Tom Busch to be present.

Agreement James N. Kirkpatrick Reconstruction

Mr. Spencer submitted an agreement to Mr. Gerde for his review, between Hawkins Environmental and Christopher B. Burke Engineering to be the consultants for the James N. Kirkpatrick reconstruction from County Road 350 South to Concord Road.

Being no further business Commissioner Knochel moved to adjourn, seconded by Commissioner Shedd. Meeting adjourned.

TIPPECANOE COUNTY DRAINAGE BOARD

February 4, 1998

regular meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, and John Knochel, County Surveyor Mike Spencer, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Drainage Board Secretary Shelli Muller.

The Tippecanoe County Drainage Board met Wednesday, February 4, 1998, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Shedd calling the meeting to order.

The first item on the agenda was to approve the minutes from the October 15, 1997 and December 19, 1997 regular Drainage Board meetings. Commissioner Knochel moved to approve the minutes, seconded by Commissioner Shedd. Minutes Approved.

MIKE MADRID COMPANY

Bob Gross, and Craig Rodarmel of R.W. Gross and Associates, presented the Board with final drainage plans of Mike Madrid Company, located west of I-65, in the northeast portion of the intersection of Swisher Road and the Rail Road. Mr. Gross explained at the south end of the site an existing 15 inch culvert under Swisher Road is the outlet. In the post-developed condition the same 15 inch pipe will be used for the outlet of the site with two sub basin. The sub basin at the north and east sides of the site will outlet into a 12 inch pipe under the driveway and then flow into the 15 inch outlet pipe under Swisher Road. The second sub basin will be at the south end of the site and outlet through a 12 inch pipe with a 4.25 inch diameter orifice on the end to restrict the flow before outletting into the 15 inch pipe under Swisher Road. Mr. Gross explained neither of the two basins will be very deep, but they will be spread over a large area.

Mr. Spencer stated he recommends final approval with the condition the applicant receives approval from the County Highway Department for use of the road right-of-way as site detention.

Commissioner Shedd asked where the emergency overflow will go and who owns the property the overflow will go on?

Mr. Gross stated Mike Madrid Company owns the property for the proposed emergency overflow.

Commissioner Knochel moved to grant final approval of the Mike Madrid Company drainage plan with the condition the applicant receives approval from the County Highway Department, seconded by Commissioner Shedd. Motion carried.

DRAINAGE BOARD 1998 CONTRACTS

Attorney

Mr. Spencer presented the Board with a 1998 contract from Hoffman, Luhman and Busch Law Firm for their services to the Tippecanoe County Drainage Board.

Commissioner Knochel moved to approve the 1998 contract with Hoffman, Luhman and Busch Law Firm, seconded by Commissioner Shedd. Motion carried.

Engineering Consultant

Mr. Luhman presented the Board with a 1998 contract from Christopher B. Burke Engineering, LTD. for engineering consultant services for the Tippecanoe County Drainage Board.

Mr. Luhman suggested continuing the 1998 contract with Christopher B. Burke Engineering, Ltd. until some language is included, which is in the agreement from January 3, 1995 contract. Christopher B. Burke Engineering, Ltd. could copy the 1995 contract and update it to include the current rates.

Commissioner Knochel moved to continue the 1998 engineering consultant contract with Christopher B. Burke until the March 4, 1998 Drainage Board Meeting, seconded by Commissioner Shedd. Motion carried.

1998 ACTIVE AND INACTIVE DITCH LIST

Mr. Luhman read the 1998 active and inactive ditch list.

ACTIVE DITCH LIST

- 4. Delphine Anson 8. Julius Berlovitz 10. Michael Binder 14. Buck Creek
- 16. Orrin Byers 18. Train Coe 20. County Farm 26. Darby Wetherill
- 31. Issac Gowen 33. Rebecca Grimes 34. Fred Hafner 35. E.F. Haywood
- 37. Harrison Meadows 41. Eugene Johnson 42. James Kellerman 43. Floyd Kerschner
- 44. Amanda Kirkpatrick 45. Frank Kirkpatrick 47. John Kuhns 48. Calvin Lesley
- 52. Mary Mckinney 54. Samuel Marsh 55. Absalm Miller 57. F.E. Morin
- 58. Hester Motsinger 59. J. Kelly O’Neal 60. Audley Oshier 64. Rayman Emmett
- 65. Franklin Reser 67. Aurthur Rickerd 71. Skinner Ray 74. Joseph Sterrett
- 76. Gustav Swanson 78. Jacob Taylor 87. Wilson Nixon 89. Simeon Yeager
- 91. Jesse Dickens 93. Dismal Creek **94. Shawnee Creek** 101. John Hoffman
- 102. Sophia Brumm 103. H.W. Moore 105. Mary Thomas 106. Arbegust Young
- 108. High Gap Road 109. Romney Stock Farm

INACTIVE DITCH LIST

- 1. John Amstutz 2. Jesse Anderson 3. E.W. Andrew 5. Dempsey Baker
- 6. Newell Baker 7. Nellie Ball 11. John Blickenstaff 12. N.W. Box
- 13. A.P. Brown 15. Alfred Burkhalter 17. Floyd Coe 19. Grant Cole
- 21. Jesse Cripe 22. Charles Daughtery 23. Fannie Devault 25. Marion Dunkin
- 27. Thomas Ellis 28. Martin Erwin 29. Crist-Fassnacht 30. Elijah Fugate
- 32. Martin Gray 36. Thomas Haywood 39. George Inskeep 40. Lewis Jakes
- 46. J.N. Kirkpatrick 50. John McCoy 51. John McFarland 53. Wesley Mahin
- 56. Ann Montgomery 61. Parker Lane 63. Calvin Peters 66. Peter Rettereth
- 68. Alexander Ross 69. James Sheperdson 70. John Saltzman 72. Abe Smith
- 73. Mary Southworth 75. William Stewart 77. Alonzo Taylor 79. John Toohey
- 81. John VanNatta 82. Harrison Wallace 83. Sussana Walters 84. William Walters
- 85. Waples McDill 86. Lena Wilder 88. J & J Wilson 90. Franklin Yoe
- 92. Jenkins 95. Beutler-Gosma 96. Kirkpatrick One 100. S.W. Elliott

Commissioner Knochel moved to approve the 1998 ditch assessment list, seconded by Commissioner Shedd. Motion carried.

OTHER BUSINESS

Mr. Spencer brought to the Board's attention a public notice from the Corp. of Engineers regarding the proposed wetland constructed above a county regulated tile drainage system the **John McCoy Ditch** located south of Wea School along County Road 200 East. Mr. Spencer explained there have been some concern from the property owners in the watershed area with what the Corp. has proposed. Mr. Spencer asked the Board if the County should have an informational meeting regarding the wetland?

Commissioner Knochel moved to have an information meeting with all the effected landowner in the area of the proposed wetland, seconded by Commissioner Shedd. Motion carried.

Mr. Spencer asked if the 30 day requirement for a public notice would be in affect with this meeting only being an informational meeting?

Mr. Luhman stated no, not for an informational meeting because it is not being reconstruted, the assessment is not going to change and there is not going to be any legal affect on the landowners.

MINUTE BOOK

Mr. Luhman explained that there was a question as to whether or not a ledger size minute book was required to be used, if not, than could the minute book be changed to a letter or legal size. Mr. Luhman stated he could not find any statue where a ledger size book had to be used.

Commissioner Shedd granted approval to change the size of the minute book from ledger to letter, beginning with the 1998 Drainage Board minutes.

Being no further business, Commissioner Knochel moved to adjourn until March 4, 1998, seconded by Commissioner Shedd. Meeting adjourned.

Ruth Shedd, President

Shelli Muller, Secretary

Kathleen Hudson, Vice President

John Knochel, Member

TIPPECANOE COUNTY DRAINAGE BOARD

February 3, 1999

Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd and John Knochel, County Surveyor Mike Spencer, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Drainage Board Secretary Shelli Muller.

The Tippecanoe County Drainage Board met Wednesday, February 3, 1999, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Shedd calling the meeting to order.

The first item on the agenda is to approve the 1999 Active and Inactive Ditch Assessment List. Mr. Luhman read the list.

ACTIVE

Delphine Anson Brown	Julius Berlowitz	Michael Binder	A.P.
Buck Creek Wetherhill	Train Coe	County Farm	Darby
Christ Fassnacht Hafner	Issac Gowen	Rebecca Grimes	Fred
E.F. Haywood Kirkpatrick	Harrison Meadows	Floyd Kerschner	Amanda
Frank Kirkpatrick McKinny	Calvin Lesley	John McFarland	Mary
Samuel Marsh Aduley Oshier Rickerd	F.E. Morin Emmett Rayman	Hester Motsinger Franklin Reser	J.Kelly O'Neal Aurthur
Joseph Sterrett Walters	Gustav Swanson	Jacob Taylor	William
Wilson Nixon Creek	Simeon Yeager	Jesse Dickens	Dismal
Kirkpatrick One Lateral	John Hoffman	Sophia Brum	HW Moore
Mary Thomas	Arbegust-Young	Jesse Anderson	

INACTIVE

John Amstutz	James Shepardson	E.W. Andrew	
Dempsey Baker			
Newell Baker	Nellie Ball	John Blickenstaff	NW Box
Alfred Burkhalter	Orrin Byers	Floyd Coe	Grant
Cole			
Jesse Cripe	Charles Daughtery	Frannie Devault	Marion
Dunkin			
Thomas Ellis	Martin Erwin	Elijah Fugate	Martin
Gray			
Thomas Haywood Johnson	George Inskeep	Lewis Jakes	Eugene
James Kellerman	James Kirkpatrick	John Kuhns	John
McCoy			
Wesley Mahin Lane	Absalm Miller	Ann Montgomery	Parker

Calvin Peters Saltzman Skinner Ray William Stewart	Peter Rettereth Abe Smith John Toohey Sussane Walters Franklin Yoe	Alexander Ross Mary Southworth John VanNatta McDill Waples Jenkins S.W. Elliott	John Lena Hadley
Shawnee Creek			
Buetler/Gosma Lake High Gap Rd	John McLaughlin Romney Stock Farm		

Commissioner Knochel moved to approve the list of Active and Inactive Ditch Assessment for the year 1999, seconded by Commissioner Shedd. Motion carried.

WATKINS GLEN SUBDIVISION, PHASE 4, PART 3

Tim Beyer of Vester and Associates, asked the Board for preliminary approval of Watkins Glen Subdivision, Phase 4, Part 3 located off County Road 400 East. The proposed subdivision consists of 9 lot on a 5 acre site. Mr. Beyer asked for a variance from the Drainage Ordinance that requires on-site detention. The majority of the proposed plan drains to an existing pipe and then to an existing detention facility for Watkins Glen South, Part V. The facility has the capacity to handle the additional runoff of Phase 4, Part 2.

Mr. Spencer recommended granting the variance for no on-site detention and preliminary approval of the drainage plan for Watkins Glen, Phase 4, Part 3.

Commissioner Knochel moved to grant preliminary approval of Watkins Glen, Phase 4, Part 3 and to grant the variance allowing no on-site detention, seconded by Commissioner Shedd. Motion carried.

SEASONS FOUR SUBDIVISION, PHASE III

Roger Fine, of John E. Fisher and Associates, asked the Board for approval of the outlet pipe for Seasons Four Subdivision, Phase III. The City of Lafayette requires the project to receive approval from the Tippecanoe County Drainage Board because of the outlet pipe into the **Elliott Ditch**. Mr. Fine informed the Board a DNR permit is pending for work in the floodway.

Mr. Spencer recommended approval of the outlet pipe, subject to the project receiving the DNR permit.

Commissioner Knochel moved to approve the outlet pipe into **the Elliott Ditch** for Seasons Four Subdivision, Phase III, subject to the approval of the DNR permit, seconded by Commissioner Shedd. Motion carried.

Being no further business, Commissioner Knochel moved to adjourn until March 3, 1999 at 10:00 a.m., seconded by Commissioner Shedd. Motion carried.

Ruth Shedd, President

Shelli Muller, Secretary

Kathleen Hudson, Vice President

John Knochel, Member

TIPPECANOE COUNTY DRAINAGE BOARD

October 6, 1999

Regular Meeting

Those present were:

Tippecanoe County Commissioners Kathleen Hudson and John Knochel, County Surveyor Mike Spencer, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Wednesday, October 6, 1999, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

The first item on the agenda is to approve the minutes from the September 9, 1999 Drainage Board Meeting. Commissioner Knochel moved to approve the minutes of September 9, 1999 Drainage Board Meeting, seconded by Commissioner Hudson. Motion carried.

PETITION TO REMOVE OBSTRUCTION OF MUTUAL DRAIN

Mike Spencer, Tippecanoe County Surveyor, received receipts of certified letters mailed to Adam Ensinger and Jim Popejoy of notification of the October 6, 1999, meeting.

Adam Ensinger, property owner on 900 S in Lauramie township, Stockwell, In., filed petition to Tippecanoe County Drainage Board to remove obstruction in mutual drain or mutual surface watercourse on July 13, 1999, in the Tippecanoe County Surveyors Office.

Adam Ensinger stated he has a natural waterway tile that drains farm land on the east side, goes through his property, across fence line and then across his neighbors property. In this natural waterway Mr. Ensinger personally built a bridge, knowing that it would back up water on him. He designed the bridge so it would not back up on his neighbor. Mr. Ensinger stated his neighbor, Mr. & Mrs. Popejoy, put in a tile on their property about 4 to 6 feet away from the property line. During heavy rains and snow melt off the water backs up, before having a chance to run through the tile, it backs up over the property line on to Mr. Ensinger. Mr. Ensinger presented to the Drainage Board photos of the water back up conditions. First set of photo's are of Mr. Ensinger's bridge with 5 tile design, has 16, 12 and 3/8 tiles staggered heights, so as water rises it will flow through and on down the natural waterway. The next sets of photos show basically what happens when there is heavy snowmelt off and rain. The water flows through Mr. Ensinger's bridge and then comes to Mr. Popejoy's tile where the water will start to back up. Mr. Ensinger has talked to Mr. & Mrs. Popejoy about changing the tile and they have agreed to do so. They have changed this design many times but still not functioning properly. Mr. Ensinger is asking that the tile be removed and taken back to natural drainage level so will flow freely across the property line. If Mr. Popejoy wants to put tile on other side of his property and if water backs up, will backup on their property before getting to property line, that will be okay also.

Commissioner Hudson asked Mike Spencer, Tippecanoe County Surveyor, what his remedy would be for this situation.

Before answering that question Mike Spencer needed to ask Mr. Popejoy some questions.

Mike Spencer asked Mr. Popejoy what is the intent in this excavation?

Mr. Popejoy stated moving dirt out before receiving the Drainage Board notice so the water wouldn't back up. Mr. Popejoy commented the communication with excavating companies has been poor. Mr. Popejoy stated a county surveyor employee was out and talked to them and they were waiting on a report from county on what to do. Mr. Popejoy commented he has tried many times to remedy this problem and wants to be a good neighbor. Mr. Popejoy said he would do what it takes. Mr. Popejoy asked how does he need to figure to correct this situation.

Commissioner Hudson asked if a permit needed to be issued to do this type work on their yards and put in tiles.

Mike Spencer commented there is no permit process for that because of no way of policing.

Commissioner Knochel asked Mike if it was the height of the tile that is causing the water to back up.

Mike stated it is the size of the tile. The tile is too small for the watershed area.

Mr. Popejoy asked if this was all considered a flood plain area. Mike commented he didn't believe it is a flood plain area.

Commissioner Hudson asked Mike how much more needs to be done to alee or eliminate this.

Mike commented, in his opinion, if Mr. Popejoy continues to excavate to the original grade of the waterway and lay the side slopes back it should have capacity to pass water and not have to go through the tile. Some may go through the tile, but the majority will go through the open channel.

Commissioner Hudson asked Mr. Popejoy how much longer it would take to complete dredging this channel.

Mr. Popejoy commented he would have to get a professional with a dozer. It would depend on how soon they could get to his project.

Mike Spencer asked Tippecanoe County Drainage Board Attorney, Dave Luhman, what is the procedure for establishing a time frame for completing the work.

Dave Luhman, Tippecanoe County Drainage Board Attorney, stated there are three options. This is the scheduled hearing on Ensinger's petition. If you were to find in favor of the petitioner you could order this work to be completed. In order to do this you need to make some pacific findings. One, need to find that there has been a natural watercourse that has been obstructed. Two, need to find that removing that obstruction would promote better drainage of Mr. Ensinger's property without unreasonable damage to Mr. Popejoy's property. Other option could be to adjourn or continued this hearing to a later date. If it looks like Mr. Popejoy 's going to be able to take care of this matter without being actually order to by Drainage Board, you can give him the time to do that and then reconvene this hearing to see if obstruction has been removed without having the Drainage Board to order it done. This would mean 30-60 days to see if he is able to complete what has apparently already started to do.

Mr. Popejoy asked who could help him determine where the natural waterway is. He wants to do it correctly if has to invest more money.

Dave Luhman commented they need to find if there is a natural waterway. From the photos presented it is apparent that there is a natural waterway. They need to determine if it is obstructed. From the photos presented it is also apparent it is obstructed. Need to balance the cost of removing it against the benefit of removing it, which is a determination to make. After determination the Drainage Board could actually order you to remove the obstruction. If Mr. Popejoy didn't remove obstruction then you could have the county surveyor remove and charge Mr. Popejoy for the cost. Would probably be less expensive for Mr. Popejoy to do than the county surveyor. The other option was to continue this hearing for some period of time to let Mr. Popejoy finish the work he already started.

Commissioner Hudson commented that the petition was filed on July 13, 1999 informing Mr. Popejoy. Commissioner Hudson asked Mr. Popejoy if he felt he could get work finished by next week.

Mr. Popejoy's comment was, next week?

Dave Luhman, Tippecanoe County Drainage Board Attorney, stated generally the statute states you have 10 days after notice to complete project.

Mr. Popejoy wanted to know who to contact for advice on how deep to go.

Mike Spencer stated there is no need to go deeper than the tile, because it was probably laid in the original waterway. Mike didn't think Mr. Popejoy could put in big enough tile to cover the flood times, because of being so close to the property line. Mike stated the surface drain is the best recourse and not a tile, or a combination of the two.

Mrs. Popejoy commented she would like to leave the tile there and dig surface drain deeper to the south. They have an acre to the south that is hard to access already. She would like the less amount of damage to their property in order to fix the drain.

Commissioner Hudson asked Mike Spencer if what they were proposing would elevate the problem.

Mike could not tell them what size of waterway to reconstruct on their property without one being designed. Would be best to slope sides to eliminate erosion problems. What the Drainage Board is looking for is positive down hill grade away from Mr. Ensinger's property line.

Mr. Popejoy stated he will get something done.

Commissioner Knochel moved to continue this hearing till December 1, 1999 drainage board meeting and will give the Popejoy's time to make progress and have another report then, seconded by Commissioner Hudson. Motion carried.

THE LANDING AT VALLEY LAKES, PH1

Allen Jacobson, with John E Fisher & Associates representing the developer of The Landing At Valley Lakes PH1, gave presentation. The project is located on approximately 28 acres extending approximately 1200 feet east of 18th Street and from approximately 550 to 1500 feet north of CR 430 South. The entire site is within the limits of the City of Lafayette. The applicant proposes to drain off-site and on-site runoff through an on-site pond, approximately 2 ½ acres, that is being constructed as a site amenity, but will also provide some detention of stormwater runoff. The proposed permanent pond will be built in the northwest corner of property. There are about 60 acres off-site that will be routed through the pond. The developer is proposing to provide an off-site outlet to the North for the water once it leaves the pond. As part of this development plan, the pond will drain to Kirkpatrick Ditch, temporarily via an open channel to the Kirkpatrick Ditch. When Kirkpatrick Ditch is reconstructed, the applicant will construct additional storm sewer to drain Phase 1 directly to Kirkpatrick Ditch. The Landing at Valley Lakes PH1 will be approximately 1/3 of the development.

The developer of this property owns all the adjacent properties. There is a long-term plan for residential subdivisions through out the whole area. This is why the developer is looking for an improved pipe system in this area. All these properties will tie in together and provide drainage.

Mike Spencer wanted noted in the minutes that the pond had a safety ledge but the maintenance ledge was not shown on their pond cross section.

Commissioner Knochel moved to approve project of The Land Of Valley Lake PH1, seconded by Commissioner Hudson. Motion carried.

OTHER BUSINESS

TOWN OF DAYTON STORM WATER MASTER PLAN

Mike Spencer, Tippecanoe County Surveyor, recommended, after hearing the presentation of the Dayton Storm Water Master Plan at the August 11, 1999 meeting, the Tippecanoe County Drainage Board give conceptual approval of The Storm Water Master Plan to the Town of Dayton.

Commissioner Hudson asked Jennifer Bonner, with Hawkins Development, representing the Town of Dayton, if there had been any changes.

Jennifer Bonner's comment was no.

Mike Spencer asked if there had been any more discussion on implementation of this project.

Jennifer comment was the town wonders where the money will come from. At this time it will probably be who develops first. As new developers come along will have to come up with some interim drainage solutions.

Commissioner Knochel moved to grant conceptual approval of The Storm Water Master Plan of the Town of Dayton, seconded by Commissioner Hudson. Motion carried.

Being no further business, Commissioner Knochel moved to adjourn until November 3, 1999, seconded by Commissioner Hudson. Meeting adjourned.

Ruth Shedd, President (ABSENT)

Doris Myers, Secretary

Kathleen Hudson, Vice President

John Knochel, Member

TIPPECANOE COUNTY DRAINAGE BOARD

February 9, 2000

Regular Meeting

Those present were:

Tippecanoe County Commissioners Kathleen Hudson, John Knochel and Ruth Shedd, County Surveyor Stephen Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Wednesday, February 9, 2000, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Kathleen Hudson calling the meeting to order.

The first item on the agenda is to approve the minutes from the January 12, 2000, Regular Drainage Board Meeting and minutes from the January 21, 2000, Special Drainage Board Meeting. Commissioner Knochel moved to approve the minutes of January 12, 2000, Regular Drainage Board Meeting and January 21, 2000, Special Drainage Board Meeting, seconded by Commissioner Shedd. Motion carried.

Commissioner Hudson welcomed Stephen Murray, as new County Surveyor, to his first meeting with the Drainage Board.

CROSSPOINTE APARTMENTS SUBDIVISION

Wm. R. Davis with Hawkins Environmental gave presentation for Crosspointe Apartments Subdivision. This site is located east of Creasy Lane, south of Weston Woods Subdivision and east of the **Treعه Meadows Relief Drain**. The applicant proposes to construct apartments and associated parking. The stormwater management plan for this area was the subject of previous studies conducted as part of the Amelia Avenue extension over the **Treعه Meadows Relief Drain**. Two issues from C.B. Burke Engineering report to be discussed. First issue is ponding of waters on project. The parking lot plans were intended to pond 7" of water. Second issue concerning previously discharge channel that has been schematic approved for the drainage of this site. Their intention is to use this channel for draining this site. If not approved as is a modification can be brought before the board.

Commissioner Hudson asked Dave Eichelberger to explain about the wet bottom ponds.

Dave Eichelberger, Drainage Board Engineering Consultant, stated the previous stormwater management plan indicated that portions of this development would drain to proposed wet-bottom ponds prior to discharging to the **Treعه Meadows Relief Drain**. However, it does not appear these ponds are proposed as part of this subject development on their plans. Are these ponds already in place, are they going to be constructed as part of this project or are they going to have some interim outlet to the **Treعه Meadow Relief Drain** between now and then? If are wanting final approval may need to have condition that proposed ponds are constructed or proposed outlet is approved.

Steve Murray asked Wm. R. Davis what was their intent.

Wm R. Davis commented there is another project that has risen to this area. The project is not moving very rapidly. They want to get these projects temporarily constructed as did in schematic approval of wet-bottom channel as part of this project.

Commissioner Hudson asked if these outlets would be the ones carrying water over parking lot. Answer was no.

Commissioner Hudson asked what was going to be done about the water ponding over the parking lot area.

Steve Murray stated 7" water ponding over parking lot is allowable by ordinance. This is backwater from 100-year flood as composed to conventional ponding for storage in the lot.

Steve Murray asked if there was a duration limit.

Dave Eichelberger stated none that he is aware of.

Commissioner Knochel moved to grant final approval to Crossepoint Apartments Subdivision subject to the outlets being constructed as part of this project, seconded by Commissioner Shedd. Motion carried.

WABASH NATIONAL SITE DETENTION

Wm. R. Davis with Hawkins Environmental gave presentation for Wabash National Site Detention. This is a 340-acre site located north of C.R. 350 South, between Concord Road and U.S. 52. This is a schematic design for Wabash National and is the second time for reviewing this site. We are trying to come up with an overall plan for final development of Wabash National property. They are not placing structures, etc, but are determining the amount of improved surface they can have, what areas need to be stoned, types of drainage, etc. Currently there is a tile branch of **Elliott Ditch** traversing this property. At present a lot of water stands on this property. We are proposing how to move this water in a developed condition. Will be stoning parts of the property after constructing diversion ditches. Will be removing tile in the **Elliott Ditch** Branch and make open drain. The present detention pond is adequate for future use. Wm. R. Davis is asking for approval of schematic design for Wabash National Site Detention.

Dave Eichelberger suggests preliminary approval of the ditch network and final approval of the continued use of the existing detention pond.

Commissioner Knochel moved to grant preliminary approval of the ditch design for the Wabash National Site Detention and final approval for the drainage pond, seconded Commissioner Shedd. Motion carried.

WILLIAMS COMMUNICATIONS – FIBER OPTIC CABLE

Harold Elliott with Williams Communications gave presentation to install fiber optic cable communication system. This cable will stretch from Atlanta, Cincinnati, Indianapolis and through Chicago. Part of this system will go through a portion of Tippecanoe County. Have received permits for the road crossings. Had been working with Mike Spencer for permits on drainage ditches. They had sent a letter earlier, recommended by Mike Spencer, explaining what they were going to do. Mr. Elliott stated he thinks they should have a permit due to all the bonding, etc. Mr. Elliott's purpose for being here today is to go over project, find out for sure what they do want, and get bond, etc. ready for the next meeting.

Commissioner Hudson asked Mr. Elliott if he received Dave Luhman's letter.

Mr. Elliott's comment was yes. Mr. Elliott stated they have included what Mr. Luhman asked for. Mr. Elliott had a question on drawing for each ditch. Can they use what we use as a typical ditch crossing with it put to the ditch we are crossing? Instead of a complete profile of each ditch.

Dave Luhman asked if it would be similar to what is used on highways. If so, that would be adequate. Mr. Elliott commented yes. Williams Communications will furnish drainage board with a complete list of where line is as built.

Steve Murray stated he would like Mr. Elliott to give as much information possible to the contractor, so they can narrow down their area to start being aware that there may be a legal drain there.

Mr. Elliott commented there would be a crew out to survey each of the legal drains so contractor knows exactly where they start and will be. They are running a minimum of 42" below ground. Some of the survey work is being done now.

Steve Murray asked if they would trench or plow the lines.

Mr. Elliott stated the plan was to plow. When you go across ditches we know you can't plow. So we will be trenching these lines.

Steve Murray stated they would want the cable trenched not plowed. When you trench you can see turned up broken tiles. When you plow there is no visible evidence of broken tiles. May be 3 to 5 years before drain collapses and backs up. A lot of counties have gone too only allowing trenching now days as opposed to plowing.

Commissioner Knochel stated his concern was when turning up some private tiles who will repair. They want someone who is knowledgeable to do the field tile repair.

Mr. Elliott commented he had talked with Mike and would like for the drainage board to hire someone in our county to act as an inspector to find the legal drains and bill Williams Communications for that service.

Steve Murray commented his concern is finding an inspector. It doesn't matter if the drainage board hires or if Williams Communications hires. Stephen thinks it would be better if drainage board hired the inspector.

Mr. Elliott asked about a pay scale agreement. This can all be worked out when I come back for the next meeting.

Steve Murray asked what is your construction schedule.

Mr. Elliott stated this year, this spring. It depends on all the permits coming in and all the easements that are being required one way or the other.

Steve Murray felt comfortable with this if they are willing to work under the drainage board conditions.

Mr. Elliott suggested the \$5,000 bond might not be large enough. There is more potential damage than \$5,000.

Dave Luhman recommends \$25,000.00 bond. Wait on final draft at the March 1, 2000 meeting for details.

Mr. Elliott will return for the March 1, 2000, meeting with final draft and details.

2000 ACTIVE AND INACTIVE DITCH ASSESSMENTS

Mr. Luhman read the 2000 active and inactive ditch list

ACTIVE

Jesse Anderson	Delphine Anson	Julius Berlovitz	Michael Binder
A.P. Brown	Buck Creek	Orrin Byers	Train Coe
County Farm	Thomas Ellis	Christ Fassnacht	Issac Gowen
Rebecca Grimes	Fred Hafner	E.F. Haywood	Harrison Meadows
James Kellerman	Floyd Kerschner	Amanda Kirkpatrick	Frank Kirkpatrick
Calvin Lesley	John McFarland	Mary McKinny	Samuel Marsh
Ann Montgomery	F.E. Morin	Hester Motsinger	J. Kelly O'Neal
Aduley Oshier	Emmett Rayman	Franklin Resor	Aurthur Rickerd
Joseph C. Sterrett	Gustav Swanson	Nixon Wilson	Simeon Yeager
Jesse Dickens	Dismal Creek	Shawnee Creek	Kirkpatrick One
John Hoffman	Sarah Brum	HW Moore Lateral	Mary Thomas
Arbegust-Young	High Gap Road	Romney Stock Farm	Darby Wetherill Ext 2
Darby Wetherill Reconstruction			

INACTIVE

John Amstutz	E.W. Andrews	Dempsey Baker	Newell Baker
Nellie Ball	John Blickenstaff	NW Box	Alfred Burkhalter
Floyd Coe	Grant Cole	Jesse Cripe	Charles E. Daughtery
Fannie Devault	Marion Dunkin	Darby Wetherill	Martin V. Erwin
Elijah Fugate	Martin Gray	Thomas Haywood	George Inskip
Lewis Jakes	E.Eugene Johnson	James Kirkpatrick	John A. Kuhns
John McCoy	Wesley Mahin	Absalm Miller	Lane Parker
Calvin Peters	Peter Rettereth	Alexander Ross	James Sheperdson
John Saltzman	Ray Skinner	Abe Smith	Mary Southworth
William Stewart	Alonzo Taylor	Jacob Taylor	John Toohey
John VanNatta	Harrison B. Wallace	Sussana Walters	William Walters
McDill Waples	Lena Wilder	J & J Wilson	Franklin Yoe
Jenkins	Buetler/Gosma	S.W. Elliott	Hadley Lake Drain

Commissioner Knochel moved to approve the list of Active and Inactive Assessment for the year 2000, seconded by Commissioner Shedd. Motion carried.

OTHER BUSINESS

PETITION FOR ENCROACHMENT ON UTILITY & DRAINAGE EASEMENT LOT 63, RED OAKS SUBDIVISION

Steve Murray gave presentation of this petition for encroachment on utility & drainage easement Lot 63, Red Oaks Subdivision. The petition for encroachment reads as follows: The undersigned, John L. Maloney, who owns 609 Bur Oak Court, does hereby request permission of the Tippecanoe County Commissioners and the Tippecanoe County Drainage Board to encroach 25 feet into the utility and drainage easement at the rear side of their home on Lot 63, Red Oaks Subdivision, Wea Township, Tippecanoe County, Indiana, as shown on the diagram hereto attached and made a part of this petition. Diagram will be on file in surveyor's office. Stephen commented the real concern is the 25 feet encroachment will be too far down the bank and into the water level. This could be an obstruction if maintenance needs to be done to the bank for erosion purposes or pipe out fall. A 10-foot encroachment will bring to the top of bank. Stephen stated he would not recommend any more encroachment then to the top of the bank.

Commissioner Hudson asked if 10 foot would encroach into the utility and drainage easement.

Steve Murray commented without an actual survey tying the house to the lot lines we wouldn't know for sure. It would appear the 10-foot at the top of bank is roughly the easement line that they want to encroach into. If we do not grant requirement for encroachment they can not go any further than the top of bank.

Commissioner Hudson asked if Bill Augustin of Gunstra Builders was aware of this being on the agenda.

Steve Murray commented he had talked to Bill Augustin this week and thought he was aware of the agenda.

Commissioner Knochel asked if they wanted to build a deck and if it was already built.

Steve Murray answer was didn't believe so. Chris from surveyor's office had been out in the last month and took pictures. No deck was in the pictures.

Dave Luhman asked if they wanted to resubmit this petition for an amendment asking for a lower amount of encroachment. If the Drainage Board denies this petition they can resubmit another petition.

Commissioner Knochel moved to deny request for 25 foot encroachment on utility and drainage easement for Lot 63, Red Oaks Subdivision, Wea Township, Tippecanoe County, seconded by Commissioner Shedd. Motion carried.

CHICAGO TITLE INSURANCE COMPANY

Dave Luhman gave presentation regarding request of letter from Drainage Board to Chicago Title Insurance Company. The property is located at 3815 SR 38 E known as the **Kyger Bakery**. There has already been a dry closing on the sale. There are 2 buildings that come within the 75-foot easement. The Chicago Title Insurance Company in order to issue their title insurance need letter from Drainage Board acknowledging that buildings on this property were constructed prior to the requirement of the 1965 Drainage Act and are thus legally located structures and do not constitute illegal encroachments. Have tax records from Fairfield Township Assessors Office that show these structures were built in 1948. Dave Luhman presented Commissioner Hudson with letter on Drainage Board stationery for signature stating these structures were built prior to the requirements of the 1965 Drainage Act and are thus legally located structures and do not constitute illegal encroachments. Dave Luhman has reviewed this with Mr. Bumbleburg, who represents Kyger, and has his approval.

Commissioner Knochel moved president of Drainage Board to sign this letter stating the building were built before 1965 and do not constitute illegal encroachments, seconded by Commissioner Shedd. Motion carried.

Being no further business Commissioner Knochel moved to adjourn meeting, seconded by Commissioner Shedd. Meeting adjourned.

Kathleen Hudson, President

Doris Myers, Secretary

John Knochel, Vice President

Ruth Shedd, Member

TIPPECANOE COUNTY DRAINAGE BOARD
SEPTEMBER 21, 2000
Special Meeting

Those present were:

Tippecanoe County Commissioners Kathleen Hudson, John Knochel and Ruth Shedd, County Surveyor Stephen Murray, Drainage Board Engineering Consultant Dave Eichelberger, Drainage Board Attorney Tom Busch and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Thursday, September 21, 2000, at 10:30 a.m. in the Grand Prairie Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner Hudson calling the meeting to order.

PETITION TO VACATE JAMES N. KIRKPATRICK DITCH BRANCH #8

Jerry Withered, Cedar Run's local attorney, presented to the board proof of publication in the Journal and Courier and also his affidavit, as required by the statute. We addressed my notice to every one of the property owners and put everyone of the property owners' name in the publication. All the pre-recreants now for passage of this vacation are in place.

Roger Fine, with John E Fisher & Associates, gave presentation for Petition to Vacate James N. Kirkpatrick Ditch Branch #8. Last week we met privately with all the landowners that were interested in the letter we sent then on September 8, 2000, inviting them to a neighborhood meeting. This letter also informed them of hearing we are having today, September 21, 2000 at 10:30 a.m. Had about a dozen people at this meeting. None of the property owners showed up at the meeting today. I think we are ready to ask for your discussion and consideration of this issue.

Commissioner Hudson asked if Steve Murray had any comments.

Steve Murray stated no. As we discussed at the last meeting the existing inlet and proposed re-routing and new improvements will fall within public easements that include drainage. They have met the statutory requirements, there is no one here to remonstrate against and have all been notified through proper legal methods. That was our only concern at the last meeting that there was something we were missing drainage wise.

Tom Busch asked about the exhibit B and legal description of Branch #8. I will need legal description and meets and bounds description of the area being vacated so I can draft an order for the board.

Roger Fine is going to get this description to Tom Busch.

Commissioner Shedd moved to approve the petition to vacate Branch #8 of the James N. Kirkpatrick Ditch that has been discussed, seconded by Commissioner Knochel. Motion carried.

LANDING AT VALLEY LAKES PHASE II

The proposed project involves the development of Phase II on 30.60-acres of a 75.80-acre tract of land. This site is located to the east of South 18th Street approximately ½ mile south of County Road 350 South. The project site is to be developed into 72 single-family residential lots. The applicant plans to drain off-site and on-site runoff through proposed storm sewers and direct discharge into a branch of Kirkpatrick Ditch at the north property line. No detention is proposed within Phase II. The entire site is within the limits of the City of Lafayette.

Allen Jacobsen with John E Fisher gave presentation of Landing At Valley Lakes Phase II. In the eventual conception of the watershed the Kirkpatrick Drain will be improved and detention storage will not be required at that point. Developers will pay a fee to the City and/or County to pay for those improvements, but in compensation we will not have to bare the cost of creating detention facilities. This is not improved at this point and our client wants to go ahead with construction. We are proposing to reroute and improve

the Kirkpatrick Drain. Allen explained how this was going to be done. They propose to cut a new channel and the construction plans have a detail sheet for that.

Commissioner Hudson asked if this would be a dry or wet bottom.

Allen Jacobsen commented right now it would function as a dry bottom. Eventually when the area comes under master plan development guidelines, there will be some recreational facilities and a permanent pond.

Steve Murray asked who would maintain the relocated tiles through the storm sewer system and the rest of the storm improvements within their development.

Allen Jacobsen stated the City would maintain all the public storm pipes. The city will not accept one perforated drain for maintenance and the connection of Mr. Yount's tiles. Everywhere those tiles get into an improved drainage structure the city will be maintaining.

Steve Murray commented this does fall within city limits and they have reviewed. I don't know if they have given formal approval, but my understanding is they are ready to do that. Christopher B. Burke Engineering has reviewed their drainage calculations and have issued a memo. I think we are prepared to recommend approval subject to conditions on the memo being worked out in the next few days.

Commissioner Shedd stated we have to approve and the City.

Steve Murray commented the reason we have to approve is because they ultimately discharge into a regulated drain and that is a statutory requirement and as well as the city but on review memo's, have you received drainage board approval. We are approving their drainage plan for this specific phase and we have been and will be involved in approving all phases of this project as it develops due to the fact that it ultimately discharges into a regulated drain.

Commissioner Knochel moved for approval of drainage plan for Landing of Valley Lakes Phase II, seconded by Commissioner Shedd. Motion carried.

Being no further business Commissioner Knochel moved to adjourn meeting, seconded by Commissioner Shedd. Meeting adjourned.

Kathleen Hudson, President

Doris Myers, Secretary

John Knochel, Vice President

Ruth Shedd, Member

TIPPECANOE COUNTY DRAINAGE BOARD

January 4, 2001

Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Doug Masson, an associate with the Hoffman Luhman & Busch Law Firm, Drainage Board Engineering Consultant Dave Eichelberger and Drainage Board Acting Secretary Janet Handy.

The Tippecanoe County Drainage Board met Thursday, January 4, 2001, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/Vice-President of the Drainage Board, John Knochel calling the meeting to order.

John Knochel turned the meeting over to Attorney Doug Masson for Election of Officers for 2001.

Mr. Masson stated he would take nominations for President of the Drainage Board. Commissioner Ruth Shedd moved that John Knochel be nominated for President for 2001. KD Benson 2nd the nomination. Motion carried. At this point, Mr. Masson turned the meeting over to newly elected President, John Knochel.

President Knochel asked for nominations for Vice-President. Ruth Shedd moved KD Benson be nominated for Vice-President. John Knochel 2nd the nomination.

Hearing no other nominations, President Knochel announced that nominations were closed. Motion carried.

The second item on the agenda is to approve the meeting dates for the Drainage Board for 2001. Please note today's meeting time is 11:00 A.M. and the September 5, 2001, meeting will be at 11:00 A.M. The remaining meetings will be at 10:00 A.M. John also noted that any of the meeting dates are subject to change. Ruth Shedd moved the schedule of meeting dates be adopted, KD Benson 2nd motion. Motion carried.

THE RESERVE AT RAINEYBROOK

Mr. Bill Davis, Hawkins Environmental, introduced Tori Thornburg. He stated Tori has done most of the technical work on this project so if there are any technical questions, please direct them to Tori.

Mr. Davis asked to take a minute to tell the history of the drainage. Raineybrook started in 1961 and they have used a regional concept. Those properties shown encompass the whole drainage basin and as Raineybrook has been developed, the drainage plan has also been further developed around and over the Little Wea Creek. Again, this is where The Reserve is today. We are continuing on with the development of this watershed. Each report is tied together. so there is a track to bring all these up to date. All the input is based on as-built data from previous submittals and we are asking for approval on The Reserve.

Commissioner Benson asked if a particular area was a pond, and does it exist now?

Mr. Davis responded with yes it is a pond and we have a core permit and we will do some improvements and enhancements in the wetlands such as walking trails and some other things.

Mr. Knochel asked for comments from Steve. Steve stated no further comments as Mr. Davis has stated it well and it has been an on-going project. This is just another phase, Burke has reviewed the project and you have a copy of the memo and I recommend final approval, with conditions and I would concur with that recommendation. They have met condition one (1) already and I also would like to add the standard conditions that they provide the Surveyor's Office with satisfactory restrictive covenants and payment of review fees in excess of the standard of ten (10) hours.

Commissioner Shedd asked if that information was on the papers she has, and Steve said no, that is why he stated the conditions. Ruth Shedd moved final approval be given, with conditions, for The Reserve at Raineybrook. KD Benson 2nd. Motion carried.

Mr. Davis thanked the Drainage Board.

President Knochel commented that we need to back up, as he got a little ahead of himself, and approve the minutes of the December 6, 2000 meeting. Ruth Shedd moved the minutes be approved, KD Benson 2nd. Motion carried.

MENARDS AT US 52 AND CREASY LANE

Jeff Weaver, of DLZ, spoke regarding the preparation of the site design plans for the Menards project. He referred to a map that shows the drainage pattern on site. The majority of the site now sheds to the Southwest and we think there is another structure that restricts the flow and the remainder of the site generally flows to Creasy and drains to Wilson Branch Reservoir. We have with our design, tried to perpetuate that drainage pattern and the majority of the site is coming back and collecting in the storm sewers and then being released into the Wilson Branch Ditch, with the exception of these lots out on Creasy, they collect in the storm sewer along Creasy Lane which connects into the existing structure and will release directly into the Wilson Branch Reservoir. I believe, if I remember correctly, the reservoir was designed to accommodate any future development in this area and it is my understanding our engineers designed the drainage plan in conformance with the design for the basin.

John Knochel asked the number of acres in this area. Steve Murray answered 28 acres. Steve also added, as Mr. Weaver stated, the ponds were sized to handle this site, which is part of the old Ivy Tech property and G. D Hammond property. Steve talked with Mike Spencer, the former County Surveyor, this morning. Mike stated that all this was discussed and negotiated at the time those land transfers were done. Commissioner KD Benson asked where is 52. Steve replied 52 is to the Southwest side, the Mall would be to your left and Ivy Tech to your right and Creasy Lane cuts through.

Steve stated our consultant, Burke, has reviewed the application and we're prepared to recommend final approval, with conditions as stated on the December 21, 2000, memo.

KD Benson moved the Board grant final approval to the Menards Project, with the conditions as stated on the December 21, 2000, memo. Ruth Shedd 2nd. Motion carried.

Mr. Weaver thanked the Board.

President Knochel announced that the Wyndham Project will be continued. KD Benson asked if it would be on the February Agenda. Steve Murray stated would be dependent on the consultant having their information submitted on time. I would assume they will.

Mr. Knochel asked Steve Murray to present the proposal for professional engineering services for 2001.

Steve stated it is a proposal between Christopher B. Burke Engineering and Tippecanoe County Drainage Board. It is the standard format as used in the past, the only change was I did ask them to make was to create a "not to exceed" amount of \$35,000 which is the amount we have budgeted. Steve thought it would be a good idea for the consulting firm to be on notice as to what had been budgeted. The Surveyor's Office and the consultant should do a little better job on keeping track when we are reaching our appropriated amount because as you also know, last year we had two additional appropriations for drainage fees and at least one for Attorney Fees as well, because of the amount of projects which we had to review this past year, which were nearly doubled from what we had done in previous years.

KD Benson asked is this basically the same contract as in past years. Steve said yes and he had talked with Attorney Tom Busch yesterday and he had reviewed the contract. Steve recommends the Drainage Board execute the contract, please.

KD Benson moved the Drainage Board accept and execute the contract between the Christopher B. Burke Engineering LTD and TIPPECANOE COUNTY DRAINAGE BOARD. Ruth Shedd 2nd. Motion carried.

Mr. Dave Eichelburger thanked the Board.

Steve Murray stated for the record, Christopher B. Burke Engineering LTD does do excellent work and sometimes does work for Tippecanoe County that they don't charge for. We do get our money's worth from them as well as from our Attorneys.

John Knochel thanked Janet Handy for filling in a Secretary for the Drainage Board.

There was discussion regarding the Attorneys – does the Drainage Board fall under the County umbrella as far as using the Firm for legal opinions. Hoffman Luhman and Busch, Attorneys, contract was renewed for 2001, at the Commissioner's meeting this week. Since there is some uncertainty regarding this matter, Steve Murray suggested the Board appoint Hoffman Luhman and Busch as Drainage Board Attorneys. KD Benson so moved. Ruth Shedd 2nd. Motion carried.

Attorney Doug Masson thanked the Board on behalf of Hoffman Luhman and Busch.

OTHER BUSINESS

Steve Murray announced to the Board that there will be an updated list of Active/Inactive Ditches for them at the February meeting.

Also, there will be an update on the Kirkpatrick Ditch

As the Board knows, the date of February 2, 2001, was set for the letting with construction to begin no later than May 1, 2001, and we may well roll a few weeks by the February 1, 2001, letting date, but the representatives from Hawkins Environmental that are working on the project have a meeting with Cedar Run. Next week they are going to double check with Morgan Heath to see if that is not a problem. The time frame for the project is really in the hands of the two consultants developing various parts of the project. They have been working diligently at it, but probably wouldn't have right-of-way clearance to start construction for a few more months. It is moving along and this morning we discussed a letting in the middle of February.

There being no further business, Ruth Shedd moved the meeting be adjourned. KD Benson 2nd. Motion carried.

Meeting adjourned.

John Knochel, President

KD Benson, Vice-president

Janet Handy, Acting Secretary

Ruth E. Shedd, Member

TIPPECANOE COUNTY DRAINAGE BOARD

February 7, 2001

Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Kerry Daily, Drainage Board Secretary Margaret Shields.

The Tippecanoe County Drainage Board met Wednesday February 7, 2001, in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/Vice-President of the Drainage Board, KD Benson calling the meeting to order.

KD called the meeting to order.

Approval of the January 4, 2001 Minutes

KD made a motion to approve the minutes from the January 4, 2001 regular Drainage Board Meeting. Ruth Shedd seconds the motion and hearing no opposition, the motion carried.

Wyndham Trace Planned Development with C&S Engineering

Joe Cotes appeared to present the information he had about this project. He explained a small portion of the site drained to an inlet on the Klondike School property located Southwest of there. Mr. Cotes indicated that they had been unsuccessful in determining where the storm sewer was. Steve asked if they had contacted the School Corporation and Mr. Cotes replied they had not. Steve asked them to pursue researching the location and the outfall.

Steve stated that he was prepared to recommend this project for final approval, subject to researching the existing inlet on the school property.

Steve stated that the latest review memo that had been received was that on February 5, 2001.

Ruth moves for final approval with conditions as stated including researching the location of the storm sewer on the school property and where it eventually outlets. Steve had asked for this information in case there were any problems with maintenance in the future site and the rest of the site would drain to a new detention facility to be constructed at the northeast corner. The outlet will go to a structure, which drains under US52 and eventually, into Indian Creek. KD seconds. KD asks for discussion. There is no discussion. The motion carries.

River Bluffs Subdivision-Parts II and IV with Vestor & Associates

Tim Buyer came forward to speak about the project and explain that they for requesting preliminary approval. Tim had a map, which he used to show the exact area of development. He explained that the first part of this project began in the 1970's followed by Parts III phase I in the mid 80's and phase II just a few years ago. Phase II and IV the portions in discussion were shown in blue.

Mr. Buyer explained that the site drains into a ravine, which then empties into the Harrison Creek and ultimately into the Wabash River. Currently, the site is a grassy field but it has historically had row crops and alfalfa planted in that area. Their plans for development have been modeled after both the historical and the current use.

Being that in this development they plan for larger lot sizes, the typical lot is about $\frac{3}{4}$ acre in size, run-off tends to be about the same as it was when the site was used for agriculture. If they were to put in a storage pond it would have to be set into the middle of the ravine. In order to accomplish this they would have to remove several trees, which would affect not only the aesthetic value but also, (flow of water into the ravine). For this reason they are requesting a storage waiver.

At this point Mr. Buyer also brought it to the attention of the board that the first part of this project was completed prior to drain ordinances and the other two sections that were in affect during drain ordinances had been granted a waiver for on site storage when they came before the board.

KD asked if the map he had was showing two (2) foot contour lines. Tim said yes. Steve went on to further explain that it is a relatively flat area that runs east along the ravines. This is then terraced and drops where it ultimately flattens into farm fields.

Ruth asks if it is customary to grant a storage waiver. Steve answers that although it is customary to grant a storage waiver at the time of final approval they will have to come back to request a variance at which time conditions will be given.

KD asks if Harrison Creek will remain a creek and her answer is yes.

KD asks for other comments. Steve mentions that he is willing to recommend this for preliminary approval and reminds those present that before final approval a variance must be requested and that they will have to give notifications to those entities down stream.

Ruth moves for preliminary approval of Parts II & IV with conditions. KD seconds the motions. The motion carries.

Cumberland Student Housing with Schneider Corporation

For this project Mike Wiley made a short presentation. He explained to the board that they were trying to seek approval with conditions and that they had worked with Christopher B. Burke who had been diligent in helping them.

Mike began his presentation by explaining exactly where the site is. Mr. Wiley explained that it is off of the new extension for Cumberland Rd in West Lafayette. The project is intended to have 12 apartment buildings and one clubhouse. The site is currently covered by a combination of woods, brush, and agriculture and is adjacent to the Celery Bog. At this point Mike explained that the Celery Bog wants to take all of the run-off created by the project provided it is first treated. The treatment system they have designed is similar to that the Wal-Mart uses. The existing run-off comes from the south, west, and the north. The City Engineer of West Lafayette has already given their approval for this project.

Mike further expanded on the treatment of the water. The plan calls for a serpentine swail of aquatic filters.

KD asks if this is made all out of plants and the answer is yes. She finds the idea to use wet land plants as a resource in creating cleaner water a great idea.

Steve adds that the use of aquatic filters will be required in the future on most projects due to Phase II Stormwater Regulations.

Mike explained that the swail was created using multiple depths so that trash would be deposited into particular areas that were accessible to people for easy cleaning.

KD asked if there were any comments. Steve mentioned that the project was within West Lafayette city limits but the reason for it coming before the board is that although it will drain into the Celery Bog, the Celery Bog ultimately empties into the Cuppy McClure drain tile and that statute requires us to review all projects that flow into regulated drains. This protects the public's investment. Steve also mentions that final approval would be subject to the City of West Lafayette and that they would need encroachment permits. Furthermore, he states that if any permanent improvements are built over the existing tile they will need to replace any of the old clay tiles that they destroy in the process or permanent improvements.

KD indicates that she is not aware of any permanent structures in the plan that would affect this area. Steve and Mike point out that there is a bike path planned which would affect the area. Mike mentions that in extreme rain the path will be overtopped but there is some drainage planned for less extreme weather and they have every intention to replace any parts of the drain destroyed in the construction process.

At this point Mike also mentioned that there was an easement that would be affected by this project. He mentioned that a petition had been faxed to C.B. Burke Engineering for encroachment but it was lacking a signature. Mike wanted to know if the matter of encroachment on the easement could be heard. Dave Luhman replied that because he had not seen the petition and they were still in need of a signature it could not be heard at this time.

Ruth then asked a question about replacing the drain as needed and why not the entire drain at once. Steve answered that it didn't need to be replaced, except what is destroyed during construction and that Mike understood what was meant. Mike acknowledged that he understood.

KD then asked if there was a retaining wall referring to the area along the bike path. Mike answered that there is no retaining wall and that the earth will rise up around the path. KD expressed that she thought it was great that the intention is for students to live in this new development and rider their bikes to work.

Ruth then asked if this was going for preliminary approval. Steve reiterated that it was going for final approval subject to approval by the City of West Lafayette, the encroachment petition, and replacement of any portions of damaged tile or portion of the tile which would be underneath the new improvements.

Ruth then asked which one of the review memos was the latest on and it was explained that the February 6, 2001 was the latest one.

Ruth moves for final approval subject to conditions. John seconds the motion. The motion carries.

Active/Inactive Ditch List

Steve begins discussion on this agenda item by explaining that according to State statute we must show a list of those ditches which we collect assessments on and those, which will be active for this year and those which will not. He also noted the new format from previous years, which he liked. Steve further explained that copies of this list would be sent to the auditor and the treasurer once approved.

Dave Luhman stated that the board needs to approve the active/inactive ditch list.

John Knochel makes a motion to approve and incorporate the active/inactive ditch list. Ruth seconds the motion and KD asks for discussion.

Ruth then asked, how is a ditch found to be inactive. Steve explained that when each ditch is formed a cost per acre is assigned to the ditch. Using the amount of acres in the watershed a total dollar amount will be collected per year is determined. When this total is multiplied by four you get the four-year assessment amount shown on the ditch list. Whenever a balance in the maintenance fund falls below the four year assessment amount it becomes active .

John also asks a question about drain 46. He wants to know why the four-year assessment amount is so much higher and if it has to do with the price per acre. First the attorney states that there is interest that accrues on these accounts. Next, Steve answers by explaining that there can be varying reasons for having a higher balance.

KD then asks why some of the active ditches have a high negative balance. Steve tells her that in cases where drain maintenance is performed but the funds are unavailable we borrow money from Fund 95, which we use to pay off the maintenance work. This borrowing creates a negative balance, but is paid off as assessments are collected.

John then asks another question about #46. He wants to know if this is the drain we are speaking of when we talk about recent **Kirkpatrick projects**. Steve says he believes it is.

Ruth asks on joint ditches how is it determined whose jurisdiction it falls into. Steve explains that whichever county has the most acres in the watershed in that ditch would be the county who holds jurisdiction.

The attorney interjects that he likes the new format.

DK makes a motion to approve and accept the active/inactive ditch list. John seconds the motion. The motion carries.

Attorney Contract

The attorney states that the contract he has with him today is the same as the other contracts they have seen with the exception of the date and the names of the drainage board members. Dave gives copies of the contracts to Ruth.

John moves for approval of the contract. Ruth seconds the motion. The motion carries.

Other Business

Kirkpatrick Ditch Cover Sheets

Steve begins discussion about the cover sheets explaining the formality of the issues. Steve explains that although the cover sheets were signed at the regular commissioners meeting on Monday technically the Drainage Board was not in session. It is important that these cover sheets come before the drainage board while in session because approval of the cover sheet represents approval of the design of the project.

The attorney suggests that the drainage board move to acknowledge and ratify the cover sheet signatures. KD says she'll make that motion, Ruth seconds, and the motion carries.

John then motions for adjournment. Ruth seconds the motion and the motion carries.

Meeting Adjourned.

John Knochel, President

KD Benson, Vice President

Robert Evans, Secretary

Ruth E. Shedd, Member

**SPECIAL JOINT MEETING
TIPPECANOE COUNTY BOARD OF COMMISSIONERS
TIPPECANOE COUNTY DRAINAGE BOARD
MARCH 5, 2001**

The Tippecanoe County Commissioners and Tippecanoe County Drainage Board held a special meeting on Monday, March 5, 2001 at 11:20 A.M. in the Tippecanoe Room in the County Office Building. Commissioners and Drainage Board members present were: Commissioners' President and Drainage Board Member Ruth E. Shedd, Commissioners' Vice President and Drainage Board President John L. Knochel, and Commissioners' Member and Drainage Board Vice President KD Benson; County Surveyor Stephen L. Murray, Auditor Robert A. Plantenga, Commissioners' Assistant Jennifer Weston, County Attorney David W. Luhman, and Secretary Pauline E. Rohr.

Commissioner Shedd convened the meeting for the purpose of opening bids for the Kirkpatrick Drain reconstruction.

BIDS: Kirkpatrick Regulated Drain Reconstruction

Attorney Luhman opened and read the following bids:

R & W Contracting, Inc.	Bid Bond	\$2,999,230.00
Atlas Excavating, Inc.	Bid Bond	2,639,579.20
Smock Fansler Corporation	Bid Bond	2,721,258.44
Milestone Contractors L.P.	Bid Bond	2,848,706.50
Jack Isom Construction Co., Inc.	Bid Bond	2,490,266.77

Mr. Murray announced the Engineer's estimate was \$2,989,724.05

- Upon the recommendations of Attorney Luhman and Surveyor Murray, Commissioner Knochel moved to take the bids under advisement, seconded by Commissioner Benson; motion carried.

ADJOURNMENT

- Commissioner Benson moved to adjourn, seconded by Commissioner Knochel; motion carried.

Robert A. Plantenga, Auditor

John Knochel, President

KD Benson, Vice President

Ruth E. Shedd, Member

Tippecanoe County Drainage Board
May 2, 2001
Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger, and acting Drainage Board Secretary Robert Evans.

The Tippecanoe County Drainage Board met Wednesday May 2, 2001 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, John Knochel, calling the meeting to order.

Approval of April 4th Minutes

KD Benson made a motion to approve the minutes from the April 4th regular Drainage Board Meeting. Ruth Shedd seconded the motion and hearing no opposition, the motion carried.

CR50 South / Stable Drive Phase II
Hawkins Environmental

Pat Jarboe from Hawkins Environmental requested final approval for Phase II County Road 50 South / Stable Drive. He displayed a diagram showing the location of County Roads 550 East and 50 South. Hawkins originally applied to have this all done as one project, but before moving all the way through the process to final approval, chose to split it into two phases. Phase I was presented in March, consisting of all parts west of C.R. 550 East. That is under construction and near completion. Phase two encompasses the remaining portions of road work on the project, excluding the reconstruction of the bridge. That will come in as a separate report, but will be constructed at the same time.

KD asked the location of Stable Drive. It is the portions west of C.R. 550 East. The portions east of 550 being C.R. 50 South. Steve Murray asked if there are any questions from the Board. He then added one item not included in the review, that all the proposed work on C.R. 50 South will need to be approved by the County Highway Department as well.

There being no more questions, KD motioned that final approval be granted with conditions as stated above and on the April 26th, 2001 Burke memo. Ruth Shedd seconded and the motion carried.

Legacy Place Commercial Subdivision – Phase I
Schneider Engineering

Pat Sheehan representing Schneider Engineering requested final approval of Legacy Place Subdivision Phase I, a four lot commercial subdivision located just south of U.S. 52., and just north of Lafayette Venetian Blind. They propose an extension of the roadway to service the lots. He showed the location of a detention basin which will take all of the drainage from this area, detain it, and discharge it. This ultimately goes Indian Creek. Phase II is going to be multifamily sometime in the future, and they are not proposing anything with that at this time. They will come back with a later submittal.

KD asked what the topography is, referring to the design drawing on display. Mr. Sheehan pointed out the outlet for Lafayette Venetian Blind, their detention basin, and the route that water will take through a culvert under the temporary cul-de-sac. The water from Lafayette Venetian Blind is a separate flow from everything that will come off the proposed commercial area. Steve Murray stated that as they find buyers, they will submit plans for drainage for each lot, and that inlets to pick up the water are provided on either side of the new road.

Mr. Sheehan stated that detention is provided for them, but for each individual lot it will need to be shown that requirements are met. KD asked if it was residential to the north, and it is currently undeveloped. Steve recommends final approval, subject to the standard conditions stated on the April 27th Burke memo. KD moved for approval with the conditions stated, Ruth seconded, and there being no further comment, the motion carried.

**Wallace Property
Hawkins Environmental**

Mark Phipps, representing Hawkins Environmental and Superior Structures presented conceptual plans for stormwater drainage for Wallace Property and requested Board approval for that plan. He showed an exhibit, pointing out U.S. 52, County Road 350 South, and old C.R. 350 South. He pointed out the Wallace Property, U.S. 52 South Industrial Subdivision just north and west of the property, described existing condition as a cultivated field and another cultivated field just north of the site. He stated that currently, a portion of the cultivated field to the north drains onto the site, along with some median drains on U.S. 52 that drain onto the site.

He stated that one existing condition that was important to their design is that the outlet for the Wallace Property will be the same as the outlet for the U.S. 52 South Industrial Subdivision, a 24 inch concrete pipe which passes under U.S. 52. Most of the capacity of this pipe is taken up by U.S. 52 South Industrial Subdivision. Hawkins was limited in the amount that could be discharged from the site in order to not send too much water into the outlet shared with the U.S. 52 South Industrial Subdivision.

He stated that this project would be a multiphase industrial development and showed a system of four ponds. He said they set parameters for development of this site that mostly had to do with the percentage of impervious area that would be allowed as each of these lots are developed and roads are put in. What they wanted to do was to size the ponds so that as long as the development is consistent with the parameters that they have set up that there is a system of ponds that would limit the discharge from the site so that they don't take any more capacity of the outlet pipe than is left after the development of the U.S. 52 South Industrial Subdivision.

One part of the design is the use of some software called PondPack v. 7 that is especially suited for this type of design. The ponds are affected by each other, one pond being affected by the elevation in another pond because it's so close that the discharge of one pond would be limited if the elevation were high enough in the next. PondPack v. 7 is not approved by the Tippecanoe County Drainage Ordinance, and so they also requested a variance to deal with the use of PondPack v. 7 in the design, as well as asking for conceptual approval of the drainage design for this development, which will be subject to final approval later.

KD asked about details of which pond emptied into which, and these details were described with the exhibit. Pond one is actually the control with pond three discharging into pond two, with pond two and pond four discharging into pond one. Steve Murray states that this eventually drains into the upper reaches of Kirkpatrick overland and across the ground to the southwest.

Mr. Phipps stated that this plan also shows existing drainage conditions from the site to the north, and also the developed condition to bring that drainage into the ponds, continuing to also drain into the outlet as shown.

KD asked whether there were other sites in the county that used multiple ponds tied together. There are, and Dave Eichelberger stated that the ordinance states that designers and applicants have to use TR20, a hydrologic computer model. The reason the ordinance was written was so that there was consistency in the data from more than one project which needed to be considered and modeled together. Dave continued to state that there are some situations for which TR20 doesn't work very well. Occasionally designers will use PondPack v. 7 or another model called ICPR, (InterConnected Pond Routing). When they use another model, technically speaking, they need a variance since they aren't using TR20.

Steve Murray reported that he and the consultant recommend granting the variance to use Pond Pac v. 7.

KD moved that the variance to use PondPack v. 7 v. 7 be granted, Ruth Shedd seconded.

Ruth then asked why, if these models are used often, that the ordinance hasn't been changed. Dave responded that there were several things in the ordinance that could be changed over the years, and rather than make yearly changes, the choice was to wait and make several at once. This might be one of the things that could be changed, but still there would be a need to try for consistency and stick with one model so that data from different projects could still be combined for consideration. Before the single model was required, many models were used, some of them not very good for the purposes of the Drainage Board.

There being no more discussion, the motion was put to a vote and carried unanimously.

Steve Murray then recommended conceptual approval to the project, subject to the conditions stated on the April 30th review memo.

KD moves to so approve, Ruth seconds, and the motion carried.

Other Business

John Knochel gave the floor to Steve Murray to begin a discussion on engineering review fees. Two additional appropriations were needed last year for these fees, at which time the County Council asked the Board to consider the current ordinance and the policy of allowing ten hours of free review time, which equates to \$650.00 per project. Steve spoke to the home builders group, engineers, and developers about this. There wasn't a great amount of concern, the feeling being that while this certainly adds to the cost of development, it is a small percentage. Steve thought that while some of the engineering firms in attendance at the meeting today, they could request feedback on dropping that ten hours completely versus cutting it in half. An ordinance would have to be drafted to amend the current Tippecanoe County Drainage Ordinance.

Steve reported that to date for 2001, the Board has used nearly all of the \$35,000.00 appropriated for engineering review fees on thirty-two projects, and will have to request another appropriation. In 2000, the Board looked at close to seventy.

Bill Davis from Hawkins Environmental was asked by Steve for comment and responded that Hawkins would support the change, and he thought there would be support from the general industry based on some of the conversations they had yesterday. The process in place for review works well, it's timely, it's understood, and he didn't think a revision in fees would be a problem.

Steve commented that they had also talked about eventually implementing application fees other changes some time in the future, but there is plenty of time to discuss that and suggested that changes be done incrementally. At this time he thought it best to act on what the County Council requested, dropping some if not all of the free review fees.

Ruth asked what effect this would have on small projects, specifically will there be a problem with the people that do those that will have to be paying something under the ten hours.

Steve responded that the small projects are often done by people that don't do developments regularly. He didn't know if they would have a feel for the big picture, but they currently pay for subdivision entrances and permits to work in the right of way. He continued that this is not outlandish by any stretch of the imagination. He stated that Burke had been asked to do a review and summary of the fifteen largest counties in the state, and there is no clear pattern. About half charge fees much higher than Tippecanoe County, and about half of them do reviews for free with their own staff or consultants.

Steve advised looking at the situation specific to Tippecanoe County. The general fund is tapped, and it's difficult to get funds for this office. As far as the County Surveyor is concerned, this would be a step in the selling point to the County Council to help offset some of the requests that will have to be made in the next few years due to Phase Two Stormwater requirements.

John Knochel commented to County Attorney Dave Luhman that an ordinance is in place that established the ten hours of free review time. He suggested the Board ask Mr. Luhman to prepare two draft amendments, one to drop the free review time to five hours, and one to drop it to zero. He also asked the other members of the Board to consider the matter and perhaps be ready to act on one or the other at the next meeting. Steve suggested that PondPack v. 7 might be included also, and John agreed that it might.

When asked by Steve for comments, Pat Sheehan of Schneider Engineering stated that he agreed with Mr. Davis, adding that it would provide the county with more expenses that could be used in other ways, and place some of those fees on developers who are doing the work. He asked if with the five free hours, will that affect a lot of people? Specifically, are those five hours going to help very many people? Steve replied that out of 70 projects in 2000, there were perhaps five that came in under ten hours of review time. Mr. Sheehan then states that Schneider Engineering would be in favor of this also, that it would be a benefit.

Ruth Shedd asked what the typical time required is, and there is no good answer, with variables including completeness and quality of the plan and submittal, and also the complexity of the site and project. Steve stated that they range from a minimum of around ten hours upwards through twenty, thirty, or forty hours. Pat added that some of the smaller projects are

done by people who aren't in the county, and they are not as familiar with the process and it takes more time to get through it. They then go over the ten hour allotment.

Steve asked Pat for his view on Legacy Place for example, where they have an overall approval, but then come to the Board for each individual lot. Pat stated he would say that falls under a small approval process where all the applicant is doing is submitting paperwork showing that they are under the impervious value and that they hit that coefficient and time of concentration and that they match the routing and discharge points and it would be something simple. Maybe that could be a one or two hour process that is included in a fee.

Pat also commented on another software model they use versus the PondPack v. 7. Schneider is currently reviewing both processes, and if there is a discussion on one versus the other being adopted, he would be willing to spend time discussing the benefits of either. He stated he thought Schneider would be willing to use PondPack v. 7.

Dave Eichelberger commented that they should not be lumped together, but the Board should take a look at what programs are available and prepare a list of those that could be used, rather than just one or two. Steve added that there may be some other housecleaning items that the Board would want to include, but that he would think the Board would rely on the recommendation of the Board's consulting firm for the appropriate software. Dave added that he wouldn't want to leave one out that other people use that's just as good as the others.

Pat then asked if, when there are changes to the ordinance, whether that gets reviewed by consultants also. This was so Schneider could give some input for any of those changes. Ruth Shedd then asked the County Attorney whether the Board had to hold a public hearing on that before it is actually adopted.

Mr. Luhman replied that the Board doesn't have to but may want to, if changes will be going beyond review hours and technical specifications. Then the Board might want a process where the proposed change is out there and people have a chance to comment on it. Steve suggested people at least be aware there was going to be an ordinance reading so they could be here to comment. KD agreed, saying, "Let's get that input."

There being no more comment and no other business, KD moved to adjourn, Ruth seconded, and the motion carried. Meeting adjourned.

John Knochel, President

KD Benson, Vice President

Robert Evans, Secretary

Ruth E. Shedd, Member

Tippecanoe County Drainage Board
July 3, 2001
Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily, Drainage Board Executive Secretary Robert Evans.

The Tippecanoe County Drainage Board met Tuesday July 3, 2001 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, John Knochel, calling the meeting to order.

Approval of June 7th 2001 Minutes

KD Benson made a motion to approve the minutes from the June 7th regular Drainage Board Meeting. Ruth Shedd seconded the motion and hearing no opposition, the motion carried.

Shawnee Ridge Subdivision Phase II

Tim Beyer of Vester and Associates appeared before the Board to request final drainage approval for Shawnee Subdivision Phase II. He displayed a map of the site of the project and the surrounding area, including County Road 600 North, State Road 43, Hawk's Nest Subdivision, and the entire Shawnee Ridge property including Phase I, the proposed Phase II, and the pond that was constructed with Phase I, sized to handle capture runoff from everything to the south of the pond including virtually all of the runoff from Phase II.

On a larger scale map of Phase II, he showed the proposed storm sewer that captures the runoff and either ties into the Phase I storm sewer, or extends the Phase I storm sewer and outlets into a ravine at the north end. The water then travels to the pond as detailed on the first map.

Steve Murray asked at what stage construction was on the Phase I pond. Tim replied that they were finishing it up, the pond having been 80% completed during Phase I.

KD made a motion to grant final approval as requested with the standard conditions, (specified on the June 28th Burke Engineering memo). Ruth Shedd seconded and there being no further discussion, the motion carried.

Schroeder Property

Tim Balensiefer of T-Bird Design began with an overview of the Schroeder Property. He displayed a map that showed its location on State Road 38 next to the existing Quality Farm and Fleet store, and further away the locations of Subaru Isuzu, the proposed F Lake, and IvyTech.

The Schroeder property is a 3-acre tract. The proposal is to develop a commercial center on it, a strip center with parking on the majority of the site, the building with some sidewalk out front, and some greenspace around with some landscaping. There's a small area offsite that drains through the site in the present condition, and they have taken that into consideration. Runoff will drain into the State Road 38 drainage ditch, including water from the roof that passes through a catch basin. The water will eventually run from the ditch into the proposed F Lake.

The request Tim brought before the Board is that the onsite detention be stored in the future **F Lake**, with the understanding that there will be fees for such storage.

Steve Murray apologized for the Board not having the latest review memo available, and referenced a Burke memo dated June 28th 2001, which recommended preliminary approval. He reported that the Surveyor's Office concurred with that. He stated agreement that, as has been the case in this area, we have allowed direct discharge to go down to **F Lake**, and the developer would need to compensate the Drainage Board for storage in the F lake. He added that the last figure the Board had was \$15,000.00 per acre/foot.

Steve said that could all be decided as they continued to develop their plan, and that they wanted to know conceptually on a preliminary basis that the Board agreed with their plans.

In response to a question from KD, Dave Eichelberger explained that in the County's continuing effort to provide regional detention instead of having individual detention ponds scattered throughout all the different developments, the County is trying to put in the regional detention concept throughout various watersheds that are seeing a lot of development. He referenced the **Berlowitz Ditch and the Wilson Branch one**.

Steve added that the Board has a study on the entire **Elliott Ditch** watershed, which was updated in 2000 by Burke. As part of that, regional ponds were planned. One is complete and is located at the Tippecanoe Mall across from the County Extension Office, and another has been started and is partially designed. It will be east of Old Ross Road and east of IvyTech and is what has been referred to as **F Lake**. Property to the east and some to the north will drain to that.

Dave continued that they had determined a certain amount of area around there that could be drained directly to **Elliott Ditch**, and its storage could be taken care of by that **F Lake basin**. The Schroeder property is within that area.

Steve stated then that the request before the Board was in conformance with that study and the direction that the Drainage Board and Surveyor's Office have taken in the past, and repeated the recommendation for preliminary approval.

KD made the motion to grant preliminary approval to the Schroeder property, seconded by Ruth. There being no further discussion, the motion carried.

First Church of the Nazarene

Pat Sheehan of the Schneider Corporation presented the proposal for the development. The site is located east of County Road 500 East, and just south of State Road 26 East. It's just east of the Meijer's development and is also surrounded by other developments. To the north and east is Brookfield Farms, and to the south is Saddlebrook Estates. He continued that this is the last piece, it's twelve acres of farm field, and everything around it is developed.

They examined the existing drainage basin, and there are four different areas where this drains off site. It drains to the north into Brookfield Farms in two locations, to the south into Saddlebrook Subdivision, and there is a drainage area that goes to the County Road 500 East ditch and some ultimately goes off to the east.

The proposal was approximately a 35,000 square foot building structure and about 1.7 acres of parking. The drainage basins and the way they intend to drain the proposed area is to split it up so that about 80% of the area drains to the north into a dry detention pond. That pond will connect to an existing tile that crosses under C.R. 500 East and goes into the Meijer development, ultimately to the **Alexander Ross** drain.

The last portion of the development drains to another dry basin that ultimately discharges into the C.R. 500 East ditch, which drains to the south. They requested final approval based upon the condition in the Burke memo of June 28th 2001.

Steve commented that Pat and he had discussed doing direct release to the C.R. 500 East ditch, and gave the board a little history. Unfortunately, while the designs for the development surrounding this site were being done, the County didn't have access to the G.I.S. contouring data. Because of that, this site was ignored as far as their offsite water being accommodated into the surrounding developments. This made the site difficult to design for, and he suggested that Pat be able to do whatever was best for his client, given the amount of time they had spent on this design, and the fact that they were strapped with some design considerations that really weren't their fault. Steve recommended that the Board approve this design, or if Pat thought it was better for his client to look at direct release and free up that area as developable area, to go that route as well.

Pat stated that approval of direct release would enable a better development for his client. Trying to restrict so much in some of these smaller areas ends up causing areas that remain wet. They're hard to restrict and the restrictor is small and gets clogged. Ultimately, the impact to the C.R. 500 ditch is very minor. Direct release would create a better development, without small mosquito (producing) ponds.

KD asked if there were houses right up against there. Pat replied that there are some in Saddlebrook Estates Subdivision, but that the drainage will not be going in that direction, instead being captured and taken to the west into the C.R. 500 East ditch. In response to questions from Steve and KD, Pat stated that changing to direct release would involve removing a pipe and restrictor. The water would still collect in the same area with a discharge of 2.5 cubic feet per second as opposed to 1.2 cfs.

Steve added that to the north where they're discharging into the existing tile, once again that is probably not a desirable situation but they have absolutely no other choice. The tile picks up the backyard runoff from Brookfield Farms, and this

development will put a restrictor plate on their outlet to meter that water out to the point that the tile can accommodate the water. This addressed KD's question about drainage through backyards in Saddlebrook Estates. This water will go into a drainage easement there as it was intended to, and had always gone in that general direction. It just wasn't recognized and accommodated as they were doing their design on that phase of Saddlebrook. But once again, this property owner has no other choice, so the Board has to let them go that route. He added that it's been designed properly and will be metered out. Pat added that the water would be detained in the basin area.

KD asked if there was no choice but to have a wet area. Pat said that it would be dry except immediately after rainfall. Steve added that the in rear yard swale in the existing subdivision the effect really should be nominal, but that even under current conditions in certain rainfall events he was sure water stands until it can get out through the fairly small tile. Steve then recommended final approval with the conditions as stated on the June 28th memo.

KD moved to grant final approval with the conditions so specified, Ruth seconded, and there being no further discussion, the motion carried.

The Commons at Valley Lakes

Jerry Withered representing Cedar Run Limited, owner of The Commons at Valley Lakes, referenced a request sent to the Drainage Board to approve reconstruction of a portion of **Branch 7 and all of Branch 8 of the Kirkpatrick Ditch**, rather than going through the vacation process. This was suggested by Steve Murray and Dave Luhman per section 52.5 of the County Drainage Ordinance which states that the Drainage Board is permitted to authorize the reconstruction rather than the vacation of a legal drain on various conditions: First, that the project is on property all owned by the petitioner, which is true in this case; Second, that the specifications have been approved by the County Surveyor, which is also believed to be true in this case; Third, that the project will be completed under the supervision of the County Surveyor, and they are happy to have that supervision; Fourth, that as in this case, the petitioner will pay all costs of the reconstruction; Fifth, that the County Surveyor has investigated whether this reconstruction will adversely affect any of the landowners upstream, which has been done; Last, that the Drainage Board makes a finding that no landowner upstream is going to be adversely affected. Jerry summarized by saying all his client is doing is reconstructing and putting in a large drainage tile where formerly there had been a ditch. He then introduced civil engineer Alan Jacobson from Fisher and Associates to show the specifics of the proposal.

Alan gave some background with aid of a map showing South 18th Street, the direction of County Road 350 South and Valley Lakes Plaza, the location of Concorde Road, County Road 430 South, Wea Ridge Elementary School, and the site for Wea Ridge Middle School. He pointed out The Landing at Valley Lakes, Phases I and II. Phase I has been constructed, with only a few empty lots left in the subdivision. Phase II was accepted on the morning of July 3rd by the Lafayette Board of Works, and construction was to begin by the end of the week.

He then pointed out the site for The Commons at Valley Lakes, a 40-acre site that adjoins South 18th Street, the north line of it being roughly the main branch of the **James Kirkpatrick Drain**. When they did the development for The Landing Phase I, they created a retention pond to deal with the stormwater management issue. Currently there is a pipe that runs north from the pond some distance before ending. A temporary open channel has been cut through the high ground. The water is managed on site because there was no choice at that time due to the size of the development and the fact that the downstream facilities had limited capacity. When they did The Landing Phase II, the water originally drained through a low area via a temporary channel to a natural depression that currently exists on the site. It's quite a large depression, an old pothole swamp with lots of black dirt. This plan was approved by the Drainage Board.

The philosophy they took for The Commons was under the assumption that **the Kirkpatrick Drain** was to be improved in a significant manner, sized to accept water from developed areas on these properties and also to the east and north of the 18th Street crossing. He then cited three new culvert bridges planned. Their philosophy was then; that there would be no need for onsite stormwater detention, that the capacity of this newly reconstructed Kirkpatrick Drain would accept the water from the site.

Moving to a discussion of the current conditions of the drain, he detailed a 30-inch tile for the main branch. Branch 5 is a small branch that goes to the north. Across the Cedar Run Properties, Branch 7 runs to their southeast corner, and Branch 8 joins the north line at The Landing at Valley Lakes. This tile line has diameters of 10, 12, and 15 inches along its length.

In response to a question from KD about the current condition of the tile, Alan explained that the tile did continue further than it currently does before The Landing At Valley Lakes Phase II was developed. They obtained Drainage Board approval to vacate a small portion, and they intercepted three tiles from Mr. Yount's property on their south line, one from a pond and

the other two being field tiles. The water from them was directed through the storm drainage system for The Landing At Valley Lakes Phase II. That currently discharges through a 36-inch pipe just west of the existing tile. The creation of the temporary channel to the low area was so that its discharge could be regulated as opposed to letting it run off by its natural course down into the low area that runs along the **Kirkpatrick Drain**.

What they were proposing to do is extend the existing outlet pipe for the retention pond for Phase I of The Landing down through the proposed subdivision to exit into the improved or reconstructed **Kirkpatrick Drain**. This would be a 36-inch storm drain all the way down, and it would accept other water from the proposed developments, both current phases and future phases, and has been sized accordingly.

At the point where they discharge from The Landing At Valley Lakes Phase II, that storm line will also be continued across the open space which will eventually be developed, and then through the Commons. This would be a 42-inch storm drain increasing in size to a 60 inch before reaching the **Kirkpatrick Drain**, due to grade considerations. He then referred to a third series of storm drains proposed that will also outlet into the **Kirkpatrick**. These will accept water primarily from future phases of development, although some of the lots in the current development will actually drain through that pipe system.

The total proposal is for three outfall locations into the reconstructed Kirkpatrick Drain. The water that was originally detained in the low area for The Landing At Valley Lakes Phase II will now run completely through the pipe system, and therefore not be detained in that low area as soon as the construction is complete.

Alan then discussed the existing field tiles. No changes are proposed for Branch 5 on the other side of the ditch. Branch 7 will be left partially in place, connected to the 42-inch storm drain at the south line of their current phase. Branch 8 will be partially removed as the new storm drain is laid, the remainder continuing to drain to Branch 7. The portion of Branch 7 which will be left in place will be in a section that is proposed as a park and recreation area with no building activity proposed over it.

In response to a question from Ruth Shedd, Alan verified that not all of the tiles of Branches 7 and 8 would be replaced at this time, though he did confirm that future development on the 200 plus acres will bring requests to relocate upstream areas, and their design takes that into consideration. They will intercept on their east line, routing the water down through the site in the proposed storm sewer system. He then restated that the current proposal features intercepts at the south line of the phase, routing through a new, larger storm pipe out to the **Kirkpatrick Drain**.

Ruth then asked if approval is given for reconstruction on the branches but not all of it will be done now, whose responsibility and at what time will that approval be requested? Or, she continued, is the Board being asked to approve later reconstruction now? Steve Murray answered that at this time, the Board is being asked to grant approval for relocation of that portion of those branches within Phase I. As they develop on the south and east, he assumed they would follow the same procedure in seeking approval. One of the requirements is that they have construction plans approved, and generally they don't generate those plans until they are closer to getting ready to build that phase or section. He concluded that the board can grant approval incrementally with no problem, and there's really no need to act on future relocations at this time because the easement will exist for those branches until such time as they develop the plans for that phase or section.

Steve also added that this process is easier compared to in 2000 when they vacated that small portion to the south with the hearing and notice process. This is cleaner and easier, and for all intents and purposes they always have to pick up that water that comes overland or through the tile and run it through their storm sewer system anyway. The net result is leaving a 30-foot drain easement that follows the new storm sewer. KD asked if the Surveyor had to approve it. Steve confirmed that, and added for the record that this is in the City of Lafayette, so the Board's approval will be contingent on the City's approval. All the Board needed to do at this time compared to other developments is to look at the effect on the regulated drain which is soon to be the **Kirkpatrick open ditch**, and the two laterals that were referred to earlier.

KD asked Steve to confirm that they will all be part of the Regulated Drain when completed and he did so, adding that he wanted to distinguish the individual portions. Steve then asked Alan about the temporary storage issue, referring to a worst-case scenario in which the construction is complete but The Board has been unable to start on the **Kirkpatrick project**. Alan responded that given the uncertainty of the construction timetable for the excavation portion of the **Kirkpatrick Drain** reconstruction project, several discussions had been conducted between them and the City of Lafayette and also the County Surveyor's Office. Regarding providing interim storage in the event that their schedule gets ahead of the reconstruction schedule, one viable option is to partially excavate along the alignment of **the Kirkpatrick Drain channel**. In other words, they will have pipes in the ground below the existing grade at these three outlet locations. They propose to create an excavation in the vicinity of these outflow pipes. This isn't intended to be a full excavation to the actual depth and cross

section of the final ditch alignment, but a partial excavation that would provide enough volume in the interim to satisfy the requirements of the release rate in the ordinance. He responded to a question from Steve by replying that his client was willing to do that in the event it became necessary.

KD asked if that was the eventual park location. It is not, but rather in the proposed ditch channel alignment area. Steve reiterated that this is referring to a worst-case scenario, and that hopefully the Board will get its permit from the Indiana Department of Environmental Management and will be able to begin construction within the next month or so. Alan did a quick estimate on volume based on developed area. The schedules will determine whether they have to come back to the Board with an interim detention plan for a partial excavation within the **Kirkpatrick Legal Drain**.

KD asked Steve if he and the consultants were comfortable with the plans proposed, and Steve responded that they were.

Jerry Withered clarified that they needed two things: First, the final approval of the drainage plan for Phase I of the Commons at Valley Lakes; Second, the approval for reconstruction rather than vacating **Branches 7 and 8 of the Kirkpatrick Ditch**. Dave Luhman added that the second issue first required a finding by the Board that no landowner upstream would be adversely affected by the project. He continued that a condition of that finding might be that the temporary detention would have to be constructed if their plans got ahead of the Kirkpatrick, since it seemed that there might otherwise be some adverse effect on landowners.

Dave suggested a motion to find, subject to the condition that they include the temporary detention pond as part of the project, that no landowners would be adversely affected. Following that would be a motion to approve reconstruction. Steve commented that the first act should be on their drainage submittal, indicating that the Surveyor's Office and Drainage Board engineering consultants would recommend that the Board give final approval to The Commons at Valley Lakes Phase I subject to the conditions stated on the June 27th review memo, stating for the record that condition number one on the memo did discuss the temporary detention situation if in fact the **Kirkpatrick Drain** hasn't been reconstructed, and that it's all subject to the City of Lafayette's approval.

KD Benson so moved, Ruth Shedd seconded, and there being no further discussion, the motion carried.

Steve stated an area of concern on the second item, that he hadn't seen a final set of construction plans on the relocation of the **Kirkpatrick Laterals, Branches 7 and 8**. 52.5 does require approval of the Surveyor. Alan said that the City was reviewing internal storm drains, sanitary sewers and water. A few minor changes were yet to be made, and he expected to provide the Surveyor's Office with a final set of plans by July 9th. Steve added that he was satisfied that through the normal construction plan review process the Board would get what it needs; to accommodate those two tiles into their new storm sewer system along with a 30 foot new regulated drain easement to follow the new storm sewer route. With that he deferred to Mr. Luhman as to how to follow through on their request for the reconstruction.

Dave Luhman suggested first that there be a finding of no adverse effect on adjoining landowners based on the review and recommendations of the Surveyor's Office and the Drainage Board engineering consultants. Steve said; assuming as expected that a good set of plans that accommodates the flow of those tiles through a new route, it will not have an adverse effect on any upstream landowners. He continued that Branch 7 does cross onto property owned by another individual, which was partially why he suggested that they go this safer and easier route. Even with the worst-case scenario on the reconstruction of the **Kirkpatrick** they will provide temporary detention in the proposed easement for the new channel. That would be submitted for review if it were needed, so there would be an opportunity to review and make sure that nobody upstream would be adversely affected.

Ruth asked if the Board is just concerned with one other landowner there. Steve's response was that's primarily true, but this process is the safest way to do it and provides protection to upstream landowners, which is why he could report a finding that no upstream landowners would be adversely affected.

KD then made a motion that the Board find that no adjoining landowners would be adversely affected by this reconstruction. Ruth seconded, and there being no further discussion, the motion carried.

KD then made a motion to grant approval for reconstruction of **Branches 7 and 8** assuming final construction plans arrive. Ruth seconded, and there being no further discussion, the motion carried.

President Knochel asked Mr. Murray for a report on where the Board was with the reconstruction of the **Kirkpatrick**. Steve reported that the Board was still awaiting approval from IDEM and also awaiting offer letters for the right-of-way which

needs to be acquired, most of which is west or downstream of South 9th Street. He also verified that a bid had been accepted from a contractor who is ready to start. IDEM was insisting that a concrete bottom could not be included, and Steve stated that conceding that was likely to be required to move the project forward.

Petition For Partial Vacation Of The Vanderkleed Drain

Joe Bumbleburg referenced a petition given to Board members for the partial vacation of the Vanderkleed Drain. Included in it are: The legal descriptions required; the land over which it should run; and averments of the appropriate statutory requirements – that the abandonment will not be detrimental; and that the reconstruction of the drain would cost more than the benefits.

Joe stated that this was essentially a tying up of a loose end in that the proposed drainage plan for the Lindberg Village subdivision had been approved, and that the subdivision had received primary approval of the Area Plan Commission. Therefore, the only question to be decided before Board action would be the question of persons affected by this vacation. He references a very old drawing that suggests the area being drained by this drain is all on this site, and when they put in the drainage system for the subdivision, they will be taking care of everything within their own property that is subject to the drain as it currently existed. Since there are essentially no other persons affected by this, it would simply require the finding of no adverse effects as in the previous item on the Board's agenda. Then the Board would be able to decide the question of vacation.

Steve Murray commented that the Surveyor's Office would concur with the vacation as requested on this site, with his only concern be that the Board follow the statutory requirements. He added that he thought the petitioners had exercised due diligence in talking to adjoining landowners, but felt that anyone within the watershed to the north needed to be contacted and given a chance to respond.

Bill Davis of Hawkins Environmental came forward to demonstrate with the aid of the map that there are no other landowners upstream in the watershed in question. After discussion between Bill and Steve, it was agreed that this was the case.

KD made a motion to find that no other upstream property owners would be adversely affected by the vacation of the Vanderkleed Drain. Ruth Shedd seconded, and there being no further discussion, the motion carried.

KD then moved to approve the petition to vacate that portion of the Vanderkleed Drain. Ruth Shedd seconded, and that motion likewise carried.

Engineering Review Fees Ordinance

Steve Murray stated that he had placed the Engineering Review Fees Ordinance on the agenda primarily to make certain that the Drainage Board members and attorney were comfortable with the process that was followed to pass that ordinance. Dave Luhman stated that since the last Drainage Board meeting, the Tippecanoe County Board of Commissioners had adopted the ordinance on first and second reading so that all necessary action had been taken. The ordinance was scheduled to have taken effect on July 1st 2001, so with petitions now filed it would apply, and developers would be required to pay the cost of the engineering review fees for anything submitted on or after that date.

Cuppy McClure Regulated Drain - Assessment

Steve stated that this had also been discussed before. The Cuppy McClure was one of three branches of the Hadley Lake Drain. The outfall runs north and east of Hadley Lake. It was constructed and accepted, and an assessment was started on the acreage in that watershed. The Baker Dempsey was reconstructed as well, and an assessment started on it. Cuppy McClure was the last of these three drains, and has been completed and accepted, but an assessment was not started. Steve found this when he was researching the file when there was some blockage and stoppage on the Cuppy McClure tile as it runs through the Great Lakes Chemical property. He stated a belief that based on everything he found and Mr. Luhman's review that the Board should have that assessment start now.

KD referred to the earlier discussion having included the issue of mailing notification to landowners in that watershed. Steve stated that was correct. KD then made a motion to recognize that the construction was complete, and for the Board to move ahead with starting the assessment process. Ruth Shedd seconded, and there being no further discussion, the motion carried.

Other Business

Joe Bumbleburg rose to address the Board on behalf of another client, Kenneth Puller and his Foxfire development on Haggerty Lane. He wanted to address the issue of escrowing the funds for drainage improvements. This development is

contributory to the F lake, and they were seeking permission to put money into the **F lake** escrow fund against the time that it would be needed. He stated he understood from Dave Luhman that there was a form of agreement that had been used previously by the Drainage Board that would be provided to him, but the signal they sought from the Board was that they would authorize them to pay the monies into that escrow fund against the time that it would be needed by the Drainage Board for work on the F lake.

KD asked if this was to be in lieu of actually making road improvements. Joe responded that the road improvements are under the jurisdiction of the Board of Commissioners, but that he was essentially talking about the same thing for the offsite drainage improvements. John Knochel asked when the Commissioners had last heard proceedings on Foxfire, and Joe responded that they had heard two versions of this with the Area Plan Commission on the actual subdivision process, and once early in 2000 on a rezoning as well as on a tax abatement.

KD stated that she would like the Surveyor to review the request and make recommendations before she would feel comfortable making a motion. Dave Luhman commented that he had suggested using something similar to what the Board had used with the **Alexander Ross Drain** on Park 65. The initial developer knew they were going to have to build a large detention pond and weren't going to construct the whole thing, but there was an agreement that future developers who would participate in that would pay for the value of their usage. He stated that if the Board hadn't yet got a mechanism set up like that for F lake, the Board should probably look at it because there had been two projects impacting F lake at this meeting, and there would be more.

Joe asked if there was a current fund existing on the **F lake**. Steve replied that there are some funds, probably a nominal amount, adding that the city generally collects those funds for the Drainage Board. The last time it came up a few months ago, there still wasn't enough to finish the design let alone to construct the facilities. He added that as developments are occurring in the area, obviously the Board is getting closer to that.

Joe asked if whatever they put into this fund would facilitate the design of the lake, at least at this point. He then stated that all he was asking was for the Board's approval to use that vehicle, whatever that fund might be. Steve stated that the Board hadn't finished the review, that the site had a three-year Drainage Board history, and that he wasn't prepared to recommend the Board take the step requested by Mr. Bumbleburg. He added that former Surveyor Mike Spencer had been involved, that it was a very thick file, and he needed to finish the review and check the intent underlying previous reviews.

Ruth Shedd asked if the Board could have a standard resolution for something like this. Dave Luhman replied that the Board could, once the review was completed and there was a determination on what the costs were going to be and how to appropriately share those. Ruth added that this was obviously going to come up more than once. Steve agreed, mentioning that it had in the past, then adding that generally with these regional concepts, they're within the city's utility service area, and they've handled the cost recovery through their normal utility cost recovery system. On **Elliott**, he said, the money for water that goes to the Mall pond the city collects and holds, and water that goes to **F lake** where money is given in lieu of onsite detention, that money goes to the County.

Ruth asked if the petitioner could hold off for another month. Joe responded that a month would present a problem. Mr. Puller rose to speak, representing 'Faces', which is the sponsor for Foxfire. He stated that the problem they had was that their option was running out that they have to get financing on this, and that they had to get it approved through FHA just for the enhancement. The dollars were originally estimated at \$50,000.00. Their engineers now put that figure at \$66,000.00 that they have to put in at the time of closing.

Steve stated that the problem with this site is that it did not have an outlet currently, and so there were some proposed improvements that were supposed to be put in place in order to provide a positive outlet. Because of that, he didn't know that agreeing to escrow the money would ever result in the Surveyor's Office making a recommendation to approve their drainage plan. Ken stated that they were there to discuss the 66-inch offsite storm sewer line. In the drainage plan they proposed to put a permanent holding pond in the project.

Steve and KD stated their beliefs that this request was premature without engineering review and recommendations. Joe asked if assuming the plan gets approval, would the Board allow the developers to put the money into escrow. Steve restated that he was not prepared to recommend that at the present time, that he wasn't certain that the Surveyor's Office and engineering consultants would ever get to the point of recommending escrowing the improvements as opposed to putting them in. Joe drew a distinction between what he saw as Steve's position that he didn't know if the plan would be approved, and Joe's request for their financial planning purposes for an understanding that if the plan was approved, that the money would be accepted into escrow. Steve pointed out that part of the plan is the improvements.

Joe reiterated that he was only discussing the event that the plan was approved. If the plan were not approved, the money would not be needed and would not be given. He again requested an understanding from the board that if the plan was approved, that the Board would allow monies to be escrowed as requested. Steve stated that as long as the petitioners understood that part of the plan approval process may be that the improvements are required to go in and the monies not be escrowed, he could recommend agreement. He then clarified for KD that the improvements in question would be to convey water from the site to the F lake. Joe added that he understood that some of the money might need to be spent rather than escrowed.

Dave Luhman clarified that the money in question was the share of money to design and develop the F lake, not the money to design and build offsite improvements to outlet water from the site to the lake. KD asked if there was a reason the Board wouldn't want to escrow the money. Dave replied that if the Board weren't ready to complete the construction of the **F lake**, and has been able to determine what their share of the **F lake** cost would be and the developers agreed, the Board could accept those monies and put them in escrow. That's separate from approving the drainage plans.

Joe suggested that if the Board was having trouble raising the funds for the design of **F lake**, it should want contributors so that progress could be made, and reiterated that all he sought was an indication that the money would be accepted into escrow if the drainage plan was approved.

John Knochel indicated that he could personally give conceptual approval to that request. Ruth Shedd agreed, stipulating an understanding of the difference of the monies, who was going to use it, and where it was going to be used. KD also expressed agreement on that basis. Joe thanked the Board, then asked Dave Luhman to provide him a copy of the earlier agreement on the Alexander Ross Ditch, and Dave agreed.

There being no further business, KD moved to adjourn the meeting. Ruth Shedd seconded, and the motion for adjournment carried.

John Knochel, President

KD Benson, Vice President

Robert Evans, Secretary

Ruth E. Shedd, Member

Tippecanoe County Drainage Board
Minutes
December 4, 2001
Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Robert Evans.

The Tippecanoe County Drainage Board met Tuesday December 4th, 2001 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, John Knochel, calling the meeting to order.

Approval of November 7th Minutes

KD Benson made a motion to approve the minutes from the November 7th regular Drainage Board Meeting. Ruth Shedd seconded the motion and hearing no opposition, the motion carried.

Brenneco Facility

Tim Balensiefer from T-Bird Design appeared before the Board representing Brenneco Incorporated. Using a drawing, he summarized their plan for the site. It is located just east of the Caterpillar Logistics site. He showed the location of the old Halsemer Airport runway and also of County Road 500 East and the Subaru Isuzu plant.

The proposed building is to replace their existing facility, which they have outgrown. It mainly consists of warehouse and office space in a building surrounded by parking area. He stated that they had addressed the concerns and comments from Burke Engineering. The plan is for the site to discharge stormwater to the northeast into a planned detention basin, part of the Berlovitz Ditch system which is not yet constructed.

KD Benson asked about vacation of a County Regulated Drain. Tim replied that they would be working with County Surveyor Steve Murray on that, and added that the Drain had been vacated through the Cat Logistics site. Steve asked Bill Davis who was in attendance, how the drainage was continued to allow the vacation of that earlier portion. Bill replied that the tile was laid north and south along County Road 500 East, and a temporary tile discharges down to the new McCarty Lane. The City of Lafayette will be installing stormwater sewers which will replace the temporary tile.

KD made a motion to grant final approval with the conditions listed on the November 19th Burke review memo. Ruth Shedd seconded, and there being no further comment, the motion carried.

Canam Steel

Pat Sheehan from the Schneider Corporation appeared on behalf of Canam Steel. The project is proposed for a site just over 34 acres in size which is located on County Road 200 South. Using a drawing, Pat showed the location of the building, associated parking areas, and gravel areas. He also mentioned that plans call for a future roofed area for gravel storage.

Current drainage conditions show some stormwater draining north to 200 South, and the remainder draining to the southeast, ultimately into Elliott Ditch. The Drainage Ordinance requires that there be onsite stormwater detention until the proposed F Lake regional detention facility is in place. Their plans call for detention in various locations onsite. Upon completion of F Lake, the orifice plates which restrict the flow of water would be removed from these onsite facilities, and stormwater would then flow to the F Lake detention facility without onsite detention.

KD asked about plans for a big ditch passing through this property. Steve Murray added that it would be passing through the Rowe Property as well. Pat replied that T-Bird Design had done the work on that ditch design. Pat added that comment number 4 on the Burke memo of November 28th be dropped, since approval of the Indiana Department of Natural Resources is no longer required. Steve indicated that that wouldn't be a problem.

Steve asked whether there would be any need for fill in their plans for the site. Pat did not know, but Steve indicated that there had been some talk on the part of other developers regarding the removal of dirt from the F Lake site in lieu of onsite temporary storage. Steve also added that while it wasn't on the review memo, it should be stated as a condition that they would be required to pay for detention storage in F Lake.

Pat replied that in the short term, they probably wouldn't need fill on the site due to the planned detention areas. Steve then stated that a condition should state that they would pay an acre/foot price for detention storage. To KD's question, he replied that the acre/foot price last agreed and voted upon by the Board had been \$15,000.00 acre/foot.

Acting on the recommendation of the Surveyor's Office and the Engineering Consultant, KD made a motion to give approval subject to the conditions on the November 28th review memo, and the added condition of payment for detention storage at F Lake. KD seconded, and there being no further discussion, the motion carried.

Fairway Co-op

Pat also presented on behalf of Fairway Co-op proposed for a site in 'The Acres', an area near Purdue University with sorority and fraternity buildings. This site is a two-acre piece with quite a bit of fall, drainage flowing from southeast to northwest. The site was designed by the Purdue Research Foundation with no onsite detention, the pipes being sized to handle the stormwater, with detention being done elsewhere. The proposed project involves drainage coming up along the south edge of the property, most of the piece sheet draining and being picked up for just a short run of pipe that ties into the existing sewer. The remainder is sheet drained in another direction and ties into an existing catch basin. There is also one other small catch basin that takes a little bit of flow.

He concluded that there was very little underground sewer onsite; that everything else sheet drains; that they had met the requirements preset for the amount of hard surface; and that detention was not required. He then requested final Drainage Board approval with the conditions stated in the November 29th Burke review memo.

KD made a motion to give final approval with the conditions specified. Ruth seconded, and there being no further comment, the motion carried.

Snowbear Frozen Custard; U.S. 52 West and Morehouse Road

Pat the spoke on behalf of the developers of Snowbear Frozen Custard; U.S. 52 West and Morehouse Road. Again using a drawing, he showed the site and location. Existing drainage travels under U.S. 52 via an 18-inch pipe. They proposed sheet drainage to a swale, the rest of the site draining to the southwest to a detention basin with a restrictor on it, and ultimately discharging to that 18-inch pipe. Their plan was designed to keep drainage at or under existing conditions, so he asked for Board approval with the conditions listed on the Burke review memo of November 29th.

Steve Murray asked where the 18-inch pipe ultimately went. Pat replied that it stayed within the right-of-way of U.S. 52. Steve then asked who maintains Old U.S. 52. Pat replied that the Indiana Department of Transportation maintains most of it, and that is where their approvals came from. Steve asked if INDOT's approval was one of the conditions listed for Drainage Board approval. Pat answered that they had submitted the entire drainage plan had been submitted to them for review and approval, and that generally if a plan earns Drainage Board approval, it is also approved by INDOT.

Steve remarked that this site had been looked at in the past and there had been controversy over drainage and access. KD asked if that was based on neighbors' concerns. Pat replied that area residents were excited to see it going in.

KD then moved to grant approval with the conditions on the November 29th memo. Ruth seconded, and there being no further comment, the motion carried.

Stones Crossing Sec. 1

Eric Gleissner with Roger Ward Engineering appeared to present Stones Crossing Section 1. It is a proposed residential subdivision located on the west side of Concord Road, just south of County Road 350 South. The overall project will involve approximately 125 acres, but section 1 will be 128 lots on about 45 acres. He added that the proposed relocation of the Kirkpatrick Ditch would be along the north side of the property. When it is completed, onsite detention will not be required. In the interim, they propose two retention/sediment basins to reduce the runoff to less than what is currently being discharged. One will be along the west of the property and there will be a diversion swale intercepting offsite runoff from the south and running it to that basin. The other basin will be located where the ditch is proposed to go. He concluded by asking for final approval with the conditions listed on the November 30th Burke memo.

Steve recommended final approval with the conditions specified. KD asked how often the Board would see a development of this size proposed without permanent onsite detention. Steve answered that historically, the Board has allowed direct release if the development was close to a major ditch when the development's runoff would pass through the channel before peak flow was reached. He predicted that the Board would see even less of that now due to the Phase II requirements. Developers

might not have to do much storage, but they would need a pond and system to separate the trash, sediment, and chemicals. He summed it up by saying that direct discharge as the Board has known it will be changed somewhat.

KD asked about the infrastructure to move the water to the ditch. Eric stated that there were about 80 storm structures and subsurface pipes that route to a couple of outlets in between two lots and into the ditch. She asked if there was erosion control in the plan. He cited an approval letter from Tippecanoe County Soil and Water Conservation for their erosion control plan.

KD moved to give final approval with the conditions from the November 30th Burke memo. Ruth seconded, and there being no further discussion, the motion carried.

Blackthorne Subdivision Phase 1, and Blackthorne Planned Unit Development

Tim Beyer from Vester and Associates presented these to the Board. With a drawing, he showed the location of the site relative to Klondike Road, Indian Creek Subdivision, Indian Creek, and Lafayette Venetian Blind. The site is about 89 acres, and Phase 1 is 43 lots on 17 acres of that. The Planned Development is a 140 unit condominium complex. The area on the south of the site is intended for future subdivision, and the area to the east for either commercial development or apartments.

In addition to looking at the details of the storm sewer for the current proposals, they looked at a conceptual drainage plan for the entire site. Located in the Planned Development is a wet bottomed pond. That pond would capture runoff from the two projects currently before the Board. He showed the location for a future pond to handle drainage from future subdivision development to the south, and the area to the east would sheet drain and then after development use storm sewers to directly outlet into Indian Creek. This is proposed because they had provided additional compensatory storage in the two detention ponds proposed in their conceptual drainage plan. Due to the elevations of the area, it would be impractical to provide onsite detention for that area without a large amount of fill.

He requested final approval subject to the conditions on the November 27th Burke memo. KD so moved, Ruth seconded on the Planned Unit Development and Subdivision Phase 1, and the motions carried.

Other Business

Bill Davis referenced items on the agenda for this meeting which involved work with the Kirkpatrick, Elliott, and Berlovitz ditches. He spoke to encourage the Board to set up a mechanism to fund some of these major improvements, at least on the Berlovitz and F Lake. He suggested the Board look at bonding and institution of a cost-recovery program to pay off the bonds over a period of time so that work could get started. He predicted that development would get pretty heavy in these two locations, and he wanted to encourage the Board to move forward. He referenced such an infrastructure investment and cost-recovery program initiated by the City of Lafayette which was working well. He stated that without seed money, there could be no such program, and voiced support for working towards that. He estimated that \$1 million might be required to start, since anything less than that might be insufficient. That's why he thought that bonding might be the way to go. He offered any assistance to the Board he could provide in moving forward with this.

KD asked if this could be done like the revolving fund for engineering review fees. County Attorney Dave Luhman said that it could, and that it was something that the Surveyor's Office had been working on for years. He referenced former County Surveyor Mike Spencer's request for \$2 million to do this very thing. KD asked what came of it, and she was told that the County Council gave him \$200,000.00. Steve added that there were several funding mechanisms that could be used. He said the long delayed projects were important, and that the Board needed to find some way to move them forward. Dave said that Phase II stormwater requirements were going to bump into the same problem.

Steve's only other business to bring before the Board was to request that the dates be set for Drainage Board meetings in 2002. Board members agreed to check their schedules for any conflicts, but that the first Wednesday of every month would be the date of Drainage Board meetings, with changes made as necessary.

There being no further business, the meeting adjourned.

John Knochel, President

KD Benson, Vice President

Ruth E. Shedd, Member

Robert Evans, Secretary

Tippecanoe County Drainage Board
March 6th 2002
Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Robert Evans.

The Tippecanoe County Drainage Board met March 6th in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, KD Benson, calling the meeting to order.

Approval of February 6th Minutes

Ruth Shedd made a motion to approve the February 6th minutes, with John Knochel seconding. There being no objection, the motion carried and the minutes were approved.

Woodfield Village

Pat Sheehan from the Schneider Corp. appeared before the Board regarding Woodfield Village. It is a Planned Development with 151 single-family residential lots. It is located west of County Road 150 East between County Roads 350 and 430 South, and is within the Lafayette City Limits.

The proposal calls for all stormwater to be collected onsite, and without detention to be routed north to the Kirkpatrick Legal Drain. Temporary detention storage is required in the Legal Drain until construction of the Drain is complete. He requested final approval with the conditions listed on the March 1st 2001 Burke memo.

Steve asked if they had received approval from the City, and Pat stated that they had no problems with the design and a letter of approval was expected soon. Pat pointed out that Burke condition number 3 could be struck, since it required approval from the County Highway Department for work within right-of-way that is now owned by the City.

Steve stated that the Surveyor's Office was prepared to recommend approval with the conditions on the memo, excepting number three.

Ruth Shedd made a motion for approval as recommended, John Knochel seconded, and there being no further discussion, the motion was passed.

Steve Murray

Ordinance Issues

Steve stated that he hoped to have the revised Drainage Ordinance ready for the April meeting. He and Dave Luhman reviewed the process required for passage. The Drainage Board needs to approve it, the Commissioners need to pass it twice, and then it needs to be published twice before it becomes effective. Steve went on to mention that there were a few technical changes, including a staged discharge requirement for stormwater which is new for this County, but that it was mostly a 'cleaning up' process for the Ordinance. Approval of some new state-of-the-art modeling software was included, some enforcement language was added, and there were some other minor language changes.

Leader-Newton Meeting

A petition filed with the Board to establish this Legal Drain has been pending, and Steve recommended that the Board have at least an informal meeting with the landowners in the watershed. They are already within the Little Wea Conservancy, and could therefore be paying two assessments if this Drain were established. The double assessment had been a concern for former County Surveyor Mike Spencer, and Steve recommended that the meeting be held to give them the likely assessment costs and various options for accomplishing maintenance work such as phasing the project to hold the yearly assessment cost down. Landowners could then express an opinion as to whether the petition should be accepted or denied.

In view of the need to notify all landowners in the watershed and the pending Otterbein Ditch assessment process, Steve recommended late May or early June as an appropriate meeting time. The Board selected May 29th at 10:00 a.m. as the meeting time.

Other Business

Steve requested the Board appoint two members to serve on the Otterbein Ditch Benton/Tippecanoe Bi-County Drainage Board. Ruth Shedd nominated she and KD, John Knochel seconded and moved that the nominations be closed. Ruth moved that the nominees be appointed, John seconded, and the motion carried.

Ruth then nominated John Knochel to serve on the Hoffman Ditch Tippecanoe/Carroll/Clinton Tri-County Drainage Board. John seconded and moved that the nominations be closed. Ruth moved that the nominees be appointed, John seconded, and the motion carried.

The Board also changed the date of the May Drainage Board meeting from the 1st to the 8th.

Joe Rund then appeared before the Board to request maintenance on the E.F. Haywood ditch. He had been farming near it since 1947 and reported that it occasionally needs to be dredged. He added that the yield in the areas whose drainage was slow was dramatically less than the high yields in the rest of those fields. He added that in the very dry seasons, Reed's Canary Grass grows in the upper part of the ditch. It is very fibrous, and tends to capture any silt in the water that enters the ditch. That causes quicker buildup of silt and obstruction of water flow.

Steve reported that he had driven the open ditch portion of the Haywood and could verify Mr. Rund's observations. Dave Luhman reported that the maintenance fund for the ditch contained \$1941.86. Steve commented that that was part of the problem, and that the assessment might need to be raised. He also suggested that the Board might consider letting the ditch accumulate funds equal to eight years' assessments rather than four. That would leave more money available for bigger jobs without raising the amount paid in a given year too much.

Steve indicated the Surveyor's Office would examine the length of the Legal Drain to check for tile holes, beaver dams, blockages, and the need for dipping out silt buildup.

There being no further business, John Knochel moved for adjournment and the motion carried.

KD Benson, President

Ruth E. Shedd, Vice President

Robert Evans, Secretary

John Knochel, Member

Tippecanoe County Drainage Board
Minutes
April 3, 2002
Regular Meeting

Those present were:

Tippecanoe County Commissioners Ruth Shedd, John Knochel, and KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Robert Evans and Drainage Board Executive Secretary Brenda Garrison.

The Tippecanoe County Drainage Board met April 3 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board KD Benson calling the meeting to order.

Approval of March 6th Minutes

Ruth Shedd made a motion to approve the March 6th minutes, with John Knochel seconding. There being no objection, the motion carried and the minutes were approved.

Copper Beach Townhomes

Tim Beyer representing Vester & Associates appeared before the Board to request final Drainage Board approval of the Copper Beach Townhomes project. He presented the board with a map of the project, located near Klondike Road, County Road 250 North, and Point West Mobile Home Park. It was to be a 13.6-acre site with 221 town homes. Owner Ron Gatehouse was in attendance.

Due to poor drainage at the site, they proposed a detention pond at the northeast corner which would drain the water through a storm sewer to McCormick Road, outletting it to a roadside ditch, which would fall into a future Wakerobin pond. KD Benson asked about nearby property owners' opinions on the proposed plans, as there were questions raised at an earlier Board meeting where conceptual approval of the drainage plan was requested. Plans had been sent to the owners who attended the last meeting, proposing to replace their driveway culverts. There are presently 2 - 12" culverts that will be replaced with 2 - 21" culverts. Regrading of the ditch to prevent water passing over the driveway was proposed. Letters had been sent to the landowners for their approval. Steve Murray suggested letters from the property owners approving the change in their culverts be kept on file. Recommendation was made for approval subject to the conditions on the March 29th Burke memo, plus inclusion of documentation that both of the affected downstream property owners were satisfied.

Ruth Shedd made a motion for approval as recommended, John Knochel seconded, and the motion carried.

Grace Lutheran Church

Due to the size of the project and in order to save the church fees, Steve and Dave Eichelberger presented the board with plans for a parking area and a new addition. It is located near 231 South at the intersection of Buckingham Way and Old Romney Road, across from McCutcheon Heights and on the east side of Buckingham Heights. A new parking area was proposed to the west along with an addition to the existing building. The additional parking area is future expansion. The existing entrance is off Old Romney Road, and a new entrance off Buckingham Way was proposed. There are 2 small dry detention ponds proposed also. Approval was requested with the standard conditions listed on the March 29th memo.

Ruth Shedd made a motion for approval, John Knochel seconded, and the motion carried.

Gutwein Property

Pat Jarboe with T-Bird Design appeared before the board requesting final approval for proposed apartments adjacent to existing apartments on the site, located SE of Hadley Lake and bordered by Indian Creek. This site was currently tilled farmland, and one issue to deal with was the detention of storm water. Modeling the site from a cultivated field to buildings with lawns showed a decrease in stormwater runoff, requiring a minor amount of onsite storage. Storage would be located inside the flood plain, and a waiver for this was requested from the Board. A 100-year offsite pass-through was modeled as well. As the new apartments were built, the pad elevations would be raised to get above the flood elevation.

Wetlands showed up on NWI mapping, although they were difficult to locate on site. One of the conditions recommended for final approval was delineation of these wetlands. Mr. Gutwein had Earth Source from Ft. Wayne on that job, and these would be delineated before final plans were signed. Flood elevation was also an issue, and discussion was held regarding the two overlapping flood plains on site from Hadley Lake and Indian Creek. The pad elevation was set to be 2 ½ feet above the 100-year flood elevation, extending to a 25-foot offset from the 100-year flood elevation to the building site.

Steve Murray remarked that all concerns had been addressed and the terms of the ordinance had been met. He stated that the Surveyor's Office and the Engineering Consultant were prepared to recommend approval with the conditions listed on the March 29th Burke memo.

Ruth Shedd made a motion to grant the waiver of storm water detention, John Knochel seconded and the motion passed. Ruth then moved to grant final approval of the Gutwein property project with the conditions specified. John Knochel seconded and the motion carried.

Regal Valley Drive, Phases I & II

Alan Jacobson from John Fisher & Assoc. appeared before the board regarding Regal Valley Drive, Phases One and Two. He presented the board with plans to construct a road named Regal Valley Drive, connecting County Road 350 South to the first phase of The Commons at Valley Lakes. Eventually, the drive would continue through The Commons and connect to The Landing at Valley Lakes. It would serve to funnel traffic from all the developments and the adjacent undeveloped land up to 350 South. The construction plans for Regal Valley Drive had been approved by the Lafayette City Engineer and were in the Area Plan Commission Office pending Drainage Board approval. Approval was needed for the drainage associated with the roadway improvements and also the future Bickford Cottage, an assisted living facility. The roadway Right of Way was approx. 2.5 acres, and the Bickford Cottage site was 2.5 acres as well. The natural topography drops from North to South in the project area. The construction plans for Bickford Cottage had been submitted to the City for approval, and a waiver for detention storage for runoff of both projects was being sought.

The plans proposed collecting water in a storm pipe along the roadway and outletting into the Kirkpatrick Ditch. Approval was needed at this time for roadway improvements and for drainage north of the ditch. Due to ongoing ditch construction and hydraulic modeling issues, approval of the road crossing wasn't requested at this time. The motivating factor for the current request was commitment to Bickford Cottage to provide access to 350 South.

Dave Eichelberger asked if approval was being sought for a variance of no onsite stormwater detention for both the road and Bickford Cottage. Due to the fact that Alan had modeled Bickford Cottage as part of his drainage study and sized an 18-inch sub pipe into the site that would accept the 100-year runoff, he was seeking approval for both at this time.

Steve asked about Valley Lakes Commercial drainage. Alan explained that both projects would be submitted with independent drainage studies and outlet points. Dave stated that Kerry Daily had reviewed the detention waiver and recommended approval. Dave expressed concern regarding the Valley Lakes Commercial design. The layout at this time was tentative and would be driven by the types of tenants for the area. Alan remarked that service-type businesses were being considered.

Discussion was held on the impact of the projects to Kirkpatrick Ditch. Steve suggested that the design intent for the Kirkpatrick Ditch be a factor in their commercial development designs. Steve then summarized the intent of the design of the Kirkpatrick pertaining to direct release, density and types of development. The Surveyor's Office recommended approval for a waiver of storm water detention, and also for construction of Regal Valley Drive with the conditions listed on the March 29th Burke memo.

Ruth Shedd made a motion to waive the storm water detention for Regal Valley Drive, John Knochel seconded, and the motion carried. Ruth then made a motion for Regal Valley Drive to be approved with conditions specified, John Knochel seconded, and that motion carried.

Other Business

Steve Murray confirmed the time of the Benton / Tippecanoe Bi-County Otterbein Ditch Drainage Board meeting as the 22nd of May 2002, at 7:00 PM in Pierce Hall at United Methodist Church in Otterbein Indiana. He also reminded the board of the

informational meeting on the Leder-Newton Ditch to be held at 10:00 AM on May 29, 2002. This will be an informal meeting.

There being no further business, Ruth moved to adjourn and the motion carried.

KD Benson, President

Ruth E. Shedd, Vice President

Brenda Garrison, Secretary

John Knochel, Member

Tippecanoe County Drainage Board
Minutes
August 7, 2002
Regular Meeting

Those present were:

Tippecanoe County Drainage Board KD Benson President, Ruth Shedd Vice President, and John Knochel member, County Surveyor Steve Murray, Drainage Board Attorney Doug Masson, Drainage Board Engineering Consultant Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of July 3 Minutes

Ruth Shedd made the motion to approve the July 3, 2002 minutes, with John Knochel seconding. The being no objections, the motion carried and the minutes were approved.

Butler Meadows Subdivision

Mr. Robert Gross with Gross & Associates appeared before the Board to present Butler Meadows Subdivision for final approval with conditions. The site consisted of approximately 35 acres and was located on the south side of County Road 500 South, approximately 0.25 mile east of the intersection of old US 231 and County Road 500 South in Wea Township. Existing drainage from the site discharged in several directions. The majority drained to an existing 30-inch diameter CMP under County Road 500 South, then followed an established drainage pattern and outlet into the Little Wea Creek. Drainage would be collected in swales and storm sewers routed to a detention basin south of the culvert under County Road 500 South. The plans showed a wetland in the southeastern portion of the site which drained a small portion and would be routed through an outlet to a detention pond. The headwall of a private drain would be lowered in order to allow for drainage of the detention pond. Grading and new culverts for the ditch along County Road 500 South were planned. The majority of the ditch slopes would be 6 to 1; while in the County Road Right Of Way the slopes would be 3 to 1. City utilities would be installed in phases. The Surveyor recommended final approval with conditions as stated on the August 2, 2002 Burke memo.

Ruth Shedd moved to grant final approval with conditions listed on the August 2, 2002 Burke memo. John Knochel seconded and the motion carried.

Lexington Farms - Phase 3

Pat Sheehan with Schneider Corporation presented the Board with plans for the Lexington Farms Phase 3 project. The proposed development was located east of County Road 500 East and north of 50 South. Phases 1 and 2 of Lexington Farms had previously been constructed. There was temporary detention on the site for the two developments. Phase 3 consisted of 82 lots on approximately 15.14 acres of the 61.8 acre overall development. Stormwater would be discharged directly into the Berlovitz Regulated Drain. As part of this development, the Berlovitz Drain would be reconstructed from County Road 550 South for the extent of the property, approximately 1000 feet. Along with the request for approval and due to the reconstruction of the Drain, he requested a waiver of the standard stormwater detention for Phase 3. This would allow direct discharge into the Drain. The Surveyor recommended to the Board waiving of the stormwater detention requirements.

Ruth Shedd made the motion to waive the standard stormwater detention requirements and John Knochel seconded the motion. With no objections stated, the motion carried.

At that time the Surveyor clarified condition one of the August 2, 2002 Burke memo. The statement "The location of the reconstructed open channel should be closely coordinated with the Tippecanoe County Surveyor and revised plans submitted for review", should read, " The location of the reconstructed open channel must be approved by the Tippecanoe County Surveyor and revised plans submitted for review". Therefore the Surveyor recommended approval with conditions as stated on the August 2, 2002 memo, which included the amendment noted.

Ruth Shedd moved to grant final approval for Lexington Farms Phase 3 with conditions stated on the August 2, 2002 Burke memo with the amendment of condition one. John Knochel seconded the motion and the motion carried.

Raineybrook Subdivision - Part 2

Mr. Bill Davis with T-Bird Design presented the Board with plans for Raineybrook Subdivision Part 2, located north of County Road 500 South and west of US 231 in Wea Township. Part 2 of the development was located west of Raineybrook Estates and The Reserve at Raineybrook and was approximately 76 acres. He requested conceptual approval of the discharge

system. The site area drained was approximately 163 acres, however after diverting approximately 45 acres from other watersheds, the total area drained through this development would be approximately 200 acres. After completion of the development, the discharge rate to the Little Wea Creek would be approximately the same amount as currently being discharged. The 36-inch pipes located in the bottom or near the bottom of the swales would carry the low flow. The swales were designed to carry the 100-year storm event directly through the subdivision to the Little Wea Creek. Stormwater emergency routing was also included in the plans. All direct discharge would be routed through a sump catch basin before outletting into the Creek. Modelling information showed drainage for each phase individually and compiled to provide a better study. Mr. Davis referred to the system as a "Piggyback" system, which was the combination of swales and pipes. He informed the Board he had discussed the system with County Highway Engineer Tim Wells. Mr. Davis stated the homeowners association would maintain the offsite system, other than those portions in the Right of Way. As part of the conceptual approval, he requested a waiver of the standard stormwater detention requirement.

Tim Wells addressed the Board regarding the drainage plan. He began by formally thanking the Surveyor for keeping his office informed of projects submitted. He stated the "Piggyback" system used in the design was acceptable to his office.

Steve stated for the record the ordinance did not prevent the use of the combination of swales and storm sewer systems. Also the planned swales were well defined and large enough that he felt future landowners would not fill them in. He stated Raineybrook had one of the best homeowner associations in regard to resolving drainage issues. Steve discussed the provision of easements in strategic locations in order to facilitate the future Phase II Stormwater Quality measures if required. This would be addressed in the final plans.

Ruth Shedd moved for conceptual approval with conditions stated on the July 23, 2002 Burke memo for Raineybrook Subdivision Part 2. John Knochel seconded the motion. There being no objections, the motion carried.

Raintree Apartments Subdivision - Phase 1

Pat Jarboe with T-Bird Design appeared before the Board and requested final approval for Raintree Apartments Subdivision Phase 1. As the project would be constructed in phases, Pat was requesting approval for phase 1 only. The site was located on a 47.5-acre tract on the north side of County Road 200 South, just east of Windemere Drive.

The site's watershed was designed to outlet into the proposed F-Lake detention area. Portions of the site were located within the Berlovitz Regulated Drain and the Elliott Ditch watersheds. However, due to broken or plugged tiles it could not be determined that existing surface water flowed into the Berlovitz Drain tile. The capacity of the tile system design allowed for pass-through of surface water from any future offsite development. The proposed culvert and tile system directed the offsite surface water into the Berlovitz drain. Calculations of the system allowed for the 100-year condition. A 12-inch tile in the northern portion of the site outletted into the Elliott Ditch and would be dedicated for offsite drainage only.

Due to the site location, the Surveyor reviewed the modeling of the site. As stated previously, the site was located within two watershed areas, which contributed to complications with the design process. Steve stated he was prepared to recommend final approval with conditions as stated in the August 2, 2002 Burke memo. He also stated a waiver for the stormwater detention requirements would be necessary. In regard to condition two of the August 2, 2002 Burke memo, the Surveyor stated he would negotiate a fee to be paid to the County for use of storage in F-Lake. Condition three, concerning the relocation or vacation of Branch 13 would be addressed. A format for a written agreement regarding the fee (or compensation) had been worked up.

Ruth Shedd moved for a waiver of the stormwater detention requirements and John Knochel seconded. There being no objections, the motion carried. Ruth then moved for final approval on Raintree Apartments Subdivision Phase 1 with the exceptions of the conditions as stated by the Surveyor and in the August 2 Burke memo. John Knochel seconded the motion and the motion carried.

American Freightways

Tim Beyer of Vester & Associates appeared before the Board and requested final approval with conditions for American Freightways. The site was located along the east side of Concord Road and north of Brady Lane within the City of Lafayette. The Surveyor while the project was located within the city limits of Lafayette, the Board's review was for the effect on the Elliott Ditch. This was a small trucking facility and the request regarded paving an existing gravel parking lot surrounding the building. A drainage analysis plan of the site was prepared for review. At the direction of the City of Lafayette, the runoff was directed to an existing roadside ditch along Concord Road and drained south into Elliott Ditch. Tim requested final approval with a waiver of detention requirements for American Freightways. The Surveyor stated he had conferred with the City Engineer's office and the effect on the Elliott Ditch was nominal. The Surveyor was prepared to recommend a

waiver of stormwater detention requirements. KD asked if this would require Phase II, Steve stated this was mentioned in the memo. Tim stated there was an existing 30-foot Right of Way at the site.

Ruth Shedd moved to waive the stormwater detention requirements for American Freightways, and John Knochel seconded the motion. Ruth Shedd made the motion for final approval with the conditions listed on the July 31, 2002 Burke memo, and John Knochel seconded. As there were no objections, the motion carried.

General Drainage Ordinance #2002-24-CM

Steve conferred with the Drainage Board Attorney regarding a maintenance bond amendment to the Ordinance. Due to the fact the amendment had been added at the last minute, the attorney thought it prudent for the Board to acknowledge it at this time and approve the Ordinance as amended.

Ruth Shedd made the motion to approve the amendment to the Drainage Ordinance as written. John Knochel seconded the motion. Let it be known the Drainage board has approved the amended Drainage Ordinance #2002-24-CM as written.

Petitions for Encroachment

Paramount Development LLC for Paramount Lakeshore Subdivision presented the Surveyor with a Petition for Encroachment. The site was located on State Road 52 West of Morehouse Road. The Drainage Plan for the site was approved at the July meeting. The site crossed the Cuppy-McClure's 48 inch reinforced concrete tile. Steve stated the Petitioner was requesting an encroachment within the regulated drain easement. Regardless of a grant of encroachment, it was understood the County had the overall right of easement. However, the petition form itself would be edited for precise wording to that effect. The Surveyor would confer with the Drainage Board Attorney on this issue. In stating this, the Surveyor recommended the Board approve the Petition for Encroachment submitted by Paramount Development LLC. Ruth Shedd moved to grant approval of the Petition for Encroachment from Paramount Development LLC, and John Knochel seconded the motion. The motion carried.

RBT Development LLC for Paramount Lakeshore Subdivision also presented a Petition for Encroachment to the Surveyor. The petition was submitted for the installation of a 12-inch storm sewer and manhole structure which would drain the east pond of the subdivision. The Surveyor recommended the Board approve the Petition. Ruth Shedd moved to grant the Petition for Encroachment submitted by RBT Development LLC and John Knochel seconded the motion. There being no objections stated, the motion carried.

Colony Pines LLC for Sagamore Point Subdivision presented the Surveyor with a Petition for Encroachment. The site consisted of 24 acres and was located on Morehouse Road. The petition was to cross the 50 and 75-foot utility and drainage easement as well as a 50-foot Dempsey-Baker Regulated Drain Easement near Lot 58. American Suburban Utilities would install the sanitary sewer in the easement. Steve stated A.S.U. understood if during the reconstruction or maintenance of the Dempsey-Baker Regulated Drain it was necessary for their facilities to be moved or the ditch rebuilt to the previous condition, it would be at their expense. This was also stated in the Colony Pines LLC petition presented to the Surveyor. Due to the location of the sanitary sewer at roughly ten feet below the bottom of the ditch, the Surveyor felt it probably would not be an issue. With this stated, the Surveyor recommended the Board approve the Petition for Encroachment as presented. Ruth Shedd moved to approve the Petition for Encroachment by Colony Pines LLC, and John Knochel seconded the motion. The motion carried.

Other Business

Kirkpatrick Ditch Regional Detention Pond

Steve reviewed a proposal for professional Engineering Services from Christopher Burke Engineering for the Kirkpatrick Ditch Regional Detention Pond and Channel Extension. The estimated fee was \$20,000.00. This amount was largely due to the fact the engineering company did the design and the hydraulic studies previously on the ditch. This proposal was for a conceptual design on the channel reconstruction upstream of Concord Road, as well as determining the most productive site for the pond which serves the L.U.R. (Lafayette Union Railway) site and the area slated for industrial development. The Surveyor recommended the execution of the contract for services stated. He added there was a business which had looked at an eighty-acre site for development, and he felt there should be a plan in place for the future. KD stated she would encourage action to be taken at this meeting regarding the contract. In response to a question from Ruth Shedd regarding the contract, Steve stated the contract was in a standard format. The engineering firm would charge hourly and, the estimated fee was not to exceed \$20,000.00. Due to the hourly charge, the fee could come to less than the \$20,000.00 stated. He stated the monies were available from the Edit fund previously allocated for this project.

Ruth Shedd made the motion to approve the contract from Christopher Burke Engineering for the Kirkpatrick Ditch Regional Drainage upstream of Concord Road, not to exceed \$20,000.00. John Knochel seconded the motion, and the motion carried.

J.B. Anderson

This drain served the stormwater drainage of Clarks Hill. The Surveyor received a contract for a project scope by Christopher Burke Engineering. He encouraged the Board to review copies which he gave them at that time. The contract covered the history and overall problem associated with the ditch. This ditch was put in on the EDIT request. The Surveyor stated he would encourage and hoped to see participation with the study from the Town of Clarks Hill.

At that time KD asked for any public comments. As there were no comments, Ruth Shedd made the motion to adjourn. John Knochel seconded the motion and the meeting was adjourned.

KD Benson, President

Ruth E. Shedd, Vice President

Brenda Garrison, Secretary

John Knochel, Member

Tippecanoe County Drainage Board
Minutes
October 2, 2002
Regular Meeting

Those present were:

Tippecanoe County Drainage Board; KD Benson President, Ruth Shedd Vice President, and John Knochel member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of September 3, 2002 Leader-Newton Hearing Minutes

Ruth Shedd made the motion to approve the September 3, 2002 Leader-Newton Hearing minutes as written and John Knochel seconded. The motion carried.

Approval of September 4, 2002 Minutes

Ruth Shedd made the motion to approve the September 4, 2002 minutes as written and John Knochel seconded. The motion carried.

Huntington Farms Phase 3, Section 1

As there were no representatives present for the Huntington Farms Phase 3, Section 1 development, the Board tabled the project until the next meeting.

Benjamin Crossing Planned Development

Mr. Pat Sheehan of the Schneider Corporation appeared before the Board and requested conceptual drainage approval for Benjamin Crossing Planned Development. The proposed site was located at the northeast corner of County Road 250 East (Concord Road) and County Road 450 South in Wea Township, approximately two miles south of the City of Lafayette.

The Surveyor recognized Schneider Corporation for their use of GIS data with the overall site plan of the development. KD stated the plan's review process was easier with the use of the data.

Pat stated the drainage for the site was in two sections. The site consisted of 160 acres and would contain 630 lots and three stormwater detention ponds. The East half drained to the north onto an overland area within the easement of the Kirkpatrick Regulated Drain, which cut through the northeast corner of the property. The West half drained from the south to the north and ultimately discharged to the northwest corner into a ditch along Concord Road. A combined onsite and offsite watershed area of 420 acres would impact the Kirkpatrick Regulated Drain. Water would be captured from offsite discharge points onto the site in the same locations. It would be routed through the site in existing channels which would be modified, or through storm sewer basins and collected into the onsite ponds. Two interconnected ponds located in the central and northeast portions of the site would discharge to the Kirkpatrick Regulated Drain, while the pond located in the northwest portion of the site would discharge to the existing swale. The stormwater would be captured onsite and the release rate reduced through the existing discharge points. The developers were looking at realignment and reduction of easement for the Kirkpatrick Regulated Drain. The Surveyor stated he would be meeting with Schneider representatives after the meeting to look at preliminary ideas and concerns for the Kirkpatrick Drain upstream of Concord Road. He reiterated Pat had requested conceptual approval only. Those concerns would be discussed at the meeting. The Surveyor recommended conceptual approval with conditions as stated on the September 27, 2002 Burke memo.

Ruth Shedd moved for conceptual approval for the Benjamin Crossing Planned Development with conditions as stated. John Knochel seconded the motion and the motion carried.

The Landings at Valley Lakes Phase 3

Randy Peterson with John Fisher and Associates represented Cedar Run Limited and appeared before the Board to request final approval for The Landings at Valley Lakes, Phase 3. The site was located east of South 18th Street, approximately one half mile south of County Road 350 South in the City of Lafayette. The proposed project would provide 42 residential lots on 17.34 acres. A 12.49-acre watershed south of the site drained through the property. A system of storm sewer pipes and drainage swales would handle the 10-year onsite and 100-year offsite runoff. A temporary channel and sediment basin was designed to convey runoff north toward the Kirkpatrick Drain. The drain flowed east to west approximately 1600 feet north of the development's north boundary line. A portion of Branch #7 of the Kirkpatrick Drain passed through the northeast corner of the Phase 3 project site. The existing 10-inch clay tile would be replaced with a 12-inch reinforced concrete pipe. The flows would be rerouted to accommodate the lot layout. Approval was sought for direct discharge into the Drain, reconstruction of Branch #7, and the reduction of the existing easement to accommodate the lots. The construction plans for this phase had been approved and signed by the City of Lafayette. The Surveyor stated due to the location within the City Limits, his purpose was to review the plan's impact on the Regulated Kirkpatrick Drain and its laterals. He stated his office sought assurance that the 12-inch tile would handle the flow. The paperwork to reconstruct the tile drain and move existing easements would be forthcoming. He felt Phase II requirements for strategically placed catch basins should also be addressed in the plans. Temporary storage was requested until the reconstruction of the Kirkpatrick Channel was completed in this area. Construction had been started and those concerns would be addressed. Steve recommended final approval with conditions as stated in the September 26th, 2002 Burke memo as well as the conditions stated.

Ruth Shedd made the motion to waive the detention storage requirements for The Landings at Valley Lakes Phase 3, and John Knochel seconded. The motion carried. Ruth Shedd moved for final approval of The Landings at Valley Lakes Phase 3 with the conditions stated and those conditions noted in the September 26th, 2002 Burke memo. John Knochel seconded the motion and the motion carried.

Construction Maintenance Bonds

Steve Murray presented the following Construction Maintenance Bonds for acceptance by the Board:

Maintenance Bond #3443292, \$5163.00 Fairfield Contractors for Hadley Moor Subdivision Phase 1 Part 5- Drainage Swale and Pipe

Maintenance Bond #3443295, \$8906.00 Fairfield Contractors for Lindberg Village Phase 3

Maintenance Bond #5855815, \$9412.00 A&K Construction for Lindberg Village Phase 2 Part 1

Maintenance Bond #5855814, \$11,484.00 A&K Construction for Lindberg Village Phase 1 Zone R-1

Maintenance Bond #5855816, \$3926.00 A&K Construction for Lexington Farms Subdivision Phase 2

Ruth Shedd made the motion to accept the bonds as noted above, and John Knochel seconded. The motion carried.

Other Business

Clarks Hill

The Surveyor suggested a dialog needed to be opened for assistance in resolving the drainage problems of Clarks Hill. Ruth suggested the public should be invited for a discussion with the Board at a future meeting. KD encouraged the Surveyor to follow up on this issue.

Ruth Shedd moved to adjourn the meeting and John Knochel seconded her motion. The meeting was adjourned.

KD Benson, President

Ruth E. Shedd, Vice President

John Knochel, Member

Brenda Garrison, Secretary

Tippecanoe County Drainage Board
Minutes
November 6, 2002
Regular Meeting

Those present were:

Tippecanoe County Drainage Board KD Benson President, Ruth Shedd Vice President, and John Knochel member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of October 2, 2002 Minutes

Ruth Shedd made the motion to approve the October 2, 2002 minutes. John Knochel seconded the motion, and the motion carried.

Huntington Farms Subdivision Phase III Section 1

Mr. Brian Sullivan from Congdon Engineering appeared before the Board and requested final approval for Huntington Farms Phase III Section 1. The site was located in Wabash Township between County Road 200 North (Lindberg Road) and State Road 26. It was approximately 2000 feet west of County Road 300 West (Klondike Road) and was a continuation of the existing Huntington Farms Subdivision. The site consisted of 11 acres (31 lots) out of the 39.8 acres remaining in the overall development. As part of the first two phases a detention pond was constructed in the southwest portion of the site to provide drainage for the entire area.

The Surveyor recommended final approval with conditions, excluding conditions 2,4, and 5 which had now been met. Ruth Shedd moved for final approval of Huntington Farms Subdivision Phase III Section 1 with conditions as specified. John Knochel seconded the motion. The motion carried.

J.N. Kirkpatrick Branch #7 - Partial Reconstruction

Alan Jacobson from Fisher & Associates appeared before the Board and requested approval of the partial reconstruction (220 feet) of tile branch #7 of the J.N. Kirkpatrick Drain. Located in the northeast corner of The Landing at Valley Lakes Phase III Subdivision site, the current tile was a 10-inch clay tile and would be replaced with a 12-inch RCP pipe with modern precast structures. The Surveyor informed the Board the request fell under I.C. 36-9-52.5. At that time he reviewed the Code for the Board. The developer would pay the entire cost of the relocation. The Surveyor stated the reconstructed portion would not adversely affect other landowners within the watershed. KD questioned the easement reduction and future access to the tile. The Surveyor stated he was satisfied with the relocation plans submitted as part of the subdivision construction plans and felt the easement was sufficient for maintenance of the tile. The Drainage Code allows for an easement reduction to 30 feet total for an urban drain. Access would be through the utility and drainage easement.

Ruth Shedd moved to grant approval of the partial reconstruction of Branch #7 of the J.N. Kirkpatrick Drain. John Knochel seconded the motion. The partial reconstruction was granted.

**Petition of Reconstruction and/or Maintenance of Drain
Elijah Fugate Joint Drain /Tippecanoe and Montgomery Counties**

The Surveyor informed the Board a Petition was received to reconstruct or increase the maintenance fee for the Elijah Fugate County Regulated Drain. The Surveyor stated he was aware of the drain's poor condition. He had reviewed the drain several times and surveyed portions of it. There was roughly 1000 feet of original tile, which had been blown-out and/or cut out resulting in an open ditch. Mr. David Malsbury had contacted the office and circulated the petition. There were roughly 882.646 acres within the watershed, with the maintenance assessment set at \$1.00 per acre. Mr. Malsbury with 160 acres, Mr. Pendleton (82 acres) and Gary Standeford (160 acres) signed the petition. The Surveyor felt it would be feasible to increase the maintenance to \$3.00-\$5.00 an acre. The Drain was located east of US 231, crossed 1200 South and extended toward the South County line. He stated the petition was warranted. He then directed the secretary to contact Montgomery County to inform them of the submitted petition. The Board directed the Surveyor to proceed with the process according to Indiana Drainage Code.

OTHER BUSINESS

Otterbein Ditch Joint Meeting July 9, 2002 Minutes

Commissioners Ruth Shedd and KD Benson who had attended the meeting accepted the July 9th, 2002 minutes as written. The secretary was then directed to circulate the minutes and obtain signatures from all members who served on the Joint Board for the Otterbein Assessment Hearing.

December Drainage Board Meeting Date/Time Change

The December 4th, 10:00 a.m. meeting of the Drainage Board was changed to December 10th at 10:00 a.m., due to a scheduling conflict.

Drain Maintenance Review

The Surveyor informed the Board he planned to review the Drain’s accounts. He felt there were several drains that would benefit by the one-time 25% increase in maintenance fees allowable by the Drainage Code. He would report his findings to the Board at the December meeting.

As there was no other business before the Board, Ruth Shedd made the motion to adjourn. John Knochel seconded and meeting was adjourned.

KD Benson, President

Ruth E. Shedd, Vice President

Brenda Garrison, Secretary

John Knochel, Member

Tippecanoe County Drainage Board
Minutes
December 10, 2002
Regular Meeting

Those present were:

Tippecanoe County Drainage Board KD Benson President, Ruth Shedd Vice President, and John Knochel member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of November 6, 2002 Minutes

Ruth Shedd made the motion to approve the November 6, 2002 minutes as written. There being no objections, John Knochel seconded the motion and the motion carried.

Benjamin Crossing Planned Development

Mr. Pat Sheehan representative of the Schneider Corporation appeared before the Board to present Benjamin Crossing Planned Development Section One for final approval with conditions. The site was located at the northeast corner of County Road 250 East (Concord Road) and County Road 450 South in Wea Township approximately two miles south of the City of Lafayette and made up of farm fields and a small amount of wooded acreage. Pat reminded the Board that conceptual approval was obtained for the overall Development at the October Drainage Board meeting. The 160-acre site would be developed in five (5) phases. Section One (Phase One) included the construction of 205 lots and all of the proposed ponds. Onsite drainage consisted of approximately 160-acres.

The plans showed offsite drainage in Basin W (located south of the site) drained north to a culvert under County Road 450 South unto the site, through Basin C and ultimately to the Kirkpatrick Legal Drain. In addition to Basin W, a larger Basin to the east also collected to the Kirkpatrick Legal Drain and drained through the northeast corner of the site. Approximately 260-acres of overall offsite drainage drained through the site. In response to KD's inquiry, Steve informed the Board a Basin was basically the same as a sub-watershed. Pat then explained that use of Basins was an easier way to track drainage through a site.

In the proposed conditions, Section One would consist of three (3) ponds. These ponds would collect and detain the site's stormwater, then discharge to two locations. The northeast location would contain a temporary 6-inch outlet to restrict the flow to the regulated drain tile until future phases of the Kirkpatrick Ditch Regional Detention System were completed. It would be designated as a Regional Detention Facility. The pond depth would be 10 foot from the water surface. Currently within a ten-year existing condition there are approximately 40cfs, the temporary outlet would limit that to 2cfs, a substantial reduced peak discharge. The flows, collected in a small pond at the northwest portion of the site, would utilize an orifice plate to reduce the outflow to a 30-inch RCP shown extended 1,096 feet to the Concord Road Bridge. Once the final section is developed a new outlet would be installed and the temporary tile would be removed. As part of the project, an easement with the landowner to the north had been acquired for the possibility of an overland drainage system. Pat and Bill Davis had met with Mr. Standifur to review the drainage portion of the plans.

Pat requested preliminary approval for the whole site layout and final approval for Section 1 with conditions as noted in the December 5th, 2002 Burke memo. Steve stated his concern was detention ponds outletting into County Regulated Drains or private tiles. Historically this had not been done. Consideration was given in the planning of this development of the Kirkpatrick Upstream Concord Reconstruction. He recommended approval for the release on a temporary basis for Section One. He stated he did have concerns for conceptual approval for the subsequent sections/ phases and did not feel it would be prudent to approve them at this time. He asked if an easement had been obtained for the outlet of the northwest pond. Pat responded that an easement was obtained. Number six on the Dec. 5th Burke memo, should be corrected to read ... **is required** to clarify instead of applicant **should** clarify.

At that time the Surveyor recommended final approval with conditions and change thereof to Benjamin Crossing Planned Development Section 1. Ruth Shedd moved for final approval for Section One of Benjamin's Crossing Planned Development with conditions and correction to number 6 on the December 5th Burke memo. John Knochel seconded the motion and the motion carried.

Steve Murray

Maintenance Bond

Steve presented a Maintenance Bond from A&K Construction Inc. #5855821 in the amount of \$4950.00 that covered Drainage Improvement, Swales and Erosion Control outside the Public Right of Way for Saddlebrook Subdivision Part 3 Phase 3. At that time he recommended acceptance of the Bond. Ruth Shedd moved to accept the Maintenance Bond for Saddlebrook Subdivision Part 3 Phase 3 from A&K Construction. John Knochel seconded the motion and the motion carried.

Petition to Remove Obstruction /Baxter

Steve requested continuance until the next meeting of the petition; more work was needed before presenting his findings to the Board. KD directed the secretary to put it on the next meeting's Agenda.

Release of Easement

A drainage request had been received from Vester & Associates for River Bluffs Subdivision Part 2 and Replat of Lot 13 Part 1, River Bluffs Subdivision Part 4 and replat of Lot 16-18 Part 1. Discussion was held with the Attorney concerning the request and as they were no representatives in attendance, the Board chose to table it until the next meeting. Ruth Shedd moved to table the Request and John Knochel seconded the motion.

Memo to Board

Steve read to the Board Indiana Code #36-9-27-42 that covered a one time twenty five percent increase to regulated drains in need. The code applied to drains on assessment and that had been through the hearing process. The one time increased rate may be raised the noted percentage. He then presented to the Board a list of drains that qualify. Discussion was held concerning the list and Steve asked the Board to review and be prepared to make a decision at the January meeting. He stated he would be happy to sit down with them and review each one on the list before then. He stated many drains were in the red and needed to be dealt with accordingly. Steve then conferred with the Attorney concerning the Waiver of Rights by a County where joints drains are involved. Dave confirmed on those drains which a County had waived their rights, then a joint drainage meeting for a one time increase would not be necessary. He hoped to have a list of those drains in need of Reconstruction, in need of Assessment Increase and those in need of Reclassification to Urban Drains. Typically Urban Drains have a per acre assessment for farmland and a per lot assessment for residential. The Berlovitz Drain was an example of such a drain that would fall under the requirements for an Urban Drain status. Bill Easterbrook had presented the Surveyor with a bill for tile maintenance on the Ray Skinner Drain and Steve asked the policy of the Board for payment of repairs on drains. Ruth Shedd stated the Board should only pay for maintenance on that part of the drain which is under assessment.

OTHER BUSINESS

Mr. Malsbury from Lauramie Township approached the Board to discuss the condition of the Elijah Fugate Drain #30 and gave his support to Steve for the increase of assessment if proposed and encouraged the Board to look at the Drainage in Lauramie Township as a whole. Steve then reviewed for the Board the location and condition of the Elijah Fugate tile as well. There was approximately 3000 feet of tile broken down. A petition for Reconstruction had been presented to the Surveyor's office. The watershed acres involved were 822.

2003 Meeting dates and time

The Board and Surveyor, decided upon the first Wednesday of each month for 2003, as being the Drainage Board's monthly meeting day and 10 a.m. as the time. The January meeting would be held on the 8th due to the New Year holiday.

Ruth Shedd then moved to adjourn the meeting and John Knochel seconded the motion. There being no objections, the meeting stood adjourned.

KD Benson, President

Ruth E. Shedd, Vice President

Brenda Garrison, Secretary

John Knochel, Member

Tippecanoe County Drainage Board
Minutes
February 5, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board Ruth Shedd President, John Knochel Vice President, and KD Benson member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

The Tippecanoe County Drainage Board met February 5th, 2003 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, Ruth Shedd, calling the meeting to order.

Approval of January 8, 2003 Minutes

John Knochel made the motion to approve the January 8th minutes with K.D. Benson seconding. As there were no objections the motion carried and the minutes were approved.

Appointment of Secretary to Drainage Board

K.D. Benson moved to appoint Brenda Garrison to serve as Drainage Board Executive Secretary for the calendar year of 2003. John Knochel seconded the motion and the motion carried.

Request to Modify Drainage Easement

Mr. Doug Mennen approached the Board to request a modification of a part of a Drainage Easement to an open ditch known as the **Stoddard Ditch**. The reduction request was located in a part of Section 31 Township 21North and Range 4W. While the ditch was a court drain, it did not have an assessment on it. He requested the Easement from the top of the bank on the east side to be modified from 75 feet to 35 feet on the property as shown on the drawing. (While the request stated 30 feet, the drawing indicated 35 feet.) The Surveyor's office did not foresee a problem with the reduction and recommended approval. John Knochel made a motion to approve the request to modify the Drainage Easement as requested from 75 feet on the east side of the Stoddard Open Ditch to 35 feet on the east side of the Stoddard Open Ditch. KD Benson seconded the motion and the motion carried.

Petition to Vacate a Portion of Platted Easement/ Lot 7 Winding Creek Subdivision - Brett & DeEtta Hawks

Mr. Matt McQueen representing Brett & DeEtta Hawks approached the Board. Mr. McQueen presented a petition to vacate a portion of a platted easement on Lot 7 in Winding Creek Subdivision. Approximately 200 square feet of the house built on the lot encroached on the platted utility and drainage easement. The petition would be presented on March 3rd to the Commissioners, however Mr. McQueen thought it to be prudent to request Drainage Board approval before the March 3rd meeting. The Surveyor informed the Board historically if the easement reductions were reasonable, vacations were granted. The vacated area requested was immediately around the house only, as shown on Starr and Associates drawing job # 10204827-2. While a storm sewer was located within the platted easement, the maintenance of the sewer would not be adversely affected, and no utilities would be affected. The Surveyor recommended approval of the vacation to the Board. John Knochel moved to approve the petition to vacate a portion of a platted easement on Lot 7 in Winding Creek Subdivision. KD Benson seconded the motion and as there were no objections, the motion carried.

2003 Engineering Review Contract Proposal- Christopher B. Burke Engineering LTD

The Surveyor informed the Board the fees in this year's Engineering Review Contract have stayed the same as the previous year, as the only change was the ownership of documents. The previous year's contract granted Christopher Burke ownership. The Surveyor stated government entities usually maintained ownership of documents. The change was made to the ownership of documents to the Government. KD inquired if there was a termination clause within the contract, as most contracts contain the clause. Mr. Luhman stated he had reviewed the contract and it included the clause. The Surveyor recommended acceptance of the proposed contract by Christopher B. Burke Engineering LTD. John Knochel made the motion to approve the Engineering Review Contract Proposal between the Tippecanoe County Surveyor Office, Drainage Board of Tippecanoe County and Christopher B. Burke Engineering LTD. KD Benson seconded the motion to approve the contract as stated and the motion carried.

2003 Legal Counsel Contract Proposal

The Surveyor presented the Board with a contract between the Tippecanoe County Drainage Board and the firm of Hoffman, Luhman and Masson, P.C. to represent the Drainage Board for the calendar year of 2003. The contract did not reflect any changes from the previous year's contract. John Knochel motioned to approve the contract between Tippecanoe County Drainage Board (referred to as "the Board") and the firm of Hoffman, Luhman and Masson, P.C. for legal services for the calendar year of 2003. KD Benson seconded the motion for approval and the motion carried.

Steve Murray

Drains: Active and Inactive List

The Board members were referred to their copy of the 2003 Drain Active and Inactive List. He explained to the Board once a drain's balance reaches four times its yearly assessment, it automatically goes to inactive status. The list would be filed with the Auditor's Office and adjoining Counties which were affected also. The Surveyor had conferred with the Attorney concerning the waiver of rights by Counties in some instances and although it was not required in these instances, the Surveyor felt it would be courteous to inform them of any actions taken. Ruth Shedd stated since Drainage Board members change from time to time, it would be prudent to notify them when changes occurred. John Knochel moved to approve the Active and Inactive List of Drains presented to the Board and directed the list to be part of the official minutes record book. KD Benson seconded the motion and the motion carried.

Classification of Drains Report

Drains In Need of Reconstruction

The members of the Board were furnished with a Classification of Drains (Partial) per I.C. 36-9-27-34. The Surveyor stated the Indiana Drainage Code requires Surveyors to present this report to the Board. While this report was preliminary, he wanted to present this to them. The first item on the report was Drains in need of Reconstruction.

The first drain listed was the Julius Berlovitz on the east side of town which had a design in place for reconstruction. This is an old agricultural tile and crossed 500 East diagonally at the McCarty Lane intersection and headed northeast under I 65 eastward to 550E and 500S. The outlet is shortly north of 50 South.

The second drain listed was the Lewis Jakes ditch, a hearing held several years ago and the petition failed due to several landowners that were against converting the tile ditch to an open ditch. The Surveyor had several conversations with DNR on this ditch due to the need of waterways by landowners within the watershed. However due to the consistent break down of the tile, the landowners were unable construct a waterway. He stated a new hearing was warranted.

The third drain listed was S.W. Elliott which included Wilson Branch and Treece Meadow Relief drain was listed partially due to the future F-Lake project and because some of the branches of the drain would need to be looked at as development continues on the East side. Part of the Elliott drain had been reconstructed in the late 1980's, such as the Treece Meadow Relief Drain.

The fourth drain listed was the J.N. Kirkpatrick from upstream of Concord Road near the end at 450East had a preliminary conceptual design that had just been completed by Christopher B.Burke Engineering LTD.

The fifth drain listed was the Anson Drain in the NW part of the County, an old agricultural tile that crosses under the interstate in several locations. Several branches had broken down and were in need of major maintenance or reconstruction.

The sixth drain listed was the Elijah Fugate Drain which was being reviewed at this time, as there had been a Petition for Reconstruction or Maintenance submitted to the Surveyor's office.

The seventh drain listed was the J.B. Anderson Drain which crosses through Clarks Hill and would need attention.

Drains In Need of Periodic Maintenance

The Surveyor reviewed the list of twenty-seven drains in need of periodic maintenance. Some of the drains listed fell between major maintenance and/ or reconstruction. The maintenance needed for each drain on the list was indicated. A copy of the list would be attached to these minutes.

Surveyor Recommendation of Hearings in 2003

Supplied to the Board was a list of drains the Surveyor would recommend a hearing be scheduled for and drains to be reclassified as Urban Drains during 2003. The three drains which the Surveyor recommended a hearing be held in 2003 were as follows:

Elijah Fugate: A petition was pending at this time and a hearing would be set up in the near future.

Julius Berlovitz: A petition had been received several years ago and the drain included a large watershed area. The Surveyor felt the hearing would be well attended as the watershed area serves several Subdivisions and included prime development ground.

Lewis Jakes Ditch: The Surveyor informed the Board due to the poor condition of this drain, they had one of three options; reconstruction, raise the present rate of assessment, or vacate the drain as the drain continued to break down and was in need of constant maintenance.

Urban Drain Classification for 2003

Drainage Code 36-9-27-67 instructs the County Surveyor to recommend to the County Drainage Board any drains to be classified as Urban Drains. He informed the Board when or if drains were classified as Urban it meant the drain needed reconstruction. Presently this County had one drain within that classification, it was the S.W.Elliott Ditch. The Surveyor recommended the Julius Berlovitz and the J.N. Kirkpatrick to be reclassified as such. The Surveyor requested the reports presented be considered as drafts as he wanted to add the drain's history and explanation of recommendations. He also hoped to review the prioritization of drains on the lists. He expected to review portions of this report in the next few meetings. He also hoped to add the Moses Baker to the list of drains in need of a hearing.

At that time John Knochel asked Steve to explain the present ongoing reconstruction for the J.N.Kirkpatrick, since this drain was listed under need of Reconstruction. Steve explained the section presently under construction ran from 350 South east across Ninth Street, Eighteenth Street, and a new conspan structure at Concord Road. The old agricultural tile was outletted at the east right of way, and into the newly constructed channel at Concord Road. From that point to the east and almost to U.S. 52 was the section referred to on the list as being in need of reconstruction. Expected future development would require the reconstruction of that section. Ruth Shedd inquired if the report had been given in the past years and the Surveyor noted he had not found in the minutes where it had been done. Once the Board accepts the report, the Surveyor at that time should prepare a short and long-range plan for drainage infrastructure. Dave Luhman noted it would also be helpful to the landowners in the event of inquiry.

Hearing Date and Time Set

The following hearing date was set for the Elijah Fugate and the Moses Baker Drains. April 2, 2003 at 10:00 a.m. was set for the Elijah Fugate Drain, and April 2, 2003 at 11:00 a.m. for the Moses Baker Drain. The Drainage Board meeting was previously set for this date and would be moved up to 9 a.m. to accommodate the hearings.

OTHER BUSINESS

Petition for Removal of Obstruction / Ronald and Marsha Baxter

At that time Dave Luhman excused himself from the hearing and left the room as he had represented one of the parties in the past. He would not participate in the hearing or be a part of the Boards decision in this matter.

The Surveyor informed the Board his office received a Petition to Remove an Obstruction in a Mutual Drain or Mutual Surface Watercourse located at 1237 West 625 South on August 26, 2002. The surveyor investigated and had reported it appeared to have some blockage along the swale in question between the two properties on 625 South. The names of Petitioner were Ronald and Marsha Baxter; the blockage was on the property owned by Kevin Beason at the location aforementioned. It was to be determined if the blockage was natural, man-made and/or intentionally blocked. Elevation shots were taken along the swale approximately 100-150 feet south of the south side of 625 South and showed a flat surface. Very little if any fall was the result of the shots taken. The Surveyor stated he reviewed the GIS property lines. The aerial photos indicated the blockage to be on the Beason property which started on the property line then 150 feet south of 625 and took a slight turn to the Northeast.

At that time Ruth Shedd invited the Petitioner, Mr. Baxter to approach the Board and state his position. Mr. Ronald Baxter of 1323 West 625 South, Lafayette Indiana 47909 then addressed the Board. He supplied the Board with additional pictures of the obstruction. He stated there had always been a water problem on his lot and the neighbors. A private tile, which ran under the Mr. Beason's property, has caved in and was full of tree roots. The water table had risen and no one wanted to fix the tile. Years ago it was surveyed by the previous Surveyor Mike Spencer, which showed minimal fall to the ditch. Mr. Baxter contacted John Hack approximately in 1996 and a swale was put in at his and the previous neighbor Jack Bedwell's expense.

Within months of moving in, Mr. Kevin Beason notified Mr. Baxter he wanted to fill in the swale and the ditch in front of his home. Approximately in April of 2000, Marsha Baxter inquired as to the legalities of the neighbor's actions if he filled in the swale and ditch. She was informed that as a mutual drain, he could not just fill in the ditch and swale. At that time they contacted Mr. Beason offering him copies of the statute. Mr. Beason refused the copies and did not want to work with them. On April 28, 2000 Mr. Tom Busch Attorney for Mr. & Mrs. Baxter contacted Mr. Beason by mail informing him of I. C. 36-9-27-2. After that notification, Mr. Beason had a load of dirt placed on the back of his property in order to block the water

from crossing his property. The attempt to block the water failed and the problem continued. Pictures were provided to the Board, which showed the area in question before and after the blockage. Another attempt in May of 2002 was made to correct the problem and there was nothing done. Mr. Baxter felt intent to block the drainage by Mr. Beason was demonstrated and requested the Drainage Board direct his neighbor to clean out the blockage and restore to the condition prior to Mr. Beason's moving in. Mr. Baxter stated he had been pumping water from his crawl space regularly. He also stated he realized the drainage in that area was poor and he could deal with that, however he felt this particular problem was avoidable and thus the petition was filed in August of 2002 and the matter brought in front of the Board. At that time Ruth Shedd asked to hear from Mr. Beason.

Shawn Beason approached the Board at Ruth's request. Shawn was Kevin Beason's brother and due to the death of Mr. Kevin Beason on September 1, 2002 he was co-representative of the Estate. He stated he was unaware of any problems until January 8, 2003. The notification by the Board was sent to the Law Office of Bennet, Behning and Clary, as the firm representing the Estate. Due to this Mr. Beason felt the petition should be thrown out, as he did not receive the notification personally. He stated the house is presently for sale and this procedure had stalled the process. He said his brother had discussed the issue with him in the past and he felt filling in the swale would push the water out to the ditch along the road. He asked if there were pictures or evidence that actually showed his brother filling in the ditch. He felt the cattails had grown naturally, and the tile that ran across the back yard was in poor shape at the time of his brother's purchase of the home. He did not feel the estate should be held responsible for what he thought was a natural occurrence.

At that time the Surveyor asked Mr. Baxter if a receipt existed for the previous work done on the swale and ditch. Mr. Baxter stated he was in possession of a receipt for the previous work. Himself and the previous owner of the property in question shared the cost. The Surveyor informed the Board of their options. They were to determine if blockage was intentional or whether it was a natural accumulation. The statute called for the Board to pass on to the respondent (Mr. Beason's Estate) the cost of clean out if found to be intentional. If the blockage was found to be a natural accumulation or due to lack of maintenance, both parties would bear the cost. Mr. Baxter stated lack of mowing the area had certainly contributed to the drainage problem. He also stated he felt Mr. Beason had planted a tree in the swale. Shawn Beason asked to see a picture of the tree in the swale. The Surveyor asked if the tree was voluntary and Mr. Baxter responded he felt the tree was planted and not voluntary. Mr. Beason felt the tree was voluntary. Mr. Beason requested the Board make a decision today as the house was currently for sale.

John Knochel stated he felt Mr. Baxter should have been allowed to do maintenance on the swale in the past. He agreed notification should have been sent to Mr. Beason personally and in a timely manner in order to better prepare for the hearing. He also stated Mr. Beason had the right to request a postponement and John would be inclined to agree to one. However, Mr. Beason did not want to delay it any longer. KD stated she thought it was an unintentional blockage and the cost of maintenance should be split between the two parties involved. However Mr. Baxter stated he felt it was intentional. Ruth Shedd then asked Mr. Baxter if he would be willing to share the cost of cleaning it out. He stated he was concerned with what a new neighbor would be agreeable to. The Surveyor recommended an agreement be written up between the parties before the house was sold. He also suggested a copy of the official minutes be provided to both parties for any future reference. The Board would issue an Order for the removal of the obstruction. The Surveyor asked Mr. Beason what his opinion was. Mr. Beason informed the Surveyor the estate was "upside down" as there was not much money and he wanted this to be done cost efficiently. Mr. Murray apologized to Mr. Beason for the untimely notification.

KD moved for the two neighbors to share the cost of the obstruction removal by the joint effort of Mr. Baxter and Mr. Beason. John Knochel seconded the motion and the motion carried. John then made the motion for the obstruction to be cleaned up in six months' time and KD seconded the motion. The motion carried.

Mr. Beason noted the Estate had to be wrapped up by May of this year. The Surveyor encouraged both parties to work together to accomplish the work needed in a timely and cost efficient manner.

As there was no other business before the Board, John Knochel moved for adjournment and KD seconded. The meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

K.D. Benson, Member

Tippecanoe County Drainage Board
Minutes
March 5, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison. Commissioner and Vice President, John Knochel, member was absent from the meeting.

The Tippecanoe County Drainage Board met March 5th, 2003 in the Tippecanoe Room of the Tippecanoe County Office Building, 20 North 3rd Street, Lafayette, Indiana with Commissioner/President of the Drainage Board, Ruth Shedd, calling the meeting to order.

Approval of February 5, 2003 Minutes

K.D. Benson made the motion to approve the February 5, 2003 minutes and Ruth Shedd seconded the motion. The motion carried.

River Bluffs Subdivision Parts 2 and 4

Tim Beyer with Vester and Associates appeared before the Board to request final approval for River Bluffs Subdivision Parts 2 and 4. Mr. Beyer presented a map of the site which was located south of Greenview Drive and north of the intersection of Pretty Prairie Drive and County Road 500 East. The site contained approximately 14.9 acres and would be developed into twenty-nine (29) single-family, residential lots. The map also included parts one (1) and three (3) of River Bluffs Subdivision. Preliminary drainage approval had been given for the site. The lot configuration was changed from the original submission in 2001 resulting in eight additional lots and a reduction of street surfaces. Due to the size of the lots (3/4 acre) and soil on the site, the increased runoff would be minimal. Additionally, drainage swales conveyed the runoff to a large ravine that ran to Harrison Creek and ultimately to the Wabash River. Due to this, a waiver of detention requirements was requested. The State owns the property between the south boundary of the site and Harrison Creek as part of the Prophetstown State Park. The Surveyor noted due to the direct release attention had been given to insure the runoff was contained in the ravines.

K.D. Benson made the motion to waive the standard stormwater detention requirements and Ruth Shedd seconded the motion. The motion carried and the waiver was granted. The Surveyor informed the Board a final approval was recommended with the conditions of easement width, design and protection or armament within those easements. Due to problems with residents filling in drainage swales, he would need to review final easement widths to insure the swales were completely within the easements and the riprap proposed, particularly within the swales on the south boundary was designed properly.

K.D. Benson made the motion to give final approval to River Bluffs Subdivision Parts 2 and 4 with the conditions listed on the February 27, 2003 Burke Memo as well as the condition noted by the Surveyor. Ruth Shedd seconded the motion as stated and the motion carried.

OTHER BUSINESS

Reconstruction Request/ Main Branch of the Kirkpatrick Regulated Drain Benjamin Crossing

Mike Wylie of Schneider Corporation approached the Board to request approval of reconstruction on the main branch of the Kirkpatrick Legal Drain located within the Benjamin Crossing Planned Development located at Concord Road and 450 S at the NE corner. The project was given final approval with conditions at the December 10th, 2002 Drainage Board meeting. The construction plans had since been signed off on, and the plat approved. This request was the final stage concerning the reconstruction of the Kirkpatrick Legal Drain located in the NE corner of the site. The existing tile would be intercepted at the east property line and rerouted through a new storm sewer which will tie back into the existing tile at the north property line. Steve informed the Board of the provision in the Drainage Code that allowed an individual to relocate and reconstruct a portion of a County Regulated Drain. The relocation and or reconstructed portion must be totally on their property and the work must be done at the individual's expense. The plans must be submitted to the County Surveyor for review.

Once reviewed it would be submitted to the Board for approval. Also a minimum of thirty feet for a drainage easement was required. At that time the Surveyor recommended approval for the relocation/reconstruction of the Main Branch of the Kirkpatrick Legal Drain as shown on the plans.

K.D. Benson made the motion for approval of the relocation/reconstruction of the Main Branch of the Kirkpatrick Legal Drain as presented before the Board. Ruth Shedd seconded the motion and the motion carried.

Reconstruction Request/Portion of Branch #7 & #8 and Reduction of Easement associated with Branch #10 of the Kirkpatrick Legal Drain...The Commons at Valley Lakes

Steve informed the Board the reconstruction request of a portion of Branch #7 & #8 and reduction of easement associated with Branch #10 of the Kirkpatrick Legal Drain at The Commons at Valley Lakes would not be presented as noted on the Agenda for today’s meeting. The Drainage Report for the project had not been submitted in time for review by Christopher Burke. Therefore the request was continued until the April 2, 2003 meeting.

Bonds – Maintenance

Steve presented the Board with Maintenance Bond #5847853 for \$6264.00 from A&K Construction for acceptance concerning the Saddlebrook Subdivision Phase 3 Part 2. The Bond was for Drainage improvement, swales and erosion control outside the public right of way. Steve recommended the acceptance of said Bond. K.D. Benson made the motion to accept the Bond as presented and Ruth Shedd seconded the motion. The motion carried.

Steve Murray

The Surveyor received notification from White, Fountain and Montgomery Counties of their Drainage Board’s approval of the twenty-five percent (25%) increase in assessment of those drains which involved their Counties. The list had been presented to the Tippecanoe Auditor for the upcoming May assessment.

The Surveyor then informed that the Board notices for the Hearing at 10 a.m. on April 2, 2003 for the Elijah Fugate Drain had been sent out and the list of assessments had been completed, copies were provided to the members. He then reviewed the options that would be presented to the landowners at that hearing.

Due to workload and the size of the watershed, the Surveyor reported the Moses Baker Drain Hearing, tentatively scheduled for April 2, 2003 at 11 a.m., would need to be rescheduled. After a discussion of dates, the Board agreed upon April 23, 2003 at 11 a.m.

Dave Luhman presented and read to the Board, the Findings and Order statement from the February 5, 2003 Obstruction Hearing.

Baxter / Beason Obstruction Hearing Findings and Order Statement

STATE OF INDIANA) SS
COUNTY OF TIPPECANOE)

BEFORE THE TIPPECANOE COUNTY
DRAINAGE BOARD
TO THE 2003 TERM

PETITION TO REMOVE OBSTRUCTION IN MUTUAL DRAIN/
RONALD R. BAXTER AND MARCIA BAXTER

FINDINGS AND ORDER

This matter came to be heard on the Petition to Remove an Obstruction in a Mutual Drain or Mutual Surface Water Course filed by Ronald R.Baxter and Marcia Baxter on August 26, 2002. Petitioners Ronald and Marcia Baxter appear in person. Respondent Estate of Kevin Beason, Deceased, appears by Shawn Beason, Co-Personal Representative of the Estate. Hearing is held on the Petition. After having reviewed the evidence and having been duly advised in the premises, the Board now finds as follows:

1. There exists a mutual drain located between the properties of Petitioners Ronald and Marcia Baxter and the property owner by Kevin Beason, Deceased, located at 1237 West 625 South, Lafayette, Indiana, consisting of a swale and ditch.

2. That the mutual drain is obstructed by fill, growth of cattails, and a tree growing in the swale.
3. That the blockage appears to be the result of a natural accumulation due to a lack of maintenance.
4. That the Board does not find that the obstruction of the drain was created intentionally by the Respondent.
5. That removal of the obstruction will promote better drainage of the Petitioners' land and will not cause unreasonable damage to the land of the Respondent.

IT IS THEREFORE ORDERED that the obstruction to the mutual drain be removed through the joint efforts of the Petitioners and Respondent;

IT IS FURTHER ORDERED that Petitioners and Respondent, being the owners of both tracts of land benefited by the drain, which tracts of land are equally benefited thereby, shall jointly pay the cost of removing the obstruction to such mutual drain: fifty percent (50%) by Petitioners and fifty percent (50%) by Respondent.

IT IS FURTHER ORDERED that the Petitioners and Respondent shall cause the obstruction to be removed within six(6) months of the date of this Order.

SO ORDERED this 5TH day of March 2003.

At that time, Dave directed the secretary to send a copy of both the Hearing Minutes and the Findings and Order Statement to both parties by certified mail. Ruth Shedd inquired as to the appeal process if the Order was not followed. Dave reviewed that process for the Board. The Surveyor stated he felt the parties would comply with the Order.

K.D Benson made the motion to approve the Order as written and Ruth Shedd seconded the motion. The motion carried.

As there was no other business before the Board, K.D. moved for adjournment. Ruth Shedd seconded the motion and the meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
April 2, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, John Knochel Vice President, and KD Benson member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of March 5, 2003 Minutes

John Knochel moved to approve the minutes of the March 5, 2003 meeting. KD Benson seconded the motion and the minutes were approved.

Shawnee Ridge Subdivision Phase 3

Mr. Tim Beyer appeared before the Board to request final approval for Shawnee Ridge Phase 3 Subdivision. The site was located on the north side of County Road 600 North between State Road 43 and Prophets Rock Road in Tippecanoe Township. The project was not within the Battleground City Limits. The site involved 96 acres and would ultimately be developed into 190 single-family residences. Phase 1 of Shawnee Ridge was approved under the name of Battlefield Heights on August 11, 1999 and consisted of 59 lots on 22 acres. Phase 2 was renamed Shawnee Ridge and consisted of 54 lots on 19 acres, and approved on July 3, 2001. The proposed storm sewers within Phase 3 would connect to and convey runoff from portions of Phase 1 to the existing detention basin for the development, while conveying runoff from Phase 3 to the pond. The Detention Pond, located in the northeast portion of the project, had been constructed and approved during the prior phases.

The Surveyor recommended final approval with conditions as stated in the Burke memo of March 26, 2003 for Shawnee Ridge Subdivision Phase 3. He stated the conditions must be met before submission of the final construction plans. John Knochel made the motion to approve Shawnee Ridge Phase 3 for final approval with conditions as stated on the March 26, 2003 Burke memo. KD seconded the motion. Shawnee Ridge Phase 3 was given final approval with the conditions stated on the March 26, 2003 Burke memo.

Wake Robin Estates 2 Phase 3

Tim Beyer from Vester & Associates appeared before the Board and requested final approval for Wake Robin Estates 2 Phase 3. The site was located along the west side of McCormick Road (County Road 250 West) and north of Lindberg Road in Wabash Township. The proposed project consisted of 45 lots on approximately 19 acres. The development included the construction of a dry-bottom detention pond to accommodate runoff from an overall 32.5-acre watershed. The detention portion of the project was previously approved on September 5, 2001 for Phases 2 and 3. In addition to Phase 3 on-site impacts, the pond would control runoffs from rear-yard portions of lots in the previous phases, off-site drainage from north of the site and the areas that currently drained to a temporary detention pond in the center part of the site. A waiver for the onsite detention storage to be located on platted lots was requested. KD Benson noted the reason public hearings had been held in the past on this project was lots had been platted up to the road. The revised plat placed the pond on those lots. Steve recommended to the Board the waiver be granted. In addition to the Drainage Board's approval, IDEM and the Corps of Engineers would have to issue a permit, due to a portion of this project located within a designated wetland.

KD Benson inquired when State Highway 231 goes through this area, would the State be responsible for the interruption of the area? Steve stated the State would be responsible for any area that was disrupted in the construction of the Highway. Also, in the planning process of the Highway construction those issues would be addressed by the State. KD also asked if and when McCormick Road gets straightened out at the s curve, what would happen to the area affected? The attorney stated if the road was straightened out it might affect four or five lots. Steve stated whoever proposed the McCormick Road project would be responsible for the acquisition of right of ways, easements, etc. He stated that the final construction plans would not be signed until all conditions listed on the March 31, 2003 Burke memo were met.

KD Benson moved to grant Wake Robin Estates 2 Phase 3 a waiver for the standard onsite detention storage to be located on platted lots as requested. John Knochel seconded the motion and the waiver was granted. John Knochel moved for final approval on the Wake Robin Estates 2 Phase 3 with the conditions stated on the March 31, 2003 Burke memo. KD Benson seconded the motion and the final approval was given.

Foxfire @ Valley Lakes Phase 1

Alan Jacobson from Fisher & Associates appeared before the Board to request final approval for Foxfire @ Valley Lakes Phase 1. The proposed Phase I of Foxfire @ Valley Lakes project was located on approximately 19 acres and would consist of 258 apartment units within 16 buildings, a pond and a clubhouse/pool facility. The site was located on the south side of County Road 350 South, between South 18th Street and Concord Road. Alan also requested a waiver for onsite detention storage, a reduction of the existing drainage easement, and the reconstruction of 780 feet of Branch #5 of the James N. Kirkpatrick Regulated Drain. Due to poor soil and wetland issues, approximately 15 acres would remain undeveloped.

At the Northeast corner of the site, a single drainage easement channel was proposed for both the Foxfire project and a project by G&L Development called The Villas at Stones Crossing Subdivision and would follow the common property line between the two. The present easement was 150 feet wide with 75 feet of width on each of the adjoining properties and extended south 520 feet. The existing easement was granted in the early 1990's and was related to the reconstruction of County Road 350S. There was a well-defined swale at the northern end of the easement that flared out gradually as it flowed to the south and allowed the stormwater to continue to the Kirkpatrick Ditch. The requested easement was 25 feet in width along the west side of the Foxfire project, along with a similar width on the G&L project site. Alan felt the proposed width would allow enough room for any maintenance work that may be needed in the future. Alan also informed the Board, in addition to the Drainage Board approval, the proposed easement was pending review by the City of Lafayette Engineer's Office.

The J.N. Kirkpatrick Regulated Drain was located along the southern property line of the site. The Regulated Drain was currently under reconstruction from a closed tile to an open channel and would eventually include the reach of the drain along the southern boundary of the project site. Branch # 5 of the J.N. Kirkpatrick Regulated Drain consisted of a 12-inch clay tile and flowed from northeast to southwest through the site. Originally the branch tied to the 30-inch main tile. The plans called for interception at the east property line and reconstruction as part of the site's storm sewer. A riser pipe was to be placed at the upstream end of the undisturbed portion of Branch #5 which would allow the tile to continue to function.

Steve stated he wanted to insure the riser was in the plans for possible future use of location of the tile and development. He then stated a review of the discharge had been done and it was at or below the projected amount based on land use and the study done by Burke of the Kirkpatrick Drain. He recommended a waiver of the standard onsite detention storage be granted. John Knochel made a motion to grant a waiver of the onsite standard stormwater detention storage for Foxfire at Valley Lakes Subdivision. KD seconded the motion and a waiver was granted.

Steve then recommended granting final approval with conditions as stated on the April 1, 2003 Burke memo for the Foxfire at Valley Lakes Subdivision. John Knochel made the motion to grant final approval for the Foxfire at Valley Lakes Subdivision with the conditions stated on the April 1, 2003 Burke memo. KD seconded the motion. The motion carried and Foxfire at Valley Lakes Subdivision was granted final approval with the conditions stated on the April 1, 2003 Burke memo.

Steve then recommended granting the relocation and reconstruction request of Branch #5 of the J.N. Kirkpatrick Regulated Drain, per I.C. 36-9-27-52.5. John Knochel moved to grant the relocation and reconstruction as proposed, and KD Benson seconded the motion. The relocation, reconstruction request of Branch #5 of the J.N. Kirkpatrick Drain was granted.

In regard to the easement on the 350S side ditches, Steve stated the County Highway purchased it at the time of reconstruction on 350S. It was put in for the discharge of 350 and extended down to the 150 feet easement for Branch #5 of the J.N. Kirkpatrick drain. A riprap dissipater was put in at that time and Steve felt the proposal at hand was actually an improvement, as a positive surface channel would be in place. After conferring with the attorney, he recommended the reduction of the drainage easement at the Foxfire at Valley Lakes Subdivision side from 75 feet to 25 feet as requested. The attorney stated the Commissioners could give the Drainage Board the required authority at their April 7, 2003 meeting. John Knochel made the motion to approve the reduction of easement from 75 feet to 25 feet for the J.N. Kirkpatrick Drain on the Foxfire at Valley Lakes property pending the April 7, 2003 Commissioners meeting date. KD Benson seconded the motion and as there were no objections, the motion carried.

The Commons At Valley Lakes Phase II

Alan Jacobson from Fisher & Associates appeared before the Board to request final approval for the Commons at Valley Lakes Phase II Subdivision. The Subdivision was located east of 150E (South 18th Street) south of County Road 350S. Phase II would add 87 single-family slightly oversized residential lots to the overall development. Stormwater from the site would be routed to existing storm sewer systems through additional storm sewers and drainage swales. In addition, he requested approval for the partial reconstruction of the **J.N.Kirkpatrick** Ditch Branches #7, #8 and a reduction of the existing easement pertaining to Branch #10. A waiver for the standard onsite stormwater detention was also requested. He stated the runoff associated with this phase of the Commons would be less than assumed in the modeling of the project.

Alan proposed 320 feet of reconstruction on a 12-inch clay field tile known as Branch #7 of the J.N. Kirkpatrick Drain which crossed the northeast corner of the site. The downstream portions of Branch #7 had been previously reconstructed as part of the Commons at Valley Lakes Phase 1 construction. The 12-inch tile would be reconstructed to a 15-inch RCP storm sewer that would follow the eastern boundary of the site. The abandoned portions of the existing tile would be removed and vacated.

Alan proposed to remove the remaining portion of Branch #8 of the J.N. Kirkpatrick Drain. The approval for reconstruction was granted previously during the Landing At Valley Lakes Phase 2 construction. The Branch flowed to the north and crossed the southeast corner of the site as a 10-inch and 12-inch diameter clay field tile, and connected to Branch #7 just east of the site. Upstream portions of the branch were previously rerouted. Currently the flows were routed through an existing 42-inch storm sewer that crossed the eastern portion of the site and no off-site water from the south was being conveyed through the existing tile. The abandoned portion of the tile would be excavated and vacated.

A portion of Branch #10 of the J.N. Kirkpatrick Drain flowed to the northwest and impacted the western side of the site. A 10-inch clay tile crossed under 18th Street to a riser pipe approximately 80 feet east of the road. Alan's proposal for Branch #10 of the J.N. Kirkpatrick Drain was to vacate and reduce the 75 foot Legal Drain Easement located east of the riser to correspond with the eastern limits of an existing 40 foot Utility Easement and a proposed 60 foot Drainage and Utility Easement as shown on Lots 119 and 120. No alterations to the tile or the riser pipe (with the exception of raising or lowering the rim) to accommodate the grading) were proposed. The City Engineer had signed off on the drawings as the project lied within the city limits.

The Surveyor recommended to the Board granting a waiver for the standard onsite stormwater detention to allow direct release into the J.N. Kirkpatrick Legal Drain. John Knochel made the motion to grant a waiver for the standard onsite stormwater detention for the Commons at Valley Lakes Phase 2 Subdivision. KD Benson seconded the motion, and the motion carried.

The Surveyor then recommended granting final approval for the Commons at Valley Lakes Phase 2 with the conditions as listed on the April 1, 2003 Burke memo excluding # 4 of the memo. Since the project was in the city limits and the city maintains the storm sewer system, he felt condition #4 on the memo was not necessary. John Knochel moved to grant final approval as stated with the exception of condition #4 on the April 1, 2003 Burke memo for the Commons at Valley Lakes Phase 2. KD seconded the motion and as there were no objections the motion carried.

The Surveyor recommended the vacation and reduction of the current Legal Drain Easement of Branch #10. He also recommended the relocation and reconstruction of Branches #7 and #8 as proposed. John Knochel made the motion to vacate and reduce Branch #10 of the J.N. Kirkpatrick Drain as stated. He also included within the motion approval of the relocation and reconstruction of Branches #7 and #8 as stated. KD Benson seconded his motion and the motion carried.

Alan Jacobson thanked the Board for their consideration on both matters.

Other Business

Letters of Credit

The Surveyor presented an Irrevocable Letter of Credit #51004659 submitted by the Eagles Nest Corporation in the amount of \$10173.64 for Hickory Hills 3rd Subdivision Phase 1 Section 1 (AKA Eagles Nest), drawn under the Farmers Bank in Frankfort Indiana dated March 17, 2006. The Letter of Credit was intended for the storm/sewer basin and waterways construction outside the County Road Right of Way. John Knochel moved to accept the Letter of Credit submitted by Eagles Nest Corp. and presented to the Board by the Surveyor. KD Benson seconded the motion and the motion carried.

Steve Murray

As the Surveyor did not have any other business to present to the Board, John Knochel moved for adjournment. KD Benson seconded the motion and the meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Executive Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
May 7, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, John Knochel Vice President, and KD Benson member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison.

Approval of Minutes

Approval of the Regular Meeting Minutes held on April 2, 2003.
Approval of the Hearing Minutes for Assessment on the Elijah Fugate Drain #30.
Approval of the Hearing Minutes for Assessment on the Moses Baker Drain #114.

Commissioner Knochel made the motion to approve minutes of the Regular Meeting held on April 2, 2003 as well as minutes for Hearings held on April 2nd (Elijah Fugate #30 Assessment) and April 23rd, 2003 (Moses Baker #114 Assessment). KD Benson seconded the motion and the motion carried.

Stones Crossing Section 2

Mr. Eric Gleissner from Roger Ward Engineering represented G&L Development and appeared before the Board to request final approval for Stones Crossing Section 2. The site was located immediately west of Stones Crossing Section One within the overall development along the west side of County Road 250 East (Concord Road) between County Roads 350 South and 430 South in Wea Township. The site consisted of approximately 16 acres and included 68 lots. The J.N. Kirkpatrick Regulated Drain crossed the project site along the north boundary of the overall development and would serve as the final outlet for the project. All 68 lots would drain into the J.N. Kirkpatrick Regulated Drain routed through storm sewers. Reconstruction currently underway on the J.N. Kirkpatrick Regulated Drain would eventually reach the portion along the northern boundary of the overall development.

The Surveyor reviewed additional conditions not stated on the April 30, 2003 Burke Review Memo. Those conditions related to section 10.F of the Drainage Ordinance referring to the maximum depth of seven inches (7") of ponding in the street at inlets and the need for emergency overflow route. The second additional condition was for placement of catch basins throughout the development. Also catch basins were to be installed in the previous phase to catch silt and debris off roadway and lots before entering the Regulated Drain. Mr. Gleissner confirmed he had spoke with the Tippecanoe County Highway Department concerning this issue. The catch basins would be installed and included in the plans as required. The Surveyor recommended final approval with conditions listed in the April 30, 2003 Burke Review Memo in addition to those discussed.

John Knochel moved to grant final approval for Stones Crossing Section 2 with conditions as stated by the Surveyor and those listed in the April 30, 2003 Burke Review Memo. KD Benson seconded the motion and final approval for Stones Crossing Section 2 with conditions stated and those listed in the April 30, 2003 Burke Memo was granted.

The Villas At Stones Crossing Planned Development

Mr. Gleissner then presented The Villas at Stones Crossing Planned Development for final approval to the Board. The site was located on 13 acres approximately 1600 feet west of County Road 250 East (Concord Road) on the south side of County Road 350 South in Wea Township. It would include 19 buildings consisting of 7 units each totaling 119 residential condominiums. A public road would be constructed. The 13-acre site was located within the watershed boundaries of the J.N. Kirkpatrick Regulated Drain and noted as such in the plans.

Branch #5 of the J.N. Kirkpatrick Regulated Drain passed through the north half of the project area and continued off-site to the west. Near the site, the Main Branch of the drain was currently under reconstruction from a closed tile to an open drain and eventually would reach the development along the southern boundary of the project site. No stormwater detention was proposed for the development. A common ditch along the west property line with Foxfire at Valley Lakes Phase 1 Development would be constructed to drain runoff from County Road 350 South.

Responding to K.D.'s question of runoff quality to the drain, discussion was held on the future Phase II requirements for developments. A regimented and documented maintenance program would eventually be required for Phase II.

The Surveyor then revised condition one of the April 30, 2003 Burke Review Memo as follows: "The applicant **must** continue to coordinate the reconstruction of J. N. Kirkpatrick Regulated Drain Branch #5 with the Tippecanoe County Surveyor's Office. The Drainage Easement for the route of the reconstructed Branch #5 **must** be 30 feet in width." The plans showed 15 feet in width. In planning the development, an easement was set up in addition to and outside of the Kirkpatrick Drain Easement. However it appeared a portion of the sidewalks encroached on to the Kirkpatrick Drain Easement. He expressed the need for adequate room for the use of maintenance equipment without causing any damages to the development. The development must also be in compliance with Section 10.F of the Drainage Ordinance and catch basins must be constructed at appropriate locations. With additional conditions as stated and those listed in the April 30, 2003 Burke Review Memo, the Surveyor recommended final approval for The Villas at Stones Crossing Planned Development to the Board.

John Knochel moved to grant final approval with the conditions as stated and listed on the April 30, 2003 Burke Memo. K. D. Benson seconded the motion and final approval with conditions was granted to The Villas at Stones Crossing Planned Development.

Meadowgate Estates

Mr. Paul Coates of C&S Engineering represented Fred Kuipers and appeared before the Board to request final approval for Meadowgate Estates Subdivision. A waiver to allow the use of a portion of the lots as opposed to an outlot for a detention basin was also requested. The site was located east of County Road 75 East and north of County Road 500 North in Tippecanoe Township. A public road would be constructed to provide access off of County Road 500 North. The majority of the site drained to the north and west and discharged to Burnett Creek. Earthen Dams would be constructed at two existing valleys to provide dry detention storage. Outlet pipes would be fitted with orifice plates to restrict discharge to the allowed release rate.

Mr. Coates stated conditions 2 through 8 of the May 2, 2003 Burke Review Memo had been met. He addressed the request for a variance and felt if granted, the lot owner and the Homeowners Association would be held responsible for the upkeep of the detention facility. Due to the fact the lot owner would be responsible for it, he felt it would be better maintained. He respectfully asked for a variance and final approval for the project. Responding to K.D.'s inquiry he stated covenants and restrictions would prohibit the lot owner from filing in the pond area. A drainage easement for the area was also included in the plans.

The Surveyor stated variances are reviewed on a case-by-case basis. At Mr. Coates request, Mr. Fred Kuipers responded to the Surveyor's request for clarification of notification to adjoining landowner(s). The outlet to Burnett Creek was situated on an adjoining landowner's property, Mr. Dave Hall. Mr. Kuipers stated he had several conversations with Mr. Hall concerning the proposed development. After review of the plans, the Surveyor felt the outfall went to a defined channel as required by Ordinance and recommended granting the waiver for variance to the Board.

John Knochel made the motion to grant the requested waiver. K.D. Benson seconded the motion and the waiver was granted. John Knochel made the motion for final approval with conditions as stated on the May 2, 2003 Burke Review Memo. K.D. Benson seconded the motion and final approval for Meadowgate Estates with conditions was granted.

STEVE MURRAY

The Surveyor presented an Irrevocable Letter of Credit #241, in lieu of a Maintenance Bond in the amount of \$53173.60 issued to Colony Pines LLC from Lafayette Savings Bank on April 2, 2003. The Irrevocable Letter of Credit #241 covered Sagamore Pines Section 2 and Colony Pines Section 1 drainage improvements outside the public road right of way. He recommended acceptance by the Board of the Letter of Credit#241 in lieu of a 3 year Maintenance Bond for drainage improvements outside the public road right of way.

K.D. Benson motioned to accept the Letter of Credit presented by the Surveyor. John Knochel seconded the motion and the Board accepted the Letter of Credit #241.

OTHER BUSINESS - Public Comment

Ruth Shedd asked for any public comment.

Mr. Dan Dexter of 8617 S.R. 43 North, Tippecanoe Township appeared before the Board. He wanted to discuss a problem concerning his driveway and the William Walters Ditch. On 900 North there were two field tiles which outlet into the ditch. He installed a retaining pond some years ago to assist in the drainage of the ditch. He stated the ditch had been cleaned out in the past. Beaver dams were also causing problems in the ditch. Some beaver dams had been removed in 2001 and presently there were two needing removed.

Commissioners Shedd & Knochel had previously viewed the area at Mr. Dexter’s request on the 5th of May 2003 and the Surveyor made at least two site visits.

Mr. Dexter stated since the installation of the larger culverts on 43N and 900N, the increased flow and amount of water traveling through and over the culvert under his drive had caused the washout of his drive. He presented several pictures to the Board of the area in question. He felt the County had some financial responsibility, at least in part, due to the fact the culverts on 43 North and 900 North caused the problem, in his opinion. He requested financial assistance from the Drainage Board to repair and/or replace the culvert under his drive.

The Surveyor stated the culvert under his drive was installed undersize to begin with. He reminded the Board a ditch maintenance fund generally couldn’t be used for the repair of private crossings. He stated landowners were responsible for the repair and maintenance of private drives, crossings, etc. He stated at the time of the installation of the culverts under 43N and 900N, he was working in the Highway department. He reviewed the work that was involved at that time on 900N and felt the amount of water should not have increased solely due to the installations of the culvert 900N. He would review the file again.

The Surveyor then stated he had conferred with the previous Surveyor Mr. Spencer and they had the same conclusion. Money collected from a ditch assessment was for maintenance of the ditch only, not private crossings. KD inquired if a larger culvert under the drive would help and the Surveyor stated yes, along with the removal of the dams. He would have the dams removed ASAP. Mr. Knochel suggested the County Highway might possess a salvaged pipe that could be dropped beside the present culvert or a larger pipe for replacement. This would be at a lesser charge and a savings in cost to Mr. Dexter. Mr. Knochel suggested the Surveyor’s office research the installation of the culverts, the watershed acreage upstream of 900 North before and after the culverts installation. He invited Mr. Dexter to return to the Drainage Board at the June 4th Meeting. The Surveyor reminded Mr. Dexter to inform the office whenever there were Beaver dams in the ditch.

KD then informed the Surveyor Mr. Bill Easterbrook reported beaver dams in some of the Lauramie Township ditches. The Surveyor would look into it. KD then requested a change in the Drainage Board Meeting schedule. The meeting on August 6th was changed to August 5th, 2003 at 10 a.m.

As there was no other business before the Board John Knochel moved for adjournment and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
June 4, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, and KD Benson member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Executive Secretary Brenda Garrison. John Knochel Vice President was absent.

Approval of May 7, 2003 Minutes

KD Benson motioned for the approval of the May 7th, 2003 minutes. Ruth Shedd seconded the motion and the May 7, 2003 minutes were approved.

Regal Valley Place Phase 1

Mr. Alan Jacobson from John Fisher & Associates represented Cedar Run Limited and approached the Board to request final approval of Regal Valley Place Phase 1 Subdivision with a waiver of the standard Stormwater Detention requirements. The site was located along the East boundary line of the overall Valley Lakes Commercial Subdivision, south of County Road 350 South and east of South 18th Street in the City of Lafayette. The City of Lafayette has approved the construction and drainage plans for this phase of the development.

Phase 1 of the development involved construction of a private 2-lane roadway extending approximately 1,000 feet west from Regal Valley Drive and 4 lots between the private road and County Road 350 South. Plans indicated grading to accommodate the proposed roadway and storm drains for Lots 1-4. Additional grading on the south side of the private roadway to direct runoff from the site to the J.N. Kirkpatrick Regulated Drain was included. The J.N. Kirkpatrick Regulated Drain that is under reconstruction from a closed tile to an open channel bordered the southern portion of the site. The reconstruction would eventually include the reach of the drain along the southern portion of the site. There would be no access to 350 South from the lots proposed. Access to the site would be from Regal Valley Drive (currently under construction) located at the eastern side of the development. Acceptance of Regal Valley Drive from the City of Lafayette was pending at this time. Eventually Regal Valley Drive would continue through the site, exiting the site on 18th Street.

Mr. Jacobson requested the direct runoff from the lots proposed in Phase 1 to the J.N. Kirkpatrick Regulated Drain be granted and the standard stormwater detention requirements be waived at this time. An inlet structure for each lot and a pipe system routed under the proposed roadway would discharge the runoff into shallow swales, then following the natural drainage onsite to the aforementioned drain. Curb inlets along the roadway were also integrated into the submitted plan. In response to KD's inquiry, all disturbed areas by the contractor would be temporarily seeded as required by the erosion control guidelines.

The Surveyor stated condition 5 on the May 30, 2003 Burke Review memo should read an **additional** minimum of a **40 feet** wide drainage easement should be provided along the JN Kirkpatrick Regulated Drain **from the top-of-bank** for future maintenance of the drain. Alan stated that would be reflected in the final plat submitted. The Surveyor recommended a waiver for the standard stormwater detention requirements to the Board. He then recommended final approval with the conditions stated on the May 30, 2003 Burke Review memo.

KD Benson motioned to waive the standard stormwater detention requirements for Phase 1 of Regal Valley Place Subdivision. Ruth Shedd seconded the motion and a waiver for the standard stormwater detention requirements was granted for Regal Valley Place Phase 1. KD Benson motioned to grant final approval with the May 30, 2003 Burke review memo conditions and the Surveyor's revision to condition #5 for Regal Valley Place Phase 1. Ruth Shedd seconded the motion. Regal Valley Place Phase 1 was granted final approval with the conditions listed on the May 30, 2003 Burke Review memo and the revision of condition #5 stated by the Surveyor.

OTHER BUSINESS

Easement / Terry Robbins

The Surveyor submitted to the Board a Construction and Maintenance Easement of Utilities Service associated with the construction of Butler Meadows Subdivision and obtained from landowner Terry Robbins. The Easement was obtained for possible installation of city utilities and drainage purposes including the regrading of the 500S side ditch to carry runoff from the Subdivision along the frontage of Mr. Robbins' property. Mr. Robbins had previously dedicated a 30 feet (half width) Road Right of Way Easement with his parcelization. Additional grading and deepening would take place on the side ditch of 500 South. The Surveyor recommended to the Board to accept the Easement as presented.

KD Benson made the motion to accept the Easement for Construction and Maintenance of Utilities Service from Terry Robbins. Ruth Shedd seconded the motion and the motion carried. The Board accepted the Easement as submitted and the secretary would record the document with the County Recorder's office.

As there was no other business for consideration, KD Benson moved for adjournment and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

Absent

KD Benson, Member

Tippecanoe County Drainage Board

Minutes

August 5, 2003

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, and member KD Benson, County Surveyor Steve Murray, Drainage Board Active Attorney Doug Masson, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Tim Wells County Highway Engineer, and Drainage Board Executive Secretary Brenda Garrison.

Approval of July 2, 2003 Minutes

John Knochel moved to approve the July 2, 2003 Drainage Board Minutes. KD Benson seconded the motion and the July 2, 2003 minutes were approved as written.

Hadley Moors Part 5 Phase 2

Alan Jacobson of Fisher and Associates represented David Lux of Lux Klinker Homes and approached the Board to request final approval for Hadley Moors Part 5 Phase 2. Part 3 bound this portion to the south, Part 2 to the West and Part 5 Phase 1 to the east. As the final portion of the overall Hadley Moors development, it would contain 30 single-family residential lots on 8.9 acres.

The site was located west of County Road 125 West and south of the east-west section of road connecting County Road 125 West to County Road 140 West in Wabash Township. The site drained east to west. Proposed storm sewers and rear-yard swales would discharge to the existing storm structures within the previously approved sections of the development. Maintaining the existing drainage pattern along the north property line, runoff would be discharged to the northwest across Outlot 318. Alan brought attention to the two outlots at the north edge of the property that were left undeveloped. He stated they would possibly be developed at a later date on a separate request.

The Surveyor asked for verification of placement of catch basins periodically throughout the site. Alan verified they had been included in the plans and inlet castings were marked appropriately. The Surveyor then stated the need to insure a Homeowners Association had been set up for the project. There has been instances where they had not been formed and the individual lot owners were left to deal with drainage problems off the road right of way. A verification of such Association for each project may be required for final approval of plans in the future. The other option would be to establish the project's storm sewer system outside the road right of way into County Regulated Drains. Alan stated he believed one had already been formed. He would check with his client to verify and in turn provide the Surveyor's office with the contact information.

The Surveyor then made the recommendation for final approval with the conditions as stated on the August 1, 2003 Burke memo of Hadley Moors Part 5 Phase 2 to the Board. Ruth Shedd asked for any comments and no comments were given. John Knochel made the motion to grant final approval with conditions as stated on the August 1, 2003 Burke memo for Hadley Moors Part 5 Phase 2. KD Benson seconded the motion and final approval for the project was granted.

Benjamin Crossing Section 2 and Section 3

Brandon Fulk represented the Schneider Corporation and approached the Board to request final approval for Benjamin Crossing Planned Development Sections Two (2) and Three (3). Conceptual approval for the development was given in October of 2002 and final approval for Section One (1) was given in December of 2002. The site was located approximately 2 miles south of the City of Lafayette at the northeast corner of County Road 250 East (Concord Road) and County Road 450 South in Wea Township. The 160-acre project would consist of 630 lots total and three (3) stormwater detention ponds upon completion. Section One (1) contained 205 lots and all of the proposed ponds. The Kirkpatrick Legal Drain (a closed tile system), which passed through the northeast corner of the overall property, would be realigned using 775 feet of 30-inch diameter RCP to accommodate development of the site. Two (2) interconnected ponds located in the central and northeast portions of the site, would discharge to the Kirkpatrick Regulated Drain at the Concord Road Bridge. The northeast pond would be designated as a Regional Detention Facility and temporary discharge to the existing legal drain tile until future phases of the development would discharge to both the northwest and the northeast ponds. Overall a combined on-site and off-site watershed area of approximately 420 acres impacted the Kirkpatrick Regulated Drain at the proposed development location.

Section Two (2) would be located in the northern portion of the overall development site and would consist of approximately 25 acres with 175 additional single-family lots. Runoff from Section Two (2) of the development would discharge to both the northwest and northeast ponds. Section Three (3) consisted of 13 acres located in the northeastern portion of the site and consisted of 73 additional single-family lots. Runoff from this section would be discharged to the northeast pond.

The Surveyor reminded the Board that Phase one (1) was given an exception to outlet the northeast pond into the existing 30-inch Kirkpatrick tile. A small amount of reconstruction and relocation was done at that point. An orifice plate was installed to control the amount of water flow. It was made clear in December while an exception was given for Section One (1) the Board was reluctant to allow that for Sections Two (2) and Three (3). A Drainage Easement with DF Properties, the property owner to the north, had been obtained and officially recorded. The Developer had provided a new 8" positive outlet through the Drainage Easement. The Drainage Easement would allow the County to perform maintenance of the tile when needed. Increased development was expected for the Kirkpatrick Drain upstream of Concord. He stated this outlet would assist in relieving the load on the existing agricultural tile. The Surveyor expressed his appreciation to the Developer and Schneider Corporation. With the standard placement of catch basins and confirmation of the drainage easement the Surveyor was prepared to recommend final approval. While the Sections were looked at as separate projects, due to the presentation of both sections at this time, the Surveyor recommended final approval for Sections Two (2) and Section Three (3) of Benjamin Crossings Planned Development.

John Knochel moved to grant final approval for Section Two (2) and Section Three (3) of Benjamin Crossing Planned Development with conditions as stated on the Burke memos of August 1, 2003. After clarification for KD on the northeast pond outlet, she seconded the motion. Final approval for Benjamin Crossing Section Two (2) and Section Three (3) with the conditions as stated on the August 1, 2003 Burke memos was granted.

Fiddlesticks Subdivision

Mr. Paul Deeds from Hawkins Environmental represented Peanut Enterprises and Bob Lahrman approached the Board to request final approval for Fiddlesticks Subdivision.

The site was located southwest of the intersection of County Roads 400 South and 100 East (South 9th Street) in Wea Township. The project consisted of 39 acres and would contain 133 single-family residential lots. The Subdivision would be constructed in two (2) phases. Off-site drainage areas to the east of the proposed development would be collected by the proposed on-site storm sewer system. Cumulative storm water flows would be discharged without detention to Wea Creek via an off-site outfall pipe extending west of the development.

As the adjoining landowners Clifford and Shannon Bradford had granted a Drainage Easement, no storm water detention was proposed. The Surveyor recommended a waiver for the standard storm water detention requirements to the Board. John Knochel made the motion to grant a waiver for the standard storm water detention requirements for Fiddlesticks Subdivision. In lieu of the Drainage Easement obtained and on file, KD Benson seconded the motion and a waiver was granted for the standard storm water detention requirements.

The Surveyor then recommended final approval with the conditions as stated on the August 1, 2003 Burke memo. John Knochel made a motion to grant final approval with conditions as stated on the August 1, 2003 Burke memo. KD Benson seconded the motion and final approval for the project was granted.

Baywater Townhomes

Alan Jacobson from Fisher & Associates represented Copper Beach Townhome Communities and approached the Board to request final approval for Baywater Townhomes Subdivision.

The site was located north of U.S. 52 on the east side of Paramount Drive in Wabash Township. The area was a vacant unimproved tract of land. The 9.5-acre site would consist of 138 residential units within 18 separate buildings. The site would be drained by street inlets and storm sewers connected to an existing 30-inch storm sewer stub at the north property line. Stormwater runoff from the developed condition site was previously analyzed as part of the design for the Lakeshore Subdivision to include compensatory storage within the Lakeshore Subdivision detention facility. Reduced run-off from the rear-yards would be uncontrolled in a manner consistent with existing drainage patterns. Run-off from the site would eventually discharge to the Dempsey Baker Regulated Drain.

Alan stated he had spoke with his client and his client felt condition four (4) of the August 4, 2003 Burke memo was not relevant in this case. As one individual owned this development of leased apartments, he felt covenants were not warranted. He stated there would be a restriction regarding access to the site and it would be indicated on the final plat. The Surveyor stated in lieu of the covenants a letter would be required to be on file indicating the developer's responsibility of the storm sewer within the boundaries of the development. Alan stated his client would provide the letter. Ruth Shedd asked for comments and the Surveyor reiterated the need for standard catch basins placed periodically throughout the development. At that time the Surveyor recommended final approval with conditions including the revision of condition four (4) on the August 4, 2003 Burke memo for Baywater Townhomes. John Knochel made the motion for final approval on Baywater Townhomes with the conditions on the August 4, 2003 Burke memo to include the revision as stated by the Surveyor. KD Benson seconded the motion and final approval for the project was granted.

OTHER BUSINESS

Kirkpatrick Ditch/Supplemental Agreement #1/ H. Stewart Kline & Associates

The Surveyor presented to the Board a supplemental agreement for the temporary design and inspection of the 9th Street Bridge (#62). The Board of Commissioners and the Drainage Board signed the original contract with H. Stewart Kline for \$200,000.00 in April 2001. The original contract was done by percentage of bridge construction versus ditch construction. The Surveyor stated the additional amount of \$25,000.00 would be used entirely for bridge #62 and would not add additional costs to the Drainage Board for the Kirkpatrick Drain. He recommended to the Board approval of Supplemental Agreement #1. John Knochel moved to approve the Supplemental Agreement #1 from H. Stewart Kline and Associates presented by the Surveyor. KD Benson seconded the motion and the Supplemental Agreement was approved.

At that time Ruth Shedd asked for public comment. As no other business was before the Board, John Knochel made the motion to adjourn. KD Benson seconded the motion and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
September 10, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, and member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Kerry Daily from Christopher B. Burke Engineering Limited, Tim Wells County Highway Engineer, and Drainage Board Executive Secretary Brenda Garrison.

Approval of August 5, 2003 Minutes

John Knochel moved to approve the August 5th, 2003 Drainage Board Minutes. KD Benson seconded the motion and the August 5th, 2003 minutes were approved as written.

Rutan Ridge

Mr. Paul Coates of C&S Engineering appeared before the Board to request a waiver along with final approval for Rutan Ridge Subdivision.

The site was located on the west side of County Road 1100 East (East County Line Road) north of County Road 700 South in Sheffield Township. A private access road called "Fretz Lane" extended westward from County Road 1100 East and terminated in a cul-de-sac would provide access to the residential lots, which included two (2) ten-acre tracts in the northeast part of the property. Two (2) culverts would be installed at low spots in the proposed Fretz Lane to carry stormwater under the roadway. An existing on-site wet pond would be expanded eastward to include direct runoff from Lots 1 & 2. The existing pond spillway would be redesigned.

Paul addressed the conditions stated on the September 4, 2003 Burke Memo. Regarding the first condition, since the pond would be in the rear of the lots, the lot owners would be responsible to maintain the pond. The Home Owners Association would take responsibility of the maintenance if necessary. In addition a provision in the covenants stated the County Drainage Board would be allowed to perform maintenance if needed. Certified notification had been sent to the adjoining property owner to the west of the project site. The survey of the property was accurate and the property lines were correct as submitted. Steve Murray stated the reason behind condition five (the requirement of a submitted general site plan exhibit) was to give the Drainage Board an overview of where the development was located and the topography of the area.

Ruth Shedd asked for any comments and specifically if the adjoining landowner Mr. Morris was in attendance. Steve asked Paul if he or the owners had any conversations with Mr. Morris regarding the discharge to the ravine to the northwest. Paul stated he had spoke with a neighbor and thought it was Mr. Morris but was not certain. Steve stated a copy of the certified mail receipt sent to Mr. Morris had been submitted. Steve's concern was the overall effect of the runoff from the ravine system. It appeared to fan out across bottomland. KD asked if the letter had been sent in time for Mr. Morris to attend the meeting if desired. Steve stated he felt it had as his office had received the certification copy a week prior to the meeting.

Item one (1) on the September 4, 2003 Burke memo stated as follows: As per Section 14. f.13. of the Ordinance, no residential lot or any parts thereof shall be used for any part of a detention basin. Lots 1-6 extend into the detention basin. The applicant has requested a variance from this section of the Ordinance for the proposed development. This variance must be approved by the Tippecanoe County Drainage Board. John Knochel motioned to approve the requested variance. KD Benson seconded the motion and the variance to Item one (1) on the September 4, 2003 Burke memo was granted.

Steve then asked Paul about the route of easement coming off the end of the ravine system to the northwest, which drained the cul-de-sac. Paul stated the easement followed the swale to the northwest corner. Steve asked Paul if the outlet structure to the pond was a bermed ravine system. Paul replied it was an agricultural field dam type construction that consisted of a corrugated metal pipe for an outlet. He had inspected the integrity of it and felt it was in good condition. Steve stated he would inspect it before the construction plan approval was given.

Steve then recommended final approval with conditions as stated on the September 4, 2003 Burke memo. John Knochel motioned to grant final approval with the conditions as stated for Rutan Ridge Subdivision. KD Benson seconded the motion and final approval for Rutan Ridge Subdivision with the conditions stated on the September 4th, 2003 Burke memo was approved.

Valley Ridge Planned Development

Mr. Paul Coates represented David Kovich and appeared before the Board to request a waiver from the standard Stormwater detention requirements along with final approval for the Valley Ridge Planned Development.

The 38.4-acre development was located on the south side of Eisenhower Road and east of Buckridge Road in Fairfield Township. It would consist of eleven (11) residential lots. A public road would extend south from Eisenhower Road and terminate with a tee intersection. Private drives would be constructed from the east and west ends of the public intersection to provide access to the residential lots.

Paul provided the Board with a site plan of the lots. He began by stating Wildcat Creek entered the property in the southwestern corner. Stormwater run-off would continue to drain unabated in a southerly direction toward an "ox-bow" channel within the floodplain of the Wildcat Creek. After conferring with the Surveyor it was decided to direct discharge into the Wildcat Creek. Therefore a waiver for the standard Stormwater detention requirements was requested. Paul did not feel there would be a substantial increase to the Creek. Paul stated the discharge of the swale on the north side of the private drive along lots 1-3 would be clarified. He stated the platted lots and survey of the tract for the development was accurate. The final plat would indicate where the flood plain was located. Clarification would also be provided of the easement along the rear of lots 6-10. Paul then stated a 36-inch corrugated metal pipe under Eisenhower Road would be replaced and lengthened. He stated the County Highway worked with him on this issue.

KD asked Steve if buffers would be required with the implementation of Phase II. Paul interjected and informed the Board of the area in the northwestern part of the development that would be dedicated as an easement for future buffers if necessary. David Kovich stated he had actually planted buffers 2 years ago. He used tall grasses and had taken pictures for Linda Eastman in the SWCD office.

John Knochel motioned to grant a waiver for the standard Stormwater requirements for Valley Ridge Planned Development. KD seconded the motion and a waiver for Valley Ridge Planned Development was granted.

Steve stated there were two pipes under Eisenhower Road that discharged water from upstream. Drainage paths and easements through the development were required to be defined and indicated on the construction plans. In the case of future lot owners possibly filling in their swales this would be a reference. With this added condition he recommended final approval for Valley Ridge Planned Development. Ruth Shedd asked for public comment. No comments were given.

John Knochel made the motion to grant final approval for Valley Ridge Planned Development with the conditions stated on the September 4, 2003 Burke memo and the added condition stated by the Surveyor. KD seconded the motion and the motion carried. Valley Ridge Planned Development was granted final approval with conditions as noted in addition to those on the September 4, 2003 Burke memo..

First United Methodist Church

Robert Gross of R.W. Gross and Associates appeared before the Board to present First United Methodist Church for final approval.

The site was located on the north side of State Road 26 West (State Street), west of State Road 526 (Airport Road) in Wabash Township and consisted of 13.65 acres. The proposed development would include a church building, parking lot, playground area, access drive, septic fields and two (2) Stormwater detention ponds.

Bob stated the side ditch was in bad condition and would be widened to a v ditch with 6 to 1 side slopes, which would allow greater capacity. Septic fields would be installed until West Lafayette sewer extends to that area. He informed the Board he would provide a single Drainage Report including the 2-year pre-developed peak runoff with the 10-year post-developed peak runoff rates. The summary table of the pre- and post-developed discharges based on the revised TR-20 modeling would

be revised and submitted. Steve asked if future expansion calculations were included in this submission and Bob informed him they were not. He informed him he would return in the future with those projects and calculations for approval.

Steve referred to condition four (4) on the September 5th, 2003 Burke memo and revised it to read; the **owner** would be responsible for maintenance and repair of all drainage facilities on the property. He asked Bob if permits from INDOT had been obtained. Bob replied they had received a drive entrance permit and would also request one for the work on the side ditch. Steve noted a permit from INDOT for work within the right of way on State Road 26 was required as an additional condition of approval.

Steve then recommended final approval with conditions as stated on the September 5th, 2003 Burke memo in addition to those noted. Ruth Shedd asked for public comment. As there was none, John Knochel moved to grant final approval of the First United Methodist Church with the conditions stated on the September 5, 2003 Burke memo to include those noted. KD Benson seconded the motion and final approval for First United Methodist Church with the conditions as stated was granted.

Stones Crossing Section 3

Eric Gleissner of Roger Ward Engineering appeared before the Board to present Stone's Crossing Section 3 for final approval.

The project was part of the previously approved Stone's Crossing Section 1 and would be developed on 21.83 acres with 55 residential lots. It was located immediately west of County Road 250 East (Concord Road) and south of County Road 350 South. Single-family residences would be constructed rather than the originally proposed duplexes. The actual number of dwelling units and density would be decreased.

The majority of the Stormwater infrastructure had been built with the development of Section 1. Curb inlets and rear year inlets would be tied into existing storm sewer trunk lines. The drainage pattern would continue along the existing pattern to the JN Kirkpatrick Regulated Drain. The Regulated Drain runs along the north property line of the project site. Detention would not be required as development condition runoff was included in the design of the JN Kirkpatrick reconstruction project.

Steve reiterated the requirement as stated in condition four (4) on the September 5, 2003 Burke memo regarding a minimum of a 30 foot easement from top of bank along the Regulated Drain. Eric confirmed the requirement would be met. Steve then recommended final approval with conditions as stated on the September 5, 2003 Burke memo for Stones Crossing Section 3.

John Knochel moved to grant Stone's Crossing Section 3 final approval with the conditions on the September 5, 2003 Burke memo. KD seconded the motion and final approval was granted.

Public Comment

Ruth Shedd opened the floor for public comment. **Frances Gaylord** of 2021 Klondike Road Lafayette Indiana approached the Board. She expressed concern for the drainage in that area and provided the Board with pictures. Construction for the **Wabash Valley Feed & Storage** was current and she noted several concerns with that development, included were exposed power cables at the Lindberg and Klondike Road intersection. She noted soil erosion and the ponding of Stormwater runoff. She stated her biggest concern was safety and was disappointed that this issue was not being addressed to her satisfaction.

Frances had informed the Surveyor's office. Steve had made a site visit to Wabash Valley Feed & Storage with John Coulson. During the winter the outlet pipe had floated to the top of the pond and Mr. Coulson was notified at that time. Mr. Coulson stated he was regrading the pond. Once the pond was graded and seeded an end section would be added to the outlet pipe, which would anchor it in place. Steve also viewed the outfall for the new outlet at Lindberg Road. He informed Mr. Coulson he would have to regrade from the pond outfall to the invert of the pipe underneath Lindberg to insure a straight defined line. Riprap was also obstructing the flow at the time of the visit. Regrading and correct placement of riprap would be required. He would also be required to provide the County certified as built, based on the approved plans. Steve then reviewed the **Lindberg Village** development plan for the Board. Among other things the plans showed the interception of old agricultural tiles routed to onsite ponds and provided a new positive outlet into the natural drainage system.

Mr. Tim Wells of the County Highway Department had also made a site visit to check the culvert under Lindberg Road. Discussion pursued and it was noted that the old agricultural tile located on Mrs. Gaylord's property was in bad condition and

needed to be replaced. Tim noted the tile had collapsed and roots were holding the dirt together. There was a clearly defined channel where the tile was once located. He also noted, with a dye test the outlet was found approximately eight (80) feet from Lindberg Road in a pooled area. He felt the obstruction was on private property. He stated he felt 90 % of the private tile was collapsed and the property owners needed to work together to repair it. Steve stated once the private tile was repaired, County Highway should confirm the pipe under Lindberg Road was open and the Surveyor's office would confirm the outlet was not blocked. The problem should be taken care of at that point.

Ruth Shedd then suggested Mrs. Gaylord contact her neighbors to implement a plan for the repair of the private tile that ran through their property. At the time of the tile repair, Mrs. Gaylord was directed to contact County Highway to check the flow under Lindberg Road. The Surveyor's office would confirm the outlet was not blocked.

OTHER BUSINESS

J.N. Kirkpatrick Ditch

Steve informed the Board the contractor was in a penalty phase and Kline has notified the contractor of such. He estimated that Isom was 10-15 days into penalty. Steve stated that roughly thirty to forty-percent (30-40%) of the project was yet incomplete. Dave stated it was a question of substantial performance, and if forty-percent (40%) was left undone at the end of the contract, a contractor might be in breach of the contract. KD then inquired if a contractor did not perform responsibly on an active contract, could that be used for not accepting the lowest bid in the future from that contractor. Dave then informed KD that yes it could as long as documentation had been kept of the past performance. Dave will meet with Steve and Stu Kline to review the contract and the performance to date.

NRCS Waterways/ Buffers

Steve informed the Board of an ongoing problem with the waterways. The lack of notification to the Surveyor's office when a waterway was constructed was a problem. Although the communication between the offices was improved, he wanted to bring this to the Board's attention. The waterway request form given to landowners, states they should inform the Surveyor's office. Huntington County had a situation where lack of communication between offices resulted in major damage to a County Tile.

Ruth asked for public comment, and as there was none, John Knochel made the motion to adjourn the meeting. KD seconded the motion and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
October 1, 2003
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, and member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Tim Wells County Highway Engineer, and Drainage Board Executive Secretary Brenda Garrison.

Approval of September 10, 2003 Minutes

John Knochel made the motion to approve the September 10, 2003 minutes. KD Benson seconded the motion and the September 10, 2003 minutes were approved as written.

The Commons At Valley Lakes Phase 3

Mr. Alan Jacobson of Fisher and Associates appeared before the Board to present The Commons at Valley Lakes Phase 3 for final approval. As a continued phase of the overall development The Commons at Valley Lakes, Phase 3 included 35 single-family lots on 11 acres just east of Phase 2. The location was immediately east of County Road 150 East (South 18th Street) approximately ¼ mile south of County Road 350 South in the City of Lafayette, Wea Township.

Existing Storm sewers within the Commons at Valley Lakes Phase 1 will be extended south to accept Stormwater from Phase 3 as well as a portion of Branch No. 7 of the **J.N. Kirkpatrick Regulated Drain**. The storm sewers eventually discharged into the J.N. Kirkpatrick drain located just north of Phase 1. The J.N. Kirkpatrick drain is presently under reconstruction from **Elliott Ditch** upstream to County Road 250 East (Concord Road). Branches 7 and 8 of the drain crossed the proposed Phase 3 site. Branch 7 consisted of a 12-inch tile and crossed the site from northwest to southeast diagonally. The developer proposed to route Branch 7 through the proposed storm sewer system and vacate the legal drain easements of both branch 7 and 8 drain tiles.

Alan stated the city of Lafayette had approved and signed the plans and approval from Area Plan was anticipated within the week. Alan requested approval of reconstruction of that portion of Branch 7 which falls within the limits of Phase 3 and approval of direct discharge of the stormwater runoff from Phase 3 into the J.N. Kirkpatrick Regulated Drain.

The Surveyor stated the minimum width of the Easement of Branch 7 must be 30 feet by statute and noted on the plans. He also requested a drawing of the previous and the reconstructed route of Branches 7 and 8 of the J.N. Kirkpatrick Regulated Drain for future reference. Alan stated he would provide the Surveyor's office with a preferred digital master exhibit of the area's development noting the routes of the drain within the area.

The Surveyor recommended approval for direct release to the J. N. Kirkpatrick Drain, the reconstruction and relocation of a portion of Branch 7 and removal of a small portion of Branch 8. John Knochel moved for approval of the direct release to the J.N. Kirkpatrick drain as requested. KD Benson seconded the motion. Direct Release was granted for The Commons At Valley Lakes Phase 3. John Knochel motioned for the approval of the reconstruction of Branch 7 and removal of a portion of Branch 8 within the Commons at Valley Lakes Phase 3. KD Benson then seconded the motion and the motion carried.

The Surveyor then recommended final approval with the conditions as stated on the September 23, 2003 Burke memo and the Easement requirement as noted. John Knochel made the motion for final approval with conditions as stated on the September 23, 2003 Burke memo and those noted by the Surveyor. KD Benson seconded that motion and final approval with conditions for The Commons at Valley Lakes Phase 3 was granted.

Haggerty Hollow Subdivision

Mr. Paul Coates of C & S Engineering approached the Board and represented Frank Spain the developer to request the final approval as well as a waiver for Haggerty Hollow Subdivision. He provided the Board with 8x11 site drawings for their convenience.

The site was a proposed Rural Estates Subdivision and located at County Road 200 South (Haggerty Lane) and County Road 800 East. There would be 12 residential lots on approximately 27 acres. A private access drive would be constructed from County Road 800 East to all the lots.

The drainage of the site was primarily westward into the floodplain of the South Fork of Wildcat Creek. The runoff route crossed over a small tract of land owned by Frank Shultz and ETAL who were notified by certified mail as required. The proposed routing of the stormwater runoff was into two detention basins. The pond outlet was to discharge into the floodplain of the South Fork of Wildcat Creek. The proposed detention basins would be located on portions of Parcels 2 & 4 and Lot 8. A small portion of the site would discharge into the right-of-way of County Road 800 East. As stated previously the owner of Parcel 2 & 4 was notified by certified mail of the meeting. Spain Court would be constructed off of 800 East to be utilized as a private access drive to the proposed lots.

A waiver regarding condition 2 of the September 23, 2003 Burke memo was requested. Condition 2 read as follows: “ The proposed detention basins will be constructed on portions of Parcels 2 – 4 and Lot 8. The applicant has indicated that the same person owns all of the land within the project site (Lots 1-12) and Parcels 2-4. Since the Drainage Ordinance does not allow stormwater detention on subdivision lots, the applicant should clarify the status of Parcels 2 –4. A waiver from Section 14.f.13. of the Drainage Ordinance may be necessary to allow construction of the detention basins on Lot 8 and Parcels 2 – 4. Mr. Coates stated the intention was to obtain a drainage easement from Mr. Spain, the owner of Parcels 2 – 4, then record it with the final plat. Paul stated he would provide clarification on the plans as required by the remaining conditions in the September 23, 2003 Burke memo.

The Surveyor discussed the previous stated Section 14.f.13. of the Drainage Ordinance regarding stormwater detention on subdivision lots. Typically detention ponds are on outlots. While he understood the desire to have the ponds on lots for maintenance purposes, the original intent of this section was liability. He felt the waiver should not be consistently granted.

The Surveyor noted additional conditions as follows: Drainage Easements around both ponds and swales must be obtained. Swale grading and elevations must be noted for future reference as well as the outfall paths for the detention ponds. Paul stated in the future he would confer with the Surveyor at the very early stage of the rural estate subdivision plan process regarding the drainage plans.

KD Benson asked about Ordinance requirements for developers when adjoining landowners are involved in some way. The Surveyor stated a certified notice was the requirement. The intent of the Ordinance was to allow adjoining landowners to voice their concerns at the scheduled hearing. The Surveyor stated a review of that particular portion of the Ordinance might be warranted. In response to John Knochel’s inquiry, Tim Wells County Highway Engineer stated the proposed drainage plans would not have a significant impact on the drainage at 200 South and 800 East. He stated Mr. Coates had conferred with the Highway Dept. and Tim felt there would be a positive improvement for that area.

The Surveyor then recommended the approval of the waiver from Section 14.f.13 of the Drainage Ordinance that stated detention ponds couldn’t be located on individual lots. John Knochel made the motion to approve the waiver from Section 14. f. 13. of the Drainage Ordinance for Haggerty Hollow Subdivision. KD Benson seconded that motion and the waiver for Haggerty Hollow Subdivision was granted.

The Surveyor recommended final approval with conditions stated on the September 23, 2003 Burke memo as well as the conditions he had previously stated. John Knochel motioned for the final approval with conditions as stated on the September 23, 2003 Burke Memo as well as those noted by the Surveyor. KD Benson seconded the motion and final approval for Haggerty Hollow Subdivision was granted.

Steve Murray

The Surveyor presented a Declaration and Grant of Off-site Storm Drainage Easement for signature approval. He stated the Drainage Board Attorney had reviewed the Easement. This covered an Easement between the outfall for the Storm sewer system to the existing pond on Coyote Crossing as well as an Easement around the pond at Coyote Crossing. The Surveyor recommended accepting the Easement and recording it. John Knochel moved to approve the Easement as recommended. KD Benson seconded the motion and the Easement was approved.

Maintenance Bond #5459211 / Lindberg Village Phase 3- Cushing Drive/ Fairfield Contractors Letter of Credit #51004886 / Hickory Hills 3rd Subdivision Phase 1 Section 2 /Eagles Nest Incorporated

The Surveyor presented Maintenance Bond # 5459211 from Fairfield Contractors for Lindberg Village Phase 3 - Cushing Drive in the amount of \$6200.00. He then presented Letter of Credit #51004886 from Eagles Nest Incorporated for Hickory Hills 3rd Subdivision Phase 1 Section 2 in the amount of \$2307.00. Steve recommended both items for acceptance by the Board.

John Knochel made the motion to accept Maintenance Bond# 5459211 from Fairfield Contractors for Lindberg Village Phase 3 - Cushing Drive in the amount of \$6200.00 as presented. KD Benson seconded his motion. Maintenance Bond #5459211 amount \$6200.00 for Lindberg Village Phase 3- Cushing Drive was accepted by the Board.

John Knochel then recommended acceptance for Letter of Credit #51004886 from Eagles Nest Incorporated for Hickory Hills 3rd Subdivision Phase 1 Section 2 in the amount of \$2307.00. KD Benson seconded his motion. Letter of Credit #51004886 from Eagles Nest Incorporated for Hickory Hills 3rd Subdivision Phase 1 Section 2 in the amount of \$2307.00 was accepted by the Board.

Private Tile Update Klondike Road and Lindberg Road

The Surveyor and Mr. Zach Beasley Project Manager for the Surveyor Office met with Mr. Swanson landowner of a tract South of Lindberg Road. They walked the route of a tile from Lindberg to Mr. Swanson's south line. There was a minimum of 6 – 8 tile holes along the route. The outlet was partially submerged and appeared to be caused by natural breakdown and erosion. The Surveyor stated there was a fair amount of fall. The Surveyor stated the area was about a quarter of a mile at most. The private tile was in bad condition and in need of general repair. There was a section just north of Mr. Swanson's south line where the tile appeared to outlet. He stated Mr. Swanson gave the history of the tile. Mr. Swanson stated he felt the outfall for the storm sewer of **Lindberg Village** that comes out on the south side of culvert underneath Lindberg Road was dumping more water on him and aggravating the situation.

Homer Schaffer/ Anson Drain

At that time Steve informed the Board he had received a letter from Joe Bumbleburg inquiring the status of Mr. Homer Schaffer's drainage problem. The area in question was located on the Southwest corner of 850 North and 100 West. A large wetland exists just across Mr. Schaffer's property line. A branch of the Anson Drain runs through the wetland. The Anson Drain was listed on the Annual Surveyor's Report presented to the Board in February under "Drains in need of Reconstruction".

The Surveyor and Shelli Muller GIS Technician presented an overview of the area. Mr. Schaffer's concern was the growth of the wetland and the proximity to his home. The tile was found to be plugged through the woods to the east of CR 100W and most likely through the wetland also. The Surveyor noted the law stated when a regulated tile drain ran through a wetland, the County had the right to maintain it. For the branch to function properly, the Surveyor estimated two-three thousand feet of tile repair was needed at the cost of \$14.00 - \$16.00 per foot which totaled approximately \$32,000.00 - \$50,000.00. The Anson drain is a fairly large tile system and watershed. The Surveyor felt the watershed landowners would most likely not agree on reconstruction, as the per acre cost would be raised from the present \$1.25 to approximately \$5.00 - \$8.00 for the needed repair. In conclusion, there were two options: vacation of the tile, or a maintenance and/ or reconstruction hearing for the landowners involved. He also stated further investigation; a report and notification were required before a hearing could be held. The status of the tile and receipt of the letter from Mr. Bumbleburg regarding the tile was noted.

John Knochel moved for adjournment. KD Benson seconded the motion and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
October 20, 2003
Special Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Auditor Robert Plantega and Commissioner's Executive Secretary Pauline Rohr were present. County Drainage Board member KD Benson and Drainage Board Secretary Brenda Garrison were absent.

Drainage Board President Ruth Shedd called the Special Drainage Board Meeting to order with Commissioner KD Benson and Drainage Board Secretary Brenda Garrison absent.

J.N. Kirkpatrick Drain Reconstruction

Mr. Murray requested the Board sign and approve Supplemental Agreement Number 2 with H. Stewart Kline and Associates Inc. for construction engineering and inspection services for the reconstruction of the J.N. Kirkpatrick Drain and Bridges 60, 61, and 62. The Surveyor had presented the Supplement to the Commissioners in their regular monthly meeting prior to the Special Drainage Board meeting being called to order.

The original agreement amount was \$200,000. Supplemental Agreement Number 1 added \$25,000.00 and Supplemental Agreement Number 2 would add \$72,000.00 to the original amount. The new not- to- exceed amount would be \$297,000.00.

John Knochel made the motion to approve the Supplemental Agreement Number 2 with H. Stewart Kline and Associates, Inc. for construction engineering and inspection services for the reconstruction of the J.N. Kirkpatrick Drain and Bridge numbers 60, 61 and 62. Ruth Shedd seconded his motion and the Supplemental Agreement Number 2 was approved.

John Knochel motioned for the Special Drainage Board meeting to be adjourned. As there was no other business before the Board, Ruth Shedd seconded the motion and the meeting was adjourned.

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

ABSENT
KD Benson, Member

**Tippecanoe County Drainage Board
Minutes
December 3, 2003
Regular Meeting**

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Tim Wells County Highway Engineer, Drainage Board Secretary Brenda Garrison, and Shelli Muller GIS Technician.

Approval of November 5, 2003 Minutes

KD Benson motioned to accept the November 5th, 2003 minutes as written. Ruth Shedd seconded the motion and the minutes were accepted as presented.

Raineybrook Part 2 Section 2 Offsite Improvements

Mr. Pat Jarboe from T-Bird Designs appeared before the Board to present Raineybrook Part 2 Section 2 Offsite Improvements and request final approval. The project was located on the north side of County Road 500 South between County Road 175 West and New U.S. 231 in Wea Township. Pat presented plans to the Board for reconstruction of the entrance road at Wharfside Parkway/Cardinal Drive. The reconstruction involved installation of four (4) curb inlets (for runoff collection from the road only) and the replacement of a 36-inch RCP culvert under Wharfside Parkway at County Road 500 South.

Utilizing the new GIS Website, Shelli Muller showed the location while Pat reviewed the project for the Board. Pat pointed out that the roundabout was located at the edge of the flood plain. It was noted the roundabout would indeed be a County maintained road. He informed the Board a permit was obtained from IDNR as required, and Soil Conservation Services was consulted. Pat added it would be very useful for flood plain information to be accessible on the County's Website. KD Benson stated that information would be added in the future. The Surveyor added the FEMA maps were not highly accurate, however there was specific flood plain information that would be added as part of the drainage layers or Area Plan's layers.

The Surveyor recommended final approval with conditions as listed on the December 4, 2003 Burke review memo. KD Benson motioned to grant final approval with conditions as stated on the December 4, 2003 Burke memo and Ruth Shedd seconded the motion. Raineybrook Part 2 Section 2 Offsite Improvements was granted final approval with the conditions as stated.

Regal Valley Place Phase 2

Alan Jacobson represented Cedar Run Limited and appeared before the Board requesting final approval for Regal Valley Place Phase 2. The project was a continuation of the construction of a private 2-lane roadway that connected Regal Valley Drive to County Road 150 East (South 18th Street). The site was located south of County Road 350 South and east of South 18th Street within the City of Lafayette. All of the stormwater facilities would outlet at the **J. N. Kirkpatrick Regulated Drain**. The Regulated Drain was undergoing reconstruction from a closed tile to an open ditch along the south boundary of the project.

The developer requested a waiver from the standard stormwater detention requirements. The construction included the installation of stormwater facilities to serve the undeveloped Lot 6 and a portion of Lot 5. A culvert would be installed where Regal Valley place crossed the east side along South 18th Street. A temporary swale constructed during Phase 1 would be continued with a southerly extension. Strategically placed catch basins were required. Alan stated the City was prepared to accept the construction plans as presented by the end of the week.

The Surveyor stated that Alan was aware detention storage may be required as the site developed depending on the impervious area. In response to the Surveyor's request, an additional forty feet (40') immediately north of the North bank's seventy-five foot (75') Drainage Easement was provided. It would be indicated as a Drainage, Utility and Landscape Easement on the final plat. A total of twenty feet (20') within the forty feet (40') Easement is for drain maintenance access.

The Surveyor recommended final approval to the Board with the conditions stated on the December 5, 2003 Burke memo and those indicated today. KD Benson moved to grant a waiver for the standard stormwater detention requirements for Regal Valley Place Phase 2. Ruth Shedd seconded the motion and the waiver for the standard stormwater detention requirements for Regal Valley Place Phase 2 was granted. KD Benson also moved to give final approval with the conditions as stated and those noted on the December 5, 2003 Burke memo. Ruth Shedd seconded the motion and Regal Valley Place Phase 2 was granted final approval with the conditions as noted.

Steve Murray

Berlowitz Drain

Hawthorne Meadows Subdivision and Hawthorne Lakes Subdivision were located within the Berlowitz Regulated Drain watershed area. Berlowitz, currently a tile, also contains the Felbaum branch. He reminded the Board a preliminary list was presented to them in January of 2003 which listed the Berlowitz as an urban drain in need of reconstruction. Resulting from studies done by Burke in the late 1980's and early 1990's it was determined the drain would need to be reconstructed from an agricultural tile to an open channel with a series of regional detention ponds. Designs were in place for the reconstruction and regional detention. With the design in place, funding was being looked at.

Section 18 of the Drainage Ordinance allow the Board to classify certain areas as Impact Drainage Areas. He then read Section 18 to the Board. The Surveyor requested permission to pursue the preparation of a resolution in accordance with this section for Berlowitz. Based on current estimates and the amount of acre-feet of storage, it appeared the contribution for detention storage for the developments in this area would be in the range of \$15000.00 to \$18000.00 per acre-foot. The exact dollar rate would be determined from bids. **F-Lake's** current rate was set at \$15000.00 per acre-foot. KD Benson and Ruth Shedd gave the Board's approval to move forward on the preparation of a resolution in accordance with Section 18 of the Drainage Ordinance.

Hawthorne Meadows Subdivision

Brandon Fulk from the Schneider Corporation appeared before the Board requesting final approval for Hawthorne Meadows Planned Development. The project was located on the west side of County Road 550 East, south of County Road 50 South. The project contained 178 residential lots on approximately 43 acres. The site drainage was southward into the **Berlowitz Regulated Drain**. As the development was designed with no onsite detention, storm water runoff from the development would drain into one of the proposed Regional Detention Basins to be constructed along the southern property boundary. As stated previously by Mr. Murray the Berlowitz Drain would undergo future reconstruction and the basins were part of that plan. A portion of the site would discharge into storm inlets previously constructed with the Arlington Commons Development along the north boundary line of the site. Catch Basins would be located to decrease debris to the basin.

Brandon stated they would present the construction of the project in phases as a contingency plan in the event the portion between County Road 550 East and I65 was not constructed at the same time as the **Berlowitz project**. The hope was that both would be constructed simultaneously. Therefore he would present the overall project in 3 (three) Sections. Mr. Fulk requested final approval for Sections 1 (one) and 2 (two). Section 1 (northwestern part of the project) contained 66 lots and 49 lots south of Section 1 was designated as Section 2. He then requested preliminary approval for the entire project noting he would return for the Board's final approval of Section 3 at a later date.

In response to KD's inquiry, the Surveyor stated the outlets for the above project were contingent on the Berlowitz project. He felt a portion of the **Berlowitz** reconstruction potentially could start next year. **Berlowitz Ditch** bordered the project on the Southeast. While the plan and partial funding were in place, a funding review was ongoing as this was approximately a \$5,000,000.00 project. He stated they would like to start the section between I65 and 50 South. The Surveyor stated the December 9th, 2003 Burke Review Memo covered all concerns and would be addressed during the construction phases. Mr. Fulk then confirmed the 4.13-acre foot of storage indicated on the plans was for the entire development. Construction was anticipated to start in the spring of 2004 and the site would be accessed from South Brookfield Drive. The Surveyor recommended final approval for Hawthorne Meadows Section 1 and 2 with the conditions as stated on the December 9, 2003 Burke memo in addition to recommending preliminary approval of the overall Hawthorne Development.

KD Benson motioned to grant final approval for Sections 1 and 2 of Hawthorne Meadows Subdivision with conditions stated on the December 9, 2003 Burke Memo as well as preliminary approval of the overall Hawthorne Development. Ruth Shedd seconded her motion. Hawthorne Meadows Section 1 and Section 2 was granted final approval with the conditions as stated on the Burke December 9, 2003 Memo. Hawthorne Meadows overall Planned Development was granted preliminary approval as well.

Hawthorne Lakes

Brandon Fulk of the Schneider Corporation appeared before the Board to request final approval of the Hawthorne Lakes Subdivision. The project was located on 43 acres east of County Road 550 East and north of the future extension of McCarty Lane. The project contained 178 residential lots. No onsite detention would be provided. The **Felbaum Regulated Tile Drain** crosses the site. The drain would be relocated and routed around the newly developed subdivision parallel to its east and north property lines before outletting into the **Berlowitz Regional Detention Basin**. As with the Hawthorne Meadows project, catch basins would be placed strategically to reduce debris.

The western half of the project would be developed first. This included a main trunk line that would service the entire site, which tied into the **Berlowitz** Basin. Mr. Fulk stated Schneider Corp. and the Surveyor have been working together on the relocation of tile. He then requested final approval along with approval for relocation of the Felbaum Regulated Tile.

In response to KD's inquiry, a waiver would not be required, as the **Berlowitz** Detention facility would be utilized if in place or the developer would have to provide temporary detention storage. As part of the conditions, payment would be required for the use of the **Berlowitz** Detention facility for both Hawthorne Lakes and Hawthorne Meadows.

The Surveyor recommended final approval with the conditions as stated on the December 9, 2003 Burke memo and to include payment for detention storage if needed. KD Benson made the motion to grant final approval for Hawthorne Lakes Subdivision with the conditions stated on the December 9, 2003 Burke memo and the condition of payment for detention storage. Ruth Shedd seconded the motion and final approval was granted.

Steve Murray

Winding Creek Section 1 Relocation of Legal Drain Easement

The Surveyor informed the Board repair work had been done recently on the **County Farm Regulated Drain**. While doing the repair, it was discovered a branch of the drain cuts through the very southwest corner of Winding Creek Section 1 Subdivision. Upon review of the file, it was found that the final plat of Winding Creek Section Subdivision did not indicate the **County Farm's tile Easement**. In addition, no request for reduction of Easement was found. After discussion with the developer and Mr. Coutts, a plat was prepared to indicate the location and reduction of Regulated Drain Easement for Lots 45, 46 and 47 in Section 1 and the reduction from seventy-five foot (75') half width Easement to fifteen feet (15') on the Northeast side. A legal description was also provided. Once the reduction was granted, an Easement dedication to the Drainage Board for public record would be submitted. The Surveyor recommended to the Board grant the reduction of the Regulated Drain Easement for the **County Farm Regulated Drain** as shown on the survey from C&S Engineering. The Easement reduction pertained to Lots 45, 46 and 47.

KD Benson moved to approve the reduction of the **County Farm Legal Drain Easement** on Lots 45,46 and 47 in Winding Creek Subdivision Section 1 as reflected on the December 5, 2003 Survey provided by C&S Engineering.

OTHER BUSINESS

2004 Drainage Board Meeting Dates

The Board was presented with a list of Drainage Board meeting dates in 2004. The dates reflected the first Wednesday of each month at 10:00 a.m.

KD Benson motioned to approve the list with the revision of the December 1 to December 8th. (This was due to the 2004 Commissioners Conference.) Ruth Shedd seconded the motion to adopt the Drainage Board Meeting Dates as noted.

The following dates were adopted:

January 7, 2004

February 4, 2004

March 3, 2004

April 7, 2004

May 5, 2004

June 2, 2004

July 7, 2004

August 4, 2004

September 1, 2004

October 6, 2004

November 3, 2004

December 8, 2004

Public Comment

Alan Jacobson thanked the Board for their service this past year and stated he looked forward to working with them in the future. Pat Jarboe shared his enthusiasm with the new County GIS website's availability and looked forward to the future addition of layers such as the flood plain information.

With no other business before the Board, Ruth made the motion to adjourn. The meeting was adjourned

Ruth E. Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
March 3, 2004
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Tim Wells County Highway Engineer, Drainage Board Secretary Brenda Garrison, and Shelli Muller GIS Technician.

Approval of February 4, 2004 Minutes

KD Benson made the motion to approve the February 4, 2004 minutes as written and Ruth Shedd seconded the motion. The motion carried.

Raineybrook Part 2 Section 2

Pat Jarboe and Meredith Buyer of T-Bird Design appeared before the Board to request final approval for Raineybrook Subdivision Part 2 Section 2 Subdivision. Meredith stated this section of the subdivision's plans complied with the previously submitted development plans. The Surveyor stated there was a swale along the rear of lots 243 through 253 and based on the proposed grades and contours it was not clear if the swale was within an easement. Clarity would be required and would be noted as the construction plan approval process was followed. The Surveyor reviewed the requirement for restrictive Covenants. The Surveyor was prepared to recommend final approval with conditions as stated on the February 26, 2004 Burke memo to include the condition of clarity concerning the drainage swale at the rear of lots 243 through 253. KD Benson moved to grant final approval with the conditions stated by the Surveyor, as well as those noted on the February 26, 2004 Burke memo. Ruth Shedd seconded the motion. Raineybrook Subdivision Part 2 Section 2 was granted final approval with conditions as stated on the February 26, 2004 Burke memo, as well as the required homeowners association covenants and clarity of the swale along the rear of lots 243 through 253.

Benjamin Crossing Section 4 and Section 5

Mr. Brandon Fulk of Schneider Engineering Corporation appeared before the Board to request final approval for Benjamin Crossing Subdivision Section's 4 and 5. The site was located at the northeast corner of County Roads 250 East (Concord Road) and 450 South in Wea Township. Brandon stated the conditions listed on the February 26, 2004 Burke memo would be met. The Surveyor stated the following additional conditions. He stated there was erosion at the outlet pipe for pond one (1) that was adjacent to Concord Road, as well as a fair amount of sediment at the Concord Road culverts. He required a plan to be in place to rectify the erosion and sediment collected on the East side of the Concord Road culvert and the erosion over top of outfall for the remainder of the Kirkpatrick tile drain. Brandon stated after further study, the eight-inch (8") outlet pipe for the Northeast pond would be changed to two (2) ten inch (10") outlet pipes. The Surveyor asked if those pipes were in place at this time. Brandon stated they were not. The Surveyor noted the placement of the outlet pipes in question would be required before any work began on Sections 4 & 5. Brandon stated they could comply with that condition. The Surveyor noted that due to the spring planting season, it was important to have those pipes in place as soon as possible. In summary, the Surveyor stated he was prepared to recommend final approval with conditions as stated on the February 26, 2004 Burke memo as well as the following additional conditions: A solution and reasonable time frame must be in place to remove sediment and rectify the erosion problem on the outlet for pond one; also assurance must be given for the placement of two (2) ten inch (10") outlet tiles for the Northeast corner pond before any site preparation, etc. was started.

KD Benson made the motion to grant final approval for Benjamin Crossing Section 4 with the conditions listed on the February 26, 2004 Burke memo in addition to those conditions noted by the Surveyor. Ruth Shedd seconded the motion. Benjamin Crossing Section 4 was granted final approval with conditions as stated on the February 26, 2004 Burke memo, a solution and reasonable time frame must be in place to remove sediment and rectify the erosion problem on the outlet for pond one, also that assurance must be given for the placement of two (2) ten inch (10") outlet tiles for the Northeast corner pond before any site preparation, etc. was started. KD Benson then made the motion to grant final approval for Benjamin Crossing Section 5 with those conditions listed on the February 26, 2004 Burke memo, as well as those additional conditions as stated previously by the Surveyor concerning the erosion and sediment correction and the two (2) ten inch (10") outlet

pipes to be in place before site preparation was started. Ruth Shedd seconded the motion and Benjamin Crossing Section 5 was granted final approval with the conditions listed on the February 26, 2004 memo, and those additional conditions noted by the Surveyor. The Surveyor then added that CP Morgan had been active in pond safety, however he wanted to insure placement of warning signs and the installation of grates over the outlet pipes shown on the construction plans.

**The Retreat at Hickory Ridge
Ravenswood at Hickory Ridge
Hickory Ridge Subdivision**

Tim Beyer of Vester & Associates appeared before the Board to request final approval for The Retreat at Hickory Ridge Planned Development, Ravenswood at Hickory Ridge, and Hickory Ridge Subdivision. The overall watershed (approximately 116 acres) drained to Wea Creek. Three (3) detention ponds would be involved in the developed area. The Retreat at Hickory Ridge site was located on thirteen (13) acres west of County Road 250 East (Concord Road) between County Roads 450 South and 500 South in Wea Township and would consist of 50 single-family residences. The Retreat at Hickory Ridge P.D. storm sewer system would discharge to an off-site detention pond (Pond No. 1) located to the north within Ravenswood at Hickory Ridge. The off-site pond would discharge downstream to a detention pond (Pond No. 2) to the west within the Hickory Ridge Subdivision before being released to an existing natural drainage channel to the north of the developed property. Ravenswood at Hickory Ridge (formerly known as the Overture) was a part of the Hickory Ridge Development and located on twenty (20) acres in the northeast corner of the overall development. Ravenswood would consist of twenty (20) four-plex condominium units, with a future planned church on seven and half (7 1/2) acres. Hickory Ridge Subdivision site was located on seventy-three (73) acres and would consist of 180 single-family residences and two (2) stormwater detention ponds numbered 2 & 3. Pond No. 2 outlets to a natural drainage channel to the north and Pond No. 3 would outlet to a natural channel to the west. The development was previously reviewed under Hickory Ridge Estates Phase 1 and granted final approval with conditions on Nov. 7, 2001. However construction on that project was never started. Mr. Beyer stated they would comply with the conditions as stated for all three projects on their February 26, 2004 Burke memos.

Regarding The Retreat at Hickory Ridge the Surveyor recommended final approval with conditions listed on the February 26, 2004 Burke memo as well as the condition of recorded covenants for a homeowners association and installation of grates for the outlet pipes. KD Benson motioned to grant final approval for The Retreat at Hickory Ridge with the conditions listed on the February 26, 2004 Burke memo as well as those conditions stated by the Surveyor. Ruth Shedd seconded the motion. The Retreat at Hickory Ridge was granted final approval with the conditions listed on the February 26, 2004 Burke memo, and the conditions of recorded covenants for a homeowners association and grates installed on the outlet pipes.

Regarding Ravenswood at Hickory Ridge Subdivision, Tim stated they would obtain and provide an easement for the swale when they appear before the Board for the final approval of the future church project. The Surveyor recommended final approval with the following conditions; a homeowners association must be formed and the covenants recorded, installation of grates for the outlet pipes, warning signs for the ponds, as well as the conditions listed on the February 26, 2004 Burke memo. KD Benson made the motion to grant final approval for Ravenswood at Hickory Ridge with the conditions listed on the February 26, 2004 Burke memo as well as those noted by the Surveyor. Ruth Shedd seconded the motion and Ravenswood at Hickory Ridge was granted final approval with conditions as listed on the February 26, 2004 Burke memo, the condition of a homeowners association with recorded covenants, grates installed on the outlet pipe, and pond warning signs.

Regarding Hickory Ridge Subdivision, the Surveyor stated a waiver for direct discharge was warranted. KD Benson motioned to grant a waiver for direct discharge to Hickory Ridge Subdivision and Ruth Shedd seconded the motion. The waiver was granted. The Surveyor then gave a drainage overview of the entire development for the Board. In response to the Surveyor's inquiry about an outlot shown on the plans, Tim stated it was a wooded area that would possibly be a park in the future. Tim stated that trees and foliage would remain on the lot for environmental purposes. The Surveyor stated a meeting between Vester & Associates with T-Bird Designs was warranted. (T-Bird designs were currently working on a project downstream.) Pat Jarboe representing T-Bird Design approached the Board and stated he had received a drainage study from Tim already but he would like to meet with Tim and someone from Christopher Burke's office to review the drainage for the entire area. In response to KD's inquiry, Tim stated all the downstream owners had been notified. The Surveyor then stated he was prepared to recommend final approval with the conditions as listed on the February 26, 2004 Burke memo along with the addition of recorded covenants of a homeowners association, grates on all outlet pipes, warning signs for the ponds and a joint meeting between Vester & Associates, T-Bird Designs and possibly Christopher Burke Engineering. KD Benson made the motion to grant final approval for Hickory Ridge Subdivision with the conditions as listed on the February 26, 2004 Burke memo and those noted by the Surveyor. Ruth Shedd seconded the motion. Hickory Ridge Subdivision was granted

final approval with conditions as listed on the February 26, 2004 Burke memo and the additional conditions of recorded covenants for the homeowners association, grates on all outlet pipes, warning signs for the ponds, and a meeting between Vester & Associates, T-Bird Designs and possibly Christopher Burke Engineering.

The Surveyor stated the Drainage Easement listed on the Agenda would be carried over to April's Drainage Board meeting.

At that time John asked for public comment. As there was no public comment, KD Benson moved for adjournment and the meeting was adjourned.

John Knochel, President

KD Benson, Vice President

Ruth Shedd, Member

Brenda Garrison, Secretary

Tippecanoe County Drainage Board
Minutes
April 7, 2004
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison, and GIS Technician Shelli Muller.

Approval of March 3, 2004 Minutes

KD Benson motioned to approve the minutes of the March 3, 2004 regular meeting and minutes of the March 3, 2004 Obstruction Hearing as written. Ruth Shedd seconded the motion and the minutes of the March 3, 2004 regular meeting and the Obstruction Hearing minutes were approved as written.

Tippecanoe Shoppes Subdivision Lot 1

Steve Murray stated this was a new lot in the Meijer area inside the city of Lafayette's limits. The concern was it discharged into a pond, which was part of the Alexander Ross Regulated Drain. While the submitted plan was reviewed by the Surveyor's office, the intent was not to present it to the Drainage Board. The pond was designed originally to handle future development and based upon the submittal, the original drainage plan for the Meijer property was followed. KD Benson made a motion to withdrawal Tippecanoe Shoppes from the agenda. Ruth Shedd seconded the motion. The motion was granted.

Avalon Bluffs Section 1

Brandon Fulk from the Schneider Corporation appeared before the Board to request a variance on the post-developed release rates and final approval for Avalon Bluffs Subdivision Section 1. This section was a part of the overall Avalon Bluffs Development. In addition to Section 1, a conceptual plan was submitted for the overall development.

The project was located on the south end of the County, east of County Road 250 East (Concord Road) between County Roads 450 South and 500 South. Benjamin Crossing Development was located directly north of this site. Brandon stated there were five (5) separate off-site release points for the overall development. The northern portion of the site drained to the Kirkpatrick Regulated Drain watershed and the southern portion of the site drained to the Kenny Ditch, which was a part of the Wea Creek Watershed. Brandon pointed out that a private tile in the northwest corner of the site would not be used for discharge. The proposed site would have three discharge points. Section 1 and Section 2 discharge point was located in the northeast corner with a minimal of direct discharge and utilized a detention pond. The outlet ran parallel to and conveyed under County Road 450 South and continued approximately 350 feet (350') east to Benjamin Crossing Development's site. Section 3 was in the conceptual stage at this point, and would drain to the south. Brandon stated the developer was aware of the surrounding landowner's concerns regarding the existing pond and ecosystem south of 500 South. The developer had directed Schneider to be proactive in meeting those concerns. All downstream owners would be contacted when they were closer to developing that portion of the site. A meeting would be held with the landowners for review of the plans.

Brandon stated they conferred with the conditions on the April 2, 2004 Burke memo, but did need to clarify #4 regarding the variance for the post development runoff deviation. When Benjamin Crossing Development was analyzed, basins W1 and W2 were one basin. That basin was split in two and the methodology was revised. A model of the total system to include the Benjamin Crossing site would be documented to show no adverse impact on the adjoining landowners by the decision to split the basin. He stated the Surveyor's office request for signage and boat ramp accessibility would be provided.

The Surveyor recommended granting a variance for the direct discharge into the Benjamin Crossing storm system. The discharge would not be on a downstream landowner. The developer had control of the property, which would receive the discharge, and the storm system was designed to handle it. Dave Eichelberger informed the Board; the increase occurred when you compared the ten-year post developed to the two-year pre developed which was the first stage and the second stage was one hundred year to the ten year.

Steve felt it would be prudent to grant the variance subject to the Surveyor's office final review. KD Benson motioned to grant the variance request subject to the condition as stated by the Surveyor. Ruth Shedd seconded the motion and the variance was granted. Steve stated he was prepared to recommend final approval with the conditions as stated on the April 2, 2004 Burke memo as well as the rerouting the Kirkpatrick Regulated Drain around the detention pond at the northeast side of the Benjamin Crossing development, including the installation of two ten inch (10") pipes for outlets and correction of the erosion and sediment problems at the conspan located at Concord Road and Kirkpatrick Ditch. Brandon stated they concurred with that. KD Benson motioned to grant final approval with the conditions noted on the April 2, 2004 Burke memo in addition to those noted by the Surveyor. Ruth Shedd seconded the motion. Avalon Bluffs Section 1 was granted a direct discharge variance and final approval with conditions. Those conditions were noted on the April 2, 2004 Burke memo, as well as rerouting the Kirkpatrick Regulated drain, installation of two ten inch (10") outlets for the pond in the northeast corner of the Benjamin Crossing development and erosion and sediment correction.

Boothe Farms Subdivision

Robert Gross of R.W. Gross and Associates represented Greg Sutter and appeared before the Board to request a variance of the standard stormwater detention requirements and final approval for the Boothe Farms Subdivision project. The site consisted of ten and one tenth (10.1) acres located on the north side of County Road 700 North about one fourth (1/4) mile east of County Road 775 East in Washington Township and would contain five (5) residential lots. Wentworth Lane, a twenty-foot (20') wide paved road, would provide access from County Road 700 North. Most of the site discharged to an existing open ravine at the northwest corner of the property, then approximately three fourths (3/4) of a mile north to the Wabash River. A 24" culvert conveyed runoff from the northeastern portion of the site to the west side of Wentworth Lane and eventually discharged into the ravine through a stormwater swale. Due to the amount of runoff from the site, a variance was requested. When modeling the project small changes were noted on the existing conditions to the proposed conditions. The runoff would increase slightly. The two-year runoff was increased from 21 cfs to 23 cfs, ten-year from 42 cfs to 46 cfs, and the 100-year from 71 cfs to 80 cfs. A rock dam to minimize erosion would be installed at the most upstream portion of the open ravine.

The Surveyor recommended granting the variance subject to the installation of riprap to help stabilize the ravine in addition to a covenant to restrict the amount of impervious area. KD Benson made a motion to grant the waiver subject to the Surveyor's conditions. Ruth Shedd seconded the motion and the variance was granted. The Surveyor recommended final approval with conditions as stated on the April 2, 2004 Burke memo. KD Benson motioned to grant final approval with the conditions stated on the April 2, 2004 Burke memo. Ruth Shedd seconded the motion. Boothe Farms Subdivision was granted final approval with the conditions stated on the April 2, 2004 Burke memo.

OTHER BUSINESS

Revised NPDES Phase II Stormwater Quality Management Plan and Permit Contract

The Surveyor presented to the Board a revised NPDES Phase II Stormwater Quality Management Plan and Permit contract with Christopher B. Burke Engineering for additional fees. The cost was shared between Tippecanoe County, City of Lafayette, City of West Lafayette and Purdue University. When the original contract was executed approximately two years ago, Rule 13 was not finished and deadlines were moved back. The NPDES project team had reviewed the revision to the contract. The cost covered additional meeting attendance, technical guidance through the process, development assistance of the Phase II website (program requirement), as well as reformatting the individual ordinances into one comprehensive ordinance. Tippecanoe County's portion of the revised contract amount would be \$22,000.00, City of Lafayette's \$16,000.00, City of West Lafayette's \$12,000.00, and Purdue University's portion would be \$10,000.00. The two cities and the University were in the process of executing the revision at the present time. As the monies were available, the Surveyor recommended granting the increase in the contract for Phase II with Christopher B. Burke Engineering. KD Benson motioned to approve the contract revision with Christopher B. Burke Engineering and Ruth Shedd seconded the motion.

Winding Creek Section 1/Reduction of Drainage Easement/ County Farm Regulated Drain

A request to modify the Legal Drain Easement of the County Farm Regulated Drain had been received by the Surveyor’s office for a part of Lots 45 and 46 of Winding Creek Section 1 Subdivision. The request involved the reduction of the current seventy-five feet (75’) Easement to fifteen feet from the centerline of the tile across lots 45 and 46 in Winding Creek Section 1 Subdivision. Dave Luhman had reviewed the request and stated since the parties had not signed it, the Board should approve the form itself. Once the parties submitted a signed request the Board could then sign it. KD Benson moved to approve the form and authorize the signing of the Easement once received with proper signatures. Ruth Shedd seconded the motion and the modification of the Legal Drain Easement was granted once the proper signatures were obtained.

Boland Heights/ Reduction of Easement/ Branch 1 of Branch 4 of S.W. Elliott Regulated Drain

The Surveyor presented a request to modify the Regulated Drain Easement for a portion of Branch 1 of Branch 4 of the S.W. Elliott Regulated Drain located in Boland Heights Subdivision. The requested modification was to reduce the existing seventy-five feet (75’) from the tile’s centerline to fifteen feet (15’) each side of the centerline of the tile for a total of a thirty-foot (30’) overall Easement. The portion of the Branch in question was located in Section 17, Township 22 North and Range 3 West and also a part of tract fourteen (14) and nineteen (19), as shown on the Plat of Survey recorded Document Number 98-06220.

KD Benson motioned to grant the Easement Reduction as presented by the Surveyor. Ruth Shedd seconded the motion and an Easement Reduction for a portion of Branch one (1) of Branch four (4) of the S.W. Elliott Regulated Drain was granted as presented to the Board by the Surveyor.

As there was no other business before the Board, KD Benson motioned to adjourn. Ruth Shedd seconded the motion and the meeting was adjourned.

John Knochel, President

KD Benson, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
June 2, 2004
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller, member Ruth Shedd was absent.

Approval of May 5, 2004 Regular Drainage Board Meeting Minutes
Approval of May 19, 2004 Special Drainage Board Meeting Minutes

KD Benson motioned to accept the May 5th, 2004 Regular Drainage Board Meeting Minutes in addition to the May 19, 2004 Special Drainage Board Meeting Minutes as written. John Knochel seconded the motion. The minutes of May 5th and May 19th, 2004 were approved as written.

Regal Valley Drive Crossing/Kirkpatrick Ditch

Alan Jacobson representative from Fisher & Associates appeared before the Board to request final approval for a proposed crossing over the J.N. Kirkpatrick Regulated Drain on Regal Valley Drive. Regal Valley Drive was located between County Roads 250 East (Concord Road) and 150 East (South 18th Street) on the south side of County Road 350 South. With the exception of the portion that crossed the J.N. Kirkpatrick Regulated Drain, the drive had been constructed. As the reconstructed J.N. Kirkpatrick Ditch was considered a regulated floodway, a permit from the Department of Natural Resources (DNR) was pending.

The proposed structure would be a 28-foot x 7-foot box culvert located north of Kingsbury Drive in the city of Lafayette. Mr. Jacobsen stated the structure would be classified as a bridge due to the length of span. It would be identified as Tippecanoe County Bridge # 59. Alan informed the Board he had conferred with the County Highway Department during the design process regarding safety issues. The County Highway Department would be responsible for the inspection and maintenance of the structure not the approaches. The Department of Natural Resources (DNR) would inspect the hydraulics of the bridge. The Highway Department requested an independent Inspector of their choice be hired by the developer to inspect the bridge after completion. The Surveyor stated the Highway Department's request would be a condition of final approval. Due to the location within the city limits, the roadway would be maintained by the City of Lafayette. Pedestrian sidewalks would be located on either side of the roadway. John Knochel asked Tim Wells for comments. Tim stated the department had previously met with Alan and agreed to the plans.

Alan then stated Milestone was contracted to perform the work for the roadway surface improvements and the erection of the bridge structure. He anticipated the construction to start mid to late July. Approval had been received from the local Soil Conservation Office for Rule five (5) compliance.

The Surveyor recommended final approval with the added condition of review after DNR inspection as well as the County Highway's approval. KD Benson motioned to grant final approval with the conditions as listed on the May 28, 2004 Burke memo and the Surveyors office review of plans (after DNR approval) along with the County Highway Department's approval. John Knochel seconded the motion. Regal Valley Crossing was granted final approval with the conditions listed on the May 28, 2004 Burke memo along with the additional conditions of the Surveyor's Office review (after DNR approval) and the County Highway's approval.

Mason’s Ridge Subdivision

Pat Jarboe representative from T-Bird Design Services appeared before the Board to request conceptual approval for Mason’s Ridge Subdivision drainage plan. The site consisted of 64 acres and was located northeast of the intersection of County Road 150 East (South 18th Street) and Wea School Road. An existing natural ravine or ditch would provide an open channel flow from the northeast portion of the site to a storm sewer line extending to one of two (2) on-site detention basins prior to discharging at an existing pipe arch below Wea School Road. A fifteen-foot (15’) easement south side of the natural ravine (ditch) would be obtained from the landowner (John R. Decker). The natural ravine or ditch would be cleaned out and improved to 5 to 1 side slopes.

Pat stated the ditch would be adequate to carry the discharge from Mason’s Ridge Subdivision in addition to the upstream watershed via an existing pipe arch under Wea School Road. The site would incorporate Stormwater discharge from the developed areas into the proposed storm sewer drainage system. The discharge then flowed through 2 pipe arches under 150 East and meandered through a natural swale or conveyance to Wea Creek. Crestwood Subdivision Part 2 was located at the northern boundary and Hickory Ridge Subdivision was located at the eastern boundary. The approximate upstream watershed total was 240 acres. Direct Discharge to Wea Creek would be requested at a later date. A wetland on site would be preserved and maintained on an outlet.

The Surveyor recommended conceptual approval for Mason Ridge Subdivision. KD Benson motioned to grant Mason Ridge Subdivision conceptual approval with the conditions as listed on the May 28, 2004 Burke memo. John Knochel seconded the motion and Mason’s Ridge Subdivision was granted conceptual approval with the conditions as listed on the May 28, 2004 Burke memo.

Public Comment

As there was no public comment, KD Benson motioned to adjourn the meeting. John Knochel seconded the motion and the meeting was adjourn.

John Knochel, President

KD Benson, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
July 7, 2004
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller.

Approval of June 2, 2004 Minutes

KD Benson made the motion to approve the June 2, 2004 Regular Drainage Board minutes as written and Ruth Shedd seconded the motion. The June 2, 2004 Regular Drainage Board minutes were approved as written.

Lauramie Creek Watershed Plan Contract/ Christopher B. Burke Engineering LTD.

The Surveyor presented contract documents for the Lauramie Creek Watershed Plan with Christopher B. Burke Engineering LTD. Dave Luhman stated he had reviewed the contract and had no negative comments. The contract in the amount of \$94835.00 covered professional services for completing the Section 205(j) funded Watershed Management Plan for Lauramie Creek. There would be four main tasks: Public Outreach and Education, Developing a Quality Assurance Project Plan, Water Quality Monitoring and produce a Watershed Management Plan. The Surveyor then recommended the Drainage Board sign the contract with Christopher B. Burke Engineering LTD as presented. KD motioned to approve the Lauramie Creek Watershed Contract with Christopher B. Burke Engineering LTD in the amount of \$94835.00. Ruth Shedd seconded the motion and the Lauramie Creek Watershed Plan contract with Christopher B. Burke Engineering LTD was signed.

Drainage Issues (related to the recent rainfall amounts)
Anson Ditch

John Knochel opened the floor for public comment concerning any drainage issues as a result of the recent rainfall amounts. Joe Bumbleburg appeared before the Board and introduced Ernest Agee. Mr. Agee a professor of Meteorology, resided at 8533 N 100 West Cairo Indiana. He stated his concern for lack of drainage in that area. A farmer northwest of his property had installed a tile system which outlet on his property. The farmer had told him the work was approved. The actions of the farmer had caused an increase in drainage onto his farm. He shared his discontent with the farmer's actions and felt the farmer had not followed drainage laws. He felt due to the drainage assessment of the Anson drain; a solution to the area's problem should be forthcoming. He stated the ditches in that area were not cleaned out regularly. The Surveyor made several site visits to the area in the last few years. He stated along with the tiling (which he was unaware of) an extensive waterway network (through NRCS) was installed upstream of Mr. Agee as well. He had reviewed aerial photographs (from 1939 on), which indicated a significant increase of the wetland area, in particular, arials through the 1960s, 70's and 1980s. He reviewed the area on the overhead for the Board and attendees using GIS. Mr. Agee thanked the Board for their time. Mr. Bumbleburg again approached the Board and noted the attendees had been invited here today by Mr. Homer Shaffer to discuss the Anson Ditch and poor drainage of the area. Mr. Homer Shaffer 8448 North 100 West displayed several photographs for the Board. He stated he had lived on the "mosquito" farm for 35 years. He reviewed and discussed each photograph with the Board. Mr. Shaffer noted a photograph of Mr. Agee's property, north of 850 North, showed standing water 25 days after the May 16th one-inch rain. In his opinion a headwall located at the Brown and Dunbar property line with an open ditch through Agee's property would help alleviate the problem. He expressed his concern of what he thought was lack of maintenance on the Anson tile. Mr. John O'Connor of 8451 North 850 West approached the Board. He recently purchased the farm from his parents and felt the area's increased development had aggravated the drainage problem. His father had purchased the property in the 1940's and had extensive files of drainage work done in the 1950's. He offered his father's file for reference, however he would need time to produce it for the Surveyor if requested. John Gambs represented Will & Kate Crook and stated they would support whatever was needed to get the drain in working order. Herb Pietsch 7741 North 100 West approached the Board. He had lived in the area since 1988. He had approximately 7 acres with 2-3 under water. He stated the area's drainage had deteriorated the last 4 or 5 years and stressed the need for maintenance. Mr. Brice McCarty 14363 W 850 North appeared before the Board and also expressed his discontent with drainage on his farm. He

lived in that area for 38 years. He stated he had 10 acres under water and had been waiting for 30 years for something to be done about his drainage.

At that time the Drainage Board Attorney gave a summary of past and current drainage laws as well as the process of county drain maintenance. The Surveyor then stated drainage code also called for a periodic short and long-range plan to be submitted to the Drainage Board by the County Surveyor. Such a plan was presented to the Board in 2003 which reported the two top drains in need of major work (maintenance and/or reconstruction) as the Jakes ditch and Anson drain. The Anson drain had 44,238 feet of tile with a watershed of approximately 1250 acres. The Surveyor's office had started an investigation of the drain to determine the problems. The Anson drain was organized as a court drain and built in 1903. In the early 1970's an assessment was set up at \$1.00 per acre. The annual amount collected was \$1562.00. The Surveyor stated the amount was just enough to take care of blowholes and in the last ten years had been used for that purpose. He reviewed some of the known problems with the drain and costs associated with the repairs. He stated IDEM would not allow an open ditch through the wetland area. However repair of the tile at the existing route using the same size and same infiltration rate would be allowed by IDEM. Once the problems were thoroughly investigated by the Surveyor's office, a hearing would be called and the rate of assessment be raised to cover cost of improvements. Landowners would be notified by mail with all pertinent information relating to the proposed assessment in the letter. He then opened the floor for questions. Steve Wright from Bank One Farm Mgmt. represented the Anson farm. He asked the Surveyor if trees would be removed on the drain when the maintenance and/or reconstruction were underway. The Surveyor stated yes as tree roots cause a great deal of problems and the surface flow would be looked at also. Mr. Bumbleburg asked the Surveyor if he had an estimate of when the hearing would be scheduled. The Surveyor noted weather conditions and amount of work involved would determine when the meeting would be held. He felt the fall of this year was likely.

Celery Bog

Chuck Corn approached the Board and asked the Surveyor if he had a chance to arrange a meeting with the Great Lakes Chemical Corporation and West Lafayette concerning the Celery Bog. The Surveyor stated since the meeting last week with West Lafayette's Engineer, he had not spoke with anyone. The Surveyor stated water was no longer across Cumberland Avenue and was receding slowly. Mr. Corn stated he would stay on top of the situation.

At this time the public comments were ended. John Knochel thanked the landowners who had attended. Ruth Shedd suggested the Anson Ditch landowners come to an agreement on a fair figure for assessment.

Due to the recent rainfall, the following drains were noted by the Surveyor as in need of maintenance; J.R. Hoffman, J.N. Kirkpatrick, Anson, McKinney, Elliott, Waples McDill, Ann Montgomery, Kirkpatrick One, J. K. O'Neal and the Cuppy McClure which drained the celery bog. He stated his office had been out every day checking drains. There were also problems on Indiana Creek however DNR had the jurisdiction. There had been several subdivision drainage calls and his office was following up on those as well.

At that time as there was no other business before the Board, KD Benson motioned for an adjournment and Ruth Shedd seconded the motion. The meeting was adjourned.

John Knochel, President

KD Benson, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

**Tippecanoe County Drainage Board
Minutes
Special Meeting
September 27, 2004**

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Kerry Daily from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison, and GIS Technician Shelli Muller.

Forest Ridge Rural Estates Subdivision

Pat Jarboe with TBird Designs appeared before the Board to request final approval along with a waiver of the Standard Stormwater Detention Requirements for Forest Ridge Rural Estates Subdivision. The project was continued from the September 1, 2004 meeting. Photographs of the downstream conveyance were on file as previously requested by the Surveyor. The site, located on Division Road (County Road 100 South) and east of County Road 700 West, consisted of thirty-four (34) acres which would be developed as an eleven (11) lot single family residential Rural Estate Subdivision.

A ravine located in the middle of the property ultimately drained into the Wabash River. Two (2) on-site detention ponds located on each side of the ravine would assist in the flow reduction of the site's runoff. Pat stated they captured the upstream portions of the upper watersheds into the ponds. As a result, they reduced the flow thirty to forty percent on comparative ten and one hundred-year events. However, while the flow was reduced, the volume would not be. Therefore, he requested a waiver of the Standard Storm Water Detention Requirements and final approval for Forest Ridge Rural Estates Subdivision.

In response to the Surveyor's inquiry, Mr. Dan Teder of Reiling, Teder & Schrier Law firm stated notifications were mailed. Natalie Dale et al south of the property and east of the Coutts property did not respond. Mr. Paul Coutts indicated he did not wish to grant an Easement across his property. He preferred the drainage be taken care of on site. He would take care of his property's drainage. The Surveyor noted he had spoke with Dr. Balger south of Division Road, and she did not wish to grant an easement at this time. The Surveyor had advised Mrs. Balger a "Right of Entry" could be granted in the future if warranted. In response to the Surveyor's inquiry, Mr. Tom Walters stated the channel had been cleaned out from Division Road to his south property line, and stated the runoff eventually outletted into the river. Mr. Teder stated photographs were provided for the file. Previously, the Surveyor had met with Mr. Jarboe and reviewed the details of the erosion control. He noted the erosion control appeared not only to be satisfactory, but possibly could be utilized in the future as benchmarks for this type of site development.

Concerning the waiver request, KD referred to condition one (1) of the September 23, 2004 Burke memo and asked if increased runoff would be discharged than was discharged prior to development. Pat stated in following the Ordinance one is meeting rate requirements. Developments per se increased amount of total flow over sites. However, on-site ponds were created to slow down the flow and the duration, which he felt, was the intent of the Ordinance. On the ten years existing to the ten years proposed flow, the effect was the reduction of approximately forty percent (40%) in the rate over a longer period of time. The analysis used was for an upland area agricultural runoff typically higher than a two-acre subdivision lot runoff, a benefit in this case. A point of analysis in the modeling of the project was where the runoff exited the site to the east and flowed directly onto Mr. Coutts' property. In general, the amount of flow was reduced due to the higher runoff characteristic of an agricultural field than what one had from a grassed area. With that taken into account, every effort had been made to reduce the runoff rate as much as possible. Also, the idea was to disturb the natural surroundings as little as possible. The Surveyor then stated Mr. Coutts' concern was the erosion, not detention. The Surveyor recommended granting a waiver of the Standard Stormwater Detention Requirements for Forest Ridge Rural Estates Subdivision.

KD Benson made the motion to grant a waiver of the Standard Stormwater Detention Requirements for Forest Ridge Rural Estates Subdivision. Ruth Shedd seconded the motion. A waiver of the Standard Stormwater Detention Requirements for Forest Ridge Rural Estates Subdivision was granted.

The Surveyor stated he was prepared to recommend final approval with the conditions on the September 23, 2004 Burke memo, along with the additional condition of anchoring the corrugated black pipe in the ravine. In response to KD, the Surveyor noted item number four (4) of the aforementioned memo's intent was to insure the erosion control practices were in compliance with the Surveyor's requirements. Due to extreme on site characteristics, Pat stated they would work closely with the Surveyor before and after the construction.

At that time, KD Benson made the motion to grant final approval with conditions on the September 23, 2004 Burke memo, as well as the additional condition of anchoring the corrugated black pipe in the ravine. Ruth Shedd seconded the motion, and Forest Ridge Rural Estates Subdivision was granted final approval with the conditions as stated.

Stones Crossing Commercial Subdivision

Eric Gleisner of Roger Ward Engineering appeared before the Board to request final approval for Stones Crossing Commercial Subdivision. This project was previously designed as a residential condominium community known as The Villas at Stones Crossing, and was granted final approval with conditions on May 7, 2003. Since that time it had been rezoned for commercial use.

The site is located on the south side of County Road 350 South, and west of County Road 250 East, (Concord Road). The thirteen (13) acre project was a part of the one hundred twenty three (123) acre Stones Crossing Development. The thirteen (13) acre project lay within the J. N. Kirkpatrick Regulated Drain watershed that paralleled the south boundary line of the property. The drain had previously been reconstructed from a closed tile to an open channel at this site. Branch 5 of the said drain would be tied into the storm sewer system. Mr. Gleisner stated an access drive would be extended south from County Road 350 South, and the drainage infrastructure would be constructed at this time to provide for future commercial outlots. The Surveyor asked if it was the intention to vacate the portion of Branch 5 of said drain from interception at the new road to the west boundary line. Mr. Gleisner responded they would request vacation of that portion of Branch 5. The Surveyor then noted the existing Branch 5 drainage easement should be vacated as well through a formal process, which should be followed up. He then noted as the road right of way overlapped the drain easement it would need to be corrected, and stated it would be a condition of approval. The area was modeled as direct release to the J.N. Kirkpatrick Drain; therefore a waiver was warranted. He recommended a waiver of the Standard Stormwater Detention Requirements be granted. KD Benson made the motion to grant a waiver of the Standard Stormwater Detention Requirements to Stones Crossing Commercial Subdivision. Ruth Shedd seconded the motion and the waiver was granted.

The Surveyor was prepared to recommend final approval with the conditions as stated on the September 21, 2004 Burke memo, as well as the condition for the vacation of Branch 5 of the J.N. Kirkpatrick drain on lots one (1) and two (2), and revision of the road right of way at the point of overlap with the J.N. Kirkpatrick Drainage Easement. KD Benson made the motion to grant final approval with the conditions as stated on the September 21, 2004 Burke memo, as well as the additional conditions of the vacation of Branch 5 of the J.N. Kirkpatrick drain on lots one (1) and two (2), and also replotting of the drive so that it did not overlap with the J.N. Kirkpatrick Drainage Easement. Ruth Shedd seconded the motion. Stones Crossing Commercial Subdivision was granted final approval with the conditions listed on the September 21, 2004 Burke memo, as well as the additional conditions as stated.

OTHER BUSINESS

Revised October Regular Meeting Date

KD Benson made the motion to move the Regular Drainage Board meeting from October 6th, 2004 to October 13th, 2004. Ruth Shedd seconded the motion and the Board voted that the upcoming Regular Drainage Board Meeting would be held on October 13th, 2004 at 10 a.m. At that time, the Surveyor reminded the Board of the Tri-County Drainage Board Meeting regarding the John Hoffman #101 Regulated Drain on October 29, 2004 at 9:00 a.m.

Public Comment Carrington Estates

Brian Keene approached the Board and presented photographs of the swale in the rear of the lots owned by Melinda Adams and Raymond Rickey in Carrington Estates that were taken on September 2, 2004. Melinda Adams and Raymond Rickey previously had appeared before the Board on September 1, 2004 with drainage concerns. Brian explained the photographs that showed evidence of debris along the fence posts located within the drainage swales, and felt it indeed contributed to their poor drainage.

Glen Stockment/Shangri La Estates

Glen Stockment of 2828 West 1800 South Remington, Indiana appeared before the Board. As Project Manager of the Shangri La Estates Subdivision, he requested the Board review the project. He stated due to various delays and revisions in the design process, the project was behind schedule. He hoped the Board would review the project. John Knochel deferred to the Board Attorney. Dave Luhman read Section 14t of the Drainage Ordinance regarding certified notification of downstream owners. He stated the intent of the Drainage Ordinance was to make sure all downstream owners were notified. The Engineer of the project Mr. Bob Grove stated he had not requested receipt of the certified notifications upon mailing; therefore receipts were not on file. Dave stated it was the Board's discretion as to whether it would be heard today or be placed on the agenda of the upcoming Regular Drainage Board meeting. The Surveyor then asked Mr. Stockment where the project was in the approval process. Mr. Stockment stated he had previously spoken with Sallie Fahey from the Area Plan Commission, and understood that phases of the project could be started before all approvals were obtained. The Surveyor reviewed the construction approval process for Mr. Stockment and noted until all concerned entities signed construction plans, construction was not allowed to begin on any phase of a project. KD Benson noted a landowner however might move dirt around or remove trees on his property as long as no ordinances or rules were violated. While the Surveyor agreed, he stated due to several cases of ordinance/rule violations in the past, the various entities had all agreed construction would not begin on a new development until plans were signed. This had been the general rule since the mid to late 1980's. Dave Luhman stated regarding a subdivision, any construction would need Drainage Board approval, and this was stated as such in the Subdivision Ordinance as well as the Drainage Board Ordinance. Mr. Stockment then requested a special exception to begin construction of the three ponds on the property. KD Benson stated she was not ready to grant an exception without consultants' review of the plans. The Surveyor noted the consultants were prepared to recommend final approval with conditions on a Sept. 17, 2004 Burke memo. The project was not placed on today's agenda due to the lack of the five-day receipt of notice, and of checkpoint agencies' approval to date. KD Benson asked Mr. Stockment where the project was in the approval process with other agencies. Mr. Stockment stated he felt it would take longer than two weeks to obtain the required approvals. However, they were close to obtaining County Highway's approval. Mr. Grove stated they had not received any of the utilities' approval to date. KD Benson noted she was not prepared to grant an exception today and was in favor of placing this project on the Oct. 13, 2004 Regular Meeting Agenda. Ruth Shedd asked the Attorney if the notifications should be resent for the upcoming meeting. Dave Luhman answered yes, with certified receipts for the record. John Knochel stated he was inclined to grant the request, however the majority of the Board members were not. He stated he knew Mr. Stockment had met with many problems and delays on this project. The Surveyor suggested he could speak with the Area Plan Commission, (specifically Sallie Fahey and Don Lamb), on this particular project regarding the direction given to Mr. Stockment in May. Mr. Stockment stated he felt it was a moot subject and did not need to be done. John Knochel then asked for Public Comment on this project if any.

Mr. Bill Kepner of 4120 North 300W West Lafayette stated his property as well as his son's and daughter's bordered the full length of the south side of Shangri La. He stated 100% of the drainage crossed his land. He met yesterday with Mr. Stockment and discussed problem areas. Due to the short notification, he requested the project be continued to the next meeting. This would allow all affected parties the opportunity to attend the meeting and offer a chance to resolve the problems previously discussed with Mr. Stockment and Engineer Bob Grove. He felt the problems previously discussed could be ironed out.

Tim Wells of the County Highway Department agreed there was no benefit to granting the special exception at this time. As there was no other business before the Board, KD Benson moved to adjourn the meeting. Ruth Shedd seconded the meeting and the meeting was adjourned.

John Knochel, President

KD Benson, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

**Tippecanoe County Drainage Board
Minutes
December 8, 2004
Regular Meeting**

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, and Shelli Muller GIS Technician – as acting Secretary, Drainage Board Secretary Brenda Garrison was absent

Approval of minutes

KD Benson made a motion to approve the October 13, 2004 Drainage Board minutes. Ruth Shedd seconded the motion. As there were no objections, the motion carried and the October 13, 2004 minutes were approved as written.

Dollar General

Dave Eichelberger from Christopher Burke Engineering presented Dollar General to the Board in lieu of the absence of a representative from Myers Engineering. The project site consisted of approximately two and a half (2.5) acres and was located south of U.S. 52 on the east side of County Road 300 West (Klondike Road) north of County Road 250 North.

Stormwater would be temporarily stored within two detention swales on the site. One swale would be located at the south side of the parking area, and one located at the northwest corner of the parking area. Both swales would outlet into the ditch along County Road 300 West (Klondike Road). An existing pipe would carry the flow north of the project site. Runoff from the site eventually discharged to Indian Creek.

The Surveyor recommended final approval for Dollar General with the conditions as stated on the December 2, 2004 Burke memo. In response to KD's inquiry, the Surveyor stated the project would also be subject to the County Highway's approval. At that time, KD made a motion to grant approval to Dollar General with the conditions as stated on the December 2, 2004 Burke memo, as well as approval from the County Highway department. Ruth Shedd seconded the motion. Ruth Shedd stated she was unhappy a representative from the Engineering firm for the project was not present at today's meeting.

Dollar General was granted final approval with the conditions as stated on the December 2, 2004 Burke memo and the added condition of approval from the County Highway Department. The Surveyor also requested the Highway Department conduct a review of the side ditch. He stated historically there had been problems with it in front of the fire station.

Love Tree Farms

Randy Peterson from Fisher and Associates appeared before the Board to request a waiver of the Standard Stormwater requirements, as well as final approval for Love Tree Farms Planned Development. The site consisted of approximately ten (10) acres and was located south of the intersection of County Roads 100 North and 775 East.

As the site was situated on steeply wooded ground, Randy stated the intent of the developer was to maintain the natural surroundings. An existing twelve foot (12') private drive would provide egress and ingress to the five (5) residential lots. He stated covenants for the subdivision limited the clearing of each building lot to the minimal extent. The Surveyor informed Randy an actual percentage of clearance would be required in the covenants. Randy then stated improvements would be made to the existing drive as well as acceleration and decelerations in the right-of-way improvements along County Road 100 North. Off-site and roadway runoff would be conveyed in newly constructed roadside drainage swales to an outlet swale extending from the end of the drive to Wildcat Creek. The outlet swale would include a French drain to provide control of stagnant water and sedimentation. Due to the minimal discharge from the site, a waiver of the Standard Stormwater Detention requirements was requested. Easements were in place for access and maintenance of the swales.

The Surveyor noted the December 2, 2004 Burke memo stated South Fork of the Wildcat Creek incorrectly, as it was the Middle Fork of the Wildcat Creek. With that said, he stated he thought the design was the best use of the project site. The Surveyor then inquired if the drainage easements had been revised as requested. Randy stated they were revised from ten feet (10') to twenty feet (20'). The Surveyor also inquired if the drainage easement had been extended to the bank of the Middle fork of Wildcat Creek. Randy stated while platted as an outlot, the existing conservation and drainage easement would also provide the required access up to the Creek.

The Surveyor recommended granting a waiver for the Standard Stormwater Detention requirements. Randy then reviewed the natural drainage and the flood plain for KD. She made a motion to grant a waiver of Stormwater Detention requirements for Love Tree Farms Planned Development. The Surveyor then recommended final approval with conditions as stated on the December 2, 2004 Burke memo, as well as conditions related to the width of the drainage easement and its extending to the Wildcat Creek bank. KD made a motion to grant final approval to Love Tree Farms Planned Development with the conditions as stated on the December 2, 2004 Burke memo, along with the additional conditions. The Surveyor then reiterated the added condition for the clearing of each building lot reflect a percent impervious to each lot in the covenants rather than a general statement in the covenants. Ruth Shedd seconded the motion including the added condition stated by the Surveyor. Love Tree Farms Planned Development was granted a waiver for the Standard Stormwater Detention Requirements along with final approval with conditions as stated.

Winding Creek Section 1 Lot 140 Easement Vacation

The Surveyor presented a request from C& S Engineering regarding a vacation of the Drainage and Utility Easement on Lot 140 in the Winding Creek Section 1 Subdivision. Dave Luhman stated the Commissioners had previously granted a waiver for the utility part of the easement, therefore only the drainage easement vacation was the issue at hand. This request was due to the replatting of Winding Creek Subdivision. The Surveyor recommended granting the drainage easement vacation for Lot 140 of Winding Creek Section 1. KD made a motion to grant a drainage easement vacation for Lot 140 of Winding Creek Section 1. Ruth Shedd seconded the motion and the vacation was granted.

Stones Crossing Commercial Subdivision

J.N. Kirkpatrick Regulated Drain Branch #5

Dan Teder Attorney represented G&L Development and appeared before the Board to request a relocation of the J.N. Kirkpatrick Drain Branch #5 in Stones Crossing Commercial Subdivision. The Board reviewed a copy of the plat provided with the request. The Surveyor stated per Indiana Drainage Code, an individual was allowed to relocate a regulated drain on their property at their own expense. He stated adequate engineering drawings were provided to the Surveyor's office.

The Surveyor recommended granting the request for relocation of a portion of Branch #5 of the J. N. Kirkpatrick regulated drain as shown in exhibit "B" at their own expense. KD made a motion to approve the relocation request for a portion of Branch #5 of the J. N. Kirkpatrick Regulated Drain. Ruth Shedd seconded the motion and the relocation request was approved.

Dan Teder then requested a partial vacation of Branch # 5 of the J.N. Kirkpatrick Regulated Drain. Exhibit "B" of the petition showed the location of the request. Dan stated in April of 2003 the Drainage Board approved a reduction of the drainage easement (from 75' to 25') for Foxfire Development with the indication that it would be done for this project as well. The Surveyor explained to the Board originally that particular easement was obtained as a part of the 350 South project. It was the outlet for the side ditches of 350 South. He stated that former County Surveyor Mike Spencer and he had worked out an agreement to buy the easement, run it down, dissipate it to sheet flow across the ground reaching the James N. Kirkpatrick Branch #5 Regulated Drain. With new development in the area, a new ditch had been constructed and the easement width was no longer needed. He went on to state the Board of Commissioners purchased the original drainage easement with the ability to assign the easement to the Drainage Board. He recommended granting partial vacation of the drainage easement. He reiterated the Commissioners purchased the drainage easement in question for the County Road 350 South project.

The Surveyor then stated since Branch # 5 had been intercepted upstream and downstream, a partial vacation of Branch #5 of the James N. Kirkpatrick was warranted as it was no longer needed. KD Benson made a motion to vacate a portion of Branch #5 of the J.N. Kirkpatrick Regulated Drain as shown on Exhibit "A" and Exhibit "B". Ruth Shedd seconded the motion and the partial vacation was granted as presented.

Stoddard Warehouses

S.W. Elliott Regulated Drain Branch # 2 & #12

Brandon Fulk of Schneider Corporation represented Stoddard Development and appeared before the Board to request the relocation of Branch #2 of Branch #12 and Branch #12 at the Stoddard Development Warehouse site. The project site was located immediately south of the Norfolk and Western Railroad, and located along the north side of County Road 350 South between U.S. 52 and County Road 500 East, adjacent to the Bencyn Industrial Subdivision. The tiles were excavated with a representative of the Surveyor's office on site and found to be active. Brandon requested the approval for the relocation of Branch # 12 of the S.W. Elliott Regulated Drain along the site's east boundary. He also requested approval for relocation of

Branch #2 of Branch #12 of the S.W. Elliott Regulated Drain along the site's west boundary. In addition, he requested a reduction of the rerouted tiles to a thirty-foot (30') wide drainage easement as well as the vacation of a portion of Branch #12 and Branch #2 of Branch #12 of the Elliott Regulated Drain that traversed the site and would be replaced with the rerouted tiles.

The Surveyor stated this request was a condition of the approval given in October for Stoddard Warehouse. He then recommended granting the relocation of the branches at their own expense as requested. In addition to the relocation, he recommended the reduction of the drainage easement to thirty feet (30') along with the vacation of Branch #2 of Branch #12 and Branch #12 as requested and presented to the Board.

KD Benson made a motion to grant approval for the relocation request for Branch #2 of Branch #12 and Branch #12 of the S.W. Elliott Regulated Drain as shown on the construction plans. Ruth Shedd seconded the motion and the relocation of Branch #2 of Branch #12 and Branch #12 of the S.W. Elliott Regulated Drain was granted. KD Benson then moved to vacate the easement portions of Branch #2 of #12 and Branch #12 which were no longer necessary due to the relocation granted. KD Benson made a motion to grant the reduction of drainage easement for Branch #2 of #12 and Branch #12 of the S.W. Elliott Regulated Drain as requested to thirty feet (30'). Ruth Shedd seconded the motion. The drainage easement for a portion of Branch #2 of #12 and Branch #12 of the S.W. Elliott Drain was granted.

River Bluffs Subdivision

Maintenance Bond # 400TC6898 in the amount of \$7646.40 submitted by Atlas Excavating for River Bluffs Subdivision was presented by the Surveyor. The Surveyor recommended the acceptance of the Bond as submitted. KD Benson made a motion to accept Maintenance Bond #400TC6898 in the amount of \$7646.40 from Atlas Excavating for River Bluffs Subdivision. Ruth Shedd seconded the motion. Maintenance Bond #400TC6898 in the amount of \$7646.40 from Atlas Excavating for River Bluffs Subdivision was accepted as presented.

Butler Meadows Subdivision

Lynn Synesec

Mr. Lynn Senesac of 450 East 500 South Lafayette Indiana 47909 appeared before the Board to discuss effects of the Butler Meadows Subdivision located south of Mr. Senesac on 500 South. Mr. Senesac lived directly north of the retention pond. He stated the pond drained into a thirty-inch (30") tile, which ran under County Road 500 South and outlet into a drainage swale on his property. He stated the swale was not a drainage easement and the runoff was routed east to Greg Sutter's property. His concern from the beginning was erosion problems. Due to a history of erosion problems, the previous owner of his home and the U.S. Agriculture Department designed a "dam" on the east edge of his property and installed it in 1981. From 1986, when Mr. Senesac purchased the property, to the time of the Butler Meadows Subdivision construction, the "dam" worked perfectly. He stated the retention pond was creating a "giant funnel" with an increasing amount of runoff to the "dam". At that time he presented pictures to the Board for their review. Referring to a photo, he stated while the drainage report for the Subdivision stated runoff would outlet to Wea creek, the photo showed runoff fanning out through the woods on Greg Sutter's property.

While there had been history of standing water in that area, he stated the runoff had increased drastically. There was an ATV trail in that area. Recently the fire hydrants of the new subdivision were drained and caused the whole width of the trail to erode. He stated he figured he lost approximately twenty (20) cubic feet of dirt out of the swale in his front yard. The amount of water that presently drained through his property would compare to a five (5) or six (6) inch rainfall prior to the construction of the subdivision. The fact that he was required to maintain the swale, as it was not a drainage easement, was a concern. He felt once the homes were built in the subdivision the problem would increase. He stated at the zoning meeting he was told he would be notified when the project was presented to the Drainage Board for approval. He stated he or Gregg Sutter were never notified of the meeting, thus the project was presented and approved without their input. While the developer had installed riprap into his swale, he felt it was only a "Band-Aid". He did not feel the drainage route was the most efficient for the project, as he felt there were alternatives that should have been utilized. He requested the Board's assistance with this problem.

The Surveyor gave the Board a review of his site visits to the area at Mr. Senesac's request. He stated the project was approved several years ago. Butler Meadows was approved and designed by the ordinance of that time. He did not believe Mr. Senesac had received notice and felt he should have. At this time the Drainage Board required photographs of downstream conveyances to indicate route and effect if any on downstream owners. He stated he had spoken with Mr. Cochran the developer of Butler Meadows. It appeared Mr. Cochran was willing to do some work where the old SCS (Soil Conservation Service) structure was located. The Surveyor felt that this was fair and reasonable.

In this particular situation, when the design was presented with a defined drainage pattern and a drop structure, the consultant assumed as the Surveyor did that it ran down into the ravine and followed the path to the Wea Creek. In fact it did not. It was not a defined runoff pattern as thought, which was why the Board did not rely solely on the topographical maps anymore, and an example of why the Drainage Ordinance now required more extensive documentation such as walking and photographing a proposed drainage route. He then stated the development had caused Mr. Senesac and Gregg Sutter some harm.

While he noted the issue could not be resolved today, he did feel Mr. Senesac had a legitimate problem. He stated with a flat site it was possible to interpret the contours and water going to a discharge point incorrectly. Therefore, he would ask Christopher Burke Engineering to review Phase One (1) and Phase Two (2), and double check that it was done correctly. In response to John Knochel's inquiry, the Surveyor stated more phases were planned for the development and it would be possible to address the problem at that time. The Surveyor questioned once a development was approved, what authority or obligation does the Board have to protect a downstream owner, and if a drainage report and plans were proven to be wrong how would the Board deal with it? KD made a motion to authorize the Surveyor to investigate the problem and report back to the Board. Ruth Shedd seconded the motion. The motion was granted. The Surveyor stated he would report back to the Board once he had completed the investigation. Mr. Senesac thanked the Board for their time and looked forward to the investigation results.

Brookfield Heights/Brookfield Farms

The Surveyor stated he had met with the Brookfield Heights and Brookfield Farms Homeowners Associations. He had received a letter in favor of the petition to make the storm sewers and drainage systems within the two (2) subdivisions a Regulated Drain. Per I.C. 36-9-27-55 the Surveyor supplied the Board with a preliminary report regarding the aforementioned petition. The report would be included in the official minutes. Brookfield Heights consisted of three hundred thirty two (332) residential lots and three (3) outlots, Brookfield Farms consisted of ninety two (92) residential lots and two (2) outlots. He then stated the next order of business would be to schedule a hearing date for the petition. The Board took it under advisement and would review their schedules to determine a date and time.

Kerr Ditch

The Kerr Ditch located just west of Newtown continued upstream to the Fountain-Tippecanoe-Montgomery County lines. Fountain County Commissioner David Zeigler wrote a letter to the Tippecanoe County Drainage Board requesting agreement that the Fountain County Drainage Board could operate as the Drainage Board for the Kerr Ditch. Commissioner Zeigler indicated in the request letter Fountain County landowners were in favor of reclassifying the ditch to a County Regulated Drain. The Surveyor recommended granting the request. KD Benson made a motion to waive Tippecanoe County's right to be represented on a joint board, and for the Board of Fountain County to be the Board for future proceedings. Ruth Shedd seconded the motion. Notification to Fountain County Commissioners would be sent by the Surveyor's office.

The Surveyor then requested the first Wednesday in January to be the next meeting date. The Board agreed to the next meeting date of January 5th, 2005 at 10 a.m. At the January meeting, the 2005 meeting dates would be set.

John Knochel, President

KD Benson, Vice President

Ruth Shedd, Member

Brenda Garrison, Secretary

Tippecanoe County Drainage Board

Minutes

January 5, 2005

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison, and GIS Technician Shelli Muller, Vice President John Knochel was absent.

Nominations of Officers

Dave Luhman opened the Drainage Board Meeting and requested nominations for Drainage Board President. KD Benson made a motion to nominate Ruth Shedd as President of the Drainage Board for 2005. As there were no objections, the motion carried and Ruth Shedd was elected President of the Drainage Board for 2005. Dave Luhman then requested nominations for Drainage Board Vice President. Ruth Shedd made the motion to nominate John Knochel as Vice President. As there were no objections, the motion carried and John Knochel was elected Vice President of the Drainage Board for 2005. KD Benson then made the motion to appoint Brenda Garrison as the Drainage Board recording secretary for 2005. As there were no objections, the motion carried and Brenda Garrison was appointed as secretary of the Drainage Board for 2005.

Approval of the December 8th, 2004 Minutes

KD Benson made a motion to approve the December 8, 2004 Drainage Board minutes. Ruth Shedd seconded the motion. The December 8, 2004 Drainage Board minutes were approved as written.

Avalon Bluff Sec 2

Brandon Fulk of Schneider Engineering Corporation appeared before the Board to request final approval for Avalon Bluffs Section 2 Subdivision. (Section 1 was approved in April of 2004) The project site was located east of County Road 250 East (Concord Road) between County Roads 450 South and 500 South. The project would be completed in three phases and would contain 247 residential lots. Section 2 lay within the northern half of the overall development. The majority of Section 2's runoff would be directed to an existing detention pond constructed with Section 1. Brandon stated this project was a continuation, as the downstream infrastructure was set in place during the previous construction of Section 1, and was completed with Section 2 in mind. In response to the Drainage Board consultant's previous concern, Brandon stated a pond downstream on the Greg Bush property would not be affected.

The Surveyor asked Brandon if the offsite easement, which conveyed runoff to the Benjamin Crossing area, was finalized and recorded at this time. Brandon stated it was at final review stage and would be provided to the Surveyor when completed. In response to Steve's inquiry, Brandon also stated the construction of Section 1 had not been started at that time. The Surveyor stated it would be a condition of today's final approval of Section 2. The Surveyor informed the Board that the development lay on the watershed lines of the J.N. Kirkpatrick Regulated Drain and the S.W. Elliott Regulated Drain. He stated he appreciated that the lot breakout between the watersheds of the regulated drains were shown on the Drainage Report as well as the plans. (He added a consultant needed to delineate which drain each lot was benefited by, as the Auditor would need to know the appropriate drain for billing purposes. This also included street right-of-ways.) Both Phase 1 and Phase 2 would require an offsite easement, which would take the runoff through a culvert under 350 South and eventually drain to the Benjamin Crossing system. The Surveyor stated he had read the language of the required easement, and the Drainage Board would have all rights as required by law. The Surveyor stated he was prepared to recommend final approval with the conditions as stated on the December 30, 2005 Burke memo as well as the additional condition of the offsite easement as was required for Section 1. He also directed Brandon to double-check that street right-of-ways were included along with the breakout of the lots. KD Benson made the motion to grant final approval for Avalon Bluffs Section 2 with conditions as stated on the December 30, 2005 Burke memo, as well as the additional conditions of offsite easement, proof of recording, and the identification of the street right-of-way benefited by the J. N. Kirkpatrick drain. Ruth Shedd seconded the motion. Avalon Bluff Section 2 was granted final approval with conditions as stated on the December 30, 2005 Burke memo, as well as additional conditions specified herein.

Other Business

The Surveyor inquired when the Drainage Board and Commissioners should schedule the new Stormwater Quality Ordinance, required for Phase II, for readings. Dave Luhman stated the Ordinance could be heard at the next Drainage Board meeting and the Commissioners could act on it at their February 7th, 2005 meeting. Steve then asked if there was a required period between readings. Dave stated there was not. Dave suggested the Ordinance be introduced to the Drainage Board on the 2nd of February for first reading and Commissioners on the 7th of February, and introduced for second reading on the 22nd of February's Commissioners meeting followed by a Special Drainage Board meeting for the same. All agreed that this would be the schedule for the required readings.

Private Laterals hooking into County Regulated Drains

Discussion was held regarding the act of hooking private lateral tiles into County Regulated Drains. The Surveyor stated at this time landowners were encouraged to inform his office of any hookups. He stated he was in the process of notifying all local contractors that approval from the County Surveyor to do such was required. Hamilton County presently has an ordinance that addressed this situation. While providing good farm drainage was certainly the objective, an Ordinance in place would assure this was done. He stated discussion and dialog was needed regarding possible fees and permits for these situations. Dave Luhman stated Indiana Code required permission from the Surveyor's office for hooking into a County Regulated Drain at the present time. While the statute did not require fees, when a tile was over twelve (12) inches, plans were required to be submitted for approval. Dave stated an ordinance would certainly allow recourse for the Surveyor's office when a violation was found. The Surveyor stated he had no recommendation of fees at this time and added this was one more way to manage and track infrastructure. He stated an informational letter would be sent to all contractors who provide lateral tile work in this area. The Surveyor reiterated at this time he only wanted to discuss the issue and would be looking at implementing an ordinance in the future. KD requested a few more counties be contacted regarding any requirements they may have in place before going forward with the issue. The Surveyor agreed and stated he would contact counties with an existing ordinance requiring permits and fees for lateral hookups to County Regulated Drains. In response to Developer Brian Keene's question, the Surveyor stated he would review the present Storm Drainage and Sediment Control Ordinance before implementation to insure no double fees were required.

Phase II/Comprehensive Stormwater Management Ordinance

In response to Developer Brian Keene's question, the Surveyor stated there was no fee schedule for Phase II Stormwater at this time. The fee schedule would follow after the Ordinance was passed.

Maintenance Bonds

Fiddlesticks Phase 1

Winding Creek Section 2

The Surveyor presented Maintenance Bond #4392265 from Fairfield Contractors for Fiddlesticks Phase 1 Subdivision regarding drainage improvements outside the County Highway Right of Way in the amount of \$44,960.00 for acceptance. He also presented Bond #4392258 from Fairfield Contractors regarding drainage improvements outside the County Highway Right of Way in the amount of \$20435.00 for Winding Creek Section 2 Subdivision for acceptance. He added the Surveyor's office was working diligently to catch up on final inspections of pending subdivisions. KD Benson made the motion to approve the Maintenance Bond amounts as presented for Fiddlesticks Phase 1 and Winding Creek Section 2 Subdivisions. Ruth Shedd seconded the motion. Fiddlesticks Phase 1 Subdivision Maintenance Bond #4392265 in the amount of \$44960.00 was approved. Winding Creek Section 2 Subdivision Maintenance Bond #4392258 in the amount of \$20435.00 was approved.

2005 Drainage Board Meeting Dates

Drainage Board meeting dates would be held on the first Wed. of each month in 2005 as presented. KD Benson made the motion to approve the Drainage Board meeting dates as listed. Ruth Shedd seconded the motion. Ruth Shedd made a motion for adjournment. As there were no objections, the meeting adjourned.

Absent

John Knochel, President

KD Benson, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
February 2, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, and Drainage Board Secretary Brenda Garrison. GIS Technician Shelli Muller was absent.

Approval of January 5, 2005 Minutes

John Knochel stated the January 5, 2005 minutes reflected his attendance. As he was absent for that meeting, he made a motion to approve the minutes with a correction indicating his absence. KD seconded the motion and the January 5, 2005 Drainage Board Regular minutes were approved with the correction as stated.

Comprehensive Stormwater Management Ordinance

Steve Murray updated the Board regarding compliance with the Federal Clean Water Act through Rule 13 and Rule 5 in Indiana. Part C was to be filed November 4, 2004. However an extension was requested and IDEM (Indiana Department of Environmental Management) granted an additional ninety days. February 4, 2005 was the extended deadline. IDEM granted an additional thirty-day extension. The filing deadline of Part C was now March 4, 2005. The following entities were on track to adopt and pass the Comprehensive Stormwater Management Ordinance in accordance with the federal guidelines; Lafayette, West Lafayette, Dayton and Battleground, as well as Tippecanoe County. Cost sharing was utilized between the entities.

The ordinance was patterned off of the existing Stormwater Ordinance, which addressed stormwater quantity. Provisions were added to address stormwater quality, and the various control measures as required by the aforementioned rules. A steering committee, project team and subcommittee reviewed technical standards. The Surveyor stated a majority of the local engineering companies were included in this process. Implementation of the federal guidelines had been a two to three - year process. The Drainage Board Attorney and Surveyor reviewed the ordinance and made appropriate corrections. The Surveyor stated he felt the ordinance was a good product for the community.

Pat Jarboe approached the Board and asked when the ordinance would be implemented and what would be the length of the interim period. The Surveyor stated he was unable to answer, as it was a federal mandate and would depend on legal aspects of the federal guidelines. The Surveyor felt once the ordinance had passed both readings, it would take precedence over the existing ordinance at that time. Copies of the proposed ordinance were available for public review at this time. It was discussed whether it should be on the web page, however the Surveyor felt it should be available by CD at this time only.

At that time, the Surveyor presented Ordinance No. 2005-04-CM amending Tippecanoe County Code, repealing Section 155.01, and adding the new Section 155.01 Comprehensive Stormwater Management Ordinance. Exhibit A was the Stormwater Ordinance guidelines as well as the Technical Standards Manual. John Knochel made a motion to approve and pass Ordinance No. 2005-04-CM on first reading. KD Benson seconded the motion. The following voted as indicated: KD Benson- yes, John Knochel-yes, Ruth Shedd-yes. Ordinance No. 2005-04-CM regarding Comprehensive Stormwater Management was passed on first reading unanimously. It was agreed to place the ordinance on the next Drainage Board meeting agenda for the second reading, followed by a Special Commissioners' Meeting for a second reading also.

Water Safety Committee

Mike Wylie of Schneider Engineering approached the Board as a member of the previously established Water Safety Committee. He stated he was in attendance to today give an update to the Board on the Committee's progress. The committee was formed to look at public safety issues, both in design and education. A design subcommittee and an educational (outreach to schools etc.) subcommittee were formed out of the main committee members. Mike stated he would like to review the outcome of these committees at the next Drainage Board meeting in March. A Power point presentation would likely be made at that time. The Surveyor stated safety recommendations from the subcommittee were included in Ordinance No. 2005-04-CM. The Surveyor also stated Mike would be added to the March meeting Agenda of the Drainage Board.

Other Business

Classification of Drains

In accordance with I.C. 36-9-27-34, the Surveyor presented a Report of Drains to the Board. The report listed classification of drains, drains in need of reconstruction, urban drains, drains in need of periodic maintenance, and drains with insufficient maintenance funds. He then reviewed the report for the Board. (A copy of which would be included in the official minutes book.)

Drains in need of Reconstruction: He stated reconstruction for the Berlowitz Drain was in the initial process. He noted an informal meeting regarding the Jakes Ditch had been held this past year with the benefited landowners. The original tile had eroded out and an open ditch had been created at the lower end. The upper end of the tile was exposed. Elliott Ditch had been a part of an ongoing planning process, specifically Branch #11 and the F-Lake detention facility behind Ivy Tech. Branch #11 of S.W. Elliott Ditch had been designed and would go to construction in the near future. J.N. Kirkpatrick's lower end had been reconstructed. In anticipation of a large industrial park near the upper end, a preliminary plan was in place for reconstruction from Concord Road to 450 East for the J.N. Kirkpatrick. Investigation of the Anson drain had been done. It was anticipated the drain would be presented for reconstruction or an assessment rate increase sometime this year. The J.B. Anderson, which served Clarks Hill, had another round of flooding the past couple of weeks. The Frank Kirkpatrick drain was also in need of reconstruction.

Urban Drains: In accordance with Indiana Code, the Surveyor designated drains that are in need of reconstruction and served an urban or urbanized area as Urban Drains. The drains listed were: S.W. Elliott, Berlowitz, J.N. Kirkpatrick, and the Alexander Ross which ran roughly behind the Super Wal-Mart located on S.R. 26.

Drains in need of Periodic Maintenance: The D. Anson, J. Blickenstaff, A. Brown, Burkhalter, T.Coe, County Farm, C. Daugherty, M. Dunkin, T. Ellis, M. Erwin, R. Grimes, F. Haffner, E.F. Haywood, L. Jakes, F. Kerschner, A. Kirkpatrick, F. Kirkpatrick, C. Lesley, F.E. Morin, H. Mottsinger, F. Resor, M. Southworth, J. Vvannata, and the H.B. Wallace were all drains listed in need of periodic maintenance. The Surveyor stated for the most part, these drains had their assessment rates set in the late 1960's. The present and future costs of construction projects required an increase of assessment rates from roughly \$1.00 an acre closer to \$2.00 - \$3.00 an acre, for adequate maintenance. KD Benson requested a GIS presentation of the drains listed on the report in the near future as time permits. John Knochel made a motion to accept the 2005 Report of Drains submitted by the Surveyor. KD Benson seconded the motion and the Board accepted the 2005 Report of Drains as submitted by the Surveyor.

The Surveyor presented Tippecanoe County Drainage Board Resolution No. 2005 – 01-DB to the Board for their approval. In accordance with I.C. 36-9-27-42, the Resolution increased assessments by twenty-five percent (25%) for the following drains: J. Blickenstaff, A. Brown, T. Coe, C. Daugherty, M. Dunkin, T. Ellis, M. Erwin, F. Haffner, F. Kerschner, A. Kirkpatrick, C. Lesley, H. Wallace, and S. Yeager. The drain had an insufficient maintenance funds in place. The Surveyor stated either the tile was in need of a significant amount of maintenance, or cleanout of the open ditch was warranted. He stated every ten to twelve years an open ditch should be cleaned out. In response to K.D.'s inquiry, the Surveyor stated a letter would be sent to White County regarding their acceptance of the proposed assessment increase of the Andrew Brown Joint Drain. John Knochel made a motion to adopt Resolution No.2005-01-DB as presented. KD. Benson seconded the motion. The Board adopted Resolution No.2005-01-DB, a Resolution Increasing Assessments for the Periodic Maintenance of Regulated Drains.

Maintenance Bonds

Prophets Ridge Phase 1 / Prophets View Subdivision Phase 1 / Paramount Lakeshore Subdivision

The Surveyor presented the following three Maintenance Bonds for acceptance; Maintenance Bond No.4175907 in the amount of \$37,060.00 for Prophets RIDGE Subdivision Phase 1 from Fairfield Contractors, Maintenance Bond No. 69839855 in the amount of \$2000.00 for Prophets VIEW Subdivision Phase 1 (located on Pretty Prairie Road) from Norma G. & Rita A. Deboy, and Maintenance Bond No. 400TF4545 in the amount of \$23, 329.70 for Paramount Lakeshore Subdivision from Milestone Contractors. The Surveyor stated the subdivisions had been completed and approved. John Knochel made a motion to accept the three Maintenance Bonds as presented by the Surveyor. K.D. Benson seconded the motion. The Drainage Board accepted the aforementioned Maintenance Bonds.

Professional Engineering Services for Engineering Review Contract

The Surveyor presented the annual contract from Christopher B. Burke Engineering for professional engineering review service. The cost of their service was in turn billed to the developer of projects submitted for review. Dave Eichelberger from Christopher B. Burke Engineering stated the rate per hour was raised from \$70.00 per hour to \$75.00 per hour. John Knochel made a motion to approve the contract between the Tippecanoe County Drainage Board and Christopher B. Burke Engineering LTD. as presented. K.D. Benson seconded the motion. The contract between the Tippecanoe County Drainage Board and Christopher B. Burke Engineering LTD. was approved as presented to the Board.

Lewis Jakes Ditch

While researching the status and condition of Jakes Ditch, it was discovered the Drainage Board approved a rate increase from \$1.00 an acre to \$2.00 an acre in April of 1983. Research indicated the present assessment of \$1.00 per acre was never changed accordingly. After conferring with the Board’s attorney, it was agreed the rate of \$2.00 per acre set in the April 1983 meeting was valid. The Surveyor requested a formal vote in order for the increase to be activated by the Auditor’s office. John Knochel made a motion to approve the \$2.00 per acre assessment rate as set in the April 1983 Drainage Board meeting. In addition the said rate be in effect starting with the 2005 tax season. K.D. Benson seconded the motion. The Lewis Jakes Regulated Drain assessment of \$2.00 per acre was formally approved beginning with the 2005 tax season.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn the meeting. KD seconded the motion. The meeting adjourned.

Ruth Shedd, Vice President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
March 2, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, John Knochel Vice President, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, GIS Technician Shelli Muller and Drainage Board Executive Secretary Brenda Garrison, member KD Benson was absent.

Approval of February 6, 2005 Minutes

John Knochel made the motion to approve the February 2, 2005 Drainage Board minutes as written. Ruth Shedd seconded the motion. The February 2, 2005 Drainage Board minutes were approved as written.

Cascada Business Park

Pat Jarboe with T-Bird Designs appeared before the Board to present Cascada Business Park and request conceptual approval for the entire site. The project was located within the City of Lafayette, south of the Super Wal-Mart location on approximately 125 acres immediately east of Treece Meadows and on the north side of McCarty Lane. The Treece Meadows Relief drain (also know as the Layden Ditch) was located along the west property line.

Pat stated the purpose today was to receive approval for the release rates into three (3) separate watersheds. Pat then reviewed the three watershed locations for the Board. The site's western portion (approximately 92.5 acres) released to the Wilson Branch of the S.W. Elliott Regulated Drain. The northeast portion (approximately 10 acres) released to the Alexander Ross Regulated Drain. The southeast (remaining 21.5 acres) released to the Berlowitz Regulated Drain through the storm system along McCarty Lane. A 2000 Drainage Study by Christopher B. Burke LTD, which focused on the TR3 modeling was followed for the drainage calculations of this study. The current design was used based on the aforementioned study. The site's portion known as phase 1 lay entirely within the Wilson Branch watershed. Construction plans would be submitted for this Phase once conceptual approval was granted. Phase 1 would include a boulevard along the Wilson Branch watershed. He noted two (2) detention basins would be included in the construction of this phase and sufficient for the entire site. Pat then showed the Board the overall conceptual plan was to construct a main road from McCarty to connect with the Super Wal-Mart road. The Surveyor pointed out this site was part of the thoroughfare plan, which would extend down to SR 38. Responding to the Surveyor's inquiry Pat stated Ron Whistler was the official developer of the site.

Surveyor recommended conceptual approval subject to the conditions on the February 22, 2005 Christopher B. Burke memo. He reiterated he was only prepared to recommend conceptual approval for Phase 1 at this time. Pat stated a final approval for Phase 1 and a conceptual approval for the entire site would be requested at the April meeting. John Knochel made a motion to grant conceptual approval of Cascada Business Park Phase 1 with the conditions listed on the February 22, 2005 Christopher B. Burke memo. Ruth Shedd seconded the motion. Cascada Business Park Phase 1 was granted conceptual approval by the Board.

Winding Creek Sec 4

Paul Coutts with C&S Engineering appeared before the Board to request final approval for Winding Creek Section 4. The site consisted of approximately 42 acres located on the south side of County Road 600N between County Roads 50W and 75E, and part of the overall Winding Creek/Coyote Crossing Development. Steve Connors from Winding Creek Development was also in attendance for the meeting. At Mr. Connor's request, this section's initial site plan was revised to retain several large trees and the natural topography of the area. Accordingly, approximately 24 lots would not be disturbed. A temporary road entrance to the golf course would be replaced by Augusta Boulevard with a sixty-foot (60') right of way and a forty-foot (40') pavement width. A waterway in the northwest corner drained approximately 118 offsite acres and would be improved upon. There would also be two (2) detention ponds constructed during the phase. Outlot C would contain a dry detention basin and would be located near the aforementioned waterway. A wet detention facility would be located further south on Outlot D. Most of the runoff collected would be released into the wet facility. Paul stated the conditions stated on the February 25, 2005 Christopher B. Burke memo would be met and requested final approval at that time. The Surveyor confirmed with Mr. Coutts that certified notification was sent to landowners surrounding this phase. Paul confirmed that an existing stream which ran to Burnett Creek had been photographed and was a part of the original file. The Surveyor requested existing condition photographs of conveyance at and off site of Outlot C and the discharge points located at the northeast and southeast portion of the section's site for the possible future reference.

The Surveyor stated he was prepared to recommend final approval with the conditions as stated on the February 25, 2005 Christopher B. Burke memo to include the added conditions stated of photographs and catch basins. John Knochel made the motion to grant Winding Creek Section Four (4) final approval with conditions as stated on the February 25, 2005 Christopher B. Burke memo as well as those stated by the Surveyor. Ruth Shedd seconded the motion. Winding Creek Section Four (4) was granted final approval with conditions as stated on the February 25, 2005 Christopher B. Burke memo in addition to the provisions of photographs of current conveyance at and off site of Outlot C and discharge points located at the northeast and southeast portion of the site for the possible future reference.

The Commons At Valley Lakes Phase 4

Pat Jarboe and Meredith Byer with TBIRD Designs appeared before the Board to request conceptual approval for Section Four of The Commons At Valley Lakes. The project site was located south of County Road 350S, east of County Road 150E (South 18th Street) and consisted of 37 acres within the City of Lafayette. The J.N. Kirkpatrick Regulated Drain Branch 7 (10 inch tile) crossed the southern portion of the site. The Commons at Valley Lakes Phases 1 and 3 were located west and The Landings at Valley Lakes Phase 4 south of the project site. The proposed storm sewers would extend south through the site. Meredith noted the direct discharge to the J.N. Kirkpatrick Regulated Drain was previously approved. A detention pond along the northern portion of the site would reduce peak discharges to the drain. In addition, a portion of the J.N. Kirkpatrick Regulated Drain Branch 7 would be relocated. A thirty-foot (30') easement would be requested through the site for said drain. Meredith requested conceptual approval of the drainage plan for The Commons At Valley Lakes Phase 4 at this time while stating final approval would be requested at the April meeting. The Surveyor stated the Board has approved the various phases of The Commons at Valley Lakes. This phase was in line with the overall project submittals. He stated the discharge release rate was within the model rates and he did not anticipate any problems with the relocation of Branch 7 as shown. He recommended conceptual approval for Phase Four (4) of the Commons at Valley Lakes with conditions as stated on the February 25th, 2005 Christopher B. Burke review memo. John Knochel made the motion to grant conceptual approval of The Commons at Valley Lakes Phase Four (4) with the conditions as stated on the February 25, 2005 Christopher B. Burke memo.

Petition to Remove An Obstruction/Joseph Mackey vs. Frederick Whaley Trust

Mr. Joseph Mackey 8511 State Road 26 West, West Lafayette Indiana, submitted a Petition to Remove An Obstruction to the Drainage Board. The Surveyor informed the Board he had made a site visit and previously walked the private tile's route from State Road 26 to the outlet on Pine Creek. Historical aerals were brought to the meeting for Board review. The Surveyor stated he spoke with Mr. Norman Bennett who had farmed the Whaley ground for many years and was a child when the tile was installed. Over the years the tile had broken down with numerous tile holes and obstructions on the Frederick Whaley tract north of SR26 from lack of maintenance. To complicate the situation the tile route was through what were existing wetlands. Aerials from the 1940's through 1960's did not indicate wetlands at that time. In conducting research, he stated he also spoke with Mark Eastman from SWCD/NRCS office. The Surveyor then noted, not only was Mr. Mackey unable to access his property, Mr. and Mrs. Alan Haas had been wading through water to access their home. A GIS photograph presentation of the area in question was presented to the Board for review. The wetland had grown in size and wrapped around a "knob" to the east then returned to SR 26W at another location. Mr. Mackey pointed out a man made berm at the Haas Residence location, which had been constructed years ago and he felt was contributed to the lack of drainage of the area. The Surveyor stated at the time of his site visit he was unable to view the berm as the water level was too high. The Surveyor stated the tiles could be repaired and replaced with the same tile type and size. The Board reviewed a 1938 aerial, which did not indicate a wetland in that area. There was no standing water whatsoever. The Surveyor stated the area was dry and drained through the 1970's. He stated the wetland area has grown through the years since then and felt the lack of tile maintenance contributed to the problem. He stated the petition was in order and requested a hearing be set within the next thirty days. He would submit a formal report to the Board at that time. Responding to the Attorney's inquiry, the Surveyor stated the tile was a mutual drain. John Knochel made a motion to authorize the Surveyor to call a special meeting to formally hear the Petition to Remove an Obstruction submitted by Mr. Mackey. A March 10, 2005 at 1:30 p.m. date and time was set for the Hearing. Ruth Shedd seconded the motion. March 10, 2005 at 1:30 pm. was set to hear the obstruction petition. Mr. Mackey thanked the Board for their time.

2005-04-CM /Tippecanoe County Comprehensive Stormwater Management Ordinance

The Attorney stated he had reviewed the draft and also spoke with the City of Lafayette's attorney concerning their ordinance. The Attorney then proposed an amendment to the Ordinance No. 2005-04-CM as previously written. The amendment dealt with the enforcement section of the ordinance and would be consistent with the City of Lafayette's as well. The amendment removed the stop work language that suggested a violation would result in imprisonment. It would replace the imprisonment language with "a fine of not less than \$500.00 for the first offense and not less than \$1000.00 for subsequent offenses." Definitions were also added. Under the corrective action reference the following should be added, "that a landowner of any land where violation occurred was required as well as their contractor to take corrective action". The attorney stated this would make it clear the Board had jurisdiction. The Surveyor noted one more amendment to Chapter Three, Page Ten, Paragraph b: "the current FIRM (Flood Insurance Rate Map) or best available to be determined by the County Surveyor" should be inserted in the place of "FEMA maps". John Knochel made a motion to adopt Ordinance No. 2005-04-CM Tippecanoe County Comprehensive Stormwater Management as amended. Ruth Shedd seconded the motion. The 2005-04-CM Tippecanoe County Comprehensive Stormwater Management was adopted as amended. Roll Call was as follows:

Ruth Shedd-yes, John Knochel-yes, member KD Benson was absent.

Resolution 2005-02-DB/Tippecanoe County Stormwater Technical Standards Manual

The Attorney presented Resolution 2005-02-DB adopting Tippecanoe County Stormwater Technical Standards Manual by the Board. Mr. John Knochel made a motion to adopt the 2005-02-DB Tippecanoe County Stormwater Technical Standards Manual Resolution as written by the Attorney. Ruth Shedd seconded the motion. The 2005-02-DB Resolution was adopted as written.

The Surveyor noted Mr. Mike Wylie postponed his Water Safety presentation to the Board until next month. As there was no other business before the Board, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

KD Benson, member

Brenda Garrison, Executive Secretary

Tippecanoe County Drainage Board
Minutes
April 6, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, County Highway Engineer Tim Wells, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller.

Approval of Minutes

John Knochel made a motion to approve the February 23, 2005 Brookfield Heights/Brookfield Farms #116 Regulated Drain Hearing, the March 3, 2005 Regular Meeting minutes, and the March 10, 2005 Obstruction Hearing minutes as written. KD Benson seconded the motion. The aforementioned minutes were approved as written.

The Commons at Valley Lakes Phase 4

Meredith Byer and Pat Jarboe with T-Bird Designs appeared before the Board to present The Commons at Valley Lakes Phase 4 for final approval. Within Lafayette city limits, the thirty-seven acre site was located east of County Road 150 East (South 18th Street) and south of County Road 350 South. The Surveyor stated the project site drained into the J.N. Kirkpatrick Regulated Drain. The requested relocation of Branch Seven of the J.N. Kirkpatrick Regulated Drain was the reason for the Board's review, as well as direct discharge into the Regulated Drain. He went on to state the Board should review and approve the relocation of Branch Seven and direct discharge.

Meredith stated branch seven consisted of a 10" clay tile and was located in the southern portion of the site. The outfall for Branch Seven was located in Phase 3 of the Commons at Valley Lakes. This Branch would be intercepted within the Landings Phase 3, and redirected through the proposed conveyance system in Phase 4 of the Commons at Valley Lakes. She stated they were working closely with Crystal Joshua in the City Engineer's Office, and expected approval of the project's construction plans. A final copy of the drainage report and plans once finalized would be forthcoming.

The Surveyor noted the project's covenants should state in detail "No permanent structures allowed within the J. N. Kirkpatrick Regulated Ditch Easement throughout the site." He recommended final approval subject to conditions on the Burke Review Memo dated March 31, 2005 with the additional requirement of verbiage in the covenants as stated. He recommended an approval of a drainage variance for the project and stated it should be the first order of business.

John Knochel made a motion to grant The Commons at Valley Lakes Phase 4 a drainage variance for the direct discharge. KD Benson seconded the motion. A direct discharge variance was granted. John Knochel then made a motion to grant final approval for the Commons at Valley Lakes Phase 4 with the conditions stated in the March 31, 2005 Burke memo with the additional requirement in the covenants as stated. KD Benson seconded the motion. Final approval with the conditions as stated in the March 31, 2005 Burke memo to include the aforementioned language in the covenants was granted for The Commons at Valley Lakes Phase 4.

Lauren Lakes Section 1

Brandon Fulk with the Schneider Corporation appeared before the Board to present Lauren Lakes Section 1 for final approval. The Lauren Lakes project would be constructed in phases, with this phase consisting of seventy (70) single family homes. The section was located on twenty-eight (28) acres of the two hundred thirty one (231) acre project site, west of C. R. 75 East on the south side of C.R.500 North. The existing conveyance conditions were taken into consideration while modeling the site, and the new Stormwater Ordinance was used as a guideline for this project. Drainage for Section 1 was provided by an existing unnamed tributary to Burnett Creek, located in the eastern portion of the site. Brandon stated the unnamed tributary crossed C.R. 500 North and eventually tied into Burnett Creek at Coyote Crossing. He pointed out that an existing drainage basin traveled to C. R. 500 North and at times had overtopped the road, and noted the issue was addressed within the Section 1 plans. In addition, Prophet's Ridge pond tributary was included in the design analysis for the site.

As a side note, the Surveyor stated while the downstream conveyance was well documented by photographs, a narrative accompanying the photographs would be useful for future projects. The Surveyor stated the channel was well defined and did not anticipate a problem. John Knochel asked Mr. Ratcliff (landowner in attendance) how often he observed the County Road 500 North flooded. Mr. Ratcliff stated a few times, only since Winding Creek Subdivision was developed. He went on to say he felt the tile under the road had been compromised during the development of Winding Creek Subdivision. Brandon stated photos taken which indicated no flooding after the last rainfall event were provided. He went on to inform the Board that the submitted design addressed that issue as well. The release rates for this section were below the Ordinance requirement, and he anticipated the rates would be lower for the overall project as well. The project had received verbal approval from the County Highway Dept. for the entrance construction work. He stated he would work closely with the Surveyor's office concerning the covenants and restrictions for this project. He then requested final approval for this phase of the project. In response to KD's inquiry, he stated the safety guidelines per the 2005-04-CM Comprehensive Stormwater Ordinance were implemented for this project. The Surveyor noted the project design included hard surface safety ramps. Ruth Shedd asked for public comment, and there were no comments made.

The Surveyor added a condition to supply an Easement for the east line outlet point of Phase 1 to the defined conveyance. In response to the Surveyor's inquiry regarding the side ditch of County Road 500 North, Brandon stated he was confident the runoff would not top the road. He also indicated the Homeowners Association would be responsible for maintenance after three years and noted he would get a verification of that on record. Future maintenance could be a high cost to the lot owners and documentation of such maintenance responsibility would be required. The Surveyor then noted the Ordinance strongly recommended reasonable tree and native vegetation retention. He recommended final approval with conditions stated on the March 31, 2005 Burke memo, along with drainage easement documentation for both outlets from the detention ponds to the defined conveyance east of the East line of Phase 1. John Knochel made a motion to grant final approval for Lauren Lakes Section 1 with conditions stated on the March 31, 2005 Burke memo as well as the condition of drainage easement documentation for both outlets from the detention ponds to the defined conveyance east of the East line of Phase 1. KD Benson seconded the motion. Lauren Lakes Section 1 was granted final approval with conditions as stated on the March 31, 2005 Burke memo to include the added condition of drainage easement documentation for both outlets from detention ponds to the defined conveyance east of the East line of Phase 1.

Cascada Business Park Phase 1

Pat Jarboe and Meredith Byer with T-Bird Designs appeared before the Board to present Cascada Business Park Phase 1 for final approval. They were also requesting conceptual approval for the overall site. Pat stated the developer, Ron Whistler, was also in attendance today.

Phase 1 of the project consisted of 26.5 acres and located at the southwest corner of the overall 125-acre site. The overall site was located in the City of Lafayette, east of Creasy Lane on the north side of McCarty Lane. The Treece Meadows Relief Drain (also known as Layden Regulated Drain) was located along the western property line. Phase 1 would include two detention facilities and runoff would be discharged via the Wilson Branch of the S.W. Elliott Regulated Drain to the Treece Meadows Relief Drain. Of the overall project site, approximately 92.5 acres drained west to the aforementioned drain, approximately 10 acres drained northeast to the Alexander Ross Regulated Drain, and the remaining 21 acres drained to the Berlowitz Regulated Drain through storm sewers along McCarty Lane. He stated the developer was working with the City's Redevelopment Office to eventually extend Park East Boulevard. This would connect State Road 26 with McCarty Lane.

The Surveyor stated the Alexander Ross drain traveled behind the Super Wal-Mart, under the interstate into the pond area northwest of Meijers then under SR 26 and east of Frontage Road. Utilizing GIS, he then reviewed the route of the Ross Drain to familiarize the Board. Christopher Burke Engineering did an overall watershed study of that area and it had been well studied. Phase 1 would contain two detention facilities on the eastern border, and would collect significant portions of the remaining phases' runoff. They were designed to accept the developed portions' runoff outside of the Phase 1 development, and would do so once online. A variance would be required as portions of the site, which drained through the pond to the Treece Meadows Relief Drain, exceeded the allowable discharge rates. Those rates were the ten-year existing to the 100-year proposed and the 2-year existing to the 10-year proposed. Pat stated they had matched the 100-year existing levels to the 100-year proposed numbers due to downstream conditions. Therefore a variance was requested for the discharge rates. Pat provided the Board with draft agreements with the Power Company, which specifically stated the design was acceptable for the storage under the power lines. The Surveyor stated it was the Drainage Board's duty to grant a drainage variance and the City of Lafayette's to grant a variance for encroachment on the City's right of entry. At that time, Pat requested a release rate variance to include final approval for Cascada Business Park Phase 1 and conditional approval on the overall portions of the site. In response to KD's inquiry, Pat reviewed the entire site's watersheds for the Board. While limiting the amount of runoff outlet to the storm sewers along McCarty Lane, the design allowed for a larger area's runoff

directed to the detention facilities- as well as the Treece Meadows Relief Drain. The Surveyor noted Treece Meadows was designed for direct release. The Surveyor's Office was made aware of some problems in the area of Amelia Drive in the last few years. He requested Christopher B. Burke revisit their previous study and they have remodeled the area, and identified the problem areas. Regarding the Berlowitz Drain and McCarty Lane, the City agreed to fund upsizing of the storm sewers along McCarty Lane, when the County constructed it between Creasy Lane and 500 East. It was designed to take the 100 year developed condition. He stated the developer would pay a fee for storage in the planned Berlowitz Detention facility. Ruth Shedd then asked for any comments from the public. No comments were made.

The Surveyor then recommended granting a release rate variance under condition two of the April 11, 2005 Burke memo. John Knochel made a motion to grant the variance under condition number two of the April 1, 2005 Burke memo. KD Benson seconded the motion. The Surveyor recommended final approval for Phase 1 and conceptual approval for the overall project with conditions as stated on the April 1, 2005 Burke memo, while striking the last paragraph in condition number two on said memo. John Knochel made a motion to grant final approval for Phase 1 and conceptual approval for the overall development with conditions as stated on the April 1, 2005 Burke memo while striking the last paragraph in condition number two on said memo. KD Benson seconded the motion. Cascada Business Park Phase 1 was granted a variance for the release rates. Cascada Business Park Phase 1 was granted final approval. Cascada Business Park was granted conceptual approval for the overall development.

Journal and Courier Publication Facility

Meredith Byer and Pat Jarboe appeared before the Board to present the Journal and Courier Publication Facility for final approval. The site consisted of 8 acres of a 10 acre parcel located between McCarty Lane and 200 South (Haggerty Lane) on the east side of County Road 500 East. A printing facility, loading docks and a parking area would be built on the site. A private road would provide access from County Road 500 East. The existing 66-inch storm sewer would be extended south from the project site to provide an outlet for future projects to the south. The project's runoff would be collected via catch basins and curb inlets and conveyed through new storm sewers to the 66-inch diameter storm sewer. A portion of the site would be discharged to the Berlowitz Drainage Facility located on at the northeast corner of County Road 500 East and McCarty Lane through the said 66-inch storm sewer along the east side of County Road 500 East. The developer would pay the storage fee associated with the said facility. At that time Meredith requested final approval for the Journal and Courier Publication Facility. Ruth Shedd asked for any public comment. There was no public comment.

The Surveyor recommended the second paragraph in the April 1, 2005 Burke memo be added as a condition. John Knochel made a motion to grant the Journal and Courier Publication Facility final approval with conditions as stated on the April 1, 2005 Burke memo as well as the added condition noted as the second paragraph of said memo. KD Benson seconded the motion. Final approval with conditions was granted for Journal and Courier Publication Facility.

Parker Ditch

The Surveyor requested the Board's attention to Dave Labonte, 720 Clifty Falls Lane, who was in attendance. Mr. Labonte wanted to inform the Board of an issue concerning Parker Ditch. GIS was utilized to review the area in question, specifically north of Haggerty Lane and east of SIA. The Parker Open Ditch project was a new concrete storm sewer constructed as an outlet for the Subaru Isuzu Automotive Plant in the 1980's. Economic Development grant monies paid for the construction of the concrete storm sewer. The Surveyor stated Parker Ditch was an existing agricultural tile at the time of construction and still had laterals tied into the new ditch. The agricultural tile ran under 200 South, east under interstate 65, and outlet at 650 East. From that point it was constructed as an open ditch all the way to the South Fork of Wildcat Creek. There were two concrete fords constructed to connect property that the open ditch severed. Mr. Labonte's entrance to his property was off 650 East (1 acre) and the building site (8 acres) was on the opposite side of the open channel. The Surveyor stated the concrete ford which was at least 24 inches of concrete had undermined and collapsed straight down. It appeared to be poor design or lack of maintenance that caused the collapse. After reading through numerous files on Parker Ditch and SIA the Surveyor found a Petition to Establish the open portion as part of the Regulated Drain, had never been filed. The second problem was a crossing over a regulated drain was typically the responsibility of the landowner. Mr. Labonte was now faced with the considerable cost of a new crossing over Parker Ditch. He noted Mr. Labonte had been very patient, however he was ready to start the building process at this time. A maintenance fund for Parker Ditch existed for the pre-existing agricultural tiles that tied into the new concrete storm sewer. At the time the concrete ford was constructed, a maintenance fund was intended to be set up for both the open portion as well as the preexisting tiles. The Surveyor stated he felt the Board should give Mr. Labonte a clear answer to his problem. Discussion at the time indicated SIA would be the sole contributor into the maintenance fund for the open portion of Parker Ditch and the majority of the assessment would then be assessed to other developments as they were created. The farmers would not bear the majority of the cost. The Board Attorney stated

since the drain was not functioning as intended due to the collapse of the concrete inside the ditch, the Board or the County could be the petitioner to establish the maintenance fund for the open portion. The Surveyor and Attorney would insure the necessary steps were taken to establish a maintenance fund for the open portion of the Parker Ditch. In response to Mr. Labonte's inquiry, the Surveyor stated he thought all the required documentation was on hand. Mr. Labonte thanked the Surveyor for his efforts and the Board for their time on this matter.

Lewis Jakes Ditch

Dale Butcher of 8171 North 300W appeared before the Board to discuss the Lewis Jakes Ditch. With heavy rains in the past year or so, he has worked closely with the Surveyor on the problems associated with the ditch. He stated the Surveyor had been very professional throughout this time. He expressed appreciation for time the Surveyor had spent with him on the drainage issue. He noted landowners were in favor of addressing the issue and was anxious to schedule a maintenance hearing. The Surveyor stated downstream of the old tile outlet had been surveyed, however more surveying and investigation was warranted. He informed Mr. Butcher he was prepared to ask the Board in an upcoming Special Drain Meeting to refer the Lewis Jakes Ditch to him for a final report. He anticipated he would be able to complete the report within thirty-sixty days of the Special meeting.

Petition to Establish a New Regulated Drain/ F. Wilson / Shelby Township

The Surveyor stated a Petition to Establish a New Regulated Drain was submitted to the Surveyor's Office by Mr. Norman Bennett 952 Kerber Road West Lafayette Indiana 47906. The Surveyor noted the Board, at the Whaley/ Mackey Obstruction Hearing held on March 10, 2005, discussed this private drain. Mr. Bennett was in attendance today. Based on the preliminary watershed information, a total of 94% of the benefited landowners had signed the Petition. The Attorney directed the assessment spreadsheet be attached to the Petition. He went on to say petitioners were required to reimburse the County if the petition did not pass, however that condition could be waived. John Knochel made a motion to refer the Petition back to the Surveyor for a report to the Board in the future. KD Bensons seconded the motion. The Petition was referred back to the Surveyor for a report. Due to the drain currently under standing water, investigation would be more difficult and the Surveyor wanted the Board to be informed of the situation.

**Maintenance Bonds
Creekside Subdivision/Shawnee Ridge Phase 3**

The Surveyor presented a Letter of Credit # 557 in the amount of \$15,976.00 dated March 7, 2005 from Mennan Builders for Creekside Subdivision and recommended acceptance by the Board. John Knochel made a motion to accept the Letter of Credit as presented. KD Benson seconded the motion. Creekside Subdivision Letter of Credit # 557, amount \$15,976.00, dated March 7, 2005 was accepted by the Board. He then presented Shawnee Ridge Phase 3 Maintenance Bond# 5013361 in the amount of \$4300.00 dated Oct. 4, 2004 from Atlas Excavating for acceptance. John Knochel made a motion to accept the Maintenance Bond for Shawnee Ridge Phase 3 as presented by the Surveyor. KD Benson seconded the motion. Maintenance Bond # 5013361 in the amount of \$4300.00 dated Oct. 4, 2004 for Shawnee Ridge Phase 3 was accepted.

Public Comment

Ruth Shedd asked for public comments. As there were none, John Knochel made a motion to adjourn the meeting. KD Benson seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
April 11, 2005
Special Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison, and GIS Technician Shelli Muller.

Ruth Shedd called the Special Drain meeting to order. She then referred to the Surveyor. The Surveyor noted the meeting today was to discuss the Classification of Drains Report previously presented to the Board on February 2005, as well as an overall Regulated Drain update. At that time, he gave the following presentation to the Board.

Steve Murray

Drain Maintenance, Drain Reconstruction, and General Drain Conditions

Drains In Need of Reconstruction

Julius Berlowitz

The Julius Berlowitz Drain was ready for the Phase 1 contract. Phase 1 included the construction of a regional detention facility east of I65, east and north to County Road 50 South. The project was held up due to the Arnett and St. Vincent issues. A new channel was in place north of 50 South and new culverts were in place on 50 South and 550 East. The County along with the area's property owners was discussing solutions for use of the excess dirt, which would allow the County to fund additional drainage projects if a solution was found. The Surveyor felt the discussions were worth the time and effort in order to save the County millions of dollars. The largest cost to the County would be disposal of the excess dirt. KD Benson inquired if it could be stored for future use. The Surveyor responded the amount of dirt would not allow that.

Lewis Jakes Ditch

The **Lewis Jakes** Ditch has had an informal hearing and field investigation completed. The project was close to a hearing for reconstruction several years ago. At that time, the watershed landowners denied the petition due to the cost. However, the property owners were now willing to raise the rate to approximately \$10-\$11 an acre to reconstruct the drain. A substantial amount of research and fieldwork was done on this drain. Steve stated it was a high priority for him and hopefully would be presented to the Board in the next 2-4 months.

S.W. Elliott Ditch/ Branch #11

The S.W. Elliott has had considerable amounts of work done over the last 20 years. The Wilson Branch Pond was in place at the Mall as a Regional Detention Facility. The **Treece Meadows Relief Drain** was reconstructed when the first Wal-Mart was built. **Branch #11 of the S.W. Elliott** was located across the Schroeder property and across SR 38 at the Tractor Supply Store, near the Brand property. A commercial subdivision was previously planned for the Brand property with twin 66" pipes under SR 38. The pipes would have to be pushed under the interstate, which proved to be too costly. Also, INDOT would not allow the construction under the interstate at that time. John Brand from Butler, Fairman, and Seifert Inc., related to the owners of the property, reviewed the drainage and infrastructure for the area and expressed interest in finding a solution. The planned thoroughfare included a connector between SR 26 and SR38, McCarty Lane and Haggerty Lane, to be constructed. As part of the current Cascada Business Park project, the Branch would be constructed from south of SR 26 (Wal-Mart area) to McCarty Lane. Since **S.W. Elliott** was an urban drain, the Surveyor recommended **Branch #11** to be reconstructed. The cost of the construction of the 66-inch pipes under SR 38 would be borne by INDOT. Reconstruction costs would be substantially lowered; therefore the landowners would benefit. Previously, Engineering consultants, during possible developments considered for that area, worked up reconstruction estimates for **Branch #11**. However, a preliminary review and new cost estimates were warranted due to the lapse of time.

F-Lake

As stated earlier, the approximate cost of the **F-Lake Regional Detention Facility** was \$2,000,000.00. The design was close to completion and would be located on County Property, east and northeast of the Ivy Tech. Campus. This was one of two priority projects to be funded out of the EDIT Drainage Projects Fund. (The **Berlowitz** project cost was estimated at \$3,000,000.00 plus, and the **F-Lake** project estimated cost at \$2,000,000.00.) There was approximately \$4,000,000.00 in the EDIT Drainage projects account at this time. If the County could work out a solution concerning the project's excess dirt, it would lower the cost of the **Berlowitz** project and allow the **F-Lake** project to proceed much faster.

J.N. Kirkpatrick/East of Concord Road

A preliminary design had previously been completed in anticipation of the LUR Industrial Park as well as additional residential development in that area. While there were advantages to a drain assessment reconstruction process, implementing a regional storage facility would result in the developers' responsibility for a set storage fee. This would ultimately result in decreasing the burden of maintenance costs solely by the area's farmers. EDIT Drainage Projects monies could supplement the cost of the maintenance of this portion of the drain.

D. Anson Drain

This drain had been discussed extensively in past meetings. This fall, the Surveyor's office was able to investigate areas of the tile located in wetlands, due to the dry weather. A revised estimate was being prepared and hopefully a drain hearing would be conducted within the next two to four months. (The Surveyor then reviewed the location of the tile utilizing G.I.S.) He stated he tentively planned to recommend the reconstruction be completed in phases. The first phase would involve beginning at the wooded location on the east side of Co. Rd. 100 West, removing major tree root blockage of the main tile, perhaps installing a new inlet on the west side of Co. Rd. 100 West (to assist in maintaining a low water level within the wetland), while continuing to work upstream. The assessment rate would need to be raised from the present assessment of \$1.25 an acre to approximately \$4.00-\$8.00 an acre. The amount would depend on the length of time over which the landowners were willing to spread the maintenance cost over. Realistically, the project would in all likelihood be completed during a 5-10 year period- due to the amount of costs associated with it.

J.B. Anderson/Clarks Hill

Christopher B. Burke Engineering, as part of the **Lauramie Creek** Design Study, had completed a preliminary design for the **J.B. Anderson Drain**. The cost of that design was well in excess of \$2,000,000.00, due to running an open ditch all the way to State Road 28. A lower cost solution would be warranted and revised preliminary plans were drawn up. The tile was fairly deep as it crossed Co. Rd. 975 East. Rather than daylighting the old tile into a new open ditch or waterway, a new shallower storm sewer would be constructed just east of Co. Rd. 975 East and ran roughly the same route as the tile. A portion of an existing storm sewer along a side street would also be reconstructed. This would relieve the surface water load and route it into a new channel that would run from Co. Rd. 975 East across the old railroad bed into twin corrugated steel pipes just south of the cemetery. The revised preliminary plan would drop the cost to approximately \$400,000.00, which was more feasible.

Frank Kirkpatrick Drain

This drain was located near South County Line and 300 East and was in need of reconstruction. A call from landowner Don Fugate, a year or so ago, warranted a site visit which determined the tile was indeed laid uphill. For a number of years the tile had enough pressure to function. However, that was not the case at this time. That portion of the tile would need to be laid at a positive grade. This would qualify the work as reconstruction, not maintenance. The Surveyor felt downstream landowners would not be interested in bearing the cost, as their tile portion was operating.

Urban Drains

An Urban Drain by definition is an agricultural drain considered to be in need of reconstruction. With the exception of the **Alexander Ross** Regulated Drain, Tippecanoe County Urban Drains had been discussed previously. The **S.W. Elliott**, **Berlowitz**, and the **J.N. Kirkpatrick** Regulated Drains consistently need maintenance performed, due to tile breakdowns etc.

Drains with Insufficient Maintenance Funds

The previously submitted report listed thirty drains with insufficient maintenance funds; some of which were in need of reconstruction. Every ten years, most open ditches need to be dredged. If in need of dredging and monies in the ditch fund were not sufficient, the regulated drain was included in this category of the list. Most of the drain funds were started in the 1960's, and the 1970's. The assessment per acre or lot for maintenance set at that time was insufficient at today's prices of construction. Most Counties schedule multiple hearings for drain assessment increase in one day. To adequately maintain regulated drains the increase was necessary. If landowners were not willing to increase the amount per acre, the drain could be vacated. Generally the drain should not be a public utility, however most often the drains were. Raising a drain assessment periodically would be more efficient and possibly prevent enormous costs of future reconstruction. The **Anson Drain** was a perfect example of that. The Surveyor informed the Board the office had seen an increase in private drain Petitions for the establishment of new Regulated Drains in the last year or so. They have been working on those petitions, as time would allow.

Parker Ditch Update

Dave Labonte had attended a previous Drainage Board meeting informing the Board of his concerns with the ditch. The Surveyor stated he had finished his research of the official minutes. The ditch drained the Subaru-Izusu production plant. At the time of the project construction, problems arose which among other things were due to an out of state contractor. In review of the minutes, he found due to the State “fast tracking” the project, a Petition was presented for Reconstruction, Relocation and Vacation of the Parker Ditch. A new concrete storm pipe was put in from the south side of Haggerty Lane (at SIA site) up to the north and east to 675 East. A new channel was built from 675 East to the Wildcat Creek. The minutes showed while the drainage was approved and the right of way was obtained, the Petition was never acted upon. A Finding and Order draft as well as an assessment rate were prepared, however they were never presented to the Board. The Board never heard the Petition. The plan was for SIA to pay 100% of the maintenance for the new storm sewer until such time as other developments in that area tied into it. The farmed acreage was not to carry that maintenance cost. An existing \$1.00 per acre assessment on the agricultural tile had been adequate for the maintenance of said tile at that time. Two at- grade fords were constructed at the new open channel. Mr. Labonte’s only access to his building site was across the fords, which now were collapsed and in need of replacement. It appeared that the petition was still valid. The Board would need to follow through and establish a maintenance fund for the open channel. The amount originally suggested for maintenance was approximately \$20,000.00 per year. However, an increase would be warranted based upon inflation and current construction costs. The Attorney then stated the original petition should be acted upon and a Drainage Board hearing scheduled in the future. He stated a new petition would not be required to schedule a hearing on establishing an open ditch maintenance fund for **Parker Ditch**. The only new development in that area had been the Armory.

Per Indiana Code 36-9-27-36 (3C), the Surveyor requested the Drainage Board refer the regulated drains that had been classified by Surveyor for a report in the order of priority set forth in the classification. The Board had the authority to change the priorities within the report if warranted. John Knochel made a motion to adopt the Drain Classifications Report in the order of priority set forth in the classification and referred them to the Surveyor for reports. KD seconded the motion. The motion passed.

The Surveyor stated several inquiries had been received concerning” no net loss within the floodplain” due to implementation of the new Tippecanoe County Stormwater Drainage Ordinance this year. A call was received concerning a residence within the 100-year floodplain on the Wildcat by Dayton. The creek had eroded very close to the foundation of the house. He felt this particular issue would constitute a variance of the rule, which the Drainage Board would grant. A review was warranted of the” no net loss within a floodplain” section within the ordinance. During development of the new ordinance, that section was included with industrial development in mind. KD noted the Tippecanoe County Stormwater Ordinance was stricter than the Department of Natural Resources fill guidelines.

Indiana Natural Heritage Data Center/Data Use Agreement

The Surveyor presented a Data Use Agreement for the Indiana Natural Heritage Data Center. (A unit of DNR) The information would be used for Phase II purposes, which included historical, and archeological site data. In order to access the database, the agreement must be signed. Subject to the Attorney’s review, the Surveyor requested the Drainage Board along with himself sign the agreement. The Attorney then reviewed the agreement. At the Attorney’s approval, John Knochel made a motion to authorize the President of the Board and Surveyor to sign the Department of Natural Resources Data Use Agreement as presented. KD Benson seconded the motion. The motion passed. The Department of Natural Resources Data Use Agreement was approved for signature as presented. At that time the Surveyor ended his report and presentation to the Board.

Ruth Shedd asked for Public Comment. As there was no public comment, John Knochel made a motion to adjourn. The Special Meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
June 1, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Doug Masson for Dave Luhman Drainage Board Attorney, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller. County Highway Supervisor Mike Spencer was also in attendance. Drainage Board President Ruth Shedd was absent.

Approval of Minutes

KD Benson made a motion to approve the April 6th, 2005 Regular Meeting as well as the April 11th, 2005 Special Drain Meeting minutes as written. John Knochel seconded the motion. The aforementioned minutes were approved as written.

Creasy at the Crossing/Easement Reduction

Mr. Matt McQuen appeared before the Board to request a drainage easement reduction of the S.W. Elliott Branch #13 Regulated Drain, located within the Creasy at the Crossing Subdivision. The existing drainage easement was established along the western portion of the subdivision in 1999. Mr. McQuen proposed a reduction of the existing easement to 75 feet. The easterly line of the proposed easement would be located approximately 30 feet east from the outside diameter of the existing two twin 66" pipes. Due to the existing State Road 38- 110 feet permanent easement, Mr. McQuen informed the Board a request was also made to INDOT and their acceptance of the reduction of the permanent easement was pending today's Board action.

The Surveyor recommended approval of the proposed easement pending review of the plat by the Board Attorney. KD Benson made the motion to approve the proposed drainage easement to 75 feet. John Knochel seconded the motion and the reduction of the drainage easement within Creasy at the Crossing was approved. At the suggestion of the Attorney, Mr. McQuen stated he would present the request at the June 6th, 2005 Commissioners meeting.

J.N. KIRKPATRICK Regulated Drain /Branch #5

Mr. Mike Wylie of Schneider Corporation appeared before the Board to request a portion of the JN Kirkpatrick Regulated Drain be vacated. A portion of Branch #5 existing 150 feet drainage easement crossed through the Wal-Mart Center in the northern portion of the site. The drain continued west, then southwest and intersected with the new improvements of the Promenade Parkways storm infrastructure. The developer and contractor for Stones Crossing Subdivision previously confirmed the tile was tied into storm system. Mr. Wylie stated that vacated portion of the tile was investigated to insure no existing flow at that location. The tile was excavated at five locations and showed no evidence of flow. It was then traced back to a manhole located at the southwest corner of the Concord Road and Co. Rd. 350. The manhole and entry point of the tile showed no evidence of flow. Mr. Wylie then requested approval for the vacation of the existing portion of Branch #5 of the SW Elliott Regulated Drain located at the Wal-Mart Center, as well as the existing 150 feet drainage easement. As a result of the reduction and vacation, a 30 feet drainage easement would be platted for Concord Plaza. Mr. Murray recommended the aforementioned portion of Branch #5 of the SW Elliott Drain vacation.

KD Benson made a motion to grant conceptual approval of the partial vacation request of Branch #5 of the JN Kirkpatrick Regulated drain as presented. The approval was pending the submittal of plans showing the vacation location with the Surveyor office. John Knochel seconded the motion and the JN Kirkpatrick Regulated Drain Branch # 5 was granted the vacation as requested, pending submittal of the location plans.

Huntington Farms Subdivision Phase 3 Section 2 and South ½ of Phase 4

As there was no representative to present the project to the board, KD Benson made the motion to continue the presentation to the July meeting. John Knochel seconded the motion and a continuance was granted.

Darby Wetherill Widmer Extension

The Surveyor presented a waiver request from the Benton County Drainage Board regarding the Widmer Extension of the Darby Wetherill Regulated Joint Drain. As a major portion of the benefited acres lied within Benton County, the Benton County Board requested a waiver for a joint board. 2400 feet of tile along the East side of CR 900 West in Shelby Township, extending approximately 80 feet East of the West section line of Section 11 Township 24N and Range 5W and 2400 feet South of the existing Darby Wetherill ditch. Mr. Murray recommended the waiver as requested. KD Benson made a motion to grant a waiver of a Joint Drainage Board for the Widmer Extension of the Darby Wetherill Drain to Benton County. John Knochel seconded the motion and a Joint Drainage Board waiver for the Widmer Extension of the Darby Wetherill Drain to Benton County was granted.

Delphine Anson Regulated Drain

The Surveyor updated the Board on the status of the Delphine Anson Regulated Drain future reconstruction and maintenance. He stated he was presently working on the Reconstruction and Maintenance Report for the Regulated Drain. He planned on requesting a landowner meeting date at the July Drainage Board meeting.

August Drainage Board Meeting Date Change

As a result of a conflicting schedule, the Surveyor requested a change of the August 3 2005 meeting date. A tentative date was August 2, 2005, however it was decided to set the date at the July Drainage Board meeting.

SWCD

Mrs. Remley thanked the Board for their time. She began by stating she did not recall ever formally meeting the Board to discuss ways of improving the relationship between the two offices in order to create efficient landowner service. Partners to the Indiana State Department of Agriculture Division of Soil Conservation and the USDA Natural Resources Conservation Service, she stated they are the local clearinghouse for natural resource information. Their plans encompassed the agricultural and urban communities, as well as soil and water resources. She stated the vision of the Department was to ensure healthy forests, productive water resources, sustainable communities as well as clean water and stable soils. As a result the office focused on water quality issues not quantity. They receive many drainage issue calls and try to assist whenever possible. She concluded by assuring the Board with open communication between their office and the Drainage Board while stating she looked forward to working together in the future. At that time she introduced Sue Gerlach resource specialist, formerly of the SWCD division and now with the newly formed Indiana State Department of Agriculture.

Sue appeared before the Board and thanked them for their time. Her agency was in the process of developing a mission statement and an organizational structure. She would be able to assist the SWCD/ Drainage Board and community through the Federal Farm Bill related programs and State projects, such as the Lake and River Enhancement Watershed Land Treatment Program. She stated historically her position had assisted the SWCD office with Rule-5 reviews and other urban conservation related concerns. Due to her new position, the SWCD district would be left short of being able to assist all the other non-related questions and concerns from the public. She expressed concern for the issues which she felt would "slip through the cracks" due to the department change. At that time she thanked the Board for their time and stated she had worked well with the Surveyor in the past and hoped this would continue. She then introduced Mr. Marc Eastman.

Mr. Marc Eastman of the Soil, Water, Conservation District appeared before the Board to give a brief description of the duties of his office as well as promote unity between the two entities. Mr. Eastman defined the drainage role of the SWCD and reviewed their wetland policy. He stated the landowner held responsibility of obtaining proper permits through IDEM and DNR as well as the notification of surrounding landowners. At the surveyor's inquiry, Mr. Eastman stated the SWCD office drainage and aerial records would be available for the Surveyor office to scan and copy.

At that time the Surveyor thanked the SWCD members for their presentations to the Board and stated historically they had a good working relationship. He thanked the SWCD office for their agreement of sharing their drainage records with the Board for the purpose of scanning and copying. This would insure a more efficient Drainage Records Library for all involved. He also felt the landowners of the County would benefit from open communication between the entities involved.

Water Safety Presentation/Mike Wylie

Mr. Mike Wylie appeared before the Board to present a Water Safety Power Point presentation. He stated recommendations contained in the report were in hopes of improving an ever-increasing concern. One out of every four unintentional injuries for children ages one to four years involved drowning. Education for public awareness was a priority and the safety of children in particular. Adopting standards for smart development was a focus of the committee. Retention pond design changes should be monitored and vandalism was also a concern. The new Tippecanoe County Stormwater Ordinance incorporated some of the committee’s concerns. A copy of the presentation was provided to the Surveyor Office in hard and digital format. He thanked the Board for their time and this Board and several individuals, developers within the community took stated water safety seriously. The Surveyor and the Board thanked Mr. Wylie for his presentation and the time he spent with the issue.

Valley Ridge PD/Maintenance Bond # 104478499

The Surveyor presented and recommended the acceptance of Maintenance Bond # 104478499 submitted to his office by Milestone Contractors dated March 21, 2005 in the amount of \$650.00 for Earthwork, Erosion Control and Storm sewer outside the Public Right of Way. KD Benson made a motion to accept Maintenance Bond # 104478499 as presented by the Surveyor. John Knochel seconded the motion. The Board accepted maintenance Bond # 104478499 dated March 21, 2005 in the amount of \$650.00 for Valley Ridge Planned Development.

The Orchard Phase 2 Section 1/ Maintenance Bond ## 1104456650

The Surveyor presented and recommended the acceptance of Maintenance Bond # 1104456650 submitted by Milestone Contractors dated March 21, 2005 in the amount of \$1547.00 for Earthwork, Erosion Control and Storm sewer outside the Public Right of Way. KD Benson made a motion to accept Maintenance Bond # 104456650 as presented by the Surveyor. John Knochel seconded the motion. The Board accepted Maintenance Bond # 104456650 dated March 21, 2005 in the amount of \$1547.00 for The Orchard Phase 2 Section 1.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
July 6, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller. County Highway Supervisor Mike Spencer was in attendance also.

Approval of Minutes

John Knochel made a motion to approve the June 1, 2005 Drainage Board Meeting minutes as written. KD Benson seconded the motion. The June 1, 2005 Drainage Board minutes were approved as written.

JN Kirkpatrick Regulated Drain/Drainage Impact Area

The Surveyor stated the JN Kirkpatrick Regulated Drain had been reconstructed from roughly 350 South to Concord Road and modeled for most development's direct release in the area, excluding commercial and industrial. At the request of several property owners east of Concord Road, a preliminary draft design for a regional detention facility was completed several years ago. The regulated drain was previously classified as an Urban Drain, meaning by statute it was in need of reconstruction. Generally, as an agricultural drain, it was inadequate and incapable of handling the increased flows resulting from the area development and did not have a positive outlet. Indiana Drainage Code Classification and the Tippecanoe County Drainage Ordinance allow for the drain to be declared a Drainage Impact Area. Based on the amount of development in the watershed area, the Surveyor recommended the Board declare the JN Kirkpatrick Regulated Drain watershed east of Concord Road a "Drainage Impact Area". The JN Kirkpatrick Regulated Drain was adequately reconstructed west of Concord Road. The impact area would be east of Concord Road just south of Co. Rd. 450 South, to Co. Rd. 350 South and extended east of Co. Rd. 450 East and a small area east of US52. (Approximately 1200 acres) KD asked what exactly would declaring the area a Drainage Impact Area mean? Attorney Dave Luhman stated general conditions of development could be established. Such as all Stormwater Drainage Control Systems in that area could be required to participate in the regional detention basin, as well as the requirement for a positive outlet to the JN Kirkpatrick Regulated Drain. Also generally the Board could require a developer to establish control systems within their developments - such as establishing their internal drainage facilities as regulated drains - as a condition of drainage approval. This was done on portions of the Elliott such as the Treece Meadows Relief Drain. Historically this was the only way to ensure adequate drainage for the property within the watershed was still used for agricultural purposes. The Surveyor stated portions of Co. Rd. 450 South, Co. Rd. 450 East and several depressional areas used as farm ground were under water for several weeks after the 2004 flood. Obviously, this area could not handle additional pressure from urban, commercial and industrial development. JN Knochel made a motion to declare the JN Kirkpatrick Regulated Drain a "Drainage Impact Area", and authorize the Attorney to prepare a formal Resolution with boundary map for the August 2, 2005 Drainage Board meeting. KD Benson seconded the motion and the JN Kirkpatrick Regulated Drain watershed east of Concord Road would be declared a "Drainage Impact Area" once the Resolution was presented to the Board during the August meeting. The Surveyor hoped to accomplish the reconstruction utilizing a combination of detention storage fees, possible EDIT money for Urban Drain Reconstruction as well as benefited landowners reconstruction assessment monies.

JN Kirkpatrick Regulated Drain Branch #5/ Petition for Partial Vacation and Relocation

Dan Teder, Attorney with Reiling, Teder and Schrier representing DF Properties appeared before the Board to present a Petition for Partial Vacation and Relocation of the JN Kirkpatrick Regulated Drain. Dan Kuester from Woolpert LLP as well as Mike Wylie from Schneider Corporation were in attendance and available for questions from the Board. The portion of Branch #5 of said drain in question was the 150 feet Drainage Easement and located within Section 10 Township 22 North and Range 4 West at the Wal Mart project site. Located in the northern portion of the site the regulated drain intersected with the Promenade Parkway's storm infrastructure. The tile was then routed through a previously approved 30 feet drainage easement within Stones Crossing Commercial Subdivision. KD noted this was discussed last month and granted conceptual approval at that time. The Surveyor stated said Branch had been located onsite and found to be routed to the southwest corner of Co. Rd. 350 South and Concord Road. The drain was previously replaced in part under the intersection of Concord Road

and Co. Rd. 350South. It had previously been intercepted just east of Lot 1 and 2 in Stones Crossing Commercial Subdivision and relocated around the east right of way of Promenade Parkway. The Drainage Code stated a condition for approval for said request was the land on both sides of a regulated drain must be owned by one and the same. The County Surveyor must approve the specifications for the project and any costs would be the sole responsibility of the petitioner. The Surveyor had investigated whether a landowner within the watershed would be adversely affected. The Surveyor stated he did not believe that was the case. Dave Eichelberger, Board Engineer Consultant, stated he had not seen sufficient plans to date. Dan Kuester stated he could provide those plans within the week. Dan responded he would provide the calculations and plans as required and submit said plans within the week. Ruth Shedd then asked what was the construction time frame. Dan Kuester replied it was the developer's intent to start construction in the fall. Final design plans were being wrapped up and they would respond to any concerns. John Knochel made a motion to approve the relocation and the proceeding vacation of Branch #5 of the JN Kirkpatrick Legal Drain contingent upon the Surveyor's approval of the forthcoming plans and specifications. KD Benson seconded the motion. Branch #5 of the JN Kirkpatrick Regulated Drain relocation and vacation was approved contingent upon the Surveyor's approval of said specifications and plans.

Retreat At Hickory Ridge Lots 198 and 199/Petition to Vacate Drainage Easement

Dan Teder, Attorney with Reiling, Teder and Schrier representing South 18th LLC- Brian Keene President, appeared before the Board to present a Petition to Vacate a Drainage Easement on lots 198,199 in the Retreat at Hickory Ridge Subdivision for approval. Attorney Teder provided Exhibit B to the Board which indicated the location of easements. The Surveyor recommended approval for the Petition to Vacate a Drainage Easement on lots 198,199 in the Retreat at Hickory Ridge Subdivision as submitted. Dan stated a new site plan would be submitted. John Knochel made a motion to approve the Petition to Vacate a Drainage Easements on lots 198,199 in the Retreat at Hickory Ridge Subdivision as submitted. KD Benson seconded the motion. The Petition to Vacate a Drainage Easements on lots 198,199 in the Retreat at Hickory Ridge Subdivision was granted.

Lafayette Pavilions Phase 1

Dan Kuester with Woolpert Inc. appeared before the Board to request final approval for Lafayette Pavilions Phase 1. The overall site consisted of fifty-one acres and was located at the southwest corner of State Road 26 and Creasy Lane in the City of Lafayette. Phase one consisted of thirty-one acres. Two access drives would be constructed from Creasy Lane and one from State Road 26. Most of the site drained to the southeast routed through a public storm network and a portion west to an existing ditch. A storm sewer network to collect onsite runoff would be located along the west property line. Dan stated he was working closely with the Lafayette City Engineers Office. The Surveyor noted while the project was located within the City, the Board's concern was runoff release to Treece Meadow Relief Drain (Layden Drain). He stated the plans indicated the rates as satisfactory. He recommended final approval for Lafayette Pavilions Phase 1 with the conditions as stated on the June 15, 2005 Burke memo to the Board. John Knochel made a motion to grant final approval with conditions as stated on the June 15, 2005 Burke memo for Lafayette Pavilions Phase 1. KD Benson seconded the motion. Lafayette Pavilions Phase 1 was granted final approval with conditions as stated on the June 15, 2005 Burke memo.

Huntington Farms Phase 3 Section 2 and South Half of Section Four

Doug Mark with Congdon Engineering Associates (CEA) appeared before the Board to request final approval for Huntington Farms Phase 3 Section 2 and South Half of Section Four. This phase was a continuation of previously approved Huntington Farms Subdivision Phases. The site was located along State Road 26 northwest of County Road 300 West (Klondike Road) and consisted of approximately fourteen acres. An existing pond was located in the southwest corner of the development. A storm system would be constructed and drain the proposed area to the pond at three separate locations. Previously approved Drainage Reports described the construction of a detention pond in the southwest portion of the site. Mr. Mark requested final approval for Huntington Farms Phase 3 Section 2 and the South Half of Section Four. The Surveyor stated he would recommend final approval with conditions as stated on the May 27, 2005 Burke memo as well as the added condition of covenants indicating proof of establishment of a Homeowners Association with covenants covering the homeowner's responsibility for the drainage system outside of the County Right of Way to include estimates of costs for such maintenance. John Knochel made a motion to grant final approval for Huntington Farms Phase 3 Section 2 and the South Half of Section Four with conditions as stated on the May 27, 2005 Burke memo as well as the added condition of covenants indicating proof of the establishment of a Homeowners Association and specific covenants covering a homeowner's responsibility for the drainage system outside of the County Right of Way including estimates of costs for such maintenance. KD Benson seconded the motion. Huntington Farms Phase 3 Section 2 and the South Half of Section Four was granted final approval with said conditions.

Park 350 Subdivision

Brandon Fulk with Schneider Corporation appeared before the Board to present Park 350 Subdivision for final approval with a waiver of onsite storage. The site was located approximately 1500 feet due west of intersection of US 52 and County Road 350 South and consisted of approximately 125 acres. The North half of the site drained north to the County Road 350 South roadside ditch. The remaining portion of the site would drain south to the planned JN Kirkpatrick Regulated Drain Regional Detention Facility. A proposed interim design was completed for storm infrastructure use until said detention facility is operable. The interim design would drain runoff to the County Road 350 South roadside ditch. Once the regional facility was constructed the Stormwater system would be modified to drain into said facility. Brandon then requested final approval for Park 350 Subdivision. Only the subdivision plan's lot configurations were general at this time and would be detailed at a later date. Brandon stated they were working closely with the City of Lafayette and the County Highway department. Brandon then requested final approval for Park 350 Subdivision. In response to John Knochel's inquiry, the Surveyor stated a structure would have to be in place at the abandoned railway bed or a cut made through it. It was noted the railroad still had control of the right of way at this time. Brandon stated a more in depth report of the site's drainage would be submitted in the near future. The Surveyor stated a variance would be required from the detention pond requirements. John Knochel then noted condition four of the June 30, 2005 Burke memo did not mention a safety ledge. The Surveyor stated if a 6:1 slope was used the maintenance ledge was required, however the slope was not 6:1. KD stated she felt a fence was warranted in this situation. She then asked the Surveyor what the time line was for the planned regional detention facility construction. The Surveyor stated it a date was not set at this time.

John noted he was willing to grant the variance with a safety fence placed around the perimeter of the ponds. He then made a motion to grant a variance with the condition of fencing the onsite ponds. KD Benson seconded the motion. The variance was granted with the condition of a safety fence constructed around the onsite ponds. The Surveyor then stated he was prepared to recommend final approval with the conditions on the June 30, 2005 Burke memo. He noted the condition of the required contribution to the planned regional detention facility. John Knochel then made a motion to grant final approval with the conditions as stated on the June 30, 2005 Burke memo. KD Benson seconded the motion. Park 350 Subdivision was granted a variance as well as final approval with the said conditions.

Menards

Brandon Fulk from Schneider Engineering appeared before the Board to request final approval for the Menards development project. The site was located on the northwest corner of US 52 and County Road 300 West and consisted of approximately 54 acres. Brandon stated the site was located within a dual watershed area. The northern portion of the site drained northeast to Hadley Lake and the remaining portion of the site, with offsite tributaries through the project site, drained to an existing culvert beneath 300 West. In addition US 52 had a culvert that would be incorporated into the design. Brandon discussed the varied elevations throughout the project site and noted the data was included within their reports. With respect to Indian Creek, the site was delineated and submitted to DNR for review. A DNR letter of concurrence of the floodway line was expected. KD asked the attendees in the audience if they were attending due to this project submittal, they answered affirmative. Brandon then addressed their questions concerning specific elevations within and surrounding the site. He stated anything above 654.3 would be considered outside of the flood plain according to DNR's published values for this site. He informed them determination of elevations for downstream properties would require a request of verifications to DNR. He stated the highest base flood elevation published with the Indiana Creek Study was less than 654. He noted whether it was Indian Creek or Hadley Lake's back waters, in the low frequency high storm events, you would theoretically see a topping of the County Road. The bridge elevation was at 657, four feet higher than the sag in County Road 300 West and three feet higher than the base flood elevation. A proposed berm elevation, located at the existing culvert, would be 652.5. This would shut the culvert off to some degree and would not allow release associated with the project itself. Brandon stated due to the conditions, the culvert would be left open as a "relief valve" for the possibility of backwater from Indian Creek and/or Hadley Lake. The Surveyor then stated the new County Stormwater Ordinance did not allow any net loss in flood plains on construction projects. (Commercial, residential or industrial) IDNR generally was not concerned about anything other than what was in the floodway, which was where there was perceptible movement of current. They have left the decision to local officials of whether the flood plain fringe may be filled in. Brandon stated the project met the release rate allowable by the current Stormwater Ordinance. Brandon stated the release rate was far less than what was in the existing condition.

KD asked Brandon to review the proposed detention pond and berm for the Board the interested attendees. Brandon stated the location of the berm would be on the east side of the culvert under 300West to insure runoff and the offsite tributaries drain north to Indian Creek avoiding the said culvert. The proposed detention facility would be located in the northeastern portion of the site and accommodate Menards as well as any future outlot development of the site.

At that time Ruth Shedd asked for public comments. Mr. Jim Bower of 3750 North 300W West Lafayette Indiana 47906 stated he felt the development of this site and also the future Meijer's store site would cause adverse drainage to his property. He stated to date he had spent \$80,000.00 due to area flooding. His property was located adjacent to the culvert under 300West. He stated he understood about the 100, 200 year flood data, however he was concerned. He believed the problem of flooding in that area would be greater due to the development of the site. The Surveyor stated the flooding would not go away until the railroad upsized their culvert. He stated the Meijer project would have to go through the same drainage process. He stated the current Stormwater Ordinance did it's best to protect landowners upstream and downstream. He did state one would see less water at any one period of time, but one would see it over a longer period of time. After the flooding last year the Surveyor noted he had been at that location several times. He had walked the portion of Indiana Creek East of Co. Rd. 300W on Mr. King's property traced the path of water etc. He stated the rainfall had hit Hadley Lake as hard as Indian Creek and the water obviously overflowed Indian Creek and traveled to Hadley Lake. He agreed it was very complicated and felt there were events when Hadley Lake overflowed to Indian Creek as well. The area was located within a watershed subject to periodic flooding. He understood Mr. Bower's concern, and stated he was insistent for an outlet to Indian Creek and not the culvert under Co. Rd. 300W. He noted the project drainage plans provided more flood plain storage than required by the current Stormwater Ordinance. Dave Eichelberger stated one couldn't control flooding one can only manage it. The Surveyor reiterated they had met the technical standards by the current Ordinance as required. Floyd Oaks 3608 North 300 West, West Lafayette Indiana 47906 approached the Board and asked if the peak flow increased, would this cause his property as well as others to be included within the flood plain. The Surveyor stated it would not.

KD asked if the berm in front of the culvert directed the average rain to the detention pond and not to the culvert would not the landowners see less runoff. Dave Eichelberger noted it would depend on the distribution, depth and duration of a rainfall event. However, the design presented showed the project site and tributaries to their site drainage would go directly to Indian Creek and not to the west. The Surveyor stated water could still bottleneck at the railroad culvert (bridge) location in the event of a flooding due to the undersized culvert. Dave Eichelberger then added depending on the flood event that occurred and in certain events where water would normally drain to the culvert it would now drain directly to Indian Creek. Ruth Shedd then asked for additional comments. KD asked Mike Spencer, Highway Supervisor to investigate a possible tree in the said culvert at Co. Rd. 300West. The Surveyor stated based on the Tippecanoe County Stormwater Ordinance he recommended final approval with the conditions on the June 29, 2005 Burke memo, subject to DNR approval before site work begins and the installation of the berm as a second item in sequence of post construction. At the Attorney's suggestion, the Surveyor explained construction sequence to the attendees. He stated as part of the new Phase II Clean Water Act requirements, the local entities including the County were now responsible for what was once known as Rule 5 (erosion control). This included a provision for post construction sequence operation (water treatment devices), which would be submitted to his office and monitored closely. He stated good sequencing for this project would include constructing the outlet to Indian Creek first and installing the berm before any erosion construction began. John Knochel then made a motion to grant final approval with conditions as listed on the June 29th Burke memo and subject to DNR approval prior to any site construction work and the installation of the berm as a second item in the sequence of post construction.

Stonehenge Planned Development Drainage Easement

The Surveyor stated he agreed to handle the request for Mr. Tim Beyers of Vester and Associates. He was in receipt of a certified letter requesting release of a drainage and utility easement. John Knochel made a motion to grant the drainage easement release request for Stonehenge Planned Development as requested by Vester and Associates submitted to the Surveyor. KD Benson seconded the motion. The drainage easement release for Stonehenge Planned Development was approved.

Appleridge at the Orchard Phase 2/Maintenance Bond

The Surveyor presented Maintenance Bond #104456650 submitted by Milestone Contractors, written by St. Paul Insurance Company in the amount of \$1547.00, dated March 21, 2005 to the Board and recommended acceptance. John Knochel made a motion to accept Maintenance Bond #104456650 in the amount of \$1547.00, dated March 21, 2005 for Appleridge at the Orchard Subdivision Phase 2. KD Benson seconded the motion. Appleridge At the Orchard Phase 2 Maintenance Bond #104456650 was accepted as presented by the Surveyor.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. KD Benson seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
August 2, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller. County Highway Supervisor Mike Spencer was in attendance also.

Approval of Minutes

John Knochel made a motion to approve the July 6, 2005 minutes as written. KD Benson seconded the motion. The July 6, 2005 Drainage Board Regular Meeting minutes were approved as written.

Arnett Ambulatory Surgery Center

Jon Perry of Gresham Smith and Partners representing Arnett Hospital appeared before the Board to request final approval for Arnett Ambulatory Surgery Center. The site was located at the southeast corner of County Road 500 East and County Road 100 South (McCarty Lane). The entrance drive would be constructed off of County Road 500 East. This project would outlet to the Julius Berlowitz Regulated Drain and was tributary to the planned Berlowitz Regional Facility. Mr. Perry stated the project consisted of a single story 45,000 square foot building ambulatory surgery center located on the southwest corner of the site. He stated he was in agreement with the July 27, 2005 Burke memo and planned to meet all the conditions listed. At that time he requested final approval for the project.

The Surveyor stated the project had been reviewed and discussed on numerous occasions by the Board. The site was included in the overall design for Arnett Hospital. However the Hospital withdrew their plans and was now requesting final approval for the proposed Ambulatory Surgery Center only. The Surveyor reviewed the site utilizing GIS for the Board. He then recommended final approval with conditions as stated on the July 27, 2005 Burke memo. He pointed out condition one addressed the forthcoming Berlowitz Regional Detention Fees, and noted Arnett was aware of the forthcoming fees. Construction of the County detention facility would require the removal of approximately half million cubic yards of soil. Arnett had expressed interest in obtaining soil for their site once a partner was obtained for the remainder of the site. The Surveyor hoped an agreement could be worked out for the County and Arnett that would benefit both. He then recommended a condition be added stating the Phase II Stormwater fees (once determined by the Phase II Project Team) would be paid by the Center. As a designated entity under Phase II of the Clean Water Act, they are currently looking at approximately \$30-\$40 an acre plus a \$250 fee. An official notice from IDEM (Indiana Department of Environmental Management) had been received stating Tippecanoe County was granted the authority to oversee the implementation of the Rule 5 approvals, reviews, and inspections. The Soil and Water Conservation and IDEM would no longer be enforcing the Rule. IDEM would be overseeing Tippecanoe County implementation of the Rule. The inspections would focus on an approved project's water quality treatment devices each year for a three-year period. John Knochel asked if the added condition was agreeable. Mr. Perry and Brian Elmor (representative for Arnett) agreed to pay the yet to be determined fees. In response to Mr. Perry's inquiry, the Surveyor stated two copies of the post construction Stormwater Manual would be required. The Surveyor noted all practices should be included in the manual to assist in the field inspections.

John Knochel made a motion to grant Arnett Ambulatory Surgery Center final approval with the conditions as listed on the July 27, 2005 Burke memo as well as the added condition of the Regional Detention fee payment. KD Benson seconded the motion. Arnett Ambulatory Surgery Center was granted final approval with the conditions as listed on the July 27, 2005 Burke memo as well as payment of the forthcoming Regional Detention fees.

Polo Fields

Paul Coutts of C&S Engineering representing David Zimmerman appeared before the Board to request final approval for the Polo Fields Subdivision project. The site located on the north side of County Road 200 North east of County Road 400 East consisted of approximately 18 acres. A fourteen lot single-family residential development was planned. Storm sewers and rear yard swales would be constructed and drained to a proposed dry detention basin north of lot eleven. The final outlet would be the existing pond of the Watkins Glen Subdivision north of the proposed site. Mr. Coutts stated an open pipe was

located in the northwestern corner of lot seven and was routed to the detention basin. A low area near the northwestern corner of lot twelve would be routed to the basin as well. From the detention basin through a vegetative swale located at the site's northwestern corner, the runoff would outlet into the existing pond located on lot thirty-five within Watkins Glenn Subdivision. Mr. Coutts stated they concurred with the conditions listed on the July 21, 2005 Burke memo and requested final approval. Ruth Shedd then opened the floor for public comment. Mark Zimpher located at 2300 Shana Jane Drive approached the Board. Mr. Zimpher who resided on lot 36 in Watkins Glenn Subdivision stated he had met with the Surveyor previously concerning this development. He was concerned with the amount of drainage, which would be directed to Lot 35 of Watkins Glen, as his lot was located immediately to the north, and felt he would also be affected by the proposed drainage. The Surveyor referred his comments to Mr. Coutts for a response. Mr. Coutts stated as part of the study, calculations were completed on the quality and quantity of runoff as well as runoff modeling to Pond A in the Polo Fields Subdivision as well as the pond in Watkins Glenn known as Pond B. He stated they did not exceed the 100-year limits, nor do they overtop or go out the existing 100-year easement. He stated the system design was more than adequate to accommodate Polo Fields Subdivision. He stated the requirements of the Drainage Board had been met. The Surveyor utilized GIS for review of the site. When reviewing this project he asked the consultant and developer to find a more direct outlet. Due to the defined path, the existing Watkins Glenn pond system seemed to be the natural way to route the water. There was also a study and calculations of the pond system previously completed at hand for review. Dave Eichelberger the Board's Drainage Consultant, confirmed runoff would stay within the existing easement and pond system in Watkins Glenn as Mr. Coutts had indicated. He noted an increase in depth and amount of water would be minimal. He then discussed the options, reviewed and studied previously by the consultants and developer. He stated given the site and the surrounding area, he felt the proposal was the best solution for the project. Mr. Zimpher noted the septic systems were in the rear of the lots' thirty five on down' close to the drop off by the existing pond and was concerned runoff would have a negative effect. The Surveyor stated he felt it would not negatively affect shallow septic systems. He noted however if a flood such as one comparable to the 2004 flood happened then a negative effect was possible. Dina Flores of 3911 Shana Jane Drive Lafayette approached the Board at that time. She stated she was concern with overflowing of the pond and standing water. The Consultant reviewed the Ordinance requirements and specifically the peak time during storm events. The Surveyor also stated it was his opinion that the drainage design presented was the best solution for the area in question. In response to Dina Flores request concerning the Watkins Glenn Pond outlet view, Mr. Coutts stated the developer would be willing to plant shrubs and/or tall grass around the outlet. The Consultant noted the flow of water must not be obstructed. The Surveyor noted the Drainage Ordinance was in place to protect people up and downstream of developments. He then reviewed the inspection process for all attendees. Richard Snodgraph of 3932 East 200 North Lafayette approached the Board at that time. He stated Bob Gross designed the drainage for Watkins Glenn South Part 6 Phase 2. He noted the amount of money he had spent to date for a drainage system of the development and stated he felt the proposed design was appropriate for the area and type of soil. He stated the Watkins Glenn pond was constructed in 1988 and has been dry to date. The Surveyor stated the proposed lots were large and a lot of grassed areas would be on the lots. The pond in Watkins Glen was a dry bottom detention pond and the proposed study was reviewed, the surrounding area was taken into consideration.

The Surveyor then recommended final approval with conditions as stated on the July 21, 2005 Burke memo. He noted item number 8 on the July 21, 2005 Burke memo which stated "...the Indiana Department of Environmental Management and the Tippecanoe County Soil and Water Conservation District... should state the" Indiana Department of Environmental Management and the Tippecanoe County Surveyor Office".... He also recommended an added condition for payment of Phase II Stormwater fees (pending determination by the Phase II Project Team) to be paid by the developer of the project. John Knochel then added a condition stating the developer must work with the owner of lot thirty-five in the Watkins Glenn Subdivision concerning landscaping around the outlet pipe. John Knochel made a motion to grant final approval for Polo Fields Subdivision with conditions as noted on the July 21, 2005 Burke memo in addition to landscaping around the outlet pipe at the Watkins Glen pond location and the revised verbiage of item number eight on said memo along with the said Stormwater fees. KD Benson seconded the motion. Polo Fields Subdivision was granted final approval with the conditions stated on the July 21, 2005 Burke memo in addition to landscaping around the outlet pipe at the Watkins Glen pond location and the aforementioned revised verbiage of item number eight on said Burke memo.

Buffalo Wild Wings

Mike Wylie of Schneider Corp. appeared before the Board to request final approval for Buffalo Wild Wings. The project site was within the City of Lafayette and was being reviewed by the Board for the drainage only. Mike stated the City of Lafayette had approved their plans. The site consisted of a 1.8 commercial lot (Lot 2 in the Creasy at the Crossing Section 1- approved in 1999) south of the intersection of Creasy Land and State Road 38. Branch 13 of the SW Elliott Regulated Drain was located along the western limits of the site and parallel to Creasy Lane. At the time of approval for Creasy at the Crossing Subdivision, the open ditch, which was Branch #13, was enclosed with dual 66" pipes. The Board had previously granted approval for a reduction of the Drainage Easement to thirty feet from the outside face of the southeasterly pipe. Mike

then stated they concurred with the July 15, 2005 Burke memo. He then noted parking asphalt was located within the easement and was requesting an encroachment on the Regulated Drain. The Surveyor stated he thought the intention of the previously granted easement reduction was to allow the workers with their equipment enough room for drain repair in the future therefore a formal Petition to Encroach on the Regulated Drain was warranted in this case. The Petition should state the County was not responsible for any damage incurred to the area of encroachment while repairing the drain. He stated he would still like to see the thirty-foot easement in place. Mike explained a result of keeping the thirty-foot easement would put the site plan in noncompliance with City Parking Ordinance. He stated the developer was aware the County had the right to enter and repair the drain with no fault for damages to the pavement or curb and noted there was no lighting, plantings located within the easement. Ruth Shedd asked if the developer submitted a letter of acceptance of damage costs, if that would be sufficient. The Surveyor noted whatever the Board agreed to would be sufficient. He was prone to protect the work zone on urban and regulated drains. While the chance of tracking over the lot with an excavator for repair of the pipes were slim, having to protect the area from damage would cost landowners more money. Protective mats would be warranted and result in a higher cost of repair passed on to the owners of the properties within the watershed. He noted however, there were locations where the easement was much closer, for example to the top of bank of a ditch such as the SW Elliott- Treece Meadows Relief Drain. In fairness, while he did not like it, the Board had accepted it in the past. In response to KD'S inquiry, Mike stated the encroachment was twenty-five feet and within five feet of the pipe. The Attorney confirmed a formal Petition of Encroachment on a Regulated Drain along with a proposal of the developer's rights and the County's rights was in order. The Surveyor then stated the Board should understand if repair was warranted, the parking lot could be tore up and the owner/developer would be responsible for the cost of repair. The Attorney stated specific verbiage indicating the Developer's responsibility in a separate document accompanying the formal Petition to Encroach on a Regulated Drain. Mike stated the developer would be in agreement. The Surveyor then recommended final approval for Buffalo Wild Wings' release rate into Branch #13 of the SW Elliott Regulated Drain with the conditions stated on the July 15, 2005 Burke memo, as well as the condition of the Developer/Owner's requirement to file for an Encroachment Permit. (Which specifically should state they were aware if replacement or maintenance were warranted, the County would not be responsible for the restoration cost of their parking lot) John Knochel made a motion to grant final approval to Buffalo Wild Wings with the conditions stated on the July 15, 2005 Burke memo, as well as the added condition of filing an Encroachment Petition on a Regulated Drain. Final drainage approval would be subject to the aforementioned Petition's approval by the Board. KD Benson seconded the motion. Buffalo Wild Wings was grant final approval with the conditions as stated.

Stones Crossing Section 4 Subdivision

Brian Keene appeared before the Board to request final approval for Stones Crossing Section 4 Subdivision. As the final phase of the overall development, Section 4 would consist of 144 single-family residences on approximately fifty acres. The site was located west of County Road 250 East (Concord Road) and north of County Road 430 South. The JN Kirkpatrick Regulated Drain reconstruction project design had accounted for the developed runoff condition. The said regulated drain ran along the northern portion of the project site. Brian stated most of the infrastructure for section four had been constructed during previous phases of the development and the main trunk line was completed during construction of sections one and two of the development. Since approvals were granted for the previous phases/sections prior to the Phase II requirements, additional outlets, extra riprap and vegetated swales were added to assist with runoff control. The Surveyor noted the development's different phase/sections (one of several developments), were approved before and after the Phase II requirements. A good portion of the site's infrastructure was approved and constructed before the implementation of Phase II requirements. The development received prior approval for direct discharge to the JN Kirkpatrick drain (as designed and modeled), with no onsite detention. The Surveyor felt a fair compromise had been reached concerning the additional riprap vegetation of swales etc. The Surveyor reminded Brian of the required Phase II fees and Brian confirmed he was aware of a required payment and agreed to payment of such fees.

The Surveyor then recommended final approval for Stones Crossing Section Four with the conditions as stated on the July 28, 2005 Burke memo, as well as the payment of Phase II fees. John Knochel made a motion to grant final approval for Section Four of Stones Crossing Subdivision with the conditions as stated on the July 28, 2005 Burke memo as well as the payment of forthcoming Phase II fees. KD Benson seconded the motion. Stones Crossing Section four was granted final approval with conditions.

JB Anderson Regulated Drain / Petition to Encroach

Tim Beyer of Vester and Associates appeared before the Board to request the approval of an Encroachment on a Regulated Drain Easement Petition submitted by David and Martha Stevenson. He stated the southwest corner of the tract was to be divided by the petitioners and access was needed from County Road 1000 South. Based on conversations with the Surveyor an Easement (within the outer twenty-feet of the existing seventy-five feet legal drain easement) had been written for the

location of the driveway and utilities. There was an existing crossing over the drain the planned drive would utilize as well. The Surveyor asked if the culvert's size had been checked prior to the request. Tim stated it had not. The Surveyor then stated the petitioners were responsible for the crossing, and if undersized, based upon the Surveyor's judgment, they would be obligated to upgrade the culvert. As there was no other access, the Surveyor recommended granting the Encroachment Petition as it was put at the back of the seventy-five feet regulated drain right of way from top of bank. As the parcelization process continued, he asked a filter or buffer strip be put in place. John Knochel made a motion to grant the Petition to Encroach on the JB Anderson Regulated Drain as submitted by David and Martha Stevenson. KD Benson seconded the motion. The Attorney noted although a draft resolution was submitted along with the petition, it was not necessary. The Petition to Encroach on the JB Anderson Regulated Drain as submitted by David and Martha Stevenson was approved with no resolution by the Board.

JN Kirkpatrick Regulated Drain/ Drainage Impact Area Resolution

Ruth Shedd opened the floor to the Surveyor concerning the JN Kirkpatrick Regulated Drain Drainage Impact Area Resolution. The Surveyor reminded the Board the upper end of the JN Kirkpatrick east of Concord Road was previously voted to be a Drainage Impact Area and designated as an Urban Drain, by definition was in need of reconstruction. He then recommended adopting the Drainage Impact Area Resolution drafted by the Board Attorney. The Attorney explained the effect of the resolution would impose additional requirements for developments within the watershed or designated impact area. Those requirements were, first all Stormwater Drainage Control Systems within the JN Kirkpatrick Drainage Impact Area should participate in the JN Kirkpatrick Regional Detention Basin, second each stormwater drainage system within the JN Kirkpatrick Impact Area should provide a positive outlet to the JN Kirkpatrick Legal Drain, third the developer of each stormwater control system within the JN Kirkpatrick Impact Area should petition to establish all internal drainage facilities as regulated drains as a condition of approval and may be required to waive its right to remonstrate against higher rates for reconstruction of those internal improvements, which were regulated drains. The Surveyor noted the boundary ran approximately from Concord Road just south of County Road 450 South, through Avalon Bluffs Development and the Halderman property up to 350 South and over just east of US 52. In response to KD inquiry, the Surveyor noted a watershed map was prepared and would be attached to the resolution as Exhibit A. At that time the watershed was reviewed utilizing GIS. The Surveyor noted the entire watershed east of Concord Road was the Drainage Impact Area. Ruth Shedd asked for comment and there was none. John Knochel made a motion to adopt Resolution Number 2005-05-DB establishing the area within the boundary of Concord Road just south of County Road 450 South, through Avalon Bluffs Development and the Halderman property up to 350 South and over just east of US 52 as the JN Kirkpatrick Drainage Impact Area. Exhibit A would be attached to the resolution as required. KD Benson seconded the motion. Resolution Number 2005-05-DB with Exhibit A which established the JN Kirkpatrick Drainage Impact Area was adopted as presented.

Steve Murray

Bridlewood Subdivision/Letter of Credit #284

US 52 South Industrial Subdivision Phase 2/ Letter of Credit #277

The Surveyor submitted the following Letters of Credit for acceptance by the Board. Letter of Credit #284 with Lafayette Savings Bank submitted by A&K Construction for Bridlewood Subdivision in the amount of \$17280.00 dated April 26, 2005 and Letter of Credit #277 submitted by Superior Structures for US 52 South Industrial Subdivision Phase 2 in the amount of \$3860.00 and dated January 7, 2005. John Knochel made a motion to accept Letter of Credit #284 with Lafayette Savings Bank submitted by A&K Construction for Bridlewood Subdivision in the amount of \$17280.00 dated April 26, 2005 and Letter of Credit #277 submitted by Superior Structures for US 52 South Industrial Subdivision Phase 2 in the amount of \$3860.00 and dated January 7, 2005. KD Benson seconded the motion. The Letters of Credit were accepted as presented by the Surveyor.

Delphine Anson Regulated Drain #4/Reconstruction Report

Lewis Jakes Regulated Drain #40/Reconstruction Report

The Surveyor submitted Reconstruction Reports on the Delphine Anson Regulated Drain #4 as well as the Lewis Jakes Regulated Drain #40 for acceptance. The Board was familiar with both drains as they have been top on the Surveyor's list for maintenance and/or reconstruction. A copy of each report was provided to and reviewed for the Board. The Surveyor utilized GIS during his review indicating areas of planned reconstruction work for both the Anson and the Jakes Regulated Drains. Packets were provided to the Board indicating the planned maintenance as well as reconstruction costs and assessments to the individual landowners of each regulated drain.

Regarding the Anson Regulated Drain Reconstruction Report, the Surveyor stated it was his opinion no damages would be sustained by any landowners as a result of the reconstruction and he had considered all benefits to each parcel of land. It was his opinion, the expense of the proposed reconstruction would be less than the benefits occurred by each landowner and the benefits were not excessive. It was his opinion each acre of land was benefited by the recommended rates per acre and that all tracts or lots were benefited by the per lot rates as recommended and all the tracts or lots were benefited by the minimum rates as recommended. He stated he believed he had addressed all requirements by Indiana Drainage Code for the reconstruction reports. He noted the official record provided all of the rates recommended; reconstruction, periodic maintenance during reconstruction and periodic maintenance after reconstruction. He noted the watershed acreage was checked with the GIS two-foot contours. He also recommended extending the terminus of the drain from the existing outlet including the open ditch section, which was in need of cleaning and clearing. John Knochel made a motion to accept the Delphine Anson Regulated Drain #4 Reconstruction Report as submitted and reviewed for the Board by the Surveyor. KD Benson seconded the motion. The Delphine Anson Regulated Drain #4 Reconstruction Report was accepted as presented. John Knochel then made a motion to schedule August 29th, 2004 at 11:00 a.m. for the Delphine Anson Regulated Drain #4 Reconstruction Landowner Hearing. KD Benson seconded the motion. August 29th, 2004 at 11:00 a.m. was set for the Delphine Anson Regulated Drain #4 Reconstruction Landowner Hearing. A copy of the said Reconstruction Report would be included in the Official Minutes Book with the August 29th official landowner hearing minutes.

Regarding the Lewis Jakes Regulated Drain #40 Reconstruction Report the Surveyor noted most likely the County Highway Department would need to reconstruct the culvert at County Road 750N (while at this time it was not an absolute). He reviewed the proposed rates per acre/lot for the Board. He stated it was his opinion no damages would be sustained by any landowners as a result of the reconstruction and he had considered all benefits to each parcel of land. It was his opinion, the expenses of the proposed reconstruction would be less than the benefits occurred by each landowner and the benefits were not excessive. It was his opinion each acre of land was benefited by the recommended rates per acre and that all tracts or lots were benefited by the per lot rates as recommended and all the tracts or lots were benefited by the minimum rates as recommended. He stated he believed he had addressed all requirements by Indiana Drainage Code for the reconstruction report. He then stated the official record provided all of the rates recommended; reconstruction, periodic maintenance during reconstruction and periodic maintenance after reconstruction. John Knochel made a motion to accept the Lewis Jakes Regulated Drain #40 Reconstruction Report as submitted and reviewed by the Surveyor as well as schedule the landowner hearing of the report and plans on August 29, 2005 at 10:00 a.m. KD Benson seconded the motion. The Lewis Jakes Regulated Drain #40 Reconstruction Report was accepted and the Lewis Jakes Regulated Drain #40 Reconstruction Landowner Hearing was set for August 29, 2005 at 10:00 a.m. A copy of the said Reconstruction Report would be included in the Official Minutes Book with the August 29th official landowner hearing minutes.

Ruth Shedd opened the floor for public comment. Deanna Durrett from the Clinton County League of Women's voters approached the Board and stated she was impressed with its actions today. She was visiting several County Drainage Board Meetings surrounding her County to gain knowledge of a Drainage Board's duties and process. The Surveyor agreed to speak with her immediately following the meeting today and answer any specific questions.

As there was no other business before the Board, John Knochel made a motion to adjourn. KD Benson seconded the motion. The meeting was adjourn.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
September 7, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller. Vice President John Knochel was absent.

Approval of Minutes

KD Benson made the motion to approve the August 2, 2005 Regular Drainage Board minutes. Ruth Shedd seconded the motion. The August 2, 2005 Regular Drainage Board minutes were approved as written.

US 52 South Industrial Subdivision Phase 2 Section 1/ Maintenance Bond #104510577

The Surveyor recommended approval of Maintenance Bond #104510577 dated August 25th, 2005, through St. Paul Insurance Company, from Milestone Contractors LP for US 52 South Industrial Subdivision. KD Benson made a motion to accept Maintenance Bond #104510577 as presented by the Surveyor. Ruth Shedd seconded the motion. The Drainage Board approved Maintenance Bond #104510577 dated August 25th, 2005 through St. Paul Insurance Company from Milestone Contractors LP regarding the US 52 South Industrial Subdivision.

Wal-Mart / CR. 350S and Concord Road

Dan Keuster with Woolpert Inc. appeared before the Board to request final approval for Wal-Mart SuperCenter. The project located at the southwest corner of C.R. 350S and Concord Road (C.R. 250E) within a forty-acre site. Branch #5 of the Kirkpatrick Regulated Drain at the northeast corner of the property would be relocated and tied into the storm system. The runoff from the site would be discharged to the main tile of the J. N. Kirkpatrick Regulated Drain located south of the project. The Surveyor stated the proposed relocation of said Branch #5 would have to be approved by the Board. A legal description with a drawing should be recorded and a copy provided to the Surveyor's office. He noted since the parking lot facility was within the easement and over top of the proposed relocated drain, an Encroachment Petition was in order. In lieu of the petition, a legal agreement of maintenance responsibility for the portion of the Branch under the parking lot could be submitted. The Attorney stated an Encroachment Petition or an added condition of the said agreement would suffice. The Surveyor recommended the Relocation of Branch #5 meets and bounds is shown on the recorded document as well as the maintenance agreement verbiage for the J.N. Kirkpatrick Branch #5 Relocation. KD Benson made a motion to approve the Relocation of Branch #5 of the J.N. Kirkpatrick Regulated Drain as shown on the construction plans. Ruth Shedd seconded the motion. Relocation of Branch #5 of the J.N. Kirkpatrick Regulated Drain as shown on the construction plans was approved. The Surveyor then recommended final approval with conditions as stated on the September 1, 2005 Burke memo and an added condition of the said recorded document indicate the meets and bounds of the relocated branch along with a maintenance agreement - verbiage satisfactory with the Board Attorney - for the said relocated tile branch and with a recorded copy supplied to the Surveyor Office. KD Benson made a motion to grant final approval for Wal-Mart with the conditions stated on the September 1, 2005 Burke memo along with the added conditions of a recorded document indicating the tile relocation's meets and bounds with a maintenance agreement- verbiage satisfactory with the Board Attorney. Ruth Shedd seconded the motion. Wal-Mart was granted final approval with the conditions as stated. The Surveyor stated, as the tile would be tied into the new storm sewer, this was a different situation than the last Encroachment Petition before the Board. He then stated the along the east side of Promenade Parkway with Stone's Crossing Commercial, this same tile branch was intercepted and routed to the J.N. Kirkpatrick main tile. As it has now been intercepted upstream, he felt it was possible to vacate some of the easement plotted adjacent to Promenade Parkway. He felt this would be in everyone's best interest and would have to be followed up by the developer.

Public Comment

Kevin Norris of 5583 Lux Blvd. Lafayette Indiana approached the Board. Mr. Norris resided on Lot 23 of Hickory Hills 3rd Subdivision Phase 1 Section 1. He informed the Board his lot as well as his neighbor’s lot was holding water coming from the lots behind theirs. He stated the construction plans showed “ concrete drainage” between the properties however the developer did not construct as indicated on the plans. He has had to replace his Pine trees three times. He said the back

corner of his yard resembled a bowl. He also stated he thought a neighbor had filled in part of a swale. The Surveyor asked if the neighbor was downstream. Mr. Norris stated the neighbor was actually upstream; the neighbor’s lot sat higher and drained to the Norris lot. He had hauled in 6 tri-axle loads of topsoil to date. In response to Ruth Shedd’s inquiry, Mr. Norris stated he had contacted Mr. Smith of Smith Enterprises –developer of the property. He had not met his responsibility to date. He had tried to speak with him several times. Mr. Smith would not discuss the problem. Mr. Norris expressed concern that the standing water would bust his footer this winter. The Surveyor stated his office had received the complaint and was in the process of investigating it. He stated this was the third complaint in the last two weeks concerning Hickory Hills AKA Eagles Nest. The Surveyor noted to the Board, in one of the first phases the profile of the road had been changed significantly. The Highway Dept. forced the redesign to meet the Highway standards and Drainage Ordinance. He stated after the investigation was completed if it was found that the developer did not construct the drainage as designed, he would be held responsible. Mr. Norris then stated in front of his lot to the west there was six inches of standing water with mold in it. The Surveyor asked if Mr. Norris was aware of the cause of the standing water. He noted the water company was making a site visit to check on it. His water bills ran about \$285.00 a month. He asked the Board to assist him with this problem. The Surveyor informed Mr. Norris he would investigate this complaint himself. He directed the Secretary to check for acceptance of the development including bonding.

As there was no other public comment, KD Benson made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

Ruth Shedd, President

Absent
John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
October 5, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller. Member KD Benson arrived late due to a scheduling conflict. County Highway Supervisor Mike Spencer was in attendance also.

Approval of Minutes

John Knochel made a motion to approve the following; the September 7, 2005 Regular Meeting Minutes, the August 29, 2005 Lewis Jakes #40 Regulated Drain Hearing Minutes and the August 29, 2005 Delphine Anson #4 Regulated Drain Hearing minutes. Ruth Shedd seconded the motion. The aforementioned minutes were approved as written.

Faith Baptist Church Phase 1

Steve Marsh with Titan Construction appeared before the Board to request final approval for Faith Baptist Church. The existing site was located at the northeast corner of C.R. 500 East and S.R. 26. The proposed construction would include a parking lot expansion, a new detention basin, athletic fields, community center, and ministry housing along with additional roads. The existing dry bottom detention basin would be replaced with a wet bottom detention basin in the northeast corner of the site. The existing outlet for the basin would be utilized for the proposed wet bottom basin as well. With the exception of a small area on the northeast corner of property, the site's runoff would be directed to the wet bottom pond.

The Surveyor recommended final approval with the conditions as stated on the September 29, 2005 Burke review memo. John Knochel made a motion to grant final approval for Faith Baptist Church Phase 1 with the conditions as stated. Ruth Shedd seconded the motion. Faith Baptist Church Phase 1 was granted final approval with the conditions on the September 29, 2005 Burke memo.

Haggerty Pointe Phase 1

Amy Moore with Butler, Fairman and Seufert appeared before the Board to present Haggerty Pointe Phase 1 for final approval. The 50-acre site was located north of S.R. 38 and east of the intersection of C.R. 200 South and S.R. 38 and was located within the City Limits of Lafayette. The Board, for the effects of the regulated drain only, reviewed the project, as the site existed within the watershed boundaries of the S.W. Elliott Regulated Drain. Phase 1 would be constructed on 28 acres of the 50-acre site. A wet bottom detention basin would be constructed on Outlet A to allow the Phase 1 construction. The Phase would utilize the existing 36" culvert under S.R. 38 as the final outlet until reconstruction of Branch 11 of the S.W. Elliott Ditch Regulated Drain to F-Lake has been completed. Development of the remaining portion of the site for Phase 2 would proceed upon completion of the reconstruction of said tile Branch. An October 1998 Drainage Board approved vacation of a portion of Branch #11 would be recorded with a copy of the recorded document supplied to the Surveyor Office. Amy distributed a plat of the project site to the Board while noting the Park East Boulevard as well as the utility and drainage easements were indicated on the plat although no interior lot lines were platted at this time.

The Surveyor reminded the Board of his recommendation of Reconstruction of Branch #11 Elliott Regulated Drain earlier this year. A portion of the said branch on the present site had been vacated in 1998, the remainder of said Branch as it continued south to F-Lake needed to be converted from an existing agricultural drain - as well as installation of new pipes under S.R.38. He had spoke with the owners and the Shroeders (landowners to north and south) and they were in agreement of a Reconstruction of Branch #11. He noted the Department of Transportation would be responsible for the placement of the new pipes under S.R. 38. This would significantly reduce the cost to the property owners as well as developers within the area. The landowners would have to agree to waive objections to the future reconstruction - as an added condition of final approval. He informed the Board that a very small part of the northern portion of the site was located within the J. Berlowitz Regulated Drain watershed as well. When C.R. 200 South was reconstructed, the terminus of said Berlowitz tile was replaced under C.R. 200 South. The terminus would need to be located and tapped due to the majority of the runoff routed south to F-Lake. The side ditch along 200South would provide adequate drainage for the remainder of the runoff. The Surveyor stated he was not aware that the said Berlowitz tile served any other property however the developer would need to confirm it. He

informed Amy, the location of the tile would be shown on the as built of C.R. 200 South and could be obtained at the County Highway Department. He stated eventually the watersheds for the J. Berlowitz and the S.W. Elliott Regulated Drain would be revised to reflect any changes. He noted the expected fees for the detention storage in F-Lake as condition #3 in the September 29, 2005 Burke memo. The wet detention basin within Phase 1 would be onsite during the second Phase of the project. The Surveyor noted credit would not be given for this detention basin. Also noted was the site was within the City Limits, the Board's concern dealt only with the effect of the two regulated drains within the area. He stated he was prepared to recommend final approval with the conditions as stated on the September 29, 2005 Burke memo along with the added conditions of the waiver of any objections concerning the reconstruction of Branch #11 of the S.W. Elliott Regulated Drain and the confirmed location of the terminus of the J. Berlowitz Regulated Drain.

Amy stated she agreed with the conditions. To comply with condition #11 of the September 29, 2005 Burke memo, she attempted to record the previously approved said vacation. The Auditor's office indicated the documents were not in compliance with a recent memo from the County Attorney regarding recording of documents. At that time the Attorney reviewed document requirements for recording vacations and easements. Amy would record the documents as soon as possible. The documents she would record would be a certified copy of the Drainage Board 1998 minute, and a description of the meets and bounds of the vacated portion of Branch #11 of the S.W. Elliott Regulated Drain. The Surveyor stated in order to convey the outlet to their detention facility to the side ditch at S.R. 38; surface work within the legal drain easement on the Schroeder property would be necessary. Mr. Schroeder had given his permission and a document indicating his approval would be obtained for the records. Amy indicated she agreed with all conditions stated today.

John Knochel made a motion to grant final approval with conditions as stated on the September 29, 2005 Burke memo in addition to the added condition of a waiver of any objections in reference to the future reconstruction of Branch #11 of the S.W. Elliott Regulated Drain and terminus location confirmation of the J. Berlowitz Regulated Drain. Also written permission from Mr. Schroeder for the aforementioned surface work was required as an additional condition. KD Benson seconded the motion. Haggerty Point Phase 1 was granted final approval with the conditions as stated on the September 29, 2005 Burke memo in addition to the added conditions of an objection waiver in reference to the future reconstruction of Branch #11 of the S.W. Elliott Regulated Drain and terminus location confirmation of the J. Berlowitz Regulated Drain along with the written permission from Mr. Schroeder for the aforementioned surface work.

Cascada Business Park Phase 2

Pat Jarboe with TBIRD Design Services appeared before the Board to request final approval for Cascada Business Park Phase 2. The site was located on the north side of McCarty Lane east of Creasy Lane within the City of Lafayette and would involve 70 acres of the 120-acre site. Phase 1 was previously granted final approval on April 6, 2005. The Treece Meadows Relief Drain (formally the Layden Regulated Drain) was located along the site's the west property line. The runoff from the site discharged to three separate outlets. Those outlets were: the Treece Meadows Relief Drain to the west (tributary to Wilson Branch), the Alexander Ross Regulated Drain to the northeast, and the J. Berlowitz Regulated Drain to the southeast via storm sewer systems and drainage swales. A portion of the project would drain directly to the detention facility located to the west within the Phase 1 location. At the far eastern end of Phase 2 small portions of the A. Ross Regulated drain branches were scaled off the original plat of the A. Ross Regulated Drain however the location of those was not confirmed. A vacation of any portions of those tiles was also requested. Park East Boulevard would be extended from the Wal-Mart site to McCarty Lane and coordinated with the City of Lafayette. Pat then requested the vacations of the branch portions of the Alexander Ross Regulated Drain as well as final approval for Phase 2. He concurred with the conditions as stated on the September 29, 2005 Burke memo. The Surveyor clarified condition #1 on the Burke memo. Runoff storage fees within the Wilson Branch only would be coordinated with the City of Lafayette. The A. Ross and Berlowitz regional detention facility fees would be coordinated with the County. Regarding the vacations, the Surveyor recommended the A. Ross tile branches vacation- however he conferred to the County Attorney regarding the appropriate process. The Attorney stated as long as they are located entirely within the site, did not serve any other property owners, the Board may vote to approval the vacation. The Surveyor stated he was positive the aforementioned branches did not serve any other property owners. A legal description of the vacated portions and a certified copy of today's Drainage Board minutes indicating the Board's approval would be adequate for recording the vacations. At that time the Surveyor recommended the vacations of the aforementioned tiled branches and final approval with conditions as stated on the September 29, 2005 Burke memo. In response to John's question, the Attorney stated the vacations could be granted today, and the Surveyor noted his office would not give the full approval for the subdivision until all conditions were met. John Knochel made a motion to grant the three vacations of the A. Ross three tiled branches. KD Benson seconded the motion. The vacations were granted as requested. John Knochel then made a motion to grant final approval with conditions as stated on the September 29, 2005 Burke memo. KD Benson seconded the motion. Final approval for Cascada Business Park Phase 2 was granted with the conditions as stated on the

September 29, 2005 Burke memo and proof of the documentation of the vacated branches of the A. Ross Regulated Drain which were located solely within Phase 2 of Cascada Business Park.

The Commons At Valley Lakes Replat of Phases 4 & 5

Meredith Buyers with TBIRD Design Services appeared before the Board to request final approval for the Commons At Valley Lakes Replat of Phases 4 & 5. The site was located east of C.R. 150 East (South 18th Street) and south of C.R. 350 South within the City of Lafayette. The Board previously approved the project's Phase 4 & 5 in April 2005. Due to the soil conditions in the northeast corner of the property the layout had to be revised. The main drainage changes involved changing the wet bottom detention facility to a dry bottom detention facility. Modifications of the storm pipe locations were also warranted. Located at the northeast corner of the property; one outlet would accommodate the offsite runoff and the J.N. Kirkpatrick Regulated Drain. An outlet located at the center of the north property line would accommodate onsite drainage of discharge from the dry bottom detention facility. The relocation of a portion of Branch #7 of the JN Kirkpatrick Regulated Drain was modified to run along the east property line. The Surveyor noted this was an improved relocation of said Branch. At that time Meredith requested final approval stating they concurred with the conditions as stated on the September 30, 2005 Burke memo.

The Surveyor recommended relocation of Branch #7 of the JN Kirkpatrick Regulated Drain. He stated the design presented today was improved compared to the previously Board approved relocation. John Knochel made a motion to approve the relocation of Branch #7 of the JN Kirkpatrick Regulated Drain. KD Benson seconded the motion. The relocation of Branch #7 of the JN Kirkpatrick Regulated Drain was approved as shown on the replat of phases 4 & 5. The Surveyor then recommended granting approval for the Commons at Valley Lakes Replat of Phases 4 & 5 with conditions as stated on the September 30, 2005 Burke memo. John Knochel made a motion to grant final approval with conditions for the Commons at Valley Lakes Replat of Phases 4 & 5. KD Benson seconded the motion. The Commons at Valley Lakes Replat of Phases 4 & 5 was granted final approval with conditions stated on the September 30, 2005 Burke memo.

Riverwood Minor Subdivisions 1 & 2

Tim Byers with Vesters & Associates appeared before the Board to request the final approval for Riverwood Minor Subdivision 1 & 2. The site consisted of 107 acres and located on the south side of Division Road at the intersection of Division and Kerber Roads. Tim stated the project at hand was two Minor Subdivisions located within the overall Planned Development. The site consisted of seventeen tracts with ten-acre tracts as part of the overall development. He stated the ten-acre tracts would be eligible for division through the Rural Estate Subdivision process, but was not proposed at this time. Phase 1 Minor would consist of four lots and Phase 2 Minor would consist of 3 lots. A twenty feet wide roadway would connect both phases. Runoff from both phases would be collected in the new side ditches of said roadway. The northern portion of the site drained toward Division Road then east to Indian Creek and the southern portion to Wabash River. Tim requested a waiver of the Stormwater detention requirements for the project. He noted a need for detention exemption requirements stated in the County Stormwater Comprehensive Ordinance, since runoff after development due to the large lot sizes was decreasing. He felt they would be able to meet the Stormwater Quality measures as well as the remaining conditions on the Oct. 4, 2005 Burke memo. At that time he requested final approval for Riverwood Minor Phase 1 & 2. The Surveyor asked Tim if they would stand by the letter the Surveyor had previously signed involving erosion stabilization regarding walkout basements. Tim stated yes they were prepared to take the appropriate measures for said stabilization to technically (per Area Plan Commission (APC) Staff Report) the seven lots of the Riverwood Minor Subdivision. Steve stated as far as the Drainage Ordinance was concerned the ten acre tracts would be included as it was the total land disturbance activity which determined whether a project fell under Rule 5 provisions in post construction etc. Also the Surveyor noted there was quite a bit of sediment which reached the side ditch on the south side of Division Road due to the natural erosion along the ridge to the north. He would require a sediment basin such as a sediment trap at the very northeast corner of the property as a part of erosion control. The County Highway Department has cleaned out the ditch numerous times after large rainfalls before the sediment reached Indian Creek. Tim confirmed the trap would be located within the ravine/ditch. The Surveyor noted the area went back and forth from a ravine to a side ditch and felt an adequate sediment basin/trap could be located along the east side of Indian Hill or Division Road. The Surveyor clarified that on any residential building site which would be over the top of a ridge would be subject to a site plan prepared by a registered surveyor or engineer to ensure the erosion control provisions were in place.

The Surveyor recommended granting the variance for the Stormwater Detention in addition to final approval with the conditions as stated on the October 4, 2005 Burke memo, APC approval, and construction of a sediment basin on the east side of Indian Hill or Division Road. John Knochel made a motion to approve the variance for Stormwater Detention to Riverwood Minor Subdivision Phase 1 and 2. KD Benson seconded the motion. The variance was granted as requested.

John Knochel made a motion to grant final approval with the conditions stated in the October 4, 2005 Burke memo, in addition to APC approval, and construction of a sediment basin on the east side of Indian Hill or Division Road. Final Approval with the conditions as stated was granted to Riverwood Minor Subdivisions Phase 1 and 2.

Hunters Crest Section 1 and 2

Brandon Fulk appeared before the Board and requested final approval for Hunters Crest Subdivision Sections 1 and 2. The site was located on the south side of Co. Rd. 450 South east of Co. Rd. 250 East (Concord Road). The northern portion of the site drained to the side ditch of Co. Rd. 450 South, eventually to the JN Kirkpatrick Regulated Drain. The southern portion of the site drained to the side ditch of Co. Rd. 500 South and eventually to the Kenny Ditch/ Wea Creek watershed. Due to the project site's location within the JN Kirkpatrick Drainage Impact area; participation in the regional detention basin would apply. The site contained two depressional areas, one within the center and one along the east line. Brandon stated these areas were delineated as wetlands, and the intent was to preserve these areas throughout the development of the site. The southeast corner of the site would not be developed at this time. Two detention ponds would be located onsite. Brandon noted the initial detention pond located at the northwest corner outlet to a 24" culvert under Co. Rd. 450 South. There would be adjustments to the natural grade in the northeast corner so runoff would drain to the 24" culvert. (This area was not in the floodplain) He stated the excess dirt from construction of the ponds and streets would be used for that purpose. He then requested final approval for Hunters Crest Subdivision Sections 1 and 2.

The Surveyor recommended final approval for Hunters Crest Section 1 and 2 with the conditions as stated on the October 4, 2005 Burke memo to include a revision to number 5 on said memo. The revision was as follows: The Homeowners Association covenants must include a clause which stated lot owners waive any objections to an increase in the regulated drain assessment regarding reconstruction or maintenance. Brandon stated he would confer with the client on the added condition, but noted the client was aware the area was located within the drainage impact area and drainage fees would be involved in the development of the project. John Knochel made a motion to grant final approval to Hunters Crest Section 1 and 2 with the conditions stated on the Burke memo as well as the aforementioned added revision to item number 5 on said memo. KD Benson seconded the motion. Hunters Crest Subdivision Sections 1 and 2 was granted final approval with conditions stated on the Oct. 5, 2005 Burke memo in addition to the revision of item number 5 on said memo indicating the Homeowners covenants include a clause which stated the lot owners would waive their objections to any increase in the regulated drain assessment regarding reconstruction or maintenance.

Public Comment

As there were no public comments, John Knochel made a motion to adjourn. KD Benson seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board

Minutes

November 2, 2005

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison. John Stoltz from Christopher B. Burke Engineering Limited and GIS Technician Shelli Muller were also in attendance.

Approval of Minutes

John Knochel made a motion to approve the October 5, 2005 Meeting Minutes. KD Benson seconded the motion. The October 5, 2005 Regular Drainage Board Minutes were approved as written.

Hadley Moors PD

Ruth Shedd stated a continuance request to the December meeting from Randy Peterson of Fishers and Associates was received. KD Benson made a motion to grant a continuance for the Hadley Moors PD to the December meeting. John Knochel seconded the motion. Hadley Moors PD was continued by request to the December Regular Drainage Board Meeting.

Ichiya Industrial Tracts

Paul Coutts of C&S Engineering appeared before the Board to request final approval for the Ichiya Industrial Tracts project. The site consisted of forty acres located north of County Road 400 South and west of County Road 500 East adjacent to the 52 South Industrial Subdivision Phase 2. Access drives would be constructed from both County Road 400 South and County Road 500 East. He presented a proof of publication required with the Notice of Intent. He stated there would be four ten-acre tracts. He distributed a map of the site to the Board members, which indicated the overall drainage plan. Runoff from Ichiya Industrial tracts would utilize existing pipes under Dale Drive and ultimately to "Pond 1" located in the northwestern corner of the 52 South Industrial Subdivision Phase 2. Regarding condition number three of the October 28, 2005 Burke memo, Paul requested a waiver for the impact fees for the JN Kirkpatrick Detention Basin. He stated Rick Johnson owner of the site was in attendance. Paul calculated the cost of the storage would be approximately \$121,500.00. In his opinion Mr. Johnson was being penalized due to site flow restrictions as well as onsite detention facility requirements, which eliminated acreage available for development. Therefore he respectfully requested a waiver of the impact fees. He stated Mr. Johnson would like to speak to the Board regarding the waiver. The Surveyor noted historically the Drainage Board had not granted a waiver for impact fees. He stated the possibility of reconstructing the existing tile to an open ditch. The site ultimately discharged to the upper JN Kirkpatrick Regulated Drain. The 52 South Industrial Subdivision Phase 2 site runoff drained through the pipes under US 52 then to the west side ditch of County Road 450 East. The County Highway had re-cut the ditch a couple years ago. The water now sheet flowed over the LUR and Dougherty Farm property from the side ditch on Co. Rd. 450 East. There was potential as the reconstruction was completed on the drain that the onsite ponds could be eliminated. Historically detention ponds were in place on a temporary basis in the interim of construction on a regional detention basin. He was not in favor of recommending a waiver to the Board. In response to Ruth's inquiry, the Surveyor stated the ponds for this development were platted as permanent. Dave Eichelberger stated the general release rate per ordinance should be used for calculating the cost and felt it would be lower than what Paul had calculated. Paul stated he felt the cost would still be high and a major setback for Mr. Johnson. In response to Dave Luhman's inquiry, Dave Eichelberger noted the volume that the regional pond was required to hold would not be reduced due to the onsite detention ponds.

At that time Rick Johnson approached the Board. He stated the Wallace Farm was purchased in "chunks" by request of the owner for tax purposes. A sixty-six acre tract was purchased and Hawkins did a drainage study of the entire sixty-six acre tract. He stated he had given up prime frontage along US 52 for drainage facilities for the US 52 Industrial Subdivision. He felt he was being penalized, as he had to give up land for drainage, plus pay a fee. He understood development was needed, however ground cost in Tippecanoe County in his opinion was driven up due to these issues. He noted he was hit on both ends giving up land for drainage as well as paying a fee. The Surveyor stated he understood the concern. However he noted Phase 1 and Phase 2 of the 52 South Industrial Subdivision was approved by the Board without fees. He also noted ponds have been required in the past as well within a regional detention facility area. (i.e.: Berlowitz and F-Lake) The Surveyor then recommended the project be granted final approval and he would meet with Mr. Johnson to work out a fee for the impact. He stated the \$15000.00 per acre-foot fee was determined due to the unknown cost of the project. He stated he was willing to sit

down and negotiate a fare fee. John Knochel stated that he agreed the Surveyor should meet with Mr. Johnson, as it did appear he was getting hit hard giving up ground in addition to paying a fee for drainage of the property. Steve then stated the proposed reconstruction cost of the upper JN Kirkpatrick Regulated Drain along with the detention basin was upwards of six million dollars. KD stated onsite storage was required so downstream owners were not affected by the drainage, (Steve interjected it was partially due to restriction- outlet wise- under US 52) as well as the need to outlet water so ponds did not detain water at all times. She stated she would vote against granting the waiver, she felt the other landowners within the watershed should not have to subsidize the development. She stated EDIT monies may be looked act to possibly lower the development costs if indeed companies were ready to locate there providing jobs to the community- as Mr. Johnson had indicated. Dave Luhman stated the waiver request could be tabled (discussion for the appropriate fee would be separate and the approval for the drainage plans could be granted today. John Knochel moved condition #3 (regarding the Ichiya Industrial Tract drainage impact fees) of the October 28, 2005 Burke memo be tabled until the December meeting. KD Benson seconded the motion. A waiver for condition #3 of the October 28, 2005 Burke memo on the Ichiya Industrial Tracts was tabled until the December Drainage Board meeting. John Knochel made a motion to grant final approval with conditions (excluding condition #3) stated on the October 28, 2005 Burke memo for Ichiya Industrial Tracts. KD Benson seconded the motion. Ichiya Industrial Tracts was granted final approval with the conditions as aforementioned. Condition #3 of the October 28, 2005 Burke memo was tabled until the December meeting.

Other Business

The Surveyor requested the Drainage Board refer the upper JN Kirkpatrick and the Julius Berlowitz (including the Felbaum Branch) Regulated Drains to the Surveyor for a Reconstruction Report. Both drains were on his prioritization list and listed as Urban Drains, which by definition meant they were in need of reconstruction. He explained in order to investigate the possibility of reconstruction to the drains; the referral from the Board was required. He stated the possibility of reconstruction costs paid from a combination of participation fees, EDIT money and reconstruction fees. He would review all of the options. The Surveyor then reviewed the routes of the drains for the Board at that time. John Knochel made a motion to refer the Upper JN Kirkpatrick and the J. Berlowitz Regulated Drains for a study on reconstruction. KD Benson seconded the motion. The Board referred the aforementioned drains to the Surveyor for a reconstruction study as requested.

Raintree Subdivision /Maintenance Bond

The Surveyor presented Maintenance Bond #174503, dated October 12, 2005 in the amount of \$17230.00 submitted by Atlas Excavating for Raintree Subdivision and requested acceptance by the Board. John Knochel made a motion to accept Maintenance Bond #174503, dated October 12, 2005 in the amount of \$17230.00 received from Atlas Excavating for Raintree Subdivision. KD Benson seconded the motion. The Board accepted maintenance Bond #174503, dated October 12, 2005 in the amount of \$17230.00 received from Atlas Excavating for Raintree Subdivision.

26 Crossings/ Lot 7

Encroachment Petition Alexander Ross Regulated Drain Crossing

Tim Beyer presented an Encroachment Petition to the Drainage Board requesting encroachment of the open ditch portion on the Alexander Ross Regulated Drain. The crossing would be located on lot 7 within the 26 Crossing Subdivision. Tim stated the crossing would provide access to the commercial lots between the pond west of Meijers and Interstate 65. It would also loop the access between Meijer Court to Meijer Drive. Two culverts were proposed for the crossing. Ruth Shedd asked for public comments. There were none. The Surveyor recommended approval of the encroachment with the conditions as follows: the maximum elevation of the crossing should not exceed the elevation of Interstate 65, elevation shots of the proposed invert pipes should be established, a more detailed relocation of an existing storm line to be coordinated with the owner (to insure the relocation would handle the flow as originally approved), and finally a recently revised Encroachment Petition form should be utilized and recorded once approved. Tim Beyer stated the owner would agree to the conditions as stated. John Knochel made a motion to approve the Encroachment Petition with the conditions as noted by the Surveyor and agreed to by the owner. KD Benson seconded the motion. The Encroachment Petition was approved with conditions as follows: the maximum elevation of the crossing should not exceed the elevation of Interstate 65, elevation shots of the proposed invert pipes should be established, a more detailed relocation of an existing storm line to be coordinated with the owner (to insure the relocation would handle the flow as originally approved), and the utilization of the recently revised Encroachment Petition form and once approved to be recorded by the developer.

Phase II

Schedule of Fees and Forms

The Surveyor informed the Board the Attorney had worked up a draft schedule of fees without the ordinance language. The Surveyor recommended striking the fines and penalties listed on the draft since they were already covered in the existing

County Stormwater Quality Ordinance. Examples of the fees on recent developments were as follows: Polo Fields (18 acres) base fee would be \$860.00. Park 350 Industrial Park on the LUR Property \$5750.00. Lafayette Wal Mart base fee \$2350.00. These fees covered inspections for Rule 5 and Rule 13, as well as inspections for a mandatory period of 3 years. Fees were also included for outlets to regulated drains (Johnson and Hancock Counties charged these fees for hookup or discharge to regulated drains). The Surveyor felt the fee for agricultural tiles hookup to regulated drains be reduced or eliminated. He felt the farmer should be required to get the Surveyor 's Office approval for hookup into a regulated drain, however he did not feel they should be charged a fee.

He requested approval for the final Phase II fees ordinance to be approved for first reading at the Commissioners meeting on November 21st. He noted the consultants Christopher B. Burke Engineering LTD recommended the proposed fees. Dave reviewed the areas the fees would cover. The final Permit Fee Ordinance should be heard for the first reading at the Commissioners meeting as well as the next Drainage Board meeting. The fees would cover various investigation or inspection costs incurred by the Surveyor's office. In response to Ruth's inquiry, the Surveyor stated by law if an approval of a hookup was not obtained before hand, the persons can be made to unhook it. A letter would be sent to all the contractors within the area regarding the rules of hookup and discharges into County Regulated Drains. He stated the Stormwater Coordinator was working on packets to be given to area builders by the Building Commission office upon request of a building permit. In addition, the Coordinator had drafted several standardized forms and notices to be used in the implementation of Phase II. He stated the Building Commission office and Area Plan office have been working closely with the Surveyor office during this process. John Knochel motioned to instruct the Attorney to prepare the Permit Fee Ordinance to be submitted at the Nov. 21st Commissioners meeting for first reading. KD Benson seconded the motion. The motion passed and the Permit Fee Ordinance would be submitted at the Nov. 21st Commissioners meeting for first reading.

**Delphine Anson Regulated Drain #4
Amended Schedule of Assessments for Reconstruction and Periodic Maintenance**

The Attorney submitted the Delphine Anson Regulated Drain #4 Amended Assessment Schedule list for Reconstruction and Periodic Maintenance to the Board for approval and filing with the Auditor's office. The amendments were due to inconsistencies between the GIS tract information and the actual onsite tract information. The inconsistencies have been amended. The Surveyor stated in the future the GIS tract information would be compared with the tax program for any inconsistencies before submission of scheduled assessments to the Board. The adopted tract information was taken from the tax program. GIS was made aware of this issue. The Delphine Anson Regulated Drain #4 Amended Assessment Schedule list for Reconstruction and Periodic Maintenance was presented for approval and filing with the Auditor's office. John Knochel made a motion to accept the Amended Assessment Schedule list for Reconstruction and Periodic maintenance of the Delphine Anson Regulated Drain #4 and file with the Auditor's office. KD Benson seconded the motion. The Delphine Anson Regulated Drain #4 Amended Assessment Schedule list for Reconstruction and Periodic Maintenance was approved as presented and would be filed with the Auditor office.

Public Comment

Ruth Shedd opened the floor for public comment. As there was none, John Knochel made a motion to adjourn. KD Benson seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
December 7, 2005
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller, member KD Benson was absent.

Approval of Minutes

John Knochel made a motion to approve the Nov. 2, 2005 Drainage Board minutes as written. Ruth Shedd seconded the motion. The Nov. 2, 2005 Drainage Board Meeting minutes were approved as written.

Hadley Moors PD

A requested continuance by the developer was granted for Hadley Moors PD.

Lauren Lakes Section 2

Brandon Fulk of Schneider Engineering appeared before the Board to request final approval for Lauren Lakes Section 2 Subdivision. The 24-acre site was located on the south side of County Road 500 North west of County Road 75 East and east of Prophets Ridge Subdivision. This section was a continuation of the previously approved Lauren Lakes Subdivision and outlet through an un-named tributary to Burnett Creek along the east boundary. The County Farm Regulated Drain existed in the southwestern portion of the site. A system of swales and storm sewers directed into an onsite detention basin would collect the site's drainage.

Brandon stated offsite flow of runoff would be redirected around the project site and outlet to the unnamed tributary. Prophets Ridge outfall would be left as is and would not be impeded. The detention facility was designed to handle water quality by the use of four bays and elongating the drain time of the pond. Brandon stated the overall drainage design had been previously approved. He concurred with the December 2, 2005 Burke memo and at this time was requesting final approval for Section Two. In response to the Surveyor's inquiry, Brandon explained the path of the rerouted offsite drainage. The Surveyor stated a letter of concurrence from Mr. Ratcliff would be necessary for the file (while not made a condition), as he owned property adjacent to the project. He was prepared to recommend final approval for Lauren Lakes Section 2 with the conditions as stated on the December 2, 2005 Burke memo. John Knochel made a motion to grant final approval for Lauren Lakes Section 2 subject to the conditions on the December 2, 2005 Burke memo. Ruth Shedd seconded the motion. Lauren Lakes Section 2 was granted final approval with conditions as stated on the December 2, 2005 Burke memo.

Meadowgate Estates Section 2

Paul Coutts of C&S Engineering appeared before the Board to request final approval for Meadowgate Estates Section 2. Mr. Fred Kuipers developer of the site was in attendance. Paul submitted an acceptance of fees- associated with the Stormwater Phase II program and drainage review- letter from Mr. Kuipers, N.O.I. and proof of publication documentation. The 23-acre site was located east of County Road 75 East north of County Road 500 North and a continuation of the Meadowgate Estates Subdivision. An existing lane known as Shooting Star would provide access to the proposed 10-lot section of the overall Subdivision project. Paul explained part of the site drained under County Road 500 North and part drained northwest under said access drive. Runoff of the development would drain to a natural tributary of the Wabash River or to an on-site tributary to Burnett Creek. Under the present conditions, natural drainage outlets would not be altered. Paul stated there was no detention storage required and water quality was the focus today. The existing drainage swales, dry detention storage as well as the addition of a second buffer strip and additional dry detention storage would maintain the water quality for the area. At that time Paul stated they concurred with the December 2, 2005 Burke memo conditions and requested final approval. He added the site would be served by septic systems. Lots 15, 16 and 17 soils were the most critical and could possibly require perimeter drains. Easements were acquired. The Surveyor asked Paul to take a second look at the sanitary system design stopping short of making it a condition. In the event of a malfunction some kind of treatment for septic drains should be in place. The Surveyor recommended final approval subject to the conditions as stated on the December 2, 2005 Burke memo for Meadowgate Estates Section Two. Ruth Shedd seconded the motion. Meadowgate Estates Section Two was approved subject to conditions as stated on the December 2, 2005 Burke memo.

Roadworks Manufacturing

Alan Jacobsen of Hannum Wagle and Cline appeared before the Board and requested final approval for Roadworks Manufacturing. The former Aertz Airport site was located on the south side of County Road 300 North and east of State Road 25 North. A system of swales would direct the site's drainage to a dry detention basin in the northwest corner which outlet to the right of way of County Road 300 North and conveyed into the state highway drainage system ultimately discharging to the west in Wildcat Creek. At the request of Commissioner Knochel, GIS was utilized for review of the site. Alan stated a new driveway entrance off County Road 300 North would be utilized as access for construction vehicles. Construction of a well and septic was planned. No land disturbing activity south of the existing runway was proposed. Hannum Wagle and Cline had previously contracted Vester and Associates to complete the initial drainage analysis and technical report. Alan stated as a result of the capacity constraint of the collection point for the State Highway drainage system, the site's release rate was reduced proportionately. The actual release rate for this site was considerably less than required by the ordinance. Water quality treatment structures would be utilized as well and located at the northwest corner. All water would be routed through the storm structure devise. An easement was acquired for the devise location and would be accessible for maintenance purposes. The Surveyor stated it was a BMP for water quality. Alan concurred with the December 2, 2005 Burke memo conditions and requested final approval for Roadworks Manufacturing. The Surveyor asked if the septic system would require a perimeter drain. Alan stated they were in the process of approval and a review by the State Department of Health. The Surveyor stated if a perimeter or curtain drain outlet to the detention facility, a second look at the system design would be warranted. Alan concurred they would be willing to review the design as needed. The Surveyor then stated due to the absence of easements around the treatment or detention facility, a covenant would be required to maintain the facilities. In response to Alan's inquiry, the Surveyor stated either an easement or the covenant would suffice. The Surveyor recommended final approval subject to the conditions stated on the December 2, 2005 Burke memo as well as the added condition of the provision of drainage easements around the detention facility and BMP or execute a covenant for maintenance. John Knochel made a motion to grant final approval of Roadworks Manufacturing subject to the conditions stated on the December 2, 2005 Burke memo as well as the added condition of the provision of drainage easements around the detention facility and BMP or execute a covenant for maintenance. Ruth Shedd seconded the motion. Roadworks manufacturing was granted final approval with the conditions on the December 2, 2005 Burke memo as well as the aforementioned added condition.

Weathersfield PD

Robert Gross of R.W. Gross and Associates appeared before the Board to request final approval for Weathersfield PD. The developer Gregg Sutter was in attendance as well. The site was located on the east side of County Road 800 East south of County Road 150 South. A single private access drive with side ditches was planned. On site drainage would discharge to a branch of the South Fork Wildcat Creek that meandered to the west toward County Road 800 East along the north property line. Detention would not be required for the development, as the natural drainage of the site would not be altered and runoff was reduced as much as fifty percent. The Surveyor stated he walked the site with the developer and Mr. Gross. He asked if perimeter or curtain drains were needed. Mr. Gross stated the lots needing perimeter drains were all located along the ravine. The Surveyor noted his concern that possible malfunction of the drains would require some treatment before entering into the drainage system. Mr. Gross stated they would confer with him on the requirements and he was willing to make any additions to the design. The Surveyor recommended final approval subject to the conditions on the December 2, 2005 Burke memo. John Knochel made a motion to grant final approval with the conditions stated on the December 2, 2005 Burke memo. Ruth Shedd seconded the motion. Weathersfield PD was granted final approval with the conditions as stated on the December 2, 2005 Burke memo.

Bridge Mill Subdivision Phase 1

Tim Beyer of Vester and Associates appeared before the Board to request final approval for Bridge Mill Subdivision Phase 1. He presented a map of the entire site for review by the Board. Farmington Subdivision was located to the West and Northridge Subdivision was located to the South of the Subdivision. The developer Brian Keene was in attendance as well as several landowners. The 147-acre site was located on the north side of County Road 200 North between County Roads 400 East and 500 East. The majority of the property drained to the north into a branch of Dry Run (Crist-Fassnacht Ditch) and eventually discharged to Wildcat Creek. The remaining portion of the site drained southerly to Wildcat Creek. Four stormwater detention ponds were proposed for the overall development. Pond A would be constructed immediately northwest of Phase 1 of the overall development and would be developed during Phase 1. The remaining detention ponds would be constructed during future phases of the development. Curbed streets, storm sewers and drainage swales would also accommodate the site's drainage. Phase 1 of the development lied within the southeast corner of the overall site and consisted of 42 lots. A conceptual drainage plan was previously provided. A portion of the site would drain into an existing culvert

under County Road 200 North then into a drainage swale which eventually ran into a depressional area to the south of the site. Currently approximately 13 acres drain into the existing culvert and upon development that amount would be reduced to approximately 8 acres. The remaining five would drain to Pond A. Pond A was designed as a stormwater quality measure and combined with the onsite drainage swales would achieve the required sediment removal. At that time Mr. Beyer requested final approval from the Board. Ruth Shedd then asked for Public Comment.

Brian Elmore 4619 Foxmoor Lane- The Meadows at Northridge Subdivision approached the Board and discussed his concerns with the project. He expressed concern of the overall development's drainage. Tim stated there were three accesses from the property to adjoining streets. Foxmoor Lane would be continued to the development in Phase 1. Mr. Beyer stated there would be eight phases to the development. The planned cluster system located immediately to the west of Phase 1 would eventually be replaced with municipal sanitary lines. Mr. Elmore then expressed concern that eventually the mound or cluster system would be built upon. He stated he knew the Board's review today was drainage; however he wanted to clarify the overall plan and phases of this development. Jon Huston 40 Huntington Way of Northridge Subdivision approached the Board. His property was located across County Road 200 North. He stated runoff from the site drained to a retention area in the corner of his property. Mr. Spencer had visited the site several times in the past due to flooding of their cul-de-sac. He asked if the culvert under 200 North would be replaced. In response to Mr. Knochel's inquiry, Mr. Spencer stated it was not demonstrated to him runoff would be increased therefore the culvert would not be replaced. Mr. Beyer stated they felt it would be simpler to decrease the amount of runoff than replace the culvert. Mr. Huston then asked if the mound system required a perimeter drain. The Surveyor stated at this point it was unknown as there was no design to review. He stated the Highway Department and the Surveyor's office would not sign the construction plans until the design for the sanitary system was presented and reviewed. Mr. Beyer stated the State Health Department would review the sanitary plans. The Surveyor explained the concern was possible conflict between the sanitary lines and the road and drainage infrastructure. As far as the actual sanitary system's technical design, they do not approve it however; the Surveyor/Drainage Board would approve the location and grade. Doug Excell 42 Hillshire Court Northridge Subdivision approached the Board. He stated his home back up to the detention area. In seven years he had seen two one hundred -year storms. He had seen the runoff cross County Road 200 North then run through back yards on occasion and felt the drainage in that area was inadequate already. His concerns were the additional increase of the area's drainage as well as the septic/sanitary system's drainage impact the new development may cause. He felt unless there was some other way of diverting the runoff, he felt the current system could not manage the flow. He had seen (in the last five years) the detention pond area fill up within twenty feet of the back door of a home. In response to John Knochel inquiry, Mr. Excell stated the detention pond had been mowed and the cattails had been cleaned out in the past. The Surveyor asked Mr. Beyer if he had reviewed the original design of Northridge Subdivision. He stated he had not. The Surveyor stated the original drainage study of Northridge Subdivision should indicate the amount of runoff entering the system and would answer some of these inquiries. He had made a site visit the day before and the swale and pond could benefit from additional maintenance. Mr. Beyer stated he felt the drainage plans for Bridge Mill PD would improve the current conditions. Richard Harlow 4609 East 300 North, trustee for his father's estate north of the project site's location approached the Board. In response to Mr. Harlow's inquiry Mr. Beyer stated Pond A would be constructed during Phase 1 and serve more than Phase 1. He stated if perimeter drains were required they would ultimately drain to Pond A. In the event additional lots were warranted, Pond B would be constructed with a future phase. In response to Mr. Excell's inquiry, the Surveyor stated he had not walked the north end of the site. Mr. Excell stated north of Pond A the land is "loaded with natural springs." He wanted the Board to know the previous landowner watered his cattle with the spring. The water ran continuously and was present at this time. John Knochel then indicated on GIS the location of the natural spring, as he was aware of it. The Surveyor stated wet bottom ponds would pick up the water and would help the water quality of the pond. Pond A was planned to be a wet bottom pond. Donna Props 4529 East 200 North Lafayette approached the Board. She stated Gunstra Builders informed her the culvert size would be increased. She also was concerned with the additional runoff and had experienced flooding. The Surveyor stated while he was prepared to recommend final approval with conditions today, as the total acreage runoff was decreased, he did have concerns with the drainage. Ruth Shedd asked if a continuance to January's meeting was warranted. John Knochel noted he agreed with Ruth Shedd and reiterated the Surveyor would not sign construction plans until sanitary/septic plans were submitted for review. He asked how far away the submission was. Mr. Beyer referred to Brian Keene, developer. Mr. Keene stated he was looking at different options for a septic/sanitary design. The Surveyor interjected the question today was the 42 lots of this phase. Mr. Keene responded a mound system would be constructed however the type was the question. The Surveyor stated he would like to see Vesters review the Northridge Subdivision Drainage Study to. This would answer the question whether the existing conveyance (including the existing pond) from County Road 200 North through the various phases of Northridge Subdivision was capable of handling the new development. He thought it was capable. John Knochel made a motion to move for continuance of Bridge Mill Phase 1 until the January meeting. Ruth Shedd seconded the motion. Bridge Mill Phase 1 was continued to the January 2006 meeting. John Knochel noted if the landowners of Northridge Subdivision would review the maintenance of the pond, it could assist the Board in their decision.

Other Business

Buffalo Wild Wings Encroachment Petition

Brandon Fulk of Schneider Engineering appeared before the Board and presented a Petition to Encroach upon the SW Elliott Regulated Drain. The encroachment was located at the Buffalo Wild Wings site. The Attorney had prepared a Resolution granting the Encroachment Petition. The Surveyor recommended to the Board approval of Resolution 2005-03-DB approving encroachment on the SW Elliott Regulated Drain for Buffalo Wild Wings. John Knochel made a motion to approve Resolution #2005-03-DB for the encroachment on the SW Elliott Regulated Drain. KD Benson seconded the motion. Resolution #2005-03-DB granting the encroachment on the SW Elliott Regulated Drain as petitioned was passed. Recorded copies would be provided to the Surveyor Office for the record.

Lewis Jakes Reconstruction/Maintenance Amended Assessments

The Surveyor stated he had investigated concerns of landowners at the August 29th Landowner Hearing as well as concerns of the Auditor office. As a result of the investigation he was presenting an amended landowner assessment list for approval and certification to the County Auditor. The Attorney stated the parcels which were omitted from the revised assessments would not change the remaining assessments. The revision would not increase or decrease said remaining assessments. Only the following stated parcels would be removed, as they were found not to be located within the Lewis Jakes watershed. The following parcels were within series: 13203800- #61, #260, #237, #259, #292, #248, #226, and #40 within series 13204900-#159 and within series 13204400-#210, #209. The Surveyor stated the parcels were located north of 850 North and a portion of Larry Underwood's property which was tiled and ran to the east. John Knochel made a motion to approve the amended drain assessments for the Lewis Jakes Regulated Drain as submitted. Ruth Shedd seconded the motion. The amended Lewis Jakes Regulated Drain Assessments were approved as submitted and would be certified by the Board for collection starting in May 2006.

Marshall Branch / Box Ditch Petition to Encroach

The Surveyor stated this was not on the Agenda; however a Petition to Encroach on the Box Ditch by Purdue University was presented for action. He stated the encroachment was reviewed in detail with the petitioners and his office was satisfied with the depth of the encroachment. Resolution #2005-04-DB was submitted for approval as petitioned. John Knochel made a motion to approve Resolution #2005-04-DB regarding the Encroachment of the Marshall Branch on the Box Regulated Open Ditch with Purdue University as the petitioner. Ruth Shedd seconded the motion. Resolution #2005-04-DB was passed as presented. It was noted a recorded copy would be required to be submitted to the Surveyor office for the file.

Ordinance #2005-51-CMDB/ 1st Reading

Ordinance establishing a fee schedule for stormwater quality management permits and inspections

The Attorney stated the Board felt it would be prudent and of interest to the public to present this ordinance at both the Commissioners meeting and the Drainage Board meeting for 1st reading. Therefore he presented Ordinance #2005-51-CMDB for 1st reading by the Drainage Board today. The Commissioners had previously approved the ordinance on 1st reading and would approve said ordinance on 2d reading Dec. 19th, 2005 at 10 a.m. He stated any amendments would be stated at that time depending on public comments. Either the Surveyor or he was available for questions by the public. John Knochel made a motion to approve Ordinance #2005-51-CMDB on 1st reading. Roll Call: Ruth Shedd/Yes John Knochel/Yes KD Benson/ Absent. Ordinance #2005-51-CMDB was passed on Drainage Board 1st reading.

Steve Murray

Proposal for Professional Engineering Services on the Upper end of the JN Kirkpatrick Regulated Drain Design

The Surveyor presented a contract for professional services on the Upper end of the JN Kirkpatrick Regulated Drain for approval by the Board. Since there were major projects pending at the upper end of the said drain it was agreed to convert the agricultural tile at the upper end to an open ditch. The Surveyor noted the preliminary regional concept design was completed a couple years ago. The estimated fee of the contract was \$77, 240.00; the Surveyor noted the fee was very reasonable. The Board Attorney had asked for some changes on the contract and those changes had been completed. The Attorney stated Burke had incorporated their standard conditions into this contract. The Surveyor then requested approval of the contract for the Upper JN Kirkpatrick Stormwater Drainage channel as presented. John Knochel made a motion to approve the proposal for Professional Engineering Services on the Upper JN Kirkpatrick Stormwater Drainage channel (open ditch). Ruth Shedd seconded the motion. The contract as presented was approved.

Lindberg Village Phase 4/Letter of Credit #291

The Surveyor presented the following for acceptance: Letter of Credit #291 in the amount of \$9205.00 through Lafayette Savings Bank from A&K Construction written by Lafayette Savings Bank for Lindberg Village Phase 4 and Maintenance Bond # 1752954 in the amount of \$10700.00 from Atlas Excavating written by Shore West Security Services Inc. for Stonehenge Subdivision Phases 2&3. John Knochel made a motion to accept Letter of Credit #291 and Maintenance Bond #1752954 as presented by the Surveyor. Ruth Shedd seconded the motion. Letter of Credit #291 and Maintenance Bond # 1752954 was accepted by the Board.

2006 Drainage Board Meetings Dates

John Knochel made a motion to accept the January 4, 2006 meeting date only at this time due to the absence of Commissioner Benson. Ruth Shedd seconded the motion. January 4, 2006 10 a.m. would be the next meeting date and time.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
February 2, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller.

Approval of Minutes

John Knochel made a motion to approve the January 11, 2006 Drainage Board minutes with the change of year's date from 2005 to 2006. Ruth Shedd seconded the motion. The January 11, 2006 Drainage Board minutes were approved with the change as aforementioned.

Avalon Bluff Section 3

Brandon Fulk appeared before the Board to request final approval for Avalon Bluff Section 3. The site consisted of thirty-five acres with approximately 105 lots and located at County Road 500 South and County Road 250 East (Concord Road). Section Three was located in the southern part of the overall development. Brandon stated letters were received from downstream landowners and their concerns had been addressed in the overall design. (The downstream landowners desired to maintain the quantity and quality of water discharging to their pond systems.) Observation was completed and documented (at the request of the Surveyor's office) concerning the pond discharge south of CR 500 South and downstream through the agricultural fields via Kenny ditch to Wea Creek as well as the flow through Concord Place and the Miehler property. The detention facility was roughly twice the required size as the historical overtopping of Concord Road was considered in their plan. A chamber system was designed for maintenance at the pond outfall. Brandon stated they concurred with the January 25, 2006 Burke memo and requested final approval. KD asked for public comment.

Russ Tarter 5729 South 200 East Lafayette Indiana 47909 presented pictures of flooding from a large rainfall event in 2004. Robert Miehler 1915 Wea School Road Lafayette Indiana 47909 approached the Board. He stated he did not have a "happy history" with the County regarding drainage. He had granted the county permission to cut through his "only large field" to straighten Wea School Road. Subsequently the gravel road became part of his property. Old ceramic broken down tile was located where the drainage ditch outlet into Wea Creek. There was a six to eight foot drop at that location and the tile fell in. He stated the twelve inch culvert was never adequate for the drainage as water historically overflowed Wea School Road. Approximately twenty years ago, the County cleared out the trees and vegetation between Wea School Road and Wea Creek without informing him. Within a year the ditch had eroded to Wea School Road. He contacted the County and was told it was his property and responsibility. Mr. Miehler stated the School Road was paved in approximately the 1960's and the clearing approximately 1985. Dave Eichelberger stated according to the ordinance, they could have released approx. 15 cfs which would have been a reduction of the existing condition. Since the 12 inch culvert under Concord Road could not handle that, they reduced the flow to 3.6 cfs. This resulted in the larger pond size. The anticipation was a lower flow rate in the ditch and should improve the drainage in that area. Ted Reihle 2214 Aberdeen Way Lafayette Indiana 47909 approached the Board and asked if drainage would be affected at his location. Mr. Reihle's property would not be affected by this plan. He felt the drainage system would not handle any additional drainage. GIS was utilized to review the area in question. Brandon stated at times when notifying downstream landowners they may stretch the notification. The Surveyor stated the Engineer Review memos were now on the website so landowners notified could review the memos before the meeting. Brandon stated that the project site did not drain to the JN Kirkpatrick Regulated Drain. KD asked if the pond owner was present and in agreement with the plan. Greg Boesch 4500 East 700 South Lafayette Indiana 47909 stated it was his understanding the drainage plan as designed would not add to or take from the existing downstream pond. The Surveyor noted there would be a slight decrease in water quantity due to the Hunters Crest Project's drainage which the Schneider Corporation was presently working on. Dave Eichelberger stated the reduction to the pond was approximately three or four percent less than the current amount of water to the pond. The larger impact to the pond would be Hunters Crest project as it consisted of approx. eighty percent of the watershed and the project at hand represented about twenty percent of the watershed. Dave Eichelberger stated the Schneider Corporation was aware of Mr. Boesch's concerns and looking at the water quantity and quality. While the release rate was above the allowable amount and less than the existing rate technically a variance was required. Brandon

agreed and requested a variance based on the tables within the ordinance for allowable release rate on the proposed conditions utilizing the existing flows as a maximum perimeter. The Surveyor recommended a variance of the release rate in the southeast corner of the subject development. John Knochel made a motion to grant the variance of the release rate for Avalon Bluffs Section Three relating to the southeast corner of the property. Ruth Shedd seconded the motion. The variance was granted as recommended. The Surveyor recommended final approval with the conditions as stated on the January 25, 2006 Burke memo. John Knochel made a motion to grant final approval with the conditions as stated on the January 25, 2006 Burke memo. Ruth Shedd seconded the motion. Avalon Bluffs Section Three was granted final approval with the conditions as stated on the January 25, 2006 Burke memo.

Concord Plaza Lot 2 LOT 1 AS OF JUNE 2006 CHANGED BY APC

Brandon Fulk of Schneider Engineering Corporation appeared before the Board to request final approval of Concord Plaza Lot 2. The site was located at the southwest corner of County Road 350 South and County Road 250 East (Concord Road) and consisted of 6.5 acres within the Wal Mart Super Center master plan west of Wal Mart Supercenter. The project was designed to adhere to the drainage plan submitted for the Super Center site. Brandon stated water quantity and quality was taken into account for this portion of the site as well. He requested final approval at that time. The Surveyor noted Promenade Parkway was platted and designed as part of Stones Crossing Commercial Subdivision. At that time Branch #5 of the JN Kirkpatrick Regulated Drain cut across that area. The branch was intercepted within the thirty foot easement and reconstructed on their property at their own expense at that location while providing a route for the new storm sewer which served the roadway. A stretch of the branch was vacated by Wal Mart and taken in along the east side into their storm sewer system. In addition, Branch #5 of the JN Kirkpatrick Regulated Drain had been intercepted further upstream and relocated. The vacated portion of the Branch #5 JN Kirkpatrick Regulated drain was technically a still considered a Regulated Drain, however did not serve as a regulated drain any longer. Formal steps were warranted to remove it as a regulated drain from the record; however it does serve the roadway. The road has a sixty- foot road right of way and a thirty foot drainage (regulated drain) easement. Some of the parking area would be within the thirty-foot easement. The Surveyor stated his office as well as the highway department did not object to the said use of the easement. He wanted the Board to be aware of the anomaly as he thought the developer of Stones Crossing would be required to request a vacation of that portion of Branch #5 of the JN Kirkpatrick Regulated Drain. Board Attorney Dave Luhman stated either the landowner could request the vacation or the Surveyor could include the recommendation with his annual classification report to the Board. The Surveyor stated his recommendation would be to remove the regulated drain status and let it exist as a storm sewer within a platted drainage easement due the service to the public road. The Surveyor then recommended final approval with the conditions as stated on the January 30th, 2006 Burke memo. John Knochel made a motion to grant final approval with the conditions as listed on the January 30th, 2006 Burke memo. Ruth Shedd seconded the motion. Concord Plaza Lot 2 was granted final approval with conditions as stated. The vacated portion of Branch #5 would be addressed at a later date.

Lafayette Pavilions Phase 2

Ryan McCroskey with Woolpert Inc. appeared before the Board to request final approval for Lafayette Pavilions Phase 2. The site consisted of approximately twenty-one acres and was located at the southwest corner of State Road 26 and Creasy Lane within the City of Lafayette. The Surveyor noted this project outlet to the Wilson Branch (aka Treece Meadow Relief Drain) of the S.W. Elliott Regulated Drain via a culvert under Creasy Lane and the Board would be looking at the impact to the regulated drain only. The master drainage plan was previously approved on July 6, 2005 by the Board. The phase was remodeled at the engineer consultant's request. The revised release rate was less than originally approved. The configuration of the storm and model was 17 cfs which was less than the allowable 24 cfs. Ryan requested final approval. The Surveyor recommended final approval for the Lafayette Pavilions Phase 2 with the conditions as stated on the January 27, 2006 Burke memo. While the project was inside the city, he stressed the importance of erosion control. He was concerned silt would not migrate through the Wilson Branch of the SW Elliott Regulated Drain. John Knochel made a motion to grant final approval with the conditions as stated on the January 27, 2005 Burke memo. Ruth Shedd seconded the motion. Lafayette Pavilions Phase 2 was granted final approval with the conditions as stated.

New North Middle School (AKA Battleground Middle School)

Pat Jarboe of TBIRD Designs Inc. appeared before the Board to request final approval for the New North Middle School. The site consisted of fifty acres and was located on the northwest corner of County Road 50 West and County Road 600 North. Pat stated this project was initially brought before the Board at the January meeting. The challenge of this project was the existing watershed to the north as well as future development of the area. Concerns pertaining to the Fred Haffner Regulated Drain had been reviewed and studied. He stated the site layout had not changed since last month's presentation. There were three inline ponds, as every square foot that could be accommodated for storage was utilized to minimize downstream impact. The emergency flow characteristics onsite were now in the existing emergency routing channels. (What went to the east prior to this project would continue to go the east. What went to the south prior to the project would go the south.) What was within the Fred Haffner Regulated Drain watershed would stay in the said watershed even during emergency routing conditions. Pat stated in none clogged conditions the site would contain up to a five hundred year storm event onsite, before emergency routes were utilized, and was an improvement over existing conditions. Regarding the Fred Haffner Regulated Drain there were several improvements; one of which was the inline pond system. He thought this would be relocation or a reconstruction of the legal drain with the said inline ponds becoming a part of the drain. Improvements on the Hal and Barb Webster's property were planned. Note: Hal & Barb Webster were in attendance at the January meeting, however absent at the present meeting. Pat stated they agreed with the conditions on the January 30, 2006 Burke memo as well as a letter from the County Highway department and were addressing those comments. The variances requested were as follows: 1. Dry detention ponds onsite depth- variance to exceed depth requirement by approximately a foot (Approaching five feet during hundred year storm event) 2. Release rate from the site during hundred year event under County Road 600 North (within Fred Haffner Regulated Drain) -variance for increased release rate 3. Overflow rate for emergency routing (hundred year storm event) - variance for increased overflow rate 4. Existing Flow restrictions (Fred Haffner Regulated Drain – 24 inch culvert modification required under County Road 600 North) – variance for increased flow 5. Pipe openings size - variance for larger grate opening for entire site (potential for clogging due to agricultural watershed) 6. Pond D Quality issue (total sediment removal requirement-80%) - variance for the total percentage-72% of sediment removal: for this area only. Pat added he also requested the relocation of the Fred Haffner Regulated Drain- onsite only. Pat stated Variance # 3 and #4 could be combined to one request, which would make a total of 5 variances requested. He then requested final approval pending the approval of the requested variances.

KD asked if there was a signed document from the Websters stating they had no objections to this plan. Mark Deyoung, Attorney for Tippecanoe School Corporation approached the Board. He stated the Websters were presently in Australia and were satisfied with the proposed improvements through their property and the Board's discussion held last month. He stated a document had not been prepared as he felt it was not required under the circumstances. Another meeting with the Websters would be held before construction started. Any required signatures would be obtained at that time; he stated the Websters had been very cooperative throughout the process. The School Corporation believed the proposed improvements were within the area legally authorized for said improvements. The Board's Attorney stated while the board was not required to obtain the consent of a downstream landowner; they did have to insure the landowners were notified and had the opportunity to object. KD then noted the Websters were present at the January meeting. Pat stated he concurred with Mark Deyoung as the Websters were anxious to have the improvements done on their property. The engineer consultants requested data from TBIRD showing results if the drain was in a clogged condition. The drainage plan's design indicated there would be no water running through their property up to a five hundred year event. It would be through the underground pipe which outlet at the existing headwall. The Websters should not see any water on their property with this design unless the pipe was in a clogged state. Clogged condition criteria were requested. A barrier was added to the design at the north end of the property to catch some of the debris before entering the site lessening the amount of debris through the site.

The Surveyor stated he felt it best to discuss the Resolution to declare the Fred Haffner Regulated Drain an Impact Area. He stated he had discussed this with the Board Attorney and was not prepared for the resolution to be passed today however felt it prudent to bring it to the Board's attention. Declaring the Fred Haffner Regulated Drain Watershed an Impact area allowed for increased requirements within that area. As that area was developed, the School Corporation could possibly recoup some of their investment as the improvements would not solely serve the School Corporation. The cost of improvements would be substantial and there was no guarantee other than goodwill they would be shared by developers within that area. GIS was utilized at that time to review the drain watershed area. He stated there were a couple of options in this instance. He could declare it an Urban Drain meaning it was in need of reconstruction, Declare the area an Impact area and he felt this was the best option. The School Corporation were the first developers north of County Road 600 North to have to deal with the fact the Fred Haffner tile and the culvert under County Road 600 North were not adequate to convey water from that area. The Attorney noted declaring it a Drainage Impact Area allowed more flexibility in requirements which might be imposed on developers within the watershed. An example would be the required participation in regional detention pond storage fees.

The Surveyor noted if this was declared an impact area it would not increase the School Corporation's responsibilities over and above what was agreed to today. In response to KD Benson's inquiry, the Surveyor stated everything above County Road 600 North would be included in the impact area and possibly extend to its terminus. The Surveyor noted he wanted to discuss this in principle and did not expect a ruling today.

The Surveyor stated with the exception of the five foot depth pond variance, the site had dictated granting of the variances. He stated there were instances where the designer had done everything reasonably possible to meet the ordinance sediment removal percentage requirements. He felt they had provisions in place which would substantially improve the water quality. After a meeting held with TBIRD and Dave Eichelberger it was determined they could not meet the eighty percent sediment removal requirement. He noted at the corner of the parking lot runoff sheet flowed to the pond. A vegetative strip would be placed in that area. The site's overall percentage of sediment removal was close to ninety which exceeded the ordinance requirement. In response to KD Benson's concern of the variance, Pat stated his focus was to allow no impact greater than point one foot (a tenth of a foot) on the downstream portion of the Haffner drain. This dictated pushing up the depth of the dry bottom pond. The edge of the pond would have a five to one side as the five foot depth would be close to the middle of the pond.

The Surveyor stated he was prepared to recommend granting the variances listed as numbers 1,3 and 6 in the January 30, 2006 Burke memo as well as the pond depth variance. Mark Young asked if there was an inconsistency between the four listed and the 6 requested. The Surveyor noted there was not. The Board Attorney then stated the variances should be granted separately for clarification. John Knochel then made a motion to allow the 5 foot maximum dry pond depth on the southwest corner as requested. Ruth Shedd seconded the motion. John Knochel made a motion to grant a variance for larger openings on the ponds A, B, D and addressed in the memo and condition #3. Ruth Shedd seconded the motion. John Knochel made a motion to grant a variance concerning the release rates and addressed as condition #1 on said memo as well as the requested flow restriction variance. Ruth Shedd seconded the motion. John Knochel made a motion to grant a variance addressed as condition #6 in the said memo. Ruth Shedd seconded the motion. Dave Eichelberger noted the emergency routing plan was addressed in the overall plan and would not need a variance. The variances were granted as requested. The Surveyor then stated as the regulated drain would be relocated through the ponds the developer was aware of the maintenance responsibility of the relocated drain on their property. As it was the Tippecanoe School Corporation's property and time was crucial for costs etc. there were still details to be worked out but was confident it would be done. John Knochel made a motion to approve the relocation of the Haffner Regulated Drain through the applicant's site subject to the Surveyor's approval of the final plans as well as the reconstruction through the Webster's property south of County Road 600 North. Ruth Shedd seconded the motion. The relocation was granted as requested. The Surveyor then recommended final approval with the conditions as stated on the January 30, 2006 memo for Battleground Middle School (aka New North Middle School). John Knochel made a motion to grant final approval with the conditions as stated on the January 30, 2006 memo for Battleground Middle School (aka New North Middle School). Ruth Shedd seconded the motion. The Battleground Middle School (aka New North Middle School) was granted final approval with conditions as stated.

Other Business

The Surveyor presented a Petition to Encroach on a County Regulated Drain Easement with a private drive crossing and culvert on the Delphine Anson Regulated Drain west of County Road 100West submitted to his office by Ernest Agee. He recommended granting the Petition as presented. John Knochel made a motion to approve the Petition as presented by the Surveyor. Ruth Shedd seconded the motion. The Petition to Encroach on a County Regulated Drain Easement with a private drive crossing and culvert on the Delphine Anson Regulated Drain west of County Road 100West submitted by Ernest Agee was approved.

2006 Contracts

Legal Services Contract and Engineering Consultation Services

The Surveyor recommended the Board approve the 2006 Legal Services Contract as presented. John Knochel made a motion to approve the contract with the legal firm of Hoffman, Luhman and Masson. Ruth Shedd seconded the motion. The contract was approved. The Surveyor presented the 2006 contract for Engineer Consultation fees with Christopher B. Burke Engineering and recommended approval. John Knochel made a motion to approve the contract as presented. Ruth Shedd seconded the motion. The contract for professional engineering consultation with Christopher B. Burke was approved as presented.

2006 Drain Regulated Drain Status List

The Surveyor presented the 2006 Regulated Drain active/inactive list and recommended its acceptance by the Board. John Knochel made a motion to approve the 2006 Regulated Drain active/inactive list as presented. Ruth Shedd seconded the motion. The 2006 Regulated Drain Active and Inactive list as presented by the Surveyor was approved. The list would be included in the official minutes book immediately following the official minutes of this meeting.

**Steve Murray
Drain Classification Report**

The Surveyor informed the Board he would be submitting his Drain Classification Report at the next meeting depending on the number of items on the Agenda. He noted last year a special meeting was held for the report. March 8, 2006 would be the next meeting.

KD Benson asked for public comment. As there was no other business before the Board, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
March 8, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Project Manager Zachariah Beasley (Drainage Board Secretary Brenda Garrison was absent).

Approval of Minutes

John Knochel made a motion to approve the February 2, 2006 Drainage Board minutes. Ruth Shedd seconded the motion. The February 2, 2006 Drainage Board minutes were approved as written.

Hunters Crest Section 3

Brandon Fulk of Schneider Engineering appeared before the Board to request final approval for Hunters Crest Section 3. The site was located on the south side of County Road 450 South just east of County Road 250 East (Concord Road). Brandon stated this section consisted of 22.5 acres of the overall development's 143 acre site. Section 1 and 2 were granted approval by the Board in the fall of 2005 and construction was underway. A system of swales and storm sewers routed to a new detention pond and outlet to a 24" culvert under County Road 450 South flowing north to the JN Kirkpatrick Regulated Drain was designed for a majority of Section 3. The remaining portion of Section 3 would drain into an existing wetland along the eastern boundary of the site. The project was located within the JN Kirkpatrick Regulated Drain watershed. Brandon stated utilizing the pond system as a treatment train; point discharges with stormceptors were designed to assist in the Stormwater quality discharge. Brandon stated the developer concurred with the March 2, 2006 Burke review memo and requested final approval for Section 3. After concurring with the Board's attorney, the Surveyor stated the project was subject to the Revised JN Kirkpatrick Regulated Drain Impact Area. The revised resolution would be presented to the Board at the present meeting. The Surveyor stated the present phase did not drain to the south. He then recommended final approval with conditions as listed on the March 2, 2006 Burke memo as well as subject to the Revised JN Kirkpatrick Regulated Drain Impact Area Resolution.

John Knochel made a motion to grant final approval with conditions listed on the March 2, 2006 Burke memo as well as subject to the Revised JN Kirkpatrick Regulated Drain Impact Area Resolution. Ruth Shedd seconded the motion. Hunters Crest Section 3 was granted final approval with conditions listed on the March 2, 2006 Burke memo and subject to the Revised JN Kirkpatrick Regulated Drain Impact Area Resolution.

TSC South Elementary School

Meredith Beyer from T-Bird Designs appeared before the Board to request preliminary approval for the TSC South Elementary School project. The site was located on the north side of County Road 450 South just east of County Road 250 East (Concord Road). The Upper JN Kirkpatrick Regular Drain Reconstruction would adjoin the north side of the project and serve as the final outlet for the site. Two temporary detention basins would be utilized until reconstruction project was completed. Meredith stated the offsite drainage would be addressed at a later date and requested preliminary approval of the proposed plan at that time. Responding to KD's inquiry, Meredith confirmed both dry detention bases could be utilized at a later date for other purposes.

The Surveyor had met with the landowners in the Upper J.N. Kirkpatrick Regulated Drain watershed and stated they were interested in constructing an open ditch in lieu of the agricultural tile. He stated he hoped to start construction this fall on the project. Right of Entries would be required and he stated the landowners present were agreeable. He then recommended granting preliminary approval for the TSC South Elementary School. As this project was located in the Upper JN Kirkpatrick Regulated Drain Impact Area, they would be subject to the Revised Upper JN Kirkpatrick Regulated Drain Impact Area Resolution.

John Knochel made a motion to grant preliminary approval for TSC South Elementary School subject to conditions listed on the February 24, 2006 Burke memo and the Revised Upper JN Kirkpatrick Regulated Drain Impact Area Resolution as stated by the Surveyor. Ruth Shedd seconded the motion. TSC South Elementary School was granted preliminary approval with conditions as listed on the February 24, 2006 Burke memo and subject to the Revised Upper JN Kirkpatrick Regulated Drain Impact Area Resolution.

Other Business

Assignment of Fortune Park Easement to City of Lafayette

The Surveyor presented an Assignment of Fortune Park Easement to City of Lafayette for the Boards approval. He noted this concerned the Treece Meadows Relief Drain/Wilson Branch of the S.W. Elliott Ditch. The last sentence of the first paragraph stated "This assignment is made subject to the reservation unto the assignors of the proceeds of all assessments related to the *drainage systems and facilities* served by such Drainage Easement, assumption by assignee of all responsibility for maintenance of the Drainage Easement, and assumption by assignee of all other obligations of assignors under the terms of the Drainage Easement accruing after the effective date of this assignment" and should be amended to read "This assignment is made subject to the reservation unto the assignors of the proceeds of all assessments related to the *drainage systems, facilities and watershed* served by such Drainage Easement, assumption by assignee of all responsibility for maintenance of the Drainage Easement, and assumption by assignee of all other obligations of assignors under the terms of the Drainage Easement accruing after the effective date of this assignment."

The Attorney explained this document related to the drainage easement granted to the County in 1991 with the development of Wal-Mart site south of Sam's Club. This was granted at that time with the understanding in the future it could be granted to the City of Lafayette. The City of Lafayette requested the easement at this time as they planned to construct sewer facilities within it. The rights under said easement would be assigned to the City. The County would retain the drainage assessments with respect to the easement within the watershed in order to maintain funding of the Regulated Drain.

John Knochel made a motion to approve the Assignment of Fortune Park Easement to City of Lafayette. Ruth Shedd seconded the motion. The Assignment of Fortune Park Easement to the City of Lafayette was approved with the revision as stated by the Surveyor. The Attorney noted he would make the revision on the document and obtain the additional signatures as required.

Steve Murray

Petition to Establish a New Regulated Drain/Sec 13, 14 23N 3W

The Surveyor noted his office received a Petition to Establish a New Regulated Drain in Section's 13 and 14 Township 23North and Range 3West and located at 1025 East and 100 North, North of Pettit on State Road 26 from Todd Welch. Based on the preliminary analysis of the watershed, approximately 49 percent of the benefited landowners had signed the petition. He recommended the petition be referred to him for a report. The Attorney stated he had reviewed the petition and it met the basic requirements of the statute.

John Knochel made a motion to refer the petition back to the Surveyor for a report. Ruth Shedd seconded the motion. In response to KD's inquiry, the Surveyor estimated it would be at a minimum of six month time frame for his investigation and report to the Board. The Petition to Establish a New Regulated Drain in Sections 13 and 14 Township 23North and Range 3West was referred to the Surveyor for a report.

Revised Resolution #2006-01-DB/Upper JN Kirkpatrick Drainage Impact Area

The Surveyor presented a Revised Resolution of the Upper JN Kirkpatrick Drainage Impact Area for approval. He stated he had met with most of the major property owners within the watershed last October. As a result of that meeting, he asked Dave Eichelberger of Christopher Burke Engineering to prepare technical language to the existing JN Kirkpatrick Drainage Impact Area Resolution#2005-05-DB. The original regional detention concept would cost in excess of 6 million dollars which proved to be too costly. He had agreed to utilize some EDIT monies in developing a new outlet (open ditch) and the developers would provide their own regional detention. He stated this would also reduce the release rates. The Attorney stated this document supplemented the initial resolution which established the impact area and quantified the discharge rates for the Upper JN Kirkpatrick Drain. The post developed discharge rate had to be limited to 233 cfs. This meant each development in the watershed must utilize the release rate of .13cfs per acre to meet the resolution requirements. The remaining 2005 resolution restrictions would be in effect. Although it was unlikely, developers may have to participate in a

regional detention facility if constructed. He noted a developer's internal facilities would have to be established as regulated drains and they would be bound to consent to the reconstruction of JN Kirkpatrick Regulated Drain. In response to KD Benson's inquiry, Dave Eichelberger stated the models had been in place since the mid 1990's for the reconstruction of the lower Kirkpatrick and were revisited for the regional detention preliminary/conceptual plan of the upper portion. The Surveyor stated he had requested specific numbers in this instance. Dave then stated the rate was fairly restrictive however they were based on a detailed setup of an entire watershed. Whereas, allowable release rates within ordinances were generally release rates spread out over an entire county and were not site specific. He pointed out in Hamilton and Hancock County the studies were completed with gage streams data. The release rates were as low as .05, .07 and .09 cfs per acre. In response to Pat Jarboe's (attende) inquiry, Dave stated .13cfs related to a 100 year storm event as he did not have numbers for the 10 year. They had concentrated on the 100 year storm event only. The Surveyor noted Christopher Burke was in the process of remodeling the channel. They would provide that information at time of completion.

John Knochel made a motion to approve the Resolution #2006-01-DB/ Establishing the Upper JN Kirkpatrick Regulated Drain a Drainage Impact Area. Ruth Shedd seconded the motion. Resolution 2006-01-DB Establishing the Upper JN Kirkpatrick Regulated Drain a Drainage Impact Area was approved as presented.

Resolution 2006-02-DB/Establishing the Fred Haffner Regulated Drain a Drainage Impact Area

The Surveyor presented Resolution #2006-02-DB Establishing the Fred Haffner Regulated Drain a Drainage Impact Area for approval. He noted this would affect the TSC North (aka Battleground) M.S. project while adding the drain had an inadequate outlet. He recommended the impact area cover the entire watershed. One of the reasons to declare this watershed an impact area was the high cost involved with construction of a positive outlet. The Surveyor felt it fair that all future developments within the watershed share a prorated cost for the said outlet. The Attorney reiterated in order to provide a positive outlet it was necessary to improve that drain. Construction of a new regulated drain crossing at County Road 600North was planned. Tippecanoe School Corporation would make the improvements. One of the conditions which may be imposed within that watershed would be a new development could be required to pay their prorated share (determined by the Drainage Board) of TSC's costs for construction of said improvements. As a secondary condition, each newly constructed drainage system within the watershed would have to provide a positive outlet to the Haffner Regulated Drain. The present conditions relate to information at hand. In the future additional conditions may be imposed as information becomes available.

John Knochel made a motion to approve Resolution #2006-02-DB Establishing the Fred Haffner Regulated Drain a Drainage Impact Area. Ruth Shedd seconded the motion. Resolution #2006-02-DB Establishing the Fred Haffner Regulated Drain a Drainage Impact Area was approved as presented.

Resolution 2006-03-DB/ Julius Berlovitz Regulated Drain Drainage Impact Area

The Surveyor presented Resolution 2006-03-DB Establishing the Julius Berlovitz Regulated Drain a Drainage Impact Area. He noted this had been discussed by the Board in the past and the Board was familiar with the watershed. A regional detention concept final plan was complete. He reviewed A.B.C. and D. of the resolution stating the conditions: A. All stormwater drainage control systems within the Berlovitz Impact Area shall participate in the Berlovitz *legal drain*. B. Each Storm water drainage system within the Berlovitz Impact Area shall provide a positive outlet to the Berlovitz Regional Detention Basin. C. The developer of each storm water drainage control systems within the Berlovitz Impact Area shall petition to establish all internal drainage facilities as regulated drains and as condition of approval may be required to waive its right to remonstrate against higher rates for reconstruction thereof. D. The developer of each storm water drainage control system within the Berlovitz Impact Area shall, as condition of approval, consent to such reconstruction of the Julius Berlovitz Legal Drain as may from time to time be required. The Surveyor stated condition A should be revised as follows: A. All Stormwater drainage control systems within the Berlovitz Impact Area shall participate in the Berlovitz *Regional Detention Basin*. John Knochel made a motion to approve Resolution #2006-03-DB establishing the Berlovitz Drainage Impact Area with the revision as noted by the Surveyor. Ruth Shedd seconded the motion. Resolution #2006-03-DB Establishing the Julius Berlovitz Drainage Impact Area was approved with the revision as noted by the Surveyor. The Attorney will provide a revised document for the Board's signatures.

Drain Classification Report Presentation to Board/Special Meeting Date

The Surveyor requested a special meeting to present the Classification of Drains (Partial) to the Board. The special meeting was set for March 24, 2006 at 10 a.m.

Public Comment

The Attorney explained the meaning of “Drainage Impact Area”. A drainage impact area is an area with unique characteristics without a positive outflow. Declaring a resolution allows special restrictions on development to improve the drainage problems in addition to those required by the County Drainage Ordinance and the State Drainage code. By definition it may be the entire watershed or a part thereof.

As there was no additional public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Zachariah Beasley, Acting Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
March 24, 2006
SPECIAL Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray and Drainage Board Secretary Brenda Garrison. Drainage Board Attorney Dave Luhman was absent.

Classification of Drains (Partial)

The Surveyor presented the Classification of Drains (Partial) report to the Board. A copy of which would be included (excluding Exhibit A- see file) in the official Drainage Board Minutes book. The Surveyor stated he has completed and presented a Classification of Drains (Partial) report to the Board previously in 2003 and 2005. He stated this year he had expanded it with more detailed information as "Exhibit A". He stated as it was not feasible for his office to know the condition of every regulated drain under County Maintenance, he relied on the farmer to report the condition of a drain .Often calling upon them for a review of the drain's condition and noted his office receives maintenance request calls in the fall and spring when farmers are in the field.

He reviewed his report with the Board as follows:

1.) Drains in need of Reconstruction

a. Berlovitz, Julius (#8) (Includes Felbaum Branch)

1. Declared Drainage Impact Area by Resolution 2006-02-DB

The Surveyor stated the Board was very familiar with this Drain.

b. Kirkpatrick, J.N.(#46) (Watershed above (east) of Concord Road

1. Declared Drainage Impact Area by Resolution 2006-01-DB

The Surveyor stated he had met with the landowners on the Upper JN Kirkpatrick Regulated Drain. It was decided they would provide their own regional detention and the County would construct a positive outlet. He noted the design would be completed within a couple of months and was hopeful to start the bidding process at that time. Right of Entries would be required from the landowners which they had verbally agreed to.

c. Elliott, S.W. (#100)

1. F-Lake Detention Facility

The Surveyor stated EDIT monies was planned for this facility, however the Berlovitz Regional facility would take precedence over F-Lake.

2. Branch #11 (at S.R.38 near Tractor Supply)

The Surveyor stated Branch#11 of the S.W. Elliott served the property north of State Road 38. Previously the Brands were told they would have to reconstruct Branch #11 themselves. The reconstruction cost proved too much- as two 60" inch pipes were required under State Road 38. INDOT would not agree to place the pipes at their expense. The Surveyor suggested a formal reconstruction to the owners as INDOT would then have to shoulder the expense for the pipe installation under State Road 38. A landowner meeting concerning the reconstruction would be organized as soon as time allows.

d. Anderson, J.B. (#2) (Clarks Hill portion)

The Surveyor stated a conceptual reconstruction plan was completed by Christopher B. Burke through the Lauramie Creek Watershed study. The original estimate was in excess of two million dollars, however the Surveyor had reviewed costs and was able to decrease that to approximately half a million dollars.

e. Kirkpatrick, Frank (#45) (Portion East of C.R. 450E)

The Surveyor stated the Frank Kirkpatrick Drain was located in the southeast portion of the County with a portion east of C.R. 450East. This portion was investigated and found to be purposely laid uphill. The Surveyor stated he felt the reconstruction cost would not be acceptable by the landowners. However he noted it would continue to deteriorate over time and would be in need of the reconstructed in spite of the cost.

2.) Hearing and rates established in 2005

a. Anson, Delphine (#4) Reconstruction rate, periodic maintenance rate and maintenance rate after reconstruction set by hearing on August 29, 2005

b. Jakes, Lewis (#40) Reconstruction rate, periodic maintenance rate and maintenance rate after reconstruction set by hearing on August 29, 2005

The Surveyor informed the Board there was a SEA 368 Review scheduled in the near future for the Lewis Jakes Drain. The drain outlet at Indian Creek. He explained if work was reconstruction and the length of a drain greater than ten miles on the USGS map, a review (SEA 368) by IDNR, IDEM and Army Corps of Engineers was required. They will walk the drain with the Surveyor and give their requirements for said reconstruction.

- 3.) Urban Drains (per I.C. 36-9-27-68 Urban Drains are classified as in need of Reconstruction)
 - a. S.W. Elliott (#100)
 - b. Berlowitz, J. (#8) (Include Filbaum Branch)
 - c. Kirkpatrick, J.N. (#46)
 - d. Ross, Alexander (#48)

The Surveyor noted extensive maintenance work on the Alexander Ross drain.

- 4.) Drains in need of Periodic Maintenance
Please see attached sheet Exhibit A

The Surveyor noted the Exhibit Sheet A indicated maintenance amounts from 1990 to date on each regulated drain and referred the Board members to the exhibit for review.

- 5.) Insufficient Funds
 - a. Blickenstaff, John (#11)
 - b. Crist Fassnacht (#29)
 - c. Grimes, Rebecca (#33)
 - d. Harrison Meadows (#37)
 - e. Kerschner, Floyd (#38)
 - f. Kirkpatrick, Frank (#40)
 - g. Lesley, Calvin (#48)
 - h. Morin, F.E. (#57)
 - i. O'Neal, Kelly (#59)
 - j. OShier, Audley (#60)
 - k. Saltzman, John (#70)
 - l. Dickens, Jesse (#91)

The Surveyor stated the most common reason for insufficient funds was the low originally established assessment rate. The rate was set many years ago and due to inflation did not meet present maintenance costs.

- 6.) Proposed Drains for hearing in 2006
(Request these drains be referred to Surveyor for preparation of maintenance report)
 - a. Brown, Andrew (#13)
 - b. Coe, Train (#18)
 - c. Haywood, E.F. (#35)
 - d. Harrison Meadows (#37)
 - e. Kirkpatrick, Frank (#45)
 - f. Morin, F.E. (#57)
 - g. Mottsinger, Hester (#58)
 - h. Parker, Lane (#61)
 - i. Resor, Franklin (#65)
 - j. Southworth, Mary (#73)
 - k. Vannatta, John (#81)
 - l. Yoe, Franklin (#90)
 - m. Dismal Creek (#93)
 - n. Beutler Gosma (#95)
 - o. Romney Stock Farm (#109)

The Surveyor stated these drains assessment rates were more critical in his view. There was a limited amount of monies within the General Fund available for general use. For example the Andrew Brown in the northeast portion of the County was tile and open ditch. A portion of the open ditch was cleaned this spring due to the submerged outlet at the headwall. (Generally open ditches should be cleaned or dipped and cleared an average of ten to twelve years.) The cost for a three thousand foot open ditch at \$6.00 per foot would be approximately \$18,000.00. It would take approximately 4-5 years to

repay the general fund. The Harrison Meadows Drain had maintenance work done in the mid nineteen-nineties and owed the General Fund over \$6000.00 to date. The four year total assessment for this drain was only \$1915.70.

- 7.) Drains recommended to be raised by 25%
 - a. E.F. Haywood (#35)
 - b. O'Neal Kelly (#59)
 - c. Oshier, Audley (#60)
 - d. Resor, Franklin (#65)
 - e. Yoe, Franklin (#90)
 - f. Kirkpatrick One (#96)

The Surveyor noted this recommendation was a temporary fix. Raising the maintenance assessment 25% in his opinion was a proactive action in the interim.

- 8.) Petitions for New Regulated Drain Referred to Surveyor
 - a. Fred Whaley/Norm Bennett
 - b. Todd Welch

The Surveyor noted additional investigation was required for the Fred Whaley/Norm Bennett Petition as the tile drain was submerged which made it difficult to evaluate properly. He felt the most cost effective way was to set up a maintenance fund before additional investigation was done. Investigation on the Todd Welch petition would be completed as time allowed.

- 9.) Existing Drains Referred to Surveyor for Report
 - c. Upper JN Kirkpatrick (#46)
 - d. J. Berlowitz (#8)

The Surveyor stated these drains had existing maintenance funds and was conferring with Christopher Burke on their reports.

- 10.) Drain that should be vacated
 - a. That portion of Branch #5 of the J.N. Kirkpatrick which runs along the East side of Promenade Drive in Stones Crossing Commercial Subdivision.

The Surveyor stated this portion of the tile was presently functioning as a storm sewer for Promenade Parkway on the west side of Wal-Mart and should be vacated as it no longer functions as a county regulated tile.

In summary the Surveyor stated a new drainage layer and map was close to completion and would eventually be available to the public. He reviewed the layer utilizing GIS for the Board. A red dash tile was a county tile or open ditch: a solid blue label indicated it had a maintenance fund, a green label indicated it did not have a maintenance fund. He added a database (individual drains historical information to date) was being maintained as well. He informed the Board he will give a presentation the first Wednesday of April to the District SWCD Board concerning County Drains.

As there was no additional information for the Board, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
June 7, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

John Knochel made a motion to approve the May 3, 2006 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The May 3, 2006 Regular Drainage Board meeting minutes were approved as written.

Clarian Arnett Hospital/Early Release Grading Plan

Jon Perry of Gresham Smith and Partners appeared before the Board to request final approval for the Early Release Grading Plan. The overall site consisted of 115 acres located east of County Road 500 East south of McCarty Lane. Mr. Perry stated his request today did not include hospital construction or site infrastructure. The grading plan consisted of approximately 62 acres of the overall site and involved approximately 400,000 cubic yards of material. Vegetated swales, filter strips and a sediment basin would be utilized to satisfy the water quality requirements. He requested final approval for the Early Release Grading Plan as presented to the Board.

The Surveyor stated the Felbaum Branch of the Berlowitz Regulated Drain ran along the east side of the site and was to be located before the mass earthwork was started. To his knowledge it was vacated to the south and intercepted into the new storm sewer along the east side of 500 East. He added that generally regulated drain easements are approximate and it would be prudent to field locate said branch. An onsite investigation would be required to ensure the location of said branch to verify the June 1, 2006 Burke memo statement of no variances or encroachments proposed.

The Surveyor recommended final approval for the Clarian Arnett Hospital Early Release Grading Plan with conditions listed on the June 1, 2006 Burke memo in addition to the field verification of the Felbaum Branch location before earth work begins. John Knochel made a motion to grant final approval for the Clarian Arnett Hospital Early Release Grading Plan with conditions as listed on the June 1, 2006 Burke memo in addition to a field verification of the Felbaum Branch location. Ruth Shedd seconded the motion. The Clarian Arnett Hospital Early Release Grading Plan was granted final approval with conditions.

West Branch Tippecanoe County Library

Kent Schumacher with Troyer Group appeared before the Board to request final approval for the West Branch of the Tippecanoe Library. The site was located within the Lindberg Village Development on the northeast corner of County Road 200 North (Lindberg Road) and Cushing Drive just west of County Road 300 West (Klondike Road). A portion would drain to the right of way of Lindberg Road and Cushing Drive, with the remaining directed north through a swale into an existing storm sewer system connected to a detention basin within the development.

The Surveyor stated this plan was in compliance with the original approved plan for the Lindberg Village Development and recommended final approval with the conditions as stated on the May 18, 2006 Burke memo. John Knochel made a motion to approve the West Branch Tippecanoe Library with the conditions as stated on the May 18, 2006 Burke memo. Ruth Shedd seconded the motion. The West Branch Tippecanoe Library was granted final approval with conditions.

Wabash Township Fire Station #1

The Surveyor presented Wabash Township Fire Station #1 to the Board, located in a minor subdivision on County Road 300 West (Klondike Road). The Surveyor noted the existing Stormwater Ordinance granted Surveyor's discretion on determination of minor subdivision drainage board approvals depending on their size. ~~He~~The site was reviewed by the Board utilizing GIS. In order to expedite the process for the Township, he stated he had given the Area Plan Commission approval for this project so they may proceed on the final plat process. A First Amendment to the Storm Sewer Easement was provided granting the fire station approval for partial construction in the existing storm sewer easement along the south side of the site. The proposed drainage plan indicated a reduction in the discharge rate and impact on the existing 18" culvert under County Road 300 West (Klondike Road). The Surveyor recommended final approval with the conditions as stated on the May 30, 2006 Burke memo. John Knochel made a motion to grant final approval for Wabash Township Fire Station #1 with the

conditions as stated on the May 30, 2006 Burke memo. Ruth Shedd seconded the motion. The Wabash Township Fire Station #1 was granted final approval with conditions.

TSC South Elementary School aka Woodland Elementary

Pat Jarboe with TBIRD Designs Inc. appeared before the Board to request final approval for the TSC South aka Woodland Elementary School project. The site consisted of approximately 33 acres on the north side of County Road 450 South and approximately 1 mile east of County Road 250 East. The site would be accessed from a proposed road off of County Road 450 South. Mr. Jarboe stated the site was located within the J.N. Kirkpatrick Regulated Drain Impact Area. The JN Kirkpatrick Regulated Drain proposed reconstruction would adjoin the north side of the site and serve as the final outlet. In cooperation with the County Surveyor's office, temporary detention basins would be constructed and utilized until said reconstruction was complete. He was in agreement with conditions on the May 26, 2006 Burke memo and would continue to coordinate this project with the Surveyor's office. He requested final approval for the project as presented.

The Surveyor stated they have had several meetings with TBIRD Designs and the School Corporation concerning this project as well as multiple meetings with landowners in the Upper JN Kirkpatrick watershed concerning the Reconstruction of the Upper End east of Concord Road. The new open ditch construction was on track. There would be some property cut off due to the new open channel. The various parties involved (L.U.R., Lohrman, Daugherty Farms, and Kirkpatrick) were in discussions regarding adjoiner agreements. To his knowledge they were partially complete. He was in possession of a final set of reconstruction plans and felt the Drainage Board's Consultant would have the project ready for letting no later than August or September. While the temporary outlet swale would provide a positive outlet for the detention pond, he believed the new channel would be in construction before there would be a need for it. Therefore under Variance/Encroachment of the May 26, 2006 Burke memo it should be changed to read "The temporary offsite swale must be completed by the time a request is submitted for Certificate of Occupancy" He stated he felt the ditch would be constructed and the School Corporation would not need to spend the additional funds. The detention ponds would need to be constructed.

The Surveyor recommended final approval with conditions as stated on the May 26, 2006 Burke memo with the exception of the revision under Variance/Encroachment to read "The temporary offsite swale must be completed by the time they request a Certificate of Occupancy". Pat Jarboe added they would continue to work with the Surveyor's office on the sequencing of both projects. John Knochel made a motion to grant final approval for the TSC South Elementary School aka Woodland Elementary with the conditions as stated on the May 26, 2006 Burke memo with the exception of the revision under Variance/Encroachment to read "The temporary offsite swale must be completed by the time they request a Certificate of Occupancy". Ruth Shedd seconded the motion. The TSC South Elementary School aka Woodland Elementary School was granted final approval with conditions.

Watkins Glenn Part 6 Phase 2

Robert Gross and Paul Dietz from R.W. Gross and Associates appeared before the Board to request final approval for Watkins Glenn Part 6 Phase 2. The site consisted of approximately 17 acres located on the west side of County Road 400 East north of County Road 200 North. Mr. Gross stated this would be the last phase of Watkins Glenn South. He stated Pond A and Pond B were located in Part 5 of the subdivision and were constructed with extra capacity in anticipation for the routing of a planned detention pond located in the northwest corner of Part 6 to the said existing ponds. However with the construction of Polo Fields Subdivision, Pond B would be utilized to a greater degree. Paul Dietz stated the project area was surrounded by vegetated two foot bottom swales on the south, west and east sides. In response to the Surveyor's inquiry, Paul stated there was no impact on the elevation of Pond A. The Pond B level would increase however it was in compliance with the existing Ordinance, as there was a considerable amount of reserve in Pond B. The site was reviewed on GIS by the Board. The Surveyor noted proof of notification to the downstream owners should be provided to the Surveyor's office.

The Surveyor then recommended final approval with conditions as stated on the May 23, 2006 Burke memo. In response to KD's inquiry, he stated the ponds had addressed the water quality issues set forth by the Ordinance. John Knochel made a motion to grant final approval with the conditions as stated in the May 23, 2006 Burke memo. Ruth Shedd seconded the motion. Watkins Glenn Part 6 Phase 2 was granted final approval with the conditions.

Eastatoe Phase 1 & 2

Paul Diets from R.W. Gross and Associates appeared before the Board to request final approval for the Eastatoe Phase 1 & 2, a minor subdivision. The site consisted of approximately 24 acres located on the northwest corner of County Road 850 East and State Road 26. The Surveyor interjected the project was bordered by a "natural stream" (unnamed tributary to Wildcat Creek) and not the Hoffman Regulated or the Hangst Drain. Photographs of the existing conditions of said stream were added to the project file. Paul stated while a small amount of the site outlet to a side ditch at 850 East, the majority would ultimately outlet to the stream. He noted the three foot bottom swales were vegetated and check dams would be utilized to minimize erosion. He then requested final approval for Eastatoe Phase 1 & 2 Minor Subdivision.

The Surveyor (after an onsite visit) had met with a property owner to the north who expressed concern to his office. He assured the landowner the overall runoff would be decreased through two of the ravines with one of the three remaining equal due to the fact the site was being converted from agricultural ground to a grassed site. The Surveyor noted under Stormwater Quality of the May 23, 2006 Burke memo condition 2 should be well defined (through the restrictive covenants or other means) to ensure minimal erosion of the steep ravines. In response, the developer Mr. Greg Sutter confirmed they would assure this through the Restrictive Covenants. The Surveyor stated each individual site plan would be reviewed to ensure requirements were met. He stated while making an onsite visit, there was burnt remains at the top of a ravine which needed to be addressed by removal or some other means - as this was not sufficient fill. He recommended final approval with the conditions as stated in May 30, 2006 Burke memo and the added condition of written assurance for well defined tree preservation along the ravines as well as the existing burnt material on top of ravine to be addressed. (As a side note he stated as the site's runoff would be reduced onsite detention was not necessary.) John Knochel made a motion to grant final approval for Eastatoe Minor Subdivision Phases 1 & 2 with conditions as stated in May 30, 2006 Burke memo and the added conditions for well defined tree preservation along the ravines and the existing burnt material on top of ravine to be addressed. Ruth Shedd seconded the motion. Eastatoe Minor Subdivision Phase 1 & 2 was granted final approval with conditions.

**Maintenance Bond(s)
Performance Bond**

The Surveyor presented Maintenance Bond #1753003 submitted by Atlas Excavating in the amount of \$43,462.50 for Harrison Highlands Phase 1; Maintenance Bond #3481609 submitted by Fairfield Contractors in the amount of \$11,942.00 for Prophets Ridge Phase 2; Maintenance Bond #5019648 submitted by R.W. Davis Contracting in the amount of \$11,585.00; Maintenance Bond #104632497 submitted by Milestone Contractors in the amount of \$3200.00; a Maintenance Bond (no number) from Farmers Bank for Hickory Hills III Ph 1 Sec 3 in the amount of \$12,219.90 as well as a Performance Bond (no number) from Farmers Bank for Hickory Hills III Ph 1 Sec 3 in the amount of \$15,730.00 (due to pending drainage issues to be addressed) for acceptance by the Board. (The Surveyor noted due to the weather there were a few drainage items which needed to be completed. The punch list of the items to be completed was attached to the Performance Bond) John Knochel made a motion to accept the Maintenance Bonds as well as the Performance Bond as presented to the Board by the Surveyor. Ruth Shedd seconded the motion. The aforementioned Bond's were accepted as presented.

Steve Murray

The Surveyor informed the Board he and the Drainage Board Secretary would be meeting with the Montgomery County Drainage Board at their July 24th, 2006 regular meeting to discuss the eight joint drains which serve both counties at their request. He invited the Board members to attend as well if their schedules allowed. The Surveyor noted Montgomery County Drainage Board members have attended Tippecanoe County Drainage Board Meetings in the past and they have been working this past year diligently to improve their drain record keeping. T

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

Ruth Shedd, President

John Knochel, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
July 5, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

John Knochel made a motion to approve the June 7th, 2006 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The June 7th, 2006 Drainage Board meeting minutes were approved as written.

Park 350 Subdivision

Brandon Fulk appeared before the Board to request final approval for Revised Park 350 Subdivision project. The site is located south of County Road 350 South, west of the intersection C.R. 350 South and U.S. 52. The site consists of approximately 137 acres. The north half drains north to the C.R. 350 South side ditch- ultimately draining to the southern portion of the J.N. Kirkpatrick Regulated Drain and the south half drains directly to the tile system of the Upper J.N. Kirkpatrick Regulated Drain. Infrastructure to support industrial development was proposed. A channel reconstruction along the regulated drain would provide an outlet for the majority of the Stormwater runoff within the subdivision.

Brandon stated final approval with conditions was obtained last year, however an alternate design is presently proposed based on the Upper J.N. Kirkpatrick Regulated Drain Reconstruction. The northern portion of the site would now drain directly to an onsite pond. Brandon referred to the Variances and Encroachments listed on the June 30, 2006 Burke review memo. Item #1: The slope of the pond to the south would have a 6:1 side slope and maintenance ledge included. This would be updated on the plans. The 20 feet embankment would also be provided as required in Item #2 of the conditions. He referred to the Stormwater Quantity conditions. Item #2: The appropriate documentation of ownership would be provided for the record and clarification and they concurred with item #2 of the Stormwater Quality section. Electric and Gas Encroachment Agreements would be forthcoming. He stated they concurred with said review memo and requested final approval for the revised plans of the Park 350 Subdivision. In response to the Surveyor's inquiry, Brandon stated Pond 300 was designed to accommodate additional development in the area. The drainage runoff route of future development to the pond had not been determined to date and would be submitted for review as the Ordinance required. The Surveyor recommended final approval with the conditions as stated on the June 30, 2006 Burke memo. John Knochel made a motion to grant final approval with the conditions as stated on the June 30, 2006 Burke memo for Park 350 Subdivision. Ruth Shedd seconded the motion. Park 350 Subdivision was granted final approval with the conditions as stated on the June 30, 2006 Burke memo.

Alexander Ross Regulated Drain#68/Petition for Encroachment

The Surveyor reviewed a Petition to Encroach on the Alexander Ross Regulated Drain #68 for the Board. A water main line would be constructed approximately 5 feet below the bottom of ditch in order to provide service for Lot 7A in 26 Crossings Subdivision south of Lafayette Business College and PEFCU in 26 Crossing Subdivision. He recommended granting the encroachment to TK Constructors Petitioners. John Knochel made a motion to grant the Encroachment Petition on the Alexander Ross Regulated Drain #68 as presented. Ruth Shedd seconded the motion. The Petition to Encroach on the Alexander Ross Regulated Drain was granted to TK Constructors, Petitioners.

Upper J.N. Kirkpatrick Regulated Drain #46 Improvements

The Surveyor stated multiple meetings had been held with the Upper JN Kirkpatrick Regulated Drain property owners since early fall of last year regarding property issues. Due to present and future development in the area the original regional detention concept was no longer planned. A new open ditch would be constructed which would provide a positive outlet for the area. The individual property owners would provide their own detention as they develop their property. The Surveyor then noted the Board declared the area a Drainage Impact Area this year. The documents for reconstruction were complete, a wage scale had been obtained and the project would be offered for bid in the coming weeks. The County Highway would

construct the culvert on County Road 450 East over the proposed ditch. In addition the gas company agreed to relocate the high-pressured lines at their own expense. The contractor bidding on the new school site was interested in obtaining some of the dirt for that project site. The Surveyor stated the project was on schedule to receive BIDS at the August Drainage Board Meeting. John Knochel made a motion to approve the Upper JN Kirkpatrick Regulated Drain #46 Improvement Plans and the Drainage Board to sign the cover sheet of the plans as submitted by the Surveyor in addition to the acceptance of BIDS on August 2, 2006 at 10 a.m. Ruth Shedd seconded the motion. The Board would sign the Upper JN Kirkpatrick Regulated Drain #46 Improvement Plans and the acceptance of BIDS for the Upper J.N. Kirkpatrick Regulated Drain #46 was scheduled for August 2, 2006 at 10 a.m.

J. Berlowitz Regulated Drain #8 Regional Detention Agreement Phase 1/ Eastland Development

The Surveyor stated he had hoped to present a final Agreement concerning the J. Berlowitz Regulated Drain #8 Regional Detention Phase 1 with Eastland Development; however it was not ready at this time. He stated he had met with Mr. Derrin Sorenson, President of Eastland Development and Mr. Bill Davis last week and reached an agreement. He informed the Board the County would gain land south of the proposed pond at the southeast corner of 50 South and 550 East. Eastland Development's desire was that the excess property would be turned over to the County Parks Department for area residents. He had thought the agreement would be available to be approved by the Board this a.m., however, he requested a recess of the meeting until July 7, 2006 at 11:30 a.m. The Attorney stated he would review the agreement in the interim and felt his presence would not be necessary for the Board to sign.

Maintenance Bonds/Letter Of Credit

Raineybrook Pt 2 Sec 2 Ph 1/L.O.C.#600/Raineybrook LLC/Dated July 3, 2006

Retreat at Hickory Ridge Maint. Bond #1750832/\$14580.00/Atlas Exc. /Dated Sept. 7, 2005

The Surveyor presented the following maintenance Bonds for acceptance by the Board: Raineybrook Pt 2 Sec 2 Ph 1: Letter of Credit #600 from Raineybrook LLC dated July 3, 2006 in the sum of \$8686.00 and the Retreat at Hickory Ridge Maintenance Bond #1750832 from Atlas Excavating dated Sept. 7, 2005 in the sum of \$14580.00. John Knochel made a motion to accept the Raineybrook Pt 2 Sec 2 Ph 1 Letter of Credit #600 from Raineybrook LLC dated July 3, 2006 in the sum of \$8686.00 as well as Retreat at Hickory Ridge Maintenance Bond #1750832 from Atlas Excavating dated Sept. 7, 2005 in the sum of \$14580.00. Ruth Shedd seconded the motion. Raineybrook Pt 2 Sec 2 Ph 1 Letter of Credit #600 from Raineybrook LLC dated July 3, 2006 in the sum of \$8686.00 and Retreat at Hickory Ridge Maintenance Bond #1750832 from Atlas Excavating dated Sept. 7, 2005 in the sum of \$14580.00 was accepted by the Board.

Public Comment

As there was no public comment, KD Benson stated the meeting would be recessed until July 7, 2006 at 11:30 a.m.

July 7, 2006 11:30 A.M.

KD Benson called the recessed meeting back to order. Drainage Board Vice President John Knochel, County Surveyor Steve Murray, and Drainage Board Secretary Brenda Garrison were also in attendance. Commissioner Ruth Shedd, Drainage Board Attorney Dave Luhman and Dave Eichelberger Engineer Consultant were absent.

Eastland Development/Agreement

KD Benson stated the recessed meeting was due to finalizing the Eastland Development Agreement with the Drainage Board for the Berlowitz Regulated Drain #8 Regional Drainage Phase 1 project. The Surveyor then informed the Board the Berlowitz Regulated Drain #8 Regional Reconstruction Phase 1 ran from I65 to C.R. 50 South and included the C.R. 550 East basin and C.R. 50 South basin. The agreement contained several Exhibits (A through E) and detailed the work to be done and the land which would be granted to the Board by Fee Simple or Drainage Easement. It also detailed the amount of excavation to be placed on Eastland Development property south of the proposed Regional Detention Basin, (property known as Hawthorne Lakes, Hawthorne Meadows) in addition to credits the Development would receive for detention storage. He stated the agreement would provide a savings to the taxpayer of approximately 2 million dollars from the original cost of the project and allow the Contractors developing the Clarian Arnett Hospital site to remove excess dirt from the Eastland Development LLC site and transport to the Clarian site. He recommended the Board sign the agreement with Eastland Development LLC and Saddlebrook Development LLC. KD Benson noted the Attorney had approved the agreement to

form. John Knochel made a motion to approve the said agreement between the Board and Eastland Development and Saddlebrook Development LLC. KD Benson seconded the motion. The agreement was approved as presented by the Surveyor. John Knochel made a motion to recess the meeting to sign the agreement on July 11th, 2006 at 11 A.M. KD Benson recessed the meeting until July 11, 2006 at 11 A.M.

July 11, 2006 11:00 A.M.

KD Benson called the recessed meeting back to order. Drainage Board Vice President John Knochel, Commissioner Ruth Shedd member, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman and Secretary Brenda Garrison were in attendance as well.

The Surveyor stated he met with Milestone and Kettelhut as well as Roger Fine from Fisher & Associates concerning the logistics of removing the dirt and stockpiling. An additional meeting was scheduled today to finalize the details of the excavation process. He noted, as built plans would be provided to the County once the excavation was completed. The County Highway would attend today's meeting as well. The Surveyor would request a letter of understanding from Kettelhut and Milestone Contractors for the project at that time. In response to KD Benson's inquiry, the Surveyor informed the Board a Waiver and Release had been obtained from Milestone Contractors releasing the Drainage Board from any liability during the excavation process. He noted the Clarian Arnett Hospital project had received approval for mass grading only from the Board and the project would be presented to the Board at a later date for final approval.

In response to Dave Luhman's inquiry, the Surveyor stated it was the intention to have the grading for the Berlowitz Regulated Drain #8 Regional Detention Phase 1 project completed by July or August and hoped to have the contract documents ready to let out for BIDS by early fall this year.

John Knochel made a motion to adjourn the meeting. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
August 2, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

John Knochel made a motion to approve the July 5, 2006 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The July 5th, 2006 Regular Drainage Board meeting minutes were approved as written.

Steve Murray /Maintenance Bonds

The Surveyor presented the following Maintenance Bonds for acceptance by the Board; Battlefield Heights Ph.1- Maintenance Bond#1003898 in the amount of \$36500.00 from Gunstra Builders and dated January 5, 2004, Wake Robin II - Maintenance Bond#400SH0474 in the amount of \$8000.00 from Atlas Excavating dated January 1, 2004, Shawnee Ridge Ph. 2- Maintenance Bond #400SF2463 in the amount of \$14883.00 from Atlas Excavating dated January 1, 2004.

John Knochel made a motion to accept Battlefield Heights Ph.1- Maintenance Bond#1003898 in the amount of \$36500.00 from Gunstra Builders and dated January 5, 2004, Wake Robin II - Maintenance Bond#400SH0474 in the amount of \$8000.00 from Atlas Excavating dated January 1, 2004, Shawnee Ridge Ph. 2- Maintenance Bond #400SF2463 in the amount of \$14883.00 from Atlas Excavating dated January 1, 2004. Ruth Shedd seconded the motion. Battlefield Heights Ph.1- Maintenance Bond#1003898 in the amount of \$36500.00 from Gunstra Builders and dated January 5, 2004, Wake Robin II - Maintenance Bond#400SH0474 in the amount of \$8000.00 from Atlas Excavating dated January 1, 2004, Shawnee Ridge Ph. 2- Maintenance Bond #400SF2463 in the amount of \$14883.00 from Atlas Excavating dated January 1, 2004 were accepted as presented.

Upper JN Kirkpatrick Regulated Drain #45 Improvement BIDS

The following Contract Bids for the Upper JN Kirkpatrick Regulated Drain #45 Improvement Project were opened by Attorney Dave Luhman and read to the Board. Two packets were submitted, the first Bid was from Fairfield Contractors Inc. in the amount of \$1,526,224.00 and the second Bid from F&K Construction Inc. was in the amount of \$1,885,803.00. The Attorney recommended the Bid packets be taken under review for compliance of specifications. John Knochel made the motion to take the Bids submitted under advisement. Ruth Shedd seconded the motion. The Surveyor stated the Engineers Estimate totaled \$1,849,896.00 for the project. The Attorney stated the Bids would be taken under advisement and reviewed for compliance of specifications. KD Benson noted they would be located in the Surveyor's office for public viewing. The Surveyor asked the Board to award the contract as soon as possible. He added there was Right of Entries to be acquired and hoped to complete the improvement project by end of the 2006. The Attorney advised to recess today's meeting to a later date. Ruth Shedd suggested Monday August 7, 2006 at 9:50 a.m. prior to the scheduled Commissioners meeting.

Other Business

The Surveyor informed the Board he received a signed agreement from Mr. Sorenson of Eastland Dev. and Saddlebrook Dev. regarding the Berlowitz Regulated Drain Regional Detention facility.

Public Comment

As there was no public comment, John Knochel made a motion to recess the meeting to August 7, 2006 at 9:50 a.m. Ruth Shedd seconded the motion. The meeting was recessed to August 7, 2006 at 9:50 a.m.

August 7, 2006

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, and Drainage Board Secretary Brenda Garrison were present. Attorney Doug Masson was attending for Drainage Board Attorney Dave Luhman.

President KD Benson called the meeting back to order.

Upper JN Kirkpatrick Regulated Drain #45 Improvements/ Contract Acceptance

The Surveyor noted he had tabulated the itemized proposals for the Bids received and confirmed Fairfield Contractors Inc. was the lowest submitted. All required contract documents were in order.

John Knochel made a motion to accept Fairfield Contractors Inc. Bid of \$1,526,224.00 for the Upper JN Kirkpatrick Regulated Drain Improvements project. Ruth Shedd seconded the motion. Fairfield Contractors Inc. was awarded the contract for the Upper End of the JN Kirkpatrick Regulated Drain Improvements. The Surveyor noted a Notice to Proceed letter would be mailed to Fairfield Contractors upon receipt of the signed Right of Entry documents.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board

Minutes

August 17, 2006

Special Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Clarian Arnett Hospital

Jon Perry of Gresham Smith and Partners appeared before the Board to request final approval for the Clarian Arnett Hospital project. Mr. Perry thanked the Board for the Special Hearing and specifically for Dave Eichelberger, Engineer Consultant and Surveyor Steve Murray's assistance. The overall site consisted of 115 acres located east of County Road 500 East south of McCarty Lane. This portion of the project would develop approximately 62 acres of the 115 acre site and include a new hospital building, a medical office building, powerhouse, parking lots, access drives, storm sewer, utility infrastructure, and water quality basins. Under existing conditions, Stormwater sheet flows to the Julius Berlowitz Regulated Drain. He noted they were working diligently to address the August 15, 2006 Burke memo comments completely.

Dave Eichelberger stated the following pertaining to situation with Caterpillar Logistics: According to the Ordinance, emergency routing must not impact adjacent property owners. Along the south property line there is a road which T's and in that general area there is a sag inlet where approximately 7 acres of developed land runs to the sag. When the sag can not handle the discharge it would overflow and run into a small pond. That pond could pond up approximately six feet deep and is drained by a pipe which would route it back into the system. If that pond were to overtop, it would break out and run into a wetland area alongside County Road 500 East. That area would then have to fill up approximately a foot to break into the Caterpillar Logistics' Center pond. Technically, it is preferred that all emergency routing flow directly to the outlet or to the ponds and then the outlet. In this situation they have done as best as they could. They have two back up systems for the overflow, as a result it would have to pond in the street, pond in the pond for six feet (which is going to be drained) then break out and pond in the wetland- then it would finally flow into the Caterpillar Logistics Center pond. Dave added he suggested to Mr. Perry and Brian Elmore they notify Caterpillar Logistics Center that emergency overflow into the pond was a possibility in very infrequent storms. Mr. Perry noted that there was a second area where a backup emergency overflow system designed from the dock area draining to the east and stated there would have to be really significant almost total failure of the system in two locations. Dave Eichelberger noted a trench drain was designed to drain the dock area as well as another pipe a little higher so if the dock area was to flood, it would be conveyed to the ponds on the east side. Dave felt with the two back up systems in place and their notification to Caterpillar that they were doing all they could to get the water to their outlet Dave Eichelberger then stated in the existing conditions four acres drained to the Caterpillar site and with the developed conditions it would be seven acres with two back up systems in place. The Surveyor then asked what the discharge would be before and after, Dave stated it would be difficult to determine right now. The Surveyor stated a provision was in the Ordinance (i.e. notification to downstream owners) due to historical problems over the years with post development impact to downstream owners. In response to KD's inquiry, Brian Elmore stated he asked for confirmation from Caterpillar of his notification. The attorney reiterated the provision allowed downstream owners the opportunity to voice concerns at the time a development appeared before the Board for approval. He noted Mr. Elmore stated Caterpillar was notified of the situation, the meeting today and requested confirmation of the notification. The Surveyor noted the emergency overflow was going into a previously approved detention facility which outlet to a storm sewer system along County Road 550 East installed by the City of Lafayette. Mr. Perry reiterated only in the event of a complete failure of two systems and a large rainfall would they potentially discharge onto Caterpillar site. John Knochel noted the Board, Clarian Arnett and Caterpillar Logistics were all aware of the situation. The Surveyor stated the August 15, 2006 under "General Conditions" comment No. 5 stated "All listed conditions must be completely addressed before any drainage infrastructure can be installed at the site, and before final plan approval and sign-off will be granted by the County Surveyor's Office." He recommended final approval with all the conditions as stated on the August 15, 2006 Burke memo as well as the added conditions: Receipt of confirmation from Caterpillar Logistics regarding the seven acre discharge, and analysis of the 72" pipe including the entire watershed drainage be completed to insure the proposed pond in the northwest corner would perform as designed presently

and to check for variable tail water conditions including the downstream analysis into the Berlowitz(as stated by Dave Eichelberger). John Knochel made a motion to grant final approval with the conditions as stated on the August 15, 2006 Burke memo as well as the analysis of the 72" pipe and receipt of confirmation of notification from Caterpillar Logistics. Ruth Shed seconded the motion. Clarian Arnett Hospital was granted final approval with conditions.

Steve Murray
Hadley Moors Part 7

The Surveyor stated the April 5, 2006 approved minutes regarding Hadley Moors Part 7 indicated he stated a Homeowners Association was to be formed for the entire Hadley Moors Subdivision. However during those minutes he encouraged a Homeowners Association for the entire Subdivision. He was in the process with the Board Attorney; Mr. Lux and Mr. Fine of potentially making the Subdivision's storm sewer system a regulated drain opposed to forming a Homeowners Association for the entire subdivision. He stated for clarification it was NOT mandatory to form a Homeowners Association for the entire subdivision; however it was mandatory to show proof of a Homeowners Association was established for Hadley Moors Part 7.

Upper JN Kirkpatrick Regulated Drain

The Surveyor updated the Board concerning the improvements to the Upper End JN Kirkpatrick Regulated Drain. Right of Entry letters were mailed last week. DF Properties and Daugherty Farms were signed and returned to date. Mr. Paul Kirkpatrick had requested a letter which stated the Board would be willing to vacate the existing 150 feet tile easements pertaining to those sections of the existing JN Kirkpatrick tile left in place after the improvements had been made (the alignment of the new open ditch will not be exact over top of existing tile as the "runs" will be perpetuated and tied into the new open channel). As new developments are completed those existing tiles will be picked up and combined into their storm sewer systems or abandoned as needed. The letter was sent out to those landowners affected.

Gambs Property

The Surveyor stated the tract lies (generally) east of Concord Road (County Road 250East) and north of Brady Lane (County Road 250 South) and runs east to the County Highway Garage and Extension Office property. It is located in the City of Lafayette. The Surveyor made a site visit in regard to the regulated drain. It appeared they had placed fill within the regulated drain easement (the easement was 75 feet from top of bank on both sides) in some areas, based on the limits of a flood plain stated in a 1994 letter requested by Schneider Engineering to I.D.N.R. of delineation of the floodplain and floodway. By those elevations noted, the owner had placed fill in the floodway and floodplain. Also fill had been placed on the additional ground acquired by the Board of Commissioners to the west of the County Highway garage. There was potential to cause problems upstream up to and to include the Board of Commissioner's properties. In response to KD's inquiry, the Surveyor stated he was unaware of an existing permit. The Attorney stated they did not have the right to place dirt on the County's property without permission. The County should notify the Department of Natural Resources concerning filling in of the floodway and note it was not done by the County or with the County's permission. The Attorney stated he would make a site visit and prepare the appropriate notification.

Robinson Ridge Minor Subdivision

KD informed the Surveyor during Area Plan's meeting the previous evening, an adjoining landowner raised drainage concerns regarding Robinson Ridge Minor Subdivision. The Area Plan Commission suggested the landowner contact the Surveyor office with her drainage concerns. KD suggested it may warrant the project to be presented to the Drainage Board for approval and wanted to inform the Surveyor of possible contact by the landowner to his office.

Public Comment

Brian Elmore expressed his appreciation for the Board's cooperation with Arnett Health Systems regarding the Clarian Arnett Hospital project. The Surveyor noted Arnett Health Systems' role in receiving approximately 380,000-400,000 cubic yards of dirt from the Berlowitz project which resulted in a substantial savings to the County. John Knochel made the motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
September 6, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, member Ruth Shedd, County Surveyor, Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Drainage Board Vice President John Knochel was absent at the start of the meeting and entered the meeting in progress -*see notation of entrance.

Approval of Minutes

Ruth Shedd made a motion to approve the August 2, 2006 Regular and August 17, 2006 Special Drainage Board minutes as written. KD Benson seconded the motion. The August 2, 2006 and August 17, 2006 Drainage Board meeting minutes were approved as written.

Dairy Queen

Brandon Fulk with Schneider Engineering Corporation appeared before the Board to request final approval for Dairy Queen located within the Creasy at the Crossing Subdivision and the City of Lafayette specifically at the intersection of Bonlou Drive and S.R. 38 southeast of the intersection of Creasy Lane and S.R. 38. It will have an indirect outlet to Branch 13 of the S.W. Elliott Regulated Drain. Creasy at the Crossing development was approved by the Drainage Board in April of 2000. The Stormwater runoff will be directed into a previously approved storm sewer infrastructure for Creasy at the Crossing Subdivision. The original entrance design for the project was pulled and would be submitted at a later date. There was no public comment.

The Surveyor noted the purpose of the Board's review was solely the release rate to Branch #13 of the S.W. Elliott Regulated Drain. Historically when projects are located within the City limits, a review of the release rate to a regulated drain was the primary reason for Board approval. However he felt water quality should be reviewed as well. Therefore the City should provide proof the project met the Stormwater Pollution Prevention Plan as well as the Post Construction Water Quality devices or plan. He recommended final approval with the conditions as stated on the August 31, 2006 Burke memo in addition to the proof from the City the project met the Stormwater Pollution Prevention Plan as well as the Post Construction Water Quality devices or plan.. Ruth Shedd made a motion to grant final approval of the Dairy Queen project with the conditions listed on the August 31, 2006 Burke memo and written proof from the City of approval of the project's Stormwater Management Plan.

Greater Lafayette Health Services (GLHS)/ Mass Earthwork and Grading

Jim Shallenberger of BSA Life Structures appeared before the Board to request approval for the mass earthwork and grading only of the Greater Lafayette Health Services project. The property was being annexed by the City of Lafayette and would be located within the limits in the near future. The earthwork consisted of approximately 57 acres of the overall 103 acre site located on the east side of Creasy Lane between McCarty Lane (C.R. 100 South) and Haggerty Lane (C.R. 200 South). The site will have a direct outlet to the Treece Meadows Regulated Drain to the north and an indirect outlet to S.W. Elliott Regulated Drain to the south. An onsite detention pond was proposed in the northwest corner of the site to restrict the flow to the Treece Meadows Regulated Drain.

Dave Luhman stated the Drainage Board was in receipt of a request from the City of Lafayette dated September 1, 2006 regarding the project site annexation (effective November 13, 2006) and requesting City of Lafayette authorization to review and approve final drainage plans on the project. The Drainage Board would have the authority prior to the November 13, 2006 date. The Surveyor stated he was in contact with the City of Lafayette's Engineers Office concerning the project. He stated given the fact the site will be annexed, the city should review the project. The County will be reviewing the release rates to the two Regulated Drains as well as the Stormwater Quality provisions. He stated the release rates were not being approved today only the mass earthwork and grading. Crystal Joshua City Engineer Assistant approached the Board at that time and stated the City approved the mass earthwork and grading plans prior to a final approval of the plans. There was no public comment.

Ruth Shedd made a motion to grant final approval of the mass earthwork and grading for the Greater Lafayette Health Services (GLHS) project with conditions as stated on the August 31, 2006 Burke memo. KD Benson seconded the motion. Ruth Shedd made the motion to authorize the City of Lafayette to review and recommend approval regarding the drainage plans before the November 13, 2006 annexation. KD Benson seconded the motion. Greater Lafayette Health Services (GLHS) was granted final approval for the mass earthwork and grading only with conditions as stated on the August 31, 2006 Burke memo. The City of Lafayette was granted authority to review plans submitted prior to the November 13th annexation. The Surveyor stated once the final plans were complete a submittal to the Drainage Board would be required for review and approval of the release rates to the Treece Meadows and S.W. Elliott Regulated Drains.

Stanfield Ridge Rural Estates Subdivision

Paul Coutts with C & S Engineering appeared before the Board to request final approval for the Stanfield Ridge Rural Estates Subdivision. The site consisted of approximately 56 acres located northwest of the intersection of C.R. 600 West and S.R. 26. The project site drained easterly and southerly to Indiana Creek and westerly to Goose Creek. Detention ponds would be located in Outlots A, B, D and E. A swale would be constructed to route the northern offsite runoff around the proposed lots to Goose Creek. The on and offsite areas drained to Indian Creek crossing C.R. 600 West or S.R. 26 at existing culverts. Areas draining to Goose Creek were discharged into the stream on the north side of S.R. 26. Vegetative Buffer strips and swales would be utilized throughout the subdivision. Most of the site's existing haul roads used previously during the construction of S.R. 26 would be utilized for the subdivision.

*John Knochel entered the meeting at this time.

KD Benson invited public comment. Landowner, Michael Sum approached the Board and asked about sewage plans for the area. Paul Coutts stated the lots would have septic systems and noted to date the Board of Health had approved Section 1 (lots 1-12). In response to Mr. Sum's inquiry, he indicated the location of the detention ponds on the plans and noted release rates would not be greater than required by the ordinance. Dave Eichelberger explained the ordinance regulations regarding release rates. There would be a slower rate of release through the pipes for a longer period of time due to detention storage in the ponds. Bill Sum then approached the Board stating he had lived in the area for 18 years and asked if the development would cause Goose Creek to go dry. Dave Eichelberger stated, in the direction of Goose Creek they left the drainage patterns the same and leaving the trees virtually the same, the calculations show no increase or volume in that direction so the Creek should not go dry. The drainage calculations indicate discharge or volume would not be increased. In response to landowner Kathy Koslowski's inquiry, Paul Coutts stated most of the trees would be left undisturbed throughout the Subdivision and Covenants would also address tree preservation. The Surveyor stated an additional review of the tree preservation along the Creek's banks was warranted to insure the bank's stabilization. Responding to Michael Sum's inquiry, the Surveyor noted the Board strongly encouraged consultants to leave existing trees along creek banks to reduce erosion. He then recommended final approval with the conditions as stated on the September 1, 2006 Burke memo in addition to finalizing tree preservation easements with the project consultant on lots 14 through 18 of said subdivision. Ruth Shedd moved to grant final approval on Stanfield Ridge Rural Estates Subdivision with the conditions listed on the September 1, 2006 Burke memo as well as the Surveyor to meet with the project consultant and finalize tree preservation for the aforementioned lots. John Knochel seconded the motion. Stanfield Ridge Rural Estates Subdivision was granted final approval with the conditions listed on the September 1, 2006 Burke memo as well as the Surveyor to meet with the project consultant and finalize tree preservation for the aforementioned lots.

Best Way Disposal

Justin Frazier with T-Bird Designs appeared before the Board to request final approval for Best Way Disposal. The site consisted of approximately 10 acres located east of the intersection of C.R. 350 South and C.R. 500 East and on the south side of C.R. 350 South. A portion of Branch 9 of the S.W. Elliott Regulated Drain was located on the north property line south of C.R. 350 South and the project had an indirect outlet to said Branch. The drive and swale outlets encroached into Branch 9 of the S.W. Elliott Regulated Drain. The swales would convey Stormwater north to the roadside ditch. Due to the encroachment of the entrance drive and swale outlets a Petition to Encroach was submitted for approval. Justin also requested a reduction of the Branch 9 S.W. Elliott Regulated Drainage Easement from 75 feet to 40 feet. He stated due to the restriction of the capacity of the existing tile and culvert which conveyed runoff across the road, a detention pond would be incorporated at the northeast corner of the site. Trash operations would be inside the building and taken offsite for disposal. KD Benson asked for public comment and there was none. The Surveyor reviewed the project site area for the Board utilizing G.I.S. He stated during the 1990's Phase IV C.R. 350 South Reconstruction, Branch 9 of the S.W. Elliott Regulated Drain was reconstructed as well. It ran parallel just inside the south right of way of the new road construction. He added this area does not have a very good positive outlet. The road side ditches, through a series of cross pipes from south to north, eventually end up in a 24 inch concrete storm sewer along the north side of C.R. 350 South Phase IV which ultimately discharges into the

main tile branch of the S.W. Elliott Regulated Drain at the northwest corner of C.R. 350 South and Newcastle Road. The onsite detention was planned in order to release their proportionate share of runoff. In addition the project site would be primarily grass which should lessen the impact overall to the C.R. 350 South storm sewer system as well as the main branch of the S.W. Elliott Regulated Drain. Responding to Steve's inquiry, Justin stated drain lines within the building would pump trash liquid into a 10,000 gallon onsite storage tank before removal from the site.

The Surveyor recommended approval of the Petition to Encroach on Branch 9 of the S.W. Elliott Regulated Drain Easement. John Knochel made a motion to approve the Petition to Encroach on Branch 9 of the S.W. Elliott Regulated Drain Easement. Ruth Shedd seconded the motion. The Petition to Encroach on Branch 9 of the S.W. Elliott Regulated Drain Easement was granted. The Surveyor recommended approval for the request to reduce the Branch 9 of the S.W. Elliott Easement from 75 feet to 40 feet. John Knochel made a motion to grant a reduction to Branch 9 of the S.W. Elliott Regulated Drain Easement from 75 feet to 40 feet. Ruth Shedd seconded the motion. The reduction to Branch 9 of the S.W. Elliott Regulated Drain Easement from 75 feet to 40 feet was granted. The Surveyor recommended final approval with conditions as stated on the August 31, 2006 Burke memo. John Knochel made a motion to grant final approval with conditions as stated on the August 31, 2006 Burke memo to Best Way Disposal. Ruth Shedd seconded the motion. Best Way Disposal was granted final approval with the conditions as stated.

Steve Murray
Petition to Encroach/J.N. Kirkpatrick Ditch/City of Lafayette

The Surveyor stated he received a Petition for Encroachment on a Regulated Drain Easement regarding the J.N. Kirkpatrick Regulated Drain from the City of Lafayette owner of the Elliott Interceptor Sewer. The City of Lafayette had relocated the sanitary sewer. The Surveyor reviewed the plans and the relocation was well under the existing tile and open portion of the Regulated Drain, therefore he recommended approval of the submitted Petition. John Knochel made a motion to approve the Petition to Encroach on the J.N. Kirkpatrick Regulated Drain submitted by the City of Lafayette for the Elliott Interceptor Sewer. Ruth Shedd seconded the motion. The Petition to Encroach on the J.N. Kirkpatrick Regulated Drain submitted by the City of Lafayette for the Elliott Interceptor Sewer was granted.

Maintenance Bond #0000781/Menards

The Surveyor presented a Maintenance Bond in the amount of \$54915.00 numbered 0000781 submitted by Kreager Brothers Excavating for Menards at C.R. 300 West and U.S. 52 and dated March 1, 2006 for acceptance. He recommended the acceptance of the aforementioned bond. John Knochel made a motion to accept Maintenance Bond #0000781 in the amount of \$54915.00 submitted by Kreager Brothers Excavating for Menards (C.R. 300 West and U.S. 52) and dated March 1, 2006. Ruth Shedd seconded the motion. Maintenance Bond#0000781 submitted by Kreager Brothers Excavating for Menards (C.R. 300 West and U.S. 52) in the amount of \$54915.00 dated March 1, 2006 was accepted by the Board.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
September 25, 2006
SPECIAL Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Project Manager Zachariah Beasley. Drainage Board Secretary Brenda Garrison was absent.

**Upper JN Kirkpatrick Regulated Drain Improvement Project
Right of Entries**

The Surveyor presented Right of Entry documents regarding the Upper JN Kirkpatrick Regulated Drain Improvement project. The following Right of Entry documents were presented and signed by those listed as follows: Paul D. Kirkpatrick, Porter D. Kirkpatrick, Jr. Key #'s 146052000028-146052000248 signed by Paul D. Kirkpatrick as owner and as Guardian for Porter D. Kirkpatrick Jr.; R&A Lahrman Farms Inc. Key# 146052000039 signed by Audrey M. Lahrman President; Mary Daugherty Key #'s 146051000205-146051000040-146052000314 signed by Constance Standiford, Power of Attorney for Mary Daugherty; DF Properties LLP Key #'s 146052000040,146048000109 signed by Constance Standiford, Power of Attorney for Mary Daugherty; Lafayette Union Railway Company Key #'s 146049000482-146050000140-146050000570-144016000030-,146051000029 signed by E. Dana Smith, President.

John Knochel made a motion to approve the Right of Entry documents as presented by the Surveyor. Ruth Shedd seconded the motion. The Right of Entry documents were approved by the Board as presented by the Surveyor.

**Upper JN Kirkpatrick Regulated Drain Improvement Project
Performance and Payment Bonds**

The Surveyor presented Performance Bond #3481666 issued by Great American Insurance Company dated September 4, 2006 in the amount of \$1,526,244.00 and Payment Bond #3481666 issued by Great American Insurance Company dated September 4, 2006 in the amount of \$1,526,244.00 both signed by Paul D. Kirkpatrick President of Fairfield Contractors Inc. regarding the Upper JN Kirkpatrick Regulated Drainage Improvements project. He requested acceptance by the Board of the said Bonds. He then presented a Certificate of Liability Insurance document issued to Fairfield Contractors Inc. by Mitchell Agency Inc. for said project in accordance with the Upper JN Kirkpatrick Regulated Drain Improvements contract requirements. He recommended acceptance of said Bonds and Certificate of Liability. John Knochel made a motion to accept the bonds and certificate of liability as presented by the Surveyor. Ruth Shedd seconded the motion. The Performance and Payments Bonds as well as the Certificate of Liability were accepted by the Board.

KD Benson, President

John Knochel, Vice President

Zachariah Beasley, Project Manager

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
October 4, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Vice President John Knochel was absent at the start of the meeting and entered at a later time during the meeting (see notation of entrance).

Approval of Minutes

Ruth Shedd made a motion to approve the September 6th, 2006 Regular Drainage Board minutes as written. KD Benson seconded the motion. The September 6th, 2006 Drainage Board meeting minutes were approved as written.

Faith Baptist Church /Vision of Hope

Brandon Fulk of Schneider Corporation appeared before the Board and requested final approval for the Faith Baptist Vision of Hope project. The site was located at the northeast corner of SR 26 and CR 550 East. This project was part of the overall master plan for the Faith Baptist Community Church Campus. He stated they have yet to record the Commercial Master Covenant to allow revisions to encompass all facilities for Stormwater; however they would record once all language was approved by the Surveyor. Brandon stated they concurred with the September 28, 2006 Burke memo and requested final approval. The Surveyor stated they had met the terms of the ordinance regarding Stormwater Quantity and Quality and the project was in line with the Master plan previously submitted. He recommended final approval with conditions as stated on the September 28, 2006 Burke memo. Ruth Shedd made a motion to grant Faith Baptist Church Vision of Hope final approval with conditions as stated on the September 28, 2006 Burke memo. KD Benson seconded the motion. Faith Baptist Vision of Hope was granted final approval with conditions as stated on the September 28, 2006 Burke memo.

Duke Energy/Westwood Substation

Bill Taylor Duke Energy Biologist approached the Board to give an explanation for their recent violation of the Stormwater Ordinance. The site was located on the east side of CR 500 West south of SR 26. He began by stating, as a biologist by nature he has not dealt with the rules associated with a MS4 area prior to this project. He handled Stormwater as he had in the past with typical Stormwater rules. He waited 30 days had no answer and submitted information to IDEM. He then waited 48 hours and informed Project Engineers they may begin construction. The soil had been disturbed when he was informed by letter from the Surveyor's Office stating they were in violation of the Stormwater Ordinance. He stated he had received an email from IDEM which stated he was out of compliance however due to the misunderstanding they would not require them to stop construction. He noted, during this entire process they had silt fencing up and conducted weekly inspections to insure sediment did not leave the site. He felt at the time they were doing everything they could and he felt they should continue to get the site "under control and not to leave it midstream during the construction". They then contacted Schneider Engineering for assistance with the project.

The Surveyor stated IDEM gave authority to Tippecanoe County regarding enforcing and inspecting of Rule 5 and Rule 13 when outside corporate limits. He requested a copy of the correspondence from IDEM which Mr. Taylor referred to. Mr. Taylor agreed to provide the Surveyor a copy of the correspondence. The Surveyor noted if his office had been aware of the construction a stop work order would have been issued. Mr. Taylor reiterated they felt since the soil was already disturbed it was best to complete the construction at that time. He then turned the presentation over to Brandon Fulk of Schneider Corporation. Brandon stated the site drained west and north into existing swales prior to discharging to an unnamed tributary of Indian Creek. Runoff would not be increased due to the improvements made. He stated the notification to downstream landowners was completed. There were four discharge points from the site and all ultimately flow to the unnamed tributary. In response to KD's inquiry, Brandon stated their involvement in this project began after the construction had been started on the site.

Dawn Copas 1814 North 500 West approached the Board and stated she lived directly west of the project. She stated she did not feel the discharge point located between her property and the Dickman property would cause a problem. She asked since the developer was building west toward her property and CR 500 West if they would consider planting trees from the north

property line to the South property line to help beautify the area. Alvin Hood of 1738 North 500 West (immediately south of Dawn Copas) approached the Board and stated his concern regarding the percentage of runoff change to his property. Brandon stated there would not be a change of runoff relating to his property. Brandon noted photograph documentation of present drainage conditions were a part of the record.

KD stated the Stormwater Ordinance was one of the best in the State for Stormwater Quality and Quantity. The Board felt if they did not hold the developer responsible for a violation of the Ordinance, other violations would certainly occur. The Stormwater Ordinance clearly required a permit for construction. This was specifically to protect downstream landowners as well as the Stormwater quality. The Board had the legal authority how to pursue. A complaint of the infraction could be filed with the Court and a Judge would have to determine the fine. The Surveyor then stated the infraction was covered under Chapter 7 of the Ordinance and allowed for a fine of \$500.00 a day for the first offence and additional costs associated with the prosecution of the offense. However, he noted he would like to recommend a compromise for both parties. He needed to review the situation and the time frame involved. The Attorney stated the Surveyor may make a recommendation to the Board for a continuance to the December meeting regarding the fine. The Surveyor then stated perhaps an effort to do some screening along with a reasonable monetary fine would be in order. He stated this was the first project which he was aware of that proceeded without prior Drainage Board approval.

Ruth Shedd stated she was not ready to grant final approval with or without conditions. KD Benson was in agreement. Ruth Shedd made a motion to table the final approval request by Duke Energy for the Westwood Substation. KD Benson seconded the motion. Duke Energy Westwood Substation was tabled until the December Meeting of the Drainage Board.

The Surveyor then noted IDEM did have the authority to review Tippecanoe County's enforcement of Rule 5 and Rule 13. He also stated IDEM could impose a fine of \$27500.00 per to Tippecanoe County for non compliance of the Ordinance (not issuing a stop work order etc.). He stated he would meet with the proper representative of Duke Energy to reach a compromise acceptable to both parties.

Other Business

Upper JN Kirkpatrick Regulated Drain Improvement Inspection Contract

The Surveyor presented an Upper JN Kirkpatrick Regulated Drain Improvement part time construction observation contract from Christopher B. Burke Engineering LTD in the amount of \$72,590.00 for acceptance by the Board. Ruth Shedd made a motion to accept the Professional Services Contract for part time observations on the Upper JN Kirkpatrick Regulated Drain Improvement project not to exceed \$72,590.00. KD Benson seconded the motion. The Upper JN Kirkpatrick Regulated Drain Improvement Part Time Observation Professional Service Contract was approved not to exceed \$72,590.00.

Utilities/Phase II

The Surveyor stated in response to the Phase II Project Team (seven MS4 entities) workshops with local contractors, developers and builders a draft notification to Utilities was prepared. After infrastructure was complete on many developments the design community noted utilities would often come in and "tear everything up". The Current Stormwater Fee Ordinance declares a \$50.00 annual fee from the Utilities for an annual Utility Certification. This certification states the Utility was aware there was an overall Rule 5 or Erosion Control or Post Construction Plan for the development and they are responsible for their part in maintenance- be it a rural, residential or commercial development. Chapter 7 "Enforcement" of the Ordinance gives the County the right to fine when and a violation occurs. He provided the Board with example pictures from Hickory Hills Subdivision of violations from a Utility Company. In response to KD's inquiry, the Surveyor stated a Utility Maintenance Bond may be in order in the future if violations continue to occur. KD stated she was fine with the draft notification. The Attorney stated he would review the form.

Hickory Hills III Subdivision Phase1 Section 3/Drainage Swale

The Surveyor stated Hickory Hills III Subdivision Phase1 Section 3 was located north and east of CR 550 East and north of Faith Baptist Church Campus. The issue at hand was a drainage swale along the north end. A final inspection was done and a Maintenance Bond and Performance Bond were received from Farmers State Bank in Frankfort Indiana. The swale was constructed incorrectly. It was not built within the easement and built approximately three to four feet deeper than planned and is presently draining in the opposite direction than planned. The Surveyor noted as soon as this office was made aware of the problem an inspection was conducted by the Stormwater Coordinator. The Surveyor presented the Board with pictures of said swale. A house under construction (on lot 104) was directly affected by the the improper location and grade of the swale. The owner basically does not have a back yard due to the discrepancies. She was in attendance today.

The swale drained from the corner to the west however it was designed to drain from the high point to the east. The elevation of the bottom of the swale at the northwest corner of Lot 104 should have been 647.6 and was 644.6 and it was 20-25 feet wider than designed. Both the Surveyor and Stormwater Coordinator have had conversations with the bank regarding their obligations. He stated the As-Built plans did not note the differences. Generally, when a swale has not been built with the original design grade -per the approved construction plans- the designed grade is shown along with the as built grade on As-Built Plans. In this case one had to pull out the construction plans and compare them to the As Built plans. A memo from the Stormwater Coordinator to the Surveyor indicated Surveyor Robert Grove stated- in a phone conversation- Mr. John Smith (original developer) needed extra dirt to finish the project and instructed the contractor to enlarge the swale and take dirt from there. The Surveyor stated he felt it was in the Board's and his office' rights to force the developer to build the swale as designed. He noted he would contact the developer (now Farmers Bank), and if a less costly swale could be constructed yet drain the yards as designed, he would be willing to work it out. He added a swale 3-4 foot deeper and 20-25 feet wider is not satisfactory and should be reconstructed as designed. In response to KD's inquiry, the Surveyor noted the developer was aware no additional Building Permits would be issued until this issue was corrected.

Sue Zwyers potential homebuyer for Lot 104 approached the Board and expressed her concern. She stated this was her dream home. She noted the design of the house called for a large patio area however presently there is a huge drop off due to the swale. There is no location to pour the patio at this time. She requested the Board hold any future permits required for the home until a written guarantee of correction is obtained from the developer.

The Surveyor noted he had spoken with the home builder and Building Permits. He had given Mr. Robinson (home builder) his word that the Certificate of Occupancy on Lot 104 would not be held up. During that conversation, Mr. Robinson stated it was just a few feet drop off and not anything major. However at that time, the Surveyor did not have a full understanding of the situation. He visited the site prior to this morning's meeting. He then understood the severity of the situation. (He presented pictures taken onsite to the Board) He felt it was major and as a home buyer himself, he would also want a guarantee this problem would be fixed and the swale constructed to the approved original design. He stated in his opinion, there were two issues the Board had to deal with. The first issue was how to require the developer to correct the problem and second whether to hold the Certificate of Occupancy for this house. The Attorney stated a maintenance and performance bond was required for the project and noted the Performance Bond was conditioned that the work would be installed in" accordance with the standards, specifications and requirements of the Drainage Board". He reiterated the swale had not been installed according to the final approved drainage plan. The Maintenance Bond required the developer to maintain it in accordance with the final approved drainage plan. The Board could authorize the Surveyor on behalf of the Board to file a claim against the bank which is the surety of said bonds. He stated it was more economical for the bank to correct the problem than enter into a court proceeding. Regarding the issue of granting a future building permit for the existing home, if the swale is too close to the home and will cause potential damage to the property, than an occupancy permit should not be issued. The Attorney noted while the Performance Bond was issued specifically for a punch list per the Surveyor, he felt the language was broad enough that it also covered the construction of the swale. The Surveyor reiterated the difference on the plans in the design was not found until the construction plans were also reviewed and a comparison between the two sets of plans was made. He noted in the future due diligence would be taken so this type of problem did not arise again.

KD made a motion for the Attorney to inform the developer and/or bank the need to correct the problem or the Drainage Board would direct the problem corrected and file a claim on said bonds. Ruth Shedd seconded the motion. The motion carried. Ruth Shedd then asked if there was a time frame which this could be corrected since the potential home owner was waiting to close with her bank. She the homebuyer needed a guarantee to close the loan with her bank. The Surveyor recommended the Board direct that the Certificate of Occupancy's be placed on hold for the lots in Phase 1 Section 3 of Hickory Hills III Subdivision. He added he had spoken with the developer and informed him he did not want to get the Attorney involved if at all possible. KD then asked Mrs. Zwyers if she was ready to close on the home loan. She stated it would be approximately four weeks and noted if she had something in writing from the bank/developer stating they would correct the problem within a reasonable time frame; her bank would proceed with the closing. NOTE: John Knochel entered the meeting at this time. Ruth Shedd made a motion to freeze all Building Permits and Certificate of Occupancy's for Hickory Hills III Subdivision Phase 1 Section 3. KD Benson seconded the motion. Hickory Hills III Subdivision Phase 1 Section 3 Certificate of Occupancy's and Building Permits were frozen.

Unity Medical

Brandon Fulk of Schneider Corporation appeared before the Board to discuss a proposed Reduction and Encroachment request concerning the Treece Meadows Relief Drain by Unity Medical for the Faith Hope and Love Cancer Center. He stated Mr. McQueen from Unity Medical was in attendance. He presented an original site design which indicated the existing location of an overall 120 feet Easement; 85 feet on the north side and 35 feet on the south of said drain. Brandon requested

the 85 feet portion of the easement be reduced to 60 feet. The reason for the request was due to the expansion of the existing Faith Hope and Love Cancer Center Building at the building's southeast corner and to reconstruct the two way drive to a one way drive. He stated they wanted to decrease the width on the north side to 60 feet. Mr. McQueen the approached the Board and stated the reason for the expansion of the facility was to service additional cancer patients. The request would allow for additional radiation equipment to be placed onsite. An additional Linear Accelerator was needed alongside the existing Accelerator at the southeast corner of the Building. The existing Accelerator was presently located within the Easement.

The Surveyor noted the 85 feet Easement north of the centerline and through the Unity property was purchased by the City of Lafayette. The Treece Relief Drain was set up through a condemnation proceeding and was not a conventional Regulated Drain Easement under Indiana Drainage Code. He stated he felt the Encroachments previously granted to Unity Medical were generous and initiated with the understanding that if future maintenance of said drain was required and damaged was incurred to the site the County would not be responsible for those damages. While the need to provide the facility was valid, public funds were used to purchase the 85 feet Easement. He did not feel it was fair to the public as he felt there should be some trade off- due to the land value. The Surveyor stated if the Board was to reduce or vacate the drainage easement he would recommend Unity maintain the drain's channel from top of bank to top of bank from Creasy Lane to Amelia Drive. This would reduce the County's need for entry with the exception of dipping the bottom out in the future. He recommended an easement reduction for the footprint of the building only. In response to John's inquiry, Brandon stated Unity had agreed to maintain (mowing) the relief drain as the Surveyor recommended from Creasy Lane to Amelia Drive. In response to KD's inquiry, previous Surveyor Mike Spencer in attendance, stated the drain had been cleaned out in 1997. In response to Ruth's inquiry, the Surveyor stated to clean the bottom of the channel required the County to enter the site with large equipment (excavator) and felt it was a very tight fit. John suggested Unity cover the cost for any damage prevention methods used for said cleanout if required in the future. Responding to KD's inquiry, Mr. McQueen indicated the project was planned for the spring of 2007 and Unity would not be opposed to the maintenance (mowing to top of bank as noted) of the drain. The Surveyor stated as the land is developed on the other side of the drain, a condition would be added to the future approvals which would require the developer to maintain their side of the channel. He recommended the Board conceptually approve an encroachment due to the building expansion and also a reduction of easement around the footprint of the building only. A conceptual approval would grant him time to work out a final encroachment petition with Unity for final approval. The Attorney clarified the documents to be presented were as follows: A Petition to Encroach for the one-way drive and any additional parking spaces, vacation of the drain for the area of the footprint of the new construction to the existing building and a reasonable distance around it, (the existing encroachment of the parking lot would stay in place. The Board could approve the vacation and the encroachment subject to the submittal of the standard forms and the submission of a legal description of the vacation. The approval would be conditioned on Unity's agreement to mow bank to bank the Treece Relief Drain from Creasy Lane to Amelia Drive. He noted public hearings were required for a vacation of drains.

John Knochel made a motion to conceptually approve the encroachment and reduction of easement at the footprint of the building and noted final approval was subject to proper documentation submitted and a maintenance agreement from Unity Medical accepting responsibility to maintain from top of bank to top of bank from Creasy Lane to Amelia Drive. Ruth Shedd seconded the motion. The Board gave conceptual approval to Unity Medical for an encroachment on the Treece Meadows Relief Drain regarding the Faith, Hope and Love Cancer Center and a reduction of easement pending the submission of the required documents as stated.

Maintenance Bonds

The Surveyor presented the following Maintenance Bonds for acceptance by the Board. Maintenance Bond #104803501 from Milestone Contractors in the amount of \$21, 505.00 for Wake Robin Estates II Phase 3 and Maintenance Bond #3481673 from Fairfield Contractors in the amount of \$13,480.00 for Huntington Farms Phase 3 Section 2. John Knochel made a motion to accept Maintenance Bond #104803501 from Milestone Contractors in the amount of \$21, 505.00 for Wake Robin Estates II Phase 3 and Maintenance Bond #3481673 from Fairfield Contractors in the amount of \$13480.00 for Huntington Farms Phase 3 Section 2. Ruth Shedd seconded the motion. Maintenance Bond #104803501 from Milestone Contractors in the amount of \$21, 505.00 for Wake Robin Estates II Phase 3 and Maintenance Bond #3481673 from Fairfield Contractors in the amount of \$13480.00 for Huntington Farms Phase 3 Section 2 was accepted by the Board.

Public Comment

With no public comment, John Knochel made a motion to adjourn. Ruth Shedd seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
February 7, 2007
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President Ruth Shedd, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

Ruth Shedd made a motion to approve the January 3, 2007 Regular Drainage Board minutes as written. KD Benson seconded the motion. The January 3, 2007 Drainage Board meeting minutes were approved as written.

Stoddard Development Warehouses/Encroachment Petition

Brandon Fulk of Schneider Corporation appeared before the Board to request an approval for Stoddard Development Warehouse Encroachment Petition. The site was located north of County Road 350 South between U.S. 52 and County Road 500 East and south of the Norfolk and Southern Railroad. Branch 12 of the S.W. Elliott Regulated Drain traversed the site. The said Branch was tributary to the planned F-Lake Regional Detention Facility. Brandon stated a railroad spur was now necessary due to the growth and its shipping obligations. The railroad spur would encroach and cross Branch 12 of the S.W. Elliott Regulated Drain. The Branch 12 tile was rerouted in 2004 from the east line of property to the northeast corner to the connection beneath the railroad at the northwest corner of the site. He noted the encroachment was located at the northeast corner of the site. Calculations provided by the manufacturer indicated the pipe was adequate size for the structural load of the engines and freight. Brandon noted, the developer would maintain the tile within the encroachment area if issues were to arise in the future. Brandon stated the encroachment request was the only issue at hand today as expansion of the warehouse would be presented for Board approval at the next month's scheduled meeting. The Surveyor stated the previously rerouted tile plan had been reviewed by Christopher Burke to ensure the tile could handle loaded railcars. Brandon reiterated at this time only approval from the Board for the encroachment was requested - based on the submitted material and draft encroachment petition. The final Encroachment Petition document would be presented for signatures at the March meeting. The Surveyor stated in addition to the required standard language, noted maintenance responsibility for said Branch (located under the railroad spur) would be required within the petition as well. Therefore if a problem arose under the railroad spur, the developer would be responsible for the repair(s) by the terms of the encroachment. He felt this adequately protected landowners served by the Branch within the watershed. Ruth Shedd made a motion to approve the Encroachment Petition requested by Stoddard Development with conditions listed on the January 29, 2007 Burke memo. KD Benson seconded the motion. Brandon confirmed he would present the finalized Encroachment Petition document at the March Drainage Board meeting for signatures.

Unity Medical Parking Lot Expansion

Brandon Fulk of Schneider Corporation appeared before the Board to request final approval for the Unity Medical Parking Lot Expansion. Brandon stated Tom Gall and Joe Bumbleburg representing Unity Medical were in attendance. Located on the east side of Creasy Lane (County Road 350 East) and south of Amelia Drive the site was within the city of Lafayette. The area in question was located northeast of the approved Faith Hope and Love project and within the Unity Medical Campus site. An Encroachment Petition (regarding the Treece Meadows Relief Drain) was submitted for approval. If approved, the encroachment would result in approximately 20' available for maintaining the drain.

Schneider was asked to investigate a platted 15' Utility Easement which Brandon stated it appeared to be a routine easement previously created (2000) during platting of the Subdivision and was not being utilized at this time. Investigation included discussion with the Surveyor who had prepared the plat and physical evidence at time of the topographic survey. The concern was the easement was created for the relocated Wilson Branch tile. Considering investigation information and the physical evidence that the tile was not in the easement- it was determined that the easement was *not* created for the Branch of the Wilson Branch as originally suspected but was a platted drainage and utility easement. Therefore, the draft Encroachment Petition (regarding the Treece Meadows Relief Drain) was submitted for approval by the Board and would in fact be updated

in the same fashion as one to be heard subsequently for the Faith Hope and Love project which was modified since the parking lot expansion project draft document was submitted.

The Surveyor clarified the requests as follows: There were two Encroachment Petitions to be considered. First the Parking Lot Expansion request for an encroachment into a standard platted 15' Drainage and Utility Easement and second an encroachment request regarding a drainage easement for the Wilson Branch / Treece Meadows Relief Drain (previously created for the re-route of a Branch of the Wilson Branch). The Attorney added the encroachment into said platted 15' Drainage and Utility Easement would not affect the existing utilities however consent from the utility companies would be required.

Regarding the Encroachment Petition into the Wilson Branch/Treece Meadows Relief Drain, the Surveyor noted due to the elevation of the Wilson Branch tile, it could not outlet east of Creasy Lane into the Treece Meadow Drain. (As the area developed through various projects, the old tile was picked up and rerouted as part of various projects. The tile ran along the north bank of Treece Meadow crossed between buildings at the Unity Campus ran north under Creasy Lane into a box structure installed as part of the Creasy Lane reconstruction project on the west side of Creasy Lane. The tile still served a portion of the agricultural ground to the east.) Responding to the Attorney, the Surveyor noted the County purchased this particular easement. The Attorney stated this would distinguish it from the standard 75' Right of Entry a Drainage Board has with respect to all Regulated Drains. The County's ownership of the drainage easement gave the Board more control of the type of use by others. Regarding a recommendation for final approval, the Surveyor deferred to the Board's opinion as to whether they felt 20' was adequate for the drainage easement (taking into consideration a maintenance agreement to mow or maintain the vegetation from Creasy Lane to Amelia Ave. was signed and provided by the developer) Tom Gall (representing Unity) approached the Board. Mr. Gall stated the requested Encroachment Petition and Maintenance Agreement documents were both reviewed and approved by the Board's Attorney and signed by Unity. He confirmed Unity would be responsible for the mowing of the ditch from Creasy to Amelia Ave.

The Surveyor recommended final approval with conditions stated on the February 2, 2007 Burke memo, with the following exception to the portion titled Variances/Encroachments – a final Encroachment Petition would be worked out between the parties. The condition regarding a 25' maintenance access from the top of bank would be worked out between the Surveyor and Developer. The Attorney then clarified the Maintenance Agreement covered mowing the vegetation on both sides of the drain from Creasy Lane to Amelia Ave. until land on the south side of said drain was developed. At that time Unity would be required to maintain the north side of the drain from Creasy Lane to Amelia Ave. A new developer/owner on the south side of said drain would be responsible for their site.

Ruth Shedd made a motion to approve the Unity Medical Parking Lot Expansion with conditions stated on the February 2, 2007 Burke memo with the exception of the Encroachment Petition. The said Petition was to be presented at the March Drainage Board Meeting for acceptance/approval. KD Seconded the motion. Unity Medical Parking Lot Expansion was granted final approval with conditions as stated.

Unity Main Campus / Encroachment and Maintenance Agreement

Brandon Fulk of Schneider Corporation appeared before the Board and requested final approval for the Unity Main Campus Encroachment Petition and Maintenance Agreement. The Encroachment Petition and Maintenance Agreement were presented to the Board in compliance with conditions of final approval previously granted for the Faith Hope and Love project located on the Unity Main Campus site. Attorneys for both parties (Drainage Board and Unity) had reviewed the documents prior to today's meeting. Brandon noted an additional condition was ordered previously for the Faith Hope and Love project concerning a Vacation of Easement (for maintaining a 5' perimeter around the Building). The said Vacation document was presently in the draft stage. He noted this situation was unique with encroachments, maintenance agreements and vacations. The Attorney had reviewed the Maintenance Agreement as well as the Encroachment Petition presented for approval today. He reiterated a condition of the Encroachment Petition approval was a signed Maintenance Agreement which the developer had provided. The Surveyor noted he had spoken with Mr. Gall informed him there was brush (willows etc.) which would need to be removed and Mr. Gall was in agreement. Attorney Joe Bumbleburg approached the Board in response to KD Benson's inquiry concerning the Maintenance Agreement. He explained the Maintenance Agreement and Encroachment Petition were both written and submitted as agreed upon by the Board in the January meeting. The Surveyor stated when the south side of the drain was developed the same maintenance requirement would be imposed by the Board.

Ruth Shedd made a motion to approve the Unity Main Campus Maintenance Agreement and Encroachment Petition as presented. KD seconded the motion. In response to the Presidents inquiry for those opposed, KD Benson indicated in the affirmative. The Unity Main Campus Encroachment Petition and Maintenance Agreement were approved as presented.

Kirkpatrick Infrastructure

Brandon Fulk of Schneider Corporation appeared before the Board to request final approval for the Kirkpatrick Infrastructure project. A proposed access road (Kirkpatrick Boulevard) would be located on the north side of County Road 450 South east of County Road 250 East (Concord Road). The roadway would provide access to the Woodland Elementary School currently under construction as well as future developments. The Benjamin Crossing Subdivision was located to the west, a vacant farm field to the east and a rural subdivision as well as Hunters Crest Subdivision to the south of the proposed road. Brandon stated the storm infrastructure would service future development to the west, a bypass system for offsite flows to the school (Schneider worked with the School Corporation on elements of this nature). The storm system would pick up a portion of offsite flow from Hunters Crest Subdivision as well areas yet to be developed on the homestead and remainder of the farm. Provisions were provided within the storm infrastructure that ran along the west line of the roadway for future development and immediate interim conditions. An interim dry detention facility would be utilized during the construction of the roadway. Brandon stated he was presently working with the County Highway Department on a couple issues. He concurred with the conditions as stated on the February 2, 2007 Burke memo while requesting an encroachment for the temporary detention facility based off the proximity to the JN Kirkpatrick Regulated Drain under construction at this time. He noted a 25' separation between the ditch bank and the temporary facility bank for accessibility was planned. A variance on the allowable release rate was requested as well. The roadway would be dedicated by the School Corporation and the easement for the storm sewer and utility would run along the western length of the road.

The Surveyor stated he recommended granting the variance on the release rate. Ruth Shedd made a motion to grant the variance of the release rate. KD Benson seconded the motion. Kirkpatrick Infrastructure was granted the variance from the release rate as requested. The Surveyor then recommended final approval with the conditions as listed on the February 2, 2007 Burke memo. Ruth Shedd made a motion to grant final approval with conditions as stated on the February 2, 2007 Burke memo. KD Benson seconded the motion. Kirkpatrick Infrastructure was granted final approval with conditions.

Huntington Farms Phase 3 Section 2 Lots 164 & 165

Paul Dietz of Vester and Associates appeared before the Board to request a Vacation of Easement for Lot 164 of Huntington Farms Phase 3 Section 2 Subdivision. Attorney Joe Bumbleburg approached the Board. He indicated he prepared both vacation and encroachment documents for the Board to determine which document to use in this case. He stated while the encroachment process may be quicker, a vacation of easement would be the more permanent solution and most beneficial to all involved in this case. The Board Attorney stated an encroachment into a platted drainage and utility easement would be subject to the condition that if it ever interfered with the drainage or need for utilities it would have to be removed. Since the encroachment was a home in this case, a mortgage lender may be reluctant to loan money for a home which may be required to be moved out of the easement in the future. The homeowner's interest would not be satisfied in that case. The process by Indiana Code for vacation of platted easements required publication and notification. Any person that may feel effected by the vacation would have the opportunity to remonstrance the vacation. Mr. Dietz stated all utilities had been notified and consents for the vacation were provided with the exception of Verizon (who had to process it through their main office) but expected that consent forthcoming. In response to the Surveyor's request, Paul stated the emergency routing plan was reviewed prior to submission of the request. The Surveyor was satisfied there was adequate room after the vacation was granted for proper drainage and recommended vacation of the easement as requested. Ruth Shedd made a motion for the Drainage Board to consent to the Vacation of Easement of Lot 164 Huntington Farms Phase 3 Section 2 Lot 164. KD Benson seconded the motion. The Vacation of Easement for Lot 164 Huntington Farms Phase 3 Section 2 would be presented at the March 5th 2007 Commissioner's meeting for final action by Mr. Bumbleburg or Paul Dietz of Vester and Associates.

2007 Regulated Drain Status Report

The Surveyor presented a 2007 25% Increase in Regulated Drain Assessments Resolution to the Board for approval. He stated in March of 2006 he presented the Board with a classification report which indicated drains in need of the said increase. He noted it was too late to get the increase on the tax rolls at that time. Therefore he presented the list today for formal action in order to include the increase for the 2007 tax roll. Ruth Shedd made a motion to accept Resolution #2007-01-DB 25% Increase in Regulated Drain Assessments. KD Benson seconded the motion. Resolution 2007-01-DB was

approved. He then presented the 2007 Regulated Drain Status sheet for approval. Ruth Shedd made a motion to approve the 2007 Regulated Drain Status sheet. KD Benson seconded the motion. The 2007 Regulated Drain Status sheet was approved as submitted. *Note: Resolution 2007-01-DB and the 2007 Regulated Drain Status sheet will be included in their entirety within the Official Meeting Minutes Book immediately following the February 7, 2007 Approved Minutes.*

William Walters #84 Regulated Drain Reclassification

The Surveyor stated he had included the need for the William Walters Regulated Drain reconstruction on the 2006 Classification Report presented to the Board in March of 2006. He noted since that time he has had two verbal requests from landowners for the drain's reconstruction north of County Road 900 North. Utilizing GIS, he noted the drain tile continued into White County. When the previous Surveyor was in office, the drain was surveyed and plans were prepared. However, a property owner north of County Road 900 North was not in favor of replacing the existing tile with an open drain at that time. The landowner has changed his mind since and in favor of the reconstruction as well as landowners located in White County. He stated he would prepare a reconstruction report to present to the Board at a later date.

Maintenance Bonds

The Surveyor presented Maintenance Bond #104791385 dated Sept. 20, 2006 for Winding Creek Section 4 Subdivision in the amount of \$24,690.00 submitted by Milestone Contractors, and Maintenance Bond #1802388 dated January 23, 2007 for Blackthorne Subdivision Phase 1 in the amount of \$6250.00 submitted by Atlas Excavating for acceptance by the Board. Ruth Shedd made a motion to accept Maintenance Bond #104791385 dated Sept. 20, 2006 for Winding Creek Section 4 Subdivision amount \$24,690.00 submitted by Milestone Contractors, and Maintenance Bond #1802388 dated January 23, 2007 for Blackthorne Subdivision Phase 1 amount \$6250.00 submitted by Atlas Excavating presented by the Surveyor. KD Benson seconded the motion. Maintenance Bond #104791385 dated Sept. 20, 2006 for Winding Creek Section 4 Subdivision in the amount of \$24,690.00 submitted by Milestone Contractors, and Maintenance Bond #1802388 dated January 23, 2007 for Blackthorne Subdivision Phase 1 in the amount of \$6250.00 submitted by Atlas Excavating were approved as presented.

Other Business Contracts

Drainage Board Legal Services Contract

The Surveyor referred to the Board's Attorney for the presentation of the 2007 Drainage Board Legal Consultation Contract. The Attorney noted the contract amounts had not changed since last year and noted if an associate performed the work a lesser amount of \$50.00 per hour would be charged. Ruth Shedd made a motion to approve the 2007 Drainage Board Legal Consultation Contract with Hoffman, Luhman and Masson as presented. KD Benson seconded the motion. The 2007 Drainage Board Legal Consultation Contract with Hoffman, Luhman and Masson was approved as presented.

Drainage Board Professional Engineering Consultant Contract

The Surveyor then presented a 2007 Drainage Board Engineer Consultant Contract with Christopher B. Burke Engineering LTD Indianapolis office for the Board's approval. He noted the amounts included in the contract were the same as in the 2006 contract. He then recommended the Board execute the renewal contract as submitted for approval. Ruth Shedd made a motion to accept the renewal contract with Christopher B. Burke Engineering LTD for Professional Engineering Services. KD Benson seconded the motion. The 2007 Professional Engineering and Drainage Review Contract with Christopher B. Burke Engineering LTD Indianapolis office was approved as submitted.

Berlowitz Regional Detention Facility Design Modifications Contract

The Surveyor presented the Berlowitz Regional Detention Facility Design Modifications Contract with Christopher B. Burke Engineering LTD Indianapolis Office for acceptance by the Board. He explained, as part of negotiations of the Clarian Arnett project, 300,000 plus cubic yards of soil was removed from the property in order to acquire the property needed for the Berlowitz Regional Detention Facility. As a result of said negotiations, the 2003 contract documents need to be modified and brought up to date. (The County agreed to relocate and compact a portion of the removed soil south on some of the Saddlebrook properties such as Hawthorne Lakes and Hawthorne Meadows.) The Surveyor recommended acceptance of the 2007 Berlowitz Regional Detention Facility Design Modifications Contract with Christopher B. Burke Engineering LTD Indianapolis Office in the amount of \$50,276.0000. Ruth Shedd made a motion to accept the 2007 Berlowitz Regional Detention Facility Design Modifications Contract with Christopher B. Burke Engineering LTD Indianapolis Office in the amount of \$50,276.0000. KD Benson seconded the motion. The 2007 Berlowitz Regional Detention Facility Design Modifications Contract with Christopher B. Burke Engineering LTD Indianapolis Office in the amount of \$50,276.0000 was approved by the Board.

Shangri La Estates

The Surveyor gave the Board an update on the Shangri-La Estates project. He stated the project was approved with conditions by the Board October 13, 2004. At that time proper notifications to all effected downstream landowners had not been completed. Three of the downstream owners were the Kepners. Mr. Bill Kepner (now deceased) was in attendance at the October 2004 meeting. Mr. Kepner had a verbal agreement for regrading the existing conveyance and adding riprap to his property. A signed agreement with the Kepners was a condition of the October 13, 2006 approval. This document has not been submitted to date. Two downstream property owners had not received the notification. The Highway Department and Suburban Utilities had not approved the project as of a couple weeks ago. The Engineer Consultant stated a final updated drainage report, approval from the Hwy. Dept., and acknowledgement letters were still pending. Mr. Glen Stockment, representing the developer, had made attempts to notify the two landowners: Cox and Sheese (the Shangri La development is wrapped around their properties) and they have not accepted the certified letters. The Attorney then stated certified or registered notifications were considered due diligence (you can not force someone to accept notification). The Surveyor stated the original developers have chosen to sell the property. He reiterated agreement letters with the Kepners as part of the conditions have not been submitted to date. He also noted, the Secretary had notified Mr. Stockment of the pending conditions on several occasions since the approval and had documented those notifications on the memos located in the file. However she will speak with Mr. Stockment again regarding the conditions pending. Since the conditions had not been met for final approval, construction plans would not be signed by the Surveyor.

Regulated Drain(s) Right of Entry

Responding to KD's inquiry, the Attorney noted by Indiana Statute the County has 75' right of entry from the top of bank or centerline of tile on a regulated drain. There is also a statute which states it may be reduced to as little as 25' from top of bank or 15' from the centerline of the tile. It also states one is not allowed to erect any permanent structure within the right of entry. If there was a special reason why one might want to reduce the right of entry it should be done on a case by case request in his opinion. The Surveyor was in agreement and stated this is often referred to a Regulated Drain Easement and it was actually a Right of Entry as the Attorney stated. The Attorney stated another area which you would get the request was subdivision drainage plans and these do not necessarily regard a regulated drain. In this case you are not talking about a Right of Entry but a platted Drainage and Utility Easement. In this instance the issue would be; is there adequate room for someone to maintain / install or repair utilities or drainage facilities within the easement? This is why for practical reasons; you have a standard 25' easement.

Public Comment

John Knochel asked for public comment, there was none. Ruth Shedd made a motion to adjourn the meeting. KD Benson seconded the motion. The meeting was adjourned.

John Knochel, President

Ruth Shedd, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
July 11, 2007
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President John Knochel, Vice President Ruth Shedd, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Lori Gates Senior Resource Planner from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

Ruth Shedd made a motion to approve the June 6, 2007 Regular Drainage Board minutes as written. KD Benson seconded the motion. The June 6, 2007 Drainage Board meeting minutes were approved as written.

Old National Bank/Concord Plaza Ph. 1 Lot 2

Alan Jacobsen with Hannum, Wagle and Cline Engineering appeared before the Board to present the Old National Bank project located on Lot 2 of Concord Plaza Ph. 1 for final approval. The project was a 5000 square foot building on 1.4 acres and located at the corner of 350 South and County Road 250 East (Concord Road). Access would be a private drive previously constructed as part of the Wal-Mart Super Center Development. Newly constructed storm sewers would connect to the main storm sewer previously constructed with the Wal-Mart Super Center. The storm drains outlet to a large detention basin located behind the Wal-Mart building. The Stormwater ultimately discharged to the JN Kirkpatrick Regulated Drain. Drainage within the site would be discharged to a previously installed 36" storm pipe at the southeast corner of the site. He stated he was in agreement with the June 21, 2007 Burke memo and requested final approval for the project. John Knochel asked for Public comment as there was none he referred to the Surveyor for his comments. The Surveyor stated this was one of several outlots which went along with the Wal-Mart development plan. An existing storm sewer was in place. He stated he was prepared to recommend final approval with the conditions as stated on the June 21, 2007 Burke memo. Ruth Shedd made a motion to grant final approval with conditions on the June 21, 2007 Burke memo for Concord Plaza Phase 1 Lot 2. KD Benson seconded the motion. Old National Bank located at Concord Plaza Phase 1 Lot 2 was granted final approval with the conditions as stated on the June 21, 2007 Burke memo.

Tilapia Fish Farm

Mr. Paul Dietz of Vester & Associates appeared before the Board and requested final approval for the Tilapia Fish Farm project. The site consisted of approximately 14.2 acres and was located on the east side of U.S. 231 north of State Road 28. The site drained from the east side of US 231 to the west side of US 231 via a box culvert. There was an offsite area of approximately 58 acres to the east which drained through the box culvert as well. Paul stated in addition to a 44,000 square foot building, there would be an onsite pond to collect and aerate fish waste (provide a degree of treatment) while the remainder of the site would be planted in meadow grass. It is intended to spray the effluent waste on the meadow grass. The conversion of fallow ground to meadow grass exempts the project from the detention requirement. Therefore there will be a water quality pond. The pond was designed to take in the area that will be disturbed and did not include the meadow area. Swales would divert runoff from any portion not within the building area to the aforementioned box culvert. Paul then requested owner Phil Shambauch to address the Board concerning the fish effluent portion of the project. Phil Shambauch stated he was the owner of the proposed fish farm. The composition of the effluent runoff out of the fish farm building to the onsite pond was less than 2% solids. He noted basically the fish farm building is the waster water treatment facility. Most of the waste would be treated within that building. The solids from the building would be approximately six tons a year and would be land applied through the water. In response to John Knochel's inquiry, Phil stated the application would be several times a year for a yearly total of six tons. He stated it would be applied through spray irrigation approximately every 6- 8 weeks. He noted he had been excluded by IDEM from the permit requirement. John Knochel asked for public comment. Dale Rainford 10704 US 231 South Romney Indiana 47981 approached the Board. He presented pictures from 1989 after a three inch rainfall which showed flooding on his property to the west of the project site. He stated he was quite concerned of the runoff from the fish pond as it would directly affect him and the main concern was how much waste would drain into his pasture. He thanked the Surveyor for a site visit and walking the area with him last week. Phil Shambauch then stated he was willing to work with Mr. Rainford as a good neighbor and was available for discussion. The Surveyor stated this was the first project of this type since the new Stormwater Ordinance was in He stated he did walk Mr. Rainford's property previously with him. The box culvert under US 231 conveys runoff east to west and across

Mr. Rainford's property. Basically the land is fairly flat and undefined across the low ground. The runoff eventually outlets to an old court drain without a maintenance fund. A system of private tiles feed into the ditch - with some of them possibly running across the project site. From a Stormwater Quantity aspect the conversion to meadow grass by calculation would indicate the amount of runoff would be reduced. However, one of the conditions and/or recommendations for the developer/owner was to meet with the downstream property owner and to form an agreement allowing a channel to be built across his property providing a positive outlet. A major concern was water quality. The Stormwater Ordinance did not exempt the facility from the requirements. After meeting this am with Lori Gates Senior Resource Planner from Christopher Burke Engineering, it was noted an NPDES permit directly from Indiana Department of Environmental Management would be required. The Surveyor noted if IDEM issued the permit, the water quality issues would be handled by IDEM rather than the County. Since Mr. Shambauch had been diligent in his attempts to get the correct information from IDEM to this point and had been misinformed, Lori Gates indicated she would assist him in the process of obtaining a permit through IDEM to be in compliance with the current EPA standards. The Surveyor recommended final approval with conditions stated on the July 6, 2007 Burke memo. Note: If IDEM issues a permit for this project the applicable Stormwater Quality conditions on said memo would be void and dropped from the conditions.

Phil Shambauch explained when the aquaculture technology was started they took the technology from wastewater treatment plants and built an aquaculture facility identical for fish. It has evolved to better suit aquaculture applications but basically uses the same principle. There is a biological filter for every system in the building. In summary the effluent is treated long before it outlets to the pond and the waste is minimal. KD stated they wanted to make sure no ammonia water would reach the neighbors property, and she felt the treatment along with his neighborly attitude was a positive sign. In response to Ruth Shedd, Phil stated the drainage approval was the holdup for the project at this point as they are ready to begin the construction process.

Ruth Shedd then made a motion to grant final approval with the conditions as stated on the July 6, 2007 Burke memo with additional conditions of working with IDEM for a permit and finalizing an agreement with the neighboring property to the West (Rainford) pertaining to runoff through their property. To clarify: Dave Eichelberger stated in the Burke memo dated July 6, 2007 Stormwater Quality Condition 1 would be in place no matter what. Conditions 2, 3, 4 under Stormwater Quality were the conditions which may be subject to removal once an IDEM permit was obtained. Ruth Shedd amended her motion to include the clarification. KD Benson seconded the amended motion. The project was granted final approval with the conditions listed on the July 6, 2007 Burke memo as well as the condition to obtain an agreement with adjoining property owner to the West (Dale Rainford) and subject to an IDEM permit granted – at which time the July 6, 2007 Burke Memo conditions would be amended as clarified by Dave Eichelberger.

NOTE: Commissioner John Knochel excused himself from the proceedings.

Other Business

Petition for Encroachment on JN Kirkpatrick Regulated Drain/ City of Lafayette

The Surveyor presented a Petition for Encroachment on JN Kirkpatrick Regulated Drain from the City of Lafayette and signed by Tony Roswarski Mayor. This was for a new sanitary line crossing of the recently constructed Upper JN Kirkpatrick Regulated Drain. He stated everything was in order and recommended the Board approve the Encroachment Crossing Petition on a Regulated Drain Easement to the City of Lafayette. KD Benson made a motion to grant the Petition as presented by the Surveyor. Ruth Shedd seconded the motion. The Petition was granted as presented by the Surveyor and would be recorded by the City.

Reschedule November Meeting

The Surveyor stated for the record the November 7th Drainage Board meeting was rescheduled to November 14th, 2007. KD then stated the October meeting was scheduled during the AIC meeting dates. It would be prudent to possibly change this date as well. The October meeting date would be discussed during the August meeting.

Steve Murray

Maintenance Bonds

The Surveyor presented the following Benjamin Crossing LLC Maintenance Bonds for acceptance by the Board as follows: Section 1 Maintenance Bond #5014464 in the amount of \$37903.00 and dated December 13, 2004, Section 2 Maintenance Bond #5028025 in the amount of \$31000.00 and dated June 8, 2007, Section 3 Maintenance Bond #5014463 in the amount of \$10162.00 and dated December 13, 2004, Section 4 Maintenance Bond #5028026 in the amount of \$27,800.00 and dated June 8, 2007, Section 5 Maintenance Bond #5028027 in the amount of \$15,700.00 and dated June 8, 2007, Section 6 Maintenance Bond #5028028 in the amount of \$3000.00 and dated June 8, 2007. KD Benson made a motion to grant the Benjamin Crossing LLC bonds as follows: Section 1 Maintenance Bond #5014464 in the amount of \$37903.00 and dated December 13, 2004, Section 2 Maintenance Bond #5028025 in the amount of \$31000.00 and dated June 8, 2007, Section 3

Maintenance Bond ##5014463 in the amount of \$10162.00 and dated December 13, 2004, Section 4 Maintenance Bond #5028026 in the amount of \$27,800.00 and dated June 8, 2007, Section 5 Maintenance Bond #5028027 in the amount of \$15,700.00 and dated June 8, 2007, Section 6 Maintenance Bond #5028028 in the amount of \$3000.00 and dated June 8, 2007. Ruth Shedd seconded the motion. The aforementioned Maintenance Bonds from Benjamin Crossing LLC were accepted by the Board.

Public Comment

As there was no public comment, KD Benson made a motion to adjourn. The meeting was adjourned.

John Knochel, President

Ruth Shedd, Vice President

Brenda Garrison, Secretary

KD Benson, Member

Tippecanoe County Drainage Board
Minutes
February 6, 2008
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

John Knochel made a motion to approve the February 6, 2008 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The February 6, 2008 Drainage Board meeting minutes were approved as written.

Subaru Warehouse #9

Woody Roeschlein from RQAW Corporation appeared before the board to request final approval for Subaru Warehouse #9 (aka Butler Building). The site was located within the City of Lafayette specifically along State Road 38 between County Road 475 East and Interstate 65 (west of the existing manufacturing plant) and consisted of approximately 2.5 acres of the 830 acre site. The site drained to an on-site detention facility before being discharged into the Parker Ditch. Additional storm drains would be installed west of the proposed addition and connected to the existing storm sewers onsite. As a condition of drainage approval, Woody stated the Consultants for the Board required a new site analysis of the overall picture. A hydraulic analysis was performed in 1995 by his company and Burke felt the analysis needed to be revised. The new warehouse would drain to pond #5 - north of the engine plant. In 2002-2003 the water was diverted from pond #3 to pond #5. Pond #5 was enlarged during the construction of the said engine plant. This will be reflected in the total site analysis report. The new warehouse would have minimal discharge effect on the Parker Ditch. The existing site would be changed to roof and asphalt. Along with the new warehouse a turn around and parking area was planned. Responding to KD's inquiry, Woody stated pond #3 was originally designed for a four foot freeboard. The maximum elevation for a hundred year storm left it with a two foot freeboard. He stated that pond would not overflow. Dave Eichelberger noted the analysis showed storage and discharge curve that went up to 658 contours. The model indicated pond overtopped during routing that calculated peak outfall/elevation was invalid. He stated the map of the area was small and he could not determine if the 658 contour ends around the lake or if the lake was totally ringed by 660 contour. Woody had stated in an email the 660 contour ringed the pond. Dave felt it still needed to be remodeled. If it was getting above 658 there was actually more storage in the pond than the model indicated and the elevation would get higher than 658. This would cause more head on the pipe which in turn caused more discharge to pond #4 which meant pond #4 was not receiving the correct amt. of water getting to it. One of the first steps to pond #3 would be discharge in storage curves which go to the top of the pond and not some point below. The Surveyor then interjected details would be worked out with the Engineers involved. The main concern was the ultimate discharge to the Parker Ditch which routed under County Road 200North and on to the northeast to the Wildcat Creek. The Surveyor recommended final approval with conditions as the modeling question would be resolved. There was no public comment. John Knochel made the motion to grant final approval with the conditions stated on the January 24, 2008 Burke memo. Ruth Shedd seconded the motion. The Subaru Warehouse #9 was granted final approval with the conditions stated on the January 24, 2008 Burke memo.

Stones Crossing Self Storage

Eric Gleissner from Civil Site Group who represented G&L Development appeared before the board and requested final approval for the Stones Crossing Self Storage. The project consisted of six self storage buildings and an office on the overall 5.6 acre site. It was located approximately 800 feet south of the intersection of Promenade Parkway and County Road 350 South. Eric noted approximately 2 acres of the site consisted of existing easements, most notably the JN Kirkpatrick Regulated Drain which ran along the entire southern boundary of the site. Direct discharge was proposed to the JN Kirkpatrick Drain. Hydrodynamic separator structures would be used to address the post construction stormwater quality requirements. He then requested final approval with the conditions as listed on the February 1, 2008 Burke memo. In response to KD's inquiry Eric stated he was in agreement with the memo regarding the encroachment request. A formal request would be forthcoming. The 15 feet encroachment on the JN Kirkpatrick Regulated Drain Easement was for proposed pavement, fencing and landscaping. A buffer yard was required due to the residential area on the opposite side of the said

drain. This would leave a 25-30 feet area on the top of the bank for maintenance. The Surveyor noted a formal petition would be required. He had also talked with Mr. Keene of G&L Development concerning their maintenance of the vegetation in the channel. Also the easement was still legally in the City of Lafayette's name and acquired by the City as part of the interlocal agreement for the Twickingham ditch project. Typically easements were transferred to the Drainage Board. At the time there was a disagreement involving the Twickingham Bridge; this has since been resolved. However the transfer was never completed although that was the intent. The current preliminary indication was the City of Lafayette was willing to transfer the easements to the Drainage Board. He further stated this may be something the Board Attorney should discuss with the City Attorney. Dave Luhman then stated to the extent it encroached on the Right of Entry Easement - the Board can consent to the encroachment. This would be separate from encroaching on the platted easement. Responding to KD's inquiry, Dave stated the city could consent to the encroachment and transfer to the Board which would be subject to the consent or they could transfer the easement to the Board and then the Board could consent to the encroachment requested. However today the Board could not consent to the encroachment into the City's Easement. It could be approved subject to the filing of an Encroachment Petition. Eric noted he was in receipt of an approval letter from Bob Foley of the City Engineer's office. The Surveyor noted he was prepared to recommend final approval with the conditions as stated on the February 1, 2008 Burke memo. There was no public comment. John Knochel made a motion to grant final approval of Stone's Crossing Self Storage with the conditions as stated on the February 1, 2008 Burke memo. Ruth Shedd seconded the motion. The Stone's Crossing Self Storage was granted final approval with conditions as stated on the February 1, 2008 Burke memo.

Other Business

2008 Regulated Drain Status List

The Surveyor presented the 2008 Regulated Drain Status list to the Board for approval. He stated a correction or two may be made before it was submitted to the Auditor office as required. John Knochel made a motion to approve the 2008 Regulated Drain Status list presented along with corrections if any by the Surveyor. Ruth Shedd seconded the motion. The 2008 Regulated Drain Status list was approved by the Board (*Note: a copy of the list as submitted to the Auditor office will be included in the official Drainage Board minutes immediately after the minutes at hand.*)

Candlewood Suites- Petition to Reconstruct Alexander Ross Regulated Drain

Clem Kuns from TBIRD Designs appeared before the Board and presented the Petition for Reconstruction of the Alexander Ross Regulated Drain for approval. He noted in the future they will present to the Board an additional Petition to Encroach on a Regulated Drain regarding future drive crossings. He then requested approval for the Reconstruction of the Alexander Ross Regulated Drain as submitted to the Board. The Attorney noted the Petition was in proper form and it had been addressed last month with approval of the drainage plans which reflected the relocation. As long as it is within their site, completed at their expense the Board could approve and they could relocate the drain. The Surveyor noted in addition to the revised encroachment agreement, they will need to formally vacate a portion of the platted easement which Mr. Luhman supplied with the form and instructions to do so. He stated the new Regulated Drain Easement should be completed at the same time. The Attorney clarified as follows: "There is now a platted easement and they want to relocate the drain. Merely relocating the drain does not replat the easement. The Surveyor suggests they vacate the existing platted easement and there should be a corresponding dedication of a platted easement for the relocated drain at the same time." The Surveyor then recommended the Board approve the Petition to Reconstruct the Alexander Ross Regulated Drain as presented. John Knochel made a motion to approve the Petition to Reconstruct the Alexander Ross Regulated Drain. Ruth Shedd seconded the motion. The Petition to Reconstruct the Alexander Ross Regulated Drain was approved as presented.

Sanitary Landfill/Gary Brown

Mr. Gary Brown appeared before the Board to request an inquiry into a Stormwater problem south of the landfill located at 2801 North Ninth Street Lafayette Indiana. The Surveyor and Mr. Brown walked the area in 2003-2004 and discovered blockage below the clover leaves under St. Rd. 52 and through the Oscar Winski Company tract. An investigative report requested by the TERF Board and completed by the Kermida Environmental Incorporated indicated problems with the area's drainage. Gary requested the Drainage Board send out informational letters to those affected property owners. He stated when the Wabash River floods the water can not drain back south as it use to through the Wabash & Erie Canal and under Ninth Street and back to the River. Due to the blockage the water now continues to flow toward the north. This affects all the property owners north of the landfill. The landfill was designed to drain from the north to the southwest therefore the blockages seem to be the problem. (The Surveyor presented the 1930's aerial photos which indicated the path of the old Wabash & Erie Canal to the Board.) He had also reviewed the bridge plans which indicated expansion to four lanes and showed the Canal at that time. They also indicated the cross section of it and a flow arrow indicating runoff to the southwest.

There was a bridge under the railroad tracks, a bridge under North Ninth Street, however he stated he was not sure at what point the berm was put in. The berm was located underneath the U.S. 52 Bridge between the Railroad tracks and the access road to the Monon shops and what was the active gravel pit. He stated after the tour of the site he felt sure that was the problem. However he had not been any further downstream. A review of the aerial photo indicated a channel which did provide relief. He stated Gary had farmed the area since he was very young. He had made a couple of site visits to the gentleman's property who lived at the very end of Conservation Club Road and he had noticed the same change as Gary. As the area floods there was nowhere for the water to get out. He felt starting with a letter from the Drainage Board advising the landowners affected of the Kermida Study and its observations made by their Engineers was warranted. The only option at that time would be to consider going through an Obstruction Petition process which was difficult and often did not lead to a firm answer. John Knochel asked Gary how long he had been farming that location. Gary stated he started in 1985 farming the Hacky property, but he was farming the Horner and Frier property (south of the landfill) since the early 1970's. John Knochel noted this was prior to the Railroad Relocation at which time the clover leafs were put in. Responding to John, Gary agreed this was around the time he started noticing drainage problems. In July 2003 his crops were completely damaged and he lost 1000 acres. In 2004 he had the same problem but was able to replant then. That was when he realized there was a problem as he noted then the water continued to go north. He stated it was obviously blocked at the clover leaf. He stated as you go on down there were several blockages. The Attorney explained the process for filing an Obstruction Petition for the removal of obstruction(s). If the obstruction(s) was intentional it would have to be removed at that particular landowner's individual cost. If the obstruction(s) was unintentional then the removal would be cost shared among all affected landowners. John Knochel made a motion for the Surveyor to draft a letter and send to those parties involved. KD noted the letters would go to those landowners located in between Gary Brown's property and the Wabash River. John included in his motion to send a copy of the Kermida study with each letter and that the Drainage Board would sign the letters. Ruth Shed seconded the motion. An informational letter and a copy of the Kermida Report would be sent to the affected landowners.

Steve Murray
S.W. Elliott Ditch/ Gaging

The Surveyor stated the Board was aware in order to solve what appeared to be an artificially high 100 year flood based on conventional modeling, a gaging station on the Elliott Ditch was proposed. After speaking with the USGS office, they were willing to participate in the cost of the station. Dave Eichelberger stated the cost for installation would be \$12,000.00 and would be billed in October this year. Due to matching funds from the USGS there would be no operating expense for the County this year. Next year the O&M would be approximately \$6,900.00. This would be billed to the County in October of 2009 and every year after that. They would be supplying a 40% match to the County's 60% for operating costs. This would be the minimum from USGS and that may increase in future years. The installation would take three to four days. The joint funding agreement presented to the Board today would start the process. The Surveyor recommended the Board authorize the President to sign the document. John Knochel made a motion for the President to sign the agreement with the USGS. Ruth Shedd seconded the motion. The Drainage Board President would sign the U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement regarding gaging on the Elliott Ditch.

Public Comment

Clem Kuns from TBIRD Designs asked how many gaging stations would be installed on the Elliott Ditch. Dave Eichelberger responded one gaging station. He then asked how long the station would be installed for. The Surveyor stated it depended on rainfall events as it could be immediately or 3-5 years potentially.

Steve Murray
Maintenance Bonds

Responding to KD's inquiry regarding The Greens PD, the Surveyor noted to date all the information received indicated everything had been installed and he had forwarded her email to the Project Manager for follow up. The Project Manager then approached the Board and stated he was able to speak with the Stormwater Coordinator and the drain pipe referenced in KD's email was located on Lot 11 and appeared to be a 4-6 inch in diameter PVC pipe. The Coordinator thought by observation it appeared to be a perimeter drain for their basement on Lot 11. He stated they would look into this further. The Surveyor stated that particular development must have individual site plans submitted to his office for approval and the drain should have been shown on the drawings submitted for that lot. Additional investigation would be done and KD would be informed of the outcome. The Surveyor stated he had received another email regarding the pond to the south from Mr. Gurly questioning whether or not the pond had been installed properly. It has a 4 inch orifice plate on it and everything appeared to be installed properly.

The Surveyor presented the following to the Board for acceptance. A Letter of Credit (note: no number) submitted by Superior Structures written by Lafayette Community Bank regarding Meadowgate Estates Section 2 Lot 14 dated December 6, 2007 in the amount of \$1,000.00. A Letter of Credit #412 submitted by the Greens LLC written by Salin Bank regarding The Greens PD Swale Lot 9 dated January 29, 2008 in the amount of \$11,486.00. Maintenance Bond #3634059 submitted by Fairfield Contractors written by Great American Insurance for the Greens PD Amended final Plat and Lots 9&10 dated Dec. 19, 2007 in the amount of \$7,500.00. Maintenance Bond Secured by Deposit submitted by Steve Schrader regarding The Greens Amended Final Plat 08-09-07 and Lots 9&10 and Amended Final Plat 12-12-07 written by Salin Bank dated January 18, 2008 in the amount of \$517.50. A Performance Bond submitted by Atlas Excavating regarding Stones Crossing Sections 1 and 3 Outlet Structures (JN Kirkpatrick Drain) and written by Union Planters Bank dated January 11, 2008 in the amount of \$5,000.00. Maintenance Bond #1831883 submitted by Atlas Excavating written by Hanover Insurance Company regarding Stones Crossing Section 1 dated February 6, 2008 in the amount of \$35,910.00. Maintenance Bond #1831884 submitted by Atlas Excavating regarding Stones Crossing Section 2 written by Hanover Insurance dated February 6, 2008 in the amount \$34,900.00. Maintenance Bond #1831885 submitted by Atlas Excavating written by Hanover Insurance Company regarding Stones Crossing Section 3 dated February 6, 2008 in the amount of \$4,500.00. Maintenance Bond #5030698 submitted by Benjamin Crossing LLC written by Bond Safeguard Ins. Company regarding Hunters Crest Section 3A dated January 14, 2008 in the amount of \$20,200.00. John Knochel made a motion to accept the Maintenance and Performance Bonds and Letter of Credits as submitted by the Surveyor. Ruth Shedd seconded the motion. The aforementioned Letters of Credit, Maintenance Bonds and Performance Bond was accepted as presented by the Surveyor.

With no additional public comment, John Knochel made a motion to adjourn. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board
Minutes
April 2, 2008
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Kerry Daily from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

John Knochel made a motion to approve the March 5, 2008 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The March 5, 2008 Drainage Board meeting minutes were approved as written.

Speedway Fuel Station

Ross Nixon from Schneider Corporation appeared before the Board to present the Speedway Fuel Station project. The site consisted of approximately 1.6 acres and was located within the City of Lafayette at the corner of S.R. 38 and Creasy Lane. The site drained to two branches of the S.W. Elliott Regulated Drain known as the Wilson Branch and Branch #13. Currently the southwest portion of the site was tributary through the Torchwood condominiums to the Wilson Branch. The north and east portions of the site were tributary through the Creasy Lane and SR 38 infrastructure to Branch #13 of the S.W. Elliott regulated drain. (2- 66" culverts east side of Creasy Lane) Future plans were to reroute this to the F-Lake Regional Basin. IN general the proposed condition would maintain the existing drainage pattern. The majority of the site would be collected in curb inlets within the parking lot refueling areas and routed to existing infrastructure in the State Road 38 Right of Way. Underground detention would be used to meet the release rates at the State Road 38 Right of Way. Ross stated the calculations were completed for the future F-Lake Basin storage fees. Stormwater Quality requirements would be implemented on site with an aqua filter system prior to discharge. He then requested final approval from the Board. The Surveyor recommended approval with the conditions as stated on the March 27, 2008 Burke review memo. There was no public comment. John Knochel made a motion to grant final approval for the Speedway Fuel Station #3310 with conditions as listed on the March 27, 2008 Burke memo. Ruth Shedd seconded the approval. Speedway Fuel Station #3310 was granted final approval with conditions as listed on the March 27, 2008 Burke memo.

Tipmont REMC Substation

Brandon Fulk from Schneider Corporation appeared before the Board to request final approval for Tipmont REMC Lafayette Substation. The site consisted of approximately 1.94 acres and located north of the intersection of C.R. 500E and 450N on the east side of C.R. 500E. Brandon stated R.W. Beck was Tipmont's Engineering Consultant while Schneider Corp. helped with the site's drainage. The site drained to the northwest corner into a roadside ditch. A system of swales surrounding the gravel pad from the east side to the north side was planned and would tie into the roadside ditch which drained north. Brandon stated the master covenant would indicate the surface would remain gravel. He then requested an exemption to the Stormwater Quantity as the peak discharge and runoff volume would not be increased. He stated they agreed with conditions as stated in the March 28, 2008 Burke memo and requested final approval. Responding to John's inquiry, the Surveyor noted the exemption would be based on the fact runoff would not be increased. There was no public comment. The Surveyor recommended final approval with the conditions as stated on the March 28, 2008 Burke memo. He referred to the condition listed under Stormwater Quantity and stated in the future if the equipment yard was paved, a request for approval must be submitted to the Board and the exemption would not be in effect. John Knochel made a motion to grant final approval with conditions as stated on the March 28, 2008 Burke memo. Ruth Shedd seconded the motion. Tipmont REMC Lafayette Substation was granted final approval with conditions as stated on the March 28, 2008 Burke memo.

Lafayette Warehouse #9

Brandon Fulk from Schneider Corp. appeared before the Board to request final approval for Lafayette Warehouse #9. The site consisted of approximately 23.01 acres and located on Lot #2 of the Park 350 Subdivision. Stormwater detention and quality treatment for the site were provided by the existing pond in the southern portion of the subdivision and the site would utilize the existing constructed ditch. The project would have an indirect outlet to the JN Kirkpatrick Regulated Drain. Access to the docks would be on the north and south end. He stated they agreed with the conditions as stated on the March 27, 2008B Burke memo and requested final approval at that time. The Surveyor noted the overall drainage plan for Park 350 was previously approved by the Board. The infrastructure for the site was constructed and ready. This project met the requirements of the overall drainage plan. He recommended final approval with the conditions as stated on the March 27,

2008 Burke memo. John Knochel made a motion to grant Lafayette Warehouse #9 final approval with the conditions as stated on the March 27, 2008 Burke review memo. Ruth Shedd seconded the motion. Lafayette Warehouse #9 was granted final approval with conditions as stated on the March 27, 2008 Burke review memo.

Davis Ferry Treatment Facility (aka Indiana American Water)

Jim Hurst (Overall Design Project Manager) from Indiana American Water appeared before the Board to request final approval for Davis Ferry Treatment Facility. He introduced John Duncan (Water Resources Engineer), Dave Elmer (Project Manager) and Chris Johnson (West Lafayette Operations Superintendent) to the Board as well. The site consisted of approximately 54 acres located on the west side of the intersection of Davis Ferry Road and Ninth Street north of the Wabash River. A concrete drive from Ninth Street would access the site. The site drained to Burnett Creek and ultimately to Wabash River. As a ground water treatment plant with 4 wells it would treat 9 million gallons of water per day at the start. One well will be located at the upper end of the farm land while the remaining three would be along the Burnett Creek. An infiltration system would filter the runoff prior to outletting into a constructed swale then entry into Burnett Creek. He referred to John Duncan. John stated the runoff would be captured upstream at the culvert under the proposed drive. Runoff beyond that would be captured by the new swale and taken from the Ninth Street ditch to the internal system and discharged into the Burnett Creek. Referring to the Stormwater quantity and quality, he stated they worked to have a very small environmental footprint associated with the project and both would be improved by the infiltration basin. Responding to KD, Jim stated they would cork closely with the Parks Board regarding an easement for the Wabash River Heritage Trail. A pipe would be placed under the trail so that the trail would not be disturbed. Kerry Daily noted the plans did not show the easement for the trail and the pipe within the easement. The exact route of the trail was not shown. The Attorney stated Wabash Heritage Trail Easement was specific and coordination with the Parks Board was required of the Developer. This would be an added condition of approval. Responding to the Surveyor's inquiry, Jim Hurst stated this project was exempt from IDEM Rule 6. There was no public comment. The Surveyor noted the conditions must be met and the required fees paid before construction may begin. He recommended final approval with the conditions as stated on the March 28, 2008 Burke review memo along with the added condition of Park Board approval regarding the Wabash River Heritage Trail. John Knochel made a motion to grant final approval with the conditions as stated on the March 28, 2008 Burke review memo with the added condition of Tippecanoe County Park Board approval for crossing the Wabash River Heritage Trail. Ruth Shedd seconded the motion. The Davis Ferry Treatment Facility was granted final approval with the conditions as stated on the March 28, 2008 Burke review memo to include the added condition of the Tippecanoe County Park Board approval for crossing the Wabash River Heritage Trail.

F-Lake Detention Pond

KD Benson stated the Commissioners received an email with a letter from Ivy Tech Community College and read it into the minutes as follows;

Dated March 28, 2008- Dear President Benson: We would like to express our appreciation to the Drainage Board for its support of our request to delay awarding the contract for F Lake. Thanks to your forbearance, we have had enough time to determine that it will be possible to create a campus plan with F Lake in its present configuration. The impact on the college will challenge parking and traffic flow, and, in a later phase of campus development, we will almost certainly have to find a way to have a parking structure. But for the moment, we can work around the pond without that expense. We are also pleased that Ivy Tech will be able to receive the soil from the excavation, resulting in a considerable reduction in cost for the project. Finally, we would like to thank you for bringing the design of F Lake up-to-date to reflect best practices in water quality and appearance. It is unavoidably a part of our campus and affects not only the college's functionality but its quality of life. We look forward to working with you as the project unfolds and as we review other drainage issues on the campus. Sincerely David A. Bathe Chancellor.

She then referred to the Surveyor. The Surveyor stated he recommended the low bid from P&H Grading and Excavating from Stockbridge Michigan be rejected for the following reasons: They did not submit the mandatory financial statement, they did not submit a list of equipment and plan to perform the work, they did not submit any of the items under Section 2 of Form 96, they did not demonstrate their capability to perform jobs of similar magnitude and scope as their experience as they only listed 2 jobs ranging from \$50,000 to \$92,000.00, they did not demonstrate adequate knowledge of earthmoving project given the extremely low unit prices on bid for excavation, they listed owner of project on form 96 as the State of Indiana. He informed them the bid would be rejected, they had no problem with that. John Knochel made a motion to reject the low bid from P&H Grading and Excavating. Ruth Shedd seconded the motion. The Surveyor then stated after review of the five lowest bids, he recommended the Board accept the bid from Poindexter Excavating Indianapolis in the amount of \$1,089,210.43. The Poindexter Excavating bid and documents were in order. John Knochel made a motion to accept the bid from Poindexter Excavating Indianapolis in the amount of \$1,089,210.43. Ruth Shedd seconded the motion. Poindexter Excavating was awarded the bid for the F-Lake Detention Facility project in the amount of \$1,089,210.43. Responding to

KD, the Surveyor noted they had done work in Tippecanoe County and they had a long list of projects which were completed of this nature regarding dirt work and moving. They have been in business for over 30 years.

Other Business

Capilano Estates

Michael Preyss appeared before the Board to discuss the Capilano Estates drainage. Mr. Preyss stated he was following up on last months meeting. He stated prior to 2004 the neighborhood had not flooded according to residents who lived in the neighborhood for 30 years. He felt the flooding in the neighborhood was a life safety issue for the neighborhood as well as the remainder of the county residents. The 6-8 week ago flooding shut down the street for 2 days and in particular his street for 3. During the time phone lines were out (flooded) Sheriff's deputies were not able to access the damage as they were not able to enter through the waters. A meeting was held with the neighborhood residents and they felt the following were possibly responsible: 1. The construction of Menards detention pond 2. The outlet drain (12" steel pipe) from the pond - (ownership in question / neighborhood would like clarification) undersized and higher than inlet pipes into the Capilano pond. He stated since the pipe is undersized and at a higher elevation it contributed to the flooding. They believe the pipe should be lowered and inspected to determine ownership and responsibility. 3. The portion of Indian Creek South of US 52 on County Road 400 West was overgrown and full of debris and needed cleaned out. He proposed Indian Creek be petitioned to a regulated drain and then cleaned out by the County. 4. The culvert under C.R. 400 West and one under the KBS Railroad were undersized. He spoke with Bob Garner President of KBS Railroad and stated Bob was very cooperative and offered to assist any way he could. He stated more than 100 homes in the Capilano neighborhood alone were affected by the flooding. He felt the new Meijer also contributed to the problem. Responding to John Knochels inquiry, Mike stated purchasing land for an additional entrance or an easement had not been pursued by the Homeowners association and felt there would not be funds to do so. John stated County funds could not be used and the financial responsibility would fall back on the Homeowners Association. The Surveyor explained the Menards pond was not a detention pond it was compensatory flood plain storage. The reason the pond was to compensate the portion of the flood plain which was filled in on the project site. As Indian Creek rose it would back into the pond and be stored to protect the downstream owners. Menards also has onsite retention pond which gathered the water and released it at the allowable rate per Stormwater Ordinance. Indian Creek extended approx. 6-7 miles to the north and had several tributaries to it with a massive watershed above the subdivision. IDNR did a floodway boundary study in 2004 which indicated profiles of the bridge under 400 West did not cause a significant rise in the floodplain for the 10, 50 or 100 year flood. However when you get to the culvert at the crossing at KBS Railroad (was Norfolk R.R.) it dropped dramatically which indicated one of the problems was at the railroad crossing culvert. The Surveyor also noted when Capilano Subdivision was developed there was not a drainage ordinance in effect. There was very little if any drainage plans on Capilano Subdivision. After the fact they improved the channel south of US52 from the culvert under US52. The Attorney then explained the power a drainage board has in general. He also discussed the petition process. He noted Indian Creek was considered a natural waterway and was subject to the jurisdiction of the Dept. of Natural Resources (D.N.R.). The Surveyor noted this was similar to Burnett Creek where each individual property owner was responsible for removal of debris in their area. Since this was not a regulated drain the Board has no jurisdiction. The Surveyor noted the recent 2 inch rainfall was not minor. Due to the ground condition (frozen) he felt it was equivalent to a 4-5 inch rainfall event in the summer. KD also suggested the Capilano homeowners look at adding another entrance to the Subdivision as an emergency route. John referred to the Attorney to explain the Obstruction Petition process to Mike. Mike stated he would discuss this with the homeowners and they may elect to follow that process. The Surveyor stated Menards was opened after the new Stormwater Ordinance was in effect and due to the area's history they were reviewed extensively by the Consultant and his office. KD Benson confirmed this as well. Meg Goldenfleet 3732 Capilano Drive approached the Board. Responding to Meg's inquiry, KD stated the Board's responsibility was to insure project release rates did not exceed existing rates prior to development. The Surveyor also stated as-built drawings were required on developments and they have to be signed by him once inspected. KD noted based on the models the Menards pond was functioning as designed. The Surveyor did not feel Menards was a problem. KD reiterated there was no scientific reason known to the Board that Menards was the cause of their flooding problem. Aaron Cook 3929 Deer Path Capilano Estates appeared before the Board. He discussed safety issues, liability and general costs associated with the flooding of Capilano.

F-Lake Detention Pond/ Construction Observation

The Surveyor presented a contract for Professional Services for F-Lake Regional Detention Facility for Part Time Construction Observation by Christopher B. Burke Engineering LTD in the amount of \$113,592.00. He recommended the Board approve the contract as presented. The Attorney had reviewed the contract. John Knochel made a motion to grant approval of the Part Time Construction Observation Contract for F-Lake Regional Detention Facility to Christopher B. Burke Engr. LTD. in the amount of \$113,592.00. Ruth Shedd seconded the motion. The Part Time Construction Observation for F-Lake Regional Detention Facility in the amount of \$113,592.00 was approved as presented.

Branch #1 of Branch #13 SW Elliott Regulated Drain / Petition to Partially Vacate

The Surveyor presented a Petition to Partially Vacate Branch #1 of Branch #13 of the S.W. Elliott Regulated Drain submitted by St. Elisabeth Regional Health New Acute Care Hospital. He reminded the Board a Petition to Partially Vacate across the Lambirth property (west of Creasy Lane) for this particular branch was granted last month. He recommended the approval of the Petition as requested. John Knochel made a motion to grant acceptance of the Petition to Vacate Branch #1 of Branch #13 of the S.W. Elliott Regulated Drain as presented. Ruth Shedd seconded the motion. The Petition to Partially Vacate Branch #1 of Branch #13 of the S.W. Elliott Regulated Drain submitted by St. Elisabeth New Regional Care Hospital was accepted as submitted.

JN Kirkpatrick Regulated Drain/ Petition to Encroach

The Surveyor presented a Petition to Encroach on the JN Kirkpatrick Regulated Drain Easement submitted by the Civil Site Group for the Stones Crossing Self Storage project. The Surveyor noted the encroachment was in the same area which the easements were in the City of Lafayette’s name. The Attorney confirmed the Board had the right to grant the encroachment within the right of entry of the Regulated Drain Easement. The city would have to address the encroachment into their easement. He stated he had spoken with the City Attorney and they were in the process of identifying all of the easements and convey those to the County now that construction was completed on the drain. John Knochel made a motion to grant approval of the Petition to Encroach into the JN Kirkpatrick Regulated Drain Easement. Ruth Shedd seconded the motion. The Petition to Encroach on the JN Kirkpatrick Regulated Drain Easement was approved as presented.

Detrash the Wabash

KD stated Detrash the Wabash was scheduled for Saturday May 17th and will be meeting at the Skating Rink for gloves and trash bags.

D. Anson Regulated Drain

Ruth Shedd stated she had a call from Ernie Agee 8533 North C.R. 100 West, West Lafayette regarding the Delphine Anson Regulated Drain. He stated work had been done on a portion of the ditch and he felt what had been done was not working. The Surveyor stated Homer Schaffer called him and informed him the drain was working much better since work had started on the drain. When the reconstruction was done, it was noted in the minutes the portion of the main needed to be replaced and the right of way needed to be cleared. The Surveyor noted at that time they were going to try at two spots to reconstruct and open up the tile to start flowing. This would help lower water level in the wetlands at the southwest corner of C.R.850 North and C.R. 100 West. This would assist in lowering the wetlands on Mr. Agee’s property and enable the staff to inspect tile condition. The new surface inlets or stand pipes would be installed at the terminus. He stated the intent was to reconstruct the tile to C.R. 100 West for the lowering of the water level so an inspection could be done. The Surveyor stated if the summer was fairly dry they would try to do more work on the tile. John Knochel asked the Surveyor to give Mr. Agee a call and update him on the status of the situation.

John Knochel made a motion to adjourn. As there was no other business before the Board, the meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member

Tippecanoe County Drainage Board

Minutes

December 2, 2008

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, Vice President John Knochel, member Ruth Shedd, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher J. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

John Knochel made a motion to approve the November 12, 2008 Regular Drainage Board minutes as written. Ruth Shedd seconded the motion. The November 12, 2008 Drainage Board meeting minutes were approved as written.

Latter Day Saints of Lafayette

Brandon Fulk appeared before the Board and requested final approval for the Latter Day Saints of Lafayette. The site was located north of C. Rd. 450 South and east of C. Rd. 250 East (Concord Road). A planned wetland was located in the southeast portion of the site. A detention pond located at the site's north end outlet into a storm sewer off site and would ultimately discharge to the J.N. Kirkpatrick Regulated Drain located north of the site. Brandon noted Woodland Elementary School was located to the north of the site as well. He informed the Board he was working with Mark Deyoung on any issues regarding easements and encroachment documentation. He stated he agreed with the November 26, 2008 Burke memo and requested final approval at that time. There was no public comment. Regarding #3 Stormwater Quality of the Nov. 26, 2008 Burke memo, the Surveyor requested a full set of plans in addition to the approval letter from IDEM authorizing the wetland mitigation- for future reference. Responding to John Knochel's inquiry, Brandon stated he hoped to have the encroachment and/or easement documentation for the Board's approval at their next regular scheduled meeting. The Surveyor then recommended final approval with conditions as stated on the Nov. 26, 2008 Burke memo. John Knochel made a motion to grant final approval with conditions as stated on the Nov. 26, 2008 Burke memo. Ruth Shedd seconded the motion. The Latter Day Saints of Lafayette was granted final approval with conditions as stated on the Nov. 26, 2008 Burke memo.

Other Business

Steve Murray

January 2009 Meeting date and time

The Board agreed to hold the January 2009 Drainage Board Regular meeting on January 7, 2009 at 10:00 a.m.

John Hoffman #101 Regulated Drain Clearing

The Surveyor noted F&K Construction would be starting the clearing out of the J.Hoffman Regulated Drain as soon as the weather allowed. He noted they have cleared out the drain in the past and was familiar with the project. He stated the clearing would be done on a regular basis.

Train Coe Regulated Drain Update

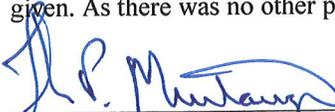
Bids were requested on the Train Coe Regulated Drain Maintenance Project. The office received 4 bids from the 6 requested. The lowest bid was Fairfield Contractors at \$36378.00. They have been given a notice to proceed. The start of the project was contingent on the weather.

Performance Bond/Tipmont R.E.M.C. Battleground

The Surveyor presented Performance Bond #8935632 submitted by Garmong & Son Inc. for Tipmont R.E.M.C. Battleground Facility in the amount of \$150,000.00. He recommended acceptance. John Knochel made a motion to accept the Performance Bond #8935632 submitted by Garmong & Son Inc. for Tipmont R.E.M.C. Battleground Facility in the amount of \$150,000.00. Ruth Shedd seconded the motion. Performance Bond #8935632 submitted by Garmong & Son Inc. for Tipmont R.E.M.C. Battleground Facility in the amount of \$150,000.00 was accepted by the Board.

Public Comment

As this was KD and Ruth's last meeting they expressed their appreciation to the various Board members, Steve Murray, Dave Luhman, David Eichelberger and Brenda Garrison as well as Mike Spencer and Zach Beasley for their hard work and assistance given. As there was no other public comment, John Knochel made a motion to adjourn.



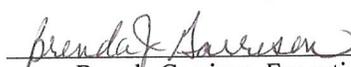
THOMAS MURTAGH, President



DAVID BYERS, Vice President



John Knochel, Member



Brenda Garrison, Executive Secretary

Tippecanoe County Drainage Board
Minutes
March 4, 2009
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

David Byers made a motion to approve the January 7, 2009 Regular Drainage Board minutes as written. John Knochel seconded the motion. The January Drainage Board meeting minutes were approved as written.

Harrison High School Advanced Studies Addition and New Parking

Pat Jarboe from TBird Design Services appeared before the Board to request final approval for the Harrison High School Advanced Studies Addition. Pat stated an overall study of the High School Campus was completed in 2005. The Campus site was located southeast of intersection of County Roads 600N and 50W (County Farm Rd) and the northern portion outlet directly to Burnett Creek and the southern portion to Cole Ditch. The Cole Ditch was located in the southeast of the campus site, meandered through the Golf Course and eventually outlet into Burnett's Creek. The new addition was located on the east side of the existing school. The parking lot would be located on the west side of the school near an existing drive. This area's drainage would be directed to an underground detention basin designed to capture the runoff. This would allow future expansion for the school. In the future, if the campus would expand to the south there would not be an adequate area for a detention basin, therefore the proposed underground basin would be used as an offset for the area. The overall area storm quantity captured presently was approximately 8 cubic feet per second. This would be lowered to approximately 1.4 cubic feet per second (100 year). The underground storage would be 36 inch tall plastic chambers placed on and packed in with large riprap or stone. A Storm Ceptor would be used for water quality and discharged into C.R. 50W (County Farm Road) ditch. This ditch eventually outlet south into the Cole Ditch. Part of the reason underground storage was designed was to save as much square feet as possible on the Campus site for future use. The underground storage minimized the footprint of the overall project. Pat stated they concurred with the March 2, 2009 Burke memo. He then requested final approval with the conditions as stated on said memo. The idea when the master study was completed was to keep it updated and that would be done once approval was granted by the Board. He then requested final approval with the conditions as stated on the March 2, 2009 memo. David Byers made a motion to grant approval with the conditions as stated on the March 2, 2009. John Knochel seconded the motion. The Harrison High School advanced Studies Addition and new parking area project was approved with conditions as stated on the March 2, 2009 Burke memo.

Other Business

JN Kirkpatrick Regulated Drain

The Surveyor presented seven Assignments of Easements regarding the lower portion of the J. N. Kirkpatrick Regulated Drain submitted by the City of Lafayette Board of Public Works. The Easements' locations were from C.R. 350S to Concord Rd (C.R. 250E). The first assignment involved key #162-16602-0247 Dorothy Bullock, recorded document # 03001936. The second assignment involved key#162-16602-0181 Leonard & Dorothy Bullock, recorded document # 03001934. The third assignment involved key#146-04600-0133 Mary Margaret Purdy, Edward J. Purdy, and Carol A. Purdy, recorded document # 02001963. The fourth assignment involved key#146-04600-0133 Mary Margaret Purdy, recorded document # 02001965. The fifth assignment involved key#146-04800-0098 D.F. properties LLP, recorded document # 01001596. The sixth assignment involved Key#162-16602-0236 Tippecanoe County Park and Recreation, recorded document # 01023272. The final assignment involved Key#146-04600-0530 Edward J. Purdy and Carol A. Purdy, recorded document # 02001960. David Byers made a motion to approve the assignments of easements as presented by the Surveyor. John Knochel seconded the motion. The Assignments of Easements were approved as requested by the Surveyor and submitted by the City of Lafayette Board of Works.

2009 Professional Engineering Services Contract

The Surveyor presented a 2009 Professional Engineer Review Contract submitted by Christopher B. Burke Engineering LTD for approval by the Board. He stated the rates in the Contract were the same as the previous year and he recommended acceptance and execution of the proposal for Engineering service to the Board. Dave Luhman stated he had reviewed the contract and it was in order. John Knochel stated he was pleased with their services and noted Mr. Eichelberger was always very responsive and he recommended the acceptance of the contract. David Byers made a motion to accept the contract as presented. John Knochel seconded the motion. The 2009 Professional Engineer Review Contract submitted by Christopher B. Burke Engineering LTD was accepted and approved by the Board.

**Steve Murray
Letter of Credit and Bonds**

Mr. Murray presented the following Letter of Credit and Bonds for acceptance by the Board. The first was a Letter of Credit #622 from Becknell Dev. LLC regarding Ichiya Industrial Tract B aka New TRW Facility in the amount of \$21,100.00. The second was a Letter of Credit #592 for the TRW Facility in the amount of \$30,000.00. (This was an amendment to the original Performance Bond in the amount of \$211,000.00.) Third was Performance Bond #474416 submitted by Tipmont R.E.M.C. for the Tipmont R.E.M.C. Lafayette Substation located near Battleground in the amount of \$39,230.00. Fourth was Maintenance Bond # B0302412 submitted by F&K Construction for the Industrial Pallet Sanitary Sewer at Clarks Hill (an extension from existing Clarks Hill Sanitary Sewer plant to the Industrial Pallet Facility located just south of S.R. 28) in the amount of \$40,000.00. Fifth was Maintenance Bond #B8883933 submitted by F&K Construction for Bridge Mill Phase 1 in the amount of \$17,250.00. The final was Maintenance Bond #C296919 submitted by R&W Contracting for Lilly Mae Estates in the amount of \$7,500.00. The Surveyor recommended acceptance of the various Letter of Credits and Bonds as presented. David Byers made the motion to accept the Letters of Credit and the Bonds as presented by the Surveyor. John Knochel seconded the motion. The aforementioned Letters of Credits and Bonds were accepted by the Board.

Public Comment

As there was no public comment John Knochel made a motion to adjourn. David Byers seconded the motion. The meeting was adjourned.

Thomas Murtaugh, President

David Byers, Vice President

Brenda Garrison, Secretary

John Knochel, Member

Tippecanoe County Drainage Board

Minutes

September 15, 2009

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was absent.

Approval of Minutes

David Byers made a motion to approve the August 5, 2009 Regular Drainage Board minutes as written. John Knochel seconded the motion. The August 5, 2009 Drainage Board meeting minutes were approved as written.

Purdue Research Park Phase 3 Part 2

Ross Nixon represented Schneider Corp. and appeared before the Board to request final approval for Purdue Research Park Phase 3 Part 2. The site consisted of approximately 100 acres and located north of Kalberer Road and west of Yeager Road (aka County Road 100West) and within the City limits of West Lafayette. The site included a detention facility developed during Phase 2 of Part 2 located at the tract's west side. The Baker-Dempsey Regulated Drain began at the north side of Kalberer Road and followed an open ditch through the detention facility. The drain was rerouted around the cemetery and eventually outlet to Hadley Lake. The Simeon Yeager Regulated Drain began on the north side of Kalberer Road crossed through the site continued to the north as well. Portions of the regulated drains located onsite were planned to be vacated in the near future and required documentation would be presented to the Board. Roadway and utility infrastructure would be added across the site connecting Yeager Road on the east. A canal and pond system would be constructed onsite which would discharge to an existing open ditch. The existing detention facility would be expanded on the eastern side for additional storage. Mr. Nixon stated the existing outlet was functioning and would be maintained. He concurred with the September 10, 2009 Burke memo and requested final approval.

There was no public comment. The Surveyor reiterated the Board's only concern was discharge/ release rates into the Baker Dempsey Regulated Drain and based on the September 10, 2009 Burke memo they met the allowable release rate. He recommended final approval with conditions based on the September 10, 2009 Burke memo. David Byers made a motion to grant final approval for the Purdue Research Park Phase 3 Part 2 with the conditions as stated on the September 10, 2009 Burke memo. John Knochel seconded the motion. Purdue Research Park Ph. 3 Part 2 was granted final approval with conditions stated on the September 10, 2009 Burke memo.

Wyandotte Elementary School

Justin Frazier represented TBIRD Design as he appeared before the Board to request final approval for Wyandotte Elementary School. The site consisted of approximately 19 acres on the south side of Co. Rd. 50 South and east of the intersection of County Road 50 South and County Road 550 East. The site drained to the open ditch at Co. Rd. 50 South westerly to the Berlowitz Regional Detention Facility recently constructed. The entire site was located within the Berlowitz Detention Basin watershed; therefore no onsite detention was planned. An entrance drive would be constructed from County Road 50 South. Runoff from the site would be collected by vegetated swales located around the site's perimeter and storm inlets located in parking lots and driveways. Runoff would be collected into the main storm infrastructure and routed to the Berlowitz Detention Facility for storage. Stormwater Quality was provided by onsite vegetated swales and Stormwater treatment units. Justin concurred with the September 10, 2009 Burke Memo and requested final approval. Responding to Mr. Byers' inquiry, the Surveyor noted there was a sanitary lift station located near the site. Also responding to Mr. Byers' inquiry, Justin noted they were actively pursuing easement acquisitions for the Tippecanoe School Corporation across the YMCA property for a storm sewer outlet. (100 yr. emergency overflow)

There was no public comment. The Surveyor recommended final approval with conditions as stated on the September 10, 2009 Burke memo. David Byers made a motion to grant final approval with conditions stated on the September 10, 2009 Burke memo for Wyandotte Elementary School. John Knochel seconded the motion. Wyandotte Elementary School was granted final approval with conditions as stated on the September 10, 2009 Burke memo.

Other Business

Resolution 2009-01-DB/Acceptance of Warranty Deeds

The Surveyor presented Resolution 2009-01-DB "Acceptance of Warranty Deeds" from Eastland LLC. , Sheumann Properties and Saddlebrook Development. These easements were to be granted to the Drainage Board based on an agreement between Saddlebrook and various companies in that area for the Berlowitz Phase 1 project (pond and property to the west of Co. Rd. 550 to I65). These had been executed and recorded by the owner. However there are two steps when property is deeded to the County. The first one was dedication and/or conveyance and the second was the actual acceptance. In order to complete the legal transaction the acceptance was required. He recommended the Drainage Board accept the Warranty Deeds as submitted. Responding to Mr. Murtaugh's inquiry, the Attorney stated it was acceptable for Drainage Board to accept on behalf of the County.

David Byers made a motion to accept Resolution 2009-01-DB "Acceptance of Warranty Deeds". John Knochel seconded the motion. Resolution 2009-01-DB Acceptance of Warranty Deeds was accepted by the Board. (Note: The Resolution will appear in its entirety proceeding these minutes)

Resolution 2009-02-DB Accepting Grant of Easement for Drainage Improvements, Structures, and Facilities

The Surveyor presented Resolution 2009-02-DB "Accepting Grant of Easement for Drainage Improvements, Structures, and Facilities" regarding the relocation (Felbaum Branch of the Berlowitz Regulated Drain north of McCarty Lane and east of I65) which took that portion of the Felbaum Branch into the Berlowitz Regional Detention Facility. The Easement was previously prepared and recorded. He recommended acceptance by the Board as presented.

David Byers made a motion to approve Resolution 2009-02-DB "Accepting Grant of Easement for Drainage Improvements, Structures, and Facilities. John Knochel seconded the motion. Resolution 2009-02-DB Accepting Grant of Easement for Drainage Improvements, Structures, and Facilities" was accepted by the Board. (Note: The Resolution will appear in its entirety proceeding these minutes)

Steve Murray

Petition to Encroach/J.N. Kirkpatrick Regulated Drain/Lot 41 Waterstone Subdivision

The Surveyor presented a Petition to Encroach on the J.N. Kirkpatrick Regulated Drain submitted by Rich Gbur of Lot 41 Waterstone Court Lafayette Indiana. Mr. Gbur requested to build a wooden bridge crossing the J.N. Kirkpatrick Regulated Drain (Phase 1 of the reconstruction). It would be at his own risk. If maintenance was required on that stretch of the J.N. Kirkpatrick and the bridge was damaged the County would not be responsible. He recommended the Board approve the Petition to Encroach on the J.N. Kirkpatrick Regulated Drain as submitted by Mr. Gbur.

David Byers made a motion to grant approval of the Petition to Encroach on the J.N. Kirkpatrick Regulated Drain. John Knochel seconded the motion. The Petition to Encroach on the J.N. Kirkpatrick Regulated Drain submitted by Rich Gbur was approved.

Surveyor Update Report/Branch #11 S.W. Elliot Regulated Drain

The Surveyor updated the Board on the progress to date for the reconstruction Branch #11 of the S.W. Elliot Regulated Drain. Mr. Eichelberger and Mr. Koons on the Burke staff have reviewed the plan to reconstruct from Butler Fairman Seifert (BFS). He also discussed with BFS what additional survey information they may have and if they would make it available to him. He received a cost estimate and rough time frame from Christopher Burke Engr. LTD for the project. He spoke with the City of Lafayette -Jenny Miller and Bob Foley - they were both in favor of the project. He had a preliminary meeting with an appraiser who has done work for the County Highway Department and INDOT regarding benefits and damages, as he felt a professional review and submission of a written appraisal of damages was in order.

The Surveyor's staff was presently working on a composite aerial which would include property owners, acreages, easements, the existing tile and new F-Lake Regional Detention Facility locations. He planned to set up a meeting in the near future with the Board Attorney regarding the exact process. He wanted to discuss with the Attorney the possibility and

benefits of declaring it a "Drainage Impact" area. He also wanted to discuss the possibility of the County paying up front for the project from the EDIT Drainage fund. This would involve setting up a drainage cost recovery for the development's storage fees (i.e. developers pay as storage was needed). He noted as there were not that many property owners involved, he hoped to have a contract and direction to proceed by the next meeting of the Board.

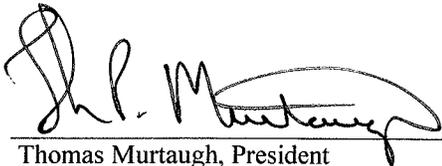
US 231 INDOT Update

The Surveyor updated the Board concerning the US 231 Relocation project. He stated he met with Kenny Franklin Project Manager with INDOT along with Randy Truitt, and a representative from the Governor's office to discuss the status of the relocation of US 231. A future meeting was scheduled with County Highway, Area Plan and several local officials in the upcoming week. He provided them with Christopher Burke's review of the detention area which addressed the Sherwood Forest Subdivision drainage issue. He was verbally informed INDOT would review the discharge location at the US52 side ditch (which eventually outlet to Indiana Creek), however he had not received any information from their consultant to date. He noted he didn't feel the reply to Mr. Luhman's letter gave a definite answer regarding INDOT's future submissions of Drainage plans for this project or others or even if they would comply with the local Drainage Ordinance. He stated that issue had not been resolved to date. He hoped to receive more answers at the next meeting with the INDOT representative, local officials, APC and County Highway officials. Responding to Mr. Murtaugh's inquiry, Opal Kuhl Highway Engineer confirmed that INDOT called the upcoming meeting. He then stated he would continue to keep the Board updated on his progress. The Board thanked him for his update.

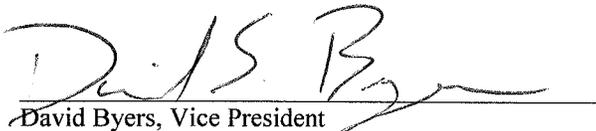
David Byers then congratulated the County Surveyor on his 29 years of service to the County.

Public Comment

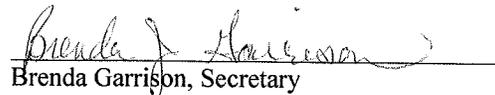
Since there was no public comment, David Byers made a motion to adjourn. The meeting was adjourned.



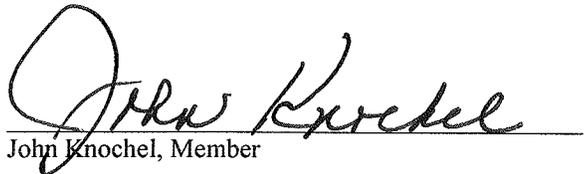
Thomas Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board

Minutes

October 7, 2009

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

Steve Murray stated a correction was in order regarding the September 15, 2009 Drainage Board minutes. Referencing the US 231 update, he stated Rep. Randy Truitt's name should be included. David Byers made a motion to approve the September 15, 2009 Drainage Board minutes with the correction included. John Knochel seconded the motion. The September 15, 2009 Drainage Board meeting minutes were approved with the correction to be included.

Heritage Woods

Mr. Brandon Fulk from Schneider Corp. appeared before the Board and requested final approval for Heritage Woods. Brandon stated a residential care facility was planned. The site was located northwest of County Roads 100 South and 550 East and consisted of approximately 13 acres. The initial phase of the project would involve 7 of the 13 acres with access to the site from County Road 550 East. Brandon stated a Master Plan was in place for the entire site. The western portion of the site was undeveloped at this time. The site would have a direct outlet to the Berlowitz Regional Facility. He stated there would be a treatment facility on the south and north end of the site for water quality. All the water would drain to the west into an existing vegetated swale and into the Berlowitz Regional Facility. He stated they would have an agreement regarding the stabilization of the north swale and the Berlowitz treatment facility banks using fabric and rip rap. He stated they agreed with the conditions set forth in the October 1, 2009 Christopher Burke review memo and requested final approval. There was no public comment. The Surveyor recommended final approval with the conditions listed on the October 1, 2009 Burke review memo. David Byers made a motion to grant approval for Heritage Woods with conditions as stated on the October 1, 2009 Burke review memo. John Knochel seconded the motion. Heritage Woods was granted final approval with the conditions as stated on the Oct. 1, 2009 Burke review memo.

Altus Minor

Mr. Joe Coutts from Masson and Assoc. appeared before the Board to request final approval for the Altus Minor Subdivision. The site was located north of County Road 725 north, west of State Road 43 and consisted of approximately 17 acres. The existing wooded condition on the western end would be preserved as much as possible. Covenants and Restrictions would restrict clearing of the trees to thirty feet around the proposed homes. The site outlet into two existing ditches located along the southern boundary of the site and one of which was a County Regulated Drain known as the Wesley Mahin Regulated Drain. The Regulated Drain routed southwesterly across the southeast portion of the property. A 48 inch box culvert crossed under State Road 43 containing a significant amount of Stormwater runoff from east of State Road 43. A wet pond was proposed for Stormwater quantity and quality located to the west of the Wesley Mahin regulated drain. A portion of the offsite Stormwater would be routed through the pond and the site. Existing drainage patterns would be utilized throughout the site with the easterly portion's runoff to be treated by the facility for quality and quantity. The western portion's runoff would outlet to an existing ditch as was currently. Vegetated swales were designed for each of the residential lots for Stormwater quality treatment. (Joe noted: the western portion's runoff would not be increased.) He stated his client agreed with the conditions as stated on the October 5, 2009 Burke review memo and requested final approval. There was no public comment. Responding to the Surveyor's request Joe stated he would provide the downstream notification documents for the record. The Surveyor recommended final approval with the conditions as stated on the October 5, 2009 Christopher Burke review memo. David Byers made a motion to grant final approval with the conditions as stated on the Oct. 5, 2009 Burke review memo for the Altus Minor Subdivision. John Knochel seconded the motion. The Altus Minor Subdivision was granted final approval with the conditions as stated on the Oct. 5, 2009 Burke review memo.

Resolution #2009-04-DB S.W. Elliott Regulated Drain Branch #11 Establishment of Drainage Impact Area

The Surveyor presented Resolution #2009-04-DB S.W. Elliott Regulated Drain Branch #11 Establishment of Drainage Impact Area to the Board. He stated the Drainage Ordinance allowed the Board to declare impact areas where there was inadequate drainage or other problems. The Surveyor recommended the Board adopt Resolution #2009-04-DB in order for his office to move forward with the design and reconstruction of Branch #11 of the Samuel W. Elliott Regulated Drain. This could be paid for with remaining monies in the EDIT Drainage Project fund. A cost recovery would be implemented as development happened. This would assist the tax payer as they would not have to pay any monies on the reconstruction up front. The Board's Attorney stated the main portions of the resolution did establish the Samuel W. Elliott Branch #11 as an impact area and provided that in addition to normal compliance with the Drainage Code on a reconstruction, any developer within the area must participate in the regional detention basin as a condition of drainage approval. Any drainage improvements in the developments would become regulated drains. This would insure the Board had continuing authority to monitor the function of the drain. Additional requirements for new development could also be added under the code (due to the impact area). The most significant impact or result would be that the development would be required to participate in the regional detention of the basin system. The cost of the reconstruction would be paid for up front by the County and the landowners would not have the initial cost. Responding to Mr. Murtaugh's inquiry, the Surveyor stated no further development could happen north of State Road 38 until there was a positive outlet. Mr. Murtaugh clarified any new development would not be able to have their own detention on their property as the Resolution required they would have to participate in the regional detention. The Attorney reiterated there would be no new cost on the exiting facilities. However expansion of an existing facility or the construction of additions to or a new development would require adhering to the said Resolution. If the development was constructed in future years down the road, their cost would be allocated regarding the actual cost of the reconstruction. There would not be an inflation factor. The Attorney stated this was the same procedure used with other facilities in the county such as F-Lake Regional Facility located near the Ivy-Tech Campus. The Upper JN Kirkpatrick Regulated Drain did not have a positive outlet and a Regional Facility was constructed to meet that demand. People within the watershed would pay a pro ratio share for the detention once they developed their property. Pat Jarboe of T-Bird Designs Inc. appeared before the Board and stated it was a good idea to have deferred cost of development. He asked if there would be a document that could be reviewed prior to acceptance. The Attorney stated a participation agreement (cost recovery agreement) had not been developed to date and only the Resolution was in front of the Board today. Mr. Jarboe asked when the agreement would be available for viewing. The Surveyor stated the design would have to be completed first. INDOT would be responsible to pay for the structure under State Road 38. The last estimate for that was approximately \$500,000.00. (This was an estimate and would need to be updated after the design was completed) The gas company should lower the gas line at their own expense as well. Both of these would result in a significantly lower cost to the property owners. Mr. Jarboe stated he felt the Drainage Board was definitely going down the right path and requested to be kept "in the loop" regarding the impact area specifically and any requirements for future development in that area. The Surveyor recommended the Board adopt "Resolution #2009-04-DB for the Samuel W. Elliott Regulated Drain Branch #11 Establishment of Drainage Impact Area". David Byers made a motion to adopt Resolution #2009-04-DB S.W. Elliott Regulated Drain Branch #11 Establishment of Drainage Impact Area. John Knochel seconded the motion. Resolution #2009-04-DB S.W. Elliott Regulated Drain Branch #11 Establishment of Drainage Impact Area was adopted as presented. The Attorney noted the next step would be to develop a design of the reconstruction of Branch #11 of the Samuel W. Elliott Regulated Drain.

S.W. Elliott Branch #11 Reconstruction Design

The Surveyor presented a contract for the S.W. Elliott Branch #11 Reconstruction Design written by Christopher B. Burke Engr. LTD. to the Board. He stated the Attorney had reviewed the contract. The contract listed the various 5 tasks which included basically the field survey, hydrologic and hydraulic analysis, 50% complete design plan, task force coordination between entities (INDOT, Duke Energy etc.), and finally 100% complete design plan. The estimated fee was \$45,000.00; he recommended the Board enter into the contract with Christopher B. Burke Engr. LTD as presented. David Byers made a motion to approve the contract as presented. John Knochel seconded the motion. The Reconstruction Design for Branch #11 of the S.W. Elliott Regulated Drain Contract was approved as submitted.

USGS Geological Survey Joint Funding Agreement/S.W. Elliott Regulated Drain Gaging Station

The Surveyor presented the USGS Joint Funding agreement regarding the installation and operation maintenance of a stream flow gaging station located at the Tippecanoe County Highway Garage. The Tippecanoe County Drainage Board would provide \$8400.00 and USGS would provide \$3600.00 for the station. He explained Burke tried to model the flood plane of the Elliott upstream basically Concord Road and Brady Lane up through Ivy Tech. The 100 year flood plain was much larger than presently. This was a method to prove to USGS that the modeling was not working in this location. This had been done

on a couple of streams in other communities within the state, The Surveyor recommended the Board execute the agreement as presented. David Byers made a motion to sign the USGS Geological Survey Joint Funding Agreement/S.W. Elliott Regulated Drain Gaging Station. John Knochel seconded the motion. The USGS Geological Survey Joint Funding Agreement/S.W. Elliott Regulated Drain Gaging Station was accepted as presented.

Steve Murray Updates

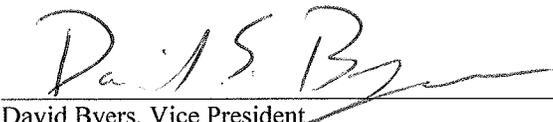
The Surveyor noted the Petitions for Vacations on the Agenda today were pulled and would be more than likely be presented at the next monthly meeting. He noted he was moving forward with the S.W. Elliott Regulated Drain Branch #11 reconstruction preparations. The resolution and contract were presented to the Board today and Christopher Burke Engineering had met with Beutler Fariman and Seiffert (BFS) to acquire all the previous survey information available on the said drain. This would reduce any additional surveys needed for the design. A US231 meeting was held with INDOT which was more about the status of the project (both phases). He did request a separate meeting regarding drainage at the meeting; however it had not been scheduled to date. He stated INDOT was addressing the comments from Christopher Burke regarding the detention storage area near Wake Robin and Sherwood Forest. He had a side conversation with the lead engineer on the north section. They were going to look at trying to do median or side ditch detention where they were discharging north to the US 52 side ditch which eventually found its way to the Indian Creek watershed. He had not received any documents yet but was led to believe they would do their best to supply drainage calculations on the two areas of concern. Responding to Mr. Murtaugh's inquiry, the Attorney stated it was a continuing battle to receive drainage information from INDOT regarding their projects. The Surveyor noted he did not believe they looked at the effect they would have at their discharge points when it goes out across private property and which do not outlet directly into a major stream or facility. He noted we were not the only county with this issue. He stated the Association of County Surveyors discussed this particular problem with INDOT at their latest meeting. He noted legislation could be proposed to remedy this. The Attorney stated under common law INDOT was responsible for any damages occurred from a project. However the Surveyor noted this was always after the fact and usually at the expense of the property owner. The intent was to protect the property owner up front before any damage could occur. He would continue to try and work with INDOT to resolve the issues.

Public Comment

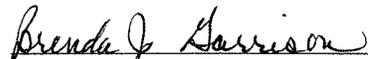
As there was no public comment David Byers made a motion to adjourn. The meeting was adjourned.



Thomas Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board
Minutes
November 4, 2009
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Project Manager Zachariah Beasley was also in attendance.

Approval of Minutes

David Byers made a motion to approve the October 7, 2009 Regular Drainage Board minutes as written. John Knochel seconded the motion. The October 7, 2009 Drainage Board meeting minutes were approved as written.

Promenade Self Storage

Kyle Betz represented Fisher and Assoc. and appeared before the Board to request final approval for Promenade Self Storage. The site was located on Promenade Pkwy. south of County Road 350 South and located within the City of West Lafayette limits. This project was previously presented before the Board as Stones Crossing Self Storage by a different developer. That project was approved in 2008 and had a larger footprint with additional buildings at that time. The current project had an indirect and direct outlet to the JN Kirkpatrick Regulated Drain. He stated the overall project was a self storage facility with a care-taker residence on the site as well. As part of the overall Stones Crossing development, the development fell within the predetermined release rates and as such, detention storage would not be required. The internal storm sewer network created three outlet points and two of the points outlet directly into the JN Kirkpatrick Regulated Drain. He noted the approval today was for the direct release only. The remainder of the storm site improvements fell under the jurisdiction of the City of West Lafayette as the site was annexed in February of 2009. The project would be completed in phases however the phasing was not yet certain at this time. Responding to Mr. Murtaugh's inquiry, Kyle stated there was a ditch which originated at Co. Rd. 350 South and a part of the Foxfire Apartments project that served two purposes. Those were creating a defined flow path for the outlet from Co. Rd. 350 South and to control the runoff from Foxfire Apt's. This was not the primary outlet as Foxfire had its own pond and its own outlet to JN Kirkpatrick Regulated Drain located further to the west. Regarding the previous Foxfire Apt's approval, the Surveyor noted there was a tile branch of the JN Kirkpatrick Regulated drain which had been vacated in phases as the developments of Stones Crossing and Wal-Mart were developed. It was intercepted and ran through the storm sewer system in the Wal-Mart project. (It was originally meant to drain Co. Rd. 350 South and was extended as part of the Foxfire development.) The Surveyor reiterated this was in the City limits and as such the Board would be approving the release rate into the JN Kirkpatrick Regulated Drain only. There was one other item to be dealt with today. A previously approved plan submitted under Stones Crossing Self Storage included an encroachment into the JN Kirkpatrick Regulated Drain approved by the Board and recorded as required. This new development would not require an encroachment, and the developer asked that the recorded encroachment agreement be rescinded. Since the encroachment was a recorded document, a request to rescind the recorded encroachment would be required to be submitted for approval by the Board. The Surveyor recommended final approval with conditions as stated on the October 30, 2009 Burke Review memo and to include the added condition for a formal rescission request prepared and submitted by the petitioner. There was no public comment. David Byers made a motion to rescind the Encroachment Agreement and authorize the Board's President to sign the Rescission Agreement. John Knochel seconded the motion. David Byers made a motion to grant final approval with conditions as stated on the October 30, 2009 Burke memo along with the added condition for a formal rescission agreement to be submitted by the petitioner. John Knochel seconded the motion. Promenade Self Storage was granted final approval with the conditions as stated on the Oct. 30, 2009 Burke memo and the added condition of a formal rescission request prepared and submitted by the petitioner.

OTHER BUSINESS

Petition to Partially Vacate the Simeon Yeager Regulated Drain

Brandon Fulk representing Purdue Research Foundation Phase 3 Part 2 appeared before the Board to request the partial vacation of the Simeon Yeager Regulated Drain in T23N R4W and Sections 1, 6 and 36. Brandon noted there were no other landowners that would be affected by the partial vacation request. He noted the drain had been terminated at Kalberer Road previously. The vacation would be from Kalberer Road to Yeager Road. He stated Purdue's counsel had worked with the
November 4, 2009 Tippecanoe County Drainage Board

Board's Attorney regarding the appropriate documents and as a side note stated the Dempsey Baker Regulated Drain Petition to Partially Vacate would be presented at the December meeting for Board action. Responding to Mr. Byer's inquiry, Brandon stated no other landowners were affected by the request. There was no public comment. The Surveyor recommended approval of the partial vacation as presented. David Byers made a motion to grant the Partial Vacation of the Simeon Yeager Regulated Drain as presented. John Knochel seconded the motion. The Simeon Yeager Regulated Drain Partial Vacation Petition presented by Purdue Research Foundation Phase 3 Part 2 was approved as submitted.

Reschedule December Meeting

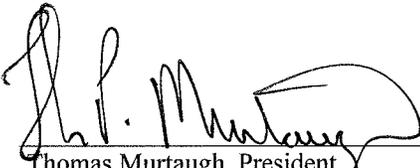
David Byers made a motion to reschedule the December 5, 2009 Drainage Board meeting to December 9, 2009 at 10:00 due to a scheduling conflict. John Knochel seconded the motion. The December Drainage Board meeting was rescheduled to Dec. 9, 2009 at 10:00. It will be held in the Grand Prairie Room.

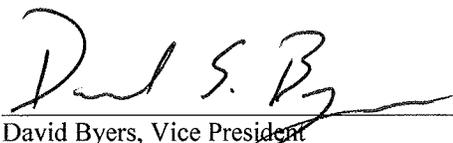
Steve Murray

The Surveyor stated that Christopher B. Burke was proceeding with the design of the SW Elliott Branch #11 Reconstruction. He had no other updates for the Board at this time.

Public Comment

As there was no other public comment David Byers made a motion to adjourn. The meeting was adjourned.


Thomas Murtaugh, President


David Byers, Vice President


Brenda Garrison, Secretary


John Knochel, Member

Tippecanoe County Drainage Board

Minutes

July 7, 2010

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, Project Manager Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Dale Snipes Surveyor's Office. Brenda Garrison Drainage Board Secretary was absent.

President Tom Murtaugh opened the meeting with a moment of silence for the former Surveyor Steve Murray. Mr. Murray passed away in the latter part of June.

Approval of Minutes

David Byers made a motion to approve the June 2, 2010 Regular Drainage Board minutes as written. John Knochel seconded the motion. The June 2, 2010 Drainage Board meeting minutes were approved as written.

McCarty Lane Extension

Alan Mize with DLZ appeared before the Board to request final approval for the McCarty Lane Extension project. Jon LaTurner project manager with DLZ was also in attendance. The extension was located at County Road 550 East and north toward State Road 26 to just west of County Road 675 East. He noted that County Road 675 East would be a cul-de-sac at that location. The extension would be a four lane section similar to the existing McCarty Lane west of County Road 500 East. There would be a 5x7 box culvert located at the Carr property directing the approximately 27+ acreage runoff to the Berlowitz Regional Detention Facility. They were in the permitting approval process presently. There was an existing manhole at the southeast quadrant of McCarty and 550 East which would be utilized. He also noted there would be a storm sewer outlet located at a Wildcat Creek Tributary. A 60 inch pipe under State Road 26 would tie into the tributary as well. Equalizer pipes were planned to be utilized due to elevation of the roadway. Construction would begin next summer or fall as the letting of bids was planned for this November 2010. Anticipated construction phase was approximately 2 years. A connection was planned from County Road 50 South to County Road 675 East. The project manager recommended final approval with the conditions as stated on the July 1, 2010 Burke Memo. John Knochel made a motion to grant final approval with conditions as stated on the July 1, 2010 Burke memo. David Byers seconded the motion. McCarty Lane Extension was granted final approval with the conditions as stated on the July 1, 2010 Burke memo.

Other Business

Petition to Encroach J.N. Kirkpatrick Regulated Drain/Church of Latter Day Saints

A Petition to Encroach on the J.N. Kirkpatrick Regulated Drain submitted by Latter Day Saints (L.D.S.) was presented to the Board by the Project Manager Zach Beasley. Schneider Corporation submitted this to the Surveyor's office for their client L.D.S. The project manager stated this was a condition to be met when the project received final approval and recommended the approval of the Petition to Encroach on the J.N. Kirkpatrick Regulated Drain. There was no public comment. David Byers made a motion to approve the Petition to Encroach on the J.N. Kirkpatrick Regulated Drain as submitted by L.D.S. John Knochel seconded the motion. The Petition to Encroach on the J.N. Kirkpatrick Regulated Drain was approved as submitted.

Public Comment

Judy Bower 3750 North 300W West Lafayette Indiana approached the Board to discuss a drainage issue at her location. She stated she had lived at this address since July 1985. Her house was the 4th house north of US52 stop light at Klondike school. In 2002 they remodeled and expanded their home, at which time her property was considered to be on the flood fringe of Indian Creek. This ran through the Elks Golf Course just north of her property adjacent to the Maleys property. On June 12th in 2004 her home flooded with the basement filled completely and 4-6 inches of water throughout the house. She noted the flood water did not come from Indian Creek but rather from Hadley Lake approximately one mile east. At that time they did

not have flood insurance nor was it required by the lender. Following the 2004 flood, FEMA representatives said the flood map for that area was being revised. Eventually the property was put in the floodplain and flood insurance was required. Since that time Menards was constructed east of her location. At that time they did some significant drainage work. She stated they had hoped the new development requirements from the Drainage Board would protect them from future problems. However, on June 22, 2010 her home flooded again. At 8 am, the water came into the northwest corner of her property from Indian Creek which flooded the Elks Golf Course as well. Menards retention ponds drain into Indian Creek as well. At 10 am, on June 22, Menards retention ponds overflowed, the water crossed the road from the east like in 2004 and flooded her property again. This time with the experience of the flooding in 2004 and the help of approx. 30 volunteers that showed up nine pumps were installed. Four pumps were industrial size. The water was prevented from rising above the top block of the basement. (In 2004, the water rose from the basement through the air conditioner vents into the rest of the house.) They used 380 sand bags along with the pumps and volunteers so that the damage was to what water seeped through the doors upstairs. The Surveyor's office project manager made another site visit (he was there in 2004) to review the situation and specifically the drainage of the area.

She stated the landowners came up with a few recommendations for flooding relief. The first was to install a holding pond anywhere upstream of this area to slow down the water flow. Second suggestion was the installation of a smaller culvert on the Menards site that would feed into the larger culvert under the road. This may relieve some of the water quicker from the Menards ponds. The third suggestion was to regrade the open waterway where the water flows from under County Road 300W as that area was no longer downstream and now it is an uphill rise. The fall in that area is not correct. The fourth suggestion was to consider making a holding pond just west of her property which was now a farm field. This might also help the flooding situation at the Capilano Subdivision entrance as it was located downstream from her location. If a holding pond was not possible it was hoped that the farm field could be regraded so that it would better protect the property with high edges rather than low spots as was presently the case. She respectfully thanked the Board for their time and consideration.

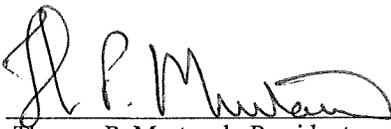
The project manager stated Judy was speaking about the area just south of her residence. The area was where the culvert was located underneath Taft Road (County Road 300W). There was a natural surface conveyance that continued south westerly through the farm field and eventually curved and entered Indian Creek. Specifically at the location of the natural surface conveyance there were a couple different things going on. It appeared from review of this, approximately in the middle of the parcel there was a high point and on the southwestern corner of the property there appeared to be a sanitary sewer manhole that was approx. 6-8 feet above the natural surface elevation. This was somewhat of an obstruction. Upon his site visit, he explained the grading would be a private matter since this was not a regulated drain maintained by the County. It would not take a whole lot to regrade that area which would allow some runoff to pass through quickly. The bigger issue was discussed with Judy, her dad and her neighbor as this was a large watershed of approximately 13-15 square miles.

Mr. Cary Maley 3756 300W West Lafayette approached the Board and stated he had 6-8 inches of flooding in his basement as well. He had lived there since 1991. His house elevation was higher than the Bowers. Prior to Menards being developed he stated he had sandbagged along County Road 300W occasionally during rains as it would run over the road onto his property. This event had increased since Menards was developed. He noted they tend to believe the water was backing up along the road someplace which would fill almost the entire farm field with the exception of the hill in the middle. He was not sure where exactly where the obstruction was however. The project manager noted a restriction was located at the Indiana Creek culvert under the Kankakee Beaverville Railroad track. This was causing the restriction and water to pond up behind it as it could not overtop the railroad track. It was only able to take so much quantity of water in a certain amount of time. This culvert was not large enough at it's opening to allow the water to run though it fast enough. Mr. Maley noted this would require a good study of the area and hoped to protect his property. He stated he appreciated the Board's time on this matter.

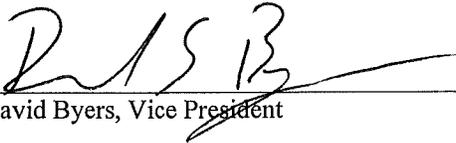
Commissioner Murtaugh asked the attorney if a study was done in the area would it be best if this was a regulated drain. The attorney stated yes in order for the Board to have jurisdiction to do improvements it would need to be a regulated drain. A study might be done perhaps with Economic Development funds because the existence of this flooding problem does impact the development of the whole area consisting of approx. 13-15 square miles. This would be a legitimate use of Economic Development monies. The development potential of either commercial or residential was impacted by the problems with the flooding, however depending on the recommendation of the study it might not be cost effective as the Board could be limited to results due to cost and legalities. The County Drain fund could not be used if the area was not a regulated drain. Comm. Murtaugh stated this *not* being a regulated drain could impact the ability to implement any suggestions from the study. The attorney agreed. He noted if it *was* established as a regulated drain, the route of the drain and the Drainage Board's required 75 feet right of entry on either side of the location of said drain would be established.

Improvements could be done within the easement once established. The cost of the improvements would then be paid by the landowners within the watershed. The alternative as an Economic Development project would require the purchase of the real estate that the pond would be constructed on. At Comm. Murtaugh request, the attorney reviewed the steps to make this a regulated drain. First a petition to establish a regulated drain representing more than 50 percent of the acreage within the watershed was required to be submitted and referred and then would be referred to the Surveyor by the Board. A study would then be done by the Surveyor for what was required to make it a regulated drain open or tiled etc. This would then return to the Drainage Board for a landowner hearing and a decision of whether the benefits outweighed the costs. Once it was decided the board would then enter an order establishing a regulated drain. The next step would be to proceed with the specifications, bids etc for whatever improvements were required to construct the drain. The project manager noted a watershed map with the landowners listed would be provided to a landowner who would take the petition around to be signed by the affected landowners. That is how it gets started. Ms. Bowers stated she was willing to help with the petition. Comm. Murtaugh noted any concerns should be relayed to the Surveyor's office so that during this process they were kept informed and the study was complete. Comm. Murtaugh stated as one member of the board he would feel more comfortable recommending a study for the entire area knowing that the petition to make this a regulated drain was moving forward. The Board would be less committed to spending the money knowing the Board's hands would be tied to doing anything once the study was completed. He stated the Board would appreciate any help the landowners could give. He then thanked the landowners for attending the meeting and explaining their situation. He stated he would refer to the Surveyor on his recommendation for the start and end point (route) of the newly established regulated drain. The project manager stated he would need to review the area and all contributing factors to make the appropriate decision of the route for the area's newly established drain. He would report this back to the Board.

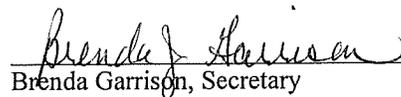
David Byers made a motion to adjourn. As there was no other public comment the meeting was adjourned.



Thomas P. Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board

Minutes

December 8, 2010

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

David Byers made a motion to approve the November 3, 2010 Regular Drainage Board minutes and the November 3, 2010 Audley Oshier Regulated Drain #60 Hearing minutes as written. John Knochel seconded the motion. The November 3, 2010 Regular Drainage Board meeting minutes and the November 3, 2010 Audley O'Shier hearing minutes were approved as written.

2011 Drainage Board Meeting Dates

David Byers made a motion to approve the 2011 Drainage Board meeting dates as presented. John Knochel seconded the motion. The 2011 Drainage Board meeting minutes were approved as submitted. The Secretary will post these dates on the website and send out to media.

Wea Substation /Tipmont R.E.M.C.

Jim Pence from Schneider Engineering appeared before the Board to present the Wea Substation/Tipmont R.E.M.C. for final approval. The site consisted of approximately 4.63 acres and located just north of County Road 450 South and west of the intersection of County Road 450 South and County Road 450 East. Access would be provided from County Road 450 South. The majority of the site's runoff outlet northwest into the existing JN Kirkpatrick Regulated Drain, and the remaining outlet to the County Road 450 South side ditch. Mr. Pence stated they agreed with conditions stated on the December 3, 2010 Burke memo. He requested final approval with the conditions as stated on the December 3, 2010 Burke memo. He stated Steve Traylor from Tipmont R.E.M.C. was in attendance today. Construction of the facility would start in the spring of 2011. Responding to Mr. Byers' inquiry, Jim stated the existing substation located approximately 0.5 miles from the site was owned by Duke Energy not R.E.M. C. He also noted a permit pending with the Highway department was for the access drive. David Byers made a motion to approve the Tipmont R.E.M.C. Wea Substation with conditions as stated on the December 3, 2010 Burke memo. John Knochel seconded the motion. David Byers withdrew the motions as stated to discuss the requested Variance and Encroachment Petition before the final approval was given. Mr. Pence requested a variance to the Stormwater Ordinance regarding Chapter 3 and more specifically as the required 30 feet easement to be reduced down to 10 feet. He stated due to the proposed 12 inch storm pipe to be located underground below and parallel to an existing overhead transmission line and high powered gas main utility easements, the requested 10 foot easement was sufficient to maintain the infrastructure when necessary. This was also at the request of Mr. Standiford the landowner. The Surveyor recommended approval of the variance. David Byers made a motion to approve lowering the required variance from 30 feet to 10 feet as requested. John Knochel seconded the motion. The requested easement variance was lowered to 10 feet as requested. A Petition to Encroach on the J. N. Kirkpatrick Regulated Drain was submitted for approval at that time. John Knochel made a motion to grant the petition to encroach on the J.N. Kirkpatrick Regulated Drain easement. David Byers seconded the motion. The Petition to Encroach on the J.N. Kirkpatrick Regulated Drain was approved as submitted. David Byers then made a motion to approve the Tipmont R.E.M.C. Wea Substation with conditions as stated on the December 3, 2010 Burke memo. John Knochel seconded the motion. The Wea Substation was granted final approval with the conditions as stated on the December 3, 2010 Burke memo.

Chapelgate Senior Apartments/Earthwork & Grading

Dan Teder Attorney with Reiling, Teder and Schrier appeared before the Board to present Chapelgate Senior Apartment Earthwork & Grading for final approval. He noted Art Kaser with Evergreen planners; Dave Tilman and Joe Whitsett owners of Chapelgate Apartments were in attendance today and would answer any questions the Board may have. The site consisted of approximately 6.90 acres and was located south of U.S. 52 west of County Road 300 West (Klondike Road). The site's grading and placement of fill would be located within the floodplain of Indian Creek. It would be used to construct on-

site floodplain compensation ponds (2) and prepare the site for future construction of buildings and parking areas. One of the ponds would be located within the floodway of the Indian Creek; however no fill would be placed within the floodway of the creek. He stated a Dept. of Natural Resource (D.N.R.) approval would be required for one pond and there would be no increase to the existing runoff. He reiterated at this time the approval was for the earthwork and grading only as they planned to return to the Board for approval of the detailed construction plans regarding the building and parking areas. Responding to Mr. Murtaugh inquiry, Mr. Teder stated they would be working closely with D.N.R. during the process of construction of the pond in question. Mr. Kaser stated there would be some fill in the floodplain area of the site. Responding to Mr. Knochel's inquiry, it was noted that all excavated materials would be used on site. Mr. Kaser stated they agreed with the conditions as set forth in the December 3, 2010 Burke memo and requested approval. Mr. Murtaugh stated the area had been discussed in length by the Drainage Board. A master drainage study was planned by the Board regarding the potential impact of development within Indian Creek watershed. Mr. Teder stated the owners understood the present conditions of the site and were willing to work closely with the Surveyor on this project to insure adequate drainage. Discussion was held regarding the release rate requirement for future building and parking area construction on site. The Surveyor reiterated historically this area has had problems with the drainage and his office was looking at this closely. A more restricted release rate would be required as one condition for any future planned construction approvals. Dave Eichelberger stated it would be prudent to use the most restrictive release rate from the Ordinance and Technical Standards of .07 cfs per acre for the 10 year and .23 cfs per acre for the 100 year in their calculations as they start to develop the site. He noted they should check with the Surveyor's office in case the master drainage study had been completed before submission. If it was completed at that time they would need to follow the master drainage study recommendation regarding release rates. Responding to Mr. Teder's inquiry, Mr. Luhman stated the area's landowners were presently circulating a petition to establish a new regulated drain regarding Indian Creek north of the railroad. It was not known when the petition would be submitted. He also noted any time there was a catastrophic flood in the area; the Board has heard multiple complaints etc. regarding the lack of drainage. He continued this area may well be declared a Drainage Impact Area if the study indicated it. Mr. Teder asked if his clients submitted a future building and parking area construction plan using .1 cfs rate before the study was completed, would they have to refigure and resubmit their plans. Mr. Luhman stated no they would not be required after the fact. Mr. Eichelberger noted if possible they should use .1 cfs release rate for their future development calculations. Boone County (as a result of a newly established master drainage study) cut their release rates to .1 and .25 cfs. Joe Whitsett owner of Chapelgate Apartments stated they had many conversations with the neighbors in the area. They certainly planned for drainage improvement of the area and being good neighbors. Mr. Eichelberger stated the existing pond was a constructed wetland put in as a BMP measure as well as the channel from past development. Due to flood elevations there was no way the ponds could be used as detention and the developer was fully aware of that. John Knochel made a motion to grant final approval with the conditions as stated on the December 3, 2010 Burke memo for Chapelgate Senior Apartments Earthwork & Grading only. David Byers seconded the motion. Chapelgate Senior Apartments Earthwork and Grading only was granted final approval with the conditions as stated on the December 3, 2010 Burke memo.

Industrial Pallet Master Drainage Study

Patrick Williams of TBird Designs Inc. appeared before the Board to submit Industrial Pallet Master Drainage Study for final approval. He noted Jay Wiegand was in attendance as well. The site consisted of approximately 26 acres and was located on the east side of U.S. 52 approximately a quarter mile just north of State Road 28. Currently the west side of the site was developed for business. This portion of the site drained west to east. The submitted Master Drainage Study would bring their current development into compliance as well as the eastern portion of the site. Two variances for the project were requested. A half acre of impervious area on the west side and a quarter acre of impervious area for the south side was planned to expand driveways and a small amount of business storage. A variance from the storm water quantity and quality was requested for these portions. In addition an emergency route was provided for offsite drainage on the south and east side of the site. There would be a small meadow or grass swale for some treatment in the area. No additional impervious area runoff would be sent to that area of the site. He stated he was available for questions at that time. Responding to Dave Byers inquiry, Mr. Williams noted they expect the storm water quality to be improved. There was presently a small amount of offsite runoff which ran to a natural depression/swale on the site. The development would impact this area of the site. The flow would bypass the pond because it was physically impossible to get the runoff into it. Hence it would be bypassed to its natural outlet and be used for emergency flow only. Storage would be provided within the swale. Discussion was held concerning the existing offsite runoff flow and the present conditions. From the culvert under the railroad the runoff crossed over the road into the ditch system. After construction instead of runoff routing through the property offsite runoff will be routed around the property. Pat Jarboe stated while the offsite runoff would be reduced it would be outlet to the same location at present. Responding to the Surveyor's inquiry, Pat Williams stated the existing onsite drainage tile would be abandoned and they would not be connecting to it. After the construction of the pond and new outlet the tile would remain in place and basically act as a farm tile for acreage to the north and noted there were private tiles tying into it. They were only proposing to obtain the Master Drainage Study approval only at this time. When the time came for construction to cross County Road

1075 South they would seek approval not only from the Surveyor Office but from County Highway as well. Pat Jarboe noted there had been discussion with the highway department regarding the culvert at that location. Regarding Dean Rusk's (5983 Broadview Road Colfax In.) inquiry, Mr. Williams stated the underdeveloped portion of the site would flow into and be contained in the pond. Marshall Palmer (10818 E 1075 S Clarks Hill In.) asked if the gas station, diner and lodge runoff flowed to his tract. Mr. Williams stated he believed it flowed south and into a depression area. The natural depression area straddled Industrial pallet's site and the south site. Mr. Weigand stated they have kept that area mowed however it was not owned by them. (small triangle tract) Pat Williams noted there would be no change on the Lincoln Lodge Property site and no investigation had been done regarding wetland etc of the depression area. Mr. Eichelberger stated when the project is submitted for approval a report would be required regarding the possible wetland issue. Kenny Johnson of Johnson Excavating (2105 S CR930W Clarks Hill In) responded to Mr. Murtaugh' inquiry and stated there was a 6 inch tile that went into an 8 inch tile in the undeveloped portion of the site. Mr. Palmer noted his property was directly north of the site. He has one area of his property which acts as a nice bio-filter full of willows, cat tails etc. and he did not want to see it destroyed. Mr. Williams stated any future expansion would be designed and based on a plan adhering to the Ordinance requirements. Tom Osborne (8536 E 1000S Clarks Hill In) asked if they had a Rule 6 permit. Jay Wiegand responded they had applied for a Rule 6 permit from Ind. Dept of Environmental Management (IDEM). He stated they were also required to do quarterly testing of any and all industrial contaminates specifically tailored to their business. He stated it was public information and could be obtained from IDEM. An engineer firm from Indianapolis performed the testing on a quarterly basis. He stated they have had a Rule 6 permit since 2006. A chain of custody of the samples was followed and they were submitted to IDEM for testing. He noted they have had no compliance issues to date. Mr. Eichelberger noted while a copy of the Rule 6 permit was on hand, a copy of the SWPPP was not. The Surveyor requested a copy of the report from IDEM (specifically the testing results) be submitted and recommended it to be a condition of approval today. Mr. Eichelberger suggested the developers submit a copy of their latest annual report from IDEM which includes testing data and any recent correspondence from IDEM as well. A current annual report would show key information from all the periods to date and would be sufficient. Mr. Wiegand noted they do have some industrial waste water which is totally separate from their storm water. They presently haul this waste offsite to a facility in Indianapolis as it is cheaper than to route the waste to the plant at present time. Eventually the industrial waste will be routed to the Clarks Hill Waste Water Plant. Currently only sewage from their restroom facilities are pumped to Clarks Hill Waste Water facility. He noted any and all industrial waste water was hauled off their site to a facility in Indianapolis. Responding to Dean Rusk's inquiry, Mr. Weigand stated their drinking water was tested by IDEM as well. Mr. Palmer stated at the present time there was a black sludge with the runoff from the site. Mr. Williams noted the pond was designed to treat for sediment, and approximately 80% of the sediment should be eliminated from the outflow. He also reiterated the release rate from the larger 2 acre pond would be restricted as the Ordinance allows. Responding to Mr. Murtaugh' inquiry, Pat stated presently the onsite ponds were undersized. Dave Luhman noted due to the additional onsite area retained in the pond the release rate would continue for a longer duration. Mr. Eichelberger stated it would create a higher volume, longer duration; the peak discharge would be about the same. During the 100 year storm the project site would produce 8 cfs (assuming fully developed) release rate, which was several times less than the contribution of the farm field at present. He also stated there were 10 year and 100 year flood restriction plates as well. Mr. Luhman, Board Attorney reiterated the developers were requesting approval for a master drainage study only for their future development plans. When they were ready to construct anything on site they would have to appear before the Board and plans would be reviewed for compliance to the Stormwater Ordinance. Action today would set the general ground rules however they would still be held to the standards as set in the Ordinance for the project at that time. Mr. Eichelberger stated that the two variance request would not be appropriate until the applicant submitted future plans for actual construction improvements on the site. David Byers made a motion to approve the Industrial Pallet Master Drainage Study with the conditions as stated on the December 3, 2010 Burke memo and the added condition of submission of the most recent IDEM report. John Knochel seconded the motion. The Industrial Pallet Master Drainage Study was approved with the conditions as stated on the Dec. 3, 2010 Burke memo and the added condition of submission of the most recent IDEM report.

Uniform Fee Schedule Ordinance/Amended for Alcohol Certification Permit Fees

The Surveyor presented the Uniform Fee Schedule amended to include a fee for the Alcohol Certification Permit Fees. He noted presently several counties were charging a fee for the process of said forms. In 2006 the law changed that businesses were to get annual renewal of their license which included obtaining a location certification permit from the County Surveyor office. The forms were more frequently submitted and required a significant amount of staff time and effort. Other County's fees for renewal were reviewed before setting the price at \$100.00. He noted the fee was for the service and costs associated with the renewal process. John Knochel made a motion to approve the Uniform Fee Schedule Ordinance/Amended for Alcohol Certification Permit Fees as presented. David Byers seconded the motion. The Uniform Fee Schedule was approved as amended.

J. Berlowitz Regulated Drain#08 / Partial Vacation request

The Surveyor presented an order to partially vacate a portion of the J. Berlowitz#08 regulated drain. He explained this was an item included within the previously submitted Clarian/Arnett/County Agreement regarding the Berlowitz Regional Storage Facility. The order involved the Berlowitz tile portion which was routed through the subject property only. He noted the agreement was previously approved by the Drainage Board and Commissioners. He requested approval at that time. David Byers made a motion to grant the vacation order as presented by the Surveyor. John Knochel seconded the motion. Order #2010-12-DB Vacating a Portion of the Berlowitz Regulated Drain in Tippecanoe County Indiana was approved as submitted. The Attorney noted a second condition of the agreement was to reduce the right of entry for the relocated Berlowitz drain to 25 feet and would be effective as of the deed transfer date was recorded. John Knochel made a motion to grant approval of the reduction of the right of entry on the J. Berlowitz regulated drain relocated portion to 25 feet. David Byers seconded the motion. The J. Berlowitz regulated drain right of entry was reduced to 25 feet as requested. (Relocated portion only)

Audley Oshier Regulated Drain

The Surveyor noted his office sent out request for quotes on the Audley Oshier regulated drain. Quotes were received and the job was awarded to Tony Garriott as lowest bidder. He will begin work as soon as weather permits.

Petition to Encroach on the John McCoy #50 Regulated Drain

The Surveyor presented a Petition to Encroach on the John McCoy #50 Regulated Drain submitted by Gary D. Kirkham. He stated the location was just south of the Wea School Road on Co. Rd. 200 East. The residence was located on the west side of the road with an existing driveway. The relocated drive would be over said drain. The county regulated tile would be replaced under the drive as well as an additional 10 feet to each side. (Approximate total - 40 feet.) David Byers made a motion to grant approval of the Petition to encroach on the J. McCoy Regulated Drain as presented. John Knochel seconded the motion. The Petition to encroach on the J. McCoy Regulated Drain #50 was approved as presented.

Petition to Reconstruct/Calvin Lesley Regulated Drain #48

The Surveyor presented a Petition to reconstruct on the Calvin Lesley Regulated Drain #48 submitted to the Surveyor office by Jack Buck and Paul Pence. The Lesley drain tile was located at Co. Rd. 750 East and north of Co. Rd. 300 North (just north of East Tipp. Middle School). It involved approximately 55 parcels and 900 acres within the watershed of this drain. He noted approximately 60-70% of the benefitted landowners signed the petition. John Knochel made a motion to approve the submission of the petition and direct the Surveyor to prepare a report for the Board. David Byers seconded the motion. The Petition to reconstruct on the Calvin Lesley Regulated Drain was approved as submitted and the Board referred the Petition back to the Surveyor to prepare a report.

Petition to Establish a New Regulated Drain Maintenance Fund/John Hengst Drain

The Surveyor presented a Petition to Establish a New Regulated Drain Maintenance Fund for the John Hengst Regulated Drain. Mr. Jack Buck submitted the petition. The Surveyor noted there was no maintenance fund set on this drain and stated approximately 60% of benefitted landowners signed the petition. John Knochel made a motion to refer the petition back to the Surveyor for a report. David Byers seconded the motion. The Petition to Establish a New Regulated Drain Maintenance Fund regarding the John Hengst Drain was approved as submitted and referred to the Surveyor for a report.

Petition to Establish a New Regulated Drain Maintenance Fund/Combs Tile

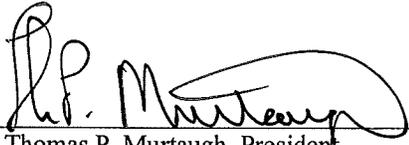
The Surveyor presented a Petition to Establish a New Regulated Drain and Maintenance Fund for the Combs tile Legal drain submitted by Jack Buck. The Surveyor stated this tile was NOT a County Regulated Drain and at this time was a private system. He stated approximately 72% of benefitted landowners signed the petition and were in agreement with Mr. Buck. The Attorney noted the requirement was 10% of the acreage or 25% of the value. David Byers made a motion to approve the petition as submitted and refer it back to the Surveyor for a report. John Knochel seconded the motion. The Petition to Establish a NEW Regulated Drain and Maintenance Fund regarding the Combs tile was approved as submitted and referred back to the Surveyor for a report.

Maintenance Bond/ Tipmont R.E.M.C/ Battleground Substation

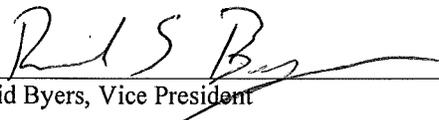
The Surveyor presented Maintenance Bond #929506906 in the amount of \$15,000.00 from Garmong Construction Services dated November 12, 2010 received from Tipmont R.E.M.C. Battleground for approval by the Board. He recommended Board approval. John Knochel made a motion to grant approval for the Maintenance Bond #929506906 in the amount of \$15,000.00 from Garmong Construction Services dated November 12, 2010 received from Tipmont R.E.M.C. Battleground. David Byers seconded the motion. Maintenance Bond #929506906 in the amount of \$15,000.00 from Garmong Construction Services dated November 12, 2010 received from Tipmont R.E.M.C. regarding the Battleground substation was approved as submitted.

Public Comment

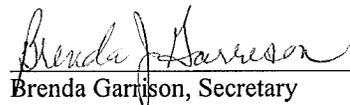
As there was no public comment John Knochel made a motion to adjourn. The meeting was adjourned.



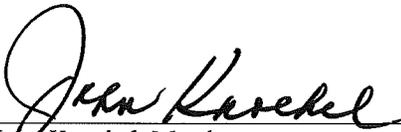
Thomas P. Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board
Minutes
June 1, 2011
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison. Board President Tom Murtaugh was absent for the approval of minutes and the Nanshan project presentation only.

Approval of Minutes

John Knochel made a motion to approve the May 4, 2010 Regular Drainage Board minutes as written. David Byers seconded the motion. The May 4, 2011 Drainage Board meeting minutes were approved as written.

Nanshan America Mass Earthwork and Grading

Jim Pence from the Schneider Corporation appeared before the Board to request final approval for Nanshan America Mass Grading. The site consisted of approximately 50 acres located on the southwest corner of U.S. 52 and C.R. 350S (Veterans Memorial Parkway) and within the city limits of Lafayette. He also requested an encroachment on the Upper JN Kirkpatrick Regulated Drain. He stated this project was granted a one hundred fifty feet (150') easement from the Park 350 Partners for a drainage ditch alongside the Park 350 site and the ditch would outlet into the Upper JN Kirkpatrick Regulated Drain. He noted they were constructing the outlet channel with a temporary sediment trap connecting to JN Kirkpatrick drain to maintain sediment runoff, both in the interim condition of mass grading and the ultimate construction of the outlet into the ditch. Mr. Pence requested final approval for Nanshan America mass earthwork and grading as well as approval for the encroachment on the Upper JN Kirkpatrick regulated drain.

The Surveyor then reviewed the site location and plans reiterating this project would be located in the City of Lafayette. He explained the open ditch would be constructed along the southwestern portion of the site which would outlet into the JN Kirkpatrick Regulated Drain. He noted the Board was hearing this project to approve the drainage - mass earthwork and grading only. He stated a petition to encroach on the JN Kirkpatrick regulated drain was submitted for this project as well. He recommended final approval with the conditions as stated on the May 16, 2011 Burke memo for Nanshan America Mass Earthwork and grading. John Knochel made a motion to grant final approval with the conditions as stated on the May 16, 2011 Burke Memo for Nanshan America mass earthwork and grading. David Byers seconded the motion. The Nanshan America Mass Earthwork and Grading was granted final approval with the conditions as stated on the May 16, 2011 Burke Memo. John Knochel then made a motion to grant the encroachment on the Upper JN Kirkpatrick Regulated drain as submitted. David Byers seconded the motion. The Petition to Encroach on the Upper JN Kirkpatrick Regulated Drain was accepted as requested. There was no public comment on this project.

Chapelgate Sr. Apts.

Arthur Kaiser from Evergreen Planners (Indianapolis Indiana) appeared before the board requesting final approval for the Chapelgate Senior Apartments project. The site was located south of US 52 and west of Co. Rd. 300 W (Klondike Rd.) and consisted of approximately 6.9 acres with the apartment building location in the northeast corner. Earthwork for this project received final approval during the February 2011 Drainage Board meeting. He noted the removal of the site within the flood zone was approved and a retaining wall was constructed along the eastern portion of the site as planned. The site was ready for the final drainage improvements and construction of the apartment building. He requested final approval for the project. The Surveyor requested the status of as builts for the compensatory storage area. Mr. Kaiser stated they had been completed and he would submit those to the Surveyor office as requested. Mr. Kaiser also stated he had received the required letter from FEMA certifying the building location out of the flood hazard area. The Surveyor noted his office would require copies of all documentation from FEMA as well as the previously mentioned as builts for the file. He then recommended final approval with the conditions as stated on the May 25, 2011 Burke memo for Chapelgate Sr. Apartments. Responding to Mr. Murtaugh's inquiry, the Surveyor noted directly west of the building site location (less than 1000 feet) 2 detention basins were excavated to compensate for the fill area of the building site. He stated the requested as builts submittal regarded the excavation of the detention basins. David Byers made a motion to grant final approval with the conditions as stated on the

May 25, 2011 Burke memo for Chapelgate Sr. Apartments. John Knochel seconded the motion. Chapelgate Sr. Apartments was granted final approval with the conditions as stated on the May 25, 2011 Burke memo. There was no public comment.

Huntington Farms Phase 4 (previously tabled from May 2011 Drainage Board meeting)

David Byers made a motion to remove from the table of the May 4, 2011 Drainage Board meeting, Huntington Farms Phase 4 project. John Knochel seconded the motion. The project was opened for discussion. Joe Coutts from Cripe Architects and Engineers (Indianapolis Indiana) appeared before the board to request final approval for the Huntington Farms Phase 4 project. The site was located between Co. Rd. 200 N (Lindberg Rd.) and SR 26 West- west of Co. Rd. 300 W (Klondike Rd.) and consisted of approximately 9.89 acres. This phase was the continuation of the overall 75 acre Huntington Farms development site. Mr. Coutts stated Mr. Lee Brand's concern from the previous May meeting was addressed. He reviewed the plan as a 4 inch tile or outlet pipe would be tied into the existing 12 inch clay Vanderkleed drain tile. A section approximately 60 feet in length of the Vanderkleed tile would be replaced and a "berm" (not a compacted bank) would be constructed above it to provide protection for the outlet. The 4 inch tile would be approximately a foot lower than the main outlet pipe of the detention basin. He noted in smaller rainfall events (up to approximately an inch) Mr. Brand should not see any water from the pond. In larger rainfall events he would see runoff however as the pond drained down the runoff would decrease. He met with Mr. Brand onsite and received his approval for the plan. He stated they felt it was a viable way to address the nuisance runoff which crossed his property. This would be included on the revised construction plans when resubmitted. A petition to encroach on the Vanderkleed Legal Drain easement had been submitted regarding this plan. He requested a waiver from item one under the Stormwater Quality section of the April 27, 2011 Burke memo regarding the 80% removal requirement as this was the last phase of the development approved in 1996 prior to the existing Stormwater Quality Ordinance. Mr. Coutts requested approval of the petition and final approval for the project at that time. The Surveyor stated they had reviewed the resubmitted plans and Mr. Coutts had addressed many of the concerns previously stated by the Board at the May meeting. Mr. Coutts had also met with landowner Mr. Lee Brand and addressed his concerns for the nuisance runoff over his property. He then recommend final approval with the conditions as stated on the April 27, 2011 Burke memo. Responding to Mr. Byer's inquiry, Mr. Eichelberger stated concerning the circumstance of the previously submitted and approved master drainage plan (prior to the Stormwater Quality ordinance in effect at this time) for the overall Huntington Farms project and the fact of the limitations within the site and their TSS removal percentage was at approximately 70 % he felt the project could be approved with an amended condition regarding the TSS removal percentage to 70%. David Byers made a motion to amend item number one under the Stormwater Quality section within the April 27, 2011 Burke memo to a 70% TSS removal John Knochel seconded the motion. The April 27, 2011 Burke memo regarding item number one under Stormwater Quality was amended to read 70% TSS removal. David Byers made a motion to grant final approval with the conditions as stated on the April 27, 2011 Burke memo with the amended item number one under Stormwater Quality to read 70% TSS removal for the Huntington Farms Phase 4 project. John Knochel seconded the motion. Huntington Farms Phase 4 was granted final approval with the conditions as stated and amended in the April 27, 2011 Burke memo. A petition to encroach on the Vanderkleed legal drain was submitted for this project and tabled at the May meeting as well. David Byers made a motion to open for discussion the Petition to Encroach on the Vanderkleed Legal Drain. John Knochel seconded the motion. The petition was opened for discussion. David Byers made a motion to grant approval of the encroachment on the Vanderkleed legal drain as petitioned. John Knochel seconded the motion. The petition to encroach on the Vanderkleed legal drain was approved as submitted. There was no public comment.

Cottages on Lindberg

Steve Roeshlein from Vester and Assoc. appeared before the Board to request final approval for the Cottages on Lindberg project. The site was located northeast of Co. Rd. 250 W and Co. Rd. 200 N (Lindberg Road) intersection and consisted of approximately 18 acres. He noted comments on the May 31, 2011 Burke memo were being addressed and revised plans would be submitted as required. The Surveyor reviewed the site for the Board using GIS. This site was directly west of the existing Willowbrook Apartment complex. There would be 129 structures. This was a high density development. The major concern of the Surveyor's office was that the construction plans previously submitted indicated two or three of the buildings did not have the required freeboard minimum. He noted he would not sign off on the plans without this being addressed and revised. He noted it was difficult to understand by the plans how the runoff would access the ditch from the paved surface at the driveway location. He had a concern that the runoff would not route down the street. There were other issues but these were the major concerns and would need to be addressed. He indicated using the GIS website the area in question for the Board. Mr. Eichelberger also reviewed the area in question and reviewed existing construction plans. Responding to Mr.

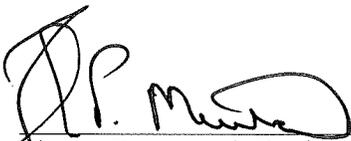
Byers' concern regarding locations of the buildings on the existing construction plans, Mr. Roeshlein stated they would be relocated and revised plans would be submitted to the Surveyor's office. Several structures were located within or close to the emergency runoff area. The Surveyor indicated on the GIS site the area in question for the Board. Mr. Eichelberger then reviewed the areas in question and the existing plans for the board. The Surveyor then recommended final approval with the conditions as stated on the May 31, 2011 Burke memo. Due to time restraints approval and the fact the Surveyor must sign off on plans before APC would approve the final plat, drainage approval was requested. Mr. Travis Triniton owner of the project site approached the Board and requested to move forward with the approval with conditions. The Surveyor stated it would have to be turned around fast and he would NOT sign off on the plan if not revised as discussed and submitted in a timely manner. The Attorney clarified a verbiage should be added under Stormwater Quantity item #1 of the May 31, 2011 Burke memo that revised plans submitted would be to the satisfactory to the Surveyor and that which verified there was a minimum of one foot of freeboard under **each** structure. David Byers made the motion to amend Stormwater Quantity number one on the May 31, 2011 Burke memo with the added verbiage as stated by the Attorney. John Knochel seconded the motion. Item number one under Stormwater Quantity was amended with the added verbiage "revised plans submitted would be to the satisfactory to the Surveyor and would verify there was a minimum of one foot of freeboard under **each** structure". David Byers made a motion to grant final approval with the conditions as stated on the May 31, 2011 Burke memo for Cottages on Lindberg. John Knochel seconded the motion. Cottages on Lindberg was approved with the conditions as stated and amended on the May 31, 2011 Burke memo. There was no public comment.

Petition to Partially Vacate the Felbaum Branch of the Berlowitz Regulated Drain

Dan Teder from Reiling, Teder and Schrier LLC appeared before the Board and submitted a Petition to Partially Vacate the Felbaum Branch of the Berlowitz Regulated Drain. The site was located just north of the McCarty Lane extension on the east side of Co. Rd. 550 E within the development to be known as Hawthorne Lakes. The Surveyor reviewed the site and route of the Branch for the Board using the GIS website. He recommended approval to the Board. David Byers made a motion to grant the partial vacation of the Felbaum Branch of the Berlowitz Regulated Drain. John Knochel seconded the motion. The Petition to partially vacate the Felbaum Branch of the Berlowitz Regulated Drain was approved as submitted.

Public Comment

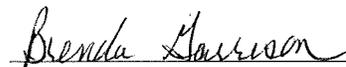
As there was no public comment John Knochel made a motion to adjourn. The meeting was adjourned.



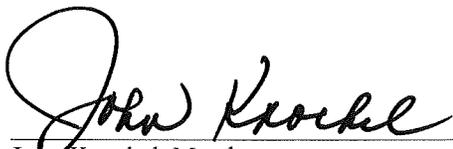
Thomas P. Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board

Minutes

July 6, 2011

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

David Byers made a motion to approve the June 1, 2011 Regular Meeting minutes, the June 1, 2011 J. Hengst, J. Blickenstaff Regulated Drains Special Hearings and the June 30, 2011 Special Drainage Board meeting minutes as written. John Knochel seconded the motion. The June 1, 2011 Regular Meeting minutes, the June 1, 2011 Special Hearing minutes regarding the J. Hengst and J. Blickenstaff Regulated Drains and the June 30, 2011 special Drainage Board meeting minutes were approved as written.

Romney Dollar General Store

Dale Kruse of Kruse Consulting Inc. 7384 Business Center Drive Avon Indiana appeared before the Board to request final approval of the Romney Dollar General Store. The site was located southwest of the intersection at SR28 and US 231 in the town limits of Romney Indiana which consisted of approximately 1.3 acres. On and off-site storm water would outlet to the existing storm sewer along S.R. 28. John Galloway, previous owner of tract owned the surrounding tracts. Mr. Kruse stated they were working together on the offsite Drainage Easement required regarding the route of the runoff. He would submit the finalized easement at a future date. They would meet today onsite to work out any issues of the easement. Underground detention would be stored in pipes located under the parking lot. At that time he requested final approval. The Surveyor reiterated the easement must be obtained and recorded as he would not sign off on the plans until this was completed. He then recommended final approval with the conditions as stated within the June 30, 2011 Burke memo to include the recorded easement condition. There was no public comment. David Byers made a motion to grant final approval with the conditions as stated in the June 30, 2011 Burke memo which included the condition of a recorded drainage easement from the adjoining landowner Mr. Galloway. John Knochel seconded the motion. The Dollar General store in Romney was granted final approval with the conditions as stated in the June 30, 2011 Burke memo which included the condition of a recorded drainage easement from the adjoining landowner Mr. Galloway.

Nanshan America Advanced Aluminum Technologies

Mr. Jim Pence from Schneider Corporation Inc. appeared before the Board to request final approval for the Nanshan America Advanced Aluminum Technologies project. The project was located within the City of Lafayette's limits. The actual development would be approved by the City. The Drainage Board was responsible for the approval of drainage only. This project lied within the Upper J.N. Kirkpatrick Impact Drainage Area and the S.W. Elliott's Ditch Priority Watershed. The site was located on the southwest corner of the intersection at U.S. 52 and C. Rd. 350 South (Veterans Memorial Parkway) and consisted of approximately 51.75 acres. Mr. Pence sated they agreed with the Burke memo conditions as stated in the June 21, 2011 Burke memo and requested final approval at that time. The Surveyor stated mass earthwork and grading was presented and granted approval by the Board in the June meeting. A Petition to Encroach on the J.N. Kirkpatrick Regulated Drain during the interim and as a permanent condition was approved at that time as well. He noted the Board's approval today regarded the special discharge rate into the J.N. Kirkpatrick Open Ditch. He stated this project was in compliance with the restricted rate and recommended approval with the conditions as stated on the June 21, 2011 Burke memo. There was no public comment. David Byers made a motion to grant final approval for Nanshan America Advanced Aluminum Technologies with the conditions as stated in the June 21, 2011 Burke memo. John Knochel seconded the motion. The Nanshan America Aluminum Technologies was granted final approval with the conditions as stated in the June 21, 2011 Burke memo.

Hawthorne Villas

Jim Pence from Schneider Corporation Inc. appeared before the Board to request final approval of Hawthorne Villas. Mr. Pence stated the site was located south of the intersection of C. Rd. 50 South and C. Rd. 550 East on the west side and approximately 37.67 acres. The site would drain to the J. Berlowitz Regulated Drain via storm sewers, swales and two dry detention facilities. Mr. Pence stated this project was brought before the Board in 2003 as a single family residential site. The developer has revised those plans to an 89 unit duplex condominium project. Pursuant to the signed 2006 Storage Fees Agreement with the developer, 2.63 acre feet of detention storage would be credited. This would leave 1.37 acre feet of storage credit for the Hawthorne Villas site to be used as directed by the agreement. Mr. Pence stated they were requesting a

variance to the required 80% TSS removal. He proposed several BMP measures such as vegetated swales, two dry detention ponds, a filter strip and stormwater quality measures to treat stormwater runoff. The current TSS removal percentage planned was at 77% so he felt it was adequate. Responding to Mr. Murtaugh' inquiry, Mr. Pence stated there was an entrance constructed from C. Rd. 50 South based on the project proposed in 2003. They have kept that entrance for this project. At the Surveyor's request Mr. Pence stated the following: Based on the Berlowitz Regional Facility, there was an overflow berm along the south side of Co. Rd. 50 South which was constructed higher than the 100 year elevation requirement. He also noted there were no building pads less than 46.6 feet onsite. He noted an extra foot of freeboard (height above 100 year elevation requirement) was added based on the worst case scenario. The Surveyor stated he felt they had gone above and beyond the building pad elevation requirement as their lowest elevation was approximately 3 feet above the requirement. He reiterated the BMP measures regarding this request were a good faith effort to accommodate the percentage. He referred to Mr. Eichelberger to elaborate. Mr. Eichelberger reiterated the aforementioned and stated he felt they had made a good faith effort in this case and saw no problem with the requested variance. The Surveyor then recommended final approval with the conditions as stated in the June 29, 2011 Burke memo in with the amendment to condition #2 under "Variances/Encroachments" concerning replacement of the stated 80% TSS removal to 77% TSS removal as requested. There was no public comment. David Byers made a motion to amend Condition #2 under "Variances/Encroachments" as aforementioned within the June 29, 2011 Burke memo and grant the variance as requested. John Knochel seconded the motion. Condition #2 under Variances/Encroachments on the June 29, 2011 Burke memo was amended to read 77% TSS removal. David Byers made a motion to grant the Variance as amended. John Knochel seconded the motion. The requested variance was granted with the amendment. David Byers made a motion to grant final approval with the conditions as stated and amended on the June 29, 2011 Burke memo. John Knochel seconded the motion. Hawthorne Villas was granted final approval with the conditions as stated and amended on the June 29, 2011 Burke memo. The Surveyor then presented a Petition to Encroach on the Berlowitz Regional Facility as well as a Petition to Vacate Branch #10 of the Berlowitz Regulated Drain for Hawthorne Villas and recommended approval. David Byers made a motion to approve the Petition to Encroach on the Berlowitz Regional Facility as well as approve the Petition to Vacate Branch#10 of the Berlowitz Regulated Drain. John Knochel seconded the motion. The Petition to Encroach on the Berlowitz Regional Facility as well as the Petition to Vacate Branch #10 of the Berlowitz Regulated Drain was approved as presented.

Hawthorne Gardens

Clem Kuns from TBird Designs Inc. appeared before the Board to present Hawthorne Gardens for final approval. The site was located west of C. Rd. 550 East and north of McCarty Lane and consisted of approximately 12.2 acres. A multifamily apartment complex was planned for this site. This site was filled with soil excavated from the Berlowitz Regional Detention Facility located along the north boundary. Currently the drainage pattern routes to the northwest directly into the Berlowitz Regional Facility via a storm sewer system with a small portion of runoff to C. Rd. 550 East ditch. An infiltration trench would provide a measure of detention and a vegetative swale was planned for storm water quality. Pursuant to the signed 2006 Storage Fees Agreement with the developer, this site was identified under the stated "R-3 West of CR 550 East" and 1.73 acre feet of detention storage would be credited for this project site. A total of 1.27 acre feet of credit remained for a remaining portion of the "R-3 West of CR 550 East" to be used as directed by the signed agreement. The developer submitted a Petition to Vacate Branch #6 of the Berlowitz Regulated Drain which served this site only and flowed from south to north within the site. The developer had also submitted a Petition to Encroach on the Berlowitz Regulated Drain. Mr. Kuns stated in all cases all storm water flows were restricted onsite up to the 100 year requirement before it would overtop the bank of the Berlowitz Regional Facility with the exception of a small amount of sheet flow from the rear of the lots. He noted there were two Drain Petitions included with this project. A Petition to Encroach on the Berlowitz Regulated Drain as well as A Petition to Vacate Branch #6 of the Berlowitz Regulated Drain. He stated they were in agreement with the June 29, 2011 Burke Memo and requested final approval for the project as well as approval for the Petitions as presented. The Surveyor stated this project site was higher in elevation than the Hawthorne Villas site approved by the Board. He reiterated the 100 year elevation in the hammerhead pond was 643.75 and this site's elevation was over five feet higher than that elevation. He noted Branch #6 of the Berlowitz drain was an old tile approx. 8-10 inch to be vacated and tied into the storm sewer. The Petition to Encroach involved two outlets that encroached upon the Berlowitz Regional Detention Facility and Tippecanoe County actually owned the property it was not just a drainage easement. He then recommended approval of Hawthorne Gardens with the conditions as stated on the June 29, 2011 Burke memo as well as approval for the Petitions as presented to the Board. There was no public comment. David Byers made a motion to grant approval of the Petition to Encroach upon the Berlowitz Regional Facility as well as the Petition to Vacate Branch # 6 of the Berlowitz Regulated Drain. John Knochel seconded the motion. The Petition to Encroach on the Berlowitz Regional Facility and the Petition to Vacate Branch # 6 of the Berlowitz Regulated Drain were approved as presented. David Byers made a motion to grant final approval with the conditions as stated on the June 29, 2011 Burke memo. John Knochel seconded the motion. Hawthorne Gardens was granted final approval with conditions as stated on the June 29, 2011 Burke memo.

Zachariah Beasley/ Regulated Drains Update

Samuel W. Elliott Regulated Drain #100: Branch #11

The Surveyor updated the Board regarding the Samuel W. Elliott Regulated Drain #100 Branch #11 appraisal status. Traynor and Associates 6750 East 75th Street Indianapolis Indiana 46250 were contracted to conduct appraisals on the properties within the Branch #11 watershed regarding the benefits and damages required for the Reconstruction Report. The appraisals were completed and the reports were delivered to him last week. He was reviewing them at this time and would finalize the Reconstruction Report when completed. He then would present the Reconstruction Report to the Board. He stated he planned to present the report along with the appraisals during the August meeting.

Dismal Creek Regulated Drain #09: Ilgenfritz Branch

The Surveyor updated the Board regarding the Ilgenfritz Branch of the Dismal Creek Regulated Drain #09. The clearing and dredging project was roughly two miles in length. (from the confluence of the creek approximately half mile west of C. Rd. 450 East and south of C. Rd. 500 South upstream or east to C. Rd. 575 East- approximately 500 feet east of S.R. 52) This project was close to completion (approximately 90%). The wet weather had slowed them down a bit..

2011 Open Ditch Spraying

The Surveyor presented the following list to the Board regarding the 2011 Open Ditch spraying to control the growth of obnoxious weeds and vegetation. The ditches were Otterbein #112, Hadley Lake #104, E.F. Haywood #35, J.N. Kirkpatrick #46. He stated this also helped with Beaver control as studies showed spraying on a regular basis saved money in the long run. Open ditches should be dredged every 15-20 years and spraying on a regular basis assisted with the keeping cost of brush removal before dredging to a minimum. This program was started a few years ago and will continue under his leadership.

Indian Creek Watershed Study

The Surveyor updated the Board regarding the Indian Creek Watershed Study. He noted he had signed a contract with Christopher B. Burke Engineering LTD. They were currently working diligently and he hoped to have the final study by the end of this year for presentation to the Board. He stated this was one step in identifying what was and locations of the problem areas within the watershed. Restrictions (such as release rates for future developments) would be reviewed and may be warranted by the problems identified within the study.

Other Business

The Surveyor presented Performance Bond #7623870 for Spitznagle Borrow Pit submitted by Crider and Crider in the amount of \$25,000.00 for approval by the Board. David Byers made a motion to approve the Performance Bond as presented. John Knochel seconded the motion. Performance Bond #7623870 for Spitznagle Borrow Pit submitted by Crider and Crider in the amount of \$25,000.00 was approved as submitted and presented to the Board.

Public Comment

Jennifer Parks 8058 North Meridian Line Road, West Lafayette 47906, approached the Board. Her home was located just west of Meridian Line Road and east of Interstate 65 - north of the intersection at C. Rd. 800 North and Meridian Line Road. She stated her drainage problem started in 2004 when at that time the farm field north of her tract was plowed during wet weather. She stated it was too wet to plow at that time in her opinion. She stated a tile within the field was smashed by heavy farming equipment. From that time forward she has had numerous problems with drainage. Her septic flooded under her home on many occasions and she has replaced their well pump as well as the switches for it numerous times. She noted that her son must walk through standing water in the mornings to reach the school bus on many occasions. They hired Snow White Services at their cost to investigate the problem and jetted the tile. She presented a letter from the company which indicated a blockage was found. She also paid for a breather pipe installed at the tile location in hopes to lessen the flow of water. Lori Koches 8211 North Meridian Line Road W. Lafayette 47906 northeast of her property also experienced standing water issues. They even cost shared an open ditch hoping to solve the issue with another landowner (not named). The open ditch was created to assist in the surface water. However neither the open ditch nor the breather relieved her drainage issue. She then presented pictures of properties owned by her and Ms. Koches that indicated the location of the standing water from the last rainfall. She stated Ms. Koches property usually drained before her property. The Surveyor stated the tile ran along the west side of Meridian Line Road and drained to the north. Responding to Mr. Byers' inquiry, the Surveyor stated a few years ago work was being done on the Anson County Regulated drain and Snow White services was in the area. Therefore he directed them to her location in order to investigate her complaints since they were in the area. Just north of her home approximately 100 feet on the west side of Meridian Line Rd. was a vertical riser. They attempted to insert the jet hose and were unable to insert it down into the tile. Upon observation of the area it appeared that a farm implement of some sort had driven across the vertical riser and smashed it down into the field tile. Therefore the jet head could not go either direction in the field tile. The Surveyor agreed that only minimal amount water was able to enter the tile. Mrs. Parks stated water had

backed up through her septic in her toilet and shower since damage of the tile occurred. She stated the farmer in question admitted to her that he indeed ran over the tile while plowing, therefore he should have to bear the cost of repair. She reiterated they had no problem with drainage until the tile was damaged. She requested assistance from the Board to remedy the ongoing problem. The Surveyor confirmed this tile or riser was not part of the Anson County Regulated Drain. He would investigate further with the Health Department, however he thought this tile was required by them when the house was built and served as an outlet to the perimeter drain around her septic field. As this was the only outlet they had for the perimeter drain, they ran it to the north and tied it into the Anson County Regulated Drain. This would be a typical requirement from the Health Department to keep the water table down. He would confirm with the Health Department this was the case and if approval was granted at the time. It would stand to reason this was what was done. Responding to the Surveyor's inquiry, Mrs. Parks stated they moved into the home in 1999 and had no drainage issues until 2004. They originally thought the issue was septic related however it was not the case. Responding to Mr. Byer's inquiry, Mrs. Parks stated originally Phil Kerkhoff owned the property where the tile was located however it was owned at the present time by Denton Sederquist. Mrs. Parks noted Mr. Kerkhoff had recovered and inspected the tile in the past but would not accept blame for the damage. He blamed the damage on the willow tree located north of the damaged tile on the Koches property. Mr. Byers stated the riser could have been shoved down into the tile while farming - if it was an old clay tile. Theoretically an agricultural tile should be located down deep enough that farming over it should not cause a problem. The Surveyor reiterated monies from a County Regulated Drain maintenance fund could not be used on private tiles. The attorney stated in the case of obstruction to a mutual drain, a Petition to Remove an Obstruction to a Mutual Drain could be filed with the Drainage Board. The Board would then hold a hearing to decide whether this was an intentional or unintentional obstruction. He reviewed in more detail the drainage law for Mrs. Parks regarding this situation. The Surveyor stated the petition would be available for Mrs. Parks if she chose to proceed. She stated she would proceed with the process.

David Byers made a motion to direct the Surveyor to investigate the private tile subject to Mrs. Parks filing the petition with the Surveyor's office. John Knochel seconded the motion. The Surveyor was directed to investigate the private tile subject to Mrs. Parks filing a Petition to Remove an Obstruction to a Mutual Drain.

Delphine Anson Drain/ Ernest Agee and Bret DeCamp

Mr. Ernest Agee 8533 North C. Rd. 100 West, West Lafayette Indiana 47906, approached the Board to discuss the Delphine Anson Regulated Drain and the drainage issue associated with it. He stated Mr. Bret DeCamp 8832 North C. Rd. 100 West, West Lafayette Indiana 47906 and Alan Gray 8822 North C. Rd. 100 West, West Lafayette Indiana 47906 were in attendance as well. He submitted pictures of standing water on his, Mr. DeCamps and Mr. Gray's properties. He noted that he felt the foamy substance on the top of the standing water shown in the pictures was runoff from chemicals used on the farm fields which ultimately entered into the Anson Ditch. He stated it had been stagnating this year as long as 17 days. He stated he was not against farming he knew well its importance. He informed the Board, he had spoken with Mark Eastman from the Soil and Water Conservation District concerning the farm to the north however they won't put any waterways in. He stated this issue was getting worse and at present time the water had sat for 4-5 days within the ditch. The standing water hindered Mr. Gray's ability to enter his home through his drive. He reiterated the seriousness of the problem. The Surveyor stated it was important to note there were two different regulated drain watersheds (Delphine Anson and Andrew Brown) involved with this drainage issue. The watersheds boundary cuts northwest and southeast through Mr. Alan Gray's driveway. He further explained the watersheds were the Andrew Brown Regulated Drain watershed which routes northeast and the Delphine Anson watershed which routes to the southwest. He reviewed the driveway in question using the G.I.S. site for the Board and the entire drainage for their benefit. He noted the watershed boundaries were completed using the old U.S.G.S. Quadrant Angle maps with 2 foot contour intervals. He stated when he investigates this issue he would confirm the boundaries. He stated the boundaries could be off a hundred foot or more horizontally due to the accuracy of the historical information at that time. He also stated there was a depressional area near Mr. Gray's driveway. Last fall he worked with Allen Gray to investigate the branch of the A. Brown drain which ran under the interstate as he was unable to locate any maintenance records for information on it. He noted when the A. Brown Regulated Drain was originally constructed the interstate was not in existence. He had the branch excavated east and west of I65 and potholed in several areas on both sides of it. He found nothing that indicated the branch had a blockage of any kind. He reviewed the construction plans for I65 and then conducted an onsite inspection of the pipe, it's size etc. The I65 construction plans were followed regarding installation and size of the pipe in question. He went further and hired a jetting company to jet under the interstate and it proved to be open. A breather was installed on the west side of I65 for future investigation due to the dry weather last fall. He noted the maintained portion of said branch stopped short of the aforementioned depressional area. Mr. Agee interjected stating the D. Anson drain was also a problem in addition to the A. Brown drain. He noted the main tile of the D. Anson Drain was located between Mr. DeCamp and Mr. Gray's homes. Mr. Allen Gray approached the Board and stated he had been working with the Surveyor over a year now and he was very accommodating and great to work with. He stated the issue for him was the A. Brown ditch was not flowing fast enough for whatever reason. He stated from his perspective he did not care if the depression area was drained. He stated he did not want the standing water on his "road" (driveway). He noted this road was approved by the County Highway to put it at that location and in the three years he has lived there it has been under water 8 times. Almost all

of the water flows from the farm fields to the north and from the interstate overflow ditch. There was an overflow pipe that route the interstate drain into the farm field north of his location and then drained to his location. The additional water from the interstate's runoff along with the runoff from the farm fields, created the enormous amount water in the depressional area. It continued to get worse as time goes by. He requests the Board take action to fix the problem. He then reviewed a video taken a few days earlier with the Board using his IPAD. The water had not moved in 4 days. He noted his power electrical box located between his home and Mr. DeCamp's home was under water. He stated there would be no way any emergency vehicles could access his home through the standing water over his drive. He would like the Board to consider some way to move the water out of the depressional area faster and route it to the Anson ditch. He noted he was in agreement with Mr. Agee that there was a large amount of chemical substance within the runoff from the farm fields to the north them this last event and it continues to get worse. He felt a filter strip should be placed down to disable the chemical substances from exiting the farm fields. Responding the Surveyor's inquiry, Mr. Gray noted this last rainfall was over 5 inches as Mr. Agee's 5 inch rain gauge overflowed. He reiterated he knew this happened from time to time however his driveway had been under water seven to eight times since he lived there. He expressed his frustration that the road/driveway was approved by the County to be put in that location and he did not understand how they could have approved it in this location. Mr. Bret DeCamp 8832 North C. Rd. 100 West, West Lafayette Indiana 47906 stated in the past he and Mr. Gray have rented a 4 inch waste water pump and it ran for 3 days nonstop pumping the water back into the Anson Ditch. This was done on 5 different occasions just to access the driveway/road and enter their homes. His wife runs a daycare out of their home and the water over the drive hindered the business greatly. She informed her clients when the water is up (often) that there is no way for an emergency vehicle to access their home. This was also a great concern for his own family if something should happen. He expressed concern that the Anson Ditch had not been completely reconstructed to date. Only part of the ditch was reconstructed and that did not include his area. He felt if the entire drain had been completed the problem would not be as bad. Farm runoff has started to erode the ground in his area due to the amount and speed of the overflow. The tile had not been fixed in that area yet. He would like the reconstruction to get started in this area even if it meant a new hearing and an additional assessment. The Surveyor reviewed the Anson tile location for the Board. He clarified a reconstruction hearing was held regarding the Anson Tile Drain. A reconstruction and maintenance rate was set at that time. Presently the balance of the reconstruction cost was close to being paid off. The entire Anson Drain watershed was studied and onsite inspections were completed prior to the said hearing. The reconstruction would be done in four phases. In phase one fifteen hundred feet of fifteen inch pipe was replaced. There was more work to be done to complete the entire reconstruction. The phases would be completed as time and money allowed. The job was stopped on the north side of C. Rd. 850N; the tile underneath the road was replaced last year. He noted from the time the reconstruction rate was set to the time the project started the price of gas and pipe skyrocketed due to the economy. The monies were depleted so the project was halted at that point. The initial reconstruction phase would be paid in full this year. His intention was to let the fund build back up and proceed to the next phase. He felt it would be a hard sell to the farmers within the watershed to raise the assessment rate again (to increase the fund balance quicker) since the present rate was set in the last 5-6 years. Mr. DeCamp noted a culvert was installed between the two houses by the bend and it was close to being destroyed by the overflow. If this happened his driveway culvert would be next.

Responding to Mr. Murtaugh' funding inquiry; the Surveyor stated that area could potentially be reconstructed next year. Monies would have to be borrowed from the General Drain Fund. At this time there were numerous projects in the works which had impacted that fund greatly. He stated he planned to ask the County Council for funds budgeted to the General Drain Fund during the Budget hearings. The balance of the General Drain Fund was at an all time low due to the many projects at hand and drains minimal assessment rates. Also the Drainage Code stated the Council will from time to time allocate funds for it. In researching this it was found there had not been any monies allocated for this fund for twenty to thirty years by the Council. It has been planned from the beginning to reconstruct the entire drain not just part of it. However due to money constraints and cost of reconstruction it would have to be done in phases. He agreed with all three landowners the tile was not in working order and had not been in years, it was plugged and in need of the reconstruction completed as soon as possible. Discussion was held of possible solutions regarding eliminating the standing water over the drive. The Attorney explained the process in submitting a Petition to Establish a New Regulated Branch of a Anson Regulated Drain as well as a Petition to Establish a New Regulated Drain (one that did not connect to an existing regulated drain) and a Petition to Connect into the Anson Regulated Drain. Mr. Agee thought a short extension pipe under the driveway and routed to the Anson drain would be a better solution. The Surveyor noted his office would provide the Petition of choice. Mr. Agee stated to the Board water behind his house (first house north of C. Rd. 850N) was draining properly and he had seen a great improvement with the first phase of reconstruction. Mr. Decamp and Mr. Gray thanked the Board for their time.

As there was no other public comment, David Byers made a motion to adjourn. The meeting was adjourned.



Thomas P. Murtaugh, President



David Byers, Vice President



John Knochel, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board

Minutes

November 2, 2011

Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

David Byers made a motion to approve the October 5, 2011 Regular Drainage Board and October 19, 2011 Regulated Drain Maintenance Rate Increase Hearing minutes as written. John Knochel seconded the motion. The October 5, 2011 Regular Drainage Board and October 19, 2011 Regulated Drain Maintenance Rate Increase Hearing minutes were approved as written.

St. Alexis Orthodox Church

Kyle Betz with Fisher and Assoc. appeared before the board to present St. Alexis Orthodox Church for final approval. The site was located at the southeast corner of the intersection at State Road 43 and State Road 225 and consisted of approximately 3.29 acres. He noted the site was located on lots 1 and 2 of the replat of Mystic Woods Subdivision. There was an existing drainage swale which routed through the site and outlet into a previously approved drainage system for Mystic Woods Subdivision. Due to the previously approved drainage for said subdivision a release rate had been predetermined and the release rate for this project was in compliance. A small church, parking and drives were proposed mainly on the east half of the site. Mr. Betz noted any other improvements would require additional drainage approval and most likely storm water detention and storm water quality measures. A diversion bypass swale was planned on the west side of the site for offsite runoff routing. He stated they agreed with the October 28, 2011 Burke Review Memo and requested final approval with those conditions at that time. There was no public comment.

The Surveyor stated he recommended final approval with conditions as stated on the October 28, 2011 Burke Review memo. David Byers made a motion to grant final approval with conditions as stated on the October 28, 2011 Burke Review memo. John Knochel seconded the motion. The St. Alexis Orthodox Church project was granted final approval with conditions as stated on the October 28, 2011 Burke Review Memo.

Cumberland Avenue Extension

The Surveyor presented the Cumberland Avenue Extension project to the Board for their review. He stated the site was located within West Lafayette and would start at County Road 300 West (Klondike Road) and extend approximately 1.3 miles east. He reviewed the depressional areas and in particular the Sherwood Forest area to make sure the system would not be overloaded. He felt after the review it would not be overloaded. There was no public comment.

The Surveyor recommended approval with the conditions as stated on the October 26, 2011 Burke memo. John Knochel made a motion to grant final approval with conditions as stated on the October 26, 2011 Burke memo for the Cumberland Avenue Extension. David Byers seconded the motion. The Cumberland Avenue Extension was granted final approval with the conditions as stated on the October 26, 2011 Burke memo.

Moose Lodge /Lot 1 Monitor Subdivision

Pat Jarboe with TBird Design Services appeared before the Board to present the Moose Lodge project for final approval. The site was located east of County Road 550 East on the north side of County Road 50 South and consisted of approximately 1.81 acres. This site was also known as Lot 1 of the Monitor Subdivision. He noted the site was immediately downstream of the Berlowitz Detention Facility and immediately adjacent to the Berlowitz Regulated Drain. The lot was designed for direct discharge to the Berlowitz Regulated Drain and as such there was no onsite detention. To accommodate the TSS removal at the downstream end of the storm pipe collection system was a "downstream defender" designed to remove 80% of suspended solids. Regarding condition #7 under Stormwater Quality on the October 27, 2011 Burke memo, he noted the designed downstream defender was configured in a way which had not been previously tested or approved for this county. He stated he would like the designed solid grate remain in the place of the recommended solid lid casting. He proposed to employ a filter strip to attempt to assist in the 80%

removal rate. Responding to Mr. Eichelberger' inquiry, Mr. Jarboe stated he calculated the removal rate with the filter strip added and the amount was in the mid 70's. Mr. Eichelberger then explained with an open grate allowing water to drop into the unit it was feared sediment would enter the unit. Without third party testing it was an unknown on how this design would function. He preferred to recommend a variance since the rate was in the mid 70's than allowing the open grate on the unit as presented. He did not want to run the risk of the unit not functioning correctly since it was providing the majority of the TSS removal for this site. A filter strip along with the solid lid would be sufficient. Mr. Jarboe stated Mr. Eichelberger' concerns regarding the unit were valid as he was relying on what the vendor had informed him. Mr. Jarboe also noted an encroachment from the outfall pipe at the west edge of the property line upon the Berlowitz Regulated Drain Easement was also in the plans. An Encroachment Petition would be submitted in the near future. There was no public comment.

The Surveyor reviewed the site for the Board and recommended final approval with conditions as stated on the October 27, 2011 Burke memo in addition the added condition of an Encroachment Petition and variance on the TSS removal amount for this project. Mr. Eichelberger recommended approving a variance rate with a minimum of 73%. David Byers made a motion to grant final approval with the conditions stated on the October 27, 2011 Burke memo along with the condition of the submittal of an Encroachment Petition on the Berlowitz Regulated Drain and a variance for a 73% TSS removal rate. John Knochel seconded the motion. The Moose Lodge project was granted final approval with the conditions as stated.

Roberts Ridge Preliminary Plat

Justin Frazier of TBird Design Services appeared before the Board to present Roberts Ridge Subdivision Preliminary Plat for preliminary drainage approval. The site was located north of Co. Rd. 450 South approximately 1 mile east of Co. Rd. 250 East (Concord Road) and consisted of approximately 60 acres. Woodland Elementary School adjoined to the west. The JN Kirkpatrick Regulated Drain was located in the northern portion of the site and the project was located within the JN Kirkpatrick Impact Area. Two detention ponds with a drainage swale were planned for the project. Construction of the ponds and swale would require a Petition to Encroach on the JN Kirkpatrick Regulated Drain. Emergency outfalls were planned for each pond. The offsite runoff routed through a culvert below Co. Rd. 450 South around the entire site into the ponds. The detention ponds, BMP, primary outfalls, emergency outfalls and mass grading have been designed at this point. He stated they planned on returning at the next meeting for the remaining of the drainage infrastructure approval. He noted they agreed with the October 28, 2011 Burke memo and requested preliminary drainage approval at this time. Responding to the Surveyor, Mr. Frazier confirmed he had submitted the required Petition to Encroach on the JN Kirkpatrick Regulated Drain and it would be presented at the next meeting. There was no public comment.

The Surveyor then recommended preliminary approval with the stated conditions on the Oct. 28, 2011 Burke memo. John Knochel made a motion to grant preliminary approval with the conditions stated on the Oct. 28, 2011 Burke memo. David Byers seconded the motion. Roberts Ridge Preliminary plan was granted preliminary approval with the conditions as stated on the Oct. 28, 2011 Burke memo.

SIA Motor Pool Truck Parking Expansion

The Surveyor presented the SIA Motor Pool Truck Parking Expansion project to the Board for final approval. The project site was located along St. Rd. 38 between Co. Rd. 475 East and Interstate 65 within the City of Lafayette and consisted of approximately 1.3 acres. He recommended final approval with the conditions as stated on the October 26, 2011 Burke memo. There was no public comment.

David Byers made a motion to grant final approval with the conditions as stated in the October 26, 2011 Burke memo. John Knochel seconded the motion. The SIA Motor Pool Truck Parking Expansion project was granted final approval with conditions as stated on the October 26, 2011 Burke memo.

Zach Beasley/Other Business

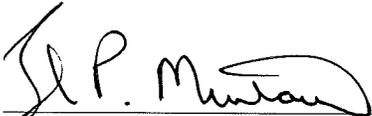
The Surveyor presented the Revised Comprehensive Stormwater Management Ordinance of Tippecanoe County for the 1st reading. The revisions consisted of expanding the menu of options for Low Impact Development (L.I.D.) to allow developers additional flexibility regarding storm water quality and quantity practices and requirements. He recommended the Board approve this revision on the first reading. The Attorney stated Ordinance 2011-27-CM Comprehensive Stormwater Management Ordinance of Tippecanoe County reflects in full the existing Stormwater Management Ordinance of Tippecanoe County and incorporates by reference the Tippecanoe County Technical Standards Manual attached. This Ordinance would be available for inspection by the public with any questions directed to the Surveyor's office. Mr. Byers made a motion to accept the stated

Ordinance as presented. Mr. Knochel seconded the motion. The vote was as follows: Commissioner John Knochel: Yes
Commissioner David Byers: Yes Commissioner Tom Murtaugh: Yes. Ordinance #2011-27-CM passed on 1st Reading 3-0.

Andrew Brown Regulated Drain #13 Status Update

The Surveyor reminded the Board landowners Ernie Agee, Brett Decamp and Alan Gray located in the general area of Co. Rd. 850 North and Co. Rd. 100 West appeared before the Board at a previous meeting regarding the drainage within their area. The tile branch of the Andrew Brown Drain was investigated as a result of their complaints. It was found that the steel pipe placed under the interstate approximately in the 1960's had developed rusting and a hole which had allowed sediment and debris to drop down into the pipe and caused an obstruction. The pipe was video recorded all the way under the interstate which revealed this finding. He stated he had contacted INDOT and provided them with a copy of the tape to inform them of the present situation. INDOT stated the problem was sent to design and they anticipated replacement of the pipe construction to be bid out by the middle of next year. He noted INDOT was being cooperative and it would be a large project. Responding to Mr. Knochel's inquiry, the Surveyor noted he thought the pipe was 10 or 12 inch in diameter. He would stay on top of the issue and hoped to see some movement by INDOT on the project sometime in May-July of 2012.

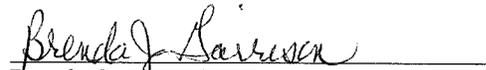
As there was no public comment David Byers made a motion to adjourn.



Thomas P. Murtaugh, President



David Byers, Vice President



Brenda Garrison, Secretary



John Knochel, Member

Tippecanoe County Drainage Board
Minutes
December 7, 2011
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, and Drainage Board Secretary Brenda Garrison.

Approval of Minutes

David Byers made a motion to approve the November 2, 2011 Drain Maintenance Hearings and Regular Drainage Board minutes in addition to the S.W. Elliott Branch #11 Reconstruction Hearing minutes. John Knochel seconded the motion. The November 2, 2011 Drain Maintenance Hearings and Regular Drainage Board minutes in addition to the S.W. Elliott #100 Branch #11 Reconstruction Hearing minutes were approved as written.

Roberts Ridge

Justin Frazier with TBird Design Services approached the Board to request final approval for Roberts Ridge Subdivision. The site consisted of approximately 59 acres and located on the north side of Co. Rd. 450 South east of Co. Rd. 250 East (Concord Rd.). The JN Kirkpatrick Regulated Drain was located in the northern portion of the site and the project was located within the JN Kirkpatrick Impact Area. The detention ponds, BMP, primary outfalls, emergency outfalls and mass grading was granted preliminary approval by the Board at their previous meeting. The subdivision's storm sewer design was presented today for approval. Justin stated his client agreed with the Nov. 30, 2011 Burke memo and requested final approval from the Board. The Surveyor reviewed the area for the Board. He stated he had been contacted by two concerned landowners located on the south side of Co. Rd. 450 South across the southwest corner of the site. Their concern regarded agricultural (field) tiles in the farm field south of Co. Rd. 450 South which drained north across their site. The Surveyor added a condition of the agricultural tiles to be located and shown on the plans. Responding to Mr. Murtaugh' inquiry, Mr. Frazier stated they would locate any tiles on the project site and incorporate them in the design where warranted. The Surveyor added an additional condition that the field tiles onsite would be located and indicated as such on plans. Justin stated they had three options. One- the tile (s) could be tied into the designed storm sewer, two- the tile could outlet into the swale, three- run the tile under the swale and on into the JN Kirkpatrick Regulated Drain. The Surveyor noted the additional condition of the field tile(s) located prior to earth work on site. He required the invert information gathered prior to the grading. He recommended final approval with the conditions as stated on the Nov. 30, 2011 Burke memo along with the additional condition of locating and incorporating the farm tiles into the design where warranted. David Byers made a motion to grant final approval with the conditions as stated on the Nov. 30, 2011 Burke memo as well as the additional condition of locating and incorporating the aforementioned farm tiles into the design where warranted. John Knochel seconded the motion. Roberts Ridge was granted final approval with the conditions as stated on the Nov. 30, 2011 Burke memo and the additional condition of locating and incorporating farm tiles into the design where warranted. The Surveyor then noted a Petition to Encroach on the JN Kirkpatrick Regulated Drain had been submitted for this project. He recommended approval. David Byers made a motion to approve the Petition to Encroach on the JN Kirkpatrick Regulated Drain as submitted. John Knochel seconded the motion. The Petition to Encroach on the JN Kirkpatrick Regulated Drain regarding Roberts Ridge Subdivision was approved as presented.

Industrial Pallet Expansion Phase I

Pat Williams from TBird Design Services approached the Board to request final approval for the Industrial Pallet Phase I Expansion. The existing site was located near the intersection of US 52 and St. Rd. 28, along the East County Line Road. Pat Stated the Master Drainage Study for the overall improvement of the site was approved in December of 2010. Approval of the drainage design and construction plans for the storm water infrastructure was granted approval in May of 2011 as well. The site was currently under construction with the storm water infrastructure near completion. The expansion included a 45,000 square feet building addition to the existing industrial facility on the east side. The site design was in compliance with the Master Drainage Study for the site. He noted two variances were requested with this project. The first related to a loading dock and the second to storm sewer inlets and emergency routing. He noted the December 2, 2011 Burke Review memo explained the variances request made. He noted it was critical the dock's finished floor match the existing floor and stated site restrictions of the grading basically established where the pond elevations needed to be. He stated the bottom of the dock was above the emergency overflow and the finished floor of the building was 4.5 feet above the 100 year flood elevation. He felt there was adequate protection of the building itself. The second was related to a couple small storm inlets on the north side of the building and their emergency routing. The reasons for this design were well documented. The

required pad grades were not met at this location. The client was aware that some onsite flooding may occur, however it was felt the structures were protected as designed. Most importantly he stated the adjoining property owners would not be affected by this design. He then asked for approval and stated they were in agreement with the December 2, 2011 Burke memo conditions and would meet all the conditions stated within the memo. The Surveyor reviewed the site for the Board and stated he recommended approval of the variances as requested and also final approval with the conditions as stated on the Burke December 2, 2011 memo. John Knochel made a motion to grant the two variances as requested. David Byers seconded the motion. John Knochel made a motion to grant final approval with the conditions as stated on the December 2, 2011 memo. David Byers seconded the motion. The Industrial Pallet Expansion Phase 1 was granted two variances as discussed in the December 2, 2011 Burke memo. The Industrial Pallet Expansion Phase 1 was granted final approval with the conditions as stated on the December 2, 2011 Burke memo.

US 231 Road Improvements Spoil Site

Brad Miller from DJ McQuestion and Sons approached the Board to request final approval for the US 231 Road Improvements Spoil Site project. The site was located between SR 26 (State Street) and US 52 and consisted of a mound approximately 600'x300' and 40' high. Runoff would be conveyed to the proposed detention pond by diversion channels along the base of the said mound. Mr. Miller indicated a detention pond would be constructed by INDOT and located east of the "S curves". The Surveyor then reviewed the site for the Board. Responding to the Surveyor Mr. Miller stated they would truck in approximately 150,000 cubic yards of dirt for the mound. Mr. Eichelberger confirmed there was no development proposed with this project. He noted the diversion channel on the east side of the proposed mound would convey any offsite runoff to the said detention pond. The Surveyor noted the project was reviewed to insure any adjoining developments would not be affected by the proposal. He then recommended final approval with the conditions as stated in the December 2, 2011 Burke memo for the US 231 Road Improvements Spoil Site. David Byers made a motion to grant final approval with the conditions as stated on the December 2, 2011 Burke memo for the US 231 Road Improvements Spoil Site. John Knochel seconded the motion. The US 231 Road Improvements Spoil Site was granted final approval with the conditions as stated on the December 2, 2011 Burke memo.

Ivy Tech Southeast Parking Lot and Pedestrian Bridge

Kyle Betz from Fisher and Associates approached the Board to request final approval for the Ivy Tech Southeast Parking Lot and Pedestrian Bridge project. The site was located within the city of Lafayette; therefore the Board was reviewing drainage only on this project. A parking lot and pedestrian bridge was planned. A portion of the project would encroach on the S.W. Elliott Regulated Drain easement. There were two encroachments one regarded the parking lot and one regarded a pedestrian bridge. Mr. Betz stated the encroachment was discussed in detail with the Surveyor previously. After much discussion a 15 foot wide strip was planned for access regarding any future maintenance of the drain. The Surveyor agreed to this. Direct discharge was planned into the S.W. Elliott Regulated Drain. Mr. Betz stated they agreed with the comments on the December 2, 2011 Burke memo and requested final approval. The Surveyor then reviewed the area for the Board. He stated the City Engineer's office, Mr. Betz and the Surveyor had discussions regarding the encroachments and he felt compromise with the 15 feet access was sufficient. He noted if the access was any larger the project would not be feasible. Maintenance of the encroached area would be covered by a Maintenance Agreement between the Drainage Board and Ivy Tech Community College. He discussed the slope ratio and suggested a possible retaining wall. Mr. Betz stated they were limited somewhat by the flood plain and floodway to the 4 to 1 slope but would review it again. Mr. Betz stated he would return to the Board with the Encroachment Petitions for approval at a later date. The Surveyor recommended final approval with the conditions stated on the December 2, 2011 Burke Memo as well as the additional condition of the Petition to Encroach regarding both the Ivy Tech Southeast Parking Lot and the Pedestrian Bridge submission. David Byers made a motion to grant final approval with the conditions stated on the December 2, 2011 Burke Memo as well as the additional condition of the Petition to Encroach regarding both the Southeast Parking Lot and the Pedestrian Bridge submission. John Knochel seconded the motion. The Ivy Tech Southeast Parking Lot and Pedestrian Bridge was granted final approval with the conditions stated on the December 2, 2011 Burke Memo as well as the additional condition of the Petition to Encroach regarding both the Southeast Parking Lot and Pedestrian Bridge submission.

Zach Beasley

Other Business

Revised Comprehensive Stormwater Management Ordinance Tippecanoe County: 2nd/final reading #2011-27-CM

The Surveyor noted the Revised Comprehensive Stormwater Management Ordinance for Tippecanoe County was passed on its first and second reading by the Commissioners prior to this date. He requested the 2nd and final reading by the Drainage Board. He noted changes to the Ordinance were discussed in previous meetings. David Byers made a motion to approve the Revised Comprehensive Stormwater Management Ordinance for Tippecanoe County on its 2nd and final reading. John Knochel seconded the motion. The vote was as follows: David Byers Yes/John Knochel Yes/Thomas Murtaugh Yes. The Revised Comprehensive Stormwater Management Ordinance was approved with a vote of 3-0.

Petition to Encroach/Berlowitz Regulated Drain #08

The Surveyor presented the following petition for approval by the Board: Petition to Encroach on the Berlowitz Regulated Drain #08 regarding Lot 1 Monitor Subdivision aka Moose Lodge. John Knochel made a motion to accept the Petition as presented by the Surveyor. David Byers seconded the motion. The Petition to Encroach on the J. Berlowitz Regulated Drain#08 submitted by TBird Design Services regarding Moose Lodge on Lot 1 of the Monitor Subdivision was approved.

Petition to Reconstruct/ Mary McKinney #52 Regulated Drain

The Surveyor presented a Petition of Reconstruction regarding the Mary McKinney #52 Regulated Drain. John Knochel made a motion to accept the Petition and refer it back to him for his report. David Byers seconded the motion. The Petition of Reconstruction regarding the Mary McKinney #52 Regulated Drain was accepted as presented by the Surveyor and referred to him for a report.

Petition to Reconstruct/Alonzo Taylor #77 Regulated Drain

The Surveyor presented a Petition for Reconstruction regarding the Alonzo Taylor #77 Regulated Drain. John Knochel made a motion to accept the Petition as presented by the Surveyor and refer it back to him for his reconstruction report. David Byers seconded the motion. The Petition of Reconstruction regarding the Alonzo Taylor Regulated Drain #77 was accepted by the Board and referred to the Surveyor for a report.

Maintenance Bonds

The Surveyor then presented the following Maintenance Bonds for approval by the Board: Maintenance Bond #6010890 from Ohio Famers Ins. Co. in the amount of \$23,510.80 submitted by Merritt Construction regarding Wyandotte Elementary School project, Maintenance Bond#929537947 from Western Surety Co. in the amount of. \$6,190.00 submitted by TWG Construction regarding Chapelgate Sr. Apts. David Byers made a motion to accept the Maintenance Bonds as presented by the Surveyor. John Knochel seconded the motion. Maintenance Bond #6010890 from Ohio Famers Ins. Co. in the amount of \$23,510.80 submitted by Merritt Construction regarding Wyandotte Elementary School project, Maintenance Bond#929537947 from Western Surety Co. in the amount of. \$6,190.00 submitted by TWG Construction regarding the Chapelgate Sr. Apts. were accepted by the Board.

2012 Meeting Dates

The Surveyor presented the 2012 Drainage Board Meeting Dates Request for the Boards approval. David Byers made a motion to accept the proposed 2012 meeting dates as presented by the Surveyor. John Knochel seconded the motion. The 2012 meeting dates as presented by the Surveyor were approved by the Board.

Public Comment

There was no public comment. David Byers made a motion to adjourn. The meeting was adjourned.



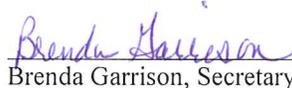
Thomas P. Murtaugh, President



David Byers, Vice President



John Knochel, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board

May 2, 2012

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David Byers, Vice President Thomas Murtaugh, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited.

Approval of Minutes

Tom Murtaugh made a motion to approve the April 4, 2012 regular and special hearing minutes as written. John Knochel seconded the motion. The April 4th, 2012 regular meeting minutes, April 4, 2012 special hearing minutes were approved as written.

Roberts Ridge Subdivision

Justin Frazier of TBIRD Designs Inc. appeared before the Board to present Roberts Ridge Subdivision for final approval. This project was granted final approval with conditions at the December 11, 2011. In April, the project was resubmitted due to revisions of the original pond 1 location as well as an addition of 15 lots. Pond 1 was previously located immediately adjacent to the JN Kirkpatrick Regulated Drain location. It was relocated to a more central location with lots around it. A road now extended along the northern portion and continued easterly to the east side of the subdivision. There were two cul-de-sacs previously planned; now a continuous drive made a loop within the subdivision. Additionally, the lots located along the J.N. Kirkpatrick Regulated Drain required a reduction from the existing 75 feet maintenance easement to 30 ft. maintenance easement. (The overall drainage infrastructure (storm sewers etc.) remained as originally planned.) Justin Frazier requested final approval with the revisions as stated and the approval of the Petition as submitted. He noted they agreed with the conditions as stated on the April 25, 2012 Burke Review Memo. The Surveyor recommended approval of the easement reduction on the JN Kirkpatrick Regulated Drain as well as final approval with the conditions as stated on the April 25, 2012 Burke memo. Tom Murtaugh made a motion to accept the Petition for Easement Reduction on the J.N. Kirkpatrick Regulated Drain as well as grant final approval with the conditions as stated on the April 25, 2012 Burke memo. John Knochel seconded the motion. The Petition for Easement Reduction on the J.N. Kirkpatrick Regulated Drain was accepted as presented. Roberts Ridge Subdivision was granted final approval with the conditions as stated on the April 25, 2012 Burke memo.

Petition to Encroach / Jakes #40 Regulated Drain

The Surveyor presented a Petition to Encroach with a crossing on the Jakes Regulated Drain #40 submitted by Joseph R. Herbst. The Surveyor reviewed the Petition previously and recommended approval to the Board. Tom Murtaugh made a motion to grant approval for the Petition to Encroach on the Jakes Regulated Drain #40 submitted by Joseph R. Herbst. John Knochel seconded the motion. The Petition to Encroach with a crossing on the Jakes Regulated Drain #40 submitted by Joseph R. Herbst was granted approval by the Board.

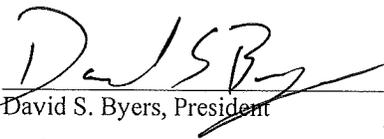
Petition to Partially Vacate/ Berlovitz Regulated Drain #08 –Felbaum Branch

Dan Teder of Reiling, Teder and Schrier, LLC appeared before the Board to present a Petition to Partially Vacate a portion of the Berlovitz Regulated Drain #08 known as the Felbaum Branch. This Branch was located within the Hawthorne Lakes Subdivision tract. Exhibit C of the Petition documents indicated the area of vacation requested. Mr. Teder noted the western portion of the Felbaum Branch had previously been vacated by the developer. The eastern portion of the Felbaum Branch was requested to be vacated today. A new drainage structure was in place to direct runoff into the designated drainage channel. Mr. Teder then requested approval for the Petition. The Surveyor stated the developer's request referred to the area at Co. Rd. 50South and Co. Rd. 550East- where the Berlovitz Detention Facility was located. An open ditch at the southeast corner of the facility was constructed along McCarty Road. Hawthorne Lakes was located directly south of the said large detention facility. The open ditch and drainage infrastructure was located on the east side of the development and routed to McCarty Lane ditch. The Felbaum Branch of the Berlovitz Regulated Drain originally routed around the Hawthorne Lakes development in a horseshoe style. It had previously been rerouted with not only this development but also the McCarty Lane Extension project. The areas' runoff was directed into the Berlovitz Regional Detention Basin/Facility. The Surveyor then recommended approval of the Petition as presented to the Board. Tom Murtaugh made a motion to grant approval for the

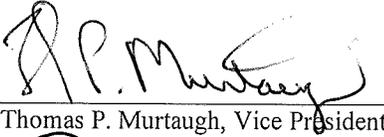
Petition to partially vacate the Felbaum Branch of the Berlovitz #08 Regulated Drain. John Knochel seconded the motion. The Petition to Partially Vacate a portion of the Berlovitz Regulated Drain #08 known as the Felbaum Branch located within the Hawthorne Lakes Subdivision tract was approved.

Public Comment

There was no public comment. Mr. Tom Murtaugh made a motion to adjourn. John Knochel seconded the motion. The meeting was adjourned.



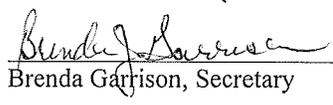
David S. Byers, President



Thomas P. Murtaugh, Vice President



John Knochel, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board
May 1, 2013
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC.

Approval of Minutes

David Byers made a motion to approve the April 17, 2013 regular minutes as written. John Knochel seconded the motion. The April 17, 2013 regular meeting minutes were approved as written.

Wea Ridge Elementary Additions and Renovations

Pat Jarboe of TBIRD Design Services appeared before the Board to present Wea Ridge Elementary Additions and Renovations project. The site was located on the southwest corner of Co. Rd. 430 South and South 18th Street. Mr. Jarboe provided the Board with an 11x17 exhibit of the site's proposed expansion showing the additional wing at the southwest corner of the existing building. The goal was to have water quality and volume serve the entire campus. Should the TSC (Tippecanoe County School Corp.) choose to expand further the onsite drainage infrastructure would be sufficient for the entire campus. Mr. Jarboe stated in the present condition there were two ponds; one pond was located west (pond#01) of the existing elementary school and one pond north (pond #02) of said school. The western pond (pond #01) runoff was conveyed under the existing driveway to the northern pond then under Co. Rd. 430 South near the South 18th Street intersection. At that point it was conveyed by a swale through a field to the north on to the Woodfield Village Subdivision storm system via 4 inlets (south side of the subdivision). It continued north and outlet to a 54 inch pipe along South 18th Street directly to the JN Kirkpatrick Regulated Drain. He reiterated this route was in the present condition and would be the route during the interim of South 18th St. construction. Currently South 18th Street was being redesigned and construction would commence in 2014. Once the newly designed South 18th Street was constructed the storm system would outlet directly into the newly designed South 18th Street storm system directly to the JN Kirkpatrick drain. The runoff capacity would be much greater, however would be conveyed directly to the regulated drain. Presently there are orifice plates on two storm structures (controls the west and north pond runoff) which would be changed to convey the site's stormwater directly to the newly constructed South 18th Street storm system.

Mr. Jarboe stated two variances were requested for the project. The first variance regarded the Water Quality Volume (WQV) during the interim period. At the time of connection to the South 18th Street storm system, WQV would become sufficient for the site as well as any future expansion. He noted the entire campus would meet the WQV after the construction of said street. The second variance regarded Channel Protection Volume (CPV) as the campus would not meet the requirement during the interim period or thereafter. While the future connection to the South 18th Street storm system would meet some measure of CPV, however due to the existing onsite ponds it was not feasible to meet the requirement by the current Ordinance. Mr. Pat Jarboe responded to Mr. Eichelberger's concern regarding Stormwater Quantity condition one. He stated the western pond's (pond#01 on drawing) emergency spillway in the southwest corner would be reviewed, reconstructed and relocated if the situation warranted it. He would work with the Surveyor and Mr. Eichelberger to ensure the public's safety regarding this issue. It was noted the present emergency spillway location was in close proximity of a single family residence. There was no public comment.

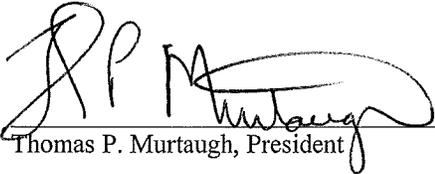
The Surveyor recommended approval for Variance #01 regarding the Water Quality Volume (WQV) and Variance #02 regarding the Channel Protection Volume (CPV) as requested. He recommended final approval with the conditions as stated on the April 26, 2013 Burke memo in addition to the possible relocation of the emergency spillway if warranted. David Byers made a motion to grant approval of Variance #01 regarding the Water Quality Volume. John Knochel seconded the motion. David Byers made a motion to grant approval of Variance #02 regarding Channel Protection Volume. John Knochel seconded the motion. David Byers then made a motion to grant approval with the conditions stated on the April 26, 2013 Burke memo as well as the added condition regarding the possible location of the emergency spillway. John Knochel seconded the motion. The Wea Ridge Elementary School Additions and Renovations project was granted two Variances and approval with conditions as aforementioned.

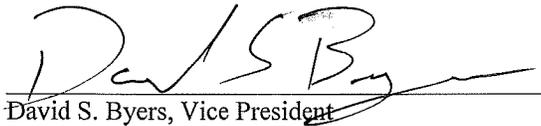
Zach Beasley/Other Business

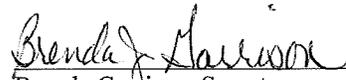
The Surveyor gave an update of drainage complaints received during recent rainfalls in the last few weeks. While the office received many calls they were reviewed and dealt with accordingly. Health and safety was a priority. He noted many were resolved however there were a number that would take additional staff review and inspections. He estimated a few weeks and possibly couple of months before all could be resolved. He stated his staff was working diligently on the issues. David Byers noted it was the second largest rainfall in April in history. Mr. Murtaugh commented he had received phone calls from County residents who expressed their gratitude for the hard work shown by the Surveyor's office during this time.

Public Comment

As there was no public comment, David Byes made a motion to adjourn. The meeting was adjourned.


Thomas P. Murtaugh, President


David S. Byers, Vice President


Brenda Garrison, Secretary


John Knochel, Member

Tippecanoe County Drainage Board

August 7, 2013

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC.

Approval of Minutes

David Byers made a motion to approve the July 10, 2013 regular minutes as written. John Knochel seconded the motion. David Byers made a motion to approve the July 10, 2013 landowner hearing minutes regarding the Thomas Ellis #27 Regulated Drain. John Knochel seconded the motion. The July 10, 2013 regular meeting and the July 10, 2013 Thomas Ellis #27 Regulated Drain Hearing minutes were approved as written.

TKO Graphix/ Lafayette Operations

Randy Peterson from Starr Associates appeared before the Board to present TKO Graphix Lafayette Operations. The site was located on the north side of County Road 450 South and consisted of approximately 30 acres. A new commercial building with additional parking and a drive was planned. While a drainage tile existed in the depressional area onsite it was in poor condition and would not be utilized. The entire site's runoff would be contained in an infiltration basin that will be located in the northern portion of the site. A vegetative filter strip would be placed along the end of the gravel area to capture the runoff prior to entering the basin. He stated the site's runoff would not impact the private drive to the east of the site. He requested conditional approval for the project at that time. The Surveyor inquired if a Petition on the S.W. Elliott Regulated Drain (tile onsite) had been submitted for review as noted in the August 2, 2013 Burke memo under Variances/Encroachments. Mr. Peterson stated it had not to date. However he would submit the Petition as soon as possible. The Surveyor noted the drainage tile was a branch of the SW Elliott #100 drain which ended just west of the private drive located on the east property line. There would be no runoff discharged into that tile. He directed Mr. Peterson to submit the required petition for his review and Board's approval during the September meeting. Responding to Mr. Byer's inquiry, Mr. Peterson stated the parking area would be compacted stone and would basically become an impervious area draining to the infiltration basin. Mr. Peterson noted there was ½ % slope for 1400 feet to the north end of the tract. The discharge would flow overland to the rear of tract. Responding to Mr. Byers, the Surveyor stated homes adjoining the northern portion of the site were at a higher elevation. Mr. Eichelberger noted presently, east of the project site, runoff sheet flows to the west during large rain events. This would not change, as it would flow to the depressional area within the project site and discharge out of the basin to the northwest.

The Surveyor recommended conditional approval as stated in the August 2, 2013 Burke memo. The required Petition would be submitted for Board's approval during the September meeting. David Byers made a motion to grant conditional approval as stated in the August 2, 2013 Burke memo. John Knochel seconded the motion. Tom Murtaugh asked for public comment.

Jack Ricks 5502 East 430 South Lafayette Indiana 47905 approached the Board. Mr. Ricks stated he is the landowner to the east of the project site. He stated currently when the drain tile located on his tract was full - water would stand for a period of time. He expressed his fear the addition of impervious area on the project site would cause additional standing water on the private drive. At that point attendee Bruce Collings Jr. 5504 East 430 South Lafayette Indiana approached the Board. Mr. Collings stated the Board was having private conversations and he did not appreciate it. He stated he could not hear anything the Board was discussing and did not learn anything today. Tom Murtaugh stated if he was having a hard time hearing the Board's discussion, a headset was available for his use. He declined and asked the audience if anyone else was having trouble hearing, at that point he left the meeting. Responding to Mr. Rick's statement, the Surveyor stated the basin would be constructed in the natural depressional area. The drainage analysis conducted for the project indicated if and when the water got high enough it would flow out of the basin to the northwest. Mr. Peterson stated the high water elevation of the project site would be approximately 1 ½ feet lower than the low point of the private drive between the properties. Mr. Peterson answering Mr. Eichelberger's inquiry stated the existing 100 year water elevation condition was roughly a foot lower as he did not have the exact numbers with him today. Mr. Eichelberger replied the 100 year existing condition elevation of the site was 668.14 and the existing road elevation was 666.74. He continued, the drainage analysis for the 60 acres which drained through the depressional area indicated water would be 1.4 feet above the road in existing condition. Mr. Byers stated due to the elevation change, runoff from the tract on the east side would leave quicker than in present conditions. Mr. Peterson stated based on the ordinance and the present design, the pond should drain within approximately 37 hours. He further stated the pond would be maintained after development as required by Ordinance. IE: mowing etc.

Tammy Ricks 5502 East 430 South Lafayette Indiana 47905 approached the Board and stated there was a drain under their lane. At times they could hear water flowing to their tract. The Surveyor stated the SW Elliott branch tile under their lane flowed to the east and was a county regulated tile for ground water NOT stormwater. He noted the developer was not allowed to discharge water into this tile. The tile's present discharge point was just east of Newcastle Road and south of the railroad track. He noted

the SW Elliott was one of the largest drainage systems in the county and had miles of tile. There was no other comment. The motion on the floor was passed as stated. TKO Graphix was granted approval with the conditions as stated on the August 2, 2013 Burke memo. The outstanding condition of the required petition would be addressed in the Sept. meeting.

The Orchard Phase 4 (Continued)

Dave Byers made a motion to take the project "The Orchard Ph. 4 off the table and John Knochel seconded the motion. The Surveyor stated Mr. Dave Kovich developer for The Orchards development had presented his office with a maintenance agreement for the earthen dam structure on the project site. He reviewed the agreement which included among other items, structure maintenance, soil borings, a maintenance inspection program, etc. with the Board. (Agreement would be recorded and located in the project file) The main item of the agreement was the creation of one spillway. That spillway would be located on the west side of the earthen dam structure. Currently there was a spillway on the east side of the structure. Per the agreement, the spillway on the east side of the structure would be blocked off and the spillway on the west side of the earthen dam would be utilized. The Surveyor then recommended approval of the three variances referred to in the April 12, 2013 Burke memo. He then recommended conditional approval as stated on the April 12, 2013 Burke memo. Mr. John Knochel made a motion to approve Variance #1,#2 and #3 as stated in the April 12, 2013 Burke memo. David Byers seconded the motion. Variances 1, 2 and 3 were granted approval by the Board. John Knochel made a motion to grant conditional approval as stated in the April 12, 2013 Burke memo. Dave Byers seconded the motion. The Orchard Phase 4 was granted three variances and conditional approval as stated on the April 12, 2013 Burke memo.

Other Business/Zach Beasley

Hester Mottsinger #58 Regulated Drain

The Surveyor requested a maintenance hearing regarding the Hester Mottsinger #58 Regulated Drain be scheduled immediately after the regularly scheduled November 6th, 2013 Drainage Board meeting. Responding to Mr. Byers, the Surveyor noted a petition was not required for a maintenance increase hearing. This regulated drain was approximately \$5000 in the red and with the present assessment as stands it would take 15-20 years to pay off. Therefore a maintenance increase was warranted. Dave Byers made a motion to schedule the Hester Mottsinger #58 Regulated Drain maintenance hearing to directly follow the regularly scheduled Nov. 6, 2013 Drainage Board meeting. John Knochel seconded the motion. The maintenance hearing on the Hester Mottsinger #58 Regulated Drain would be held on Nov. 6, 2013 directly following the regular Drainage Board monthly meeting.

Waterstone Subdivision

The Surveyor stated he had attended a meeting of the landowners in the Waterstone Subdivision regarding the JN Kirkpatrick Regulated Drain and Nanshan America's pumping of ground water into the open ditch. He noted the subdivision was located at the southwest corner of 18th street and Veterans Memorial Parkway (CR350S). He investigated the situation thoroughly and had met with the landowners. He received a letter from Mr. Doug Griffin 1121 Stoneripple Circle Lafayette In. 47909 (resident of Waterstone Subdiv.) regarding the situation. The letter was read as follows by the Surveyor into the minutes: "Drainage Board: Please accept this written request in place of an in-person testimony at the August 7th board meeting, as I am unable to attend. Over the past several weeks, the residents of Waterstone (of which I am one) that live along the J.N. Kirkpatrick Ditch have recently had a perception altering experience as Nanshan America was forced to drain ground water into the ditch. Over the years, the Kirkpatrick Ditch has functioned very well. The engineering of the ditch for high-level storm water retention and drainage is quite impressive. Up until recent events, the pilot channel has also functioned exceptionally well in retaining the nominal or low-level flow rate. So well, that most of the residents in Waterstone are able to keep their yards, right up to the pilot channel, very well manicured. The recent events surrounding the increase of the nominal flow rate has raised some concerns, specific to Waterstone residents, for the future. The concerns are as follows:

1. Another Nanshan (one-off) type event in which the nominal flow rate exceeds what the pilot channel can effectively handle for an extended period of time.
2. Future commercial and or residential development, along the ditch, which results in an aggregated increase in the nominal flow rate that exceeds the pilot channel's capacity.

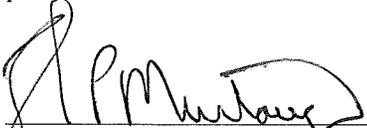
I am fully aware that we live on a drainage ditch and that there is an easement in play on either side. However, I would suggest that the section of the Kirkpatrick ditch between 18th St and 9th St. represents a unique portion of the ditch. It is unique in that we own property and manage upkeep on both sides. This creates a section of ditch in which the state of nominal flow rate is quite significant to our quality of life. In light of this reality, I am formally requesting that the drainage board consider approving a kind of 360 degree study that considers all relevant factors related to the current and future concerns regarding the ditch. I would personally like to thank Zach Beasley for his handling of the Nanshan situation, and Tom Murtaugh for his efforts to support best interests. As a constituent, I greatly appreciate your time and attention. Sincerely, Doug Griffin"

The Surveyor stated as it stands now pumping of uncontaminated ground water is one of the exempt discharges within the Ordinance. In the area between 18th street and 9th street the flow capacity was generally between 900 and 1000 cubic feet per second. Nanshan America was at one time pumping up to 8000 gallons per minute. This equated to approximately 7-10 cubic feet per second. The capacity was not an issue. The issue for the landowners was the detriment it caused to their properties. They had not been able to mow their yards during this time and the extra water killed some of their vegetation. He requested Nanshan America test the ground water for contamination and they complied. The testing indicated the water was not contaminated. He stated he had reviewed that extensively. Ms. Elizabeth Butler 1201 Stoneripple Circle Lafayette In. 47909 approached the board at that time. Ms. Butler stated properties east of the subdivision were being developed and she wondered how the new

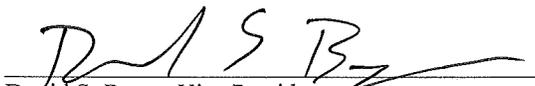
development would affect the ditch and its surrounding properties. The Surveyor stated the ditch was designed as what is now referred to as a two stage ditch. There was a pilot channel and then the ditch banks were "stair stepped" designed. He noted this was also designated an "Urban Drain". He noted this situation was unique and an anomaly. Nanshan America's property site was within the city of Lafayette limits and drainage plans for the site was approved by the City of Lafayette. The County Drainage Board's responsibility was to review and approve the proposed discharge rates into the J.N. Kirkpatrick Ditch only for the project. Since the pumping of uncontaminated ground water was allowed by ordinance, he was not aware of actions which could be taken to control it. He stated he planned to work with Consultant Christopher B. Burke Engineering and investigate further to see if any communities within the state had experienced this issue and if so their response. He noted the ditch was designed for stormwater use and not the pumping of ground water continuously 24 hours 7days a week over an extended period of time. The ditch would handle it, however the killing of vegetation in and surrounding the ditch was a concern for those landowners who owned property on both sides. John Knochel stated the pumping of the ground water was due to Nanshan America digging a pit for one of their presses. If a new industrial company came in that required something similar it was safe to assume this could happen again. The Surveyor stated the watershed of J.N. Kirkpatrick was designated a "Drainage Impact Area." This required a stricter set of release rates (lower volume) to be followed by developers within the watershed boundaries. Mr. Murtaugh expressed appreciation to the landowners at Waterstone Subdivision for their patience and understanding of the situation. He also expressed his appreciation to Nanshan America for their prompt attention to the matter. Mrs. Ricks stated her neighbor Doug Griffin had made a site visit with a Nanshan representative. The press pit being dug was complete and the level of water in the ditch has receded. She thanked Tom Murtaugh and the Surveyor for their quick responses to the issue.

Public Comment

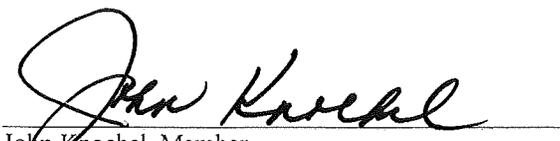
Pat Jarboe of TBIRD Design Services approached the Board. Mr. Jarboe stated he needed clarification of the Drainage Ordinance. TBIRD Designs had an opportunity to complete a Master Drainage Study for large tract of land approximately 90 + acres remaining to be developed with approximately 42 acres having been developed over the last decade or so. The tract had drainage challenges due to the numerous developments in and around the tract. A "Master Drainage Study" was suggested to the developer. In addition the developers were not sure when construction would begin and it could be several decades. He asked the Board what constituted a master drainage study. He stated he did not expect an answer today however did request guidance. He read the following from the Ordinance: "Chapter 2 of Prohibited Discharge and Connections"- Finally any construction project which has had its drainage plan approved by the Board prior to the effective date of this Ordinance shall be exempt from all requirements of this Ordinance" etc... Assuming this happens in future Ordinances, what is meant by drainage plan and construction project? Traditionally, any construction plans which were approved prior to a particular Ordinance were requested to meet the in force Ordinance as much as possible. The developer asked how a Master Drainage Study benefited them. Construction plans could be a large investment that they would not get a return from. He stated his guidance inquiry was as follows: What constitutes a construction project that can be approved by the Drainage Board for a large area with a non-defined scope of use in the future. The Engineer Consultant Dave Eichelberger stated he brought up a good point. He would be willing to look at this inquiry and provide a response after consulting with the Surveyor. He asked Mr. Jarboe to request this in writing to the Board/Surveyor Office. Mr. Eichelberger agreed completing a Master Drainage Study for a large area in the county was a winning situation for the county as well as developer. Mr. Eichelberger stated in years past Eastland Development did a Master Drainage Study for their properties within the Berlowitz Watershed. Mr. Jarboe thanked the Board for their time. As there was no other public comment John Knochel made a motion to adjourn. The meeting was adjourned.



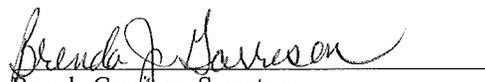
Thomas P. Murtaugh, President



David S. Byers, Vice President



John Knochel, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board

October 2, 2013

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, member John Knochel, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Vice President David Byers was absent.

E.K. Lois Regulated Drain #119 Reconstruction

The President opened the meeting and referred to the Attorney for opening of the E.K. Lois Reconstruction Contracts received by the Board. He read the received Contract amounts as follows: Davidson Excavating total \$228,925.25, Fairfield Contractors Inc. total \$160,594.55, Central Indiana Drainage total \$144,343.20, Maxwell Farm Drainage total \$155,205.00, F&K Construction Inc. total \$261,625.00. He noted the contract documents would be reviewed and the E.K. Lois #119 Regulated Drain Reconstruction Contract would be awarded at end of this meeting. John Knochel made a motion to award the E.K. Lois #119 Regulated Drain Reconstruction Contract after a compliance review of all submitted. Tom Murtaugh seconded the motion. Tom Murtaugh then thanked the Contractors for their submission.

Approval of Minutes

John Knochel made a motion to approve the Sept. 4, 2013 regular minutes as written. Tom Murtaugh seconded the motion. The September 4, 2013 regular meeting minutes was approved as written.

ProAxis 2nd Expansion

Joe Coutts with C&S Surveying appeared before the Board and presented ProAxis 2nd Expansion for approval. The project site consisted of approximately 2.25 acres and located south of Burnett Road on the west side of North Ninth Street. A new entrance and building would be constructed on the south side of the current facility with additional parking planned. He stated they had reviewed the latest Burke memo dated September 26, 2013 and would comply with the conditions as stated. The Surveyor asked Mr. Coutts to confirm downstream landowners had been notified of the project. Mr. Coutts stated he had the certifications of the notifications with him and would turn in to secretary after the meeting. The Surveyor then stated he would recommend approval with the conditions as stated on the September 26, 2013 Burke memo. There was no public comment. John Knochel made a motion to grant approval with the conditions as stated on the September 26, 2013 Burke memo. Tom Murtaugh seconded the motion. ProAxis 2nd Expansion was granted approval with the conditions as stated on the September 26, 2013 Burke memo.

Stones Crossing Section 4 Revised

Kyle Betz with Fisher and Associates appeared before the Board to present Stones Crossing Section 4 Revised for approval. The project site consisted of approximately 54.8 acres and located north of Co. Rd. 430 South and west of Co. Rd. 250 East (Concord Road). The JN Kirkpatrick Regulated Drain was located along the north property line of the project site. This phase of the overall design was submitted and approved between 2000 and 2004; however market conditions did not allow construction at that time. The original Phase 4 planned 144 single family homes on 50.4 acres; the revised Phase 4 plan consisted of 162 single family homes on 54.8 acres. Overall changes were made to the street layout and the density of the lots. The project had 3 discharge points. He noted 2 existing discharge points tie into previously constructed systems. The newly planned discharge point would be located in the northwest corner directly into the J.N. Kirkpatrick Regulated Drain. There was no on-site detention for this development. He requested the approval of two variances noted in the September 26, 2013 Burke memo regarding Channel Protection Volume and Storm Water Quality treatment. A Petition to Vacate Branch #07 of the J. N. Kirkpatrick Regulated Drain #46 was also presented for approval by the Board. He explained most of the branch had been vacated or relocated. Currently a portion of said branch consisted of a 10 inch clay tile through the site. This branch would no longer serve a purpose. He formally presented a Petition to Vacate Branch #07 of the J.N. Kirkpatrick Drain to the Board. He stated his client agreed with the conditions on the September 26, 2013 Burke memo and requested approval at that time. The Surveyor stated he recommended approval of the Petition to Vacate Branch #07 J.N. Kirkpatrick Regulated Drain #46 as presented. He stated he recommended both variances be approved as requested. He noted regarding condition #02 under "Variances/Encroachments" on the September 26, 2013 Burke memo, he researched past phases of the development and the requirements therefore. In keeping with the previous Surveyor's requirements for the overall Stones Crossing Development; he recommended the Board waive the condition as stated on the memo. There was no public comment. John Knochel made a motion to accept the Petition to Vacate Branch #07 J.N. Kirkpatrick Regulated Drain #46 as presented. Tom Murtaugh seconded the motion. The Petition to Vacate Branch #07 J.N. Kirkpatrick Regulated Drain #46

was approved by the Board. John Knochel made a motion to grant both Variances as requested. Tom Murtaugh seconded the motion. Both Variances were approved as requested and recommended on the Sept. 26, 2013 Burke memo. John Knochel made a motion to grant conditional approval for Stones Crossing Phase 4 Revised as stated on the September 26, 2013 Burke memo. Tom Murtaugh seconded the motion. Stones Crossing Phase 4 Revised was granted conditional approval as stated on the September 26, 2013 Burke memo.

Lakeshore Subdivision Phase 2

Robert Grove with R. Grove Surveying appeared before the Board to present Lakeshore Subdivision Phase 2 for approval. The project site consisted of approximately 4.39 acres and located within the northeast portion of the overall Paramount Lakeshore Development west of Morehouse Road and US 52. Mr. Grove stated runoff would route through the existing storm sewer infrastructure and ultimately outletting into the Cuppy McClure Branch of the Hadley Lake Regulated Drain #104. Mr. Grove requested a variance regarding stormwater quality. The Surveyor stated based on the fact the overall development had an existing Master Drainage Plan which was implemented prior to the Stormwater Quality Ordinance in effect; he recommended the variance to the stormwater quality. The Surveyor then recommended approval with conditions as stated on the September 11, 2013 Burke memo. There was no public comment. John Knochel made a motion to grant the Stormwater Quality Variance as requested. Tom Murtaugh seconded the motion. The Stormwater Quality Variance was approved by the Board. John Knochel made a motion to grant approval with the conditions as stated on the September 11, 2013 Burke memo. Tom Murtaugh seconded the motion. Lakeshore Subdivision Phase 2 was granted approval with the conditions as stated on the September 11, 2013 Burke memo.

Zach Beasley/Other Business

The Surveyor presented Performance Bond # 2021900 written by West Bend Insurance in the amount of \$90,000.00 for the Legacy Sports Club Phase 2 project. He recommended acceptance of the bond as presented. John Knochel made a motion to accept Performance Bond # 2021900 written by West Bend Insurance in the amount of \$90,000.00 for Legacy Sports Club Phase 2. Tom Murtaugh seconded the motion. Performance Bond # 2021900 written by West Bend Insurance in the amount of \$90,000.00 for the Legacy Sports Club Phase 2 project was accepted by the Board.

E. K. Lois #119 Regulated Drain /Reconstruction Contract Award

The Attorney stated the Contract Bids were reviewed and the lowest responsible bidder was Central Indiana Drainage in the amount of \$144,343.20. John Knochel made a motion to award the Reconstruction Contract for the E.K. Lois Regulated Drain #119 to Central Indiana Drainage in the amount of \$144,343.20. Tom Murtaugh seconded the motion. Central Indiana Drainage was awarded the Reconstruction Contract on the E.K. Lois Regulated Drain #119.

Public Comment

There was no public comment. John Knochel made a motion to adjourn. The meeting was adjourned.



Thomas P. Murtaugh, President

ABSENT

David S. Byers, Vice President



John Knochel, Member


Brenda Garrison, Secretary

Tippecanoe County Drainage Board

November 6, 2013

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas Murtaugh, Vice President David Byers, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison, Surveyor's Office Project Manager James Butcher and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. County Surveyor Zachariah Beasley and member John Knochel were absent.

President Tom Murtaugh opened the meeting and introduced James Butcher, Project Manager of the Surveyor's Office. He informed attendees Mr. Butcher was sitting in for the Surveyor in his absence due to illness. The President noted it was the first attendance absence by the Surveyor in ten years.

Approval of Minutes

David Byers made a motion to approve the October 2, 2013 regular Drainage Board Meeting minutes and the October 2, 2013 J.K. O'Neal #59 Regulated Drain Hearing minutes as written. Tom Murtaugh seconded the motion. The October 2, 2013 Regular Drainage Board Meeting minutes and the October 2, 2013 J.K. O'Neal #59 Regulated Drain Hearing minutes were approved as written.

Buffalo Wild Wings

Attorney Joe Bumbleberg introduced Mike Deboy of Deboy Land Services Inc. regarding the ongoing parking issue associated with the Buffalo Wild Wings tract. The said tract -aka Lot 2 of Creasy at the Crossing Sec. 1- was located within the City of Lafayette limits more specifically at the intersection of Creasy Lane and S.R. 38. Mr. Deboy stated due to Branch #13 of the S.W. Elliott #100 Regulated Drain's (two 66 inch metal corrugated pipes) onsite location and the Buffalo Wild Wings desire to expand their parking (westward), the culvert and pipes were examined to determine their status. He noted the pipes were located on the east side of S.R. 38 and continued easterly under S.R. 38 making a circular motion and continue south parallel or adjacent to Creasy Lane. The issue at hand was a recent request to expand parking with additional parking spots. It was previously determined that the said drain shall be removed and replaced with reinforced concrete pipe with any expansion of the parking area by the Board. (See 2005 Drainage Board minutes) One of the issues with the pipes was that they were installed in the approximate year of 2000 as part of a reconstruction and the Surveyor's office to date were unable to locate the original plans for the reconstructed pipes. Therefore they requested a pipe status investigation. An investigation was completed by SLB Pipe Solutions for Deboy Land Development Services and forwarded to the Surveyor Office for their review. Other than normal wear and tear there was no apparent damage to the pipe. He noted the pipes were approximately half full at the time of inspection. An in depth review was conducted of the drainage system. He requested the Board approve the request for additional parking without replacing the existing system as previously directed. He stated his client would maintain the proper cover over the said system and bear the financial responsibility for replacement of parking area if maintenance on said drain was required. The County would not be financially responsible for the removing and replacement of the parking materials. He stated his client was willing to maintain the cover and place a Geo-Mat with a stone cover across the pipes once the sod has started to grow as an added protection. As far as future use of the area it would accommodate service trucks deliveries and additional parking only. At that time he again asked the Board's approval for the building of an additional parking area on the Buffalo Wild Wings site. He noted no drainage issues have arose since Buffalo Wild Wings was completed.

Tom Murtaugh stated he understood from a previous informal mtg with Mr. Deboy that a structural report would be completed as well. Mr. Deboy noted he had contacted numerous structural engineer firms. All structural Engineer Firms contacted were reluctant to certify as this would require the complete excavation of the pipes. Referring to the televised report of the pipes already completed as requested, he stated he did not feel there were issues with the pipes condition that could be identified. Tom Murtaugh stated what was not known if the pipes were installed the same way on the subject property as it had been previously under S.R. 38. Mr. Deboy stated the firms he had contacted stated the only to find the structural status would require the exposure of the entire 300 feet of pipe. Tom Murtaugh asked if it could be completed by exposing a smaller portion of the pipe instead of the entire length. Mr. Deboy asked if exposing a small amount of pipe and certifying it would be sufficient for the Surveyor's consultant. Mr. Butcher interjected the Surveyor's office required a Structural Engineers certification and they would defer to the Structural Engineer hired to determine what he would need exposed for the certification. Drainage Board Consultant David Eichelberger suggested they seek the cmp manufacturer's structural engineer's certification. Mr. Deboy stated he had and they chose not to certify for numerous reasons not related to the structure but internal. Mr. Butcher stated if a certification which included the statement that no future problems were anticipated due to additional parking on top of the pipes were submitted to his office for the record, then his office would not have issues with the additional parking request. Tom Murtaugh stated the Board would not have any issues as well once a Structural Engineer Certification was obtained and the Surveyor's office was satisfied. Responding to Mr. Deboy's inquiry, David Eichelberger stated the Structural Engineer's report should also include a review of all areas where asphalt /polymer lining had exposed the cmp as

well in addition to the pipe's ability to handle the loads. The Certification report should also include any repair requirements prior to construction of the additional parking project is applicable. Mr. Deboy stated his client would agree to the requirement of a covenant to run with the property which stated the owner would be responsible to bear the costs resulting from removal of any of the asphalt parking area during maintenance performed. David Byers stated as a safety issue the Board had the responsibility to keep the public safe. This would not only protect the public but also Buffalo Wild Wings. Mr. Deboy would inform the Surveyor's office how his client elects to proceed in this matter.

Ivy Towns and Flats Offsite Borrow Area

Jim Pence of Schneider Corp. appeared before the Board to present Ivy Towns and Flats Offsite Borrow Area to the Board. The offsite area is planned for the east side of the Cuppy McClure Branch of Hadley Lake #109 Regulated Drain to provide fill to the west side of Cuppy McClure Branch of the said drain. The site was located on the north side of the future Cumberland Ave. Extension just west of U.S. 52. An approximately 1.35 acres would consist of a wet detention pond utilized for this project site only. The pond and its outlet would be required to be analyzed prior to any possible future development's use for Stormwater Quality or Quantity. The design of this project met the Indian Creek release rates as required in the Indian Creek Resolution #2013-01-DB. This site was strictly designed for the Borrow area. He then requested final approval for his project. James Butcher stated the Surveyor's office recommended approval with the conditions as stated on the October 31, 2013 Burke memo. There was no public comment. David Byers made a motion to approve the Reduction of Easement and Encroachment on the Cuppy McClure Branch of the Hadley Lake #109 Regulated Drain. Tom Murtaugh seconded the motion. The Petition for Easement Reduction and Encroachment on the Cuppy McClure Branch of Hadley Lake #109 Regulated Drain was approved as submitted. David Byers made a motion to grant final approval with the conditions as stated on the October 31, 2013 Burke memo. Tom Murtaugh seconded the motion. Ivy Towns and Flats Offsite Area was granted final approval with the conditions as stated on the October 31, 2013 Burke memo.

Lot 5 Valley Lakes Shoppes

Justin Frazier of TBIRD Design appeared before the Board to present Lot 5 Valley Lakes Shoppes to the Board. Lot 5 consisted of approximately 21 acres of which approximately 1.12 acres is planned for this project. The project site was located on the southwest corner of Regal Valley Drive and Regal Valley Place. He stated runoff from the development would outlet into the JN Kirkpatrick Regulated Drain #46. There was no detention planned as the entire site met the allowable curve number (cn). A waiver for detention was granted previously for Phase 1 and Phase 2 of the overall development on June 4 and December 3 2003. He noted this was located within the City of Lafayette limits. The Drainage Board was reviewing the site's allowable release rates only. There was no public comment. James Butcher stated the Surveyor's Office recommended approval with the conditions as stated on the October 25, 2013 Burke memo. David Byers made a motion to grant final approval with the conditions as stated on the October 25, 2013 Burke memo. Tom Murtaugh seconded the motion. Lot 5 Valley Lakes Shoppes project was granted final approval with the conditions as stated on the October 25, 2013 Burke memo.

SIA Proposed Additions

Stan Jones of R.Q.A.W. appeared before the Board to present to the Board. The site was located along S.R. 38 between C.R. 475 East and I65 within the City of Lafayette limits. A Revised Master Drainage Plan includes the revisions of all previous reports and the proposed changes to the existing Pond#01 onsite. Mr. Jones noted the site met the allowable release rates to the Parker Ditch Regulated Drain#61. The Board was reviewing the allowable release rates only for this project. The runoff would be collected and conveyed to the existing storm sewer and basin system prior to discharge to Parker Ditch #61 Regulated Drain. There was no public comment. David Byers made a motion to grant conditional approval with the conditions set on the November 1st, 2013 Burke memo. Tom Murtaugh seconded the motion. The SIA Proposed Additions was granted conditional approval with the conditions on the Nov. 1, 2013 Burke memo as presented.

Other Business

Petition to Encroach Cuppy McClure Branch of the Hadley Lake #109 Drain /West Lafayette

James Butcher presented a Petition to Encroach on the Cuppy McClure Branch of the Hadley Lake #109 Drain submitted by the City of West Lafayette for approval. He stated the Surveyor's office recommended approval. There was no public comment. Dave Byers made a motion to accept the Petition to Encroach on the Cuppy McClure Branch of the Hadley Lake #109 Drain. Tom Murtaugh seconded the motion. The Petition to Encroach on the Cuppy McClure branch of the Hadley Lake Drain #109 and submitted by the City of West Lafayette was granted approval by the Board.

Petition to Reconstruct Amanda Kirkpatrick Regulated Drain #45/Forest Goings

James Butcher presented a Petition to Reconstruct the Amanda Kirkpatrick Regulated Drain #45 which was submitted by landowner Forest Goings. James Butcher reviewed the drain area utilizing GIS for the Board. He noted well over 50% of the affected landowners had signed the Petition. He recommended the Board accept and refer the Petition back to the Surveyor's Office for a Reconstruction Report to be presented at a future date. There was no public comment. Dave Byers made a motion to accept the

Petition to Reconstruct the Amanda Kirkpatrick Regulated Drain #45 submitted by landowner Forest Goings and refer it back to the Surveyor Office for a Surveyor's Reconstruction Report. Tom Murtaugh seconded the motion. Petition to Reconstruct the Amanda Kirkpatrick Regulated Drain #45 was accepted and referred back to the Surveyor's Office for a Reconstruction Report.

Petition to Establish a New Legal Drain /Shepherds Point

James Butcher presented the Petition to Establish a New Legal Drain for the Shepherds Point Subdivision. The site was located Southeast of C.R 500 North and Salisbury intersection. He explained this was an older subdivision. There were some developed as well as undeveloped lots within the subdivision. He stated it was the intent of the submitter- Brian Keene for the storm system to be regulated by the County and included in the Drain Maintenance program. The Petition was signed by the vacant lots owner Brian Keene. David Byers stated he was reluctant to accept due to the fact only the vacant lot owner signed the petition. No owners of the lots developed had signed it. However he then made a motion to accept the Petition as submitted and refer it back to the Surveyor Office for a Report "with hesitation". The Attorney then explained no action by the Board was required regarding acceptance into the system at this time. The steps required a landowner hearing prior to approval. Tom Murtaugh seconded the motion. The Petition to Establish a New Legal Drain for Shepherds Point Subdivision was accepted and referred back to the Surveyor Office for a Surveyor's Report back to the Board.

Maintenance Bond # 9029580854 /Harrison Highlands Phase 2 Section 1

James Butcher presented Maintenance Bond #9029580854 in the amount of \$17,800.00 regarding Harrison Highlands Ph. 2 Sec. 1 Subdivision and written by Continental Insurance. Mr. Butcher explained this was for the storm sewer system outside the public right of way. David Byers made a motion to accept the Maintenance Bond as presented. Tom Murtaugh seconded the motion. Maintenance Bond #9029580854 in the amount of \$17,800.00 regarding the Harrison Highlands Ph. 2 Sec. 1 Subdivision and written by Continental Insurance was accepted by the Board.

Maintenance Bond # B-0353260 /Tippecanoe County Indoor Soccer Facility

James Butcher presented Maintenance Bond # B-0353260 in the amount of \$8570 regarding the Tippecanoe County Indoor Soccer Facility and written by Cincinnati Insurance Company. Mr. Butcher noted this was for Phase 1 of the Tippecanoe County Indoor Soccer Facility project. David Byers made a motion to accept the Maintenance Bond as presented. Tom Murtaugh seconded the motion. Maintenance Bond #B-0353260 in the amount of \$8570 regarding the Tippecanoe County Indoor Soccer Facility and written by Cincinnati Insurance Company was accepted by the Board.

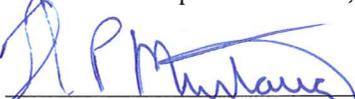
Performance and Payment Bond #929580837/S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction Project

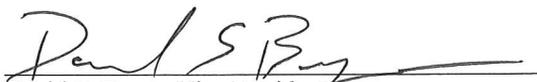
James Butcher presented Performance and Payment Bonds both numbered 929580837 and both in the amount of \$627,760.00 regarding the reconstruction of Branch #11 of the S.W. Elliott Regulated Drain #100, written by Continental Casualty Company and submitted by Milestone Contractors Inc. for acceptance. David Byers made a motion to accept the Performance and Payment Bonds as submitted by James Butcher. Tom Murtaugh seconded the motion. Performance and Payment Bonds numbered 929580837 in the amount of \$627,760.00 regarding the reconstruction of Branch #11 of the S.W. Elliott Regulated Drain #100, written by Continental Casualty Company and submitted by Milestone Contractors Inc. were accepted by the Board.

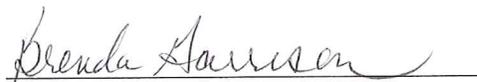
Tom Murtaugh announced once the meeting was adjourned there would be a five minute break before the scheduled Hester Mottsinger Regulated Drain#58 Hearing would begin.

Public Comment

As there was no public comment, David Byers made a motion to adjourn. The meeting was adjourned.


Thomas P. Murtaugh, President


David S. Byers, Vice President


Brenda Garrison, Secretary

ABSENT

John Knochel, Member

Tippecanoe County Drainage Board

January 8, 2014

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President John Knochel, member Tom Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Project Manager James Butcher and G.I.S. Technician Evan Warner were also in attendance.

Election of Officers

Drainage Board Attorney Dave Luhman opened the floor to accept nominations for 2014 Drainage Board President. John Knochel made a nomination of Dave Byers for President of the Drainage Board in 2014. Tom Murtaugh seconded the nomination. Dave Byers was elected as the 2014 President of the Tippecanoe County Drainage Board. Tom Murtaugh nominated John Knochel as the 2014 Vice President of the Drainage Board. Dave Byers seconded the nomination. John Knochel was elected as the 2014 Vice President of the Tippecanoe County Drainage Board. There was no public comment.

Annual Tile Bids

The Attorney stated due to County Commissioners declaring a Weather Emergency from which affected the mail delivery for two (2) days, the Board could defer the opening of the annual tile bids to the Feb. meeting. Bids received by the Surveyor Office postmarked on or before January 7th would be considered. The Attorney noted two bids had been received to date, one from CDI Supply and one from ADS. John Knochel made a motion to defer the opening of the Annual Tile Bids to February 5, 2014. Tom Murtaugh seconded the motion. The Annual Tile Bids received as aforementioned and those received with a postmark of January 7, 2014 or before would be opened at the Feb. 5, 2014 Drainage Board meeting. There was no public comment.

Appointment of Executive Secretary

Tom Murtaugh made a motion to appoint Brenda Garrison as the 2014 Tippecanoe County Drainage Board Executive Secretary. John Knochel seconded the motion. Brenda Garrison was appointed as the 2014 Tippecanoe County Drainage Board Executive Secretary. There was no public comment.

Approval of Minutes

Tom Murtaugh made a motion to approve the December 18, 2013 regular minutes as written. John Knochel seconded the motion. The December 18, 2013 regular meeting minutes were approved as written. Tom Murtaugh made a motion to approve the December 18, 2013 Franklin Resor #65 Regulated Drain Hearing minutes as written. John Knochel seconded the motion. The December 18, 2013 Franklin Resor #65 Regulated Drain Hearing minutes were approved as written.

Contract for Legal Services

The Attorney stated due to the recent snow emergency, the Legal Services Contract was not available for today's meeting. The contract would be presented at the Feb. 5, 2014 meeting of the Drainage Board for acceptance. John Knochel made a motion to defer the opening of the Legal Services Contract to the Feb. 5, 2014 meeting of the Board. Tom Murtaugh seconded the motion. The Contract for Legal Services would be presented at the Feb. 5, 2014 Drainage Board meeting for approval.

Contract Amendment S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction Project

The Surveyor presented a Contract Amendment to the Christopher B. Burke Part Time Construction Observation of the S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction to the Board for their approval. He stated the amendment to the current contract was due to Vectrens delay of relocating and lowering their gas main and the discovery of an unknown abandoned 6" gas line under State Road 38. These issues set the project back approximately 3-4 weeks. The Part Time Construction Observation Contract Amendment was in the amount of \$17,000. This brought the total amount of the

Christopher B. Burke Part Time Construction Observation Contract for the S.W. Elliott #100 Regulated Drain Branch #11 Reconstruction to \$57,000.00. He recommended approval by the board. John Knochel made a motion to approve the Contract Amendment to the Christopher B. Burke Part Time Construction Observation of the S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction in the amount of \$17,000. Tom Murtaugh seconded the motion. The Christopher B. Burke Part Time Construction Observation of the S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction in the amount of \$17,000 was approved as presented by the Surveyor.

Woodland Elementary School Additions and Renovations

Pat Jarboe of TBIRD Design appeared before the Board to present the Woodland Elementary School Additions and Renovations. The site was located on the north side of County Road 450 South and east of County Road 250 East. Additions to the existing building on the north and the south side as well as the playground area and drives were planned. Due to the project location within the J.N. Kirkpatrick Regulated Drain Impact Area, a variance to Chapters 6 and 8 Channel Protection Volume of the current Stormwater Ordinance was requested. The existing pond presently located on the northeast portion of the site would be expanded and the outfall of the pond would be relocated away from the school. The Surveyor noted the original project was approved by the Board prior to channel protection requirements. He recommended approval of the requested variance as well as the project with the conditions as stated on the January 3, 2014 Burke memo. John Knochel made a motion to grant the variance as requested. Tom Murtaugh seconded the motion. The variance to Chapters 6 and 8 regarding channel protection volumes was approved by the Board. John Knochel made a motion to grant approval with the conditions as stated on the January 3, 2014 Burke memo for the Woodland Elementary School Additions and Renovations project. Tom Murtaugh seconded the motion. Woodland Elementary School Additions and Renovations was granted approval with the conditions as stated on the January 3, 2014 Burke memo.

Zach Beasley

Eldora K. Lois Regulated Drain Reconstruction Update

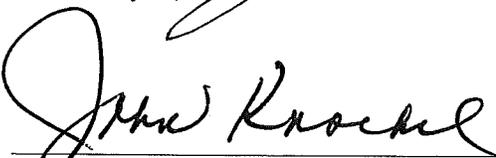
The Surveyor stated this project was located approximately at County Road 125 West and County Road 925 South and southwest of the Southwestern Middle School. He stated approximately 5200 feet of 24" tile was installed by the Contractor. The project had been completed with the exception of a couple items to be completed as the weather allowed. He noted it was an interesting project to complete and landowners were satisfied with the work.

Public Comment

There was no public comment. John Knochel made a motion to adjourn the meeting. The meeting was adjourned.



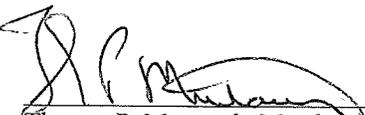
David S. Byers, President



John Knochel, Vice President



Brenda Garrison, Secretary



Thomas P. Murtaugh, Member

Tippecanoe County Drainage Board

June 4, 2014

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President John Knochel, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Project Manager James Butcher and GIS Technician Evan Warner were also in attendance.

Approval of Minutes

Tom Murtaugh made a motion to approve the May 5, 2014 Drainage Board Regular Meeting minutes as written. John Knochel seconded the motion. Tom Murtaugh made a motion to approve the May 5, 2014 Frank Kirkpatrick #45 and May 5, 2014 Elijah Fugate #30 Drainage Board Landowner Hearing minutes as written. John Knochel seconded the motion. The May 5, 2014 regular Meeting minutes and the May 5, 2014 #45 F. Kirkpatrick Drain and #30 E. Fugate Drain Drainage Board Landowner Hearing minutes were approved as written.

Rogers Group Bosma Quarry Site

Pat Jarboe of TBird Design Services appeared before the Board to present the Rogers Group Bosma Quarry site for approval. The project site was located on the north side of Old State Road 25 at the intersection of County Road 800 North and consisted of approximately 133 acres. Mr. Jarboe introduced accompanying attendees as Eric Hart-TBird Design, Rogers Group representatives: Andy Williams and Dan Medlock along with the Attorneys Andy Gutwein and Christopher Shelmon. Mr. Jarboe supplied the Board with exhibits of the site. He stated the pit location was located inside the floodplain area and closer to Old State Road 25 the processing area was planned. He stated this was a fairly straightforward site and they had met the ordinance regarding stormwater runoff. However, they were requesting 3 variances regarding Channel Protection Volume, Water Quality Volume and the required number of BMP structures for the project. While the project plan met the intent of the ordinance, there were site specific perimeters which did not meet the exact technical requirements of the ordinance. He noted these were listed in the May 28, 2014 Burke Review Memo. He stated they agreed with conditions as stated on the memo and noted the requested variances were recommended within the review memo as well. At that time he requested approval from the Board. The Surveyor requested a representative from the Rogers Group speak on the required Rule 12 for the project. Dan Medlock Director of Environmental Services of the Rogers Group approached the Board to discuss the Rule as requested. He stated Rule 6 was applied for and granted by IDEM (Indiana Dept. of Environmental Mgmt.) regarding the construction phase of the operation. He stated the Rogers Group then opted to request coverage from IDEM under Rule 12 with the Notice of Intent submitted to them. He stated they will keep the approval for Rule 12 dormant until the dewatering process began and at which time it would then be made active with IDEM. Rule 12 covers the Industrial discharges associated with Quarry Operations. The industrial discharges associated with this project involved the pit dewatering. Rule 12 would grant the right to discharge the groundwater that infiltrates behind the slurry wall or accumulates within the pit to the Wabash River. That is the main difference between IDEM's Rule 6 and Rule 12. Responding to Mr. Murtaugh, Mr. Medlock stated they had not submitted the NOI to IDEM for the Rule 12 approval. He noted as it was a general permit and it was only a formality in the matter of IDEM processing the Rule 12 NOI and issuing the permit. The Surveyor stated a thorough review had been completed and noted the IDEM approval of Rule 6 and Rule 12 must be in his office prior to the start of any operations. He stated he recommended approval with the conditions as stated on the May 28, 2014 Burke memo to include the submittal of the IDEM Rule 6 and Rule 12 permits to his office for the official record. Mr. Murtaugh requested explanation of Item #3 statement as follows: The applicant is requesting a variance to allow the stormwater quality units to be constructed in-line instead of off-line. The Surveyor stated basically there are different types of units that are made. The Ordinance specifically requires off-line structures. A structure must be constructed off line of the pipe not in line with it. Technology changes faster than the Ordinance and there are newer units which function on line and capture unwanted components as is the intent of the ordinance for stormwater quality purposes. Engineer Consultant Dave Eichelberger stated basically the requirement in the ordinance is so that one does not resuspend the material as it is discharged. The first structure is a diversion structure to divert the low flow into the unit to treat it then the larger flows would bypass that and continue on down. The developer has a unit designed to lessen the chances of resuspension by placing the sediment in a separate chamber within the structure. Also this would be the second treatment as it would flow into the pond first then into the unit with a controlled release. He stated due to this it justified recommending approval of the variance

request of the required number of BMP structures. There were no other inquiries from the Board. The President opened the floor for comments regarding the project's drainage only. He stated he would limit the comments to 3 minutes per person. Landowner Allen Hoffman approached the Board and stated he was prepared to give a short 11 minute presentation and was not aware of the limits for speaking. He noted he had attended many meetings on this subject and there was never a limit set at any of those meetings. John Knochel interjected he would allow the 11 minute presentation to the Board. Allen Hoffman stated he would have made his presentation shorter had he been aware of the time limit. As Mr. Hoffman gave his presentation he stated as follows:

Quote "Good Morning- my name is Allen Hoffman and I am on the Advisory Board of the Americus Area Community Coalition. I am the liaison between our group and the County Surveyor's office. First let me say it has been a pleasure to work with Zach and Brenda during this project. The County can certainly be proud of the professional manner in which the County Surveyor's Department is run. I would like to speak today specifically against the Drainage Board granting any variances for the Quarry project. I would assume you place importance on the level of channel protection volume and quality water volume that you've set. TBird cannot achieve the levels which you have set. The Rogers Group currently operates ten facilities in Indiana and has over 103 nationwide. This is not their first rodeo. They have been in business for over a hundred years; yet they are barely adhering or not adhering to your specifications. Is this indicative of how they wish to run their operation in our county? Let's look at the numbers and the deviations they are requesting. Ok? Let's begin with the number TBird submitted but did not discuss, peak water surface elevation. It should be noted that all three ponds are in compliance, but by what value? (A power point was presented along with the verbal presentation to the Board) The chart you are viewing is a blowup of the information submitted by TBird in its most recent re re resubmittal. If you look at the peak event value, you see a safety of 1.4 feet to 1.66 feet above the ten year peak. But let's look at the 100 % values; here the safety level is .02 feet, .18 feet and .73 feet. That is just ¼ inch, 2 and 1/8, and 8 ¾ inches. I would call that barely meeting your requirements with 0 margin for error. TBird never said this in their basic -that you just meet their basic requirements. Let's move on in my analysis remembering the precision demonstrated in just meeting the requirements for the hundred year flood plain. Channel Protection Volume (CPV) – here you're interested in providing the extended water detention for the one year in 24 hour event. Reviewing your requirements we see a maximum store value no more than 40% released in 12 hours volume event. No more than 10% maximum store volumes to be retained after 36 hours. Let's review the data provided by TBird to show compliance with this for all three ponds. Here is the table presented by TBird to show compliance with your specifications. Remember your requirements. We see pond 3 has already released too much water- 41.4% versus your 40% required value. In essence they are releasing the water nearly a half hour to fast. It is supposed to release more slowly over twelve hours' time not eleven and half. They are not meeting your requirements. Your requirement is there for a reason. TBird stated they only missed it by 27 minutes, but again why did you miss it in the first place? What design changes would TBird need to make in order to obtain total compliance with your requirements. We see at the 36 hour mark pond 2 still has a level of 17% detention versus stated maximum detention at 10%. That's extra 7% exceeds your requirements by a large number- 70%. Here TBird states it is quote "reasonably close" unquote, and they only missed it by quote "five hours and 42 minutes" unquote. Reasonably close? If you were waiting for an extra 5 hours and 42 minutes for somebody, would you consider they arrived reasonably close to your apt. with you? It is not reasonably close to achieve compliance when you only meet four of six specified values. Let's see if they can do better on water quality volume (WQV). Here the Bosma stormwater system would be required to provide 80% total suspended solids (TSS) removal utilizing one of the best management practices (BMP). The system must provide extended detention of the water volume based on a storm of 1 inch rainfall in a 24 hour period and meet the following criteria: 40% maximum stored values at least in 12 hours, 10% maximum stored value in 36 hours. Let's dig into the numbers and see how TBird's calculations fall from this 1 inch rainfall. We reviewed the volume stored value at 12 hours- the 40% maximum release = 60% or more retained that meets your requirements. The new verbiage TBird states it only needed a variance for not meeting the requirements specified for pond #. They can only achieve 55.8%. They cannot meet your 60% specification for pond 2 either. The last time I checked, 59.5% that they are proposing is less than 60.0% but they did not request a variance for that number. Oversight, rounding error, I don't care. There was no request for a variance for not meeting your requirements and they need one. They claim not meeting your specification is quote "not a significant issue" unquote, why not? If you agree with TBird's own calculation, they will be releasing 10% greater volume of water that is not acceptable. Finally let's review the maximum stored volume with 10% retained at the 36 hour mark, TBird exceeded that value in all three ponds. Thus none of the three ponds meets the specifications. As you can see pond 3 exceeds the requirement by 32%, pond 2 exceeds the requirement by 120% and pond 1 exceeds the requirement by a whopping 154%. How is this total disregard for your explanation/your specifications explained by TBird? Quote " This excess volume stored is insignificant compared to the excess WQV provided" unquote. This is not the point. Why don't they meet the specifications, why are your own requirements repeatedly termed as insignificant? They also give the explanation for doing your requirement; quote" it will only take an additional 26 hours to get down to the 10% mark" unquote. So if you have a specification for 36 hours, it will only take just 62 hours to achieve and that should be ok. That's not best management practice in my eyes. Tom Murtaugh asked at this time if the charts used were TBird charts. Allen Hoffman said yes the

yellow charts were TBird's charts. The percentages are the calculations off the values they are presenting raw data. I am giving you percentages off the values. Every quote that I give you in quotations is a quote off TBird's refilings of their report. The percentages are the calculations off the values - they are presenting raw data. So let's summarize the information that's being presented to you indicating the best management practices offered by TBird off their design of these three holding ponds in the processing and storage areas only. There are two calculated values required for the channel protection volume and two additional calculated volumes for the water quality volume. Thus there are four calculated values for each pond and twelve total calculations for the three ponds. Pond one fails one of the four requirements, pond two fails three of the four requirements, pond three fails three of the four requirements. Thus the total project fails seven of your twelve specifications. TBird fails to meet 58% of your specifications. No matter how you look at it, that is pretty pathetic. TBird obviously does consider your specifications once again in their own words "insignificant". I am sure that TBird has many capable professional engineers that are more than capable of designing three simple retention ponds that are in a hundred percent compliance with the Tippecanoe County Stormwater Management mandate. So why haven't they done that? I have read your Stormwater Comprehensive Stormwater Mgmt. Ordinance for Tippecanoe County and I understand you are limited to granting approval or denial solely on the stormwater discharge not the merits of the project itself. AACC (Americus Area Community Coalition) certainly has been frustrated in its opposition with this project, as each county board will only examine their piece of the total pie. I also know your mandate is not to weigh in on the concerns of over 200 homeowners adversely affected by the location of this Quarry in this exact spot, but what you can do and should do is insist on 100% compliance with your very own specifications in which you have written to protect the citizens of this county. As I have followed the four filings by TBird for this project, I have been frustrated by the phrases they use. They say their lack of compliance with your specifications are their own words "not a concern", variations according to them are "acceptable- very close to- close to- minor deviations and not a significant issue." Well let me assure you that none of this lack of compliance, none of the shoulder shrugging by TBird is acceptable for a project of this magnitude which would affect so many people's lives so adversely. As an Engineer I am also frustrated by something else. Nowhere in TBird's discussions, any of our attempts to running multiple computer simulations to verify they are presenting to you the best scenarios of drainage possible. No where can I see comments about trying alternate solutions that may have brought them into compliance with your specifications. Nowhere did I see any comments concerning alternate scenarios which may have been tried and abandoned as less effective. Maybe it would have cost them too much to run simulations. Maybe there is no better practices available to solve these problems or maybe the plan was just good enough in their eyes. I strongly urge this Board to exercise its prerogative and reject this proposal. Please return it to TBird and tell them to design three ponds that meet the requirements of the Stormwater Management Ordinance of Tippecanoe County. Tell them to meet the specifications that you have put in place to protect the citizens of Tippecanoe County. Thank you for your time." Unquote

Mr. Nate Hoffman approached the Board and also utilized a power point exhibit for his presentation and stated as follows: Quote" My family and I live at 7701 Rolling Hill Drive about 100 yards from the proposed Quarry site. I am a Teacher for the Tippecanoe County School Corporation. While my knowledge of Engineering is limited, I do at least have the ability to identify incomplete paperwork and to discern when someone handing in that paperwork put no effort into the paperwork. Today I will be addressing the lack of appropriate effort with respect to the permit process and how frequently you are asked to trust Rogers Group and TBird. Now essentially these people are asking you to trust them. They say that they will get all the permits they need. Just give them your stormwater drainage approval and they will take care of everything. Just trust them. Now before you do that I would ask that you look through their filing history and see if you think that trust is warranted. On Feb. 10, 2014, Rogers Group through TBird made its initial filing for Drainage Board approval. However they said and submitted nothing pertaining to Rule 6 or Rule 12 permits. Now this well thought out submittal was received by the County Surveyor's department and also the consulting engineering group in Indianapolis. Among the more than 50 errors and/or incomplete items, was the following request to reference Rule 6 and 12. So you see there is a request for both Rule 6 and 12 permits and also a request for the SWPPP report. This is the first of several similar requests. Now Rogers Group says they have Rule 6 approval. Sounds good, but let's dig into the documents. IDEM received Roger's Rule 6 information during mid-June of 2013. The cover letter and Notice of Intent letter are both dated May 9, 2013. If they were submitting them, then why were they not received by IDEM for five weeks? Reviewing the next document shows what may have caused the delay. They did not run the legal notice until eight days after the dating of the Notice of Intent filing. The notarized publisher's affidavit appears not to have been received until it was date stamped June 13, 2014 by the Rogers Group and you are supposed to trust them and take their word that everything will be taken care of. You can see by the time that IDEM gave Rogers Group the formal permit approval it was 6 months after the supposed date of their original filing. Timely I think not. The second letter of rejection by CBBEL states that Rogers acknowledged the need for Rule 12 compliance. Quote: The dewatering process will be permitted under IDEM MPDES General Permit Rule 12" Unquote I guess they thought that restating the request would be sufficient. Now this slide shows the second request for the same document. Now they try to tell you to trust them and they will even make a quarterly report on top of that. Almost a month later CBBEL made the exact same request. The following response was added to the exactly the same prior response by Rogers Group to Quote:"Rogers Group

has acknowledged that it is their policy to apply for the Rule 12 permit when it becomes applicable. The Rule 12 will be easy enough to obtain but is costly to comply with. A certified operator must perform sampling and complete it with review of outfalls. For this reason Rogers Group is holding off on the Rule 12 application until they have approval to mine the site.” Unquote So if it is easy enough to obtain, why haven’t they obtained it? Oh you’re waiting for approval to mine the site? Please remember that when you see what they tell you four weeks later. After 4 formal submittals with almost 300 pages of documents and exhibits, CBBEL gave up. They made the exact same request with reference to Rule 12 permitting. Except this time CBBEL essentially is saying we are sure eventually you will provide the requested documents. So we will recommend drainage approval. Now let’s look at the May 22, 2014 response and to see how Rogers’s response instilled all this trust. Quote ”Rogers Group has filed their Rule 12 and has submitted the NOI to IDEM” Unquote I must have missed it. Did they receive approval to mine the site? If so where is it? May be the high cost of comply was reduced to a more manageable number for the Rogers Group. I kind of doubt that also. But regardless it appears they are well along with their rule 12 permit. Has the Rogers Group been working hard on the permit since it has been noted on four responses from CBBEL to them over the past four months? Let’s find out. IDEM as of this morning at 8:45 am says they have received nothing from the Rogers Group with reference to Rule 12 filing. Natta, Nothing - really working hard on the permit. On May 13, 2014 a legal notice was buried in the Journal and Courier. This small notice drew a number of responses to IDEM from potentially grieved parties and it’s expected more parties will enter the action when Rogers finally gets around to submitting its formal NOI filing to IDEM and the notice is then posted for all concerned parties to see. So the AACC and IDEM are waiting patiently around for Rogers Group to get their act together and deliver on CBBEL’s request for a Rule 12 permit and their asking you to trust them to not worry about it, to just let it slide through your approval process. I don’t think that any of these inconsistencies, half-truths or blatant disregard for the constant request for information from the representatives of Tippecanoe County warrants your trust or ours. I would request that you do not approve this project. I ask that you send it back to Rogers Group until they get the proper permits from IDEM and the residents of Americus are given their due process. Why reward someone for sloppy or incomplete work? Why give trust when it has not been earned? Why approve a project before the necessary steps of a process have been conducted. I thank you for your time and for your consideration.” Unquote

The President asked for any additional comments from the attendees. Dan Medlock with Rogers Group approached the Board and stated he could not speak for the IDEM family however he just emailed his office to see if they had the green certification card back from IDEM. They had not. He noted the holdup is typically with the newspaper and getting proof of publication back, as it took almost three weeks after they ran the notice. He stated the notice was run and it had been submitted to IDEM. As far as permitting goes, Rogers have a lot of permits with IDEM. He stated this has been a contentious site and one does not want to involve IDEM, burden them with permitting issues if it is not going to go through. He stated, out of respect for landowners and their concerns we have been cautious in the process of submission. He noted as the process moved forward they felt more confident about the site and what could be done.

The Board President thanked all for the comments. He then referred back to the Surveyor or Consultant for a response. Consultant Dave Eichelberger Director of Engineering Mgmt. with Christopher B. Burke Engineering stated as follows: Quote: “When we looked at the variance requests, basically we look at the releases and the timing issues are set out to make sure the wet pond operates the way it is supposed to operate. You are not supposed to release more than 40% of the peak volume within the first 24 hours and a little bit under that or over and under several different cases. The numbers actually changed with the latest submittal. The second one is about making sure the pond is empty enough to operate again in case you get another storm. So in the first case with some of the guesswork that goes into hydrology and hydraulics, to get close to the 40% mark we have historically said it has been adequate for a variance request. On the second issue there was 10-25% was going to be left after 36 hours and that is a number related to the smaller volume of the channel protection volume or water quality volume. That volume was a much smaller number as you compare it to the peak detention volume- which is what we were considering here. So yes it does take 10% but since the pond is going to be used for the peak detention we are trying to make sure it is available for use for the 100 year storm for peak detention. Those numbers are actually much smaller when you compare it to the 100 year storage volume we are trying to trap. So that is why we have recommended approval for the Variance requests regarding the timing on the ponds for both water quality volume and channel protection volume and historically have done. It is very difficult to meet both the numbers exactly because you have an orifice plate in or some sort of structure. What we are talking about here is a difference like if you had a 6 inch or a 5.9 inch orifice plate or a 6.1 inch orifice. So we get to a certain place where we are talking about a minute difference in that diameter. You start questioning whether or not someone can build it with that exact specification with 6 inches, 5.85 inches or whatever you are going to come up with. When we get to the point where we feel they have met the spirit of the way it was intended and they have balanced it out as back they can between retaining the water enough to get the sediment to drop out, but yet letting the water be gone so it is ready for its next use- we call it quits at that point and say it doesn’t actually have the exact numbers, let’s grant a variance request and move on. That is basically it on the variance issue.” Unquote Tom Murtaugh asked for clarification on the statement 17% left in pond 2 represents only 9% of the peak detention storage. Mr. Eichelberger stated,

Quote "It is 17% when you compare it to what is for that storm volume. When doing a channel protection volume, it is a much smaller storm than the 100 year detention storm. The channel protection and water quality are much smaller storms. So as an example we are talking about the amount of volume left is going to be .065, .097, and .048 I think it was acre feet. The storage volume we are talking about is more like for peak detention is more like an acre foot. So we are talking about less than 1/10th of an acre foot left in the pond as compared to our peak detention volume of about an acre foot. So the percentages correctly pointing out in the table exceed the 10% yes, but the bigger picture is and this is what I want to stress is that we want that pond to be available for use again for the peak detention event. So that is what we compared it to a bigger picture issue. It will still be available for use for the next channel protection volume or next water quality volume because the pond is so much bigger -- because it is actually sized for the peak 100 year detention. I care more about that 17% is going to take up too much of the peak detention so it does not overtop during a 100 year storm." The Surveyor then stated he understood the concern and Mr. Eichelberger just explained the intent and he reiterated historically the Drainage Board have granted variances of this nature. The precedent has been set. The President stated no activities could start until the Rule 12 Permit issued from IDEM was submitted to the Surveyor. Mr. Eichelberger stated they try to get all State/Federal permits in for review when writing the review memos. When it gets down to one issue such as in this case the Rule 12 it is stated this must be submitted prior to the start of the dewatering process. That is our recommendation that this be a condition of the approval. So the dewatering could not start until the Rule 12 IDEM permit is submitted to the Surveyor.

Board Attorney Dave Luhman stated as follows: With regard to variances, they are not allowed only because the Drainage Board has granted them in the past. The standard is a variance can be allowed if application of the particular provision that they want a variance from (1) would cause extraordinary difficulty to the developer or expense (2) the variance would not prevent the goals and purposes of the ordinance (3) it would not result in less effective management of storm water runoff. This is the standard the Drainage Board considers when looking at the large picture and determining whether it meets those criteria. Strict adherence to this standard would require extraordinary difficulty or expense and if you allow the variance it would not prevent the goals and purpose of the Ordinance in the overall effective management of stormwater runoff. This should be kept in mind as the Board considers the request for and request against the variances. Responding to Mr. Murtaugh's request for clarification, Mr. Hoffman approached the Board. He stated quote "We are talking about the three ponds exceeding the requirements of the 10% retained after 36 hours maximum. It said that the 10% volume was exceeded by 154% was the exact comment with reference to Pond #1. The primary pond as pond 1 drains into pond 2 and pond 3 may never be built as far as the whole discussion is concerned. But Pond 1 is the critical pond. Pond 2 is supported by pond 1 and is also critical. But that was the point I was trying to make in that." unquote There were no other questions from the Board. Tom Murtaugh made a motion to approve Variance #1 as requested and recommended on the May 28, 2014 Burke review Memo. David Byers seconded the motion. John Knochel opposed. Tom Murtaugh made a motion to grant the variance #2 as recommended in the May 28, 2014 Burke review memo. David Byers seconded the motion. John Knochel opposed. Tom Murtaugh made a motion to grant variance #3 as requested and recommended on the May 28, 2014 Burke review memo. David Byers seconded the motion. John Knochel opposed. Tom Murtaugh made a motion to grant approval with the conditions as stated on the May 28, 2014 Burke review memo. David Byers second the motion. John Knochel opposed. The Rogers Group Bosma Quarry site was granted the requested three variances and a drainage approval with conditions as stated on the May 28, 2014 Burke review memo.

Meadowgate Estates Phase 4

Joe Coutts with C&S Surveying appeared before the Board to present Meadowgate Estates Phase 4 to the Board. The site was located north of County Road 500 North and east of County Road 75 East and consisted of approximately 28 acres. He stated half of the site drained to the west to an existing pond which was constructed with Section 3 of the overall Subdivision. The east side drained to a natural ravine onsite and both ultimately discharged to Burnett Creek. He stated they had received the May 15, 2014 Burke memo and was in agreement with all the conditions as stated and they were currently working toward meeting all the conditions at this time. An approximately 2 acre portion of the site would be undeveloped and remain a tree preservation area. There will be a small amount of clearing for Lot 28 that is not included in the tree preservation; however the majority of the trees would be preserved. The vast majority would be preserved with a platted tree preservation easement. He stated the owner was intimately involved in the maintenance of the drainage for the existing Meadowgate Subdivision and would be as involved in the maintenance of the drainage infrastructure for the new section/phase planned as well. He then requested approval of the variance as requested and drainage approval. There were no questions from the Board. The Surveyor informed the Board each individual site plan would be reviewed by his office prior to approval for site construction. He recommended approval of the variances as requested and drainage approval with the conditions as stated on the May 15, 2014 Burke review memo.

The President asked for public comment. Mark Hilton 5497 Shooting Star Lane West Lafayette approached the Board. He stated his lot was located across the pond and adjacent to the woods. He noted he fishes in the pond often and it was a big reason for his move to this location. His home was located approximately two hundred feet from the pond and noted there was no cropland draining into the pond as it was complete pasture. His concerns were how close would the next house be constructed to the pond and what amount of drainage would go into the pond. He said he had no issue with having a neighbor his only concern was the pond and the amount of additional drainage into it and as well as the current need for cleaning out the pond prior to new construction. Upon moving in to this location, he had asked how deep the pond was and Mr. Kuipers informed him then it was 17 feet deep. He stated the pond was actually 9 feet deep and disagreed with Mr. Coutts in that Mr. Kuipers was helpful with pond maintenance. He explained that when he bought the lot he asked Mr. Kuipers to clean up the pond as it was completely grown up and covered over by a number of species. Finally, after two years Mr. Kuipers finally cleaned the pond. However said pond was once again in bad shape and shallow in several areas. The President asked for Mr. Coutts reply. Mr. Coutts addressed the comments as follows: quote" To address the comments, I think the maintenance of the pond is more an issue for the Homeowners Association. I believe the maintenance of the pond is very clearly covered in the homeowner's covenants and restrictions for the existing phases and would be included with this next phase also. This subdivision was approximately 50% farmland and 50% uncultivated land. A portion of the land to the south of Mr. Hilton's location drained into the pond via a farm tile and open ditch as well as drained to the northeast. Regulations dictate how close one can build near a pond as well as elevation regulations and each building site would be reviewed by the Surveyor office prior to approval for home construction. The Consultant stated he personally inspected the pond years ago and at that time made maintenance recommendations. He stated the rate of runoff to the pond would not increase by this expansion. Mr. Coutts stated the owner commented to him when construction crews were building the new the roads for this section they could possibly clean out the pond as it would be a good opportunity to do it then." Unquote

Tom Murtaugh made a motion to grant the variance as stated on the May 15, 2014 Burke review memo. John Knochel seconded the motion. Tom Murtaugh made a motion to grant drainage approval with the conditions as stated on the May 15, 2014 Burke review memo. John Knochel seconded the motion. Meadowgate Section 4 Subdivision was granted the variance as requested and drainage approval with all the conditions as stated on the May 15, 2014 Burke review memo.

Blackthorne Phase 3

Pat Cunningham with Vester and Associates appeared before the Board and presented Blackthorne Subdivision Phase 3 for approval. The site was located southwest of intersection US 52 and Klondike Road and consisted of approximately 11.25 acres. An additional 44 lots would be developed in this phase. The original plan for this area when the development was planned was condominiums in this area; however since that time a new owner will build residential homes. The drainage infrastructure planned had been followed and would be as planned. Storm sewers and swales would route the runoff to the existing pond on site. He requested a variance for the use of the pond as a stormwater quality measure. He stated the owners were in agreement with the conditions as stated on the May 29, 2014 Burke review memo and requested drainage approval. Drainage Board Consultant David Eichelberger interjected the following: He stated he wanted to clarify for the record their variance recommendation -as it was not recommending using a pond as a water quality measure. When we recommend a variance request we are not really recommending the pond can be used as a water quality device, because it was not designed that way. We are acknowledging that it provides some sort of water quality benefit. Really the variance regards constructing one device for water quality only. Mr. Cunningham stated basically the pond does provide water quality control however not to the extent the Ordinance requires.

The Surveyor stated he recommended approval of the Variance as well as drainage approval with the conditions as stated in the May 29, 2014 Burke review memo. There was no public comment. Tom Murtaugh made a motion to grant approval for the variance as requested. John Knochel seconded the motion. The variance was approved as requested. John Knochel made a motion to approve Blackthorne Subdivision Phase 3 with the conditions as stated on the May 29, 2014 Burke review memo. Tom Murtaugh seconded the motion. Blackthorne Subdivision Phase 3 was granted a variance and drainage approval with the conditions as stated on the May 29, 2014 Burke review memo.

Contracts

Berlowitz Wetland Mitigation Contract Amendment

The Surveyor presented the Berlowitz Wetland Mitigation Contract Amendment in the amount of \$8,000.00 to the Board for approval. He noted this was an IDEM requirement and the amount would be added to the previously approved contract.

There was no public comment. Tom Murtaugh made a motion to approve the Berlowitz Wetland Mitigation Contract Amendment in the amount of \$8,000.00. John Knochel seconded the motion. The Berlowitz Wetland Mitigation Contract Amendment in the amount of \$8,000.00 was approved as presented by the Surveyor.

Upper JN Kirkpatrick Drain Extension Contract

The Surveyor presented the Upper JN Kirkpatrick Drain Extension Contract in the amount of \$89,000.00 to the Board for approval. This would extend the current open ditch from Co. Rd. 450 to the east side of US 52. He stated this was a part of the Build Tippecanoe project. There was no public comment. Tom Murtaugh made a motion to approve the Upper JN Kirkpatrick Drain Extension Contract in the amount of \$89,000.00. John Knochel seconded the motion.

Petitions

The Surveyor presented the following petitions for Board approval; Petition to Encroach on the JN Kirkpatrick Regulated Drain #46 submitted by The City of Lafayette, Petition to Encroach on the John McCoy Regulated Drain #50 submitted by Nathan Buche, Petition to Encroach on the Grant Cole Regulated Drain #19 submitted by Larry Underwood. He noted his office had reviewed the petitions and he recommended approval by the Board. There was no public comment. Tom Murtaugh made a motion to approve the Petitions as presented by the Surveyor. John Knochel seconded the motion. Approval from the Board was granted for the Petition to Encroach on the JN Kirkpatrick Regulated Drain #46 submitted by The City of Lafayette, Petition to Encroach on the John McCoy Regulated Drain #50 submitted by Nathan Buche, Petition to Encroach on the Grant Cole Regulated Drain #19 submitted by Larry Underwood.

Requests

The Surveyor presented a letter received by his office and written by the White County Drainage Board. The letter requested a Waiver be issued by the Drainage Board regarding the Emmitt Rayman Joint Regulated Drain #64 planned public hearing. Tippecanoe County has approximately 800 acres within the watershed and White County has approximately 6700 for a total of 7500 acres benefited by this joint drain. The waiver would allow White County Drainage Board to hold the hearing without a Tippecanoe County Drainage Board member. They are planning to increase the rates to the following variable amounts: 0.50, \$1.00, \$1.50, \$2.00 with a minimum rate of \$5.00. Since White County has the majority of acreage benefitted by the drain - they are the County in charge of its maintenance. The Surveyor recommended the Board provide the waiver as requested. There was no public comment.

John Knochel made a motion to grant a waiver for the Emmitt Rayman Joint Regulated Drain #64 as requested by White County Drainage Board. Tom Murtaugh seconded the motion. A Waiver to participate in the Emmitt Rayman Joint Regulated Drain #64 public hearing was granted to White County Drainage Board.

Public Comment

As there was no public comment, John Knochel made a motion to adjourn. The meeting was adjourned.



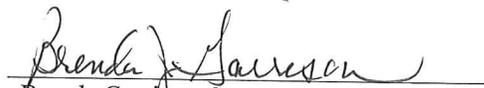
David S. Byers, President



John Knochel, Vice President



Thomas P. Murtaugh, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board

August 6, 2014

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President John Knochel, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Project Manager James Butcher and Surveyor's Office G.I.S. Technician Evan Warner were also in attendance.

Approval of Minutes

John Knochel made a motion to approve the July 9, 2014 regular minutes as written. Tom Murtaugh seconded the motion. Motion carried.

CSXT Raub Siding

President Dave Byers stated the CSXT Raub Siding project was rescheduled for the September 3, 2014 Drainage Board meeting.

G.E. Aviation Mass Grading

Jim Pence from Schneider Corp. appeared before the Board to present the G.E. Aviation Mass Grading project. The project consisted of approximately 45 acres west of the U.S. 52 and Co. Rd. 450 East intersection. The project was located within the City of Lafayette and would outlet into the J.N. Kirkpatrick Regulated Drain #46. Mr. Pence informed the Board the J.N. Kirkpatrick Regulated Drain was located across the southern portion of the tract. He presented a petition to reduce and encroach upon the drainage easement of said drain for approval by the Board. He stated he had reviewed the August 1, 2014 Burke review memo and was currently working on the comments noted within the memo. He stated the project's construction plans would be submitted at end of this month as it was planned to present the complete project for drainage approval at the October meeting of the Board. He stated he agreed with all the conditions stated on the August 1, 2014 Burke memo and asked for approval of the site's mass grading as presented.

The Surveyor stated the Petition to Reduce and Encroach into the easement of the J.N. Kirkpatrick Regulated Drain must include verbiage for the underground gas line with all utilities involved and the planned landscape berm. In addition, a Maintenance Agreement would be required prior to a final approval. The Surveyor stated the exhibit was not clear and needed to be revised to reflect the area of reduction and encroachment with the aforementioned additions. Mr. Pence agreed to revise the petition and the exhibit as required. Mr. Pence stated with the reduction requested- the walking trail and emergency spillway would not be involved.

The Surveyor then recommended approval of the Petition to Reduce and Encroach on the J.N. Regulated Drain Easement; with the condition of the added verbiage within the petition document and the additions to the exhibit as previously stated. John Knochel made a motion to approve the Petition to Reduce the Easement on the JN Kirkpatrick Regulated Drain with the conditions as stated by the Surveyor. Tom Murtaugh seconded the motion. Motion Carried. John Knochel made a motion to approve the encroachment as presented. Tom Murtaugh seconded the motion. Motion carried. John Knochel made a motion to grant approval for the G.E. Mass Grading with the conditions as stated on the August 1, 2014 Burke memo and those which the Surveyor stated today. Tom Murtaugh seconded the motion. Motion carried.

Frank Kirkpatrick Regulated Drain #45 Amended Schedule of Assessments

The Surveyor informed the Board there was a clerical error on the (previously approved by the Board) Frank Kirkpatrick #45 Reconstruction and Maintenance Schedule of Assessments. A duplicate parcel/key number was included. He stated the duplicate key/parcel number and corresponding information had been deleted. He requested approval by the Board for the Amended Schedule of Reconstruction and Maintenance Assessments on the Frank Kirkpatrick Regulated Drain #45. John Knochel made a motion to grant approval of the Amended Schedule of Reconstruction and Maintenance Assessments on the Frank Kirkpatrick Regulated Drain #45. Tom Murtaugh seconded the motion. Motion carried.

Petitions

F.E. Morin Regulated Drain #57/ Petition to Reconstruct

The Surveyor presented a Petition to Reconstruct the F.E. Morin #57 Regulated Drain submitted to his office by landowner Les Christianson. He recommended approval to complete a Surveyor's Reconstruction Report for the Board and present it at a later date. John Knochel made a motion to grant approval for a Surveyor's Reconstruction Report to be completed on the F.E. Morin Regulated Drain #57 and presented at a later date. Tom Murtaugh seconded the motion. The motion carried.

S.W. Elliott #100- Branch #13 Amended Petition to Encroach on Easement

The Surveyor informed the Board a Petition to Encroach on the S.W. Elliott #100 Branch #13 and submitted by Buffalo Wild Wings Restaurant (located within City Limits of Lafayette Indiana) was approved by the Board. During the project's construction a storm sewer pipe was located in a different area than previously thought. This affected the Drainage Board's approval of the petition approved at that time. Therefore the Surveyor required an amendment to the petition with the correct location of the storm sewer pipe. He recommended approval of the Amended Petition to Encroach on the S.W. Elliott #100 Branch #13 Regulated Drain as presented. John Knochel made a motion to grant approval of the Amended Petition to Encroach on the S.W. Elliott #100 Branch #13 Regulated Drain. Tom Murtaugh seconded the motion. Motion carried.

S.W. Elliott #100- Wilson Branch/ Petition to Reduce and Encroach on Easement

The Surveyor presented a Petition to Encroach on the S.W. Elliott #100 Wilson Branch Regulated Drain. The site was located on the Bob Rohrman property at 1600 South Creasy Lane Lafayette Indiana. The Treece Meadows Relief Drain crossed Creasy Lane immediately north of the St. Elizabeth Hospital site and this ditch was south of that location and west of Creasy Lane. He noted the project was also within the City of Lafayette's limits. The easement reduction would be from the current 75 feet to 25 feet. He stated he reviewed the petition and recommended approval for it by the Board. John Knochel made a motion to grant the easement reduction on the S.W. Elliott #100 -Wilson Branch Regulated Drain. Tom Murtaugh seconded the motion. Motion carried. John Knochel made a motion to grant approval for the Petition to Encroach on the S.W. Elliott Regulated Drain #100 Wilson Branch as presented by the Surveyor. Tom Murtaugh seconded the motion. Motion carried.

Maintenance Agreements

The Surveyor submitted an Amended Maintenance Agreement on the S.W. Elliott #100 Branch #13 Regulated Drain submitted by Buffalo Wild Wings Restaurant Lafayette Indiana. He noted this was in conjunction with the aforementioned Amended Petition presented earlier in meeting and approved for the project site. This Amended Maintenance Agreement would take the place of the previously recorded agreement from Buffalo Wild Wings. The Amended Maintenance Agreement when recorded would be cross-referenced with the originally recorded agreement. He stated he recommended approval by the Board. John Knochel made a motion to approve the S. W. Elliott #100 Branch #13 Regulated Drain Amended Maintenance Agreement with Buffalo Wild Wings Restaurant as presented. Tom Murtaugh seconded the motion. Motion carried.

The Surveyor presented a Maintenance Agreement for the S.W. Elliott #100 Wilson Branch located on the Bob Rohrman Creasy Lane project site. He noted this too was in conjunction with the aforementioned Petition presented earlier in meeting and approved for this project site. He stated he had reviewed the agreement and recommended approval by the Board. John Knochel made a motion to approve the Maintenance Agreement for the Wilson Branch of the S.W. Elliott #100 Regulated Drain. Tom Murtaugh Seconded the motion. Motion carried.

Bonds/Letter of Credit

The Surveyor presented a Maintenance Bond #929593016 in the amount of \$62,268.38 for the S.W. Elliott Br#11 Reconstruction and recommended approval. John Knochel made a motion to approve the Maintenance Bond for the S.W. Elliott #100 Branch #11 Reconstruction project as presented. Tom Murtaugh seconded the motion. Motion carried.

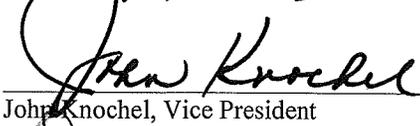
The Surveyor presented Maintenance Bond #929593017 in the amount of \$11,300.00 for the Harrison Highlands Ph. 2 Sec. 2 project and recommended approval. John Knochel made a motion to grant approval of the Maintenance Bond for the Harrison Highlands Phase 2 Section 2 project. Tom Murtaugh seconded the motion. Motion carried.

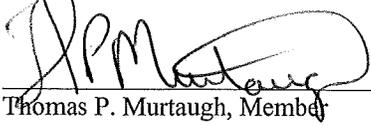
The Surveyor presented Letter of Credit #S503912 in the amount of \$4000.00 for the Proaxis 2nd Expansion project and recommended approval. John Knochel made a motion to grant approval for the Letter of Credit #S503912 in the amount of \$4000.00 for the Proaxis 2nd Expansion project. Tom Murtaugh seconded the motion. Motion carried.

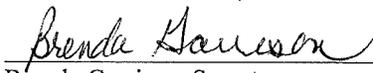
Public Comment

The President asked for public comment. There was none. John Knochel made a motion to adjourn. The meeting was adjourned.


David S. Byers, President


John Knochel, Vice President


Thomas P. Murtaugh, Member


Brenda Garrison, Secretary

Tippecanoe County Drainage Board
October 1, 2014
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board Vice President John Knochel, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Dave Luhman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner, G.I.S. Technician and James Butcher, Project Manager for Surveyor Office were also in attendance. President David S. Byers was absent.

Minutes Approval

Tom Murtaugh made a motion to approve the September 3, 2014 regular meeting minutes as written. John Knochel seconded the motion. Motion carried. Tom Murtaugh made a motion to approve the September 3, 2014 Shepherd's Point Part Two Regulated Drain hearing minutes as written. John Knochel seconded the motion. Motion carried.

TKO Graphix Addition

Randy Pearson working with Starr and Assoc. appeared before the Board to present the TKO Graphix Addition project. A parking expansion project was planned for the western side of the TKO Graphix facility located on the north side of Co. Rd. 450 South east of U.S. 52 on approximately 30 acres. The facility was granted construction approval with conditions by the Board during the December, 2013 meeting and he noted the expansion would not change the drainage analysis for the overall site. The previously approved drainage patterns were followed. The existing detention basin would capture and store the developed site runoff as the parking expansion would sheet flow to the detention basin. Mr. Peterson stated they agreed with the September 24, 2014 Burke memo conditions and requested approval from the Board. The Surveyor reminded the Board the overall project was approved in 2013 by the Board. He then reviewed the site utilizing GIS. He noted along with the prior Drainage Board approval for the project, a portion of Branch #08 of the S.W. Elliott was vacated as requested by the developer in 2013. (E1/2 Fractional NW ¼ Section 18 Twp 22N R 3W) That portion was vacated up to the western edge of the driveway which served the residential homes and capped as planned. His office staff was present when the vacation of the drain was completed and capped. Photos were located in the County Regulated S.W. Elliott #100 Drain file. He stated his office was ready to recommend approval with conditions as stated on the September 24, 2014 Burke memo to the Board. Commissioner Knochel asked for public comment.

Mr. Tim Ford 5500 East 430 South Lafayette approached the Board. Mr. Ford stated on the northern perimeter of the site and more specifically the west side of the lane; there was a "buffering wall" dug out and piled with rocks in place which makes it look like a spillway. He stated "if the water rose high enough it would cross our lane." He stated "water has been in that area since construction started and we have not had any good rains yet" He reiterated if a three inch rain came it would cross the spillway and the lane and cause no access to their property. He stated he lived in that location 18 years and has saw water run over the lane twice during that time. Mr. Randall Peterson (Project Engineer) stated the adjoining tracts elevation was higher than the project site. He noted the storm drainage plans call for storm runoff to route east to west away from the adjoining tracts and ultimately into the detention pond on the project site. Therefore the sites and the adjoining tracts runoff would route through the project site's infrastructure (detention pond) and would not cause drainage problems for adjoining property owners. The storm drainage runoff would run west then north through the site.

Tammy Ricks 5502 East 430 South Lafayette approached the Board. She expressed her concern regarding standing water currently onsite. She also expressed her concern of future stormwater ponding and runoff obstructing the adjoining lane after a large storm. Mr. Peterson noted onsite construction of the first phase had not been completed; once the construction was completed there would be no standing water onsite. Dave Eichelberger clarified Mr. Peterson's remarks stating: the east spillway is higher than the west spillway. The Surveyor stated he gave permission for the semis currently parked there. However the site work was not complete at this time. His office would review as built's once the construction was completed and ensure the work was completed as designed and approved by the Drainage Board. There was no other public comment.

Tom Murtaugh made a motion to grant approval for TKO Graphix Addition with the conditions as stated on the September 24, 2014 Burke memo. John Knochel seconded the motion. Motion carried.

Power Place Industries

Joe Coutts from C&S Surveying appeared before the Board to present Power Place Industries Warehouse Addition project to the Board for drainage approval. The site consisted of approximately 10 acres was located north of US 52 on the west side of US 231. Mr. Coutts stated the project area onsite was under a half an acre and technically would receive an exemption from Stormwater Quantity and Quality. However due to a couple additions onsite in recent years, the Surveyor felt the project's drainage plan should be reviewed. The Surveyor wanted to ensure there was no adverse impact up or downstream from the site. Mr. Coutts noted there was a private tile placed onsite years ago by the Soil Conservation Service in the 1970's which outlet to a County Regulated Drain known as the Box Ditch. He stated the site's elevation of the emergency overflow path was lower than adjoining tracts and would not adversely affect adjoining tracts. He requested approval from the Board. The Surveyor reviewed the project site and noted the breakout point/depressional area to outlet to the Box Ditch was approximately 2.5 feet lower than the lowest adjacent grade of the home to the west. He noted he did speak with Mrs. Emily Farley (homeowner to the west) and Mr. John Robert Howell who owned the woods as well. The Surveyor stated they were satisfied with the plans. He recommended construction approval with conditions as stated on the September 25, 2014 Burke memo. John Knochel asked for public comment. There was no public comment. Tom Murtaugh made a motion to grant construction approval with conditions as stated on the September 25, 2014 Burke memo. John Knochel seconded the motion. Motion carried.

Oak Ridge Subdivision Section 1

Justin Frazier from TBird Design appeared before the Board to present Oak Ridge Subdivision Section 1 for approval by the Board. The site was located north of County Road 500 North on the west side of County Road 75 East and consisted of approximately 48 acres. Coyote Crossing Golf Course and Winding Creek Subdivision were located to the west of the site. He noted there were three discharge points for the site. 1. The east side of project drained northerly through a drainage channel to Burnett Creek 2. The central area of site drained northerly through existing ravine channel systems to Burnett Creek 3. The western portion of site drained westerly to an existing tributary of Cole Regulated Ditch (located on entire length of property) and eventually to Burnett Creek. He stated there would be 104 single family residential lots onsite. The majority of the site would drain through storm infrastructure to an onsite detention pond in the northwest corner of site. A portion of site in the northeast corner would drain un-detained to a ravine tributary to Burnett Creek. He requested two Stormwater Quality Variances due to design limits 1. A variance for the proposed basin DEV-3-2 separate stormwater BMP measures would be utilized and would maintain the riparian corridor 2. A variance for basin DEV-1A - vegetative swales and mechanical stormwater quality units and a wet pond would be utilized for 90% of the area. He then requested approval from the Board and stated they agreed with the September 26, 2014 Burke memo. The Surveyor stated his office supported the variances and recommended approval with the conditions as outlined in the September 26, 2014 Burke memo. John Knochel opened the floor for public comment. There was none. Tom Murtaugh made a motion to approve the two variances to Stormwater Quality measures as requested. John Knochel seconded the motion. Motion carried. Tom Murtaugh made a motion to grant approval with the conditions as outlined in the September 26, 2014 Burke memo. John Knochel seconded the motion. The motion carried.

GE Aviation Site Plan and David Howarth Drive Extension

Jim Pence from Schneider Corporation appeared before the Board to present the GE Aviation Site Plan and David Howarth Drive Extension project for approval. The site was located within the City of Lafayette limits west of the intersection of US 52 and County Road 450 East and consisting of approximately 100 acres. Mr. Pence noted approval for the mass grading plan and encroachment on the JN Kirkpatrick Regulated Drain was granted in August 2014. He requested 2 variances for this project. He noted detention for the site would meet the restricted release rate requirements (due to the site location within JN Kirkpatrick Regulated Drain watershed). However the timing requirements would not meet the channel protective and water quality volume release while meeting the aforementioned required restricted release rates. Therefore they requested variances for both. He stated they agreed with the September 26, 2014 Burke memo and asked for approval to outlet into the JN Kirkpatrick Regulated Drain as well as approval for the variances from the Board. The Surveyor noted regarding the September 26, 2014 Burke memo - variance #1 listed is no longer requested- therefore only the 2 variances as explained by Mr. Pence were requested. The Surveyor stated his office reviewed the requests and recommended approval with the conditions as stated on the September 26, 2014 Burke memo regarding the variances and the project. John Knochel asked for public comment. There was none. Tom Murtaugh made a motion to grant approval for Variance #2 and Variance #3 listed on the September 26, 2014 Burke memo. John Knochel seconded the motion. The motion carried. Tom Murtaugh made a motion to grant conditional approval as stated on the September 26, 2014 Burke memo. John Knochel seconded the motion. Motion carried.

Zach Beasley/Other Business

The Surveyor stated his office received a letter from the Carroll County Surveyor requesting a waiver from the Board to participate in the landowner hearing regarding the Julien Bowen Joint Drain. He noted Carroll County has the largest amount of acreage within the watershed with 4508.122 acres benefited. Tippecanoe County has approximately 462.16 acres benefited. He recommended approving the waiver request as presented. If a county has fewer than 10 % of the benefited acres, the statute allows a drainage board to waive their rights to participate on a Joint Drainage Board. Tom Murtaugh made a motion to waive the Tippecanoe County Drainage Board's right of participation on the Julien Bowen Bi-County Drainage Board. John Knochel seconded them motion. Motion carried.

Petition to Encroach on a Regulated Drain/Jerry Rooze

The Surveyor stated he had received from landowner Jerry Rooze a Petition to Encroach on the Otterbein #112 Regulated Drain. He noted the verbiage on the document was not correct as the document states "encroach" and should state "reduce" the statutory easement from the 75 feet to 30 feet total perpendicular from top of bank. He stated he would work with the landowner to get the correct verbiage on the document prior to signing if the Board would approve with that condition today. Tom Murtaugh made a motion to grant the requested reduction of the Otterbein Regulated Drain #112 with the correction on the document as outlined by the Surveyor. John Knochel seconded the motion. Motion carried.

Public Comment

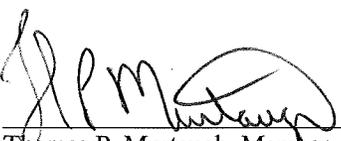
John Knochel asked for public comment. There was no public comment. John Knochel made a motion to adjourn the meeting. The meeting adjourned.

ABSENT

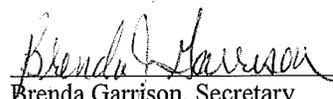
David S. Byers, President



John Knochel, Vice President



Thomas P. Murtaugh, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board
February 11, 2015
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President Tracy Brown, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner, Surveyor Office G.I.S. Technician and James Butcher, Surveyor Office Project Manager was also in attendance.

Contracts

The President referred to the Attorney for reading of contract bids received for three separate regulated drain projects planned for 2015. The Attorney read the contract bid amounts as follows: **1.** Calvin Lesley Regulated Drain Maintenance project: Maxwell Farms Drainage submitted a bid of \$36,770.00; Central Indiana Drainage submitted a bid of \$36,440.00. **2.** The Hester Mottisinger Regulated Drain Maintenance project: Maxwell Farm Drainage submitted a bid of \$48,840.00; Tony Garriott submitted a bid of \$48,084.75. **3.** Moses Baker Regulated Drain Maintenance project: Tony Garriott submitted a bid of \$71,417.50; F&K Construction submitted a bid of \$175,330.00. The President thanked the contractors for submitting bids. Tom Murtaugh made a motion to take the bids under advisement and award the contracts after determining the required documentation was including in the packets. Tracy Brown seconded the motion. Motion carried. The project contracts would be awarded at the end of today's meeting.

Approval of Minutes

Tom Murtaugh made a motion to approve the January 7, 2015 regular minutes as written. Tracy Brown seconded the motion. Motion carried.

Lindberg Village Phase 6

Pat Cunningham of Vester and Associates appeared before the Board to present Lindberg Village Phase 6 for approval. The site was located north of the intersection of Lindberg and Klondike Roads on approximately 7.78 acres. As a continuation of the Lindberg Village Overall Planned Development, it would include an additional 30 residential lots. Mr. Cunningham stated this phase would be located between Klondike Road and the existing Lindberg Village Development. Detention ponds for the entire development were previously constructed for the overall development. As G.I.S. was not working, he indicated using a printed plat the storm sewer route for the Board. Infrastructure for this phase included an existing 42 inch storm sewer located in the northwest corner of the phase. The storm sewer would receive runoff within the phase and direct it to an existing detention pond within Section 1 of the overall development. A mechanical storm water unit (BMP Unit) and vegetative swale will provide stormwater quality prior to entering the detention pond. Since the current phase was a continuation of the overall development, a variance from the minimum BMP's (required by Ordinance) and approval for the project was requested. Responding to the Surveyor's inquiry, Mr. Cunningham stated the 2nd certification of notifications would be submitted today to the Surveyor's office. (The first notification lacked the official meeting date and time) The Surveyor stated due to the fact there was existing infrastructure his office recommended approval of the variance request for this phase. He noted the January 30, 2015 Burke memo under Stormwater Quantity Item #1: Tippecanoe County Highway approval for the direct release to Klondike Road right of way must be addressed. Item #2 under Stormwater Quantity must be addressed and a note placed on the final plat of the phase prior to recording. The note stated "All roof drainage and side yard drainage from each home must be directed to the front yards and streets. No roof or side yard drainage will be allowed to the rear yards of any home" and was to be included on the recorded final plat. A point of clarification for the adjoining homeowners; the 3.82 acres which currently drained to the rear yard swales would be reduced to 0.78 acres. Tom Murtaugh made a motion to grant a variance for Lindberg Village Phase 6 as requested and noted on the January 30, 2015 Burke Memo. Tracy Brown seconded the motion. Motion carried. The Surveyor recommended approval with the conditions as stated on the January 30, 2015 Burke Memo. Tom Murtaugh made a motion to grant approval for Lindberg Village Phase 6 with the conditions as stated on the January 30, 2015 Burke Memo. Tracy Brown seconded the motion. Motion carried.

South 18th Street Reconstruction

Eric Hart of TBIRD Designs appeared before the Board to present South 18th Street Reconstruction for drainage approval. The site was located within the City of Lafayette. The reconstruction area started south of County Road 350 South and continued approximately 4700 feet south past County Road 430 South and crossed the J.N. Kirkpatrick Regulated Drain. The road would be widened from 25 feet to 48 feet throughout the project area. A DNR (Department of Natural Resources) "Construction in a Floodway Permit" was obtained for the pedestrian bridge (12 feet width) to cross the J.N. Kirkpatrick Regulated Drain. He then requested approval from the Board. (Previously during the June 2014 Drainage Board meeting a

Petition for a Regulated Drain Easement Crossing and Encroachment was granted approval for this project.) The Surveyor noted this project was located within the City of Lafayette therefore the Board's concern was approval of the release rate into the J.N. Kirkpatrick Regulated Drain and approval of the planned pedestrian crossing as presented. He recommended approval of this request with the conditions as stated on the January 14, 2015 Burke Memo. Mr. Tom Murtaugh made a motion to grant approval with the conditions as stated on the January 14, 2015 Burke memo. Tracy Brown seconded the motion. Motion carried.

Other Business/Zach Beasley

Per I.C. 36-9-27-34 the Surveyor presented the 2015 Regulated Drain Classification Report with Exhibit A to the Board for review. He noted with the volume of work the Surveyor's office has been accomplishing, he has submitted this report yearly since 2011 to keep them updated. The reports reflect work accomplished from year to year within his office on Regulated Drains. He stated he felt it was an accountability report to the Board from his office. He recognized the work completed since 2011 was done with landowner support. Tom Murtaugh made a motion to accept the 2015 Regulated Drain Classification Report including the 25% increase of assessments noted within the report and Exhibit A as presented by the Surveyor. Tracy Brown seconded the motion. Motion Carried.

Bonds

The Surveyor presented the following bonds for approval: The Orchard Phase 4 Maintenance Bond #929605817 written by Continental Insurance Company for Milestone Contractors LP in the amount of \$5900.00 and dated February 11, 2015 as well as Roberts Ridge Phase 2 Maintenance Bond #106220307 written by Travelers Insurance and Surety for Fairfield Contractors Inc. in the amount of \$8240.50 and dated January 28, 2015. He requested acceptance by the Board for both bonds as stated. Tom Murtaugh made a motion to grant acceptance for the Orchard Phase 4 Maintenance Bond #929605817 written by Continental Insurance Company for Milestone Contractors LP in the amount of \$5900.00 and dated February 11, 2015 as well as Roberts Ridge Phase 2 Maintenance Bond #106220307 written by Travelers Insurance and Surety for Fairfield Contractors Inc. in the amount of \$8240.50 and dated January 28, 2015. Tracy Brown seconded the motion. Motion carried.

Contract Bids Award

The Attorney stated the following: Regarding the Calvin Lesley Regulated Drain #48 Tile Maintenance Project bid submitted by Central Indiana Drainage the total quote was listed as \$36,449.00 however there was a mathematical error and the total was actually \$36,220.00. This was the low bid for the project. Tom Murtaugh made a motion to accept the Central Indiana Drainage bid of \$36,220.00 (as corrected) for the Calvin Leslie #48 Regulated Drain 2015 Tile Maintenance Project. Tracy Brown seconded the motion. Motion Carried.

Regarding the Hester Mottsinger Regulated Drain #58- 2015 Tile Maintenance Project bids, Maxwell Farm Drainage submitted a bid of \$43,840. However this bid had a mathematical error and the total was \$48,840.00. The bid submitted by Tony Garriott in the amount of \$48,084.75 was low bid. Tom Murtaugh made a motion to accept the Tony Garriott bid of \$48,084.75 for the Hester Mottsinger #58- 2015 Tile Maintenance Project. Tracy Brown seconded the motion. Motion carried.

Regarding Moses Baker Regulated Drain #114- 2015 Open Ditch Maintenance Project bids, Tony Garriott submitted the low bid at \$71,417.50. Tom Murtaugh made a motion to accept Tony Garriott's bid of \$71,417.50 for the Moses Baker #114 - 2015 Open Ditch Maintenance project. Tracy Brown seconded the motion. Motion carried.

Public Comment

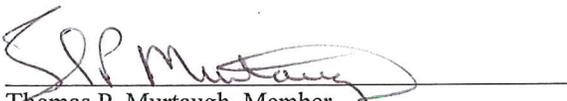
As there was no public comment, Tracy Brown moved to adjourn. The meeting was adjourned.



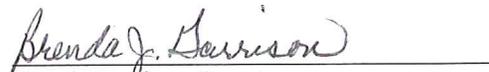
David S. Byers, President



Tracy Brown, Vice President



Thomas P. Murtaugh, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board
June 3, 2015
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President Tracy Brown, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Mathew Salsbery, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance. Attorney Doug Masson was absent.

Approval of Minutes

Thomas Murtaugh made a motion to approve the May 6, 2015 regular minutes as written. Tracy Brown seconded the motion. Motion carried.

Clymer Norris #122 Regulated Drain Tile Reconstruction

The President referred to Attorney Mathew Salsbery to open the Clymer Norris #122 Regulated Drain Reconstruction Contractor Bids submitted to the Drainage Board for consideration. Attorney Salsbery noted there were four bids submitted regarding the Clymer Norris #122 Regulated Drain Reconstruction. The first bid opened was submitted by Bedino Construction Company- Terre Haute Indiana in the amount of \$126,838.00; the second bid submitted by Maxwell Farm Drainage LLC-Crawfordsville Indiana in the amount of \$76,745.00; the third bid submitted by Central Indiana Drainage-West Lafayette Indiana in the amount of \$83,939.50; the fourth and last bid submitted was by Atlas Excavating- West Lafayette Indiana in the amount of \$194,309.00. Comm. Murtaugh made a motion to take all bids under advisement. Comm. Brown seconded the motion. Motion carried. The President thanked the Contractors for the submissions and noted the bids would be reviewed for compliance and awarded at end of this meeting.

Auburn Meadows

Jim Pence from Schneider Corporation appeared before the Board to present the Auburn Meadows project for approval. The site was located on the east side of Co. Rd. 50 West (aka Salsbury Road) south of Co. Rd. 500 North and consisted of approximately 85 acres. He stated he had received the May 29, 2015 Burke Review Memo and was in the process of addressing the conditions as stated on the memo. He noted they had received Department of Natural Resources Approval (DNR) for the planned outlet into the unnamed tributary of the Grant Cole #19 County Regulated Drain. He stated they were staying out of the area on the site designated as floodplain. Planned for the overall subdivision were 222 lots. This phase of the overall project would be known as Section 1 and would involve 78 lots. He then requested conditional approval for the Master Plan and Section 1 of said plan. The Surveyor stated the presentation today regarded approval of the project's Master Plan in addition to specifically Section 1 only of the overall Master Plan. He noted a variance was requested regarding Chapter 8: Channel Protection Volume and Water Quality Volume. He recommended the requested variance and conditional approval as stated on the May 29, 2015 Burke memo. Comm. Murtaugh made a motion to grant conditional approval as stated on the May 29, 2015 Burke memo for the overall site's Master Plan. Comm. Brown seconded the motion. Motion carried. Comm. Murtaugh made a motion to grant a variance as noted on the May 29, 2015 Burke memo. Comm. Brown seconded the motion. Motion carried. Comm. Murtaugh made a motion to grant conditional approval for Section 1 of the overall Master Plan as stated on the May 29, 2015 Burke memo. Comm. Brown seconded the motion. Motion carried. There was no public comment.

Greater Lafayette Chinese Alliance Church

Kyle Betz of Fisher and Associates appeared before the Board to present the Greater Lafayette Chinese Alliance Church project for approval. The site was located on the south side of Co. Rd. 250 North west of Klondike Road and consisted of approximately 4 acres. Mr. Betz noted the site was specifically located at the northwest corner of Lindbergh Village Subdivision. The site plan was designed with two parts in mind, first part as a primary construction site and a second part for the future 2nd phase construction (currently the phase 2 timeline was undetermined). An approximate third of the site drained to the northwest -into a portion of the Indian Creek Drainage Impact Area; however the runoff's cfs impact would be reduced from the current amount draining into the impact area. The remainder of the site (approximate 2/3) drained into Lindbergh Village Subdivision's existing drainage infrastructure. Rear yard inlets adjoining the project site and located within the

Lindberg Village Subdivision would route the project's runoff throughout the Lindberg Village Subdivision infrastructure. He noted due to this, owners, contractors and Lindberg Village Home Owners Association met and discussed the drainage plan for the church project. He noted a couple of the Lindberg Village lot owners whose rear lots were affected by this plan met with the owner and contractors to discuss the developer's planned drainage. He stated he thought the landowner's concerns were addressed adequately. He would submit document verification by the parties affected. At that time Mr. Betz requested approval from the Board.

The Surveyor stated under the "Stormwater Quantity" portion of the May 29, 2015 Burke memo- "Items #1 and #2"- must be addressed prior to his signature on plans. As a public safety issue, he would not move forward until the items were addressed. Mr. Betz noted the owner was aware of the requirement and currently working on submitting the documents for future reference if needed. Mr. Betz stated the emergency routing verification would be provided. The Surveyor interjected and stated he felt it would be necessary for the area to be surveyed to insure no modifications have been made since the "As Built Plans" for Lindberg Village were recorded. The Surveyor stated the portion of the site which drained into the Indian Creek Impact Area was an insignificant amount. He directed Mr. Betz to discuss the site's entrance with Tippecanoe County Highway Department to eliminate any concerns they may currently have. Mr. Betz agreed to discuss as soon as possible with the Highway Department. The Surveyor recommended approval with conditions as stated on the May 29, 2015 Burke memo in addition to the added condition of surveying the emergency routing area to insure no modifications had been made since recording of the adjoining development's plans, Lindberg Village. Comm. Brown made a motion to grant conditional approval as stated in the May 29, 2015 Burke memo in addition to the Surveyor's condition of the emergency routing area to be surveyed. Comm. Murtaugh seconded the motion. Motion carried.

Comm. Byers asked for public comment. Kristin Perkis 2460 Hopkins Drive West Lafayette approached the Board. She stated her lot was one of the lots (third lot from intersection) with an existing inlet which runoff from the Greater Lafayette Chinese Church project site would outlet into. She stated her husband and she was in the process of building a fence in their rear yard and had met with the developer and contractor concerning the issue. They were told the fence project would not interfere with the infrastructure/outlet plans. She noted she had written a letter to the Drainage Board addressing concerns and submitted the aforementioned letter for the official record. (The letter will be added to the minutes at end of this transcript and scanned into the digital project file) She provided a copy of the letter to Mr. Betz of Fisher and Associates as well. The Surveyor informed Mrs. Perkis that he took these issues very seriously and would not sign off on the final plans until he was satisfied the developer met all the conditions as safety was of the utmost importance to him. He assured her he would not compromise with public safety as he took this very seriously. He thanked her for her comments. She thanked the Board for their time.

Zach Beasley/Other Business

New East Branch Tippecanoe County Library/Petition to Encroach & Maintenance Agreement/Berlowitz Regulated Drain #08

The Surveyor presented a Petition to Encroach and Maintenance Agreement regarding the Berlowitz Regulated Drain and the New East Branch Tippecanoe County Library project, submitted by Schneider Corporation. He stated his office had reviewed both documents and recommended approval. Tom Murtaugh made a motion to approve the Petition to Encroach for the Berlowitz Regulated Drain #08 as submitted. Tracy Brown seconded the motion. Motion carried. Tom Murtaugh made a motion to approve the Maintenance Agreement on the Berlowitz Regulated Drain as submitted. Tracy Brown seconded the motion. Motion carried.

Bob Rohrman Auto Group Expansion/Petition to Encroach and Reduction in Easement/Wilson Br. S.W. Elliott Regulated Drain #100

The Surveyor presented A Petition to Encroach and Reduction in Easement on the Wilson Branch of the S.W. Elliott Regulated Drain #100 for the Bob Rohrman Auto Group project submitted to his office by Bunnell Land Survey and Engineering for approval by the Board. Tracy Brown made a motion to approve the Petition to Encroach and the Reduction in Easement regarding the Wilson Branch of the S.W. Elliott Regulated Drain #100 as presented. Tom Murtaugh seconded the motion. Motion carried.

G.E. Aviation/Petition to Encroach J.N. Kirkpatrick Regulated Drain #46

The Surveyor presented a Petition to Encroach on the upper end of the J.N. Kirkpatrick Regulated Drain #46 to the Board which was submitted for approval by Schneider Engineering on behalf of Wintek. He noted he reviewed the document and

recommended approval by the Board. Tom Murtaugh made a motion to grant approval of the Petition to Encroach on the upper end of the J.N. Kirkpatrick Regulated Drain #46 as presented. Tracy Brown seconded the motion. Motion carried.

Clymer Norris Regulated Drain #122 Reconstruction Project Bid Award

The President referred to the Attorney for announcing the Clymer Norris Regulated Drain #122 Reconstruction Project lowest bid. Atty. Salsbery stated Maxwell Farm Drainage Inc. submitted the low bid in the amount of \$76,745.00. He noted the Bid was in compliance with the contract as written. Tom Murtaugh made a motion to award the Clymer Norris Regulated Drain #122 Reconstruction Project to Maxwell Farm Drainage Inc. in the amount of \$76,745.00. Tracy Brown seconded the motion. Motion carried.

Zach Beasley/Other Business

The Surveyor asked the Board to set dates for three Public Landowner Hearings regarding the regulated drains. He requested the following: The Peter Rettereth Regulated Drain #66 Reconstruction for August 5th 2015, Ann Montgomery Regulated Drain #56 Maintenance Increase for September 2, 2015 and Gustav Swanson #76 Regulated Drain Maintenance Increase for October 7, 2015 and each hearing to immediately follow the scheduled regular meetings on these dates. Tom Murtaugh made a motion to set dates for the Peter Rettereth Regulated Drain #66 Reconstruction on August 5th 2015, Ann Montgomery Regulated Drain #56 Maintenance Increase on September 2, 2015 and Gustav Swanson #76 Regulated Drain Maintenance Increase on October 7, 2015 and that the hearings were to immediately follow the scheduled regular meetings on said dates. Tracy Brown seconded the motion. Motion Carried.

Moses Baker Regulated Drain #114

The Surveyor presented a slide show of the dredging, clearing maintenance work recently completed on the Moses Baker Regulated Drain. The location of the slides was Co. Rd. 1000 South and Co. Rd. 500 East. The pictures were taken from the Bridge on Co. Rd. 500 East just north of Co. Rd. 1000 South. He stated the ditch would function much better now that it had been cleared of the trees in that area.

Alonzo Taylor#77 Regulated Drain Reconstruction

The Surveyor informed the Board the Alonzo Taylor#77 Regulated Drain Reconstruction project would begin at the first of the upcoming week with tile replacement.

Public Comment

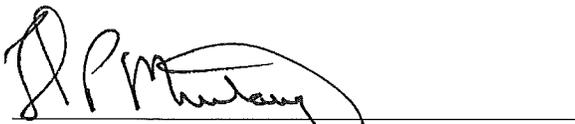
As there was no public comment Tom Murtaugh made a motion to adjourn. The meeting was adjourned.



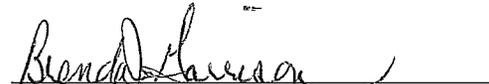
David S. Byers, President



Tracy Brown, Vice President



Thomas P. Murtaugh, Member



Brenda Garfison, Secretary

Tippecanoe County Drainage Board

December 9, 2015

Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David S. Byers, Vice President Tracy Brown, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

Approval of Minutes

Thomas Murtaugh made a motion to approve the October 4, 2015 Regular Meeting minutes and the October 4, 2015 #12 Box Hearing minutes as written. Tracy Brown seconded the motion. Motion carried.

AEP Dequine Station

Mr. Pete Siglow of Wightman and Associates Inc. appeared before the Board to present the AEP (American Electric Power) DeQuine Station. The site was located on the north side of C.R. 350 North and Hoover Rd. intersection and south of US 52. An expansion of the existing Substation would include the construction of a detention basin on approximately 8 acres of the 52 acres overall. Currently the site's stormwater sheet flows across C.R.350 North to the Martin Edwin Drain as there was no existing outlet. Onsite stormwater would be directed to the planned detention basin which- via a new private tile- outlet into an existing open ditch south of the facility and located alongside C.R. 600 West. The Martin Edwin Regulated Drain Easement located south of the project site would not be disturbed. The size of the private tile would be 24inch. Approval from the adjoining landowner south of the site for the new tile installation crossing their tract was currently in the works. The landowners were out of town at this time. Approval for an easement to cross the adjoining property (Benson) with the new private tile was anticipated to be signed upon their return. He noted he was in the process of working with the Hwy. Dept. for their approval as well. A 3 year maintenance bond would be submitted as well for the project. He requested approval at that time. The Surveyor stated his office and Mr. Siglow had worked closely together on this project. He stated this site was originally developed in the late 50's or early 60's. There was no Drainage Board Ordinance at that time. He specified the outlet route for the site was located on the south central portion of property and routed to C.R. 350 North traveling west and then south along C.R. 600 West to the south side of Jackson Hwy on the east side of C.R. 600 West approximately 1000 feet into the open roadside ditch. Per drainage calculations a 15inch pipe would be required; however a 24inch tile would be installed to handle any lateral hookups it may come in contact with. He stated he had spoken with the adjoining landowners (Benson's) and at this time had no objections to the plan. He informed Mr. Siglow before he signed off on the project; the adjoining landowner's recorded easement must be submitted to his office. He stated he approved of the Maintenance Agreement as submitted and recommended approval with the conditions for the project as stated on the November 24, 2015 Burke memo. There was no public comment.

Tracy Brown made a motion to approve the AEP DeQuine Station project with the conditions as stated on the November 24, 2015 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Lindberg Village Phase 6

Patrick Cunningham of Vester and Assoc. appeared before the Board for approval of Lindberg Village Phase 6 Subdivision. He noted this was before the Board in February of 2011 and since then the design has changed. This section was bid previously however those bids came back high and it was not feasible at that time to proceed. He stated this project was a continuation of the existing Lindberg Village development. The site was located on approximately 7.78 acres north of the intersection of Lindberg and Klondike Roads on the west side of Klondike Road. Due to the delay redesign was warranted. Consequently, this phase of the development's runoff would be routed through vegetative swales and storm sewers to the existing 42 inch outlet in the northwest corner of the development then to the existing detention pond within the development. He requested approval for Phase 6 Lindberg Village project. The Surveyor reiterated this particular phase of the project was previously approved with conditions during the February 11, 2015 meeting of the Drainage Board. Since that time a change in the design has caused it to be submitted for review once again. A change to the 2011 approved variance was in order as well. He then recommend approval of the revised variance in addition to the project with the conditions as stated on the December 1, 2015 Burke memo. There was no public comment.

Thomas Murtaugh made a motion to grant approval for the revised Variance as stated in the Dec. 1, 2015 Burke memo. Tracy Brown seconded the motion. Motion carried. Thomas Murtaugh made a motion to approve Lindberg Village Phase 6 with the conditions as stated on the Dec 1, 2015 Burke memo Tracy Brown seconded the motion. Motion carried.

Liquid Springs

Randy Peterson of Starr & Associates appeared before the Board to request approval for Liquid Springs Subdivision. This site was located within the J.N. Kirkpatrick Drainage Impact Area. The site consisted of approximately 9.33 acres and specifically located on the southeast corner of US 52 and C.R. 400 South. This was the first phase of a planned project's production facility, drives and parking areas. Along with the building of the facility, drives and parking lot, the first phase would include a wet detention basin and storm sewer infrastructure. The project site's runoff flowed southeast to northwest to the ditch along US52 (within the right of way) through an existing 18" culvert under US52. A variance from the 0.13 cfs rate was requested. He then requested conditional approval of the project. INDOT had approved the release into the right of way of US52. There were no public comments.

The Surveyor stated his office had reviewed the downstream landowner's area and did not feel the variance would cause any problems. He recommended approval of the variance and approval of the project with conditions as stated on the Dec. 4, 2015 Burke memo. Tracy Brown made a motion to grant the variance as stated on the December 4, 2015 Burke memo. Thomas Murtaugh seconded the motion. Motion carried. Tracy Brown made a motion to grant approval with the conditions as stated on the December 4, 2015 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Responding to Commissioner Byer's inquiry, the Surveyor discussed future plans for the extension of the JN Kirkpatrick Urban Drain. The planned design was to extend the existing open ditch (located south of the new GE business to east side of 450East) to the west side of US52, then (within the right of way) parallel US52 heading southeast approximately ¼ mile to the property line between Lafayette Urban Railroad and Mr. Robert Peabody. A 60inch pipe would be bored under US52 and head due east to CR. 500 East across Ichiya property and stop on the east side of CR.500East on a Mr. John Rice property. Landowner Agreement contracts were being worked on currently for the right of way easements etc. He stated he hoped weather permitting- work to be completed in 2016 and to hold a March 2016 Landowner Hearing.

Other Business

The Surveyor presented a Petition to Reduce the Drainage Easement on the Baker Dempsey Regulated Drain submitted by TBird Designs regarding the south side of the Soleado Vista Subdivision. He stated he had reviewed the petition and recommended approval. He noted this was a cleanup item from previous Board approval of the project. There was no public comment. Tracy Brown made a motion to approve the Petition to Reduce the Baker Dempsey Regulated Drain Easement as submitted. Thomas Murtaugh seconded the motion. Motion carried.

Bonds

The Surveyor presented the following Maintenance Bonds for approval by the Board:
Maintenance Bond #106382994 submitted by Fairfield Contractors for Meadowgate Subdivision Sec. 4 in the amount of \$3,025.60 and written by Travelers Insurance Group and Maintenance Bond #69C004261 submitted by Gild Dev. LLC for Gild Estates Subdivision in the amount of \$2954.00 and written by Ohio Casualty Insurance. Thomas Murtaugh made a motion to accept Maintenance Bond #106382994 submitted by Fairfield Contractors for Meadowgate Subdivision Sec. 4 in the amount of \$3,025.60 and written by Travelers Insurance Group and Maintenance Bond #69C004261 submitted by Gild Dev. LLC for Gild Estates Subdivision in the amount of \$2,954.00 and written by Ohio Casualty Insurance. Tracy Brown seconded the motion. Motion carried.

2016 Drainage Board Meeting Dates

Thomas Murtaugh made a motion to approve the meeting dates as presented to them by the secretary. Tracy Brown seconded the motion. Motion carried. The meeting dates for 2016 are as follows: January 6, 2016-February 3, 2016-March 2, 2016-April 6, 2016-May 4, 2016-June 1, 2016-July 6, 2016-August 3, 2016-September 7, 2016-October 5, 2016-November 2, 2016-December 7, 2016

Reconstruction Hearing Request/J.N. Kirkpatrick Regulated Drain

The Surveyor requested the Board set the landowner hearing date for March 2, 2016 regarding the extension of the existing open ditch known as the James N. Kirkpatrick Regulated Drain. Thomas Murtaugh made a motion to set a March 2, 2016 landowner reconstruction hearing for the JN Kirkpatrick Regulated Drain Reconstruction. Tracy Brown seconded the motion. Motion Carried. The hearing would immediately follow the regular scheduled meeting of the board that day.

Public Comment

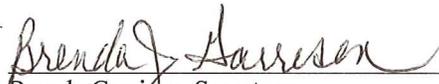
There was no public comment. Tracy Brown made a motion to adjourn. The meeting was adjourned.



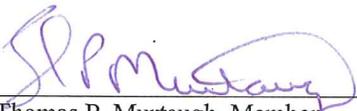
David S. Byers, President



Tracy Brown, Vice President



Brenda Garrison, Secretary



Thomas P. Murtaugh, Member

Tippecanoe County Drainage Board
May 4, 2016
J.N. Kirkpatrick #46 Upper End Extension
Regulated Drain
Hearing Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

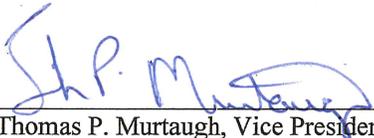
The President opened the hearing for the upper end extension reconstruction of the J.N. Kirkpatrick #46 Regulated Drain. He noted an informal meeting with an owner impacted by the project had taken place and referred to the Surveyor at that time for his recommendation. The Surveyor agreed informal meetings had been held with Park 350 landowners who had property located within the proposed watershed of the upper end extension of said drain. He noted progress had been made, however there were a couple items that needed to be ironed out and felt confident they could do so soon. He recommended the Board continue this meeting until the May 4, 2016 date immediately following the regular meeting scheduled for that day.

Public Comment

As there was no public comment, Thomas Murtaugh made a motion to adjourn until the May 4, 2016 date immediately following the regular scheduled meeting at 10:00 a.m. David Byers seconded the motion. The meeting was adjourned and continued until the May 4, 2016 date.



Tracy Brown, President



Thomas P. Murtaugh, Vice President



Brenda Garrison, Secretary



David S. Byers, Member

Tippecanoe County Drainage Board
May 4, 2016
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

Approval of Minutes

Thomas Murtaugh made a motion to approve the April 6, 2016 regular meeting and April 6, 2016 Upper end extension of the JN Kirkpatrick Regulated Drain and the Waples McDill Reconstruction Hearing Minutes. David Byers seconded the motion. Motion carried.

Waples McDill #85 Regulated Drain Reconstruction Contract Bid Opening

President Tracy Brown referred to the Attorney to open contract bids submitted regarding the Waples McDill #85 Regulated Drain Reconstruction. Attorney Doug Masson read the following bids into record: RKN LLC total quote \$616,626.00; Dwenger Excavating total quote \$651,988.10; Maxwell Farm Drainage LLC total quote \$490,527.24; Rinehart Excavating \$574,148.74; Marvis Inc. total quote \$668,398.59. David Byers made a motion to take the bids under advisement. Thomas Murtaugh seconded the motion. Motion carried. The President noted the Surveyor's Project Manager would review the submitted documents and the contract would be awarded at the end of today's meeting.

Hawthorne Crossing Subdivision

Clem Kuns from TBird Design appeared before the Board to request approval for the Hawthorne Crossing Subdivision project. The site consisted of approximately 13 acres located just south of the previous Hawthorne Gardens project at the northwest corner of C.R. 550E and McCarty Lane. It is located within the City of Lafayette boundaries and will be multi-family apartment complex. The drainage was prominently east to west and released directly to the Berlowitz Regional Detention Facility via storm sewers and vegetative swales. He noted this project was located within the Berlowitz Master Drainage Plan and the design complied with the said plan. He presented a Petition to Encroach on the Berlowitz Regulated Drain Easement for approval on this project as well. He requested approval at that time.

The Surveyor reiterated this project directly released into the Berlowitz Regional Detention Facility and located within the City of Lafayette so the Board's review was the release rates into the Regional Detention Facility only. The City of Lafayette would review the sites infrastructure plan etc. He stated he had reviewed the Petition as submitted and it was in order. He recommended approval by the Board for the Petition to Encroach on the Berlowitz Regulated Drain Easement and approval of the project based on the April 15, 2016 Burke memo. There was no public comment.

Thomas Murtaugh made a motion to approve the as well as Petition to Encroach on the Berlowitz Regulated Drain. David Byers seconded the motion. Motion carried. Thomas Murtaugh made the motion to grant conditional approval as stated on the April 15, 2016 Burke memo. David Byers seconded the motion. Motion carried.

East Tipp. Middle School Improvements

Pat Jarboe of TBird Design appeared before the Board to request approval for the East Tipp. Middle School Improvements project. He stated he was happy to see all familiar faces and hoped this continued for a very long time. The project consisted of a future East Tipp. Middle School building addition as well as athletic field and track renovations. The site was located on the south side of C.R.300S at the intersection of CR.300S and CR. 750E. The existing track and field area would be moved to the south with upgrades and renovations due to a planned building addition on the southwest corner of the school. The site was developed in the 1950s prior to stormwater drainage guidelines within a drainage ordinance. However the area of the project was accommodated by a new drainage facility basin (detention pond). Inlets and storm sewers would be used to route the site's runoff to the dry detention pond that which ultimately would drain to the J. Amstutz Regulated Drain. Runoff release rates into the Amstutz Drain would not exceed the site's current discharge amount. The existing outfall remained the same and the existing drainage pattern would be maintained. He requested a variance to the technical standards of the ordinance particularly Chapter 8 Section A- regarding bmp measures. He noted the dry detention pond would act as the bmp treatment for this site. He requested approval of the project and stated they agreed with the April 26, 2016 Burke memo. The Surveyor stated the John Amstutz County Regulated Drain was located immediately east of the school's site as a County maintained open ditch and tile system. The ditch flowed to the south and as Mr. Jarboe indicated this drain was partially reconstructed. Some of the tile was removed and replaced with an open ditch was has increased its capacity. He noted the tile replacement was currently in the works regarding the residential area of the tile locations. He stated this was reviewed in

detail and felt there would be no downstream flooding issues. The release rates were well within the current Stormwater Ordinance. He reiterated the school project was completed in the 1950's. Due to this the designers had to retrofit their design to comply with the current ordinance regarding the stormwater quality portion as best as possible. He stated he recommended approval of the requested variance as the site would have water quality applications such as vegetated swales and grassed strips etc. in addition to the dry detention basin as well as conditional approval as stated on the April 26, 2015 Burke memo. There was no public comment.

Thomas Murtaugh made a motion to approve the variance as requested. David Byers seconded the motion. Motion carried. Thomas Murtaugh made a motion to grant conditional approval as stated in the April 26, 2016 Burke memo. David Byers seconded the motion. Motion carried.

Fort Quiatenon Trailhead and Overlook Archaeological Site

Andy Mix with Vester and Assoc. appeared before the Board on behalf of the Tippecanoe County Historical Association to present the Fort Quiatenon Overlook and Trailhead Archaeological Site project for approval. Mr. Mix stated the site was adjacent to South River Road between Patrick Lane and CR.350W and consisted of approximately 14.8 acres. He noted the top third portion of the site was relatively flat with a sloping ridge to the river. Two naturally curved swales on the east and west sides take the sheet flow from the site to the river. The proposed plan included an entrance to the site, a one way roadway, parking area for buses and cars with handicap parking and a concrete walkway/bicycle path. He further stated; prairie restoration would assist in the stormwater quality improvement of the site and the post development runoff was minuscule compared to pre-developed runoff. He requested approval of the project at that time.

The Surveyor stated this was a minor project, basically a few parking spots for the trailhead access and archeological site. He stated construction would all be completed on high ground of the overall project site. Everything south of the aforementioned slope (natural transition) of the tract was floodplain. There were no sanitary facilities for the site, existing slopes would be utilized as Mr. Mix stated and there are no piping systems planned. He noted this project was reviewed in house. Mr. Mix was aware the project required a completed SWPPP prior final approval.

The Surveyor then recommended approval per the Surveyor's Office Review Summary dated April 29th 2016. There was no public comment.

David Byers recommended approval with condition as stated within the April 29th 2016 Surveyor's Office Review Summary. Thomas Murtaugh seconded the motion. Motion carried.

Stonehenge Phase 4 P.D.A. and P.D.B.

Marc Tolliver with Vester and Assoc. appeared before the Board to present Stonehenge Ph. 4 P.D.A. and P.D.B. for approval. The overall Stonehenge Development was located on the southeast corner of the intersection at CR. 450N and 375W and consisted of approx. 134.6 acres. Phase 4 was located in the northeast region (17.8 acres). The existing P.D. region was located in the southeast region; however there a fringe lots that would be developed as part of the current project. The Stonehenge Development Master Drainage Plan was previously approved by the Board during the January 8, 1997 Drainage Board meeting. The site's detention pond was previously planned on its eastern extremities. He noted there was an existing county regulated drain along the northeast corner of the site known as the E.W. Andrews County Regulated Drain #03. The planned fringe lots to be developed were located immediately south and further southeast of the northeast region (Phase 4) of the project. (South of the existing pond) He reviewed the overall plan for the Board and stated there would be subsurface storm sewers with overland vegetated swales through the site. (49 lots total to be developed with 20 lots planned within the P.D.A. and P.D.B. regions) A variance was in order regarding the detention pond to act as a secondary post construction bmp treatment method. This was in addition to tail water bio swales for stormwater quality treatment. He noted two variances were requested. The first variance was for the reduction of existing easement for the E.W. Andrews Regulated Drain #03 and the second for the detention pond to act as a bmp treatment method. He then asked for approval of the project as stated. The Surveyor stated the applicant was here for preliminary approval only. The variances would not be acted upon today and the applicant was aware of this. The variances would be approved at a later date. The Surveyor stated the project's data at hand was reviewed with the 1997 Stonehenge Development Master Drainage Plan. He noted in general their plan complied with the master drainage plan as approved by the Board in 1997. He requested a meeting to discuss the regulated drain encroachment. He would like to discuss the amount of room needed for maintenance work of the said county regulated drain easement. This was due to a physical restriction in the area of CR.450N. A culvert routes under the said county road and the open ditch starts on the south side. There was a physical barrier on north side and another on the east side due to an existing driveway over the open portion of the drain. Other than the variances today, he recommended preliminary approval to the Board for Stonehenge Phase 4 P.D.A. and P.D.B. There was no public comment.

Thomas Murtaugh made a motion to grant preliminary approval for Stonehenge Phase 4 P.D.A. and P.D.B as stated in the April 27, 2016 Burke memo without acting on the variances as requested in said review memo. David Byers seconded the motion. Motion carried.

Zach Beasley/Other Business

The Surveyor presented Maintenance Bond # 1044914 in the amount of \$14,166.30 written by Hanover Insurance Company and submitted by Atlas Excavating regarding Hickory Ridge Phase 2 Subdivision for approval by the Board. David Byers seconded the motion. Motion carried.

Waples McDill #85 Regulated Drain Reconstruction Contract Award

Project Manager confirmed all Waples McDill #85 Regulated Drain Reconstruction contract documents were in order. David Byers made a motion to accept the Maxwell Farm Drainage contract for the Waples McDill #85 Regulated Drain Reconstruction in the amount of \$490,527.24. Thomas Murtaugh seconded the motion. Motion carried.

Public Comment

Lyle Bowman representing A.D.I. (Tile Company in area) approached the Board and stated the following: My Company submitted a bid on Monday via overnight. It arrived on Tuesday -election day- to this location and should have been received by the mailing authority at this location on Tuesday- in time to be read and accepted. The Surveyor's office Project Manager stated the office was aware of the bid and watching for it, however it was not delivered prior to the start of today's meeting. Mr. Bowman asked if he obtained a certification that the bid was delivered to this address prior to the start of the meeting would it still be considered. He stated it would have been the low bid by a significant amount. He asked if there would have been a place that accepted this delivery due to the election held at this location on Tuesday. Attorney Doug Masson stated if it would have to be a special circumstance as if it was not received prior to this meeting, it would not be considered by the Board. The Attorney stated the Board made the exception to allow the bid- if received by 10am today- to be submitted and opened (deadline receipt of bids 9:30am Weds. April 6, 2016). However the bid did not arrive prior to the meeting therefore it was not considered for the award. The circumstance would have to be extraordinary to change the award at this meeting. Maxwell Farm Drainage Contract award remains as accepted. Bart Maxwell approached the board and stated he hoped to learn whether he was awarded the contract today. Most instances contracts are not opened if not received prior to the deadline. Attorney Masson stated he was bound to double check the law; however the situation would have to be compelling before he would recommend a change in the Board's award of the contract today. He stated his preference would be to move forward based on his knowledge of the situation to date. Maxwell Farm Drainage submitted the lowest contract bid to the Board prior to the deadline as outlined in the Public Notice for Request for Contract Bids on the Waples McDill #85 Regulated Drain Reconstruction.

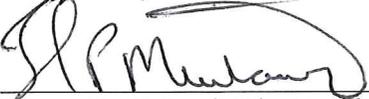
Dave Byers asked if the bid would re-pro rate the per acre assessments to the landowners since the amount was significantly lower than the Surveyor's estimated per acre assessment previously approved by the Board. The Surveyor stated it could possibly lower the assessment at the end of the process; however he referred to the Attorney for his legal opinion. He noted there are always unforeseen items that come up during reconstruction which could increase the total cost of a bid. The Attorney noted the reconstruction order would be reviewed, and a certified total cost of the project would be submitted to the Auditor next month.

Mr. Bob Devault 3200 SR.28E Lafayette Indiana 47909 approached the Board and stated as one of the largest landowners within the watershed he represented a few of the landowners and they all felt the designated time and date was stated regarding the request for contract bids on the said drain reconstruction. He stated he would not want the board to set precedence where once the amount of a received bid was read out loud it would enable a contractor to easily come in with a story and a lower bid to be accepted by the Board. He felt it would be a poor precedence to set. He stated the Board made a decision to award the contract today already and he hoped they stuck with it. He then congratulated the Surveyor for his win in the primary election. The Surveyor thanked him for his thoughts today.

David Byers made a motion to adjourn. The meeting was adjourned.



Tracy Brown, President



Thomas P. Murtaugh, Vice President



Brenda Garrison, Secretary



David S. Byers, Member

Tippecanoe County Drainage Board
May 4, 2016
J.N. KIRKPATRICK REGULATED DRAIN #46
UPPER END EXTENSION
HEARING
(Continued from April 6, 2016)

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

The President reopened the hearing which was continued at the April 6, 2016 hearing for the Upper End Extension of the J.N. Kirkpatrick Regulated Drain #46. He referred to the Attorney. Attorney Doug Masson stated this was a reconstruction hearing and signed agreements with affected landowners were received except for the Park 350 Partnership LLP agreement. He stated 80% of the partnership and drainage board agreement was settled, however there were still detention issues to be ironed out between the Surveyor's office and said partnership. He recommended taking public comment if any - then adjourn until May 18, 2016 at 10 a.m. in order to finalize detention issues associated with the J.N. Kirkpatrick Regulated Drain #46 Upper End Extension project. This time and date was set prior to the upcoming June Drainage Board regular meeting date as reconstruction work needed to be completed this calendar year. He referred back to the President for public comment.

The President asked for public comment. There was no public comment.

David Byers made a motion to adjourn until May 18, 2016 at 10 A.M. for the upper end extension reconstruction project of the J.N. Kirkpatrick Regulated Drain #46. Thomas Murtaugh seconded the motion. Motion carried.

Tippecanoe County Drainage Board
May 18, 2016
J.N. KIRKPATRICK REGULATED DRAIN #46
UPPER END EXTENSION
HEARING
(Continued from May 4, 2016)

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison. Landowners and/or their representatives present were Richard Johnson from Ichiya LLC, Attorneys McBride Carlyle of the Ball Eggleston Law firm representing Park 350 Partnership LLP.

President Tracy Brown called the special hearing to order. He referred to Drainage Board Attorney Doug Masson. Drainage Board Attorney Masson stated the board had taken evidence and the board adjourned until today. The last piece of business was a landowner agreement with Park 360 Partnership LLP. A form of agreement had been worked out with said partnership.

He had received approval by their attorney of the agreement language. Signed agreements had been received previously from Ichiya LLC and John Rice landowners affected by this reconstruction. He noted a form of the said Park 350 Partnership and the Drainage Board agreement was provided for the official record. All three agreements

would be included in the official record as exhibits to this hearing. The first order of business would be to approve the landowner agreements which is 3 total.

Thomas Murtaugh made a motion to grant approval for the three landowner agreements between the Tippecanoe County Drainage Board and the affected landowners known as Ichiya LLC, John Rice and Park 350 Partnership LLP as written. David Byers seconded the motion. Motion carried.

Public comment

President Tracy Brown asked for public comment. There was none.

As such the Attorney read the following Findings and Order of the Board into the official record:

Findings And Order Of Reconstruction:

This matter is before the Tippecanoe County Drainage Board ("Board") on the report of the Tippecanoe County Surveyor ("Surveyor") filed on or about January 25, 2016. The Board enters the following findings and order:

1. The hearing was conducted on March 3, 2016, April 6, 2016, May 4, 2016, and May 18, 2016. Affected landowners have specifically agreed to an order in substantially the form of this order and waived further notification. Notices of publication of the time and place of the hearing, in the Journal & Courier and the Lafayette Leader, were filed.
2. No written objections were submitted and the affected landowners have affirmatively waived objections to this order.
3. At the hearing, the Board considered evidence on the Surveyor's Report.
4. After consideration of the evidence, the Board makes the following findings:
 - A. The reconstruction report of the Tippecanoe County Surveyor was filed in the office of the Surveyor on January 25, 2016.
 - B. Affected landowners have specifically agreed to an order in substantially the form of this order and waived further notification.
 - C. Notice of the time and place of the hearing was given by publication in the Journal & Courier and the Lafayette Leader, newspapers of general circulation in Tippecanoe County, Indiana more than ten (10) days prior to this hearing.
 - D. The reconstruction and extension is not expected to damage the landowners, and the landowners have specifically agreed that the benefits of the improved drainage and the Drainage Board's agreement to bear the costs of reconstruction equals or exceeds damages or impairments, if any, to land affected by the reconstruction and extension.
 - E. The cost of reconstruction, exclusive of the amounts required to be excluded under IC 36-9-27-71 (costs for highway crossing to the Indiana Department of Transportation) and costs under IC 36-9-27-48 (costs for utility equipment relocation) is estimated to be \$1,060,000.00.
 - F. Maintenance costs are expected to remain the same regardless of the reconstruction.
 - G. The Board finds that the costs, damages, and expenses of the reconstruction will be less than the benefits accruing to the owners of the land benefitted by the construction.
 - H. The Board hereby adopts the reconstruction report of the County Surveyor. All Landowners have agreed that their benefits exceed any damages, if any.
 - I. The reconstruction shall be paid from funds allocated to the Drainage Board for such purposes under the Economic Development Income Tax Capital Improvement Plan or funds which are otherwise available to the Drainage Board for reconstruction and shall not be the subject of a reconstruction assessment against the Landowners.
 - J. Pursuant to IC 36-9-27-71, the costs of crossing public highways shall be paid by the owner of the public highway.
 - K. Pursuant to IC 36-9-27-48, the costs of relocation of any pipeline, cable, or similar equipment of a public utility shall be paid by the owner of the public utility.

NOW, THEREFORE, IT IS ORDERED THAT:

1. The Board hereby adopts the reconstruction report of the County Surveyor.
2. The Board has determined that the costs, damages and expenses of the proposed reconstruction and the periodic maintenance cost will be less than the benefits accruing to the owners of the land benefitted.
3. The reconstruction shall be paid from funds allocated to the Drainage Board for such purposes under the Economic Development Income Tax Capital Improvement Plan or funds which are otherwise available to the Drainage Board for reconstruction. However, the costs attributable to the public highway crossing under IC 36-9-27-71 and relocation of

utility equipment under IC 36-9-27-48 shall be paid by the owner of the public highway and the owner of the public utility. Maintenance rates should remain unchanged.

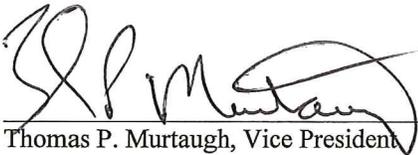
David Byers made a motion to approve the Findings and Order as read into the official minutes by Attorney Masson. Thomas Murtaugh seconded the motion. Attorney McBride asked if there was a necessity of referencing in that order the agreements in that order not sure what your procedure is on that. Attorney Masson stated the order does reference the landowners have affirmatively agreed to an Order in substantially that form. I think we have the minutes indicating that this was subject to formal execution of that order. Attorney McBride stated fair enough. Motion carried.

David Byers made a motion to adjourn. Attorney McBride stated he would like to thank the Surveyor and the Drainage Board Attorney Masson in addition to the Drainage Board for their assistance in expediting the landowner agreements. Responding to Attorney McBride's inquiry, the Surveyor stated he would like to begin the Upper End Extension reconstruction in late July if possible.

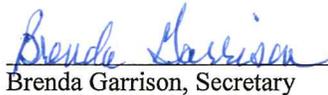
The J.N. Kirkpatrick Regulated Drain #46 Upper End Extension Hearing was adjourned.



Tracy Brown, President



Thomas P. Murtaugh, Vice President



Brenda Garrison, Secretary



David S. Byers, Member

Tippecanoe County Drainage Board
June 1, 2016
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

Approval of Minutes

David Byers made a motion to approve the May 4, 2016 regular meeting minutes. Thomas Murtaugh seconded the motion. Motion carried. David Byers made a motion to approve the May 4 and 18, 2016 J.N. Kirkpatrick Upper End Extension minutes as written. Thomas Murtaugh seconded the motion. Motion carried.

Zach Beasley

INDOT Reimbursement Agreement JN Kirkpatrick #46 Upper End Extension Project

The Surveyor presented an INDOT agreement with the County Drainage Board for reimbursement of the County's cost to jack and bore a 54 inch tile under U.S. 52 within INDOT's right of way. He noted the amount was not to exceed \$208,000.00 and recommended approval by the Board. Thomas Murtaugh made a motion to approve the INDOT reimbursement agreement regarding the Upper End Extension of the J.N. Kirkpatrick Regulated Drain #46 as presented by the Surveyor. David Byers seconded the motion. Motion carried.

Drain Project (s) Update:

Eugene Johnson #41 2016 Dredging project

The Surveyor stated the Eugene Johnson #41 Dredging Project located at CR. 1300 South and CR 700 East was 90% complete. Inspection of the project was forthcoming. Heartland Excavating was the Contractor for this project.

Moses Baker #114 Phase II Dredging Project

The Surveyor stated Phase II of the Moses Baker #114 Dredging Project was located CR. 575 East and CR700 East was nearly 100% complete. An inspection of the project was forthcoming. Huey Excavating was the Contractor for this project.

Waples McDill #85

The Surveyor noted the Waples McDill #85 Reconstruction started today by crossing CR275East and setting up the large machine to be ready to go by first of week. He stated a new machine was being used to lay the large pipe. The machine was called TexMek and would be viewed in action by many across the Midwest during this job. It was one of the largest tile machines in existence. He informed the Board to his knowledge, this was the largest AGRICULTURAL tile project ever constructed in Tippecanoe County. He offered to accompany the Board to view the installation. Maxwell Farm Drainage was the Contractor for this project.

John Hoffman #101 Joint Regulated Drain

The Surveyor stated a meeting should be scheduled for the John Hoffman #101 Regulated Joint drain with Clinton and Carroll County's. He recommended the joint meeting follow the Board's regular meeting on August 3, 2016. The Board agreed to hold the John Hoffman Joint Regulated Drain #101 on August 3, 2016 immediately following the regular scheduled meeting on that date.

Resolution 2016-02-DB: Certification of Assessments Waples McDill #85 Reconstruction

Attorney Doug Masson recommended the removal of the Waples McDill #85 Resolution which was on today's Agenda- as there were revisions warranted. He stated a revised Resolution would be presented to the Board at a later date.

Public Comment

David Byers made a motion to adjourn. The meeting was adjourned.

Tracy Brown, President

Thomas P. Murtaugh, Vice President

Brenda Garrison, Secretary

David S. Byers, Member

Tippecanoe County Drainage Board

July 6, 2016

J.N. Kirkpatrick #46 Upper End Extension Special Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. James Butcher-Project Manager, both with the Surveyor Office were also in attendance. Evan Warner-G.I.S. Technician and member David Byers were absent.

J.N. Kirkpatrick #46 Upper End Extension

President Tracy Brown referred to the Surveyor for the opening of bids regarding the J.N. Kirkpatrick #46 Upper End Extension Reconstruction. The Surveyor referred to the Attorney to read the bids submitted. Attorney Doug Masson read the bids as follows: F&K Construction Inc. Amount: \$987,111.00; Rinehart Excavating Inc. Amount: \$698,079.80; Atlas Excavating Inc. Amount: \$968,177.00; Fairfield Contractors Inc.: Amount \$960,846.05; Midwest Paving Amount: \$975,399.00. Thomas Murtaugh made a motion to take the bids under advisement to be reviewed for compliance and award at the end of the meeting if all are in order. Tracy Brown seconded the motion. Motion Carried.

J.N. Kirkpatrick #46 Upper End Extension Construction Observation Contract

The Surveyor presented a lump sum Construction Observation Contract for J.N. Kirkpatrick #46 Upper End Extension project submitted by TBird Design Services Inc. in the amount of \$49,500.00 for approval by the Board. He has reviewed along with the Attorney and it contained all the legal requirements. He then recommended approval. Thomas Murtaugh made a motion to approve the J.N. Kirkpatrick #46 Upper End Extension Construction Observation Contract submitted by TBird Design Services Inc. in the amount of \$49,500.00. Tracy Brown seconded the motion. Motion carried.

Zach Beasley

Regulated Drain projects updates:

The Surveyor informed the Board the Waples McDill #85 Regulated Drain Reconstruction project was 90% complete. This is an Agricultural Drain Project. The JN Kirkpatrick Regulated Drain #46 Upper End Extension is an Urban Drain project. The Amanda Kirkpatrick Regulated Drain #44 project will be reconstructed this year. The total cost of the three projects is at 2.2 million dollars which the Drainage Board along with the Surveyor's Office will have accomplished this year. This does not include the maintenance projects the Surveyors office continues to complete.

He requested the Board set the date for a Public Hearing on the Amanda Kirkpatrick Regulated Drain #44 Reconstruction project. He suggested October 5th, 2016 immediately following the regular scheduled Drainage Board meeting. Thomas Murtaugh made a motion to set October 5, 2016(immediately following the regular meeting of the Board) for the Amanda Kirkpatrick Regulated Drain #44 Reconstruction Public Hearing. Tracy Brown seconded the motion. Motion carried.

Regulated Drain Spraying Contract

The Surveyor updated the Board on the 6 year contract with Daltons Inc for spraying of ditches. (Received 3-4 bids low bidder Dalton Spraying Inc.) He noted this has been a huge success in other counties around the state. This County is in the third year of the contract. The program has gone exceptionally well in his opinion. One garden was damaged due to the conditions of the weather at that time. The company's insurance handled it as the contract outlined. He has seen a significant improvement on the open ditches. Using a spray program is a much cheaper form of effective maintenance for the ditches. He noted several farmers have called and been provided the data sheets on the chemicals per their request. They are happy with the results. They want to use the same chemicals as well. At the end of the 6 year contract after the third year of current contract. He will review the results at that time again. Any clearing dredging project completed after the first year that drain is put on the spray rotation list. This has worked tremendously well.

J.N. Kirkpatrick #46 Upper End Extension Contract Award

The Project Manager noted all the J.N. Kirkpatrick #46 Upper End Extension bid proposal packets are in order. Thomas Murtaugh made the motion to Rinehart Excavating Inc. in the amount of \$698,079.80 contract for the J.N. Kirkpatrick #46 Upper End Extension reconstruction. Tracy Brown seconded the motion. Motion carried.

Richard Johnson owner of Ichiya LLC approached the Board. He thanked them for their diligence and expressed his satisfaction and thankfulness for the extension project approval.

July 19, 2016

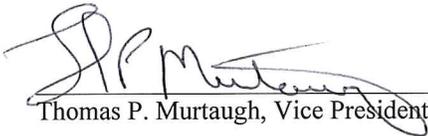
Tippecanoe County Drainage Board

The Surveyor thanked those that submitted bids for this project and to the Board for their willingness to set a special meeting date for this project.

Thomas Murtaugh made a motion to adjourn. The meeting was adjourned.



Tracy Brown, President



Thomas P. Murtaugh, Vice President

ABSENT

Brenda Garrison, Secretary



David S. Byers, Member



EVAN WARNER, GIS TECH.

Tippecanoe County Drainage Board
September 7, 2016
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, Surveyor Office Project Manager James Butcher (proxy for Surveyor), Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician with the Surveyor Office was also in attendance. County Surveyor Zachariah Beasley was absent.

Approval of Minutes

Thomas Murtaugh made a motion to approve the August 3, 2016 Drainage Board minutes. David Byers seconded the motion. Motion carried.

Concord Ridge Subdivision

Robert Langager from Schneider Corp. appeared before the Board to request approval for Concord Ridge Subdivision project. The site was located between Co. Rd. 450South (north side) and Co. Rd. 500South (south side) and consisted of approximately 70.4 acres. He noted the project was located across from the Roberts Ridge Subdivision. The site's runoff was routed onsite north and south through storm sewers and vegetated swales to two detention basins. One of the detention basins was located in the northern portion as a wet detention basin and one in the southern portion as a dry detention basin. The drainage plan routed the tract's southern portion runoff to the Ilgenfritz Branch of the Dismal Creek Regulated Drain. The northern portion ultimately outlet to the J.N. Kirkpatrick Regulated Drain and was located within the J.N. Kirkpatrick Drainage Impact Area; therefore this portion's runoff rate was more restrictive. The southern portion of the site was not under the restrictive runoff rates as it was not located within the said impact area. He presented the Petition to Encroach on the Ilgenfritz Branch of the Dismal Creek Drain to be approved as well by the Board. He then requested approval of this project. Project Manager James Butcher (proxy for Surveyor Beasley) informed the Board a variance to the runoff rate for the northern portion of the site was requested as well. Mr. Langager agreed. Mr. Langager noted the variance was related to the allowable release rates to the J.N. Kirkpatrick Ditch during the 10 and 100 year storm events. The projects planned drainage would lower the release rates which would directly impact Roberts Ridge Subdivision. Mr. Butcher reviewed the project site and plans utilizing the G.I.S. site for the Board and attendees. He recommended approval by the Surveyors office for the Petition to Encroach on the Ilgenfritz Branch of the Dismal Creek Drain. He recommended approval of the requested variance as recommended in the September 6, 2016 Burke memo. He stated the Surveyors office recommended approval with the conditions noted on the September 6, 2016 Burke memo for Concord Ridge Subdivision.

Tracy Brown asked for public comment on this project. Pam Roberts 3741 East 500South Lafayette Indiana 47909 approached the Board. Ms. Roberts stated the following: "my name is Pam Roberts, my little bitty subdivision is in the southeast corner across the road from said property and I would like to make the Board aware of the terrible drainage condition that continues to exist and has existed forever. Now what you see in the southeast corner is the low spot in that area. (Topographical) Now I have some pictures here to give you some idea of what's going on and what has been going on, if I may." (She presented pictures to the Board at that time.) "I have numbered these pictures and I will explain what they are. To note if you do not live in that area, you are not aware of these problems. This property has been farmed for I don't know how long and they put in a drainage tile without the County's approval. It seriously flooded my property for years. I continued to complain and got no resolution, because the ditching was terribly inadequate. Another problem you have is the water table is at 11 feet, which you don't know unless you live there and try to put in a basement. Now I don't know if they are going to put in a pond there in the southeast corner which was originally suggested to do, if that is still on the table I don't know." Project Manager James Butcher stated "It is. There will be a pond in the southeast corner of the development and that would outlet to a ditch which they are going to build that will take the water straight down" Pam Roberts stated "Right beside me, yes see what happens when you try to put in a pond when the water table is 11 feet?" Dave Eichelberger Engineer Consultant to the Board stated "It is going to be a dry pond as it is not going to be a wet pond" Pam Roberts stated "It will be wet when you dig down 11 feet you are going to hit water." Mr. Eichelberger stated they would not be digging down 11 feet. He noted there would be excavation and berming up at the site t nowhere near 11 feet. James Butcher stated they are not really digging down as they are more digging it back. At the south end it will have similar elevation and then they will peel back at the north end and get the storage that way. Pam Roberts's response: "Do you understand what the grade is on that property?" (Mr. Butcher responded- yes) I don't know if you have seen it, but I have a picture of the grade in there. Like picture #1 gives you a sense of the grade of the property and tells you how steep it is and how much water flows out of there.

#2 is the existing ditch which runs along the property which is very shallow as you can see in the picture. #3 Shows you the ah, I circled the drainage tile that was put in. That seriously caused problems as you can see by the picture of my driveway. It seriously floods every time it rains because of the amount of water that comes off that property and this is just the south half of the property- this isn't the whole property. This is just the amount of water that comes off the south half- which is a tremendous amount of water. #4 shows how far they dug the ditch to help, but they only ran the ditch through the Driscoll's property which is next door to this. It ended at the Pilote property which is past the Driscoll's. The ditch stops and it drains into the field next to me. Well when that water drains into the field It runs to the back of my property and floods down there. So everything they've done so far has not solved problems it just created more problems. That's my point. There is not much thought or engineering and I don't know you're just not aware of the volume of water that's produced on that half of the property. That's a lot of water; this is my driveway, when it rains." Thomas Murtaugh asked which direction the picture was taken from. Pam Roberts stated "facing south- because we are on the low spot of that area. So all the drainage water comes on to my property and now they put it into the field next to me and then you can see in the back of that picture that there is standing water. Well that water drains into the back and I tried to put in a garden, floods it every year- no garden." Thomas Murtaugh asked James Butcher if the ditch which runs down to Dismal Creek along the west side of her property- is it existing. Mr. Butcher stated no it would be created. He stated he did not see any way this would NOT help her situation. He reviewed the drainage infrastructure and plans for the project area for the board in more detail. There would be a pond which catches runoff to the north and reduces it down to the allowable release rates (which are the rates prior to development) and piped to a ditch west of her property. He explained the site's runoff would be caught in a pond and reduced to a pre-developed rate then outlet into a 24 feet wide and two feet deep ditch on the west side of the Roberts property and ultimately to Dismal Creek and noted there would be a big improvement in the drainage of that area. He explained pre developed and post develop runoff to the attendees. David Eichelberger Engineer Consultant interjected the runoff rate will be less than the pre-developed rate after the drainage infrastructure is completed. Pam Roberts responded: "But you see what I'm saying is your assumptions on the pre-existing drainage was wrong because you have been flooding me for years and I have been complaining about it. I have called dozens of times, I've asked to come to the meetings. I went to the area plan commission meeting and was told I was at the wrong place- you got to go to Drainage Board." James Butcher responding to Commissioner Murtaugh's inquiry stated it was not part of a regulated drain. Pam Roberts stated "No its not part of it, the ditch in front was adequate up until till the time he put in the drainage tile. Then that ditch could no longer handle that flow at all." Thomas Murtaugh stated this would significantly help her situation. Pam Roberts responded "According to what your engineers say, but I am saying when they came and finally said they resolve the problem by putting in a ditch. The ditch they put in was still inadequate because they figured it on allowable rates. Well you know that's not scientifically, well their figures were wrong, because it still was not enough. It just moved it from this corner to the next driveway where it ran into the field on the east side of my property and flooded there. I mean it just creates; it just pushes the problem somewhere else. I don't know that two feet, if it's maintained and cleared at two feet continually without allowing the overgrowth and everything else and the buildup that it will be adequate five years from now. I don't want to be back here complaining again because you know your engineers were not or the ditch wasn't maintained. I know that the ditch being where it's at is not going to be maintained because it going to have to go across several fence rows and everything else that is already existing there. That's my point. I want this to not be a problem that comes again and again and again. One of the problems with that property that was farmed was that there is an area that he does not farm because it is continually mush- it holds water alright- which is why he put in the drainage tile. Well the problem is the water table is really high there obviously or it would not be such mush that he couldn't farm it. I am just not sure that you people are aware of all the problems that already exist with this property." Responding to Tracy Brown's inquiry- Ms. Roberts stated her problems started after the drainage tile was put in, before this the water would stay on that property. He asked how long ago was that put in and Ms. Roberts stated 5-6 years ago. He then stated that was a private tile and the Board had no jurisdiction over it. Pam Roberts said "Yes but aren't they supposed to not put in a tile without approval without knowing if the ditch will hold the flow?" James Butcher stated in a County Regulated Ditch, but this is not a county regulated ditch. Pam Roberts stated "So anybody can put in a tile and flood anybody and it makes no difference, hmm interesting." Thomas Murtaugh stated he thought she would see a real benefit from this. Pam Roberts stated "Well are they going to remove the drainage tile or plug it? Robert Langager stated any tile uncovered would be tied in to their system. Pam Roberts stated "Yeah but that's years away" Mr. Langager noted he would have to know the location of the tile in question to tie it into the system. He noted the southern half runoff coming from the project site tract would be routed to the west of her property. Pam Roberts stated "I would like to have the drainage tile plugged or removed right away so that it stops flooding. I mean this development in the southern portion is not going to take place immediately. It's going to take years to get to that point. Correct?" Ron Whistler -project developer stated she is correct it will be years before the last phase of the development construction is started. Pam Roberts stated "Three to five years would be my estimate so in the meantime I would like to have something done about that drainage tile." Thomas Murtaugh stated it was a private drain and the Drainage Board had no authority over it. Pam Roberts stated "so what do I have to do, sue the owner???" Pam Roberts stated she had not spoken with the owner as "She thought the county put in all the ditches" James Butcher suggested the Surveyor office could contact the current owner of the tract and try to work something out /find resolution for her. Pam Roberts stated: "Sure but the problem I have is I left my name and number with Boards

before and no one has ever contacted me” Responding to Tracy Brown’s inquiry she stated as he motioned to the Secretary “I left it with her”. (Note: The Surveyor’s Office Project Manager James Butcher discussed this issue with her prior to today) James Butcher stated the Surveyor office could possibly facilitate conversation between her and the developer of the site. Pam Roberts stated m” My number is 426-7339. My error was in believing anyone that put in a drainage tile had to get approval by the County to make to make sure they would not be flooding anybody, wrong” James Butcher stated this was a private issue which the Surveyor Office has no authority over, however they can try and make suggestions for possible solutions but that is all about we can do in this situation.” Pam Roberts stated” I just keep thinking my God 160 homes all that asphalt is going to really increase my drainage problems.” James Butcher emphasized he was confident it would not and a big part of the design is to make sure that does not happen. He stated he was confident it would help noticeably. Tracy Brown noted the intent of the Board was first to follow the law and second to leave a neighborhood better off. He continued - the Board has no authority over the private tile, a meeting could certainly be facilitated between the parties for an amicable solution. James Butcher stated he would contact Mrs. Roberts in the near future. Pam Roberts stated: “Alrighty, Thank you”

Thomas Murtaugh made a motion to grant acceptance of the Petition to Encroach on the Ilgenfritz Branch of the Dismal Creek Regulated Drain. David Byers seconded the motion. Motion carried. Thomas Murtaugh made a motion to grant approval of the variance as recommended. David Byers seconded the motion. Motion carried. Thomas Murtaugh made a motion to grant approval of the Concord Ridge Subdivision with conditions as listed on the September 6, 2016 Burke memo. David Byers seconded the motion. Motion carried.

Petition to Vacate Br. #9- S.W. Elliott Regulated Drain #100

Project Manager James Butcher presented a Petition to Vacate Branch #09 of the S.W. Elliott #100 Regulated Drain. He noted the vacation would not affect landowners other than those that submitted the Petition. He informed the Board there could be agricultural tiles (unknown locations) that tie into this branch. As a result, the Surveyor’s office recommends the approval of said petition to be vacated only at which time development construction begins. David Byers made a motion to approve the Petition to Encroach as presented with the condition that the tile will not be removed until development starts construction. Thomas Murtaugh seconded the motion. Motion carried.

Petition to Encroach –S.W. Elliott #100 Regulated Drain/J. Sedam

Project Manager James Butcher presented the Petition to Encroach on the S.E. Elliott #100 Regulated Drain submitted by James Sedam. The encroachment would allow enough space for future maintenance of said drain. The Surveyor’s office recommended approval to the Board. David Byers made a motion to grant approval for the Petition to Encroach on the S.W. Elliott #100 Drain as presented by the Project Manager. Thomas Murtaugh seconded the motion. Motion carried.

Petition to Establish a Maintenance Fund /John McGlaughlin Tri-County Regulated Drain

Project Manager James Butcher presented a Petition to Establish a Maintenance Fund on the John McGlaughlin Regulated Tri-County Drain. He noted this was a tri-county drain with Clinton and Montgomery Counties and requested the Board refer it for a Surveyor’s Maintenance Report. David Byers made the motion to refer the Petition to Establish a Maintenance Fund for the John McGlaughlin Regulated Tri-County Drain to the Surveyor for a maintenance report. Thomas Murtaugh seconded the motion. Motion carried.

Bonds:

Soleado Vista Phase 1 Subdivision/Maint. Bond#S001-3914

Roberts Ridge Phase 3 Subdivision/ Maint. Bond##106537515

Southern Winds Apts. Phase 1 & Phase 2 Subdivision /Maint. Bond#1052750

Project Manager James Butcher presented the following Maintenance Bonds for approval by the Board: Maintenance Bond #S001-3914 in the amount of \$27,756.03 submitted by R&W Contracting and written by Allied World Specialty Insurance ; Maintenance Bond #106537515 in the amount of \$7,274.50 submitted by Fairfield Contractors Inc. and written by Travelers and Surety Insurance; Maintenance Bond #1052750 in the amount of \$18,530.15 submitted by Atlas Excavating Inc. and written by Hanover Insurance. Thomas Murtaugh made a motion to approve the maintenance bonds as presented by the Surveyor. David Byers seconded the motion. Motion carried.

Reconstruction Projects Update

Project Manager James Butcher gave an overview of the reconstruction projects the Surveyor’s office had completed since 2010. He noted there were ten (10) agricultural drains reconstructed. He stated there were some issues receiving reconstruction assessment monies from adjoining counties on joint reconstruction projects. The Surveyor’s Office is working to obtain the assessment monies. Warren, Benton and Montgomery Counties have been contacted and are in the process of obtaining the assessments. Warren and Benton County’s stated they will send payment this week. Montgomery County Assessments are currently pending. There was a total of \$78,000 of various reconstruction assessments

not received to date by this County. There were ten landowners in Tippecanoe County that had not paid anything to date on various projects. There were a couple instances where the five year collection period as required by Indiana Drainage Code was over. The Surveyor requests the Board take this into consideration and come to an agreement of how to proceed in these cases. Responding to David Byers inquiry, James Butcher noted he was not sure if they had paid their property taxes but thought so as the properties were not on tax sale. Responding to Thomas Murtaugh's inquiry, the secretary stated the reconstruction assessment billing is a separate process from property tax billing. Drain Maintenance assessment is included on property tax bills, reconstruction assessments are not. The billing is sent out and collected by the Treasurer office; however it is totally separate from property tax billing. Attorney Doug Masson stated he would instruct Atty. Matthew Salsbury to conduct research on legal avenues available for collection in these cases. Thomas Murtaugh stated he felt a letter from the Attorney was in order. Attorney Doug Masson stated he thought it was prudent and would need a list of those landowners located in Tippecanoe County only. (Note the secretary will follow up on the list of names to the Attorney) Project Manager James Butcher informed the Board currently there was approximately 1.1 million dollars in the General Drain Improvement Fund. He stated 1 million dollars of this total was committed for this year's projects. He informed the Board the Surveyor would request 1.5 million from the County Council in the coming week for 2017 drainage projects. The Project Manager stated the concern is that some of the reconstruction assessments would not be repaid in a timely manner. This would cause a lower balance in the General Drainage Improvement Fund which in turn would put a halt to future projects as planned.

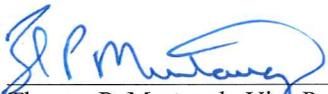
Martin Erwin Regulated Drain #28

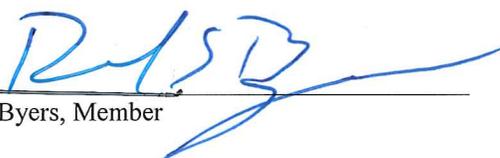
Project Manager James Butcher requested a landowner hearing date on the Martin Erwin #28 Regulated Drain to increase the maintenance assessment from the Board. He asked to hold the hearing on November 2, 2016 immediately after the regular scheduled meeting that day. David Byers made the motion to set the Martin Erwin Regulated Drain #28 landowner Maintenance Rate Hearing on November 2, 2016 to begin immediately after the regular scheduled meeting that day. Thomas Murtaugh seconded the motion. Motion carried.

Public Comment

As there was no public comment, David Byers made a motion to adjourn. The meeting was adjourned.


Tracy Brown, President


Thomas P. Murtaugh, Vice President


David S. Byers, Member


Brenda Garrison, Secretary

Tippecanoe County Drainage Board
October 5, 2016
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance. Member David S. Byers was absent.

Approval of Minutes

Thomas Murtaugh made a motion to approve the September 7, 2016 Drainage Board Minutes as written. Tracy Brown seconded the motion. Motion carried.

Morehouse Meadows Minor Subdivision

Randy Peterson with AbonMarche and Starr Associates approached the Board and presented Morehouse Minor Subdivision for approval. Mr. Peterson stated the site was tributary to Indian Creek and was located within the overall Indian Creek Watershed Study. The project site was bordered to the west by Morehouse Road, south by Co. Rd. 600 North and consisted of approximately 18 acres. The project site would be divided into four single family residential lots. Mr. Peterson requested a variance to the release rate requirements of the Indian Creek Drainage Impact Area Resolution. The developer Mark Zimpfer approached the Board and stated the intent with the design was to keep as much of the natural state as possible and not cause any undue erosion issues. He noted the covenants/restrictions will impose low impact development only within the project area. He stated the area was nice rolling terrain and they would like to keep it that way. The Surveyor stated the drainage board was well aware of how contentious this watershed is. He noted he had met with the developer and engineers on three separate occasions to address his concerns. He stated regarding the variance request to the allowable release rates, their final design calculations were within 400cfs which satisfied his concern. He recommended approval of the variance as well as approval of the Morehouse Meadows Minor Subdivision project.

Thomas Murtaugh made a motion to approve the variance to the release rates as requested. Tracy Brown seconded the motion. Motion carried. Thomas Murtaugh made a motion to grant approval of the project as recommended by the Surveyor. Tracy Brown seconded the motion. Motion carried.

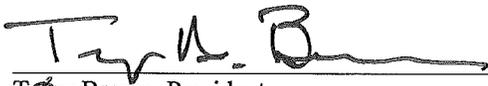
Zach Beasley

JN Kirkpatrick Upper End Extension Reconstruction Update

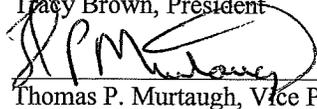
The Surveyor informed the board the Upper JN Kirkpatrick Upper End Extension project was 70-80% complete. The Boring under U.S. 52 had been completed.

Public Comment

There was no public comment. Thomas Murtaugh made a motion to adjourn. The meeting was adjourned.



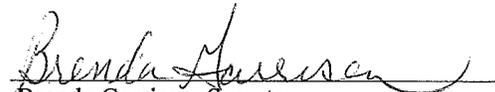
Tracy Brown, President



Thomas P. Murtaugh, Vice President



David S. Byers, Member



Brenda Garrison, Secretary

Tippecanoe County Drainage Board
November 2, 2016
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor's Office, were also in attendance.

Approval of Minutes

David Byers made a motion to approve the October 5, 2016 regular Drainage Board meeting minutes. Thomas Murtaugh seconded the motion. Motion carried. Thomas Murtaugh made a motion to approve the October 5, 2016 #44 Amanda Kirkpatrick Regulated Drain Landowner Reconstruction Hearing minutes as written. David Byers seconded the motion. Motion carried.

Amanda Kirkpatrick #44 Regulated Drain Reconstruction Bid Opening

The Surveyor referred to the Attorney to read submitted bids for the #44 Amanda Kirkpatrick Regulated Drain Reconstruction. He read the bids as follows: Maxwell Farm Drainage in the amount of \$333,630.00, Dwenger Excavating Inc. in the amount of \$337,705.00. Thomas Murtaugh made a motion to take the bids under advisement for review of compliance and award the project at the end of this meeting. Dave Byers seconded the motion. Motion carried. Surveyor Beasley thanked the companies that submitted bids.

West Lafayette Apostolic Christian Church Improvements

Mark Thorpe of Weihe Engineering approached the Board to present the West Lafayette Apostolic Church Improvements project for approval. The existing church site consisted of approximately 34 acres and was located at the northeast corner of Co. Rd. 600 North and Co. Rd. 75 East. Mr. Thorpe stated the church was built in 2008. The planned building addition and parking area would expand into the dry detention basin area. Due to the improvements, the said dry detention basin would be relocated to the east of the current location and provide for additional storage as warranted. He noted the detention basin would accommodate the additional impervious area created by this construction.

The Surveyor stated his office reviewed the plan and recommended approval with the conditions as stated in the October 17, 2016 Burke memo. There was no public comment. Thomas Murtaugh made a motion to grant approval with the conditions as stated on the October 17, 2016 Burke memo. David Byers seconded the motion. Motion carried.

Winter Crest Subdivision

Randy Peterson of AbonMarche and Starr Associates approached the Board to present the Winter Crest Subdivision project for approval. The site consisted of approximately 11 acres and was located at the intersection of Co. Rd. 50 North and Co. Rd. 550 East (east side). Mr. Peterson stated the plan was composed of two separate sections/phases with two separate watersheds. Each section/phase would have its own detention area. Phase one (1) would be constructed on the east side of Co. Rd. 550 East with eleven (11) lots and be accessed off County Road 550 East. Phase two (2) would consist of construction for two (2) lots and "stub" streets within the existing Hickory Hills Subdivision. Each section would have a dry detention basin which would discharge to ravine on site. To assist in erosion control, he noted "Conservation Easements" were planned for portions of the ravines. He then asked for approval by the Board.

The Surveyor emphasized the importance of item #1 under the 2.0 Stormwater Quantity Section of the October 26, 2017 Burke memo. He also emphasized conservation easements should start at the top of the slope so the entire ravine side slope was included within the easement. He stated outlet pipes proposed by the plan for the ravine's side slopes must be corrected and "armored" so erosion does not create problems in the future. The County Highway Department also had concerns over outlet structures and stated they had not received plans to date. Mr. Peterson agreed and was working on the issue currently. He would submit revised plans to both offices ~~ASAP~~. *AS SOON AS POSSIBLE*

The Surveyor recommended approval while emphasizing the importance of the conditions as listed on the October 26, 2016 Burke memo. Tracy Brown asked for public comment.

The Surveyor presented a proposed 2017 Drainage Board meeting date list for approval by the Board. David Byers made a motion to approve the 2017 Drainage Board meeting dates as presented. Thomas Murtaugh seconded the motion. Motion carried.

The Surveyor reminded the Board in September 2016 he was directed to prepare a Maintenance Report on the John McLaughlin Regulated Tri-County Drain (Tippecanoe, Montgomery and Clinton) following up on a petition received by his office to establish a maintenance fund on the said drain. He requested January 4, 2017 at 10:15 for a John McLaughlin Tri-County Regulated Drain Maintenance Landowner Hearing. David Byers made a motion to set January 4, 2017 at 10:15am for a Landowner Maintenance Hearing on the John McLaughlin Regulated Tri-County Drain. Thomas Murtaugh seconded the motion. Motion carried. David Byers made a motion to appoint Tracy Brown as the Tippecanoe County representative for the Tri-County Board. Thomas Murtaugh seconded the motion. Motion carried.

Amanda Kirkpatrick #44 Regulated Drain Reconstruction Bid Award

Responding to the Attorney's inquiry, Project Manager James Butcher stated both submittals were in order and complete. David Byers made a motion to award the Amanda Kirkpatrick #44 Regulated Drain Reconstruction project to the lowest bidder- Maxwell Farm Drainage Inc. in the amount of \$333,630.00. Thomas Murtaugh seconded the motion. Motion carried.

JN Kirkpatrick #46 Upper End Extension Reconstruction Project

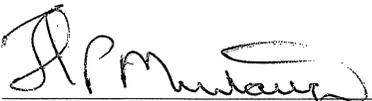
The Surveyor informed the Board the JN Kirkpatrick Upper End Extension project was 98% complete at this time. David Byers noted the ditch looked very good. The Surveyor stated the JN Kirkpatrick urban drain reconstruction project along with the Waples McDill Regulated Drain and Amanda Kirkpatrick (to be completed by year's end) agricultural reconstruction projects would total approximately 1.8 to 2 million dollars. He noted this was a large amount of construction projects completed in 2016 by his office. Tracy Brown commended the work by the Surveyor office in 2016.

Public Comment

Tracy Brown asked for public comment. There was none. David Byers made a motion to adjourn. The meeting was adjourned.



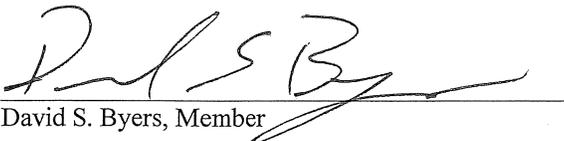
Tracy Brown, President



Thomas P. Murtaugh, Vice President



Brenda Garrison, Secretary



David S. Byers, Member

Tippecanoe County Drainage Board
September 11, 2017
Drainage Board Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas P. Murtaugh, Vice President David Byers, member Tracy Brown, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC and Drainage Board Secretary Brenda Garrison. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

#46 J.N. Kirkpatrick Regulated Drain Dredging Project Quotes:

Regarding the J.N. Kirkpatrick Regulated Drain #46 dredging project, Attorney Masson opened the following quotes:

Tony Garriott: \$79,516.40- Huey Excavating: \$82,845.00

Thomas Murtaugh stated the quotes would be taken under advisement and if in compliance would be awarded at the end of today's meeting.

Approval of Minutes

August 2, 2017 Regular Minutes

August 2, 2017 Huffman Weimert #125 Regulated Drain Hearing Minutes

David Byers made a motion to approve the August 2, 2017 Regular Drainage Board Meeting minutes and the Huffman Weimert Regulated Drain #125 Hearing minutes as written. Tracy Brown seconded the motion. Motion carried.

Romney Regional Sewer District

George Lewis of GRW Engineers appeared before the board to request approval of the Romney Regional Sewer District project. The site consisted of approximately 2 acres and was located on the north side of C.R. 1200 South southeast of the town of Romney Indiana. Runoff would be collected via swales and conveyed to a bio-retention basin located within the southern portion of the site. The bio-retention basin would outlet into an unnamed tributary of Romney Stock Farm Regulated Drain #109. (A petition to encroach on the Romney Stock Farm Regulated Drain #109 was approved by the Board in the August 2017 regular meeting.) Mr. Lewis stated he was working with the County Highway Department to address any concerns they may have. He noted they were in agreement with the August 28, 2017 Burke memo and would follow up with appropriate documentation. He requested approval at that time. Responding to the Surveyor's inquiry regarding entrance off the highway, Mike Spencer (in attendance) confirmed the Highway Dept. had been consulted and were working with Mr. Lewis. The Surveyor recommended approval with the conditions as stated in the August 28, 2017 Burke memo. David Byers made a motion to approve the Romney Regional Sewer District project with the conditions as stated in the August 28, 2017 Burke memo. Tracy Brown seconded the motion. Motion carried.

Country Squire Subdivision

Justin Frazier with TBIRD Design Services Corp. appeared before the board to request approval for Country Squire Subdivision. The site was located on approximately 5.6 acres of an overall 12 acre site north of US 52 on Morehouse Road. Colony Pines Subdivision was located to the north and Country Squire Estates (apartment complex) to the south of the current project's location. A dry detention basin would be constructed and outlet into the existing storm sewer infrastructure to the north within Colony Pines Development. The detention's runoff was conveyed through the Colony Pines stormwater system and ultimately to the Dempsey Baker regulated drain into the Hadley Lake regulated drain. Mr. Frazier stated they had no objections to the September 6, 2017 Burke memo and requested approval at that time. He confirmed downstream notification was complete and the proof of notification would be submitted to the Surveyor's office for the record.

The Surveyor emphasized the site discharged into an existing storm pipe located in the southwest corner of the Colony Pines site, and that which the northwest dry detention basin for Country Squire Subdivision was located as well. He noted his concern of the emergency routing plan was addressed. The designers went above and beyond what the Ordinance required. They mapped the entire conveyance north through Colony Pines and provided an exhibit of that route as well. The Surveyor pointed out two items of concern. The first was the finding that in the existing condition today the 100 year emergency routing with the pipe being blocked (which was a worst case scenario) the Condominium to the west of the emergency route and immediately north of the Country Squire project, the 100 year elevation was basically at the finished floor elevation then routed out to the street then north to the Dempsey Baker regulated drain. The second item to point out was in the proposed condition, the existing situation would improve. They proposed to regrade the swale through Colony Pines which would give the unit to the west a one foot freeboard elevation and more to the unit on the east side. He thanked the designers for their

public safety point of view and going the extra mile. Responding to the Surveyor's inquiry, Mr. Frazier stated they had every intention to meet with the H.O.A. of Colony Pines Development to obtain an agreement regarding any work planned within the Colony Pines development. The Surveyor then recommended approval with the conditions as stated on the September 6, 2017 Burke memo. Responding to David Byers inquiry of fencing around the pond, the Surveyor confirmed it was a dry detention pond and the design met the ordinance standards. Tracy Brown stated the Board appreciated the extra effort given for the public's future safety. Mr. Frazier acknowledged it was their job to provide plans which was in the best interest of all those involved. Tracy Brown made a motion to approve the Country Squire Subdivision with conditions as stated on the Sept. 6, 2017 Burke memo. David Byers seconded the motion. Motion carried.

Zach Beasley

A&M Thomas Joint Regulated Drain #105 Waiver Request

Surveyor Beasley presented a letter from the Carroll County Surveyor requesting a waiver of an upcoming Maintenance Increase Hearing on the Andrew and Mary Thomas #125 joint regulated drain. The Surveyor stated he and the attorney had reviewed the request. He informed the Board Carroll County had the majority of acreage benefitted within the watershed and were the administrators for this drain. He recommended the Board approve the waiver, noting Carroll County had approximately 95% of the benefitted acreage. David Byers made a motion to grant a waiver of attendance as requested by the Carroll County Surveyor for the Maintenance Increase Hearing on the joint regulated drain known as the Andrew and Mary Thomas #105. Tracy Brown seconded the motion. Motion carried.

Lindberg Village Phase 6 Subdivision Maintenance Bond

The Surveyor presented Maintenance Bond #1231743 in the amount of \$77,417.07, dated Sept. 11, 2017 written by Cincinnati Ins. Co. regarding the Lindberg Village Phase 6 Subdivision for approval. Tracy Brown made a motion to grant approval for Maintenance Bond #1231743 in the amount of \$77,417.07, dated Sept. 11, 2017 written by Cincinnati Ins. Co. for the Lindberg Village Phase 6 Subdivision. David Byers seconded the motion. Motion carried.

John L. Hengst #117 Regulated Drain/ Branch #08

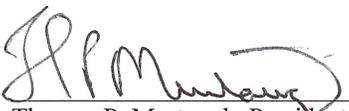
The Surveyor requested a reconstruction hearing for Branch #08 of the John L. Hengst Regulated Drain #117 to be held on November 1, 2017 immediately following the regular scheduled meeting of the Board. David Byers made a motion to set the reconstruction hearing date for Branch #08 of the John L. Hengst Regulated Drain #117 on Nov. 1, 2017 immediately after the monthly meeting of the board. Tracy Brown seconded the motion. Motion carried.

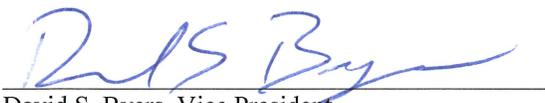
#46 J.N. Kirkpatrick Regulated Drain Dredging Project Quotes

After compliance review of the #46 J.N. Kirkpatrick Regulated Drain Dredging Project Quotes and finding they were in order, Tracy Brown made a motion to award the JN Kirkpatrick #46 Regulated Drain Dredging project to Garriott Excavating in the amount of \$79,516.40. David Byers seconded the motion. Motion carried. Thomas Murtaugh thanked those that submitted a quote for this project.

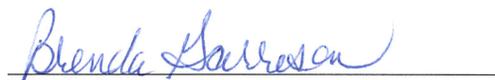
Public Comment

As there was no public comment, David Byers moved to adjourn. The meeting was adjourned.


Thomas P. Murtaugh, President


David S. Byers, Vice President


Tracy A. Brown, Member


Brenda Garrison, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
November 1, 2017
Drainage Board Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Thomas P. Murtaugh, Vice President David Byers, member Tracy Brown, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultant Lenny Noens from Christopher B. Burke Engineering LLC and Drainage Board Secretary Brenda Garrison. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

Approval of Oct 4, 2017 Drainage Board Meeting Minutes

David Byers made a motion to approve the October 4, 2017 Regular meeting minutes of the Drainage Board as written. Tracy Brown seconded the motion. Motion carried.

N.W. Box #12 /Marshall Branch Regulated Drain Dredging Contract

President Tracy Brown referred to the Attorney for the opening of the dredging contract bid regarding the N.W. Box #12 Regulated Drain. He read the bid as follows; Rick Sutton in the amount of \$30,082.51/ Tony Garriott in the amount of \$18,628.25/ Huey Excavating in the amount of \$24,888.00. The President thanked the bidders for their submittals and noted the Project Manager would check the submittals for compliance with the bid specifications. The Board would then award the bid at the end of this meeting.

All State Fastener

Randy Peterson of AbonMarche Consultants and Starr Associates appeared before the Board to present All State Fastener project for approval. The site was located south of US 52 at the southwest corner of Co. Rd. 400 South and Co. Rd. 500 East and consisted of approximately 10.24 acres. The first phase of the project (approximately 4 to 5 acres) would be the construction of a new facility along with parking, drives and an entrance off Co. Rd. 400 South. An overall plan consisted for the entire 10.24-acre site with future phases as well. This project was located within the J.N. Kirkpatrick drainage impact area which required a restricted release rate. Due to several factors underground detention was designed for this site. The emergency route was designed from the southwest corner toward US 52 and southerly to the newly extended J.N. Kirkpatrick Regulated Open Drain. He stated they agreed with the conditions as stated on the October 17, 2017 Burke memo and requested approval at that time. The Surveyor stated approval from INDOT and the County Highway Dept. as well as proof of easement to the JN Kirkpatrick drain outlet was required prior to onsite construction. The Surveyor recommended approval with conditions as stated on the October 17, 2017 Burke memo. There was no public comment. Tracy Brown made a motion to approve with conditions as stated on the October 17, 2017 Burke memo the All State Fastener project. David Byers seconded the motion. Motion carried.

Zach Beasley/Other Business

Maintenance Bonds:

The Surveyor presented the following Maintenance Bonds for acceptance by the Board: Maintenance Bond#1231748 submitted by Merritt Contracting for Concord Ridge Section 1 and written by the Cincinnati Insurance Company in the amount of \$39,011.53 additionally Maintenance Bond#1231749 submitted by Merritt Contracting for Avalon Bluffs Section 2 and written by the Cincinnati Insurance Company in the amount of \$10,966.82 for approval by the Board. David Byers made a motion to approve Maintenance Bond #1231748 for Concord Ride Section 1 and Maintenance Bond #1231749 for Avalon Bluffs Section 2 as submitted by Merritt Contracting and presented by the Surveyor to the Board. Tracy Brown seconded the motion. Motion carried.

Drain Projects:

The Project Manager stated the low bid for the N.W. Box#12/Marshall Branch Dredging Contract submitted by Tony Garriott followed the specifications. Tracy Brown made a motion to accept the Tony Garriott bid of \$18,628.25 for the N.W. Box Drain #12/Marshall Branch Dredging Project. David Byers seconded the motion. Motion carried.

**Drain Project (s) Update:
Upper Berlowitz Stormwater Interim Conveyance Project**

A site visit was conducted on the Berlowitz Upper End Stormwater Conveyance project. The location of the jobsite was between St. Elizabeth Hospital and Indiana University Hospital. Surveyor Beasley, Commissioners Tracy Brown and David Byers, along with Landowner Jerry Schmidt and his realtor Steve Shook toured the construction site and everything is on schedule except for the outlet pipe installation from the first pond to the southwest corner of McCarty Lane as the weather has been an issue lately and caused a bit of a setback. Other than this issue the project was moving along very well. He reminded the public this was a pilot channel.

Cox Vanderkleed Regulated Drain #127 Reconstruction Project

The Surveyor noted the Cox Vanderkleed reconstruction would be started the first part of next week. He noted the Cox Vanderkleed Reconstruction, the Upper Berlowitz construction, and the F.E. Morin Regulated Drain Reconstruction represented two agricultural and one urban drain reconstruction projects this year. He noted a total of 4 Urban Drains and approximately 33 miles of tile reconstruction projects have been completed since 2010.

There was no public comment.

David Byers made a motion to recess and reconvene after the Drain Maintenance Hearings scheduled to follow this meeting. Tracy Brown seconded the motion. Motion carried. The regular Drainage Board meeting would reconvene after the scheduled Drain Maintenance Hearings have been held.

Reconvened:

Harrison High School Tennis Complex

Pat Jarboe with TBIRD Design Services appeared before the Board to present the Harrison High School Tennis Complex project (ten court complex). The site was located at the east side of Co. Rd. 50 West between Co. Rd. 500 North and Co. Rd. 600 North and on the south side of the Grant Cole Regulated Drain and consisted of approximately 2.7 acres. He noted the School Corporation was relocating the tennis courts to south of the Grant Cole Drain. Due to multiple detention ponds etc. onsite, he requested the approval to combine the multiple drainage projects into one. He stated they conferred with the October 27, 2017 Burke memo and were currently in the process of receiving a DNR (Department of Natural Resources) permit for construction within a floodway for the access walkway. He noted nonnative species would be removed from the corridor for security and safety issues. He stated the bridge would stay located over the ditch and would be for emergency access only. The School continues to outgrow itself and creative thinking is warranted regarding placement of additions etc. onsite. The Surveyor reiterated detention would be provided as part of the future expansion projects and agreed with their plans. They have met and reviewed the proposed plans for any potential problems to downstream landowners in the interim. He recommended approval with the conditions as stated on the October 27, 2017 Burke memo. There was no public comment. David Byers made a motion to approve the Harrison High School Tennis Complex with the conditions as stated on the October 27, 2017 Burke memo. Tracy Brown seconded the motion. Motion carried.

Public Comment

There was no public comment. David Byers made a motion to adjourn. The meeting was adjourned.



Thomas P. Murtaugh, President



David S. Byers, Vice President



Tracy Brown, Member



Brenda Garrison, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD

July 11, 2018

Drainage Board Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President David Byers, Vice President Tracy Brown, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC and Drainage Board Executive Administrator Brenda Garrison. Evan Warner-G.I.S. Technician and James Butcher-Project Manager, both with the Surveyor Office, were also in attendance.

Approval of Minutes

Thomas Murtaugh made a motion to approve the June 6, 2018 Drainage Board Meeting Minutes. Tracy Brown seconded the motion. Motion carried.

Belle Terra Subdivision

Justin Frazier with TBird Design Services appeared before the Board to present Belle Terra Subdivision for approval. The site was located at the intersection of Co. Rd 75 East and Co. Rd. 600 North in the northwest quadrant and consisted of approximately 27.6 acres. The site drained northwest through a swale into a tributary of Burnett Creek. The subdivision was residential and consisted of 77 lots with an outlot for a clubhouse and pool. The infrastructure included a detention pond in the northwest corner which would provide storm water quantity and peak discharge control as well as storm water quality. Responding to Thomas Murtaugh's inquiry, Justin stated there was a single pond which was the outlet for the clubhouse. He requested construction approval at that time. The Surveyor noted the notification of downstream owners had not been submitted for record. Mr. Frazier stated he had the notification with him today and would submit it to the secretary for the record. The Surveyor then recommended construction approval with conditions as stated in the July 2, 2018 Burke memo. There was no public comment. Thomas Murtaugh made a motion to grant construction approval with conditions as stated in the July 2, 2018 Burke memo. Tracy Brown seconded the motion. Motion carried.

Wea Township Fire Department Accessory Building

Justin Frazier with TBird Design Services appeared before the Board to present the Wea Township Fire Department Accessory Building for construction approval. The project was an addition to the rear of the fire department existing building. Access to the site would be from the east side of the existing department site. The building would consist of 5000 square feet. A detention pond would be located in the eastern portion of the site and provide storm water quality as well as some detention. He noted they did not object to any of the comments on the July 5, 2018 Burke memo and requested approval at that time. The Surveyor noted there was a row of trees in the eastern portion of lot where the project was planned, and those trees would be left as is. The site was allowed to direct release into Wea Creek due to the proximity of the site to the Creek While the detention pond in the northeastern corner of the site was mainly for storm water quality, it would also detain water. The normal drainage path was along the north side to the roadside ditch. He recommended construction approval with conditions for the Wea Township Fire Department Accessory Building as stated in the July 5, 2018 Burke memo. Responding to Thomas Murtaugh's inquiry, Mr. Frazier stated the project would not involve the flood plain issue and would not include any of that area. There was no public comment. Tracy Brown made a motion to grant construction approval for the Wea Township Fire Department Accessory Building with conditions as stated in the July 5, 2018 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Venture Site Improvements (formally TRW)

Roger Ward with Roger Ward Engineering appeared before the Board to present the Venture Site Improvement project for approval. Venture Improvement project site was previously known as TRW Steering Facility. The existing site was located within the Ichiya Industrial Subdivision on a portion of Tract A and on the entire Tract B. This project would consist of approximately 4.27 acres for the planned improvements. Mr. Ward stated the drainage pattern would not be changed as previously approved in the Master Plan. Runoff would continue to flow to the existing detention basins via sheet flow and through existing swales. No detention was required. The site has an indirect outlet to the J.N. Kirkpatrick Regulated Drain. Parking to the east side was previously approved by the Board. Mr. Ward requested construction approval from the Board. The Surveyor stated in the initial design and review process detention basins were formally approved and allowed for additional expansion. He recommended construction approval with the conditions as stated on the June 29, 2018 Burke memo. There was no public comment. Tracy Brown made a motion to grant construction approval with the conditions as stated in the June 29, 2018 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Three Meadows Section 1 Phase II

Kyle Betz with Fishers and Associates appeared before the Board to present Three Meadows Section 1 Phase II for approval. The site was located on the east side of Co. Rd 300 West (Klondike Road) south of the Lindberg Road intersection and will consist of 30 lots on approximately 12 acres. Mr. Betz stated the previously approved Phase I portion of the project included the drainage infrastructure for Phase II. He stated the majority of Phase II's runoff would drain south to Phase 1 drainage infrastructure. The remaining runoff would drain into a ravine along the eastern edge of the site. The offsite areas from the north and the west would bypass the development through unnamed tributaries. Developed runoff would be collected into inlets and storm sewers routed through a series of three dry detention basins. The site would ultimately discharge into an unnamed tributary to Jordan Creek at the southeast portion of site. This was the same drainage design previously approved by the Board with Phase I. Mr. Betz stated they agreed with the July 2, 2018 Burke memo and requested construction approval from the Board. Responding to the Surveyor's inquiry regarding the pad elevation of Lot 63, Mr. Betz stated the design was changed on the Phase 1 construction plans for Lot 63 due to this issue. He encouraged the Surveyor to check for the change when he signed the construction plans for Phase 1. There was no public comment. The Surveyor recommended construction approval with the conditions on the July 2, 2018 Burke memo. Thomas Murtaugh made a motion to grant construction approval for Three Meadows Section 1 Phase II with the conditions as stated on the July 2, 2018 Burke memo. Tracy Brown seconded the motion. Motion carried.

**F-Lake Detention Facility Detention Agreement
Raintree Apartments/Gary Schroeder**

The Attorney stated this was a modified F-Lake Detention Agreement approved in March 2018 by the Board for Raintree Apartments (Gary Schroeder). He noted a couple of minor changes were made and agreed upon since the March approval. The substance stayed the same. It stated the remaining acreage on the site would need 5.25-acre feet of detention in the F-Lake facility at \$15,000 per acre foot which would be paid when the site was developed. The changes were simply that Raintree assigns would be covered under this agreement and clarification of language regarding the transporting of water to F-Lake Facility and the responsibility of owners in the future for payment. He stated Mr. Schroeder had signed the modified agreement and the Board at their discretion was free to sign as well. The agreement today replaced the agreement approved in March of 2018. Gary Schroeder of Raintree Apartments approached the Board. He stated he appreciated the work on this matter and thanked the Surveyor for his time on the issue. The Surveyor stated this agreement was 20 years in the making and was pleased the parties were able to work out the details and finalize the agreement. The document would be recorded by Mr. Schroeder once signed. There was no other public comment. Tracy Brown made motion to approve the new agreement as presented today between the Tippecanoe County Drainage Board and Raintree Apt's. Thomas Murtaugh seconded the motion. Motion carried.

Mary McBeth Regulated Drain Hearing Request

The Surveyor requested a Reconstruction Hearing for October 3, 2018 contingent upon discussion with Montgomery County Surveyor Office/Drainage Board regarding this drain. Less than 200 acres of the overall approximately 1600 acres watershed was located in Montgomery County. He planned to request a waiver of rights to Montgomery County due to the small amount of acreage in their county. However, he would like to get the hearing scheduled today. Tracy Brown made a motion to set a Reconstruction Hearing for the Mary McBeth Joint Regulated Drain on October 3, 2018 immediately following the regular 10:00 am meeting of that day. There was no public comment. Thomas Murtaugh seconded the motion. Motion carried.

Public Comment

As there was no public comment, Thomas Murtaugh made a motion to adjourn. The meeting was adjourned.


David S. Byers, President

Absent
Tracy A. Brown, Vice President


Brenda Garrison, Secretary


Thomas P. Murtaugh, Member

TIPPECANOE COUNTY DRAINAGE BOARD
October 3, 2018
Drainage Board Meeting Minutes

Those present were:

Tippecanoe County Drainage Board Vice President Tracy Brown, member Thomas P. Murtaugh, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC and Drainage Board Executive Administrator Brenda Garrison. James Butcher-Project Manager, was also in attendance. President David Byers was absent.

Approval of Minutes

Thomas Murtaugh made a motion to approve the September 19, 2018 Drainage Board meeting minutes as written. Tracy Brown seconded the motion. Motion carried.

**Avalon Bluff Section 3
(previously aka Hunters Crest Sec 4)**

Robert Langager from Schneider Corporation appeared before the Board to present the Avalon Bluff Section 3 project for construction approval. While this was the final phase of the previously-approved Hunters Crest Subdivision project (approved in 2005), it was treated as a standalone project. The site was located west of Concord Road between Co. Rd.'s 450 and 500 South and consisted of approximately 68 acres. The infrastructure would include swales and drainage pipes to direct runoff to two existing and one proposed pond.

He noted the overall site had two outlets. The site's runoff from the northern portion outlet indirectly through ponds 1 and 2 within Hunters Crest Subdivision to the JN Kirkpatrick Regulated Drain. A proposed pond 3 was different from the Hunters Crest Master Plan approved in 2005. Therefore, it was designed to meet the current Storm Water Ordinance. The southern portion of the site's runoff routed through pond 3 and ultimately outlet indirectly to Dismal Creek Regulated Drain via two outlets; one to the southwest and one to the east. Release rates were lower than the allowable 10 and 100-year rates. At that time, Mr. Langager requested construction approval for the project as submitted.

The Surveyor stated an informal meeting was held with downstream landowners who own a part of the pond immediately south of the 15inch culvert which crossed under Co. Rd. 500 South. The project's designer, developer, County Surveyor, Commissioner David Byers and David Eichelberger, Engineer Consultant for the Drainage Board were in attendance as well. The landowners expressed their gratitude regarding the meeting as their concerns were addressed during the meeting. He recommended construction approval for Avalon Bluffs Sec. 3 with the conditions as stated on the October 1, 2018 Burke memo. There was no public comment. Thomas Murtaugh made a motion to grant construction approval with the conditions as stated on the October 1, 2018 Burke memo. Tracy Brown seconded the motion. Motion carried.

Zach Beasley / Other Business

Continued: Detention Basin Signs

The discussion was continued from the September meeting regarding the J. Berlowitz Basin/pond #01 located on the SE corner of Co. Rd. 550 East and Co. Rd. 50 South. Complaints had been received regarding public safety and environmental concerns (insect population, swimming and fishing). Research was done by the Surveyor regarding the public safety issue and he found fishing from the banks of a detention pond in urbanized areas was not uncommon in this state and others. While at times there may be bank erosion issues (due to foot traffic), from a technical aspect he stated he did not have an issue with fishing in the detention basin/pond. He stated he felt it would not be easy to stop everyone from entering the area and fishing from the bank. He stated he felt it could be an amenity to the area if fishing was allowed. He recommended "from a technical standpoint" to allow fishing from the banks only- no boat fishing. He would post the signs he presently has which state no swimming or skating. Furthermore, if the Board would allow fishing of the Berlowitz Basin/pond #01 he would design a schematic drawing of the location for a small parking area and a public access drive off the south side of Co. Rd. 50 South. He noted another component was the legal liability issue. He then referred to Attorney Masson regarding this. Attorney Masson recommended if the Board allowed fishing to install a sign (in addition to the other signage) that stated along the lines of these activities are at your own risk. He stated he would look at the liability issue and provide verbiage for additional signs.

Responding to Commissioner Murtaugh's inquiry, the Surveyor stated his office has a mowing contract for several of the County owned basins/ponds. They are mowed annually one time to assist in keeping the woody vegetation down to avoid beaver activity. As this is the second year of the mowing cycle. The area of the Berlowitz basin/pond looks very nice and like a "park facility". The contract for mowing was a six-year contract and would be reviewed at the end of the sixth year. Commissioner Brown stated the Surveyor had a plan moving forward, the first part was to install the existing signs on hand, address the safety issues in terms of foot traffic and otherwise requested the Surveyor keep the Board informed of any meetings with the surrounding residents regarding this issue.

Public Comment

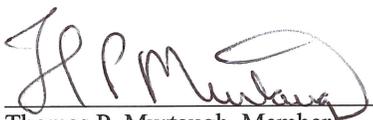
As there was no public comment, Thomas Murtaugh made a motion to adjourn. The meeting was adjourned.



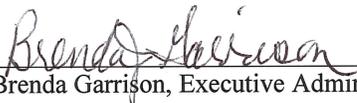
David S. Byers, President



Tracy A. Brown, Vice President



Thomas P. Murtaugh, Member



Brenda Garrison, Executive Administrator

TIPPECANOE COUNTY DRAINAGE BOARD

January 9, 2019

Drainage Board Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy A. Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC and Drainage Board Executive Administrator Brenda Garrison. James Butcher, Surveyor Office Project Manager and Tim Walters, Surveyor's office GIS Technician were also in attendance.

Election of 2019 Drainage Board Officers

Attorney Masson opened the floor to accept nominations for the 2019 President of the Drainage Board. Thomas Murtaugh made a motion for Tracy Brown to be the 2019 President of the Drainage Board. David Byers seconded the motion. Motion carried. Attorney Masson then opened the floor for nominations of 2019 Vice President of the Board. David Byers made a motion for Thomas Murtaugh to be the 2019 Vice President of the Drainage Board. Tracy Brown seconded. Motion carried.

Appointment of 2019 Drainage Board Executive Administrator

Tracy Brown opened the floor for nominations of the 2019 Drainage Board Executive Administrator. Thomas Murtaugh made a motion to appoint Brenda Garrison as the 2019 Executive Administrator for the Drainage Board. David Byers "wholeheartedly" seconded the motion. Motion carried.

Approval of December 5, 2018 Drainage Board Minutes

Thomas Murtaugh made a motion to approve the December 5, 2019 Drainage Board minutes as written. David Byers seconded the motion. Motion carried.

Alexander Ross Regulated Drain #68 Outlet Improvement Reconstruction Contract Award

Surveyor Beasley stated he had conferred with the attorney regarding the Bids received for the A. Ross Reconstruction project as they were more than 20% of the construction estimate. Attorney Masson stated he had reviewed the bids and, in his opinion, stated they could be accepted as presented. The Surveyor noted reconstruction costs would be paid from the Tax Increment Finance Fund (TIFF) monies and would not be paid from the General Drain Improvement fund (GDI) as is the normal reconstruction process per Indiana Drainage Code. Therefore, the bids were determined to be acceptable and the project would move forward. The Surveyor stated he reviewed similar projects across the state and found several reasons for higher bid prices. The current climate raise in prices of materials and time of year, all factored into the bids. He stated Atlas was the low bidder (\$929,950), and noted they had selected Lowe Construction as their jack and bore subcontractor. He stated the Surveyor's office had worked with Lowe on two other Urban Drain reconstruction projects (Br#11 SW Elliott and the #02 J. B. Anderson Drains) He then recommended awarding the Alexander Ross #68 Outlet Improvement Reconstruction Project Contract to Atlas Excavating. David Byers made a motion to award the Alexander Ross #68 Outlet Improvement Reconstruction Contract to Atlas Excavating in the amount of \$929,950. Thomas Murtaugh seconded the motion. Motion carried.

Alexander Ross #68 Regulated Drain Outlet Improvement Construction Observation Contract

The Surveyor recommended to the Board to award the Construction Observation Contract for the Alexander Ross #68 Outlet Improvement Reconstruction Project to TBird Design Services as submitted. Thomas Murtaugh made a motion to award the observation contract by TBird Design Services in the amount of \$75,000. David Byers seconded the motion. Motion carried.

Projects:

CR450/430 South Reconstruction

Mike Peterson of VS Engineering approached the Board to present the CR 450/430 South Reconstruction project for approval. The site was located at the intersection of US 52 and extended approximately one mile east to New Castle Road. Two existing 90-degree turns would be aligned on said road. There would be resurfacing and widening of the road to 22 feet with new 5-foot shoulders (3-foot aggregate and 2-foot grass). In order to keep access open to local businesses on the road, the project would be conducted in 4 phases. The new alignment would drain into a detention basin designed for the project as the S.W. Elliott Drain tile in the area was not designed for the additional runoff caused by the increase of 3 acres of impervious area. There was no public comment. Mike Spencer Highway Supervisor (attendee) confirmed the project had been reviewed by his office as well. The Surveyor recommended construction approval for CR450/430 South Reconstruction project per the December 27, 2018 Burke memo. David Byers made a motion to grant construction approval per the December 27, 2018 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

McCutcheon High School Renovations and Additions

Tracy Brown stated the McCutcheon High School Renovation and Addition project was pulled off the Agenda by the designer's request and would be placed on the February 13, 2019 Drainage Board Agenda. There was no public comment.

Avalon Bluffs Section Three (Tabled from January meeting)

Robert Langager approached the Board to review the Avalon Bluffs Section Three for construction approval by the Board. (This project was heard during the October 3rd and December 5th, 2018 Drainage Board meetings). The project was continued from the December 5th, 2018 Drainage Board meeting. Mr. Langager stated this was approximately a 44-acre site with a 200+ lot subdivision and treated as a standalone project due to the timing of design. It was noted that this portion was the final phase of the Hunters Crest Development started in 2005. Portions of the site would drain to existing ponds 1 and 2 in the Hunters Crest Subdivision and an additional Pond 3 would be added to meet the current ordinance standards. Pond 3 would outlet to the southwest and to the east. Storm drainage pipes and swales would direct the runoff to existing and proposed ponds. The northern portion runoff would outlet indirectly to the J.N. Kirkpatrick Regulated Drain and the southern portion would outlet indirectly to the Dismal Creek Regulated Drain. There was an issue with landowner notifications last month therefore it was tabled until this month for consideration of approval. He stated, after the December Board meeting, a meeting was held with those landowners and any issues they had were addressed. Design changes were made to the eastern outlet control structure due to their concerns and he noted they approved the new design. He then requested construction approval for this project. The Surveyor stated he held a second meeting with the downstream landowners to the southwest and southeast of the project and felt the concerns were met as well. There was no public comment. He recommended construction approval according to the January 7, 2019 Burke memo to the Board. Thomas Murtaugh made a motion to grant construction approval as outlined in the January 7, 2019 Burke memo. David Byers seconded the motion. Motion carried

2019 Contracts:

The Surveyor presented the 2019 Legal Services Contract from Hoffman, Luhman and Masson PC with a slight increase (*from 2014 fees*), the 2019 Drainage Board Engineer Review Services for Tippecanoe County from Christopher B. Burke Engineering LLC (CBBEL) with no increase, the 2019 Drainage Board Engineer Review Services for Tippecanoe County from Beutler Fairman and Sieufert (BFS) with a 3% increase for approval by the Board. There was no public comment. David Byers made a motion to approve the 2019 Legal Services Contract from Hoffman, Luhman and Masson PC. Thomas Murtaugh seconded the motion. Motion carried. David Byers made a motion to approve the 2019 Drainage Board Engineer Review Services for Tippecanoe County from Christopher B. Burke Engineering LLC. Thomas Murtaugh seconded the motion. Motion carried. There was no public comment. David Byers made a motion to approve the 2019 Drainage Board Engineer Review Services for Tippecanoe County from Beutler Fairman and Sieufert. Thomas Murtaugh seconded the motion. Motion carried. There was no public comment.

Amanda Kirkpatrick Regulated Drain Reconstruction Financial Assistance Satisfaction of Mortgage

The Surveyor presented a Release of Mortgage document regarding the Amanda Kirkpatrick Drain Reconstruction Financial Asst. Contract with Forest and Marcia Goings. The Attorney noted they had met their financial obligations therefore their mortgage was to be released. Thomas Murtaugh made a motion to approve the Release of Mortgage for Forest and Marcia Goings as presented. David Byers seconded the motion. Motion carried.

Surveyor Zachariah Beasley:

The Surveyor presented the Surveyor's 2019 Regulated Drain Classification Status report to the Board. He recommended the Report be approved as submitted. He noted once approved, the drain status list is submitted to the Auditor for 2019 drain assessment collections. David Byers made a motion to approve the Drain Classification and Drain Status List as submitted by the Surveyor. Thomas Murtaugh seconded the motion, Motion carried.

Petition to Reconstruct /Delphine Anson Regulated Drain #4

The Surveyor presented to the Board a Petition to Reconstruct on the Delphine Anson Regulated Drain #4 submitted to his office by Doug Morehouse landowner within the Anson Drain Watershed. He recommended acceptance and referral by the Board. Thomas Murtaugh made a motion to refer the Delphine Anson Petition to Reconstruct back to the Surveyor for his Report. David Byers seconded the motion. Motion carried. There was no public comment.

Bonds:

The Surveyor presented the following project Maintenance Bonds for approval from the Board. Blackthorne Subdivision Ph. 2 Part 2, Lots 72-75/Maint. Bond#106976463 /by Travelers Casualty Ins./ submitted by Fairfield Contractors/ Amt: \$31,715.00: Hickory Ridge Ph.3 Sec.1/Maint. Bond#1074658/by Hanover Ins. Co./submitted by Atlas Exc./Amt.: \$18,624.20: Barrington Woods Sec.1/Maint. Bond#1073063/by Hanover Ins. Co./submitted by Atlas

Exc./Amt.: \$40,862.00: Country Squire Sec.1/Maint. Bond#9304959/by Fidelity and Deposit Co./submitted by Country Squire Assoc LLC/Amt.: \$25,104.00. Thomas Murtaugh made a motion to approve the four Bonds as presented by the Surveyor for approval. David Byers seconded the motion. Motion carried. There was no public comment.

February 6, 2019 Drainage Board Meeting

Surveyor Beasley stated the February 6, 2019 Drainage Board meeting date had a conflict with AIC Legislative Conference. He recommended changing the February meeting date to February 13, 2019 at 10:00 a.m. David Byers made a motion to approve the February meeting date as the 13th for the monthly Drainage Board meeting. Thomas Murtaugh seconded the motion. Motion carried.

Public Comment

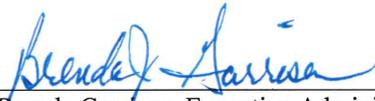
As there was no public comment. David Byers made a motion to adjourn. The meeting was adjourned.



Tracy A. Brown, President



Thomas P. Murtaugh, Vice President



Brenda Garrison, Executive Administrator



David S. Byers, Member

TIPPECANOE COUNTY DRAINAGE BOARD

March 13, 2019

Drainage Board Meeting Minutes

Those present were:

Tippecanoe County Drainage Board President Tracy A. Brown, Vice President Thomas P. Murtaugh, member David S. Byers, County Surveyor Zachariah Beasley, Drainage Board Attorney Doug Masson, Engineering Consultants; Dave Eichelberger from Christopher B. Burke Engineering LLC, Mabelle Watts from Butler Fairman and Siefert and Drainage Board Executive Administrator Brenda Garrison. James Butcher, Surveyor Office Project Manager and Tim Walters, Surveyor's office GIS Technician were also in attendance.

Approval of Minutes

Thomas Murtaugh made a motion to approve the February 13, 2019 Drainage Board Meeting Minutes as written. David Byers seconded the motion. Motion carried.

McCutcheon HS Renovation and Addition

Paul Nashert with A&F Engineering appeared before the Board to present the McCutcheon H.S. Renovation and Addition project for approval. The site was located on the east side of Old US Hwy 231 north of CR. 500S (currently on the McCutcheon High School Campus site). He noted due to the growth in Tippecanoe County the McCutcheon HS. has the need to expand with three building additions, a new concessions/locker building, ticket booths, grandstand and parking lot expansion with renovations. A new access drive from CR 500 South was planned for the additional parking lot to ensure safety by separating the bus and vehicular traffic. He noted due to the additional impervious area causing additional stormwater overland flow, The Surveyor requested a storm sewer system designed to include a swale located in the northern portion of the site. This would safeguard the homes near the campus in that area and provide enough capacity to convey the additional flow- in addition to providing one foot of freeboard to the adjacent properties. It was noted that a revised stormwater maintenance agreement was agreed upon between County Attorney Doug Masson and TSC Attorney Mark DeYoung which was more specific to the TSC (Tippecanoe Schools Corporation) Campuses. Mr. Nashert requested approval for this project. The Attorney interjected that Condition #3 on the January 3, 2019 BFS (Beutler Fairman Seifert) Review Memo had been agreed upon by both attorneys (Dr. Bd. and TSC) and would be signed when completed. The agreement was modified to clarify there were no third-party beneficiaries among other items and it was solely between the County and the School Corporation. Mr. Nashert stated the modified agreement was included in the OP Manual submitted to the Surveyor office for consideration today. There was no public comment. The Surveyor stated the project was close to be completed and he recommended conditional approval as stated on the January 3, 2019 BFS Review Memo. Tom Murtaugh made a motion to grant approval with the condition as stated on the January 3, 2019 BFS review memo for the McCutcheon HS Renovation and Additions. David Byers seconded the motion. Motion carried.

Lindberg Point Villas

Tim Wright of Fisher and Associates appeared before the Board to present Lindberg Point Villas for approval. The site was located approximately ¼ north of the intersection of Lindberg and Klondike Roads, specifically on the west side of Klondike Road. He noted he met with both the Surveyor's office and the Highway office prior to today's meeting to ensure there were no negative effects discharging into the Klondike Road right of way. He noted they agreed with the March 5, 2019 Burke memo and asked for approval at that time. There was no public comment. The Surveyor stated the ultimate emergency breakout and routing will stage and back up into the surface swales along the southwest and northwest northerly boundaries of the small site. Once it reaches approximately the 694 elevation it would break out to the south along the western right of way of Klondike Road and traverse south until it gets to the northern side of Lindberg Subdivision Phase 6, then turn and traverse west to the detention basin in Lindberg Village. He then recommended construction approval with conditions as stated in the March 5, 2019 Burke review memo for Lindberg Point Villas. Thomas Murtaugh made a motion to grant construction approval with the conditions as stated on the March 5, 2019 Burke review memo. David Byers seconded the motion. Motion granted.

Benjamin Crossing Stormwater Outlet/Outfall

Pat Jarboe of TBIRD Design Inc. appeared before the Board to request approval for the Benjamin Crossing Stormwater Outfall project. The site was located on the east side of CR 250East (Concord Rd.) Mr. Jarboe stated Benjamin Crossing subdivision was developed in 2003 and at that time the subdivision did NOT have a defined outlet. A temporary outlet with

twin pipes was constructed to the open ditch portion of the J.N. Kirkpatrick Regulated Drain (which crossed the site) as the temporary outlet. At that time (2003) the JN Kirkpatrick Regulated Drain was tile at that location. In 2003 a 36" RCP outlet pipe from the northeast pond to the J.N. Kirkpatrick open ditch was designed to be completed once the said ditch was converted to an open drain. The current plan is to vacate the temporary outlet drain system and easement across the property. A new permanent easement would be created for the outlet pipe and existing spillway from the Benjamin Crossing pond. He stated they agreed with the March 7, 2019 Burke memo and requested approval at that time. The Surveyor stated on the latest construction plans submitted there was riprap showing on the bottom of the JN Kirkpatrick open ditch. He stated the rip rap on the opposite bank of the outlet pipe must be a minimum high as or vertically two foot above the top of pipe to protect the banks. He noted he reviewed these plans carefully for the protection of surrounding landowners. There was no public comment. The Surveyor recommended construction approval for the Benjamin Crossing Subdivision Storm Outlet/Outfall with the conditions as stated on the March 7, 2019 Burke memo. Thomas Murtaugh made a motion to grant construction approval with the conditions as stated on the March 7, 2019 Burke review memo. David Byers seconded the motion. Motion granted. Responding to David Byers inquiry, the Surveyor noted a vacation of the old tile of the JN Kirkpatrick drain no longer is used as it was a housekeeping item he hoped to get to soon. It would require a hearing to vacate that tile portion which no longer is used. He noted it was included on his overall drain classification report presented to the Board at the first of this year.

Maintenance Bond/ Stonehenge Phase 4

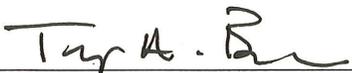
The Surveyor presented Stonehenge Phase 4 Maintenance Bond#10744700 submitted by Atlas Excavating and written by Hanover Insurance in the amount of \$21,801.92 for approval by the Board. David Byers made a motion to grant approval for the maintenance bond as presented by the Surveyor. Thomas Murtaugh seconded the motion. Motion granted.

Zach Beasley

The Surveyor requested a June landowner hearing to follow directly after the regular monthly meeting held on June 5, 2019 regarding the John Bone Private Drain. His noted his office received a Petition to Establish the John Bone Private Drain as a County Regulated drain from landowner Dean Craig. Thomas Murtaugh made a motion to hold a landowner hearing on the John Bone Private Drain to establish it a County Regulated Drain on June 5, 2019 directly after the regular 10:00 am meeting scheduled. David Byers seconded the motion. Motion carried.

Public Comment

Responding to Pat Jarboe's inquiry, the Attorney stated he would be comfortable- if the stormwater maintenance agreement revisions between TCS Attorney Mark DeYoung and himself- would be used for all TCSC campuses. There was no other public comment. Thomas Murtaugh made a motion to adjourn. The meeting was adjourned.



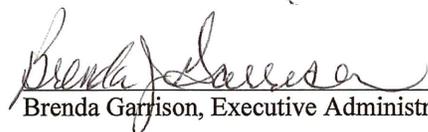
Tracy A. Brown, President

Absent on 4-10-19 Approval

Thomas P. Murtaugh, Vice President



David S. Byers, Member



Brenda Garrison, Executive Administrator