

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD OCTOBER 4, 1972.

The Tippecanoe County Drainage Board held it's regular meeting on October 4, 1972, at 9:00 o'clock a.m., with the following members present: Bruce Osborn, Dale Remaly, Edward Shaw, Dan Ruth, Fred Hoffman and Gladys Ridder.

Minutes Approved Upon motion of Bruce Osborn, seconded by Dale Remaly and made unanimous by Edward Shaw, the minutes of the September 6, 1972 meeting were approved as read.

Other business of the Board The Engineer reported to the Board his findings in Clarks Hill with reference to the J. B. Anderson ditch. Mr. Ruth said he would see that the legal drain would be repaired in all locations where there is any possibility of an obstruction. He also stated that he felt sure that the Anderson Ditch could not possibly solve the storm water problem in Clarks Hill. It was his opinion that the ditch was never intended as a storm drain for the town.

The problems in the J. & J. Subdivision were discussed. It was decided that maintenance money could not be used to repair the driveways that were in need.

9:30 a.m. Charles E. Daugherty Ditch Hearing The engineer opened the hearing on the Charles E. Daugherty ditch by reading his report and making his recommendations to the Board. There were no remonstrances and only one person attended the hearing. Mr. Eber Eugene Johnson, who attended, was very much in favor of a maintenance fund being established and because he owned 38% of the ditch he felt he had every reason to speak. Upon motion by Bruce Osborn, seconded by Dale Remaly and made unanimous by Edward Shaw, a \$1.00 per acre assessment was established.

10:30 a.m. Hearing on the Clyde W. Richards Ditch The engineer opened the hearing on the Clyde W. Richards ditch by reading his report to the Board and read a letter from all the landowners in the area asking the Board to vacate the ditch and let them take care of it themselves. With all in agreement, Mr. Osborn so moved to vacate the C. W. Richards ditch. The only person in attendance was Boyle D. Moore who had carried the letter.

"BE IT RESOLVED by the Tippecanoe County Drainage Board that the Clyde W. Richards Ditch, located in Lauramie Township, Tippecanoe County, Indiana, be, and the same hereby is vacated."

11:30 a.m. Hearing on the S. K. Richards Ditch The Engineer opened the hearing on the S.K. Richards ditch by reading his report and making his recommendations to the Board. No one from the drainage area attended and Mr. Ruth read a letter from all the landowners in the watershed area asking the Board to vacate this ditch. Mr. Osborn so moved, Mr. Remaly seconded and Mr. Shaw made it unanimous to grant their request and vacated the ditch. "BE IT RESOLVED by the Tippecanoe County Drainage Board that the S. K. Richards Ditch, located in Lauramie Township, Tippecanoe County, Indiana, be, and the same hereby is vacated."

1:30 p.m. William J Walters Ditch Hearing The engineer opened the hearing on the William J. Walters ditch by reading his revised report with the changes in acreage from the original 4996.32 A. to 2112.24 acres. Mr. John Nagle was the only one in the watershed area that appeared. His acreage was subject to change as Mr. Ruth had gone out prior to the hearing and said only 27 Acres of Mr. Nagle's 50 acres that were assessed to the Walters ditch were also assessed on the Stewart ditch in White County and the Engineer said he felt it would be fair to let her acreage be assessed on the Stewart Ditch. Upon motion by Bruce Osborn, seconded by Dale Remaly and made unanimous by Edward Shaw, a \$1.00 per acre assessment was established.

Ditches Referred The Board referred the following ditches to the Engineer for preparing a schedule of assessments for a maintenance fund: James Vanderkleed, Wabash Twp., Elliott Pearson, Washington Twp., Calvin Peters, Perry Twp., Luther Lucas, Sheffield Twp., Arthur E. Richard, Perry Twp., James L. McClure, Wabash Twp.

Order & Finding and Certificates of Assessment Upon the establishment of a maintenance fund for the Charles E. Daugherty and the William J. Walters ditches, the Board then signed the Order and Findings and the certificates of assessment.

Upon motion made and carried the meeting adjourned.

Bruce Osborn
Bruce Osborn, Chairman

Dale Remaly
Dale Remaly, Vice Chairman

Edward J. Shaw
Edward Shaw, Board Member

ATTEST:
Gladys Ridder
Gladys Ridder, Exec. Secretary

The regular meeting of the Tippecanoe County Drainage Board held it's meeting in the County Commissioners Room in the Tippecanoe County Court House at 9:00 a.m., on Wednesday, February 7, 1973. Present at the meeting were: Bruce Osborn, Robert Fields, Edward Shaw, Dan Ruth, Fred Hoffman and Gladys Ridder.

Minutes Approved

Upon motion by Edward Shaw, seconded by Bruce Osborn and made unanimous by Robert Fields the minutes of the January 3rd, 1973 meeting be approved as read.

Ditches
Referred to
Engineer

Several Ditches were referred to the Engineer to set up for a maintenance fund. The Alexander Ross ditch in Fairfield and Wea Twps, the Martin V. Erwin Ditch, in Shelby Twp., James Sheets ditch in Tippecanoe Twp. the County Farm Ditch in Tipp. and Wabash Twps. and the Joseph Sterrett ditch in Tippecanoe Twp.

Abe Smith
Ditch Maintenance
Hearing
9:30a.m.

The Engineer opened the hearing on the Abe Smith ditch located in Perry Twp. His report and recommendations were as follows:

MAINTENANCE REPORT
ABE SMITH LEGAL DRAIN

After spending considerable time on the site of the ditch, and discussing the ditch with a number of the property owners in the area it is the judgement of the Surveyor that a maintenance fund should be established on this ditch with the following provisions.

The Drainage Board should classify that portion of the main ditch west of road 850E and open ditch and extend the reconstructed branch to it. This could be accomplished over a period of years with maintenance funds as they became available.

This ditch consists of 5439 Feet of main line tile and approximately 1000 feet of branch at the present time there is no open tile on this ditch.

The area served by this ditch is 306.68 acres and will bring in \$319.38 per year.

At the present time there are no charges against this drain.

/S/ A. D. Ruth, Jr.
A. D. Ruth, Jr., Tippecanoe
County Surveyor

Those in attendance were: Alva Stime, Clarence Behringer, Omer Murphy, Dale Remaly and Dich Welch.

Many personal conflicts entered into this ditch hearing as was brought out in the oral remonstrances. No remonstrance had been filed prior to the hearing. After

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listening to all who wished to voice their opinion and after it was clear that on their own they could never reach any decision, the Board decided to do what they felt best for all and voted to establish a maintenance fund of \$1.00 per acre.

The Engineer suggested that the tile run 40' West of 800E and recommended the following corrections in acreage: Omer Murphy's 3A assessment in the NE of Sec. 2 be removed and out of a 47.86A tract only 15A drain into the Smith and out of a 50.56A tract only 5A drain into the Smith Ditch.

John C. Amstutz
Ditch
Hearing
10:15a.m.

The Engineer opened the hearing on the John C. Amstutz ditch by reading his report and making his recommendations to the Board. He suggested including the following acres in this watershed for they are drained by this ditch:

- McCormick, Mary F.
- East Tipp School Bldg. Corp.
- Scharer, Daniel & Penelope A.
- Chaney, Larry J & Sue L.
- Fisher, Thomas R & Lillian J.
- Martin, Buel C & Wanda C.
- Temple, Robert H & Hazel
- Temple, Richard G. & Beverly A.
- Martin, Samuel L & Mabel
- Fields, Robert F & Faye L.
- Tipp. School Corp.
- Payne, James W & Frances A.
- Martin, Samuel L & Mabel

After much discussion the Board moved to continue this hearing so that the additional landowners could be notified and instructed the secretary to set up a new hearing at a later date.

McClure or Cuppy
Ditch Hearing
11:00 a.m.

The engineer opened the hearing on the McClure or Cuppy ditch by reading his report and making his recommendations to the Board. He also read all the remonstrances that had been filed on this ditch. Those in attendance were: Roland Halleck, Wayne Shamo, Spencer Congram, Charles R. Vaughan, Ruth and Ray Scifres, Robert W. Maier, John Schmitt, E. V. Lamberson and Robert C. Garrison.

Mr. Vaughan reported that he had 27A of ground under water because of the golf course. As this ditch does not go through this ground, the Engineer suggested that he tiled to this ditch to get the relief needed.

The new Hilton Motel being built in this district and a proposed lake in this drainage area was discussed.

The Engineer said that he had examined the area from the State Police barracks north and that stretch of the tile was in very bad condition.

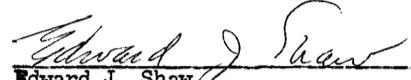
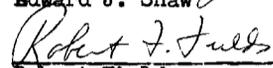
The farm landowners felt that to assess this ditch by acres was unfair for most of the property owners along the Highway 52 were benefitted as much as the farm land but would be assessed much less. They felt to assess according to the amount benefitted would be a much fairer way to assess all landowners.

The Board moved to continue this hearing until many more answers could be acquired and then set a new hearing.

Order & Findings
& Certificate of
Assessments Signed

Upon the establishment of a maintenance fund on the Abe Smith ditch, the Board signed the Order and Findings and the Certificate of Assessments.

With no more business the Board moved to adjourn.


Edward J. Shaw

Robert Fields

Bruce Osborn

ATTEST:


Gladys Ridder, Exec. Secretary

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD AUGUST 6, 1975.

The Tippecanoe County Drainage Board met in the County Council Room on August 6, 1975 with the following members present: Robert Fields, Bruce Osborn, William Vanderveen, Robert L. Martin, Fred Hoffman and Gladys Ridder.

Minutes
Approved Upon the reading of the minutes of the July 2nd, 1975 meeting, a motion made by William Vanderveen, seconded by Robert Fields and made unanimous by Bruce Osborn to accept the minutes as read.

The following letter was received by the Executive Secretary:

9:30 a.m.
Vacation of Pts.
Cuppy/McClure Gladys Ridder, Executive Secretary
Tippecanoe County Drainage Board
Tippecanoe County Court House
Lafayette, Indiana 47901

Subject: Vacation of a Portion of the Cuppy/McClure Ditch

Dear Mrs. Ridder:

The land owners of the Purdue Research Park desire to have vacated the portions of branches # 12, 13, 14, and 15 of the Cuppy/McClure ditch lying north and east of U. S. Highway # 52 (Sagamore Parkway). These portions of the ditch no longer function and are of no value. The area is now drained by West Lafayette storm sewers which discharge into a retention pond and then into a section of the ditch not being vacated.

Very truly yours,

/s/
Rex Bowman
Civil Engineer

RB/sj

Rex Bowman was the only person present at the hearing and there were no remonstrances filed in the County Surveyor's office, so upon motion made by Bruce Osborn, seconded by William Vanderveen and made unanimous by Robert Fields the Board so moved to declare that that portion of this ditch be vacated.

Robert Fields opened the informal reconstruction hearing on the Michael Binder ditch. He explained to the group that the Surveyor needed to know how many of the people in this watershed were in agreement on the reconstruction of this ditch before he did all of the field work necessary.

9:35 a.m.
Informal meeting
Reconstruction Those in attendance were Robert Ade, Mr. and Mrs. Raymond Bennett, Sr., Norman Bennett, John Sheets, Eleanor Frost, Paul W. Ade, Raymond C. Bender and Charley Shelby.

M. Binder
Ditch The name Binder was discussed. Raymond Bender said Michael Binder was his grandfather and Binder was the German spelling. Future generations went to court and had the name changed to Bender. The correct pronunciation is Binder.

Mr. Martin asked the group to please feel free to express their feelings on the project before he got started doing the field work. Mr. Norman Bennett said on his property the tile portion was completely broken down. John Sheets said there was a need of cleaning at least a part of Pine Creek to get enough fall for an outlet for the new ditch. Mr. Robert Bender said the lower end was full of willows. He also said that when the ditch was built in 1894, a fifteen inch tile was used with a grassed waterway over the tile to catch the surface water and it had proven most successful until some farmer decided to plow over it.

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD OF AUGUST 6TH, 1975 (CONTINUED)

Mr. Osborn suggested a committee work along with Mr. Martin be formed to acquire answers to: the fall, adequate outlet, how much of Pine Creek would have to be dredged, etc. Mr. John Sheets had first suggested that several of them walk this ditch together when the crops were out of the fields. Mr. Martin said he would call them and set up the committee.

Mr. Robert Ade suggested the new committee check for a lower spot for the outlet and asked if a lower place was located could the outlet be changed. The County Attorney said as long as they followed the law and did the proper advertising there would be no problem.

All were informed that when the Surveyor was finished with his work, a new hearing with the results would be called. ✓

St. Rd.#26
Widening

The County Surveyor received the following letter:

Mr. Robert L. Martin, L.S.
Tippecanoe County Surveyor
Court House
Lafayette, Indiana 47901

July 25, 1975

Dear Sir:

I wish to acknowledge your letter of July 14, 1975, pertaining to drainage problems on State Road 26, from U. S. 52 to I-65.

The proposed improvement project on State Road 26 by the Indiana State Highway Commission will not create a drainage problem any worse than currently exists. Any drainage problem currently existing cannot be corrected within the limits of the proposed new right-of-way. The Indiana State Commission does not have the authority to secure this necessary outlet. Therefore, if it is to be corrected a suitable outlet must be provided outside of State right-of-way.

The Tippecanoe County Drainage Board recognized in 1971 that an overall master drainage plan was necessary. It is clearly the responsibility of the County Drainage Board to provide such a plan. We understand that since that time the City of Lafayette has annexed a portion of the area, and would also be involved in the final solution to the drainage problem.

It appears that we are not arriving at any resolution of the currently existing drainage problem. This leaves the State Highway Commission with the alternative of delaying the improvement project on State Road 26 or possibly an effort to incorporate a cross-pipe or other drainage feature that would later be incorporated as a part of the overall drainage plan. Please advise if you and the County Drainage Board are requesting that the State Road 26 improvement project from U. S. 52 to I-65 be delayed until an overall drainage plan is formulated and a permanent solution arrived at.

Very truly yours,

/s/
G. K. Hallock
Chief Highway Engineer

GKH:s

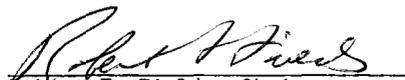
Mr. A. D. Ruth, Jr., Highway Engineer, who had been involved with this project while he was Tippecanoe County Surveyor had drafted a letter to the state. Mr. Ruth felt the statements on the letter were untrue and felt the state should be so informed. The Commissioners fully agreed and so did Mr. Martin.

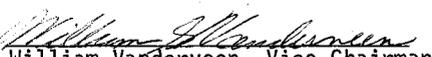
Mr. Ruth said he would have his secretary type his letter but sign the surveyor's name because the letter had been directed to the Surveyor. Mr. Martin said he would show a copy sent to Mr. Ruth. Mr. Osborn suggested a called meeting between Maurice Callahan, City of Lafayette Engineer, Dan Ruth, County Highway Engineer, Robert L. Martin, County Surveyor, G. K. Hallock, State Highway Engineer and the Drainage Board. Mr. Osborn asked Mrs. Ridder to set up this meeting.

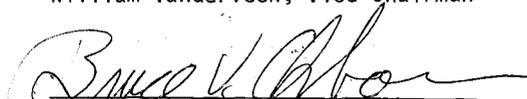
R/R &
E. Eugene
Johnson
Ditch

The County Attorney informed the Board that he had received a letter from the Railroad in answer to his request that they fix the tile going under their road bed on the Ora Gish property. In his letter the Railroad said they had originally installed the tile under the roadbed with an assurance that it would release them from any future obligation. Mr. Osborn asked the Attorney if he would write to them and ask for a copy of that agreement. Mr. Gish needs the drainage provided by that tile under the Railroad that is obviously not performing. Mr. Hoffman assured the Board he would write again and request the copy.

All business taken care of, Mr. William Vanderveen moved to adjourn. Motion seconded by Bruce Osborn and made unanimous by Robert Fields.


Robert F. Fields, Chairman


William Vanderveen, Vice Chairman


Bruce Osborn, Board Member

ATTEST:


Gladys Ridder, Executive Sec'y.

THE REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD MARCH 3, 1976

The regular meeting of the Tippecanoe County Drainage Board met in the County Council Room at 9:00 a.m., o'clock with the following members present: Robert F. Fields, William Vanderveen, Bruce Osborn, Ronald Melichar, Robert L. Martin and Gladys Ridder.

Minutes Approved Upon motion of Robert Fields, seconded by William Vanderveen and made unanimous by Bruce Osborn, the minutes of the February 4, 1976 meeting were approved as read.

State Road # 26 Widening Michael Bowman, Project Engineer for the State Highway Commission and his assistant appeared before the Board for assistance in determining whether a catch basin in the right-of-way of State Road 26 should or should not be relocated in the SE Section 22, Township 23North, Range 4 West. Robert Fields/said the ditch involved was a private ditch and the Drainage Board had no jurisdiction over private drains . He suggested to Mr. Bowman that he contact the property owners involved.

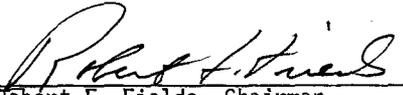
Those in attendance were: Robert Richardson, Maurice Callahan, and James Murtaugh. Norbert Korty came in for a short while, also.

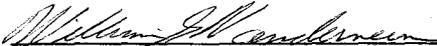
Treece Meadows Legal Drain James Murtaugh also reported to the Board the abundance of water that was crossing Creasy Lane because of the incompleated Treece Meadows Legal Drain. Mr. Lynn Treece was called and came to the meeting. The situation was explained to him and Robert Fields said the Board might have to halt building permits in this subdivision if the situation was not taken care of. Mr. Treece said he had just returned from Florida and was not aware of the situation. The Drainage Board ordered the Board of Commissioners to write a letter of explanation to all persons concerned.

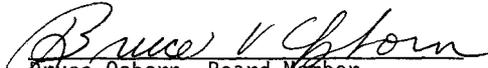
Relocation of State Road #43 Robert Martin brought the Relocation Study plans for State Road # 43 to the attention of the Board. He pointed out the different places that the County's Legal Drains would possibly be affected. No definite plans have been accepted as yet-only proposals.

Richard H. Smith Richard H. Smith appeared before the Board to ask when work was scheduled to be done on the lower end of the George Ilgenfritz ditch. The surveyor reported the condition of the ditch, where work had been done at this point, the financial condition of the ditch and why work had not been done so far at the lower end. Mr. Fields said he felt the lower end was much in need of repair and suggested the Surveyor make plans to clean the lower part of the ditch. Mr. Osborn asked the Surveyor to notify all of the landowners before doing the work.

Great Lakes Chemical Board Plans for building a parking lot and back-up lane by the Great Lakes Chemical Corporation were presented to the Board by the surveyor with his recommendations. Great Lakes asked for a letter of consent to do the building as per plans but because the parking area would be over the easement of the Cuppy-McClure Legal Drain and the back-up lane would be directly over the Cuppy-McClure ditch, the Board was reluctant to make any final decisions at this point. Mr. Osborn said he would like to keep a consistency in this kind of approval or disapproval for all individuals.


Robert F. Fields, Chairman


William Vanderveen, Vice Chairman


Bruce Osborn, Board Member

ATTEST:


Gladys Ridder, Executive Sec'y.

The Tippecanoe County Drainage Board met in the jury room on the 4th floor at 9:30 a.m., on May 5th, 1976 with the following members present: Robert F. Fields, William Vanderveen, Bruce Osborn, Robert L. Martin and Gladys Ridder.

Minutes
Approved

Upon the reading of the minutes of the April 16th, 1976 special meeting, Bruce Osborn motioned to accept the minutes as read and William Vanderveen Seconded. Mr. Robert Fields made the motion unanimous.

The surveyor opened the hearing on the Jacob Taylor ditch by explaining the reason for this hearing, namely, to add the branches that go into Fountain County to the Jacob Taylor Legal drain. Those persons on those branches are assessed to the Legal drain already so adding those branches to the Legal drain does not change the assessment, only the fact that the maintenance money will help maintain their branches also.

9:30 am
Jacob
Taylor
Ditch

Those in attendance were: Larry C. Wagner, Larry Carlson, Orville Carlson, Hal R. Davis, Wayne Stevenson for Farmcraft Service, Inc. and Alberta Taylor Bennett.

All persons in attendance were in favor of a maintenance fund but felt a reconstruction of that part of the ditch lying in Fountain County might be necessary. With the line so fine as to where maintenance ends and reconstruction begins, those possibilities were openly discussed. Mrs. Bennett said she would just be happy to be able to farm her land as each and every year she lost part of her land. Wayne Stevenson suggested they talk to Ralph Patrick at the SCS office to see if help could come from there and if necessary to change the size of the tile. The amount of fall and the depth of the tile was also discussed.

Whether reconstruction was necessary or not, they expressed the desire for the Board to establish the two branches as part of the legal so the maintenance monies could help them too. William Vanderveen so moved that the Board accept Branches No. 5 and Six, described as follows:

Branch Number Five

Begins at the headwall of main line at Station 133 +20 of main ditch and runs thence Southwesterly for a distance of 5016 feet more or less to a point located 530 feet West and 1600 feet South of the Northeast corner of the Northwest quarter of Section 4, Township 21North, Range 6 West.

Branch Number Six

Begins at a point 528 feet South and 924 feet East of the Northwest corner of the Northeast quarter of Section 4, Township 21 North, Range 6 West and runs Southerly for a distance of 3300 feet more or less

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THE TIPPECANOE COUNTY DRAINAGE BOARD MEETING HELD MAY 5, 1976 (Continued)

to a point located 1452 feet North and 530 feet East of the South West corner of the South East quarter of said Section 4.

Bruce Osborn seconded the motion and Robert Fields made the motion unanimous.

The following letter was received from Gary Hitchcox:

Gary
Hitchcox

Mr. Robert F. Fields
Tippecanoe County Drainage Board
Lafayette, Indiana

Garrett L. Hitchcox
6220 Wyandotte Road
Lafayette, Indiana

April 21,1976

Dear Mr. Fields:

In answer to your letter of April 19th, regarding the outlet of a drain pipe into Elliott Ditch for the Hitchcox-Robinson Subdivision.

The remaining lots that you referred to are sold and were sold when all of this came up. We know these people want to build and would like for the Board to reconsider.

Very truly yours,

/s/
Garrett L. Hitchcox

In answer to Mr. Hitchcox's letter the Board decided they would stand by their first decision for until the S. W. Elliott ditch could find relief they did not want to add to an already bad situation. The Secretary was instructed to write to Mr. Hitchcox and inform him of their decision.

The following letter was received from the Area Plan Commission:

Tippecanoe County Drainage Board
Tippecanoe County Court House
Lafayette, Indiana 47901

April 28, 1976
Ref.No. 216-76

Gentlemen:

We are in receipt of inquiries from the bonding company seeking release of contract bonds on Parts 5 and 6 of Raineybrook Estates. Apparently, there are drainage facilities involved in addition to the streets.

Part 5 bond was dated March 30, 1970, and is in the amount of \$6,000.00. The final approval of the plat was given by the APC on march 23, 1970 under file S-385.

Part 6 bond was dated November 27, 1973, and is in the amount of \$25,000.00. Final approval of the plat was given October 22, 1973 under file S-532.

If the drainage facilities for these subdivision tracts are complete and acceptable, please so inform this office so that we may release the bonds. Thank you for your cooperation in this matter.

Sincerely,

/s/
Frank A. Blair
Zoning Administrator

FAB:dk
Enc.

The Board asked the County Surveyor if he would check out the drainage facilities for these two Parts of Raineybrook Estates and report back to them.

Mr. Carl Kupfer, professional engineer for the Site Planning and Civil Engineering Corporation came before the Board with some temporary engineering suggestions to show the possibilities in developing some ground lying south of the Hilton Inn and located in the watershed of the Cuppy-McClure drainage area.

Carl Kupfer
for
SPACECO

They had planned a retention pond plus an open ditch in the lowlands of the site and relocate the existing tile of the Cuppy-McClure legal drain. Michael Gitlitz, who came with Mr. Kupfer, asked the Board what was needed to get things rolling and the Board said everyone in the Cuppy-McClure watershed should be notified and a public hearing with more detailed drawings be shown. The Board asked the Secretary to check with the Attorney to see if time allowed the regular June 2, 1976 meeting to be that hearing. If so, to do the necessary notifying.

State Hgy.
St. Rd. #43

April 15, 1976

SR 43 Spot improvement at north
junction with S.R. 25 in Lafayette
all in Tippecanoe County

ST-F Project 191(20)
Preliminary Road File

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TIPPECANOE COUNTY DRAINAGE BOARD MEETING OF MAY 5, 1976 (continued)

Mr. Robert L. Martin, L.S.
County Surveyor
1631 Klondike Road
West Lafayette, Indiana 47906

Dear Mr. Martin:

The Design Department of the Indiana State Highway Commission is preparing construction plans for the project described above. Actual construction has not been scheduled, however, the R/W phase has been initiated.

We are sending you today, under separate cover, two sets of our preliminary plans for this project. One set of these plans is for review of the proposed drainage by the County Drainage Board. We request your approval or comments on the drainage as planned. If we fail to hear from you within 30 days, we shall assume that you are satisfied and that the Board has approved the plans as submitted with this letter.

The second set of plans is for your use in determining your need for land monuments as required by law, to be established during construction of the project.

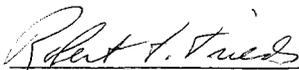
If other information is desired, please advise.

Very truly yours,
/s/
S. R. Yoder
Chief, Division of Design
For: G. K. Hallock
Chief Highway Engineer

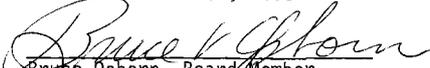
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The Board found no fault with the plans.

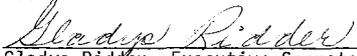
With the business of the day completed, William Vanderveen moved to adjourn and Bruce Osborn seconded that motion. Robert Fields so voted to make it unanimous.


Robert F. Fields, Chairman


William Vanderveen, Vice Chair.


Bruce Osborn, Board Member

ATTEST:


Gladys Ridder, Executive Secretary

The Tippecanoe County Drainage Board met in the County Council Room at 9:30 a.m., on June 2, 1976 with the following members present: Robert F. Fields, William Vanderveen, Bruce Osborn, Fred Hoffman, Robert L. Martin and Gladys Ridder.

The minutes of the May 5th, 1976 meeting were read and approved. The motion to accept was made by Bruce Osborn, seconded by William Vanderveen and made unanimous by Robert Fields.

Minutes Signed

A Mailgram or confirmation copy of a previously phone-delivered telegram on June 1st, 1976 was received in the County Surveyor's office at 10:00 a.m., that reads as follows:

Sorry we must cancel special meeting of June second. Hopefully we have not inconvenienced anyone by doing so. Please advise if any persons who contemplated attending meeting had excessive out of pocket expenses to Kenneth L. Tucker, President Kenroy, Inc.

10:00 a.m.
Cancelled Meeting

Those in attendance at the cancelled hearing were: Ray Scifres, Herman E. Alberts, Hanley Hammel, Jr., Jewell Burk, Jr. Herman Andre, Rex Bowman, C. S. Snyder and Paul W. Combs. One other young man came that did not sign the register. None of those in attendance wished to bill the Kenroy Company for their expenses in coming. However, the Drainage Board felt that the expense of mailing all of the notices plus per diem of Board Members and Attorney fees should not be borne by the Tippecanoe County Taxpayer. The Board instructed the Secretary to bill the Kenroy, Inc. for same.

on
Cuppy-McClure
Ditch

With this being the only thing on the agenda for the day, Bruce Osborn moved to adjourn. The motion was seconded by William Vanderveen and made unanimous by Robert Fields.

Robert F. Fields

Robert F. Fields, Chairman

ATTEST:

Gladys Ridder
Gladys Ridder, Exec. Secretary

William Vanderveen

William Vanderveen, Vice Chairman

Bruce Osborn
Bruce Osborn, Board Member

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 G. Vanderveen, Bruce Osborn, Martin L. Galema, Dan Ruth Jr., Michael J. Spencer, Kenneth Miller, Grady Jones, J. Frederick Hoffman and Ethel Kersey.

Minutes Approved

Upon motion of William G. Vanderveen, seconded by Bruce Osborn and made unanimous by Martin L. Galema the minutes of the October 4, 1978 meeting were approved as read.

The Chairman opened the vacation hearing of Sub-Branches 3 and 4 of Branch 2 of the Cuppy-McClure Ditch by reading the following remonstrance:

October 16, 1978

Vacate Sub-branches 3 & 4 of Branch 2 Cuppy-McClure Ditch

Tippecanoe County Drainage Board
County Office Building
20 North 3rd Street
Lafayette, In 47902

Re: Vacating of Branches 3 and 4 of Branch No. 2 of the Cuppy/McClure ditch.
Hearing set for 9:30 A. M. November 1, 1978.

Gentlemen:

We are of the opinion that Branches 3 and 4 of Branch No. 2 of the Cuppy/McClure ditch do perform the function for which they were designed and constructed, and that abandoning them at this time would be detrimental to the public welfare.

This letter is to place us on the hearing record as objecting to the proposed vacating at this time.

Very truly yours,

/S/ William H. Kashner
William H. Kashner,
City Engineer

Those attending the meeting were: D.J. Werderitsh, Craig Maddox, J. Robert Walker, J. R. Ross, Glen H. Sullivan, Hiram M. Shumway, Albert Dahre, P. T. Smith, Martha N. Smith, Beryl Fox, Imogene Stovall, Y. C. Wang and Larry O'Connell, Attorney for Petitioners. Mr. Spencer explained to those present that according to the records the Cuppy-McClure ditch was designed and built for the sole purpose of draining sub surface water in an area primarily used for agricultural purposes. Under present conditions the ditch is inadequate to properly drain all lands affected. The cost to reconstructed this ditch would outweigh the benefits to be derived therefrom. Mrs. D. J. Werderitsh asked if someone would show her just where this ditch is on a map. Mike then explained and show all of those present where sub-branches 3 and 4 of branch 2 of the ditch was located on the maps. It was also explained that in vacating a drain that the ditch would remain in it present condition but it would release the 150 feet easement that is required for a legal drain. Mr. Vanderveen asked if there were any objections from those present. There were no objections but Mrs. Werderitsh asked why Mr. Kashner objected. Dan Ruth stated that he had talked to Mr. Kashner and it was a misunderstanding where the branches were located.

Bruce Osborn made a motion that Sub-Branches 3 and 4 of Branch number two (2) of the Cuppy-McClure ditch be vacated as petitioned. Martin L. Galema seconded the motion and made unanimous by William G. Vanderveen. The petition read as follows:

BEFORE THE TIPPECANOE
COUNTY DRAINAGE BOARD

IN THE MATTER OF THE VACATION)
OF A PORTION OF THE)
CUPPY-McCLURE DITCH.)
(J.L. McCLURE DRAIN, PER)
FRANK O. CUPPY, etal, PETITION)
SUPERIOR COURT CASE 9017)

PETITION TO VACATE DRAIN

The Petitioners, The Joseph R. Ross, Mayme L. Ross and John E. Smith, as President of John E. Smith & Company, Inc.; respectfully petition the Tippecanoe County Drainage Board and show the Board as follows:

1. The Petitioners request the Board to vacate that portion of the Cuppy-McClure Ditch described as follows:

Sub-branches number three (3) and four (4) of branch number two (2), lying North and East of Northwestern Avenue. Said branches are located in the Southwest quarter of Section seven (7), Township twenty-three (23), Range four (4), Tippecanoe County State of Indiana.

2. The Petitioners believe themselves to be the owners of at least ten percent of the real estate which would be directly affected by the vacation herein prayed for.

3. The above-described portion of said legal drain no longer performs the function for which it was designed and constructed. The drain was designed to drain water from land used for agricultural purposes. However, the use of a large portion of the property has been converted to intensive residential development and the balance is being held for proposed future residential development which the present drain is not designed or constructed to accommodate.

4. The expense of reconstructing the above-described portion of said legal drain to accommodate the present prospective uses outweighs the benefits to be derived therefrom.
5. The vacation and abandonment of the above-described part of said legal drain will not be detrimental to the public welfare.
6. Annexed hereto as Schedule A is a list of the names and addresses of the owners of the land which the Petitioners believe would be affected by said vacation.
7. The Petitioners request to have the date on which the matter will be referred to the surveyor for report advanced in accordance with I.C. 1971, S19-4-1-10 (g).
8. The attorneys who will represent the Petitioners in these proceedings are Lawrence B. O'Connell and the firm of Schultz, Ewan Burns, 73 Lafayette Bank & Trust Building, Lafayette, Indiana, 47902 (Phone: 317-742-8464).

WHEREFORE, the Petitioners pray that the Board:

- A. Serve notice of intention to vacate the above-described portion of the Cuppy-McClure Ditch on all owners of land affected by said vacation;
- 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 vacation; and
- D. Issue and order vacating the above-described portion of the Cuppy-McClure Ditch as a legal drain.

PETITIONERS

/S/ J R Ross
Joe R. Ross

/S/ Mary A. Ross
Mary A. Ross

/S/
John E. Smith
President of John E. Smith & Company, Inc.

SCHULTZ, EWAN AND BURNS
73 Lafayette Bank & Trust Building
Lafayette, Indiana. 47902
Telephone: 317-742-8464

Attorneys for Petitioner

Transnational Motels Midland Nutual Life Ins.	Claremore S-D Lot 2	40-036-033
" " "	Pt SE SW SEC 7-23-4	40-036-034
" " "	Claremore S-D Lot 1	40-036-035
" " "	J.R. Ross S-D Lot 1	40-036-036
" " "	J.R. Ross S-D Lot 2	40-036-037
J. F. & H. F. Feldhusen	J. R. Ross S-D Lot 3	40-036-038
L. R. & D. L. McMullen	J. R. Ross S-D Lot 4	40-036-039
P. C. & D. M. Kenny	J. R. Ross S-D Lot 5	40-036-040
R. R. & N. Crawley	J. R. Ross S-D Lot 6	40-036-041
C. W. & F. E. Regek	J. R. Ross S-D Lot 7	40-036-042
R. E. & J. M. Ewalt	J. R. Ross S-D Lot 8	40-036-043
C. E. Bain	J. R. Ross S-D Lot 9	40-036-044
M. L. & L. P. Wilson	J. R. Ross S-D Lot 10	40-036-045
J. M. Howe	M. L. Clevett S-D Lot 16	40-036-046
D. Byrene	M. L. Clevett S-D Lot 17	40-036-047
N. & F. C. Bolin	Rausch Addt. Lot 5	40-036-054
M. E. Johnson	Rausch Addt Lot 5 Ex 10 X 80 Ft off	
R. C. & I. T. Bolin	E. Side Lot 4 Ex strip off W. Side	40-036-055
" "	Rausch Addt Lot 4	40-036-056
" "	Homestead S-D Lot 2	40-036-057
K. V. Stull	Homestead S-D Lot 3	40-036-058
C. G. & E. J. Ledford	Homestead S-D Lot 4	40-036-059
N. J. Patterson	M. L. Clevette S-D Lot 19	40-036-060
Ching Shung & K. I. Gong	M. L. Clevette S-D Lot 15	40-036-061
D. J. Wederitsh	J. R. Ross S-D Lot 11	40-036-062
" "	J. R. Ross S-D Lot 12	40-036-063
J. R. & M. L. Ross	J. R. Ross S-D Lot 13	40-036-064
" "	J. R. Ross S-D Lot 14	40-036-065
" "	J. R. Ross S-D Lot 15	40-036-066
" "	J. R. Ross S-D Lot 16	40-036-067
E. B. Brown	J. R. Ross S-D Lot 17	40-036-068
Y.C.J.S.T. Wang	J. R. Ross S-D Lot 18	40-036-069
J.R. & M.L. Ross	J. R. Ross S-D Lot 19	40-036-070
" "	J. R. Ross S-D Lot 20	40-036-071
" "	J. R. Ross S-D Lot 21	40-036-072
J. R. & M. L. Ross	J. R. Ross S-D Lot 22	40-036-073
J. E. Smith & Co. In.	Camelback S-D Pt SW SEC 7-23-4	40-036-074
" " "	" " "	40-036-075
" " "	" " "	40-036-076

REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD HELD NOVEMBER 1, 1978 (CONTINUED)

N.H. & L.A. Short	M. L. Clevette S-d Lot 5	40-036-077
R. E. Road	M. L. Clevette	40-036-078
P. Mattox	M. L. Clevette S-D Lot 7	40-036-079
D. F. & D. D. MacLeod	M. L. Clevette S-D Lot 8	40-036-080
R. E. & J. E. LaMay	M. L. Clevette S-D Lot 9	40-036-081
J. E. Smith	M. L. Clevette S-D Lot 10	40-036-082
R. & B. H. Walkee	M. L. Clevette S-D Lot 11	40-036-083
C. & L. Maddox	M. L. Clevette S-D Lot 12	40-036-084
R. E. & I. E. Christain	M. L. Clevette S-D Lot 14	40-036-085
M. L. Nolan	M. L. Clevette S-D Lot 20	40-036-086
R. W. & C. K. Boyd	M. L. Clevette S-D Lot 21	40-036-087
E. M. Tudor	M. L. Clevette Lot 22	40-036-088
M. M. Jones	M. L. Clevette S-D Lot 23	40-036-089
R. E. & T. J. McVey	M. L. Clevette S-D Lot 24	40-036-090
R. E. & M. A. Sinclair	M. L. Clevette S-D Lot 25	40-036-091
D. S. & M. Schuder	M. L. Clevette Lot 27	40-036-092
J. M. & M. Tatlock S-D Lot 12	M. L. Clevette S-D Lot 12	40-036-094
W.F. & M. K. Hentschel	Homestead S-D Lot 12	40-036-095
" "	Homestead S-D Lot 11	40-036-096
C. R. & C. F. Edwards	Homestead S-D Lot 10	40-036-097
E. M. Irish	Homestead S-D Lot 5 & 6	40-036-098
R. N. & B. W. Fox	Homestead S-D Lot 6 & 7	40-036-099
P. T. & M. N. Smith	Homestead S-D Lot 7	40-036-100
B. A. McDaniel	Homestead S-D Lot 9	40-036-101
J. A. & M. J. Marchand	Rausch Addt. lot 3	40-036-102
I. M. Evans	Rausch Addt Lot 2	40-036-103
N. & F. C. Bolin	Rausch Addt Lot 1	40-036-104

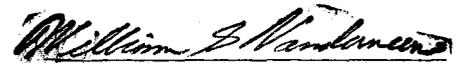
The Board signed the Order and Findings for the vacation of the Cuppy-McClure ditch.

Saltzman Ditch
Mr. Earl Miller and Mr. Glenn Rodgers were not on the agenda but came before the Board to find out what was being done on the reconstruction of the Saltzman Ditch. They were informed that there were other ditches to be reconstructed and as soon as the other ditches ahead of the Saltzman ditch were taken care of, then we would work on their ditch. Would try by the first of next year to set up a meeting with those in the watershed.

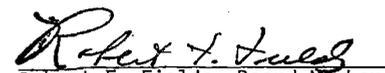
Drain Tile Bid
Flora Tile Company and Construction Products Corporation (Lafayette Pipe) submitted Bids for supplies and materials for the use of the Tippecanoe County Drainage Department for a period beginning November 15, 1978 through December 31, 1978.

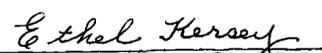
Gosma Ditch
Dan Ruth, County Engineer reported on the meeting he attended with the White County Drainage Board on October 17, 1978, concerning the A. P. Gosma ditch which outlets into Burnett Creek in Tippecanoe County. After Mr. Ruth explained about the Parkinson Group Project the Tippecanoe County Drainage Board all agreed that they had no objection to the project. If it can not be done as a group project the Board would be happy to serve with White County on a Joint Drainage Board. Letter to be mailed to White County Drainage Board.

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


William G. Vanderveen, Chairman


Bruce Osborn, Vice Chairman


Robert F. Fields, Board-Member

ATTEST:

Ethel Kersey, Exec. Secretary

A special meeting of the Tippecanoe County Drainage Board for the Reconstruction of the Michael Binder ditch met in the Community Meeting Room in the County Office Building at 10:00a.m. with the following members present: William G. Vanderveen, Bruce Osborn, Martin L. Galema-special member, Dan Ruth, Frederick Hoffman, Michael Spencer-, Grady Jones and Ethel Kersey

Michael
Binder

Ditch
Reconstruct-
ion

The Chairman, William Vanderveen read the three (3) remonstrances that wer filed. All three were objecting to the assessed acres not the project of the reconstruction of the Michael Binder Ditch. The Surveyor, Michael J. Spencer had corrected the acres to be assessed and the Chairman asked Eleanor B. Frost, Paul Ade and Raymond C. Bender if they were satisfied with their land assessments as corrected. All replied that they were satisfied with the changes.

The County Engineer, Dan Ruth explained to those present that we had taken a Notice to Constructors and Bidders to the Journal and Courier so we could get an ad in the paper on Friday. The reason for this was that it is so late in the fall and we didn't wantto waste any time, incase you property owners said go ahead and built the ditch. He also stated that the Drainage Board will buy the pipe in order to save money. Althought the

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."

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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.

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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.

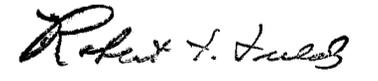
Bruce Osborn: 2nd the motion.

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 Wednesday, May 6, 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, and Natalie Boyer,-Secretary.

Brookview

George Schulte was before the Drainage Board requesting Drainage Board approval of Brookview Subdivision drainage plans. It is located on the corner of South 9th Street and County Road 350 South.

It was stated that there will be a 90' easement from the centerline of the Elliott Ditch.

The total development consists of 37 acres. There are 47 single-family lots and approximately 41 patio-home lots.

They are proposing to construct 2 detention basins underneath an existing PSCI easement. The detention basins will serve a little over 13 acres. There will be some direct run-off due to the lay of the land. The run-off will be uncontrolled. They will compensate for this direct run-off by decreasing the allowable release rate from the two detention basins to meet the before and after development. The two basins will be designed for a 100-year storage.

George Schulte stated that they had talked to Public Service. The Public Service indicated that the only thing they want is an access so they can get in and work on their structures when necessary. They have no power poles in the middle of the detention basins. For the record, the Board would like a letter from the PSI stating they have no objections.

The outlet from the two ponds will be outletting into the Elliott Ditch. There will be a controlled release rate structure in the ponds to control the volume in the two detention basins.

William Vanderveen asked who will maintain the detention areas.

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The basins will be part of the lots and will be built with gentle enough slope so that the people can maintain them. It will be stated in the Covenants.

Brookview
Subdivision

MOTION: Bruce Osborn made the motion to approve the drainage plans for Brookview Subdivision, subject to approval of final construction plans, and a letter from the PSI stating they have no objections to having the retention ponds in their easement.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

MOTION: Bruce Osborn made the motion that no occupancy permits be issued until the storm drainage system has been installed and approved.

Sue Reser: Seconded the motion.

William Vanderveen: Made the motion unanimous.

Red Roof Inn

Steve Baumgartner was before the Drainage Board requesting permission to supply a cash bond so they could receive their occupancy permit before they had completed their detention pond.

Red Roof
Inn

MOTION: Bruce Osborn made the motion to deny the request for the cash bond for the completion of the drainage system for Red Roof Inn.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

Ranch Road Subdivision

Roy Easton was before the Drainage Board seeking approval of drainage plans for Ranch Road Subdivision.

Mike Spencer mentioned several questions which he and George Schulte had concerning the plans. He stated that the retention pond could not be located in the flood plain. He was also concerned with who would maintain the system.

Ranch Road
Subdivision

There was some discussion on where the retention pond will be located and how it will be maintained.

It was agreed upon that it would be put in the Covenants that the people who maintain it be aware of that fact when they purchase the property.

MOTION: Bruce Osborn made the motion to give conceptual approval of Ranch Road Subdivision drainage plans, pending the location of the retention pond, the approval of the Legal Department of Restrictive Covenants, and final construction plans.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

Twychenham

Richard Boehning was before the Drainage Board representing Twychenham Building Company, INC. He was seeking Drainage Board approval of the drainage plans for Phase 1 and Phase 2 of Twychenham Estates, and conceptual approval of the drainage system for the entire area.

Other representatives present for Twychenham Building Company, INC., were: Mr. Jim Hilligoss, Mr. Bob Grove, and Mr. John E. Smith. Twychenham

Bob Grove went over the total Master Drainage Plan for the entire Twychenham Development pointing out the drainage to the Board.

There was some discussion on the vacation of the legal drain. The legal drain will go into a non-legal drain and back into a legal drain.

Fred Hoffman stated that this will cause some problem because there will be no control over the non-legal drain. It is poor practice to vacate portions of a legal drain.

There was further discussion on the maintenance of the drain if a portion of it would be vacated.

Bob Grove stated that their system meets the Drainage Board Criteria for the 10-year capacity in the piping and has met the criteria for detention.

It was also stated that the plans were not worth much without the vacation of a portion of the legal drain.

Mike Spencer asked Fred Hoffman if the Board could approve the drainage without having the Ortman Drain vacated.

Fred Hoffman stated they could approve the plan, but it should be stated that it will in no way affect their decision at a later date if they file a petition to vacate it. It may not be vacated.

MOTION: Bruce Osborn made the motion to approve the drainage plans as presented, that it no way affects the present legal drain and does not constitute any ruling as to a petition to vacate the drain, and that everybody understands that the drain may not be vacated.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

Bruce Osborn made the motion to approve the conceptual plans for the northern run-off of the Twychenham Subdivision project.

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD ---- Held May 6, 1981 (continued)

Petition to Vacate a Portion of the Ortman Ditch

Petition to vacate portion of Ortman Dr. The Board received a petition to vacate a portion of the Ortman Legal Drain. The petition was submitted by Richard Boehning, representing Twychenham Building Company, INC.

Valley Forge

Valley Forge Bob Grove submitted to Mike Spencer a preliminary drainage proposal for Valley Forge for review and comments.

Vacation of the Police Barracks Branch of the Cuppy-McClure Ditch

The Board received a petition to vacate a branch of the legal drain known as the Cuppy-McClure Ditch.

Petition to vacate Police Barracks Branch The petition was submitted by Richard Boehning, representing John Sei and Franklin Parks Associates and Normandy Farms.

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

Sue Reser: Seconded the motion.

William Vanderveen made the motion unanimous.

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 Vanderveen
William Vanderveen, Chairman

Bruce Osborn
Bruce Osborn, Vice Chairman

Sue M. Reser
Sue Reser, Board Member

Natalie Boyer
ATTEST: 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.

J.N. Kirkpatrick

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.

Petition 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.

Cuppy-McClure Ditch

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,

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 October 7, 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-County Surveyor, and Natalie Boyer-Secretary.

Adoption of the Drainage Ordinance

A General Ordinance Establishing Storm Drainage and Sediment Control in Tippecanoe County, was presented to the Drainage Board for final approval and adoption.

Richard Boehning was representing the Home Builder's Association of Greater Lafayette in reference to the Drainage Ordinance. He read a letter of summary of the recommendations made by the Home Builder's Association of Greater Lafayette.

There was some discussion heard in relation to the recommendations made by the Home Builder's Association of Greater Lafayette.

The Board will consider the recommendations made by the Home Builder's Association of Greater Lafayette, and the Ordinance will be placed on the November Agenda.

MOTION: Sue Reser moved that the motion be made to table the Ordinance for further study.

Bruce Osborn: Seconded the motion.

William Vanderveen: Unanimous.

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REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD ---- Held October 7, 1981 (continued)

Triangle Acres Subdivision

Nancy Kretzmeier, a homeowner in Triangle Acres Subdivision, was before the Drainage Board asking for assistance in finding a solution to release surface water from her property.

She also states that she has a problem with her septic system.

Fred Hoffman stated that the remaining lot in the Triangle Acres Subdivision has not been given approval by the Health department under the new Ordinance; the other lots were given approval under the old Ordinance of the Health department.

Mike Spencer will run elevations on the area and report to the Board, at a later date, with his recommendations.

Wakerobin Estates Subdivision

James Hilligoss, representing Tippecanoe Development Corporation, was requesting drainage board approval for 20 lots in Wakerobin Estates Subdivision, Part II-Section I.

Final plat approval was received from the Area Plan Commission. A letter of credit was filed for \$24,000.00 with the Area Plan Commission, for the completion of the drainage.

The restrictive covenants provides that individual lot owners will form a homeowner's association that will be responsible for the maintenance of all drainage easements.

Fred Hoffman requested that a stipulation be put on the plat, subject to the effect that if it is not maintained by the homeowner's association, it shall be maintained by the individual lot owners.

Motion: Bruce Osborn made the motion to approve the drainage for 20 lots in Wakerobin Estates Subdivision, Part II-Section I, subject to the fact that if it is not maintained by the homeowner's association, it must be maintained by the individual lot owners.

Sue Reser: Seconded the motion.

William Vanderveen: Unanimous.

Franklin Park Apartments

Richard Boehning was before the drainage board representing Dr. John Y.D. Tse and Franklin Park Associates, proposing that something be done about the run-off from the north basin to the north.

John Tse developed Franklin Park Apartments and developed it under a storm drainage plan where its rate of after-development run-off was no greater than the rate of before-development run-off. The existing 18" drain tile, through Dr. Tse's property, is not functioning as it should; it needs to be replaced. The tile ends north of U.S. 52, just about 600-800' south of Hadley's Lake; it runs in an open ditch into Hadley's Lake, which has no positive outlet.

Richard Boehning submitted a letter to the drainage board, outlining the following proposals of Franklin Park Associates; the letter reads as follows:

October 6, 1981

Tippecanoe County Drainage Board
County Office Building
Lafayette, Indiana

Re: Franklin Park Apartments

Dear Sirs:

To satisfy the requirement of the West Lafayette Engineer for the issuance of the Certificate of Occupancy for the Franklin Park Apartment project, Franklin Park Associates proposes to the Tippecanoe County Drainage Board that the following conceptual solutions to the drainage problem of the water shed basin be accepted and approved:

1. Franklin Park Associates will not object to the reconstruction of the existing drainage tile serving the water shed basin. Further Franklin Park Associates will participate in its fair share of the cost of reconstruction of the existing drainage tile by the Developers in the water shed basin.
2. Upon request by the Drainage Board, Franklin Park Associates will join in or initiate an application with the Tippecanoe County Drainage Board for the establishment of a maintenance fund.
3. Franklin Park Associates will join in or initiate a Request with the Department of Natural Resources to define the flood protection elevation for the basin area.

Thank you for your consideration.

Sincerely,

FRANKLIN PARK ASSOCIATES

/s/
John Y.D. Tse
Partner

Mrs. Anna Davidson, chairman of the Golf Course Neighborhood Association, who lives to the south of Dr. Tse's property in the watershed area of the Cuppy-McClure Drain, was before the board to discuss ponding problems on Lindberg Road and the drainage problems in that area.

She was advised by the board that the proper action to be taken on the matter would be to petition the drainage board for the reconstruction of the Cuppy-McClure Drain.

Richard Boehning mentioned they have agreed to go to DNR and ask them to make an examination of flood plain levels; we could extend that examination out to include Hadley's Lake.

Fred Hoffman: "Beyond Hadley's Lake, that is where the problem is. Indian Creek won't carry the water that is

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REGULAR MEETING OF THE TIPPECANOE COUNTY DRAINAGE BOARD ---- Held October 7, 1981 (continued)

there now; it has been that way for ten years. Indian Creek is no outlet for Hadley's Lake."

Pat Cunningham: "I think what we need to look at is, if DNR takes a look at Hadley's Lake and looks at the effects on it, and if it has further effects, then the DNR would look beyond Hadley's Lake."

Further discussion on the need for a positive outlet was heard.

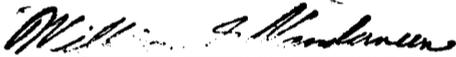
MOTION: Sue Reser made the motion to approve the three conditions as proposed by Franklin Park Apartments.

Bruce Osborn: Unanimous.

MOTION: Sue Reser made the motion to adjourn.

Bruce Osborn: Unanimous.

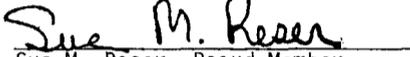
Motion made and carried, meeting adjourned.



William G. Vanderween, Chairman



Bruce V. Osborn, Vice-Chairman



Sue M. Reser, Board Member

ATTEST: 
Natalie Boyer, Secretary

The Tippecanoe County Drainage Board met in regular session in the Community Meeting Room of the Tippecanoe County Office Building on Wednesday, October 5, 1983 at 8:30 a.m.

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

I Woodland Terrace Mobile Home Park - Phase 2.

Representatives: Richard Boehning, Attorney; and Robert Williams, Engineer.

Mr. Boehning reported that data requested by the Drainage Board at the September meeting had been supplied and that Mr. Schulte had received plans for both Phase 2 and Phase 3 in order to review the overall drainage design for the Park. He stated that the request was now being made for preliminary and final approval on the drainage system for Phase 2 and preliminary approval for Phase 3 in order to begin construction plans.

Mr. Schulte confirmed that a rough layout of Phase 3 had been submitted and that he had requested more detailed plans of lots, etc. along with additional information to be noted on the Phase 2 construction plans. Mr. Schulte recommended that the question of maintenance on the proposed detention area be addressed. Mr. Boehning stated that the Park would be maintaining the detention area. Woodland Terrace Mobile

Michael Spencer requested that a notation as to the plans for erosion control be made on the construction plans since it was now late in the season for seeding. Mr. Williams could not state whether any erosion measures would be accomplished this year, but had no objection to the notation being added to the plans.

Mr. Boehning requested clarification of areas in need of erosion control. Mr. Schulte explained the drainage to be to the west through a culvert under Klondike Road with siltation to the west properties. It is this area, he stated, in need of erosion control and to be so noted in the construction plans. Mr. Schulte stated that requirements set up in the Drainage Ordinances, I.E. State Highway standards, were the guidelines to be met for erosion control.

Mr. Spencer and Mr. Schulte conferred that plans to meet these requirements be noted in the construction plans or so noted in an attached sheet and be made part of the contract for the construction project.

In answer to Mr. Spencer's question, Mr. Boehning stated that the Park does have its own maintenance staff for upkeep of the grounds.

Mr. Schulte reported that calculations for the detention storage to be acceptable.

Fred Hoffman recommended that any approval given at this time be contingent upon making the discussed additions to the plans and advised that the Board give authority for approval to Mr. Spencer and Mr. Schulte after their verification of the required additions.

Sue Reser made the motion that Preliminary and Final Drainage Board Approval be given to Woodland Terrace Mobile Home Park- Phase 2, contingent upon the addition to the plans either by notation or letter of the following: 1) Erosion Control Plans 2) Intent and Ability to maintain the detention area.

Eugene Moore seconded the motion.

The Tippecanoe County Drainage Board gave Preliminary and Final Approval to Woodland Terrace Mobile Home Park, Phase 2, contingent upon the above noted conditions.

Mr. Williams presented plans for Phase 3 of Woodland Terrace Mobile Home Park showing the lots and the drainage system, however noting that pipes were not sized.

Mr. Schulte recommended that Preliminary Approval be given to Phase 3 since preliminary calculations had been submitted.

Sue Reser made the motion that Preliminary Approval be given to Phase 3 of Woodland Terrace Mobile Home Park. Eugene Moore seconded the motion.

The Tippecanoe County Drainage Board gave Preliminary Approval to Woodland Terrace Mobile Home Park, Phase 3.

II Purdue Industrial Research Park, Phase 2, Part I.

Representatives: Rex Bowman, Engineer; and Thomas McCully, Attorney.

George Schulte reported that Rex Bowman had submitted plans on October 4, 1983, requesting Drainage Board approval for a development in West Lafayette. The area to be developed is north of Cumberland Ave. and served by a tributary of the Dempsey Baker Ditch which drains into Hadley Lake.

Fred Hoffman noted drainage problems in this area due to Hadley Lake having no outlet and also noted existing problems in the Cuppy McClure watershed area. Purdue Industrial Research Park

George Schulte reported that Purdue University had at one time plans to reconstruct the Dempsey Baker Ditch, but these plans had never been realized. Mr. Schulte explained that the Purdue Industrial Research Park plans were to develop three lots with a temporary detention basin. He stated the release rate to remain the same with plans to move the basin as needed with future development. Mr. Schulte stated that he could voice no objection to the development as long as there was no increase in runoff.

Fred Hoffman advised that maintenance responsibility be defined to protect the Hadley Lake area from further problems and to provide adequate drainage maintenance for the lots sold. He recommended that an open-ended maintenance bond be obtained from the University and that it remain in effect as long as the pond exists.

It was agreed due to the recommendation of the Drainage Engineer and of legal counsel that no final approval be given at this time. The need for construction plans, for final calculations, and for a maintenance bond were noted. George Schulte also noted the need to revise the basin plans from a 25 year to a 100 year return period. It was recommended that approval be requested at a later date after final plans and calculations had been submitted.

Rex Bowman explained that the actual development would only include 1½ acres, with 4 acres on the front to be retained by the University for a laboratory, drainage plans to consist of a dam on a swail with a pipe running underneath, and these plans to be revised with future development of Part 2.

Regular Drainage Board Meeting - October 5, 1983 (cont.)

Mr. Schulte clarified the need for construction plans to be submitted and for as-builts and certification to follow upon completion, even though this is a temporary basin.

Mr. Bowman stated the development to be within West Lafayette City limits and that city approval had been given. He noted an Area Plan Commission meeting to be that evening on this development, and requested Drainage Board approval in order to begin road construction on Monday. He asked if a letter stating detention pond size, intent to furnish as-builts, and statement of maintenance in the purchase agreement would suffice to meet Drainage Board needs.

Thomas McCully, Attorney, stated that a transferrable maintenance bond would be drawn up in the Area Plan format and submitted to Mr. Hoffman for approval. He also stated that final construction plans would be drawn up and submitted.

Sue Reser made the motion that conditional approval be given to Purdue Industrial Research Park, Phase 2, Part I, contingent upon the submission of a maintenance bond and the final construction plans. Final approval not to be given until the Drainage Engineer and County Surveyor had verified the meeting of these conditions.

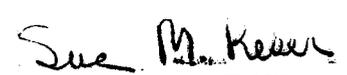
Eugene Moore seconded the motion.

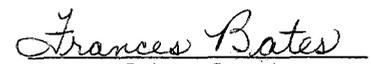
The Tippecanoe County Drainage Board granted conditional approval to Purdue Industrial Research Park, Phase 2, Part I.

The regular meeting of the Tippecanoe County Drainage Board was adjourned at 9:05 a.m.


Bruce Osborn, Chairman


Eugene Moore, Boardmember


Sue Reser, Boardmember

ATTEST: 
Frances Bates, Secretary

The Tippecanoe County Drainage Board met Wednesday, October 5, 1988 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Bruce V. Osborn chairman, called the meeting to order with the following being present: Eugene R. Moore and Sue W. Scholer, Boardmembers; Michael J. Spencer Surveyor; J. Frederick Hoffman Attorney; and Maralyn D. Turner Executive Secretary.

QUAIL RIDGE SUBDIVISION

QUAIL
RIDGE
SUBDIV
ISION

John Fisher representing Subdivision developer and Joe Bumbleburg attorney for developer requested Preliminary and Final Drainage. Subdivision is located on the south side of County Road 600 North, approximately 1/4 mile East of U.S. 231, in Tippecanoe Township. Subdivision consists of 13 acres which is being farmed. James Andrews and John Schuemann are developers. Presentation was made of plans. Adjoining property owner Mr. Hunt has a 30' wide grass waterway this is where the water goes now, they plan to discharge in the same position as it is now at the same rate. Watershed area would consist of 16.00 acres as they are picking up 3 acres from the existing Prophets Rock Subdivision. The off-site drainage has been included in the detention storage requirements for Quail Ridge Subdivision. Presentation is on file.

Mr. Hoffman asked: There is no retention pond? Mr. Fisher answered yes.

Michael Spencer asked if they had Construction Plans? Mr. Fisher answered they would be finished tomorrow (October 6, 1988).

Mr. Hoffman asked would there be any more water crossing Mr. Hunt's property than there is now, and no greater speed? Mr. Fisher answered there would be no more water and no more speed.

Mr. Hoffman asked who was going to maintain? Homeowners Association covenants. Mr. Hoffman asked if the County had an access to it, and under the covenants County would have the rights to go in and clean it out if it isn't maintained. Mr. Bumbleburg stated if that is what the board wants they will put it in the covenants. Mr. Hoffman stated that in the covenants it should be stated if the Homeowners don't do it, that the County has the right to come on in and do it and assess it against the Homeowners.

Michael Spencer asked about the velocity at the outlet pipe downstream. John answered between 4 and 5 feet. Michael asked about rip-rap to make sure there would be no erosion to the waterway. Discussion on rip-rap and erosion.

Michael asked if they had an emergency overflow structure?
Michael asked if they had erosion control plan during construction? Mr. Fisher answered they would be a part of the Construction Plans.

Bruce Osborn asked if they wanted Preliminary and Final approval with conditions mentioned?

Michael Spencer stated that conditions would be that the board have construction plans and approved by the regular check point agency. This is standard. Mr. Hoffman stated he had no problems with the system presented as long as they put the maintenance agreements in the covenants.

Eugene R. Moore move to give Quail Ridge Subdivision approval to final plans with the restrictions that the construction plans are submitted and approved with the covenants, seconded by Sue W. Scholer, unanimous approval.

MCCUTCHEON HEIGHTS SUBDIVISION PART II

MCCUTCHEO
N S.D.
PART II

John Fisher representing developer stated this was the final portion of the subdivision. Mr. Fisher had thought they had received Preliminary and Final approval with the conditions of getting the easements, therefore before Construction Plans can be approved the Drainage Board has to give approval. Michael stated he was under the impression that all they had to do was supply the board with the easements. Reading the minutes this was incorrect. Michael stated the signed easements have been recorded. The only thing that has to be done is have a hearing to establish the legal drain for that section of McCutcheon Heights. There are 40-45 lots. Dick Boehning is the attorney. Michael asked Mr. Fisher to get him a copy of the Construction Plans of the storm drainage system. Petition has been filed. Discussion.

Sue W. Scholer moved to grant final Drainage Board approval for McCutcheon Heights Subdivision Part II and a letter be sent for the hearing to create the legal drain, seconded by Eugene R. Moore, unanimous approval.

PURDUE
INDUSTRIAL
PARK
PART II
PHASE II

PURDUE INDUSTRIAL PARK PART II PHASE II

Daniel Pusey representing Purdue Research Foundation presented plans of the area impacted by the development of the Purdue Industrial Research Park Phase II. Area consists of 13 acres which is being constructed for the Whirlpool Corporation. The needed improvements are the storm water management. The area has been under discussion for several years. Historical the Hadley Lake basin has been one without an outlet, and as the area has been developed discussion of things to be done and things not done over the years. With the Research Park development it has given an opportunity to look and implement a part of a master plan that was developed a few years back. There were two options. One was to acquire right-of-way and by pass Hadley Lake, and go into Burnetts Creek system. The other was to work as a part of the whole community development because of the cost and look at utilizing and developing around Hadley's Lake as a drainage basin from the water management stand point. Aerial photos as far back as 1939 show that at one time there was a positive outlet to Hadley's Lake, and talking with property owners there was at one time a tile underneath Morehouse road that went out across farm fields, over the period of years these have either plugged up or got cut off. Biggest contributory to the problem was the Cuppy/McClure system which takes a large portion of West Lafayette, north part of the Purdue Golf Course and Purdue Dairy, basically Lindberg Road area north emptying into Hadley's Lake, this and a periodic flooding of Indian Creek Valley coming into the system presents a very large problem.

With the State Industrial Development Grant Program in the Whirlpool Corporation project coming to the Research Park West Lafayette has been given a \$350,000.00 infrastructure grant in the name of Whirlpool because of the added jobs created by Whirlpool.

Working with an inter governmental agreement between the County and the City (City is set up to administer). A request for proposal was put out by the City to model and determine what the capacity downstream is in the ditch system that flows eventually into Burnetts Creek. This will help the future development in the Cuppy/McClure system and Dempsey Baker system. The Dempsey Baker system (legal drain) starts (doesn't go into the Lake) and goes across the Cemetery comes back into Purdue Research across 350 North mid point of Yeager Road/ Cumberland Avenue coming up in the Four Season Apartment area. Mr. Pusey gave the route of the two legal drains.

Their plan is looking at a part of the Master Plan. Much presentation.

The Third Drainage basin consists of 79 Acres, a line from the Intersection of Cumberland Avenue and 52 north to 350 North goes to the Salem Court House area small area to the south draining into the Cuppy/McClure system through Research Park Phase I. Major design has been done for this area.

The fourth area Morehouse Road, US 52, and a little bit of Cumberland Avenue. This area has history and has affected the entire area. At one time it drained out and had no water in the area. The pond is a product of construction when 52 was widened, used as a borrowed area for the State Highway Department. This acts as a storage area for a portion of the area. Historically the south tip was a low area that drained part of the 80 acres Purdue Research owns, came down and drained across underneath 52 into the Cuppy/McClure system. The area under an agreement with the State Highway contractors filled in the area and altered the drainage pattern, area owned by Mr. Westl. The fill is set up so that water drains toward 52 and not onto the property of Purdue Research to the west. Much more presentation of the area.

The fourth area was done by the State. An outlet was created along common boundary a prominent swale is there, the swale goes to the north 42X29 corrugated metal pipe underneath 350 north swale proceeds down the east property line of the cemetery down over the Baker legal drain. The surface run off, if the area flooded, which it has, the surface course above the Baker ditch and follows on out. This has been altered too, and impeded the surface drainage.

Present water elevations of the pond 680.54, the culvert under 350 North 680.50, there is a berm that maintains the water in the pond. Michael stated there is lower ground between Purdue Research property line and the berm. (back of Butcher Block) With the alteration of the drain by the 52 construction and filling operation forced part of Purdue Research into another area, so in their design they need to accomplish two things. 1. Need to get some infrastructure up to the Whirlpool site, one being sanitary sewer, which needed some cover. 2. They felt their prudent management system of their sub-drainage basin was to make sure all the storm water would be maintained on their property. They are constructing a cover over the storm and sanitary sewer along their west boundary property line 80' wide easement which will maintain and keep the run off as their area is developed in the future into their sub-drainage area and lessen the impact that was caused by the alteration. Making more flexibility. Much more presentation.

Mr. Pusey presented figures for the future at the inlet box.

Sizing of the pond is based on the present conditions, that being utilizing the existing storm tile that is there with its release rate of 3 cfs, because of that release rate they had to oversize the detention area to serve the area in a developed stage.

Pre-design for a 10 year would be 83 cfs.

Presentation of sub-drainage was given.

Mr. Hoffman asked what they wanted today from the board? Approval of the storage for Purdue Research. They wanted to present a Master Plan of water management that was to fit in with the West Lafayette City.

The development of the Research Park has spurred funding to help do this.

Carolyn Locher property owner asked Mr. Pusey to explain what would be done in regards to the utilities. Explanation was given.

John Burgett asked if at this time there is no widening of 350 west of the west boundary. Answer by Mr. Pusey was that some widening has been done by the County Highway, but is still two lanes. Part of the agreement with the county with the Industries coming in, Whirlpool provided funding for the improvement in the roads. George Schulte Highway Engineer decision was to add a two foot strip on each side with some drainage improvements with some structures adding four inches of binder, next spring a new surface of 1" of surface re-stripping it. Drive way approaches were improved. Mr. Burgett asked if the pipes were still south of the pavement, in the two lane area? Answer-Yes. John Burgett asked what area does he figure the holding pond is going to drain? 80 acres. Pond is being constructed to maintain storm water management from the improved 80 acres under the given present condition, the area around it (to the east) is still being maintained as a natural area. Explanation continued.

Mr. Burgett asked if he was correct. The two holding basins, storm sewer basins being constructed on the north south of 350 N on west line are about 685, curb inlet and the bottom of the conduit was 680 so there is a 5' difference between them. What sort of a structure appears in the bottom area? Bottom of the low outlet in to the legal drain is 670, paved inlet. What happens when you go east of 350 from the metal corrugated conduit as you approach the two basins. It is a curb and cutter, curb inlet handles the road. Michael stated what Mr. Burgett is asking is the difference between the flow line of the corrugated metal pipe on how your going to slope the ground to get up to the basin. County is widening and extending the corrugated pipe. Both sides. Explanation and discussion continued. Rip-rap will be put in.

Mr. Osborn asked what are you asking for today? Approval of the concept and the Construction Plans for the 80 acres.

Michael Spencer stated the water surface elevation is much closer to the structure elevation. Problem is he did not realize there was berm around the existing lake. It is about 4' higher than the water elevation, it will have to get that high before it will run over and even get to the overflow structure. Mr. Burgett stated the lake is down. Mr. Burgett's concern was that the lake could get higher than the basin. Michael stated if this happened it would be held in there by the berm. The berm is 6-8' wide. Mr. Hoffman asked if it would wash out? NO.

Mr. Burgett asked about the moratorium against any more construction in the triangle, based on the new numbers does that mean that there is no longer a moratorium, because of drainage?

Michael Spencer stated the moratorium Mr. Burgett is talking about is anything contributory to Hadley Lake? The board has stated they did not want any more development in the Hadley Lake watershed area until an outlet was provided for the lake, hopefully the mechanism is in place now to provide that and funding for it would be a state grant. Sue W. Scholer stated hopefully that is correct. There are alot of procedures that have to go through Drainage Board. Mrs. Sharon Burgett asked if they were talking about a small or large project? Mr. Hoffman answered, a large project. Dan Pusey asked if she meant in their water area? Yes, construction in their watershed area. This will have to be evaluated. Discussion. Mr. Hoffman explained ordinance.

Mr. Burgett asked if there was any federal, Corps of Engineers, or state impact done on this structure? All environmental things were checked out. No wildlife.

Sue W. Scholer asked if Michael had any questions about the project for approval. No. Discussion continued.

Sue W. Scholer moved to give preliminary approval and approval of construction plans for the detention facilities as presented to Purdue Industrial Park Phase II Part II, seconded by Eugene R. Moore, unanimous approval.

500 East, State Road 26 East/200 South

Lamar Ziegler engineer with Clyde Williams & Associates, Inc. presented Drainage study for County Road 500 East asked for Drainage approval for proposed highway improvement on County Road 500 East from the terminus of Project RS-9179(1), County Road 475 East at a point approximately 2,100 feet north of County Road 200 South to State Road 26. Mr. Ziegler handed out a detailed report which he went through. There are four drainage area within the project limits on 500 East, Segment A, Segment B, Segment C and Segment D. Water flows to and percolates into the Felbaum Fork of the Berlowitz Ditch. Presentation is on file.

Proposed road improvements will consist of two concrete travel lanes 12 foot wide, with 11 foot graded shoulders (10 foot paved). Type "X" underdrains will be provided throughout.

Drainage improvements are proposed on the same segments. This is on file. Segment A. from north end of County Road 475 to the Halsmer Hill will drain down to the Felbaum branch of the Berlowitz Ditch, they are not proposing to make any direct connection into the Ditch, they are proposing to install a elliptical pipe under County Road 500 East, so the water that now collects on the west side of the road can travel under the road overland eventually reaching the Wildcat Creek. Essentially no change in the drainage pattern that exists there now. Because the impact of the proposed improvements is so slightly--only 1 cfs for a 50 year storm event the overall effects is considered

500 East
State Road
26 East
200 South

negligible and, therefore, no further routing or detainage of flow is considered for Segment A. They used runoff rates for 10 year, 50 year, and 100 year storm event criteria due to the fact that this area is almost all agriculture in nature and is not impacted at this time by flooding conditions and heavy run-off.

Mr. Hoffman asked how much additional right-of-way is there going to be? Answer-Two additional acres in the drainage brought on by the additional right-of-way all the way through mostly off the east side.

Segment B will drain 540.69 acres, drainage pattern will run the same, however they ran into a small problem in the SE corner of 500E and 100 South, picking up the additional right-of-way they intercept a very slight swale that turns toward the right-of-way then turns east, they intercept that and bring it on to County right-of-way, increasing the runoff rate. They have proposed to install detention into County Road 500 East and 100 South area. Two detention will be put on the east side of 500 East and one detention on the Northwest quadron of 500 East. 100 year Storm runoff is reduced to 49 cfs because of detention areas which is equal to the 50 year existing runoff conditions. The detention areas will basically consist of the storing water in the existing side ditches with the exception of the NW corner which the side ditch will be widened in order to have enough storage. The land is very low and dikes will be required to keep the water in the ditch. The only positive outlet is to the Berlowitz ditch. Once the water has flowed through the detention areas it will flow to the SW quadron where it will access the Berlowitz ditch by a bee hive inlet that exists there now. Project will move the connection further away from the road way providing a new inlet to the pipe. Within their rights of way limits they will replace both the Felbaum and the main branch tiles with new tiles. Mr. Osborn stated or any other unknown tile that may exist there now. As they are found during construction they will consult with Michael Spencer as to the position of where the field tiles should be.

Segment C runs north of I-65 up to the drive way for Fassnacht property. This area increases to 40.37 acres, water will collect in the side ditches and will flow south and run directly into I-65 ditch, run the water from the west ditch to the east ditch. Because of the ground conditions the proposed conditions will decrease the runoff rate to 1 cfs. 50 year storm event from 80 cfs to 79 cfs.

Segment D is a small area 50 year existing runoff rate is only 4.3 cfs and the proposed 50 year runoff is 5.7 cfs. Water flowing in the area flow into each of the side ditches runs north to State Road 26 ditches on the south side of 26 and flows away from County Road 500 East project. The amount of flow is very small the difference is just a little over 1 cfs and the size of the ditches makes detention virtually and practical as the ditches are shallow and there is no place to store the water, it is their recommendation no further detention be considered for this basin. Maps and calculations are included in the report and are on file in the Surveyor's office.

Bruce asked if Lamar had consulted with George Schulte Highway Engineer? He has consulted with George. Lamar stated George had comments and they have been incorporated into the report presented.

Michael Spencer only comment was to confirm the boards position on the outlet of the road projects and the county tile drains. Don't want to impact any more problems than there is in the watershed area now. There is an existing catch basin into the Berlowitz main tile at the intersection of 500 East and McCarty Lane. Bruce asked if Michael was going to ask for a positive outlet? Discussion.

Lamar Ziegler stated they ran a survey on north side of 100 South straight East from the intersection to the Interstate ditches which is the only positive outlet that exist, per Michael's request. They found the existing land at the intersection is .4 a foot lower than the grade in the Interstate ditch, therefore there is no positive outlet.

Mr. Hoffman asked if this was where Shaw ran the waterway? Mr. Hoffman asked how much additional right-of-way is this going to be taken? Right-of-way shown on construction plans there is an existing 25 feet they are requiring about 100 feet total so this would be about 50 additional feet. You can't say that it is 25 feet on each side of the road, because on the south side of the Interstate they are widening to the east side off setting the road slightly as is 475 East is coming into it, so there is about 32 feet taken off the west side, difference is made up on the east side. There's 10 feet more on the west than the east side. The right-of-way is subject to the Drainage Board action here today, as what is decided by the Board affects how much right-of-way is required.

Mr. Hoffman asked if the landowners who will be affected by the right-of-way had been notified? Michael stated not to his knowledge. Mr. Hoffman stated they should be notified. Sue Scholer asked how soon will they be notified? Mr. Ziegler stated prior to the time they started their preliminary survey in May, 1988 they sent notices to all property owners indicating that this project was beginning to unfold and there would be some trespass on their land to conduct the survey and there would be some additional right-of-way required. After approval today they will be able to finish the right-of-way plans in approximately 10 days, which will allow them to proceed with the acquisition process. Bruce Osborn asked what advise Mr. Hoffman had, he stated he really shouldn't give any advise as he represents two property owners affected by this project, Lafayette National Bank as Trustee for Mary K. O'Farrell and Richard Shaw partnership. Bruce stated were not talking about Drainage Board acquisition. Mr. Hoffman stated the drainage is going to affect whatever has to be done. Bruce asked which comes first? Mr. Hoffman stated again they should be notified from both the drainage and highway stand point. Appraisal process will start in two weeks, one of the requirements is that the appraiser before he inspects the site must contact the owner and the owners representatives to accompany the appraiser will have the plans with him to explain the impact of the project and if necessary an engineer can accompany the appraiser to

explain engineering details relative to the plans which the appraisers would be knowledgeable. Mr. Ziegler stated they are required to follow state law procedures. Mr. Hoffman wanted to be sure the law was followed. Discussion.

Sue W. Scholer moved to give preliminary and final approval on the Drainage Plans for County Road 500 East to State Road 26 / 200 South, seconded by Eugene R. Moore, unanimous approval.

STATE ROAD 38/US 52 TO ELLIOTT DITCH

STATE ROAD
38/US 52
to Elliott
Ditch

Robin Thompson representing Craig & McKnight, Inc. who has been sub-contracted by the State to do the road design for State 38/US 52 to east of Elliott Ditch. Purpose of the report today is to summarize what they plan to do with the drainage along this area and to ask for preliminary drainage approval. Upon that approval they will submit preliminary right-of-way plans to the State and go to design hearing, after state comments from the hearing they ask for final approval.

Sue W. Scholer asked if they had a date for that hearing? No date has been set, they feel it will be within the month of October.

Mr. Thompson stated the Drainage Ordinance requires that for new development, the 100-year post-development storm runoff must be detained while the 10-year predeveloped storm runoff may be discharged. The highway improvements are considered new development, therefore the proposed drainage system has been designed to meet this ordinance. The report has been broken down into four parts corresponding to four different drainage areas in the project. The water is either detained in a pond or in the road side ditches to assure the county ordinance is met. Three of the four areas will discharge into Elliott Ditch while the fourth will discharge into Wilson Branch. Area has been broken down into four areas, A.B.C. & D.

Area A will drain to Wilson ditch, the area has been broken down to two subareas. This area is the highways right-of way from the intersection of U.S. 52 to approximately 400 feet East of Wilson Ditch. The undeveloped area is 13 acres. The subarea west of Wilson Ditch contains 12 acres and the subarea east of Wilson Ditch contains a acre. The runoff in the subarea east of Wilson Ditch flows directly into Wilson Ditch. The subarea west of Wilson Ditch will be detained in a detention pond which will be constructed on the south side of S.R. 38 adjacent to Wilson Ditch. The outlet pipe from the pond will discharge directly into Wilson Ditch at a peak flow rate of about 6 cfs. The bottom of the pond will be at elevation 644 with a highwater elevation of 648. This allows 2 feet of freeboard to the top of bank. A flap gate will be required on the outlet pipe to prevent back flow through the pipe into the pond as the water level in Wilson Ditch gets higher. A detention pond will be put in the area of the Skating Rink. Bruce Osborn asked if this was off the easement? Yes. Discussion.

Area B includes approximately 315 acres from Basin 13, 13 acres from S.R. 38, and 4 acres from the Creasey Lane Extension. The developed 100-year flow for S.R. 38 in this area is about 35 cfs. The predeveloped 10-year flow is about 8 cfs. This makes the required detention for S.R. 38 about 27 cfs.

The state proposed funding of an outlet ditch from S.R.38 to the twin 66 inch pipes presently under construction. This ditch will be used as a detention area for S.R. 38 water. The peak 100-year flow from Basin 13, S.R. 38, and the Creasey Lane Extension is about 182 cfs. After storage in the proposed ditch, the peak flow into Elliott Ditch is reduced to about 151 cfs. This is a net storage of 31 cfs which exceeds the required storage. To gain this storage, the twin 66 inch pipes will be "choked" down at the inlet to twin 48 inch pipes. This will detain the amount of water while maintaining the water elevation well within ditch banks.

Michael asked if they had talked to the City about that 48" pipe sticking into their 66" pipe? Todd Frauhiger stated they had talked to Hawkins Environmental Associates about this. The reason they have to decrease this 66" pipes is that when they were original sized they were sized to catch all the water from Basin 13 and the Creasey Lane extension as well as all the water from S.R. 38. Without decreasing those pipes you would have all the water with 100-year storm from all those areas flowing directly through the 66" pipe with no detention at all. Decreasing to 48" gets them down to the detention which exceeds what they needed for S.R. 38. They could be detaining some Basin 13 water or Creasey Lane water, there is no way to tell. They did match what they needed for S.R. 38.

Michael Spencer asked how they feel about those 48" pipes in the end? Todd answered they had no problems with them at all.

Mr. Hoffman asked if it was going to have any effect on the parts where they are not going to let the water flow through, area north. Answer, it should help improve it.

Sue W. Scholer stated they are not showing it as acquisition. Todd answered: Through discussion with Michael Spencer the City has acquired a 60' easement along the Creasey Lane extension, and have already contracted to put in the twin 66" pipes, which is under construction. Michael pointed out that the City has put them in. Basically there is a problem existing which no one knew (city or county) how the outlet pipe from S. R. 38 was going to be constructed in the 60' easement down to the pipes. Since the State needed a detention pond they agreed to construct a ditch and use it as detention facility. Todd clarified build a ditch, technically the State can not go off the State right-of-way to do construction, so what they are going to do, they are going to fund the construction. Whoever owns that easement will hire a contractor to do the construction of the ditch. Michael stated this would be a City project. State would pay the City and the City pay the contractor. Todd stated the side ditch is 20' bottom, 12' deep, 3-1 side slopes, and 1500' long. Its a massive project. Mr. Hoffman asked if there was going to be a guard rail? Yes.

Todd pointed out whoever is designing Creasey Lane extension, the ditch will be running along the edge of Creasey Lane, he is assuming they are aware of the size and need for guard rail. For State Road 38 everything is OK.

Bruce V. Osborn chairman, had another commitment and asked Eugene R. Moore Vice-Chairman to chair the meeting in his absence.

Area C is a low area, it is lower than Elliott Ditch at S.R. 38. There is an existing tile in the area which drain the runoff from this low area into Elliott Ditch, 1000' south of S.R. 38, consisting of approximately 3.5 acres of land including highway right-of-way and adjacent land which drain onto the highway right-of-way. Predeveloped 10-year flow is 6.3 cfs. The developed 100-year flow is 20.1 cfs.

Proposal: The runoff from this area will be retained in a 20 foot bottom ditch from Sta 188+00 to Sta. 194+00 "PR-A" Rt. The bottom of the retention ditch will be at elevation 642 and the top of bank elevation is 644.5. The existing tile will be utilized to slowly drain the runoff away from the ditch. They propose to find the field tile when construction starts. They will put a little pipe catch basin with a grate on it, stick it in the pond and meter it out, this will store all the water with no runoff except for a little pipe that will tap into the existing drain. The retention ditch will reach an elevation of 644.3 at the 100 year storm drainage. This gives a freeboard of 0.2 feet.

Area D is the State's right-of-way from approximately Sta. 197+00 to Elliott Ditch. Existing right-of-way is approximately 2 acres and the proposed right-of-way is approximately 7 acres. This will be a four lane road with shoulders and side ditches.

Proposal is to take runoff from this area and detain in the roadside ditch along the south side of S.R. 38. The ditch along the north side will flow through a pipe under S. R. 38 into the south side ditch. The outlet pipe from the pond will discharge directly into Elliott Ditch at a peak flow rate of about 4 cfs. The elevation at the outlet will be 646 with a peak ponding elevation of 653.7. This will allow about 1.5 feet of freeboard. A flap gate will be required on the outlet pipe to prevent back flow through the pipe into the pond as the water level in Elliott Ditch gets higher.

Report is on file.

Michael stated everything looks fine, however there are some questions in the area of the ditch. Michael would like to get with Hawkins Environmental for discussion to make sure everything is OK and get it in writing from Hawkins that everything is OK.

Mr. Hoffman agreed with Michael to get it in writing regarding the pipes and the ditch.

Todd stated they have had conversation with Hawkins in regards to the pipes and ditch in the project.

The erosion control needed in the area will meet State Highway standards. Straw bales in the ditches, slopes too steep they will put the erosion fabric in and stake it down. Mr. Thompson stated there should be no problem. The discharge of pipes are 4-5 cfs. They will be more often under water. That will disparte the velocity coming out, therefore they do not anticipate any erosion.

Sue W. Scholer moved to grant preliminary approval for Drainage Plans as presented for S.R. 38 from U.S. 52 to Elliott Ditch, seconded by Eugene R. Moore, unanimous approval.

Todd Frauhiger stated they will get the right-of-way plans submitted, get the final construction plans, then come back and verify that what was presented earlier has been put into the final construction plans and ask for final approval.

Mr. Thompson stated all inlets would be located.

ORCHARD PARK/HERITAGE BANK

Michael Spencer has been in contact with the Farmers & Merchants State Bank of Darlington in regards to the detention pond underneath the power lines. Fred Hoffman has talked with them. They have supplied the board with a document that says they will have insurance that will cover any occurrence related to that drainage facility. It has met with Mr. Hoffman's approval. Based on this, Michael recommended the board give approval of the bank being built on the location. Michael stated this restricted covenant needs to be recorded with the plat.

Sue W. Scholer moved to grant final approval of the drainage plan and give the Bank permission to build the branch bank on the location requested, subject to receiving and having the restrictive covenant recorded with the plat, seconded by Eugene R. Moore, unanimous approval.

DRAINAGE ORDINANCE

Sue W. Scholer asked where are we with the changes in the Drainage Ordinance. Have we made a statement in there about detention under utilities? Mr. Hoffman stated we adopted the amendments. They are typed up. The only thing that was not typed in was the definition of the Impact area, and no detention under power lines. This is what came out of the Heritage Bank proposal. Michael stated they have satisfied it coming up with the legal liability. This is the reason Michael made the recommendation that he did. Mr. Hoffman stated they had been in acted on by the board in the April 6, 1988 Drainage Board meeting. Mr. Hoffman stated this needs to get in the books sold to developers. Sue asked Michael if the definition in the Impact area needs to be done before the book is printed. Yes. Michael stated this is close to being ready. Sue asked if this could be acted on next month. Fred stated Section 13 and 14 was adopted

Orchard
Park
Heritage
Bank

Drainage
Ordinance

October 5, 1988

in regards to power lines.

CUPPY/MCCLURE-DEMPSEY BAKER

Sue W. Scholer asked Michael to get the legal of the Cuppy/McClure Legal drain and Dempsey Baker Legal drain to Mr. Hoffman. Mr. Hoffman wants the legal on the drains that don't quite go into the pond. Michael stated it is Cuppy, Yeager, Cole and Baker drains. The end points are needed. Drainage procedure needs to get started.

There being no further business, the meeting adjourned at 11:10 A.M. Next meeting is November 2, 1988.

Cuppy
McClure
Dempsey
Baker
Ditch

Michael W. Hoffman
Chairman

Sue W. Scholer
Board Member

Eugene R. Moore
Board Member

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

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
Wednesday, March 7, 1990

Tippecanoe County Drainage Board met in regular session Wednesday, March 7, 1990 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Sue W. Scholer chairman called the meeting to order with the following being present: Bruce V. Osborn and Eugene R. Moore Board Members; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; and Todd Frauhiger, Drainage Consultant, and Maralyn D. Turner Executive Secretary. Others present are on file

WOODRIDGE SOUTH

WOODRIDGE
SOUTH

George Schulte of Ticen, Schulte, & Associates P C presented Stormwater Drainage Design Calculations and requested final approval. Subdivision is located adjacent to Elliott Ditch in the Southeast Quarter Section 4 and the Southwest Quarter of Section 3 in Wea Township. The proposed development contains 8.92 acres which presently is in grass and weeds. There is approximately 0.75 acres of offsite for a total drainage area of 9.67 acres. The offsite drainage comes from a part of the developed Woodridge. Runoff from the site drains overland and into the Elliott Ditch.

Mr. Schulte stated this had been submitted to the Department of Natural Resources because of the area that the Subdivision is in. They have received a response from DNR concerning the high water elevation. They will have to submit to DNR for a permit to work in the flood way. As soon as the Drainage Board gives approval they will go ahead with the Construction plans, and then proceed with the submittal to DNR for there approval.

Mr. Hoffman asked if they were destroying wet land? Discussion. The back yard area of the lots will have to be graded out to show their detention storage area, it will be one to one half feet deep. Roadway has been cut.

Michael J. Spencer stated that he was requesting DNR approval and that they have the proper erosion control techniques incorporated during construction. For this small size pond Todd Frauhiger stated that the erosion control was important.

Mr. Hoffman asked if this was attached to a legal drain? Discussion. Michael stated this subdivision is already in the Elliott Ditch watershed area and that the lots would go into the Elliott, they will pay the maintenance assessments. Michael pointed out that a covenant should be presented and Mr. Hoffman check the language. The outlet pipe goes to the Elliott ditch. It is on the Elliott Ditch as previously stated, right on the easement line. Michael stated the county would still have access and he sees no problem. The only problem per Mr. Schulte is that there is some offsite coming in from the existing development, he has discussed this with Michael. Mr. Hoffman stated if there was no channel there would be no problem. Sue asked then if the Board would not be in consistent with legal drain request in a subdivision, answer no.

Bruce V. Osborn moved to give final approval for Woodridge South Subdivision Stormwater Design Calculations as presented, seconded by Eugene R. Moore, unanimous approval.

STOP & RUSH CONVENIENCE STORE

STOP/RUSH
CONVENIENCE

Pat Cunningham of Vesters and Associates, Inc. presented drainage study for Stop and Rush Convenience Store, he is representing Dean Bunch property owner. The Proposed site consists of a 2.1 acre tract of ground. Tract lies within a 5.5 acre watershed area of which 1.1 is currently being developed. The property currently consists of mostly sandy-clay soil, flat terrain and cropland. Site drains overland to an 18 inch culvert pipe under Old Romney Road as shown on plan presented. The total watershed area for the 18 inch culvert is approximately 8 acres. The 18 inch culvert outlets onto property owned by Mr. Bunch and from there drains into an 18 inch storm pipe, as show on the drainage plan, and overland across the property and the St Mary cemetery. The 18 inch pipe outlets at the north boundary of the cemetery and at that point all flows are overland to the Wabash River. Todd Frauhiger has stated that Mr. Cunningham has over designed the pond for storing on the 100 year storm event for the total 4.65 acres watershed. Todd feels he can reduce the pond just for the 1.1 acre-site.

Pat stated that the drainage consultant had not had time to go over the plans as presented. Pat asked that the Board allow the drainage consultant and Michael to make final approval after they have made review and study of plans.

Pat stated that they do not have an easement at this time, they will be seeking an easement after they receive approval of the plans.

Mr. Hoffman asked if St. Mary's Cemetery had been informed? Answer-No. Mr. Hoffman stated they should be notified as they will be having drainage into the ravines on their property. This would cause erosion problems. It was pointed out that it is currently draining there now. They are not changing anything from that stand point as that is the direction the watershed goes.

Sue asked if the structure on the road would be new? Answer-No.

Sue asked Michael if they had reviewed the plans. He stated they had reviewed it in January. At that time they had 5-6 items that they discussed with Mr. Cunningham; therefore his most recent submittal is the out come of that meeting. Todd Frauhiger stated that by end of the week they should be able to finish their study on this proposed project. Pat stated that most of the comment in January pertained to the

March 7, 1990 Drainage Board Continued

Drainage Ordinance revisions of November 1989 of which he was unaware of when he made his first submittal.

Discussion of easement and notification to St. Mary's Cemetery, City of Lafayette, and Railroad Company continued.

There will be no increase of flow across the road after development. Discussion.

Discussion - Positive outlet is the proposed 12 inch pipe into the 18 inch pipe.

Discussion of a format letter should be composed for situations like this.

Michael is more concerned about the easement they need to get across the next neighbor, that is definitely needed. He requested they finish their review and get back with Mr. Cunningham and if they need anything it gets completed before coming back before the board. The Board requested that the easement be for pre-condition.

Before the Board takes action after much discussion it was decided to reconvene this meeting for the Stop & Rush Convenience Store. The Board agreed that notification be sent to the property owners affected and get the necessary easement. The Board will need to post the reconvened meeting 48 hours prior to the time and date.

ORCHARD
PARK

ORCHARD PARK

Michael stated that he and John Fisher had met with Mid-States Engineering and got a copy of their topo maps showing where the flight lines will be and where they want the targets set, everything is moving along; hopefully this will be started this week.

CUPPY
MCCLURE

CUPPY MCCLURE

Sue W. Scholer stated that a notice had been received from City of West Lafayette of an information meeting on Monday, March 12, 1990 at 1:30 P.M.

WATKINS
GLENS

WATKIN GLENS

Mr. Hoffman stated that Jerry Withered had gotten restrictions to Fred and he has not had the time to go over the language yet. This is in regards to the Sondegarth property next to Watkin Glens.

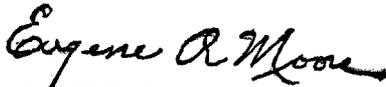
Michael suggested that when there are projects surrounding the City Limits and County, the Boards should have some type of joint review.

Meeting recessed at 9:30 A.M. until meeting is scheduled to reconvene.

April 4, 1990 the Drainage Board met and Eugene R. Moore moved to adjourn the March 7, 1990 meeting, seconded by Bruce V. Osborn, unanimous.



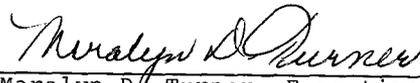
Sue W. Scholer, Chairman



Eugene R. Moore, Board Member



Bruce V. Osborn, Board member

SS: 
Maralyn D. Turner, Executive Secretary

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JUNE 5, 1991**

The meeting was called to order by Nola J. Gentry, Chairman, at 9:00 A.M. in the meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Those present were: Nola J. Gentry, Chairman, Keith E. McMillin, Hubert Yount, Tippecanoe County Commissioners, Michael J. Spencer, County Surveyor, Ilene Dailey, Chris Burke Consulting Engineers, David Lührman, 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 May 1, 1991. Keith McMillin moved to approve the minutes, seconded by Hubert Yount. Unanimously approved.

HADLEY LAKE

Dennis Clark, Cole Associates presented to the board a final plan on Hadley Lake Drainage Project. Involving two components: 1) Reconstruction of the Dempsey/Baker Drain from Purdue Pond to Hadley Lake; 2) Provide a positive Drainage outlet from Hadley Lake northeastward through the Equitable Life Assurance property to their gravel pit and continuing intercepting the Yeager Ditch and then outletting into Cole Ditch.

Dennis Clark presented the plans with revisions to the Board.

Discussion followed.

Dennis Clark stated to the Board that they could make the changes.

Mike Spencer said the plans needed to be reviewed since this was the first time the Board had seen this route. Also, a revised set of plans need to be given to Steve Murray, County Highway Engineer.

Discussion continued.

Mike also stated, a 30 day notice needed to be sent to the landowners. The date should be set soon. It is too late to make the July Drainage Board meeting, but a special meeting could be scheduled.

Discussion continued.

CONCORD CORNER

George Schulte presented plans to the board on Concord Corners. Mr. Schulte stated that Concord Corners is a 25 acre site located at the intersection of County Road 350 and Concord Road. Approval is needed on the high water elevation so that the site can be planned.

Discussion followed.

Mr. Schulte stated that they are projecting a high water elevation of 6 foot going through the site. The proposal is to build the site up to a flood protection grade 2 feet above that.

Discussion continued.

Hubert Yount asked Mr. Schulte and Steve Murray, Highway Engineer how this would proposal would affect the county side ditch.

Nola asked if this proposal was putting more water in the side ditch.

Steve responded that this was his primary concern. This is a unique site and we have no problems trying to adjust our side ditch along 350 to accommodate the Fairfield site as long as it does not cause any undo maintenance problems for the road or any downstream problems. We will hire Chris Burke, Engineering LTD to look at both drainage reports, Klins that was done for 350 South and the one done for Concord Corners to see what are realistic discharges and how it is going to affect in particular the downstream area.

Hubert asked if the resevoiring would move out into the side ditch and send it downstream.

Steve replied. "Some amount of it would yes." The question is: What is a reasonable amount and how will it affect the downstream area.

Discussion followed.

George Schulte stated that it was his understanding in the report to Stu Kline developed at 350, that their system would pass the 50 year storm drainage. That is what we are looking at, the same criteria. We are passing the 50 year storm drainage.

George continued that we would provide detention storage. We are not increasing the run off rate, it will be decreased because of County Road 350's construction.

Ilene Dailey, from Chris Burke Engineering asked how will you define what your predevelopment run off is? You looked at it without accounting for the existing storage and the existing outlet conditions correct? So the existing run off on the site is the number you came up with but that is not how much actually gets out through the existing outlet.

George stated that there is no existing outlet. The only thing that is there is a field tile that drains the site. It is my understanding that 350 will be improved to help the drainage for these areas.

Nola said that the 350 drainage was just designed to handle the road drainage.

Steve commented that the policy had always been if they can in turn help adjacent properties without causing problems or liabilities for down stream owners we would.

Hubert stated that that is the question that arises.

Steve said that he did not feel comfortable recommending one way or the other.

Noia interjected that we just need to have Burke Engineering look at this and bring it back later.

Steve said that Burke would be hired through the Engineers office.

Hubert said to bring it back to the Commissioners and tell us what they say.

Steve said that they do a good job reviewing these things, but this was unique enough it needs to be a more in depth review, and he would go basically with their recommendation.

George stated that they had gotten involved in the original design of these culverts. We are looking for approval so we can establish some kind of grade out here and build a site and start construction. We need high water elevation.

Ilene Bailey stated that what George came up with based on this structure being put in, I don't have any problems with the calculations specifically for this site. What is the down stream affect?

Discussion followed.

George stated that the only thing that needs to be taken into consideration is when General Foods was built the whole intersection was raised at one time which did impede the discharge going through that area.

Jack Coffin, Fairfield Contractors asked the Board what the status of the project does the county give additional approval based on their review, where do we stand?

Nola responded that no action could be taken today, or until the plans had been reviewed.

MAPLES PARK/ELDER BERRY SUBDIVISION

George Schulte said the next item is the Maples Park/Elder Berry Subdivision which is located northwest of Lafayette this is US 52, Morris Bryant, County Road 250 West Hadley Lake. What is being proposed is an increase in the number of lots for the Maples Park Mobile Home community and also the Elder Berry Subdivision which lies just north of the existing park and along County Road 250.

The Maples Park area contains about 9.33 acres and proposed addition of 56 lots. The Elder Berry development contains about 2.10 acres and they are proposing 15 lots in that area. The reason that both were submitted is because they are continuous to each other and contributory to the Hadley Lake drainage basin. What we are proposing to do to comply with the drainage ordinance is to excavate just north of the proposed development to build up the existing proposed development above the 100 year high water elevation. It will take about 6600 yards or about 4.1 acre feet to build the Maples Park area up. Theoretically, storage volume required to comply with the ordinances about 1.2 acre feet. What we are proposing is that the area we excavate out from within the flood plain provide the needed storage for the site.

The site itself does have about a 33 acre watershed tributary to it which we did look at for drainage and providing sizing of culverts through the proposed road system.

Discussion followed.

Hubert asked if the basin was going to be in the flood plain.

Ilene responded that it would not be a basin it will just be excavation.

George said it would be excavation. Basically, it is a volume exchange.

Discussion followed.

George stated that what they are asking for is final approval on the Maples Park area and preliminary approval for Elder Berry Subdivision.

Ilene Daily stated that they were planning to use polyethaline pipe and that requires a special approval from the board.

Mike stated that we do allow polyethaline pipe. It refers to state highway specs.

Noia asked Mike if he had looked at Mapie Point.

Mike said yes, and his only concern was that digging around a lake was it a wetland, do they need DNR and Soil Conservation approval? Is that area inundated now by 100 year storm event where you want to dig.

George said yes.

Mike said normally storage doesn't count unless it is above the flood plain elevation.

Discussion followed.

George stated that we are doing here, by excavating out of the flood plain we are taking dirt out and putting water out we are not going to raise the water level, and that is the concern of detention storage.

Ilene stated that if the water is not raised the outflow will not be raised.

George stated that they are exchanging volumes basically. A lot of times when you go to detention storage people will build them in a flood plain and when you build a pond in a flood plain then you can only consider that storage above that, where you actually dyke it.

Discussion followed.

Mike stated that a lot of the items brought up in the review deal with construction plan items.

Ilene stated to the board that since he was asking for preliminary approval on the one these would be addressed when he comes back for final approval.

Nola stated that he was asking for final approval on the Maples Park project.

George stated that a complete design had been submitted on the storm drainage system for Maples. The only thing we haven't really detailed is exactly where the detention pond is going and we need to know if we can get approval before we can do something like that.

Discussion followed.

Nola said that it looks like they are just making Hadley Lake a little bigger. So we are not really detaining.

Ilene said in affect you have a natural detention which is the entire lake and you are enlarging that detention.

Nola asked if that was technically throwing water on another property.

Mike said that it drains that way now so he would say no, it's not.

Hubert asked in your opinion we are not increasing the flow.

Ilene said; right because he providing over twice as much volume as is required.

Discussion followed.

Ilene wanted the Drainage Board to be aware that this might be setting a precedent. Enlarging the existing natural basin.

George stated that this is a natural reservoir and it is advantageous if you look at future maintenance problems with the basin that could crop up that you could build it into a natural reservoir by increasing the volume of the storage. That is basically what we are doing. Increasing the volume of the storage in a natural reservoir.

Discussion followed.

George said they would like final approval on the Maples Development and preliminary approval on the Elder Berry because the construction plans have not been submitted. The reason for the preliminary approval on the Elder Berry is to utilize the same detention area.

Hubert asked: "Your theory is that you are just enlarging the Hadley Lake basin. They are not releasing more water on the predevelopment."

Ilene stated, not down stream.

Hubert stated that Hadley Lake would basically have the same volume it may get there quicker downstream based on what happens on the other project.

Mike said it was tied in just like the 350 South from Fairfield. We have got to get out what is there.

Nola asked Ilene that basically her caution was that a precedent was being set by exchanging volumes.

Ilene responded that it wasn't necessarily bad, but she just wanted the board to be aware of it.

Mike stated that compensatory storage had been approved along the Elliott for the Mall expansion but there is the regional lake. There is the volume versus spread all over a place.

Hubert commented that this is the theory he had been preaching. We need regional detention, regional basin.

Discussion followed.

George stated that they were asking for final approval on the drainage plan for Maple Park so the construction plans can be developed. Give them to the drainage board for final approval so we can go to the state board of health, area plan commission and get final approval.

Irene said that they had looked at the storm sewer and grading of the Maples Subdivision and it all checked out.

discussion followed.

Hubert Yount moved to approve the Maples Park drainage plan subject construction plan approval.

Keith McMillin, seconded. Motion carried.

Hubert Yount moved to approve the preliminary plans for Elder Berry Subdivision Phase II.

Keith McMillin, seconded. Motion carried.

TREECE MEADOWS

Tom Borck, Hawkins Environmental stated that the City of Lafayette did receive bids yesterday on the Treece Meadows project. There was one bidder successful in completing all the documents, Worts & Yates. We are in the process of evaluating that bid and talking with the contractor.

In evaluating the preliminary there were a couple of items that caused the difference. Other than that everything was in line. As far as I know the Interlocal Agreement is in order.

Noia asked Mike if he had finished looking over the exhibits on the Interlocal and are they in order.

Mike said as far as he could tell yes.

INTERLOCAL AGREEMENT

This INTERLOCAL AGREEMENT is entered into by and between the BOARD OF COMMISSIONERS OF TIPPECANOE COUNTY, INDIANA, and the TIPPECANOE COUNTY DRAINAGE BOARD hereinafter referred to collectively as "COUNTY", and the BOARD OF PUBLIC WORKS AND SAFETY as approved by the MAYOR and ratified by the COMMON COUNCIL of the CITY OF LAFAYETTE, INDIANA, hereinafter referred to as "CITY", and the parties each agree and represent one to the other as follows, to-wit:

WHEREAS, a problem exists involving the disposal of surface water from the area; and

WHEREAS, the surface water drainage creates problems of ponding and flooding during significant rainfall; and

WHEREAS, a proposed improvement for the Treece Meadows and contiguous area has been designed to significantly improve both surface water drainage problems for the area (See Exhibit "A" which is attached hereto incorporated by the reference and made part of this INTERLOCAL AGREEMENT).

WITNESSETH THAT:

WHEREAS, the County and the City have agreed that it is in their best interests to jointly participate in the Project hereinafter described; and

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS HEREIN CONTAINED THE PARTIES DO HEREBY AGREE AS FOLLOWS:

1. That it is in the best interests of the parties to this Agreement and the Citizens they represent that said Project heretofore described be implemented for all.
2. That the Board of Public Works and Safety of the City of Lafayette acting through Hawkins Environmental, Inc., will be responsible for the administration of said Project, but will coordinate approvals with the Tippecanoe County Highway Engineer and the Tippecanoe County Surveyor.
3. That in consideration of the implementation of the project described in Exhibit "A" which is attached hereto, incorporated by reference and made part of this INTERLOCAL AGREEMENT involving the disposal of surface water drainage said area being more fully described in Exhibit "A" the City will pay the costs connected with items one (1), two (2), three (3), six (6), seven (7) and eight (8) in part with CITY FUNDS and in part with monies acquired by participation from property owners served by said project and the County will pay the costs connected with items four (4) and five (5) with COUNTY FUNDS said items one (1) through eight (8) being more fully described in Exhibit "B" which is attached hereto, incorporated by reference and made part of this INTERLOCAL AGREEMENT.

4. That it is the intention and desire of all parties to this Agreement that the Treece Meadows Area Storm Relief project drain when constructed pursuant to the provisions of this Interlocal Agreement be made a "Regulated Drain" pursuant to the provisions of the Indiana Drainage Code, I.C. 36-9-27, and be under the jurisdiction of the Tippecanoe County Drainage Board, and the City and County will take all action, do all things, and execute all documents necessary or proper to make the drain constructed pursuant to the Treece Meadows Area Storm Relief Project a "Regulated Drain", pursuant to the provisions of I.C. 36-9-27-54 to 65 inclusive, and other applicable statute. At the discretion of the County it may be made a part of the "Wilson Branch" of the S.W. Elliott Ditch a regulated drain, to which it will connect at the project point near Creasy Lane.

5. That as further consideration the County will take appropriate action pursuant to the Indiana Drainage Code, I.C. 36-9-27, to reconstruct and/or maintain the present Wilson Branch of the S.W. Elliott Ditch, a regulated drain, from the project point of Creasy Lane described as item five (5) in Exhibit "B" to its confluence with the main branch of the S.W. Elliott Ditch, or the contemplated detention pond to be constructed near highway 52 (Sagamore Parkway).

BOARD OF COUNTY COMMISSIONERS
 TIPPECANOE COUNTY, INDIANA
 By: Keith E. McMillin
 Keith E. McMillin, President
Nola C. Gentry
 Nola C. Gentry
Hubert D. Gount
 Hubert D. Gount

ATTEST:

 Betty J. Michael, Auditor
 Dated: _____

BOARD OF PUBLIC WORKS AND SAFETY
 CITY OF LAFAYETTE, INDIANA
 By: _____
 P. Anne Glade

 Eileen Hession-Weiss

 Richard T. Heide

ATTES! :

 Eileen J. Hession-Weiss, Clerk
 Dated: _____

Ratified by Resolution _____ of the LAFAYETTE COMMON COUNCIL on the _____ day of _____, 1991.

EXHIBITS

- Exhibit "A" Plans and Specifications
- Exhibit "B" Preliminary Cost Estimate

Keith McMillin moved to enter into this Interlocal Agreement between the county and city.

Seconded by Hubert Yount. Motion carried.

This will also be acted on at the special Commissioners Meeting on Monday, June 10, 1991.

INTERLOCAL AGREEMENT FOR
MAPPING FOR THE CUPPY/MCCLURE WATERSHED

This agreement is entered into between and among the City of West Lafayette, Indiana, Tippecanoe County Drainage Board, Shook/Pearlman, et al., and Great Lakes Chemical Corporation, Inc. on _____, 1991.

WHEREAS, due to the dynamic and interrelated nature of the Cuppy/McClure watershed, consideration must be made for downstream improvements.

WHEREAS, in order to make downstream improvements, professional mapping must be procured.

WHEREAS, the City of West Lafayette, Indiana, Tippecanoe County, Indiana, Shook/Pearlman, et al., and Great Lakes Chemical Corporation, Inc. are affected by the drain, the parties have agreed to fund the cost of the professional mapping.

In consideration of the mutual promises contained herein, the parties agree as follows:

1. The mapping will be performed by MSE Digital Mapping of Indianapolis. The mapping will provide a one foot contour interval for the entire 1000 acres, more or less, of the Cuppy/McClure watershed.

2. The watershed delineation and study will be based on the mapping provided by MSE Digital Mapping of Indianapolis.

3. The parties agree to pay the cost of mapping of \$10,750 in the following amounts:

City of West Lafayette	\$11,250.00	
Tippecanoe County	\$ 3,000.00	
Shook, Pearlman, et al.	\$ 4,500.00	
Great Lakes Chemical Corporation, Inc.		will provide current completed mapping of their site as payment in kind

Each party shall pay MSE Digital Mapping of Indianapolis directly upon completion of the work and submission of a statement and/or claim.

4. Upon the completion of the mapping, the parties will be provided with reproducible copies of same. A study of the mapping will then be conducted for a wetland determination, delineation and use plan. The funding for this study will be provided for by the City of West Lafayette, Indiana. All parties will be provided with a copy of the study.

Dated: _____, 1991

RD OF PUBLIC WORKS AND SAFETY THE CITY OF WEST LAFAYETTE BY ITS BOA

By: _____
By: _____
By: _____

ATTEST:

THE TIPPECANOE COUNTY DRAINAGE BOARD

By: _____
By: _____
By: _____

GREAT LAKES CHEMICAL CORPORATION, INC.

By: _____
Name: _____
Title: _____

TIPPECANOE COUNTY SURVEYOR
By: _____

Keith McMillin, moved that the Tippecanoe County Drainage Board enter into the Interlocal Agreement for Mapping of the Cuppy/McClure Watershed with the City of West Lafayette.

Seconded by Hubert Yount. Motion carried.

Nola asked for any other business.

The next Drainage Board meeting will be July 10, 1991 at 9:00 A.M. Being no further business the meeting was adjourned.

 Keith E. McMillin, Member

 Nola J. Gentry, Chairman

 Dorothy M. Emerson
 Dorothy M. Emerson, Executive Secretary

 Hubert D. Yount
 Hubert D. Yount, Member

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
November 6, 1991**

The meeting was called to order by Nola J. Gentry, Chairman, at 9:00 A.M. in the meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Those present were: Nola J. Gentry, Chairman, Keith E. McMillin, Hubert Yount, Tippecanoe County Commissioners, Michael J. Spencer, County Surveyor, Jon Stolz, Chris Burke Consulting Engineers, Fred Hoffman, Drainage Board Attorney and Dorothy M. Emerson, Executive Secretary Drainage Board.

The first item on the agenda was to approve the minutes of the meeting for the last Drainage Board meeting on October 16, 1991. Hubert Yount moved to approve the minutes, seconded by Keith McMillin. Unanimously approved.

DEERFIELD COMMONS

Dennis Holmstead presented the drainage plans for Deerfield Commons.

Discussion followed.

Mr. Holmstead asked the Board to grant approval with the conditions stated in Ilene Dailey's Memo.

Hubert moved to approve the plans submitted subject to providing written proof of access to the Brampton property and all other conditions from Ilene Dailey's Memo dated November 4, 1991.

Ilene's conditions are as follows:

- a) The storm sewer calculations apparently were not done using Manning's equation. No pipe velocities were provided.
- b) No inlet calculations were provided. Depth and spread of ponding in the parking areas was not provided.
- c) Velocity and stability calculations for the proposed drainage swales were not provided.
- d) No calculations for the effects of the proposed development draining to the existing Brampton Apartment detention facility were provided. No calculations were provided for this facility.
- e) The total drainage area and areas draining directly off-site need clarification. The total site area is given as 7.017 acres, the areas from Exhibit "F" appear to sum to 6.42 acres, while the areas shown as "Before Development" and "After Development" apparently total to 5.74 acres.

Keith seconded. Motion carried.

JANE KENNY PROPERTY

Bob Grove representing the Jane Kenny Property requested drainage approval.

Discussion followed.

Fred Hoffman, Drainage Board Attorney asked if this was wetland.

Discussion followed.

Mr. Grove was informed by the Board that he needed to find out if this property was considered wetlands.

Discussion continued.

Hubert Yount moved to grant preliminary approval on the Kenny Property with the conditions of checking the wetland status and State Highway approval for an outlet.

Seconded by Keith McMillin. Motion carried.

BROOKFIELD PHASE II, SECTION II

Dale Koons and John Fisher asked the Board for drainage approval on Brookfield Phase II, Section II.

Discussion followed.

Fred Hoffman asked if the pond had a fence around it.

Discussion continued.

Fred Hoffman read the Drainage Ordinance: "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.

Discussion followed.

Hubert stated that the proper procedure would be to come back and ask for a variance on the fence at another meeting.

Fred informed Mr. Koons and Mr. Fisher that they would need a written petition for a variance for the fence and for using lots for detention.

Discussion followed.

Nola stated that before approval could be given the following conditions need to be met: 1) Variance for the fence and 2) using lots for detention. When this is done a special meeting could be called.

ASSIGNMENT OF WALMART EASEMENTS TO THE DRAINAGE BOARD

Keith McMillin moved to accept the drainage easements for Richard A. Moore and Marjorie M. Halstead as submitted. Seconded by Hubert Yount. Motion carried.

Keith McMillin moved to accept the drainage easements from Walmart Stores, Inc. Hubert Yount seconded. Motion carried.

Keith McMillin moved to accept the drainage easement from GTE. Hubert Yount seconded. Motion carried.

Keith McMillin moved to accept the drainage easement from INB National Bank for the Gipe Property. Seconded by Hubert Yount. Motion carried.

PARKER DITCH

Our consultant MSE, their inspector Bill Hall, SIA and the Commissioners have approved the substantial completion of Parker Ditch. Letters have been sent to Indianapolis.

VACATION OF BRANCH 11 OF THE CUPPY-MCCLURE DITCH

Nola stated that a motion was needed on advertisement for the Vacation of Branch 11 of the Cuppy-McClure Ditch.

Discussion followed.

Hubert Yount moved to authorize advertising of the Vacation of Branch 11 of the Cuppy-McClure Ditch ten (10) days before the next Drainage Board Meeting on December 3, 1991.

Keith McMillin, seconded. Motion carried.

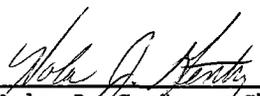
DRAINAGE BOARD MEETING CHANGED

Keith McMillin moved to change the next regular scheduled Drainage Board Meeting from Wednesday, December 4, 1991 to Tuesday, December 3, 1991.

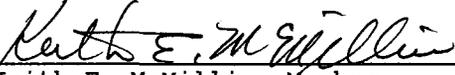
Hubert Yount, seconded. Motion carried.

Hubert moved to adjourn the Drainage Board meeting. Seconded by Keith McMillin. Motion carried.

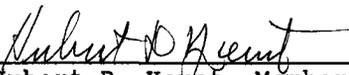
The next regular scheduled Drainage Board meeting is scheduled for Tuesday, December 3, 1991 at 9:00 am.



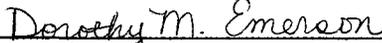
Nola J. Gentry, Chairman



Keith E. McMillin, Member



Hubert D. Yount, Member

ATTEST: 

Dorothy M. Emerson, Executive Secretary

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
DECEMBER 3, 1991**

The meeting was called to order by Nola J. Gentry, Chairman, at 9:00 A.M. in the meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Those present were: Nola J. Gentry, Chairman, Keith E. McMillin, Hubert D. Yount, Tippecanoe County Commissioners, Michael J. Spencer, County Surveyor, Ilene Dailey, Chris Burke Consulting Engineers, David Luhman, 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 meetings on November 6 and 15, 1991. Hubert Yount moved to approve the minutes, seconded by Keith McMillin. Unanimously approved.

Vacation of Branch 11 of the Hadley Lake Drain

Mike Spencer, County Surveyor recommended vacation of Branch 11 of the Hadley Lake Drain. Petition to vacate is on file along with legal notice and proof of publication. He then gave the Surveyor's Report:

December 2, 1991

STATE OF INDIANA)
)
COUNTY OF TIPPECANOE)COUNTY SURVEYORS VACATION REPORT

IN THE MATTER OF THE VACATION OF BRANCH 11 OF THE (HADLEY LAKE DRAIN) CUPPY McCLURE DRAIN

FINAL VACATION REPORT BY SURVEYOR

Petition to vacate was received October 1, 1991 from Great Lake Chemical Corporation to vacate Branch 11 of the Cuppy McClure Ditch.

It is my recommendation that Branch 11 be vacated for the following reasons:

- 1) Branch 11 is a six inch field tile that no longer performs the function for which it was designed and constructed.
- 2) The expense of reconstruction outweighs the benefits of reconstruction.
- 3) The vacation will not be detrimental to the public welfare.

Michael J. Spencer
TIPPECANOE COUNTY SURVEYOR

Nola Gentry, County Commissioner asked if there was anyone in opposition of the vacation of Branch 11 of the Hadley Lake Drain

Hubert Yount, County Commissioner moved to approve final vacation of Branch 11 of the Cuppy-McClure Drain and to include the Final Report of the Surveyor. Keith McMillin, seconded. Motion carried.

CCC Subdivision

George Schulte, Ticen, Schulte & Associates P.E.. representing CCC proposed to the Board the drainage plans for the CCC Subdivision.

Discussion followed.

Elmer Roth of 320 Elston Road voiced his objection to changing the water flow.

Father Potthoff, St. Mary Cemetery stated that it would be disadvantageous for them if there were more water being carried over the cemetery property than already exists.

Discussion followed.

Pat Fitzsimmons, St. Mary Cemetery voiced her objection to CCC Subdivision drainage plans.

George Schulte stated that he could sit down and discuss with the people involved and come up with a plan that would be acceptable for everybody involved.

Discussion followed.

Ilene Dailey, Christopher Burke Engineering LTD stated that this site currently provides storage for the upstream water and there has been no analysis done on how much storage is provided on the site. It needs to be investigated. Data is needed on the overland flow through the cemetery. More information is needed.

Helen Clark asked how the water would be rerouted.

Discussion followed.

Elmer Roth stated that there would be too much water around the houses with the proposed plans.

Discussion followed.

Ilene Dailey stated that one of the requirements for approval is to know what the capacity of downstream drainage is.

Discussion followed.

Hubert Yount moved for a continuance until the regular scheduled Drainage Board meeting on January 8, 1992. Seconded by Keith McMillin. Motion carried.

Bids for Drainage Tiles

Mike stated this was for the drainage tiles to be used in 1992. Bids will be accepted on January 6, 1992 at 11:00 AM. Advertisements dates will be the 19 and 26 of December 1991.

Keith McMillin moved to approve the advertisements for drainage tiles. Seconded by Hubert Yount. Motion carried.

Copies of the bids are located in the office of the County Surveyor.

Pine View Farms

Roger Kotlowski of Wetzel Engineering representing Melody Homes of Lafayette informed the board of their future plans.

The proposal will be presented in the January 8, 1992 Drainage Board meeting.

Discussion followed.

Family Pantry

Mike explained that Greg Jacobs had conditional approval with four (4) conditions: calculations for the final site plan be submitted, erosion control, offsite easement be recorded and submitted and come back to the Drainage Board with the final site plans to be approved. Then permits will be issued.

Mike continued that he did have the recorded easement from the Goddards to Mr. Jacobs and Helen Kaiser. Helen Kaiser is the legal title holder and Mr. Jacobs leasehold tenant. That was prepared and recorded on October 9, 1991. Key Number 106-04201-0085 with the Tippecanoe County Recorder. A copy is on file in the Surveyor's Office.

Mike also stated that he has final site plans and a letter from Dale Koons, P.E., Mr. Jacobs Engineer that the final site plan still conforms to already submitted drainage calculations.

Mike stated that Mr. Jacobs had met the conditions, but he (Mike) wanted some assurance that the system would be installed in a timely manner.

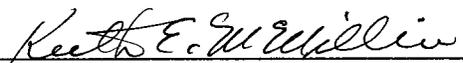
It was decided that Mr. Jacobs either install the system now or provide some sort of performance bond for the value of the improvement.

Hubert Yount moved to continue until the next Drainage Board meeting on January 8, 1992. Seconded by Keith McMillin. Motion carried.

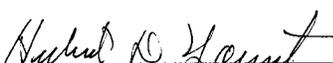
Being no further business the meeting was adjourned. The next regular scheduled Drainage Board meeting will January 8, 1992 at 9:00 AM.



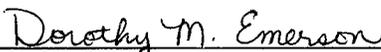
Nola S. Gentry, Chairman



Keith E. McMillin, Member



Hubert D. Yount, Member

ATTEST: 

Dorothy M. Emerson, Executive Secretary

**TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JANUARY 8, 1992**

The Tippecanoe County Drainage Board met Wednesday, January 8, 1992 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 for the re-organization of the board, she then invited J. Frederick Hoffman Drainage Board Attorney to preside.

Those present were: Nola J. Gentry, Keith E. McMillin, 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.

Mr. Hoffman asked for nominations from the floor for board chairman. Nola Gentry nominated Keith McMillin for chairman, seconded by Hubert Yount

Keith McMillin nominated Nola Gentry for vice-chairman, seconded by Hubert Yount.

Nola Gentry nominated Dorothy Emerson as executive secretary, seconded by Keith McMillin.

Mr. Hoffman asked if there were any other nominations.

There being no further nominations, Mr. Hoffman asked for the vote. The officers were unanimously elected.

The first item on the agenda was to approve to the minutes of the meeting for the last Drainage Board meeting on December 3, 1991. Nola Gentry moved to approve the minutes, seconded by Hubert Yount. Unanimously approved.

Hire the Attorney

Nola Gentry nominated Fred Hoffman as attorney the Drainage Board, seconded by Hubert Yount. Motion carried.

Hire the Engineer

Nola Gentry nominated Christopher Burke Engineering & Associates, seconded by Hubert Yount. Motion carried.

Active and Inactive Ditches

Mike Spencer, County Surveyor stated that a special meeting would be set to establish the active and inactive ditches for 1992.

Drainage Board Meeting Schedule for 1992

SCHEDULE OF 1992 DRAINAGE BOARD MEETINGS

The Tippecanoe County Drainage Board meets the first Wednesday of each month at 8:30 A.M. in the Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana. The year 1992 will have two exceptions, the January meeting will be held Wednesday, January 8, 1992 and the July meeting will be held Wednesday, July 8, 1992.

Should there be a need for a special meeting it will be posted on the County bulletin board.

January 8, 1992
February 5, 1992
March 4, 1992
April 1, 1992
May 6, 1992
June 3, 1992
July 8, 1992
August 5, 1992
September 2, 1992
October 7, 1992
November 4, 1992
December 2, 1992

Nola Gentry moved to approve the 1992 Drainage Board meetings dates, seconded by Hubert Yount. Motion carried.

SHEPHERDS POINT

Bob Grove representing Buckley Homes requested from the Drainage Board final approval on Shepherds Point Part II. Mr. Grove presented his construction plans.

Discussion followed.

Hubert Yount moved to approve the drainage plans on Shepherds Point Part II, seconded by Nola Gentry. Motion carried.

PINE VIEW FARMS

Roger Kottlowski of Wetzel Engineers Inc. and Tom Stafford of Melody Homes Construction presented their drainage plans for Pine View Farms

Discussion followed.

Ken Baldwin expressed his concerns and explained the drainage problems already existing in the area.

Jim Johnson, owner of adjacent property asked if they had considered all the possibilities.

Discussion followed.

John Tse of 2103 Tecumseh Park Lane, West Lafayette, Indiana 47906, read a letter written to the Drainage Board.

2183 Tecumseh Park Lane
West Lafayette, Indiana 47906
January 8, 1992

Tippecanoe County Drainage Board
Lafayette, Indiana

Dear Sirs: Re: Proposed Storm Sewer Overfall
 Pine View Farms Subdivision
 Wabash Township

I have received a letter dated December 31, 1991 from Wetzel Engineers, Inc. on behalf of Pine View Farms Subdivision on a proposed 24-inches pipeline from the planned subdivision eastward across the front of Sagamore Village Estates (Mobile Home Parks) to my land east of Sagamore Village.

This letter is written for myself as well as on behalf of members of my family who own properties across the highway from Sagamore Village on the north side of U.S. 52.

All the properties owned by me and members of my family referred to in this letter are in the Cuppy McClure Drainage Ditch area.

The proposed Pine View Farms Subdivision is in a drainage ditch area west of the Cuppy-McClure Ditch, and the ridge dividing the two drainage ditch areas is at the entrances of Sagamore Village Estates.

To bring the storm water from Pine View Farms to a different drainage ditch area and to dump the water onto our land will be in violation of Indiana Drainage Law. It is interesting to note that in order to solve the drainage problem along Lindberg Road in West Lafayette, the shortest distance and the least cost way would be to connect the low area with a pipe west to Black Bird Pond along Lindberg Road. I had been told that this could NOT be done because the pipe would have to cut through a ridge dividing the Cuppy-McClure Drainage Ditch area, which starts in the south at Lindberg Road, with Black Bird Pond drainage area, which is a different drainage area. The City of West Lafayette, this county and the State of Indiana are now spending hundreds of thousands of dollars, just for designing a system to take this water north to Hadley Lake along the Cuppy McClure Drainage Ditch in a distance many more times the distance to Black Bird Pond.

I should also point out that the highway right of way part of U.S. 52 in front of our properties are owned by the property owners, not the public. Easement right must be obtained first from the owner of each property before the installation of any pipe line even when it is constructed within the highway right of way.

If the water is allowed to be dumped into the 5 X 10 culvert of Cuppy-McClure Ditch along U.S. 52 in front of my property, it will become surface water flowing across properties owned by me and my family on the north side of U.S. 52, a water we have not had in the past.

For these reasons, I must respectfully ask the Board to turn down the plan of Pine View Subdivision to pipe its storm water east to us as suggested by the developer's engineer.

Thank you very much.

Sincerely yours,

John Y. D. Tse

Discussion followed.

John Schmidt of Maples Park confirmed that Mr. Baldwin does have flooding in his office.

Discussion followed.

Hubert stated that there are more problems than can be dealt with at this time. He moved to continue the hearing until the February meeting, seconded by Nola. Motion carried.

CCC SUBDIVISION

George Schulte of Ticen, Schulte & Associates updated the Board of the problems with CCC Subdivision.

Mike Spencer stated that he and George had met with the Monsignor to discuss the subdivision plans. They discussed the possibility of a shared storage area.

Discussion followed.

Mr. Lorine Roth of 320 Elston Rd. Lafayette, Indiana expressed concerned about the open ditch.

Discussion followed.

Helen Clark of 2311 Old Romney Road, Lafayette, Indiana stated to the board that at this point the landowners in the area do not have any problems with the drainage and they do not want to see any created.

Hubert stated before any decisions are made let the engineers finish there study and then decide.

Nola moved to table the CCC Subdivision, seconded by Hubert. Motion carried.

US 231 RELOCATION (RIVER CROSSING)

Ilene Dailey of Chris Burke Engineering stated that all of the information needed for approval has not been received. Ilene said by next month all of the information should be received.

Ilene explained the plans to the Board.

Discussion followed.

OTHER BUSINESS QUOTES FOR THE BERLOVITZ DITCH

Mike asked the board if quotes were needed for Engineering Services for the Berlovitz Ditch.

Nola stated that it needed to be determined if notices needed to be sent out or if it needed to be published.

Mike also stated that he wanted to amend an ordinance to require 3 sets of plans be submitted instead of two. So that the Highway Department also be submitted with a set of plans.

Nola Gentry motioned for Mike Spencer to meet with Drainage Board Attorney, Fred Hoffman on adding one more copy to be sent to the County Highway Department on drainage plans. Seconded by Hubert Yount. Motion carried.

Being no further business, Nola Gentry moved to adjourn the Drainage Board meeting. Seconded by Hubert Yount. Meeting adjourned.

The regular scheduled Drainage Board meeting is February 5, 1992.

Keith E. McMillin
Keith E. McMillin, Chairman

Nola S. Gentry
Nola S. Gentry, Member

Hubert D. Yount
Hubert D. Yount, Member

ATTEST: Dorothy M. Emerson
Dorothy M. Emerson, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
SPECIAL MEETING
OCTOBER 16, 1992

The Tippecanoe County Drainage Board met in special session held on Friday, October 16, 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, David Luhman, Attorney ProTem, and Dorothy M. Emerson, Executive Secretary Drainage Board.

Greg Griffith, Great Lakes Chemical Corporation presented the drainage plans to the Board. Stating that all items have been addressed.

Commissioner McMillin asked Surveyor Spencer if he had looked at the items, and if he was satisfied that all requirements have been made.

Surveyor Spencer stated that several meetings have taken place and that all items have been addressed. Surveyor Spencer also, stated that he has received a memo from Ilene Dailey, Christopher Burke Engineering giving her approval for the drainage plans for Great Lakes Chemical.

Memo from Ilene Dailey, Christopher Burke Engineering LTD

MEMORANDUM

TO: Mr. Mike Spencer - Tippecanoe County Surveyor

FROM: Ilene Dailey, P.E. - SPACECO, Inc.

SUBJECT: Great Lakes Chemical Corporation Headquarters
(CBBEL Project No. 92-211)

RECOMMENDATION: Final Approval (with Variances)

After review of the submitted information, listed below, CBBEL offers the following comments:

DETENTION BASINS

1. The detention basin design appears to meet the requirements of the Tippecanoe County Drainage Ordinance as it existed before the adoption of Ordinance No. 92-18-CM. The detention basin design was prepared based on rational method calculations.

2. The proposed project provides stormwater storage in three separate locations, which are linked by a series of pipes. The three basins are described below:

a. EAST POND - The east pond is located directly east of the proposed building, and is to be a wet bottom facility. It provides detention storage for the east side of the building site, in addition to an off-site area located to the south. The normal water level of 680.0 is maintained by a v-notch weir located in Manhole No. 11. Outflow to the north basin is controlled by a 10" orifice located downstream of Manhole No. 10. Safety and maintenance ledges are shown on the plans. A variance will be required to omit fencing around the pond.

b. PARKING LOT - The parking lot west of the proposed building will provide a limited volume of detention storage for the parking lot and access road areas. Maximum storage depths in the parking lot are expected to reach approximately 1'. The water depth in the access drives appears to be limited to approximately 8", which should allow emergency vehicles to reach the building if necessary. A variance will be required to allow the maximum depth in the parking lot to exceed 7". The remainder of the required parking lot storage is provided in the north basin. Outflow from the parking lot storm sewer discharges directly into the north basin.

c. NORTH BASIN - The north basin provides detention storage volume for the parking lot and access road areas. Water from the east pond essentially bypasses through the north basin. Outflow from the north basin is controlled at Manhole No. 9, which is to be constructed on top of the existing Cuppy-McClure tile. Outflow is to be controlled by two orifices, a 5" orifice located in the finflow pipe to Manhole No. 9, and a 10" orifice located in the top of Manhole No. 9. The top orifice allows discharge from the east pond to enter the Cuppy-McClure tile. The two orifices are designed to limit inflow to the tile to approximately 3.5 cfs. A variance will be required to allow the maximum depth of storage in the basin to exceed 4'.

3. The emergency overflow path from the east pond will be through an open grate at the top of Manhole No. 10 into the north basin. The top of Manhole No. 10 should be no lower than elevation 681.2. The emergency overflow path from the north basin/parking lot system appears to be westerly across the access road, toward the relocated Cuppy-McClure Ditch.

CUPPY-MCCLURE DITCH

1. The Indiana Department of Natural Resources (IDNR) has issued an after-the-fact permit for construction of the relocated Cuppy-McClure Ditch. A copy of the permit is on file in the Surveyor's office. Copies of the IDNR HEC-2 model input and output have been requested from the IDNR.

2. Results of the HEC-2 analysis appear to show that the relocation of the Cuppy-McClure ditch does not adversely impact upstream of downstream properties.

3. It should be noted that the HEC-2 analysis for IDNR used a discharge of 700 cfs in the Cuppy-McClure Ditch. It is anticipated that upon completion of the current Cuppy-McClure hydrologic and hydraulic study, a considerably lower discharge may be found at this point, due to consideration of the available storage in the Celery Bog.

BUILDING FREEBOARD

1. The lowest finished floor of the proposed building appears to be at elevation 682.0. From the plans, it appears that the 100-year water surface profile in the relocated Cuppy-McClure Ditch varies from approximately 680.1 at the south (upstream) end of the site. At the building entrance the elevation appears to be approximately 681.0. The parking lot is proposed to be part of the floodplain. Therefore, based on the analysis for IDNR, it appears that the building freeboard is approximately 1".

2. The proposed high water elevation in the east pond is 681.2, which is only 0.8' below the building's finished floor elevation. A 2' wall, extending to an elevation of 684.0, may provide additional protection.

3. A variance will be required to allow the building freeboard to be less than 2' above the expected 100-year water surface elevations.

STORM SEWER

1. The storm sewer calculations appear to meet the requirements of the Ordinance.

EROSION CONTROL

1. Erosion control notes and silt fence placement are shown in the plans.

EASEMENTS

1. An easement for the relocated Cuppy-McClure Ditch is not shown on the plans. It is CBBEL's understanding that Great Lakes Chemical Corporation intends to grant such an easement, pending the completion of the current Cuppy-McClure study. Great Lakes is to prepare a letter to that effect.

The submitted information includes a Drainage Report and Addendum, weir, orifice, and detention volume calculations, HEC-2 input and output, and plan sheets. The information was prepared by The WBDC Group, Grand Rapids, Michigan.

Based upon this review, CBBEL recommends approval of the proposed stormwater management plan, with the variances noted above.

No error or omission in either the plans, calculations or applications (whether said plans, calculations or applications have been reviewed by the review engineer or not) shall permit or release the applicant and designer from constructing this work in any other manner than that provided for in the County Ordinance.

IAD/id

copies: file
Glen Klopfer, WBDC Group
Scott Snyder, West Lafayette
Greg Griffith, Great Lakes Chemical

Commissioner Yount asked Surveyor Spencer if he was satisfied with this now.

Surveyor Spencer responded that he was.

Discussion followed.

Commissioner Yount moved to approve the Great Lakes Chemical drainage plans with the following variances being granted:

1.) Delete fence required to surround the Permanent Pool shown in the plans as the Pond east of the proposed building.

2.) To allow 8" of pavement storage instead of 7" per the ordinance.

3.) To allow the depth of the pond north of the proposed parking lot to be 4.5 feet deep instead of the maximum 4'-0" depth per the ordinance.

4.) To allow a 1.5 foot freeboard instead of 2' above the effective flood stage of 680.5 for the lower level building floor elevation of 682'.

Commissioner Gentry, seconded. Motion carried.

Greg Griffith expressed his appreciation to the Board.

The Board discussed Rule 5 of the Erosion & Sediment Control from Soil & Water Conservation.

The next regular scheduled Drainage Board meeting is November 4, 1992 at 8:30 A.M.

Commissioner Gentry moved to adjourn the meeting. Seconded by Commissioner Yount. Meeting adjourned.

Drainage Board Minutes 10/16/92 Board dme Great Lakes Chemical/Special Meeting

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
FEBRUARY 3, 1993

The Tippecanoe Drainage Board met Wednesday February 3, 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, County Surveyor Michael J. Spencer, Drainage Board Attorney J. Frederick Hoffman, Christopher Burke Consulting Engineer Ilene Dailey, Woolpert Consultants Project Manager Steve Nixon, Representing Meijer Properties Scott Nowakowski, American Consulting Engineer Willard Hale, Indiana Department of Transportation Engineer Robert Rhoades, Tippecanoe County Highway Engineer Steve Murray, Drainage Board Secretary Shelli Hoffine.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held on January 3, 1993 Commissioner Gentry moved to approve the minutes. Seconded by Commissioner Yount. Unanimously approved.

MEIJER PROPERTIES, INC

Mr. Hoffman, entered for the record he is a representative of the O'Ferrall Estate, Mr. O'Ferrall is the owner of this real estate. Steve Nixon, Project Manager for Woolpert Consultants, introduced Pat Cunningham from Vester & Associates. Mr. Cunningham represents the O'Ferrall Estate. Mr. Nixon also introduced Scott Nowakowski the Meijer Real Estate Representative.

Mr. Nixon stated that currently as part of the Alexander Ross Drain there are two tiles, a 10" and a 12" that encumber the property that Meijer intends to purchase. What Mr. Nixon and Mr. Cunningham requested, due to the size of building on the site, is that on the storm drainage plan the legal drain needs to be relocated to bypass the building and parking area. Mr. Nixon plans to use reinforced concrete pipe so the easement widths can be decreased to 50 feet for both drains. Mr. Nixon also requested that the Drainage Board approve the location of the joint detention pond and that the County accept the facility into its maintenance assessment district. Mr. Nixon stated that Meijer and O'Ferrall agreed on a joint retention facility.

Mr. Cunningham defined what the perimeters are and what storm events he and Mr. Nixon are dealing with. Mr. Cunningham has looked at some concepts with Jim Shook Sr., a commercial real estate broker, on the concepts on marketability and things that might take place. Mr. Cunningham and Jim Shook realize they can fit the pond in a three and a half acre area. They are presently proposing that the pond be a wet bottom with safety ledges and four (4) foot of storage area on top.

Commissioner Yount asked if the pond was going to be at a later date?

Mr. Cunningham replied that they hope to do it with the construction of Meijer property project.

Commissioner Gentry asked Mr. Cunningham if they will have to come in with a reconfigured pond?

Mr. Cunningham answered, Yes.

Mr. Spencer asked if detention pond would serve the entire site.

Mr. Cunningham replied, No it will not serve the total watershed area, not included is the portion that goes to the South and East.

Mr. Hoffman stated that the South and East portion goes into the Berlovitz Ditch.

Commissioner Yount asked if the open area has any projection of what it might be used for?

Mr. Cunningham said it is possibly going to be used for an outlet mall.

Commissioner Gentry made a motion that the Board approve the preliminary storm drainage for the Meijer properties. Seconded by Commissioner Yount. Unanimously approved.

US 231 RELOCATION SR25 to River Road

Willard Hale from American Consulting Engineering introduced Bob Rhoades from Indiana Department of Transportation. Mr. Hale and Mr. Rhoades presented plans for the middle section of three projects that are being designed for US231 relocation and a new crossing for the Wabash River. The project will start south of SR25 midway between Old Romney Road and County Road 100 West including the intersection of SR25. The project will stop just short of tying into South River Road. The majority of the drainage goes westward along SR25. Approximately 50 acres out of the 500 acres will be taken on the Northwest side between SR25 and Elston/Shadeland Road. Old Romney Road will be relocated and go North instead of West. As SR25 depresses down hill, there will be a bridge at Elston Road. The grade will depress 20 feet keep going down under the two railroads and across the river. Water in this depression goes North to the outlet in the wetland just south of the river.

Steve Murray Tippecanoe County Highway Engineer stated that in 1992 or 1993 one or both of the railroad bridges were scheduled for construction. He asked if there is any indication on the contracts.

Mr. Hale stated that the ground will be broke on some portion of the project.

Mr. Rhoades said that he can not say for sure. The bridge project has not received all of the needed environmental approval.

Mr. Hoffman asked Mr. Hale if he is going to do the work by the Cement Construction Company?

Mr. Hale said not this year, hopefully next year.

Mr. Hale stated that they will have to shut Elston down completely.

Mr. Hoffman asked when you do SR25 are you going to let traffic through?

Mr. Hale said, yes traffic will be able to get through. First one half will be under construction and then the other.

Mr. Hoffman asked Mr. Hale if he had to have a Corp of Engineers permit for the wetlands?

Mr. Hale said, yes.

Commissioner Yount asked if SR25 will be an at grade crossing?

Mr. Hale said, it will be an at grade crossing.

Mr. Hoffman asked if there would be an access to the toepath?

Mr. Hale said, they have to relocate a piece to go under the new bridge. It is an emergency exit for Lilly and the sewage treatment plant still uses it.

Ilene Dailey, Christopher Burke Engineering Consultant, asked Mr. Hale if he had to get a flood easement up stream from the bridge?

Mr. Hale said no as he understood it they did not have to get an easement.

Mr. Hoffman asked if they have to purchase any right-a-way for that?

Mr. Hale said no.

Mr. Spencer recommended approval of the drainage plan as submitted to the Board.

Commissioner Gentry moved to approve the drainage plan as submitted by American Consulting Engineering for their section of the US231 relocation.

Seconded by Commissioner Yount. Unanimously approved.

BIDS FOR ELLIOTT DITCH

Mr. Spencer had a bid to accept for maintenance work on the Elliott Ditch. He recommended that the Board accepts the bid from F & K Construction.

Mr. Hoffman asked if that was the only bid?

Mr. Spencer said no we had four other bids.

Commissioner Gentry asked for the figures of the other bids.

Mr. Spencer read the amounts of the bids as follows:

Cement Construction	\$144,422.00
F & K Construction	\$49,620.00
Fairfield Contractors	\$88,955.00
Merkel Excavation	\$79,500.00

Commissioner Gentry moved to award the bid to F & K Construction on the Elliott Ditch for \$49,620.00. Seconded by Commissioner Yount. Unanimously approved.

PROPOSALS FOR DRAINAGE STUDIES

Mr. Spencer requested the Board allow him to issue a request for proposals of drainage studies on the Alexander Ross watershed and the James N. Kirkpatrick watershed area.

Commissioner Gentry asked if the Alexander Ross and James N. Kirkpatrick studies would be paid out of engineering funds or if the ditches have money in their maintenance fund?

Mr. Spencer said that the ditches have money in their maintenance funds, but he would prefer to use engineering funds first.

Commissioner Gentry moved to have Mr. Spencer develop requests for proposals for the drainage studies of the Alexander Ross watershed and the James N. Kirkpatrick watershed. Seconded by Commissioner Yount. Unanimously approved.

ATTORNEY CONTRACT

Mr. Spencer presented a contract between the Drainage Board and Mr. Hoffman for attorney services for the year 1993.

Commissioner Yount moved to approve the contract for the Tippecanoe County Drainage Board for legal services performed by J. Frederick Hoffman in the amount of \$10,000.00 due and payable by the County in monthly proportions on proper claims and allowances. Seconded by Commissioner Gentry. Unanimously approved.

REGIONAL STORMWATER DETENTION FACILITY

Mr. Spencer requested acknowledgment of a receipt of an executed copy between the City of Lafayette and Lafayette Union Railway, (LUR), for a regional stormwater detention facility located on the LUR property. LUR entered into this agreement and requested that the Board acknowledge its existence.

The agreement reads as follows:
(quote)

The Tippecanoe County Drainage Board acknowledges receipt of an executed copy of the above Agreement and to the extent the facility referred to therein remains within its jurisdiction, agrees to regulate the use of such facility as provided by the provisions of this Agreement to the extent that such provisions conform to the laws of the United States of America, and the State of Indiana, as well as the ordinances of the Tippecanoe County, Indiana, that are then in effect, but at no time shall the Tippecanoe County Drainage Board be required to approve any Drainage Plan for any part of the Area involved in such Agreement which does not comply with the terms of the Tippecanoe County Drainage Ordinance in effect at the time such Drainage Plan is presented to it.

Tippecanoe County Drainage Board

By: _____

William Haan, President

Nola Gentry

Hubert Yount

(unquote)

CERTIFICATE OF ASSESSMENT FOR ANNUAL MAINTENANCE ON HADLEY LAKE

Mr. Spencer had a Certificate of Assessment for Annual Maintenance on the Hadley Lake. This encompasses the Dempsey Baker Reconstruction Drain and Hadley Lake Drain which is the outlet channel from the lake itself, north to Cole Ditch. At the hearing, one of the stipulations was that the maintenance fund would not start on those drains until the work had been done and accepted. The surveyor would like for the Certificate to be signed so that it can be submitted to the Auditor's Office and they can put it in the budget for this year. The yearly total is \$16,336.24 and it will change as developments come on line, Pineview Farms is one that has come on line since the hearing, plus Hadley Moore Subdivision will be added when the acreage becomes lots.

Commissioner Gentry moved to approve the Certificate of Assessment for Annual Maintenance on the Hadley Lake Drain. Seconded by Commissioner Yount. Unanimously approved.

Commissioner Gentry asked Mr. Spencer to update the Board on the Cuppy-McClure Drainage Project.

Mr. Spencer reported that he met with Great Lakes Chemical to discuss alternate one, the low flow pipe and the high flow channel. Great Lakes was unhappy with alternate one, mainly from an aesthetic standpoint. Mr. Spencer and SEC Donohue are looking into a few things with DNR and Fish and Wildlife to see if they have any problem with moving the drain. SEC Donohue is looking into the possibility of the floodway ever going away. Until that question is answered, SEC Donohue is not going into any more alternative plans. If the floodway can not go away, there is no reason for not following alternate one.

Commissioner Gentry asked if the all pipe alternative requires any additional permits?

Mr. Spencer said no additional permits are required, but the application for the permits would be different.

Being no further business Commissioner Gentry moved to adjourn. Seconded by Commissioner Yount. Meeting was adjourned

The next scheduled Drainage Board meeting will be March 3, 1993 at 8:30 a.m.

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
SPECIAL MEETING
APRIL 19, 1994

The Tippecanoe County Drainage Board met Wednesday, April 19, 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 April 6, 1994, Commissioner Yount moved to approve the minutes, seconded by Commissioner Haan. Motion Carried.

TRIPLE J POINTE SUBDIVISION

Due to an absents of representatives the next project was presented.

HAWKS NEST SUBDIVISION

Greg Hall, Intercon Engineering, asked the Board to approve a redesigned plan of the majority of Phase I and the street elevations of Phase II in Hawks Nest Subdivision. Mr. Hall mentioned a meeting he had with Mr. Spencer and the County Highway Department on the original plans, at that time suggestions were made to help draft the redesigned plans.

Mr. Spencer stated the redesigned plans have been reviewed by him and the Engineering Consultant, the questions that came about after the review were setting lot grades in Phase I and the dirt balances for the total project, those have been resolved and final approval is recommended.

Commissioner Yount moved to grant final approval of the redesigned plans for Hawks Nest Subdivision, seconded by Commissioner Haan. Motion carried.

ARBY'S RESTAURANT - BRITT SUBDIVISION

Ken Russell, Russell Engineering, asked for approval of the storm water system planned for Arby's Restaurant. The storm water drains parallel to the proposed Brinker Street and Britt Farm Drive in easements to the Britt detention pond.

Mr. Spencer recommended granting final approval with the addition of an erosion control plan and the County Highway granting approval of the storm drain under the proposed street and drive.

Commissioner Haan moved to grant final approval of Arby's Restaurant drainage plan with the condition that an erosion control plan is submitted and approved by the County Highway for work within the Right-of-Way, seconded by Commissioner Yount. Motion carried.

MEIJERS REGIONAL RETENTION POND

Mr. Hoffman excused himself from the hearing of the Meijers Regional Retention Pond.

Pat Cunningham, Vester & Associates, asked the Board for final approval of Meijers regional retention pond. This project is located off State Road 26, east of I-65 and includes 106 acres. A drainage tributary of 460 acres from the west side of I-65 is also included in the design of the retention pond. Subarea B currently drains directly to the Alexander Ross Ditch, subarea A currently does not. The proposed plan is to route subarea A through the proposed retention pond, creating a positive outlet to the Ross Ditch which will not increase the rate of flow to the ditch. The overall development plan for the 106 acres includes construction of the Meijer store on 38 acres that drains into the retention pond. The projected curve number for the Meijer site and the commercial area is 91, the projected curve number for the land south of the Meijer site is 87, based on those numbers the proposed retention pond has been sized to handle 460 acres tributary that will pass through the site at the 10 year release rate. Plus the pond will store the runoff from the 106 acres which will be released under State Road 26. Mr. Cunningham stated the proposal to relocate an existing 24 inch tile is still in affect. During evaluation of this project, it was discovered the 460 acre tributary will change the configuration of the pond. To compensate for the change, the pond will be lowered to create more live storage.

Commissioner Haan moved to grant final approval of Meijers Regional Retention Pond with the condition of the County Surveyor approving the design of the outlet structure, seconded by Commissioner Yount. Motion carried.

Mr. Hoffman returned.

PINE VIEW FARMS II PHASE I

Jerry Kittle, Schneider Engineering, asked for final approval of Pine View Farms II Phase I with three variances:

1. The requirement for a fence to surround the proposed pond
2. On lot water storage
3. Gutter spread calculations, the ordinance calls for 10 feet clear and the plan shows 8.5 feet clear for one gutter spread and 9.8 feet for another.

Mr. Spencer stated the variance for the gutter spread calculations is a decision for the County Highway Department.

Mr. Hoffman asked the depth of the pond?

Mr. Kittle stated the pond will be at a depth of 10 feet and will be completed with Phase I.

Mr. Stolz stated there are a few locations where water is going to back up on subbasins 500 and 700. What is the capacity and where will they drain?

Mr. Kittle stated subbasin 700 will be reduced from 2.87 cfs to .97 cfs, subbasin 500 will drain through the 12 inch storm sewer that is in Pine View Farms I.

Evero Crouse is the landowner of 52 acres across McCormick Road from the proposed Pine View Farms II, Phase I. On the West side of McCormick Road the landowner, with the help of the Soil and Water Conservation, constructed a water

way along the road to help prevent erosion, presently the water way is in good working order. Ms. Crouse stated Gary Workman contacted her for an easement across her 52 acres. She is not willing to give an easement because the water way is not a legal drain. If she granted an easement everyone along the water way would have to grant Mr. Workman an easement. Another reason Ms. Crouse will not grant the easement is the 52 acres will not always be a field, eventually it will be lots and an easement is a restriction against a lot.

Mr. Kittle stated when Schneider first looked at this project they thought about the possibility of draining it across the 52 acres. The current proposed plan is to drain the project through Pine View Farms I which will not affect the 52 acres across McCormick Road other than to reduce the release rate from 3.77 cfs to 1.89 cfs.

Mr. Spencer stated the emergency routing needs to be clearly shown to function without going two different ways.

Mr. Kittle stated the safety ledges start above the normal pool with a 5 foot ledge and a 4 to 1 slope to another 5 foot ledge with 2 to 1 slope to another 5 foot ledge.

Mr. Spencer asked Mr. Hoffman to help with the language in the covenant for the maintenance of the pond.

Commissioner Yount moved to grant the variance for the fence and the on lot storage, seconded by Commissioner Haan. Motion carried.

Commissioner Yount moved to grant final approval with the conditions of the emergency routing being approved by the County Surveyor and a Rule 5 application being filed, seconded by Commissioner Haan. Motion carried.

OTHER BUSINESS

Town of Dayton Resolution

Mr. Spencer presented the Board with a resolution from the town of Dayton. Dayton would like the Board to provide review recommendations and approval of drainage plans for construction within the town.

Commissioner Gentry asked Mr. Hoffman if Dayton could adopt the County Drainage Ordinance and name the County Surveyor and the Drainage Board as the approval body?

Mr. Hoffman replied Dayton could adopt the ordinance and have the Drainage Board do the work for hire. The Drainage Board would have to keep track of the expenses related to the projects so that Dayton can reimburse the County.

Cuppy McClure Update

Mr. Spencer stated he has met with DNR Forestry Division, one of the requirements of obtaining the Water Quality permit is the project will have to replace the trees at a 2 to 1 ratio. Approximately four acres of trees will have to be planted to replace the two acres that will be cleared. Mr. Spencer stated he suggested to the DNR an interlocal agreement between the County and the City of West Lafayette to plant the four acres in the Celery Bog Park Plan, the DNR did not have any objection.

Commissioner Gentry asked if a hearing could be held and the bid process started?

Mr. Spencer stated it would be better to wait until the Water Quality Certification is approved instead of getting everyone geared up for the hearing and then not be able to give them the approved plans.

Discussions

Mr. Spencer stated John Rowe brought a set of plans April 15, 1994 for the proposed Rowe Trucking located off 475 East. Mr. Rowe would like the review to be completed in time for the May 4, 1994 Drainage Board Meeting.

Commissioner Haan asked about the progress to change the ordinance to construct a specified pond or require a fence to surround the pond?

Mr. Stolz stated he has been discussing the issue with others in his firm trying to get ideas of how other counties are handling this situation. Mr. Stolz plans to have a report together by the May 4, 1994 Drainage Board meeting to give the Board different options.

Mr. Bumbleburg stated he wrote a letter to Mr. Spencer asking him to seek the Boards approval for him to write a letter to the Area Plan Commission indicating the Board agrees a detention pond is no longer needed on Lot 28 of Orchard Park Subdivision and its replat.

Commissioner Yount stated an easement has to be established for the pipe, it is shown on the drawing submitted by Russ Ticen, but it is not recorded.

Commissioner Yount explained an underground pipe was installed to tie the yard drains into the pipe to connect to a storm drainage system, but an easement was never recorded. He suggested stating the pond that is on the original plat has been reconfigured and reduced in size and now is included within the easement of Creasy Lane.

Mr. Bumbleburg needs a recordable easement with a drawing showing it has been recorded for the Drainage Board.

Mr. Spencer received a video tape from Steven Schneider, a landowner in Sherwood Forest. Mr. Schneider asked the Board to view the tape because he has concern that the proposed Wake Robin Estates Phase II will cause more water to flow through the water way in Sherwood Forest. The video tape is on file in the County Surveyor's Office.

Being no further business Commissioner Yount moved to adjourn until May 4, 1994, seconded by Commissioner Haan. Motion carried.

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JUNE 1, 1994

The Tippecanoe County Drainage Board held its regular meeting on Wednesday, June 1, 1994 at 8:30 A.M. in the Community Meeting Room of the Tippecanoe County Office Building. Present were: County Commissioners: Nola J. Gentry, William D. Haan, and Hubert D. Yount; County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; Drainage Board Engineering Consultant Jon Stolz, and Acting Secretary Pauline E. Rohr.

Commissioner Nola J. Gentry called the meeting to order.

APPROVAL OF MINUTES

Commissioner Yount moved to approve the minutes of May 4, 1994 as distributed, seconded by Commissioner Haan; motion carried.

WILSON BRANCH FLOOD CONTROL RESERVOIR

Mark Harris, American Consulting Engineers, stated that, following discussions with Mike Spencer and Jon Stolz, minor changes have been made to the plans for the Wilson Branch Flood Control Reservoir which were presented at last month's Drainage Board meeting. The following concerns were discussed at today's meeting:

- ¶ Mr. Harris, in a letter to Mr. Spencer, requested a variance of the statutory 75' easement measured from the top of the bank to be reduced to approximately 35' on each side. The total easement will then be 150 feet. Mr. Hoffman stated that the letter should be changed to read: a "minimum" of 35' rather than "approximately" 35 feet.
- ¶ Mr. Hoffman asked if a fence will be erected on the side that parallels US52 to prevent the public from entering the pond.
- * Mr. Harris explained that a fence along US52 is not planned. Since the existing roadside ditch along US52 will be retained, a fence erected on the right of way line would be in the flow line of the ditch. He also pointed out that the top edge of the berm surrounding the pond will be approximately 120' from the pavement.
- * The Board generally agreed that erecting a fence will not prevent a person from entering the pond. It is hoped that the 120' distance from the paving will be enough of a deterrent.
- ¶ Commissioner Gentry asked if the water from the Mall parking lot will flow directly into the ditch.
- * Mr. Harris answered that it will go directly into Wilson Branch but, after it reaches an approximate depth of 6', it will overflow into the pond.

Commissioner Gentry thinks that, for future projects, the ordinance should be amended to require more filtering of the water before it flows into the retention pond.

Commissioner Yount moved to give final approval to the drainage plan of the Wilson Branch Flood Control Reservoir as well as to approve the variance for no fence and the width of the easement to be 75' from the center line of the new proposed Branch and a minimum of 35' on each side from the top of the bank for maintenance all of which is subject to DNR approval, a change in the wording of the letter, and revised plans showing the change from 75' to 35', seconded by Commissioner Haan.

Audience Discussion:

Mr. Howard Helfrick, President of Torchwood Condominiums Homeowners Association, spoke to the Drainage Board about the ditch becoming a buffer between a residential area and a commercial/industrial area without a fence to separate them. The Association wishes to be a part of the total plan so that the owners' property will not be devalued and the area will continue to be a source of pride. Since the rear of the new Pay Less store will be visible from the Torchwood Addition, the Association is discussing the landscaping plans with a store representative. Mr. Helfrick outlined the main concerns of the homeowners regarding the entire project:

1. They want a sufficient buffer to prevent environmental pollution; e.g. air, water, human, light, and noise.
2. They want to prevent the disturbance of area wildlife.
3. They are concerned about the potential for flooding due to the large amount of paved area. In addition, they think a fence would prevent the blowing of paper and debris across their properties.

Commissioner Gentry explained that the "variance for no fence" previously discussed applies to the pond located on US52 close to Ivy Tech.

Mr. Helfrick stated that the Association is asking Pay Less to erect a chain link fence on its side of the ditch to provide security from trespassers as well as to prevent the blowing debris into the Torchwood Addition.

Commissioner Yount pointed out that, if a fence is erected within the easement for the ditch, the County is not responsible for replacing any part of that fence which has to be removed during maintenance work on the ditch.

The motion carried to give final approval to the drainage plan for Wilson Branch Flood Control Reservoir as well as approval of the variance for no fence and the width of the easement to be 75' from the center line of the new proposed Branch and a minimum of 35' on each side from the top of the bank for maintenance all of which is subject to DNR approval, a change in the wording of the letter, and revised plans showing the change of 75' to 35 feet.

COUNTY ROAD 50 WEST

Tom Turey of Bernardin, Lochmueller & Associates, presented the drainage plan for the construction and reconstruction of CR50 W for final approval. Tippecanoe County Highway Engineer, Kristine A. Frazell-Alexander, P.E., also attended for consultation.

The drainage plan continues the upgrading of Salisbury Street (in a northerly direction) just north of 350 N to just north of 600 N. The road, which is narrow and substandard, requires improvements because of increased traffic volume due to Harrison High School. Mr. Turey discussed cross culverts and a storm sewer which will improve drainage along CR50 W.

Mr. Spencer and Mr. Stolz expressed concern that the County ditch on the south side of 600N has inadequate capacity. Ms Frazell-Alexander stated that the County has an adequate amount of right-of-way should the ditch require additional work by the County Highway Department.

Commissioner Haan moved to give final approval of the CR50 W drainage plan, seconded by Commissioner Yount; motion carried.

ASHTON WOODS SUBDIVISION PHASE IV

Dan Lee, Ticen, Schulte & Associates, presented the drainage plan for Ashton Woods Subdivision Phase IV for final approval. Mr. George Schulte, of the same firm, also attended the meeting.

Mr. Lee presented the drainage plan in which the pond previously approved for Phase III has been enlarged to also provide drainage for Phase IV. New outlet structures have been designed under the roadway which separates the westerly pond (Phase III) and the easterly pond (Phase IV). The subdivision is surrounded by swale that will direct drainage to the easterly pond. Grass swales are also positioned at the end of the cul-de-sacs to provide additional drainage.

Mr. Lee requested a variance on the required depth of the dry bottom easterly pond located in Phase IV for the 100 year storm event.

Commissioner Yount moved to grant the variance for dry bottom depth on the easterly pond located in Phase IV and to grant final approval of the drainage plan for Ashton Woods Subdivision Phase IV, seconded by Commissioner Haan; motion carried.

Commissioner Haan left the meeting.

OTHER BUSINESS

DISCUSSION: DRAINAGE ORDINANCE

Mr. Spencer explained that each year the Drainage Board receives a large number of variance requests for wet bottom storage basins and "no fencing". In order to avoid the granting of a variance for "no fence", the following proposed changes to the Drainage Ordinance No. 88-40-CM were presented for the Board's consideration.

Commissioner Haan reentered the meeting.

Mr. George Schulte expressed his concern regarding the proposed item h (a) in Section 14 h of the Ordinance which states:

(quote)

A safety ledge 10 to 15 feet in width is required and must be installed in all lakes approximately 12 to 24 inches below the permanent water level.

(unquote)

Mr. Schulte thinks that the change from a 6 feet safety ledge (h) to one 10 to 15 feet in width (h a) in a wet bottom basin will cause the public to consider the basin a play area and present a danger.

Commissioner Gentry explained that the Board thought if a small child wandered too close to the water, the wider ledge would allow the child to be more easily reached.

Section 14 h (a) of the revised Ordinance specifies how the basin has to be built if no fence is used. This allows a developer the option to build with a fence or without a fence.

The wording of section 14 h (#8) was discussed and the Board agreed to delete "chain link" and "plus a barb wire". Item #8 will now read:

(quote)

Basins designed with permanent pools or containing permanent lakes shall be surrounded by a nonclimbable (sic) fence at least six (6) feet in height suitably posted to prevent unauthorized entry into the pool area, as shown on typical cross-section.

(unquote)

Commissioner Gentry answered Mr. Schulte's question about stagnation control in the pond by pointing out that item #7 concerns providing aeration facilities if required.

INTERLOCAL AGREEMENT: CUPPY MCCLURE PROJECT

Mr. Spencer announced that the Interlocal Agreement between the County and the City of West Lafayette is complete and will be presented at the next Commissioners' meeting for their approval. The two entities have agreed to plant four acres of trees in the Celery Bog Park Plan as a requirement for obtaining the Water Quality permit for the Cuppy McClure Project.

ROWE RETENTION POND PROPOSAL

Mr. Spencer announced that Attorney Hoffman has drawn up a proposal which includes the Drainage Board, County Commissioners, and Rowe Truck & Equipment, Rowe Farms, Inc., and John C. Rowe as participants. In a letter dated May 2, 1994, Mr. Rowe agreed to pay a proportional percentage of the cost of a regional downstream retention pond on the Elliott Ditch. Attorney Hoffman pointed out that Mr. Rowe will place the funds in an escrow account.

Mr. Spencer pointed out that Mr. Rowe originally submitted a six (6) acre area for drainage to the Drainage Board, but the legal description submitted by Mr. Rowe for the proposal includes nine (9) acres. The Board decided that this discrepancy should be resolved before Mr. Rowe's proposal is accepted.

CORRESPONDENCE TO: TIPPECANOE ENTERPRISES, INC.

Mr. Spencer referred to a letter sent to Tippecanoe Enterprises, Inc. on behalf of the Tippecanoe County Drainage Board by Attorney Hoffman. The letter, which addresses the "Restrictive Covenants for the Northridge Subdivision provided in Paragraph 18 on Page 3", says that the maintenance of the retention ponds has not been accepted by the homeowners and the developer is required to return those ponds to their original condition. A general discussion followed.

ENGINEERING REVIEW FEES

The proposed fees for a first time engineering review were discussed. Although the first time review fees are absorbed by the County, fees for additional reviews will be charged to the customer.

LENARD DIBLE

Mr. Dible appeared to discuss continuing drainage problems on his property which are a result of drainage work done by Hawkins Environmental for the City of Lafayette. His complaint concerns work done on Creasy Lane and the ravine that is directly behind his lot. Mr. Dible requested the Drainage Board to develop a position either verbally or in writing to Hawkins Environmental to get the problem corrected.

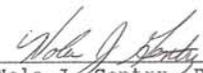
Commissioner Gentry asked Mr. Spencer to present a written request for the as-built drainage plans from Hawkins Environmental. This will enable the Drainage Board to determine if the City is at fault and therefore should be responsible for correcting the problem.

Mr. Spencer stated that if Hawkins Environment does not comply with his request for the plans, he will personally correct the problem.

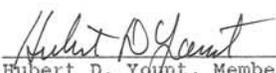
ADJOURNMENT

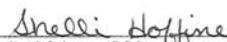
Commissioner Haan moved to adjourn, seconded by Commissioner Yount; motion carried.

The next regularly scheduled meeting of the Tippecanoe County Drainage Board will be held at 8:30 A.M. on Wednesday July 6, 1994.


Nola J. Gentry, President


William D. Haan, Vice President


Hubert D. Yount, Member

ATTES: 
Shelli Hoffine, Secretary

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
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
APRIL 5, 1995

The Tippecanoe County Drainage Board met Wednesday April 5, 1995 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, and 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 March 1, 1995. Commissioner Jones moved to approve the minutes, seconded by Commissioner Haan. Motion carried.

SAGAMORE POINT SUBDIVISION

Robert Grove, represented Smith Enterprises, asked for preliminary approval of Sagamore Point Subdivision. Mr. Grove stated at the March meeting an agreement between Smith Enterprises and the owners of Hadley Lake was trying to be reached, an agreement was not reached. Mr. Grove recalled the Board granting conceptual approval to the plan that would replace four residential lots with two onsite detention basins which is what he has asked preliminary approval of.

Mr. Spencer recommended preliminary approval with three conditions.

1. The applicant has provided calculations for both proposed detention ponds by utilizing the modified rational method. However, Basin 1 appears to have approximately 12 acres draining to it. The ordinance allows the use of the modified rational method for detention facilities that drain 5 acres or less. It appears the applicant should revise the detention analysis to utilize the TR-20 hydrologic model. The applicant should refer to the ordinance to include the proper rainfall distribution, conduct a critical storm duration analysis, use TR-55 methodology for times of concentration and curve numbers and to be sure to take tallwater effects on the pond outlet into account.

2. Basin 2 appears to have approximately 3.5 acres draining to it. Technically, the use of the modified rational method is acceptable for this pond. However, since the TR-20 analysis will be conducted for Basin 1, the applicant may want to consider the use of TR-20 for Basin 2 to be compatible. In either case, tallwater effects on the pond outlet must be considered.

3. The analysis of the undetained peak discharges appears to have an error. The applicant has stated that there will be 1.95 acres released undetained from the north. The applicant has shown a peak discharge of 0.76 cfs. However, using the applicant's numbers, CBBEL obtains a value of 2.9 cfs. The applicant should correct this error when submitting for final approval. In addition, calculations and flow paths to define the times of concentration should be provided with the submittal for final approval.

Mr. Spencer stated those items can be corrected for final review.

Commissioner Haan moved to grant preliminary approval of Sagamore Point Subdivision with the three conditions read into the minutes, seconded by Commissioner Jones. Motion carried.

FIELDCREST SUBDIVISION

Paul Coutts, C & S Engineering, asked for final approval of Fieldcrest Subdivision which consist of 14 lots on 35 acres, the smallest lot being 1.68 acres and the largest being 3.82 acres. The subdivision is located on the west side of County Road 900 East, approximately 3/8 mile North of State Road 26 East. The entire development drains to the west into an existing natural swale which eventually outlets into the middle fork of the Wildcat Creek. A storm drainage plan was discussed using the existing swale and use various inlets and pipes to convey the runoff on the west side of the site.

Mr. Hoffman asked if DNR approval is needed for installation of pipe in the north stream?

Mr. Stolz stated the stream drains less than a square mile. Therefore, DNR approval is not required.

Mr. Hoffman suggested adding to the covenant for lots 5, 6, 7, & 8 stating nothing can be done to the stream without DNR's approval.

Mr. Coutts agreed to Mr. Hoffman's suggestion.

Mr. Spencer recommended final approval with two conditions:

1. Item 1 of the original memo discussed the lack of detention at the site. In response to that comment, the applicant has now proposed detention for the site by using 3 driveway culverts to restrict the natural flowpath. A TR-20 analysis was used to obtain the runoff hydrographs. This information was input to the POND-2 program to estimate the amount of detention volume required. The applicant also provided calculations to show that the storage required due to the POND-2 analysis is available in the existing channel if the proposed culverts are constructed.

The provided submittal does not fully comply with the Ordinance since the applicant has not provided a release rate value from the site, has not utilized TR-20 to determine actual detention storage, has not noted the information on the plans nor indicated that the general requirements for detention facilities have been met. However, it appears that the applicant has substantially met the intent of the Ordinance and we would recommend waiving of the usual criteria in this case. However, the applicant should still show the limits of the 100 year ponding areas on the plans to ensure that the ponding is contained within drainage easements and to ensure that the proposed buildings are a minimum of 25 feet from any ponding area. Also, the 100 year elevation of each pond is required to ensure that all buildings, including basements, have adequate freeboard. In addition, the Erosion Control Lot Detail on Sheet 3 must be revised. It implies that a 12-Inch CMP may be required at the driveway culverts. The new analysis now requires the use of 30-Inch CMP's at three locations in the creek tributary.

2. Item 4 of the original memo stated that an Indiana Department of Natural Resources (DNR) permit may be required for the site and that an analysis of off-site flows should be provided to verify the structure protection from flooding. The applicant has provided a detailed analysis of the "north" unnamed tributary of Middle Fork Wildcat Creek. However, in regards to the "southern" unnamed tributary of Middle Fork Wildcat Creek, the applicant has calculated a

drainage area of 4.2 square miles and has stated that "none of the proposed development will directly impact this channel."

It should be noted that any future crossing of the tributary or other floodway construction will require an IDNR permit. In addition, the applicant should still determine the 100 year base flood elevation (BFE) on this tributary to verify that the proposed home lots, including basements, have adequate freeboard. The 100 year BFE elevations should be noted on the plans for each lot.

Commissioner Haan moved to grant final approval of Fieldcrest Subdivision subject to the two conditions, seconded by Commissioner Jones. Motion carried.

SHEFFIELD DEVELOPMENT

Bill Davis, Hawkins Environmental, and Dale Koons, Civil Engineering, presented the Board with drainage plans for Sheffield Development. They discussed with the Board their idea of draining the area without detention and taking it directly to the Wea Creek. The Sheffield Development plan includes the completion of the relocation of the US231 project, Raineybrook Subdivision and Stratford Glen. Currently the sites drain along Old Romney Road through a culvert under County Road 400 South into the Wea Creek, next to the vacant bridge on Old Romney Road.

Mr. Koons updated the Board as to changes of the first initial plan. Raineybrook, which consists of 30 to 40 acres has been taken out of the watershed and made to drain towards the west, reducing the drainage into Wea Creek, but approximately 11 acres will be put back into the watershed with the relocation of US231.

Mr. Koons explained the pre-developed 10 year and 100 year conditions with a discussion that followed.

Mr. Koons explained after development, which consists of the completion of Raineybrook Subdivision, Stratford Glen Subdivision and US231 project, a 10 year total flow will be 144 cfs.

Mr. Davis proposed replacing the culvert and the pipe from County Road 400 South, north to Wea Creek and asked the Board to schedule a meeting between the Drainage Board, State Highway, the developer's Engineer and the developer.

Mr. Spencer agreed to schedule a meeting to meet with Phelps Klika, Chief of the Design Division for the State Highway.

OTHER BUSINESS

WILSON BRANCH RELOCATION

Mr. Spencer brought to the Board's attention the consents from the landowners, Maple Point Enterprises and Payles Corporation, on the relocation of the Wilson Branch.

CUPPY-MCCLURE - update

Mr. Spencer stated he received the tree mitigation plan from J. F. New and Associates, which is ready to be sent to the DNR for their approval.

HIGH GAP ROAD DITCH

Mr. Spencer asked Mr. Hoffman who is responsible to maintain High Gap Road Ditch, which used to run along 375 West before it was moved West as part of the

375 West road construction. The town of Shadeland contend they own just the road and are not responsible for the maintenance of the ditch.

Mr. Hoffman stated he would talk to Cy Gerty, the attorney for Shadeland.

LEWIS JAKES DITCH

Mr. Spencer asked when a hearing could be held to discuss the Jakes Ditch. Some landowners in the Jake's watershed area asked him to clean out the ditch, but the law will not permit making a tiled ditch an open ditch with out a reconstruction.

Mr. Spencer asked if the maintenance money could be used.

Mr. Hoffman stated the landowners can make the decision to use the money in the Jakes Ditch to replace a portion of tile with open ditch.

Commissioner Haan suggested having the hearing during the June 7, 1995 regular Drainage Board Meeting.

MEETING TIME CHANGE

Mr. Spencer suggested changing the time of the regular Drainage Board Meetings from 8:30 a.m. to 9:00 a.m..

Commissioner Haan and Commissioner Jones agreed to change the time from 8:30 a.m. to 9:00 a.m..

Being no further business, Commissioner Haan moved to adjourn until May 3, 1995, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES APRIL 5, 1995 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MAY 3, 1995

The Tippecanoe County Drainage Board met Wednesday, May 3, 1995 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; Engineering Consultant David 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 April 5, 1995. Commissioner Jones moved to approve the minutes, seconded by Commissioner Gentry. Motion carried.

OSCO DRUG STORE #483

Pat Cunningham, Vester & Associates, asked the Board for preliminary approval of Osco Drug Store #483, which will be located at the Northwest corner of South Beck Lane and State Road 231 South. The entire site consists of 1.63 acres, of that, 1.365 acres drains to the north along State Road 231 then to Carter Lumber's detention pond and 0.27 acres drains to the north into the onsite detention pond. There will be a stoned area which will serve as a detention pond located in the parking lot east of the proposed building. The pond will be three feet deep and in a 100 year storm event approximately 6 inches of water will back up onto the parking lot. The pond will drain through a 12 inch CMP with orifice into the State Road 231 drainage ditch.

Mr. Spencer recommended preliminary approval with conditions.

1. For final design the calculations should show the proposed orifice will limit the peak discharge from the pond to the allowable release rate indicated at the 100 year elevation.
2. An erosion control plan should be included with the final submittal.
3. The applicant should obtain approval needed from the Indiana Department of Transportation for the proposed construction within the right-of-way.

Commissioner Gentry moved to grant preliminary approval of Osco Drug Store #483, subject to the conditions of Mr. Spencer and the calculations of the point which the retention pond will spill into the parking lot, seconded by Commissioner Jones. Motion carried.

NORTHGATE DEVELOPMENT PHASE II

Dan Lee, Ticen, Schulte & Associates, asked the Board for final approval of Northgate Development Phase II, located at the Southwest corner of State Road 43 and County Road 600 North. The proposed site will consist of three commercial lots on 5.4 acres which currently drains to the southwest into a channel that drains to the Burnett's Creek. The site includes the construction of a detention pond on the southwest corner which will serve the entire site. The runoff will enter the pond on the northeast corner and exit into the existing channel on the southwest corner.

Commissioner Haan asked why the design was being discussed if there is not going to be any development at this point?

Dan Lee stated the reason for this plan is to get the detention pond established so each individual lot is not required to build separate detention. The developed curve numbers for the lots must be limited to 95 for lot 1 and 93 for lots 2 and 3, so no addition detention will be needed. The developers for the lots will still need to submit a drainage plan for the lot being developed.

Mr. Hoffman asked for language to be added to the covenants requiring the developers to receive drainage approval for each lot.

Mr. Spencer recommended final approval with two conditions.

1. The applicant must provide a set of certified plans.
2. The stormwater drainage plan for each lot must be submitted to the Tippecanoe County Surveyor's Office for approval prior to development of each lot.

Commissioner Gentry moved to grant final approval of Northgate Development Phase II subject to the two conditions and the addition to the covenants, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

Cuppy-McClure - update

Mr. Spencer has received verbal approval of the tree mitigation plan for the Cuppy-McClure Drain. Mr. Spencer presented the Board with a status report provided by RUST Environment, showing the current status of permits as to when they were issued and when they will expire. Also summarizing the conversation between Mr. Peterson and Mr. Maupin regarding the 401 Water Quality Certification, which indicates that IDEM is awaiting a mitigation plan to restore woody riparian vegetation in the proposed sediment pond. Mr. Ken Baldwin, landowner of the property and pond, still opposes the plan. Mr. Spencer pointed out the three options that RUST has suggested.

1. Convince the property owner that the sediment pond and woody vegetation are required in order for the project to move forward. The improved drainage system could help improve the "marketability" of the property.
2. Appeal to IDEM once again to see if there are any other options for mitigation other than the sediment pond with woody vegetation.
3. Investigate the legality of IDEM's denial of the 401 certification. The permit from the Corps of Engineers states that "If IDEM fails to respond to your request for authorization within 60 days, the WQC (Water Quality Certification) is considered waived." We requested the WQC on December 16, 1994. IDEM denied the certification in a letter dated February 28, 1995, a total of 74 days after the request. There may be a legal question as to whether IDEM has waived the WQC. This option would need to be reviewed and approved by the County's legal counsel before proceeding.

Commissioner Gentry moved to recess until 11:00 a.m, seconded by Commissioner Jones. Motion carried.

Commissioner Haan called the meeting back to order at 11:07.

WAL-MART - West Lafayette

Commissioner Gentry asked if the Wal-Mart development in West Lafayette would need to receive drainage approval since a County Regulated drain is involved?

Mr. Hoffman stated the statute states that if the drain is affected then the County Drainage Board needs to be consulted or the City needs to ask for a waiver of jurisdiction.

US231 Relocation

Commissioner Haan asked for representatives of the State on the US231 Relocation. Jeff Lazzell from RQAW Consulting Engineers stated they were requested by the State to be present on their behalf.

Commissioner Gentry stated this meeting was arranged so the County Drainage Board and the State of Indiana could discuss the County's Drainage Ordinance. The Consulting Engineers cannot answer the questions that need to be discussed and she felt the State must comply with rules and regulations of the County Drainage Ordinance, just like any other developer in this County.

Commissioner Haan stated if the State refuses to discuss the drainage plan then the County Drainage Board will cease the construction that has already began until an agreement has be reached.

Commissioner Gentry moved to request the County Drainage Board Attorney to seek any legal remedies to stop the State construction of US231 until a meeting with the State of Indiana and the Tippecanoe County Drainage Board has been held, seconded by Commissioner Jones. Motion carried.

Being no further business Commissioner Gentry moved to adjourn until June 7, 1995, seconded by Commissioner Jones. Motion carried.

TIPPECANOE COUNTY DRAINAGE BOARD
SPECIAL MEETING
JUNE 26, 1995

The Tippecanoe County Drainage Board met Monday, June 26, 1995 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; and Drainage Board Secretary Shelli Muller.

DUNBAR HIGHLAND/HIGHLAND MEADOWS

Dale Koons, Civil Engineering Services, presented the Board with final drainage plans of Dunbar Highland/Highland Meadows Subdivision. Mr. Koons explained that the comments from Christopher B. Burke Engineering have been addressed including the easement agreement between the developer of Dunbar Highlands/Highland Meadows and Bob Adams. An executed agreement was not presented, but was initialed indicating Mr. Adams' awareness of the developer's proposal and agreement to the easement with the potential of becoming a regulated drain.

Mr. Hoffman reviewed the agreement, his comment was the easement shows 10 feet on the South side of the ditch and 40 feet on the North side.

Mr. Spencer explained all of the items from the May 31, 1995 Memorandum from Christopher B. Burke Engineering have been addressed such as clarifying the detail sheet to reflect the outlet pipe from the proposed detention pond will be 15 inches in diameter and include a safety ramp exit for the pond. Mr. Spencer recommended final approval subject to an executed agreement.

Commissioner Gentry moved to grant final approval of Dunbar Highlands/Highland Meadows Subdivision, contingent upon an executed agreement of the presented initialed agreement, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

US231 Relocation - up-date

Mr. Spencer reported after meeting with RQAW, the State of Indiana, the County Drainage Board and Christopher B. Burke Engineering he felt the State is almost to the point where the County can except the US231 Relocation plan.

Cuppy - McClure - up-date

Mr. Spencer stated he sent a certified letter to Mr. Maupin, Indiana Department of Environmental Management, concerning the 401 water quality certification. Mr. Spencer explained there has not been any response to the phone calls or office visits, so this letter will be the last attempt to get a response before the Board will implement the 120 day policy.

TWYCKENHAM ESTATES - Covenant Change

Mr. Spencer recalled at the May meeting he asked Mr. Hoffman to prepare a change to the drainage covenant removing the County Drainage Board responsibility for the maintenance of the common drainage areas for Twyckenham Estates.

Mr. Hoffman read the following:

ASSIGNMENT OF RIGHT OF ENFORCEMENT OF DRAINAGE COVENANT

WHEREAS THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR TWYCKENHAM ESTATES HOMEOWNERS ASSOCIATION, INC. made by JOHN E. SMITH ENTERPRISES, INC. executed on May 2, 1990, and recorded in the Recorder's Office of Tippecanoe County, Indiana, on May 18, 1990, as Document 90-06585, includes the following Paragraph in ARTICLE V at page 10 of Covenants:

Section 4, Enforcement by Drainage Board. In the event that the Association fails to exercise its authority, obligation and responsibility for maintenance of the common drainage of any lot to maintain the tiling or subsurface drainage systems located in Twyckenham Estates or permits any lot owners to block or hinder surface water or subsurface drainage or runoff, the Tippecanoe County Drainage Board may perform such maintenance and any other acts necessary to correct any drainage problems. The cost of any such maintenance or any other action performed by the Tippecanoe County Board shall be paid by the Association. Said right to enforcement shall be assignable.

and

WHEREAS, TWYCKENHAM ESTATES Phase I, Sections 2-10 and Phase II Sections 2-12, has been annexed to and become a part of the City of Lafayette, Indiana; and

WHEREAS, the City of Lafayette is now the proper party to enforce maintenance of the drainage system in the subdivision.

NOW, THEREFORE, the Tippecanoe County Drainage Board hereby assigns to the City of Lafayette, Indiana, all of its rights of enforcement of the Covenants, Conditions and Resolutions for Twyckenham Estates Phase I, Section 2-10 and Phase II Section 2-12, contained in the DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR TWYCKENHAM ESTATES HOMEOWNERS ASSOCIATION, INC. made by JOHN E. SMITH ENTERPRISES, INC., and executed by TWYCKENHAM ESTATES HOMEOWNERS ASSOCIATION, INC., by John E. Smith, its President, on May 2, 1990, which is recorded as Document 90-06585 in the Recorder's Office of Tippecanoe County, Indiana.

TIPPECANOE COUNTY DRAINAGE

BOARD

ATTEST Shelli L. Muller

BY William D. Haan, President

Nola J. Gentry, Vice

President

Gene Jones, Member

Commissioner Gentry moved to approve the assignment of right of enforcement of drainage covenant for Twyckenham Estates Homeowners Associates, Inc., made by John E Smith Enterprises, Inc. to the City of Lafayette, seconded by Commissioner Jones. Motion carried.

Being no further business Commissioner Gentry moved to adjourn until July 12, 1995, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MEETING JUNE 26, 1995 SPECIAL MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
JULY 12, 1995

The Tippecanoe County Drainage Board met Wednesday, July 12, 1995 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 Pro-Tem Thomas H. Busch; Engineering Consultant Dave 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 June 7, 1995. Commissioner Gentry moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

SADDLEBROOK ESTATES SUBDIVISION

Todd Warrix, Hawkins Environmental, presented the Board with final drainage plans for Saddlebrook Estates Subdivision, located South of Brookfield Farms Subdivision off County Road 500 East. Mr. Warrix proposed a 12 inch low flow drain along the existing County easement will outlet 1600 feet downstream, which will prevent any restriction of flow from upstream. Mr. Warrix explained at the June 7, 1995 meeting more information on the construction of the Berlovitz Regional Retention Basin was needed before final approval could be considered. Mr. Warrix stated Crossman Community Partnership plans to develop the regional retention basin as Saddlebrook is being developed, but Hawkins has included in their plan for Saddlebrook an interim detention facility located at the southeast corner of County Road 550 East and 50 South, which will handle the runoff from their development if the regional retention basin is not developed.

Mr. Eickelberger explained the comments in the review memorandum for the interim detention facility were made as if the facility was to be a permanent structure, but since the structure is only temporary, he felt it would be sufficient.

Commissioner Gentry suggested adding to the approval of Saddlebrook a time limit for the use of the interim detention facility. After the time limit and if the pond was still in use, the developer would have to appear before the Board and the detention facility would have to meet the requirements of the Drainage Ordinance.

Mr. Busch agreed with Commissioner Gentry's suggestion.

Commissioner Gentry moved to grant final approval of Saddlebrook Estates Subdivision subject to after one year if the interim pond is still in use and the regional retention basin has not be constructed, the developer will return with plans for the detention facility that will meet the Drainage Board Ordinance requirements, seconded by Commissioner Jones. Motion carried.

LAFAYETTE MARKET PLACE

Paul Coutts, C & S Engineering, presented the Board with final drainage plans for Lafayette Market Place, located north of State Road 38 East and west of US 52

South. Mr. Coutts presented Mr. Spencer recorded easements of the Kepner Drain and a certificate indicating the drain is in the easement. The proposed drainage system is designed to connect the McCarty Lane ditch, the LUR Ditch and the Kepner Ditch into the Wilson Branch which will outlet into the regional retention basin. Adjustments were made to the original plan to improve the performance of the Kepner Drain by using a 42 inch pipe west of the existing 48 inch Kepner Drain.

Commissioner Gentry asked if there was adequate capacity in the Wilson Branch?

Mr. Spencer stated there is adequate capacity, Christopher B. Burke Engineering reviewed this project because they did the original study of the Elliott Ditch and have been updating the Wilson Branch capacity as developments are constructed.

Commissioner Gentry moved to grant final approval of the release of runoff from Lafayette Market Place into the Wilson Branch of the Elliott Ditch, seconded by Commissioner Jones. Motion carried.

SAGAMORE POINTE SUBDIVISION

No representatives appeared before the Board.

OTHER BUSINESS

US 231 - RELOCATION

Mr. Spencer and Mr. Eickelberger agreed the final submittal, June 16, 1995, of the relocation of US231 meets the requirements for the County Drainage Ordinance. Mr. Spencer stated if US231 has another phase, it will also have to meet the Drainage Board requirements.

Commissioner Gentry moved to approve final drainage plans of US231 relocation, also to submit a bill to RQAW for engineering review fees in excess of 10 hours, seconded by Commissioner Jones. Motion carried.

Cuppy-McClure - update

Mr. Spencer reported to the Board of a meeting with Marty Maupin from IDEM, the discussion was about the changes IDEM required before approval of the Water Quality Permit could be granted. Mr. Spencer explained to Mr. Maupin the changes were made and submitted in July of 1994, Mr. Maupin acknowledged the changes and stated a memo of his approval for the Water Quality Permit would be submitted.

Being no further business, Commissioner Gentry moved to adjourn until August 2, 1995, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES JULY 12, 1995

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
OCTOBER 4, 1995

The Tippecanoe County Drainage Board met Wednesday, October 4, 1995, in the Commissioners Meeting Room of the Tippecanoe County Courthouse, Lafayette Indiana, with William D. Haan calling the meeting to order.

Those present: 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 Consultant David Eichelberger, and acting Secretary Anna Rumble.

RIVER BIRCH TRACE SUBDIVISION

Bob Grove asked for final approval of River Birch Trace Subdivision. Bob showed a map of the detention area along Klondike Road. The existing pipe is 27 inches and will be replaced with a 27 inch pipe. They will put two grates in there since they are going to be higher, to catch any water that might come up. Mike mentioned that there had been several things come up on this proposed development, one is this off site pipe that crosses through the site and Mike asked bob to locate it and get elevations and he's done that. They are going to have a grade conflict between their system and the trailer park. To get around that he's proposed to run that pipe into his basin and run another pipe out. Bob Gross is here to represent the owner of the trailer park, and he stated that the owner of the trailer park currently believes that they have exclusive rights to that pipe, that is their easement and their pipe. He doesn't believe there should be anything built over that pipe. Mike asked if he understood that they are going to replace it entirely. Mr. Hoffman stated that we need to get the owner of the trailer park in and have another hearing and explain to him and he has to have a notice by certified mail. Mr. Gross stated that they already have drainage problems in the trailer park and that was why he was hired, Nola moved that we continue this until next month, November 8, pending notice of the adjoining landowners, Vanco. Motion passed. Bob Grove will meet with the landowner and see if they can work things out, then if he wants to meet earlier than November 8, he'll get with Mike to set up a special meeting.

ABBEY MARIE APARTMENTS

Bob Grove asked for preliminary approval of Abbey Marie Apartment complex on 4.15 acres located north of SR 25 and west of South Beck Lane next to Dehaai Industrial. There is to be 44 apartments. There is no tiles or ditch, it's grass swale now. They are proposing to build a dike along the northwest corner and collect the water and detain it in this area.

Discussion followed.

Nola moved to grant preliminary approval of Abbey Marie Apartments. Motion carried.

HARTMAN RIDGE SUBDIVISION

Russell Ticen presented a map of drainage of the area around the proposed subdivision which is in the John Hartman Estate now, and is being annexed into the City of West Lafayette. They will take the water to the street putting in extra catch basins so they don't have a problem with water in the street. They are here for a waiver of detention storage as the ordinance calls for detention

on every site, but this property has a very deep ravine. There is already a 30" metal pipe under the roadway. Mike mentioned that this is one of the last pieces of property tributary to that ravine to be developed. No other development in the area has storage, they are all pre-ordinance, pre-existing developments.

Nola moved that we approve a waiver of on site detention storage for Hartman Ridge Subdivision. Gene seconded, motion passed.

OTHER BUSINESS

O'FERRALL POND PETITION

The O'Ferrall estate is in the process of preparing a petition to make the pond by Meijer a regulated drain.

ANDY ROYER EASEMENT REDUCTION

At our last meeting Mike discussed the request of Robert Royer for easement reduction on a portion of the John Hoffman Drain. The land is located at 706 North, East County Line Road and Mike has a legal description for that piece of ground. He asked for this in the spring and we had not done our maintenance work across that piece of property so he was reluctant to reduce it at that point. Now the maintenance work is done and Mike does not see a problem with reducing that easement to 25 feet each side for a total of 50 feet. Action was not taken before because Mike did not have the legal description to put into the minutes. Mr. Hoffman stated that we need to approve the reduction.

Nola moved to approve the reduction that is described in the legal description on the Hoffman Ditch for Andrew Royer at 706 NE County Line Road. Gene seconded, motion passed.

RQAW

Mike has received a letter from RQAW and their correspondence with the State Highway and they returned our invoice of \$3,420.00 unpaid because the State or RQAW has no contract with Tippecanoe County.

Nola moved to have Mr. Hoffman write a demand letter to INDOT and RQAW to pay the invoice.

CUPPY-MCCLURE - UPDATE

Mike has the bid documents from RUST Environmental and Infrastructure. Mike told him to include an alternate bid item for the outlet in Hadley Lake back to Great Lakes Chemical but stopping short of the 1200 feet of 5 foot by 10 foot concrete boxes. They also got with the Army Corp of Engineers to get a two year extension for our permit on the project extending it to September 25, 1997.

Nola asked Fred about the funds being State Grant funds that we should write the Department of Commerce for determination of which wage setting we should use since it is their money. Mike has the wage scale and they are highlighted so they can be changed easily, they are just good for 90 days. Mike will visit with all the landowners to let them know about what's taking place then we need to have a hearing of everybody in the Cuppy-McClure watershed area. Mr. Hoffman stated that we have to give 30 days notice on the hearing. There will be no cost to the watershed landowners for the construction of this drain. There will

be a reconstruction and maintenance hearing, but the maintenance does not start until after the construction.

Being no further business, the meeting was adjourned.

DRAINAGE BOARD MINUTES OCTOBER 2, 1995

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
DECEMBER 6, 1995

The Tippecanoe County Drainage Board met Wednesday, December 6, 1995 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; Engineering Consultant Dave Eichelberger and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes from the meeting held November 8, 1995. Commissioner Gentry moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

AGGREGATE EQUIPMENT & SUPPLY

Allen Jacobsen with C & S Engineering, recalled at the November 8, 1995 Drainage Board Meeting, conceptual approval was granted for the temporary drainage of Aggregate Equipment. Mr. Jacobsen was back to ask for preliminary approval of the drainage plan.

Mr. Spencer and Mr. Eichelberger recommended granting preliminary approval.

Commissioner Gentry moved to grant preliminary approval of the interim drainage plan for Aggregate Equipment and Supply, seconded by Commissioner Jones. Motion carried.

HUNTINGTON SUBDIVISION

Andy Slavens and Pat Cunningham of Vester & Associates, presented the development plans for Huntington Subdivision. Mr. Slavens asked for preliminary approval of the development which is located north of State Road 26 West, just west of Green Meadows Subdivision.

Mr. Kenneth Collins, 1631 N 400 W, expressed his concern of flooding in the farm field at the outlet of the proposed development.

Mr. Slavens stated the detention pond would serve as a control to release the water from the pond through a thirty one inch pipe at the south west corner of the pond outletting into a thirty six inch culvert under State Road 26 West.

Mr. Cunningham stated the pond will improve the site because the water naturally drains to the same culvert, the pond will decrease the rate at which the water will reach the culvert.

Mr. Hoffman asked if the State granted permission for the discharge into the culvert under State Road 26 West?

Mr. Slavens stated they will get the permission in the permit.

Mr. Lee Brand, 3890 State Road 26 West, asked how much more water will be caused by the street and roof coverage? Mr. Brand would rather the developer tile the water to the outlet, not release over his property.

Mr. Cunningham stated row cropping is the type of farming being done on the proposed site, with the development of streets and houses will not cause much increase in the runoff.

Mr. Spencer stated Vester and Associates needs to determine the total amount of acres that drains to the culvert before preliminary approval is granted. The Huntington development can use their share of the culvert capacity, but no all of the capacity.

Commissioner Gentry moved to continue Huntington Subdivision until the January 3rd Drainage Board meeting, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

OSCO DRUG STORE

Commissioner Gentry stated after discussing the drainage system for Osco Drug store with professors in hydrology from Purdue University, she has some questions. Where does the subsurface water drain and what is the water quality going to be like from a parking lot?

Mr. Slavens stated they have received a letter from the Environmental Protection Agency (EPA) and the pond is designed to include a filtration system.

Mr. Spencer suggested the Board obtain a copy of the letter from the EPA.

Commissioner Haan requested Vester and Associates to submit a copy of the letter from the EPA showing they approve of the drainage system for Osco Drug store.

CUPPY MCCLURE - update

Mr. Hoffman stated the letter from the Department of Labor states that the use of the money has to comply with all Federal, State, and local laws.

Commissioner Gentry moved to set the reconstruction hearing for Feb 7, 1996, during the regular Drainage Board meeting, seconded by Commissioner Jones. Motion carried.

Commissioner Gentry stated there is some question on West Lafayette agreement to pay a portion of the Cuppy McClure project. She asked Mr. Spencer to get her any letters or minutes from the City to the County concerning this project.

Being no further business Commissioner Gentry moved to adjourn until January 3, 1996, seconded by Commissioner Jones. Motion carried. + , -

> N O W _ DRAINAGE BOARD MINUTES DECEMBER 6, 1995 REGULAR
MEETING 01/26/9611/24/95

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 MOTSINGER, 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: _____
 Shellie 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
REGULAR MEETING
APRIL 3, 1996

The Tippecanoe County Drainage Board met Wednesday, April 3, 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 of the Drainage Board Meeting held March 6, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

ARLINGTON COMMONS/BRIDLEWOOD SUBDIVISION

Jennifer Bonner, Hawkins Environmental, presented the Board with final drainage plans for the Arlington Commons/Bridlewood Subdivision located between County Road 500 East and 550 East, south of Saddlebrook Subdivision. Ms. Bonner explained there is no onsite detention facility planned for the site due to the Berlovitz Regional Detention Basin, which will be build before or along with the development of Arlington Commons/Bridlewood Subdivision. Arlington Commons runoff will mostly be collected by inlets in the street then directed east to a culvert under the proposed South Brookfield Drive to a lake located in the center of Bridlewood Subdivision. The lake will not hold the runoff from the two subdivision, but serve as a collection point and then outlet into the Berlovitz Regional Detention Basin through a 2'x 4' RCP box culvert under County Road 550 East.

Mr. Spencer asked Ms. Bonner why stop logs where being used in the development?

Ms. Bonner stated the reason for the stop logs are to adjust the water level down to enable cleaning of the pipes.

Mr. Spencer recommended final approval with conditions:

1. The Berlovitz Regional Detention Basin must be build and completed along with the completion of Arlington Commons/Bridlewood Subdivision.
2. Clarification of calculation are needed for the pond outlet capacity.
3. Clarification of calculation for the regional basin.

Commissioner Haan moved to grant final approval of Arlington Commons/Bridlewood Subdivision with the three condition set by the Surveyor, seconded by Commissioner Jones. Motion carried.

COUNTY ROAD 350 SOUTH - Phase IV

Brian Litherland, Bernardin, Lochmueller and Associates, presented the Board with final design plans of County Road 350 South, Phase IV which will be located

from U.S. 231 to the new U.S. 231. Mr. Litherland explained a portion of the road will drain directly to wetland areas, and portions directly to Elliott Ditch. The new U.S. 231 has incorporated the new 350 South in the design of the new highway by providing an approach and a culvert. Side ditches will drain toward the new U.S. 231 and the plans for the highway have made provision for these ditches.

Mr. Spencer recommended final approval with two conditions:

1. Copies of the final certified plan, Corps of Engineers permit and Department of Natural Resources permit must be provided.
2. A revised copy of Sheet 9 must be provided.

Commissioner Haan moved to grant final approval of County Road 350 South, Phase IV with the conditions set by the Surveyor, seconded by Commissioner Jones. Motion passed.

OTHER BUSINESS

Cuppy McClure - update

Mr. Spencer stated he had a discussion with Hans Peterson, RUST Environment and they are putting together the bid documents for the Cuppy McClure Ditch. The bid documents should be ready next week.

Romney Stock Farm Ditch

Mr. Spencer stated he has received the information needed from the Montgomery County Surveyor and the project is moving forward.

Being no further business, Commissioner Haan moved to adjourn until May 1, 1996, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES APRIL 3, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
MAY 1, 1996

The Tippecanoe County Drainage Board met Wednesday, May 1, 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 Jon Stolz and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes of the Drainage Board Meeting held April 3, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

BERLOVITZ REGIONAL DETENTION BASIN

Mr. Spencer stated Hawkins Environmental requested a continuance of the Berlovitz Regional Detention Basin. Mr. Spencer mentioned Hawkins Environmental expressed some interest in presenting the plan at the special Drainage Board Meeting May 15, 1996, but they have not requested to be on the agenda.

Commissioner Haan moved to continue the Berlovitz Regional Detention Basin hearing, seconded by Commissioner Jones. Motion carried.

BRENTWOOD COMMUNITY

Mr. Spencer stated he spoke with Alley and Associates, the developers of Brentwood Community and explained to them Christopher B. Burke Engineering suggested continuing the discussion of their development. Alley and Associates asked Mr. Spencer to ask the Board for a continuation of Brentwood Community.

Mr. Mark Luebker, Indiana Creek Homeowners Association, asked if a review has been done on the most recent plan, if so what were the results?

Mr. Spencer stated after the first review a memorandum was issued to the developer on conditions that must be met before final approval. The developer re-submitted a plan but did not address all the conditions, therefore Christopher B. Burke Engineering consultant's recommendation was to continue until the plans comply with the drainage ordinance.

Mr. Spencer presented the Board with letters he received concerning Brentwood Community. Mr. Spencer also, informed Mr. Luebker that Rick Roethke, owner of the development, is willing to have a meeting with the surrounding landowners before the plan is heard by the Drainage Board.

Mr. Luebker stated the only time available for him to meet with the developer would be May 12th through May 18th.

Commissioner Haan moved to continue Brentwood Community, seconded by Commissioner Jones. Motion carried.

BRINDON WOODS DEVELOPMENT, PHASE I

Andy Slavens, Vester and Associates, asked for preliminary approval of Brindon Woods Subdivision located at the southwest corner of McCormick Road and US52 and

includes 25 acres. The southern portion of the development will consist of apartments and the northern portion a commercial development. There will be access from both McCormick Road and US52, there is an existing box culverts under US52 for the storm drainage to be routed. The offsite portion of the watershed will be picked up in the storm system at the southeast corner of the development. A wet bottom detention facility is planned to restrict the flow and release it at the current rate into the culvert under US52.

Mr. Spencer stated the capacity of the culvert must be determined to show it is adequate to handle the flow. Mr. Slavens needs to obtain a Corps of Engineers permit for the development because it appears to be within a wetland indicated on the National Wetland Inventory Map.

Commissioner Haan moved to grant conceptual approval of Brindon Woods Development, Phase I, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

WAL-MART POND - State Road 26

Commissioner Gentry asked Mr. Spencer if the fence surrounding the pond located at the Wal-Mart site off State Road 26 would be the responsibility of the County or the City of Lafayette to repair?

Mr. Spencer stated when the area was being developed the pond was designed to be a dry bottom facility and the County did not require the fence. On the south side of the pond the fence was taken down to do some grading when the site was being further developed. Mr. Spencer suggested asking the City to write a letter along with the County writing a letter asking them to follow up on the status of the pond.

CUPPY-MCCLURE - update

Mr. Spencer stated the bids for the Cuppy-McClure project will be received Monday, May 6, 1996 at 11:00 a.m.. There was a pre-construction meeting on the project April 29, 1996 and three out of the six contractors who picked up a set of plans were at the meeting.

Mr. Spencer stated both DNR permits for the project have expired. Paul Elling of RUST Infrastructure has re-applied for the permits. The Corp of Engineers permit was extended for two more years and the IDEM permit is still valid.

Being no further business Commissioner Jones moved to adjourn until May 15, 1996, seconded by Commissioner Haan. Motion carried.

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.

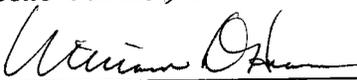
Being no further business Commissioner Haan moved to adjourn, seconded by Commissioner Jones. Motion carried.



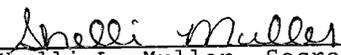
 Nola J. Gentry, President



 Gene Jones, Vice President



 William D. Haan, Member

ATTES: 

 Shelli L. Muller, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
June 5, 1996

The Tippecanoe County Drainage Board met Wednesday, June 5, 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; and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes of the Special Drainage Board Meeting held May 15, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

Cuppy McClure - update

Mr. Spencer presented the Board with a complete application notice from the DNR which states both permit applications they received have been deemed complete and ready for processing. Mr. Spencer stated it is not an authorization to proceed, but indicates the DNR has received the application.

Commissioner Gentry asked Mr. Spencer if he heard anything from the West Lafayette Engineer concerning the bids?

Mr. Spencer stated he had spoken to the West Lafayette Engineer and he asked for two more weeks to review the bids.

Commissioner Gentry mentioned a conversation with Opal Kuhl, former West Lafayette Engineer, in which Opal told West Lafayette the bids received were low enough that even if the plans had a smaller culvert size it might cost more to rebid the work.

PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES - Elliott Ditch Watershed Study
Mr. Spencer discussed a proposal for Professional Engineering Services to update the 1988 CBBEL/OMTEK Report Entitled "Hydraulic and Hydrologic Investigation of the Elliott Ditch Watershed". Christopher B. Burke Engineering, LTD submitted the proposal to the Drainage Board for review and consideration. The proposal includes an Understanding of the Assignment, Scope of Services, and Estimated Fees. The Understanding of the Assignment reads:

"In January, 1988, CBBEL, in association with OMTEK, completed a study of the Elliott Ditch Watershed for Tippecanoe County. This study was completed to identify and evaluate potential solutions to the "present and future flooding problems" of the watershed. In the period between the completion of that report and the present, the watershed has seen a substantial amount of development and the construction of the Wilson Branch Reservoir. In addition, there has been several recent permit applications submitted to the Tippecanoe County Surveyor's Office for development along Elliott Ditch between the Conrail and Norfolk & Western (N&W) railroads and U.S. 52, with the potential for further development in the near future."

Mr. Spencer stated the estimated cost of the services described in the proposal is \$24,800.00.

Commissioner Gentry asked the procedure for having the floodplain elevation redefined.

Mr. Spencer stated the DNR would have to adopt the study of the Watershed and the only way to get them to adopt the study is to get them involved as much as possible with the study that Christopher B. Burke Engineering is proposing.

MCCUTCHEON HEIGHTS SUBDIVISION - Outlot "A"

Mr. Spencer presented a letter from Prairie Oaks, Inc. which is addressed to all property owners in McCutcheon Heights Subdivision. The letter explains Prairie Oaks, Inc. is going out of business and the 3.38 acre outlot A for McCutcheon Heights will be sold. Prairie Oaks, Inc. suggested the adjoining landowners in Prairie Oaks Subdivision buy outlot "A" which could be used for a neighborhood picnic/playground area. Mr. Spencer stated outlot "A" serves as the dry storm water retention basin for McCutcheon Heights Subdivision.

Commissioner Haan stated with dividing outlot "A" between adjoining landowners, they may not maintain it as a basin.

Mr. Hoffman stated the basin should be sold to one individual with the understanding the basin is to be maintained so it functions properly.

Commissioner Gentry understood the basin was going to be petitioned to be made a legal drain.

Mr. Spencer stated if the basin would become part of a legal drain that would solve the problem of who would maintain the basin, but not who would own it. A suggestion was made to Mr. Spencer of the County owning the basin. Another solution would be if the adjoining landowners did own the basin and did not maintain it as a basin, the County can fix the problem and bill the landowners.

Mr. Spencer presented aerial photos by Woolpert for the Board's inspection. The aeriels were done for the pilot GIS project, the photos include six section east of town.

BROOKFIELD FARMS SUBDIVISION - Homeowners Association

Eric Burch, Brookfield Farms Subdivision lot 63, stated he is the President of the Homeowners Association in Brookfield Farms Subdivision. The association has just formed and Mr. Burch asked for information on liability, maintenance, and erosion of the two wet bottom basins located in Brookfield Farms Subdivision.

Mr. Hoffman stated the Homeowners Association will have the responsibility of getting liability insurance, maintenance and controlling erosion in the basins.

Mr. Spencer asked if the Homeowners Association has a set of the construction plans for Brookfield Farms. The plans will help to determine the sizes and location of the pipes and outlet structures.

Mr. Burch stated they have a plat of the subdivision, but not the construction plans.

Mr. Spencer stated he can provide a set of the plans for the association to have on file. Maintaining the basins would include mowing, inspecting the outlet structure to insure it is in proper working order which means making sure nothing obstructs the flow through the pipes. Also, monitoring the rear yard swales so no one alters the flow path will be a responsibility of the Homeowners Associates. Mr. Spencer offered to meet with the Homeowners Association when he gets the construction plans and go through the plans with them on site.

Mr. Burch expressed some concern of existing erosion that was started before the Homeowners Association formed and also with an existing muskrat problem. He wondered who would address those problems.

Mr. Spencer stated he can give them a name of someone who traps muskrats. He mentioned another option for the landowners in Brookfield Farms is to petition the Board to make the basin part of a legal drain. All of the landowners in the watershed area would pay an annual maintenance fee for the drain. The money collected would go into a fund set up for the ditch and if a maintenance problem arises the landowners can call the County Surveyor's Office to report the problem. The County would make the necessary repairs and the expense would be taken from the fund that was created for the ditch.

Mr. Burch stated he will suggest the idea of petitioning the Board to the association and get their input.

Being no further business Commissioner Haan moved to adjourn until July 3, 1996, seconded by Commissioner Jones. Meeting adjourned.

DRAINAGE BOARD MINUTES JUNE 5, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
July 3, 1996

The Tippecanoe County Drainage Board met Wednesday, July 3, 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 Thomas Busch; and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes of the Drainage Board Meeting held June 5, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

BUCKINGHAM ESTATES SUBDIVISION

Dale Koons, Civil Engineering, asked the Board for final approval of Buckingham Estates Subdivision located south of County Road 400 South and east of the proposed relocation of U.S. 231. The project consist of 129 single-family lots on approximately 55 acres. Mr. Koons stated the temporary detention facility on Buckingham property and the detention facility for Stratford Glen Subdivision will be eliminated. The developer is proposing to replace the offsite drainage structure under the first driveway north of Buckingham with a 4' X 7' box culvert. There are two structures located at County Road 400 South, the first structure is located at the intersection of County Road 400 South and Old Romney Road. This structure conveys a portion of the Old Romney Road side ditch flow to Wea Creek through a 30" corrugated metal pipe, the flow continues to the second structure located at County Road 400 South, that is a 24" RCP culvert west of Old Romney Road. The first structure will be replaced with a 48" RCP culvert and the south side ditch of County Road 400 South will be regraded. Mr. Koons requested a variance to permit no on-site detention.

Mr. Spencer recommended final drainage approval with three conditions:

- 1) The applicant should provide construction plans for the off-site construction and written agreements from the applicable land-owners.
- 2) Drainage easements should be provided for the on-site ditch that will convey the on and off site 100 year frequency discharge through the site.
- 3) The Typical Street Cross Section should be revised to eliminate the conflicting cross slopes indicated.

Commissioner Haan moved to grant the variance to waive the requirement for on-site detention, seconded by Commissioner Jones. Variance granted.

Commissioner Haan moved to grant final drainage plans for Buckingham Estates subject to the three condition read by Mr. Spencer, seconded by Commissioner Jones. Motion carried.

PINE VIEW FARMS PHASE II

Mr. Pat Sheehan, Schneider Engineering, asked the Board for a continuance of Pine View Farms Phase II.

Commissioner Haan moved to continue Pine View Farms Phase II, seconded by Commissioner Jones. Continuance granted.

ELLIOTT INDUSTRIAL

Mr. Bill Davis, Hawkins Environmental, asked the Board for final approval of Elliott Industrial located at the southeast corner of Concord Road and Brady Lane.

Commissioner Haan and Mr. Tom Busch excused themselves from the discussion of Elliott Industrial at 9:20 a.m.

Mr. Davis stated the National Wetland Inventory Map indicates the site is not within the wetland, also per the Flood Insurance Rate Maps the site does not lie within the limits of the 100 year flood plain. The application for a permit has been submitted to IDNR for construction in the floodway of Elliott Ditch. Mr. Davis stated the adjacent landowners have been notified of the re-routing of the existing 36-inch RCP.

Mr. Spencer recommended final approval with three conditions.

1. The applicant request a variance for the pond depth from the maximum allowable depth of 4 feet for a dry detention pond for the north pond, which has a maximum depth of approximately 6.8 feet.
2. The applicant should supply a detail of the emergency spillways for the proposed detention ponds, correct the size of the orifice on the detail for the south detention pond, Include the 100 year elevation of the proposed detention ponds on the site development plans and revise the pipe sizes on the site development plans to match the calculations for the pipe segments downstream of structure MH-H2 to the pond, as necessary.
3. The applicant should obtain approval from the adjacent land-owner to re-route the existing 36-inch RCP and should obtain permits from IDNR for construction in a floodway.

Commissioner Gentry moved to grant a variance for the north pond in Elliott Industrial to exceed the maximum 4 foot depth requirement for a dry bottom detention basin to be a depth of approximately 6.8 feet, seconded by Commissioner Jones. Variance granted.

Commissioner Gentry moved to grant final approval of Elliott Industrial subject to the three conditions, seconded by Commissioner Jones. Motion carried.

Commissioner Haan and Mr. Busch returned to the meeting.

OTHER BUSINESS

HADLEY MOORS SUBDIVISION - vacation of easement

Mr. Spencer presented the Board with a letter from Mr. & Mrs. Tyree Harris which requests vacation of an easement on lot 145 in Hadley Moors Subdivision. They are wanting to vacate the drainage easement on the west side of their property to add a 15' x 15' enclosed deck to the northwest corner of their home. Mr.

Spencer stated instead of vacating the easement the Board could grant an encroachment into the drainage easement. Mr. Harris submitted along with the letter, signatures from property owners within 100 feet of his lot which shows their consent of the easement vacation. They also received letters from Tipmont REMC, American Suburban Utilities, Inc., Cox Communications, and GTE Telephone Operations. These letters contain no objections to the construction of the deck over the easement with the understanding if the need arises at a future date to access the easement, the current lot owner would be liable for any dismantling.

Mr. Busch stated the encroachment will have to be recorded.

Mr. Spencer stated he will contact Mr. Harris to ask him to have his attorney write an encroachment permit and submit it to the Drainage Board.

CUPPY MCCLURE - Up-date

Mr. Spencer stated he has not received the permits for Cuppy-McClure, but they have been granted.

Commissioner Gentry stated Mayor Margerum informed her West Lafayette will not be contributing to the project.

Mr. Spencer stated when he receives the DNR permits he will bring them to the Commissioners Meeting to be signed. Atlas Excavating had the lowest alternate bid of \$312,767.00.

BERLOVITZ REGIONAL DETENTION BASIN

Mr. Spencer stated he received a letter from Deluxe Homes stating if the existing Berlovitz tile drain is disturbed or damaged in any way by the construction of the detention basin they will immediately correct or repair the damage. They will construct a clay liner 1' thick and 20' wide centered on the existing Berlovitz drain tile in the detention basin.

ELLIOTT DITCH WATERSHED STUDY UPDATE PROPOSAL

Mr. Spencer asked to be placed on the July 8, 1996 Commissioners Meeting for the approval of the proposed Elliott Ditch Watershed Study update by Christopher B. Burke Engineering, LTD. A letter has been written to the DNR asking them to be involved in the study.

WILSON BRANCH OF THE ELLIOTT DITCH

Mr. Spencer received the dedication of the relocated portion of the Wilson Branch of the Elliott Ditch on the south side of Maple Point Drive between US52 and State Road 38.

ROMNEY STOCK FARM DRAIN

Commissioner Gentry spoke with Marvin McBee and he asked since Montgomery County has waved the right to a joint board what is the next step?

Mr. Spencer stated the next step would be to compile an assessment list. He needs from Montgomery County the acres that drain north into the ditch. The Montgomery County Treasurer can tax the landowners in the watershed area and send the money to the Tippecanoe County Treasurer for collection.

Commissioner Gentry presented an article from Prairie Farmer entitled "Drainage Boards power extended to private drains" which discusses the new Indiana law which gives the County Drainage Boards the authority and responsibility to arbitrate when private landowners can't resolve disagreements about drainage.

The County Surveyor will have the authority to enter onto private property to investigate drainage disputes and the Drainage Board will hear the case and have the power to act. The Drainage Board may have the problem fixed and the cost distributed to the various owners involved based upon how much each owner should benefit. County Drainage Boards were given authority to hear cases involving "natural surface watercourses". In those situations property owners could block water out allowing the flow onto a neighbor's property. The new law will not allow the flow to be blocked.

Being no further business Commissioner Haan moved to adjourn until August 7, 1996, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES JULY 3, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
August 7, 1996

The Tippecanoe County Drainage Board met Wednesday, August 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, and Gene Jones; Tippecanoe County Surveyor Michael J. Spencer; Drainage Board Attorney J. Frederick Hoffman; and Drainage Board Secretary Shelli Muller.

The first item on the agenda was to approve the minutes of the Drainage Board Meeting held July 3, 1996. Commissioner Gentry moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

PETITION OF DEDICATION - Wilson Branch of the Elliott Ditch
Marianne Owen, Bennett Boehning Poynter and Clary Attorneys at Law, represented Tippecanoe Associates and Maple Point Enterprises with a petition for acceptance of dedication for the relocated portion of the Wilson Branch of the Elliott Ditch Legal Drain. She requested the Board's acceptance of the dedication and signing of the vacation for the old portion of the Wilson Branch which is no longer in use.

Commissioner Jones moved to dedicate the new legal description of the relocated portion of the Wilson Branch of the Elliott Ditch, seconded by Commissioner Gentry. Motion carried.

Commissioner Jones moved to vacate the unused portion of the Wilson Branch of the Elliott Ditch, seconded by Commissioner Gentry. Motion carried.

Commissioner Jones moved to authorize the chairman of the Drainage Board to sign the order for the Wilson Branch of the Elliott Ditch, seconded by Commissioner Gentry. Motion carried. Commissioner Gentry signed the order.

Pine View Farms II, Section 2

Todd Warrix, Schneider Engineering, requested final approval of Pine View Farms II, Section 2 located in Wabash Township east of County Road 250 West. Pine View Farms Subdivision contains 180 residential lots, section two consists of 60 lots on approximately 17 acres. At the April 1994 Drainage Board meeting, the drainage system was approved by the Board for both sections. Section two was submitted to assure the Board it meets the requirements previously approved. Mr. Warrix asked the Board for a variance to allow ponding of detention water on lots 158, 159 and 160 of section two.

Commissioner Gentry moved to grant a variance to allow detention on lots 158, 159 and 160 of section two, seconded by Commissioner Jones. Motion carried.

Commissioner Jones moved to grant final approval of Pine View Farms II, Section 2, seconded by Commissioner Gentry. Motion carried.

MILL CREEK SUBDIVISION

Jim Jones, Hawkins Environmental, requested final approval of Mill Creek Subdivision located east of 18th Street, north of 350 South and south of Elliott Ditch. The site consists of 74 single family lots and 58 duplex lots. The site

is designed to direct release into the Elliott Ditch, therefore Mr. Jones requested a variance for no onsite detention.

Mr. Spencer recommended final approval of Mill Creek Subdivision with the condition the developer receives approval from the Department of Natural Resources for the outfall structures.

Commissioner Jones moved to grant final approval of Mill Creek Subdivision with the condition the development receives approval from the Department of Natural Resources for the outfall structures, seconded by Commissioner Gentry. Motion carried.

Commissioner Gentry moved to grant the request for a variance of no onsite detention in Mill Creek Subdivision, seconded by Commissioner Jones. Motion carried.

LIGHTHOUSE HOMES CENTER

Mr. Spencer introduced Ike Tarvin, President of Lighthouse Homes Center and Amy Moore, of Butler, Fairman & Seufert, Inc.. They came before the Board to discuss Lighthouse Homes Center and the concept of them contributing to the Elliott Ditch Regional Detention Basin instead of having onsite detention. Ms. Moore stated she wrote a letter to Mr. Spencer which discussed the possibility of the developer contributing to the regional basin based on the volume of storage used by Lighthouse Homes Development.

Mr. Spencer stated the next step would be for the developer to prepare an agreement and include the amount of storage the development will use.

Mr. Tarvin asked when the regional detention basin will be built?

Mr. Spencer stated a time frame has not been determined.

COMFORT SUITES HOTEL

Steve Johnson, Design Consultant, requested final approval for Comfort Suites Hotel located northeast of frontage Road. Mr. Johnson explained water from the hotel site will travel across the surface of the parking lot and collect in catch basins, a storm water pipe will carry the water through a dry detention basin outletting into the existing ravine at the same runoff rate.

Mr. Spencer stated the developer wants to fill the existing ditch along Frontage Road. The ditch is within the right-of-way, therefore the developer needs approval from the County Highway Department. The other two conditions are the applicant needs a variance for the anticipated detention storage depth of 12 feet and the applicant must include an emergency spillway for the proposed detention pond.

Steve Murray, County Highway Executive Director, stated the developer has to provide information to confirm the amount of offsite water which flows through

the ditch. After an amount is determined the Highway Department will make a decision to allow or not to allow the ditch to be filled.

Commissioner Gentry moved to grant the variance of the detention storage depth, seconded by Commissioner Jones. Motion carried.

Commissioner Jones moved to grant final approval of Comfort Suites subject to the condition stated by the Surveyor, seconded by Commissioner Gentry. Motion carried.

OTHER BUSINESS

Mr. Spencer presented an agreement from RUST Environmental & Infrastructure, Inc in regards to Cuppy McClure drainage project. The agreement states RUST will provide additional engineering services as the County requires and be reimbursed on a per diem basis. Expenses incurred will not exceed the amount of \$12,500.00 and be billed at a hourly rate.

Mr. Spencer presented a letter from Atlas Excavating, who is the contractor for the drainage improvements on the Cuppy McClure Ditch. They suggested a structure change for manhole #1, and manhole #3 through manhole #9 to change from a 72" diameter pre-cast manhole to a 5'x 5' box manhole. They also, suggested changing catch basin #2 from a 48" diameter catch basin to a 2'x 2' box catch basin. There is no cost savings on the 5'x 5' box manhole, but the 2'x 2' box catch basin will result in a savings of \$125.00.

Mr. Spencer asked to be on the agenda for the August 12, 1996 Commissioner meeting for both the agreement with RUST Environment & Infrastructure and the changes suggested by Atlas Excavating.

Mr. Spencer informed the Board the notices for a hearing on the maintenance assessment for Romney Stock Farm Drain and the High Gap Road Drain were sent August 5, 1996 and the hearing will be held September 4, 1996 at 9:00 a.m.

SHEPHERDS POINT SUBDIVISION

Mike Gibson, 47 West 500 North asked the Board for help with the detention basin at the corner of 50 West and County Road 500 North. He was before the Board a year ago with the same situation and nothing has been done to get the pond regraded or seeded. Mr. Gibson stated Al Buckley was going to do the work, but nothing has been done.

Mr. Spencer stated he spoke with Mr. Gibson prior to this meeting and wrote a letter to Mr. Buckley asking for a meeting between himself, Mr. Buckley and Highway Department so they could discuss a remedy to Mr. Gibson situation.

Mr. Hoffman stated another letter needs to be written to Mr. Buckley with a time limit to respond to Mr. Spencer's letter.

Mr. Spencer stated he will send a certified letter instructing Mr. Buckley to contact him within 10 days after his receipt of the letter.

Being no further business, Commissioner Jones moved to adjourn until September 4, 1996, seconded by Commissioner Gentry. Meeting adjourned.

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
NOVEMBER 6, 1996

The Tippecanoe County Drainage Board met Wednesday, November 6, 1996 in the Tippecanoe Room of the Tippecanoe County Office Building, 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 pro-tem Thomas Busch; and Drainage Board Secretary pro-tem Anna Rumble.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held October 2, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

BRINDON WOODS SUBDIVISION Phase I

Andy Slavens, Vester and Associates, introduced a new employee to Vesters, Tim Byer. Mr. Slavens requested final approval of Brindon Woods Subdivision located off US52 near McCormick Road and consists of 12.3 acres.

Mr. Eichelberger stated after the review the following comments were:

1. The hydrologic calculation submitted in support of the detention requirements.

a.) Time of concentration calculations received on October 10, 1996 indicate that sheet flow areas were grassed. The current submittal appears to indicate a cultivated soil, with residual cover less than 20%. The applicant should clarify the sheet flow land cover and verify the roughness coefficient.

b.) The applicant should provide a watershed map showing all off-site subareas, along with the flow paths assumed in the time of concentration calculations.

c.) The applicant does not appear to follow the required methodology for the shallow concentrated flow regime. As specified in the Ordinance, the applicant must use the methodology outlined in the TR-55 Manual. It should be noted that the applicant did use the correct TR-55 methodology for this flow regime in pervious submittals.

d.) The applicant has used three off-site subareas for the allowable release rate analysis, while only tow are used in the detention analysis. The hydrologic characteristics of all off-site subareas should remain constant between the tow models.

e.) The TR-20 analysis used a rating curve with maximum elevation 669.0. The provided detention analysis indicates a peak 100-year water surface elevation of 669.13 for the 4-hour event. The applicant should extend the proposed detention pond rating curve so that the calculated peak 100-year water surface elevation does not exceed the last point of the curve.

f.) The principal outlet for the pond is a 2-foot by 4-foot reinforced concrete box culvert and a 10-foot wide concrete weir. Based on the analysis supplies by the applicant, there would only be 0.17 feet of freeboard between the calculated peak 100-year water surface elevation and the berm

overtopping elevation. The applicant should increase the minimum berm elevation to provide at least 1.0 feet of freeboard.

2. A channel conveys off-site water through the site under existing conditions. The applicant proposes to convey this off-site runoff via a 36-inch ADS pipe placed at 0.5% slope. The following comments are related to the applicants proposed conveyance system.

a.) Any system intended to convey off-site water should be contained in an easement. This affects both the pipe network and proposed detention facility.

b.) The applicant states that the 36-inch ADS has capacity of 62.6 cfs, with a peak 100-year discharge , to the pipe, of 62. 5 cfs, as determined by the provided TR-20 analysis for the 54.6 acre off-site tributary area. The applicant should provide a hydraulic grade line analysis to demonstrate that the proposed 36" ADS mainline has capacity for the 100 year event. The analysis should be based on the RT-20 critical duration additions of the 10-year flows along the 36" ADS pipe for the on-site flows, based on rational method analysis. The beginning tailwater elevation should be no lower than the top of the pipe at the 36" outfall to the proposed detention facility. This analysis should account for losses at all manholes, losses due to change in alignment, exit losses, entrance losses, as well as frictional losses. It should also be noted that this analysis may be affected by the response to comment number 1.

3. The applicant should provide a detention pond safety ramp on the plans, as required by the ordinance.

Commissioner Haan moved to grant final approval of Brindon Woods Subdivision, Phase I, subject to the condition stated by Mr. Eichelberger, seconded by Commissioner Jones. Motion carried.

WATKINS GLEN SUBDIVISION, Phase IV, Part II

Mr. Slavens presented the Board with the proposed Watkins Glen Subdivision, Phase IV, Part II drainage plan located west of County Road 400 East and consist of approximately 6 acres. Mr. Slavens asked for final approval of the proposed drainage plan.

Mr. Spencer stated a memo was not written for this project because the submittal was received after the deadline. He recommended continuing Watkins Glen Subdivision, Phase IV, Part II until next month Drainage Board Meeting.

Commissioner Gentry asked Mr. Slavens why the Osco Drugs drainage system is not working adequately?

Mr. Slavens stated he is aware of the situation and has been in contact with Findly Drilling who will help to get the drainage system working properly.

MILESTONE

Bob Gross, R.W. Gross & Associates, introduced Kristine Horn an Engineering in Training. Mr. Gross asked the Board for final approval of the proposed

Milestone Contractors site located at the corner of County Road 350 South and 475 East. There is an existing branch of the Elliott Ditch that runs through the site and they propose to re-route the tile or direct it through the proposed detention pond.

Mr. Spencer recommended final approval with these conditions:

- 1.) The national wetland inventory map shows the south half of the property and the area where the borrow pit is located are wetland areas. The applicant must receive approval of construction in wetlands
- 2.) The applicant needs to show the proper outlet details, emergency spillway and overflow details on the construction plans.

Commissioner Haan moved to grant final approval of Milestone Contractors drainage plan subject to the condition stated by the Surveyor, seconded by Commissioner Jones. Motion carried.

BERLOWITZ DITCH WATERSHED STUDY

Tom Busch excused himself from the meeting.

Mr. Spencer mentioned a study that had been done four years ago on the Berlowitz watershed. Christopher B. Burke Engineering is looking at the original study and comparing the development since the first study to the development that has followed, and determining the existing drainage and what improvements can be done.

Mr. Stolz, Christopher B. Burke Engineering, stated the first item discussed was the runoff of water under Interstate 65 through a 33" X 49" pipe arch and review of the southeast area where the pond is for Saddlebrook, Bridlewood and Arlington Commons.

Mr. Spencer stated this is a good example of how the GIS system would help reduce the cost to the County for research done on drainage studies. There is not adequate topographical information in the area to do a complete study. The two foot contour maps which will be created with the GIS system will have more control, accuracy and be more accessible.

Mr. Spencer stated a meeting with the property owners within the watershed area should be the next step. Mr. Dick Shoemaker, manager of the Shaw Farms, stated he would like the meeting to be the week of December 16th because the Shaw's will be in town that week. Mr. Spencer stated having a meeting the week of December 16th is certainly possible and the landowners will be notified of the meeting when a date is confirmed.

OTHER BUSINESS

CUPPY MCCLURE UPDATE

Mr. Spencer stated the project is going well, the open ditch has been cleared and rough graded. The 48 inch pipe has been installed almost to the US52 right-of-way.

DRAINAGE BOARD SCHEDULE CHANGE

Commissioner Gentry stated the next month Drainage Board Meeting needs to be changed from December 4, 1996 to December 11, 1996 at 9:00 a.m. and notices sent to the papers of the change.

Being no further business, Commissioner Haan moved to adjourn until December 11, 1996, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES NOVEMBER 6, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
DECEMBER 11, 1996

The Tippecanoe County Drainage Board met Wednesday, December 11, 1996 in the Tippecanoe Room of the Tippecanoe County Office Building, 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; Drainage Board Consultant David Eickelberger and Drainage Board Secretary Shelli Muller. William & Delores Kepner, 4120 N 300 W; Scott Kepner, 4116 N 300 W, also George and Ruby Tsao, 4200 N 300 W, Lafayette, Indiana.

The first item on the agenda was to approve the minutes from the last Drainage Board Meeting held November 6, 1996. Commissioner Haan moved to approve the minutes, seconded by Commissioner Jones. Motion carried.

STONEHENGE SUBDIVISION & PLANNED UNIT DEVELOPMENT PHASE I

Andy Slaven, Vester and Associates presented final drainage plans for Stonehenge Subdivision and Planned Unit Development, Phase I, located off County Road 375 West and County Road 450 North. The entire site consist of 134.6 acres, 401 lots, Phase I is centrally located within the site and consist of 53.4 acres. There is a retention pond designed to handle the runoff for the entire 134.6 acres. Currently the site is a farm field after development a storm sewer system will be installed to re-direct the majority of the current flow to the detention facility. There are two areas which will not be routed to the pond. The first is 8.6 acres at the back half of lots along the southern boundary. The second area includes 9.6 acres in the northeast corner of the site. Streets have been designed to carry emergency routing to the pond while maintaining a depth of 7" or less of ponding.

After discussion with the adjoining landowners, the Drainage Board Members and Andy Slavens it was decided the developer will need to address the following concerns of the landowners, before final drainage approval is granted.

Mr. Scott Kepner stated he was concerned about driveway washout and accessibility to his property, he felt the development of the pond will cause the creek that runs through the properties east of the development to go dry, also infiltration from the pond into his basement. A soil scientist was to evaluate the situation to determine if a curtain drain will need to be installed and nothing has been done.

Mr. Bill Kepner asked if a new culvert would be installed to handle the additional flow. He also, did not want the conditions of the creek to be altered and felt with the development the creek would start having erosion control problems due to the volume of water rushing through at a faster rate. He is also concerned with the creek drying out because of the pond holding water back that would normally flow.

Mr. George Tsao stated a portion of his land is wet and he wanted to be sure that the entire lot would not become wet.

Mr. Spencer asked if the street for the planned development area are going to be private streets? There is some concern on the gutterspread not having the 10 foot clear lane for emergency access causing the street to flood.

Commissioner Haan stated even if the streets are private, the Board would not approve a plan which would allow a significant amount of flooding in the streets.

Commissioner Haan moved to continue Stonehenge Subdivision and Planned Unit Development, Phase I until the Surveyor, the landowners and Vester and Associates meet to solve the concerns stated by the landowners, also the gutterspread distances need to be addressed, seconded by Commissioner Jones. Motion carried.

OSCO DRUG STORE - Beck Lane & US231 update

Andy Slavens stated Darrell Norton investigated the situation of the pond at Osco Drug Store located at Beck Lane and US231 South. The investigation showed that the casings drilled were not drilled to the depth required by the plans. The casing will be re-drilled to match the plans. The ditch has a hump in the flow line that needs to be re-addressed.

Commissioner Gentry asked what the legality of the Drainage Board is to get the drainage corrected at the Osco store?

Mr. Hoffman stated the Drainage Board could make the developer re-design the project because the decision of the Board was based on the assurance from the developer that this drainage system would work.

KOEHLER COMMERCIAL SUBDIVISION

Tim Balensiefer, Hawkins Environmental, asked the Board for final approval of Koehler Commercial Subdivision located on the west side of Creasy Lane between McCarty Lane and State Road 38. Mr. Balensiefer explained that the site currently sheet drains to the Wilson Branch of the Elliott Ditch. Post-development the site will direct release into the Wilson Branch through a storm drainage system with emergency routing via swales. Mr. Balensiefer also asked the Board for an easement reduction for the Wilson Branch, currently 75 feet reduced to 25 feet, based on the cross section after clean out. The developer is willing to create funding for the reconstruction of the Wilson Branch portion which borders this development.

Commissioner Haan moved to approve the Koehler Commercial Subdivision concept of allowing the developer to reduce the easement from 75 feet top of bank to 25 feet top of bank after the legal description for the reconstruction of the Wilson Branch is completed, also the concept of direct release into the Wilson Branch after an agreement is approved, seconded by Commissioner Jones. Motion carried.

OTHER BUSINESS

CUPPY MCCLURE - UPDATE

Mr. Spencer stated Atlas Excavating is finished with laying the pipe, there is still dirt work to finish, and final grading which will be complete in May 1997.

Commissioner Gentry suggested a study be done on the drainage for the Elston area. The area is developing fast and a drainage plan needs to be created for the future development.

Commissioner Haan moved to approve the 1997 Drainage Board schedule, seconded by Commissioner Jones. Motion carried.

Being no further business, Commissioner Haan moved to adjourn until January 8, 1997, seconded by Commissioner Jones. Motion carried.

DRAINAGE BOARD MINUTES DECEMBER 11, 1996 REGULAR MEETING

TIPPECANOE COUNTY DRAINAGE BOARD

July 5, 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 Consultants Dave Eichelberger and Kerry Davis and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Wednesday, July 5, 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 June 14, 2000, Regular Drainage Board Meeting. Commissioner Knochel moved to approve the minutes of June 14, 2000, Drainage Board Meeting, seconded by Commissioner Shedd. Motion carried.

EASTSIDE ASSEMBLY OF GOD

Allen Jacobsen with John E Fisher & Associates gave presentation for final approval of Eastside Assembly of God. This site contains approximately 24 acres located on the south side of C.R. 50 South, approximately one-half mile east of C.R. 550 East. The southwest border of the site is the future alignment of a road that will connect C.R. 50 South with the McCarty Lane extension. The proposed construction under review includes a new sanctuary building and parking area. About 9 acres are involved in this construction. The site is fairly flat. It is an agricultural area. There are no drainage improvements to speak of on the site. Drainage wise we propose to allow most of the run off that flows to the southeast to continue to do so, with the condition that the church plants the last years farm field with a grass surface to reduce the amount of run off. Most of the area that is subject to development will drain toward the west along the drainage ditch, which is on the south side of C.R. 50 South. Unfortunately the swale is very poorly defined at the site and for some distance west of the site. We propose to improve the channel in the off site area to allow positive drainage of the site itself, subject to development. We propose to detain storm water on site and regulate by use of a 12" outlet pipe and a 9" orifice plate.

Steve Murray asked where would the improvements along C.R. 50 South end up discharging.

Allen Jacobsen stated it would flow about ¾ mile to the west and into the Berlovitz ditch. The detention we are proposing is an interim solution, which will be eventually addressed by the overall drainage plan for the Eastland Development.

Dave Eichelberger commented Memo of June 23, 2000 had three concerns. Comment number three regarding the HY-9 analysis of the proposed detention outlet has been taken care of. Allen Jacobsen provided Dave with new info this morning for comments one and two. Dave recommended final approval with comments one and two being conditions pending final review.

Steve Murray stated they would need to get Highway Department approval for work to improve existing side ditch within the C.R. 50 South right-a-way.

Allen Jacobsen stated they have provided plans to the County Highway and have received a review letter from them.

Commissioner Knochel moved to grant final approval with conditions, seconded by Commissioner Shedd. Motion carried.

JEFFERSON COMMONS

Eric Gleissner with Schneider Corporation gave presentation for preliminary approval of Jefferson Commons. The proposed project involves the redevelopment of an existing mobile home park into an

apartment complex. The nearly 20-acre site lies along the south side of U.S. 52, about 1,500 feet east of County Road 250 West, just west of the Cuppy-McClure Ditch. When completed the site will include 21 apartment buildings, a pool, clubhouse facility and parking areas. Stormwater from a majority of the site will be routed via storm sewers to a dry-bottom detention facility located along the eastern property line of the site.

Dave Eichelberger stated what they have from Schneider Corporation is request for preliminary approval. Have only received preliminary plans from Schneider Corporation on this project. Never received a final set of certified plans or calculations from Schneider Corporation on this project. We are prepared to recommend preliminary approval with conditions in the June 30, 2000, memo.

1. Questions regarding the outlet of the pond in general. Received analysis of the downstream system and we need more information.
2. The emergency overflow appears to drain onto another property owner before reaching the St. Rd. 52 Right-of-way ditch. Need to get approval from downstream landowner for proposed plan.
3. Need to get INDOT approval for all proposed work within the U.S. 52 Right-of-way.
4. Certified plans and calculations must be submitted for review before final approval of the project can be recommended.

Dave Eichelberger would recommend preliminary approval of this project. Once we get these conditions addressed then we can go forward to the final approval.

Commissioner Hudson asked if there were any problems or concerns from landowners with water in the Cuppy-McClure ditch last week with all the rain.

No one had heard of any problems or concerns from landowners.

Commissioner Shedd asked what are chances that INDOT would not approve and what would happen after that.

Steve Murray stated Jefferson Commons would not have an outlet. Without an outlet the project could not move forward unless they could find an alternate outlet. Typically INDOT will approve these kinds of requests. I wouldn't anticipate a problem with INDOT other than them doing their own review and satisfying themselves that the design is proper.

Commissioner Knochel moved for preliminary approval with conditions, seconded by Commissioner Shedd. Motion carried.

ORTHOPEDIC INSTITUTE OF LAFAYETTE

Eric Gleissner with Schneider Corporation gave presentation for final approval of Orthopedic Institute of Lafayette. The proposed project involves the development of a 25,064 square-foot building and 70,633 square-feet of parking and sidewalks on Lot 1 of the Crosspointe Commercial Subdivision. The 3.34-acre site lies along the East Side of Creasy Lane (County Road 350 East), south of Amelia Avenue, west of Amelia Court and along the north bank of the Treece Meadows Relief Drain. Eric Gleissner is asking for final approval with conditions in the June 29, 2000, memo.

1. Applicant provides verification that 100-year runoff coefficients were used in the storm sewer analysis.
2. Applicant receives Drainage board approval for the proposed parking area encroachment into the Treece Meadows Relief Drain easement.
3. Certified plans and calculations for the project be submitted.

Steve Murray commented they have answered all the consultants' questions. Item 2 is a request for encroachment into the Treece Meadows Relief Drain easement. We have asked them to leave a minimum of 15 to 20 feet from the curb to the top of the bank so we can maintain that drain in the future. Also we received a letter from the property owner requesting their ability to encroach into that easement with a parking lot. Historically we have allowed that in most cases with conditions. One condition being that the

Surveyor's Office or Drainage Board will not be responsible for any damage done to the parking lot if we need to maintain the drain. In the future, since we do get a lot of encroachment requests, we need to have an encroachment form filled out and executed by the board so we have it in the drainage board minutes.

Commissioner Knochel moved to have easement encroachment form drafted holding county not responsible for damages to any of their improvements, seconded by Commissioner Shedd. Motion carried.

Commissioner Knochel moved to grant final approval with conditions to Orthopedic Institute of Lafayette, seconded by Commissioner Shedd. Motion carried.

WABASH NATIONAL

Steve Murray, Tippecanoe County Surveyor, stated that he has a meeting at 11:00 AM this morning with Tillett Engineering and some of the Wabash representatives. Weren't sure Wabash National would have everything to the board today. Put them on the agenda in case they had everything to the board by this morning. We are meeting with them after this drainage board meeting and look at some pacific items on their request.

OTHER BUSINESS

PETITION TO REMOVE OBSTRUCTION

Ike Tarvin and Bonnie L. Tarvin property owners at 2121 Lindberg Rd, West Lafayette, IN, filed petition with Tippecanoe County Drainage Board to remove obstruction in mutual drain or mutual surface watercourse on property owned by Gregory and Caroline Grace at 2115 Lindberg Road, West Lafayette, IN.

Ike Tarvin gave presentation for removal of obstruction. Ike and Bonnie L. Tarvin purchased property at 2121 Lindberg Road over a year ago. This problem could be caused by a combination of situations. The property owned by Gregory and Caroline Grace at 2115 Lindberg Road have brought in dirt and back filled their back yard causing water to back up and stand in Ike and Bonnie L. Tarvin's front yard. It has killed the grass and covered Lindberg Road a couple of times. Ike stated he has spoken to the Grace's a couple times about the situation. We understand their problem but now they have created us a problem. We wrote them a letter, they responded with a letter and now we have filed a petition with the drainage board. We hope to get the problem settled through the drainage board. Today we have 6" to 8" of water standing in our front yard. It has killed most of our grass.

Commissioner Hudson commented she has gone out there lately and seen the situation. When Commissioner Hudson owned this property they did have water that came up, but it would drain and go back down. It never stood like it does now. This drainage problem was looked at in 1997 when she still lived there. The drainage is a natural waterway and we were never to cover that over. What I understand from the Building Commissioner, who issues permits, there was never a permit issued to haul in dirt and block that drain. I know that both sides now are experiencing problems with water.

Ike Tarvin stated he had spoke to Mike Spencer, former Tippecanoe County Surveyor, about a year ago and he came out and looked at situation. Mike told him that there definitely was a problem and should get with the county and every body involved and get the problem resolved. I have just put in a blacktop driveway. I am afraid the water will wash the packed rock away.

Commissioner Hudson asked the Tarvin's how they got a complaint form.

Steve Murray said the surveyor's office mailed them one.

Ike Tarvin mentioned the neighbors put in a new septic system in their back yard also. We need to get some help to solve the problem for all the property owners in this area.

Steve Murray stated there was a petition in 1997 from Gregory and Caroline Grace regarding the owner to the East obstructing, what appears to be, the same natural waterway. At that time Mike Spencer went out and profiled the waterway to the south east and there appears to be an old tile under the low ground. That

tile is breaking down and not draining properly. We discovered that several years ago when the Reifenger's across the road had some problems with water ponding and there was a lawsuit. Mike and I were both involved in trying to research where the water went and how it drained out of the low spot. The profile shows water does have to run slightly uphill which is obviously the reason they are experiencing ponding in the yard area. It doesn't appear that anything was formally done on that request other than Mike saying the tile need repaired or ground needed re graded so it had a positive outlet. I have not seen the latest filling in of dirt and I will need to go out and investigate in more detail. I also ask the board to go along with me and also investigate. There are obviously two possible resolutions. One resolution is to repair the tile and put in new inlet or inlets. Second resolution would be to re grade the surface of the ground so that it does drain in a positive fashion. My recommendation would be to do more investigating and try to get all three parties involved to work together with this office.

Commissioner Knochel asked if this tile was county owned.

Steve Murray stated it was a private tile and appeared to be an old agriculture tile that was put in to drain the low ground along Lindberg Road. This gets into a complicated area with drainage laws, as Mr. Luhman, Tippecanoe County Attorney, knows, and we will just have to check the most recent things that have been done, visit the site and then rely on our attorney for drainage guidance.

Commissioner Knochel suggested setting up a date and go to the site.

Steve Murray stated ultimately if we can't get all parties to work together then our recourse or direction is based on the statue, would be to order those that are blocking the natural waterway to remove the blockage or improve the flow.

Commissioner Hudson wanted on the record that the only times she has been out to site is when she has been called by the Tarvin's to go out and look at the water that is standing because of the blockage. The owner on the East Side has also called her lately because of the Graces's putting in a new finger system and blocking off the East property and the Grace property. Now by being a County Commissioner I have to go out when I've been called to look at the properties. I have never gone out there without being called.

Commissioner Hudson and Commissioner Knochel both agreed to make an appointment after the meeting to go to the site. Commission Hudson told Ike and Bonnie Tarvin, we would let them know when they would be out.

Steve Murray commented they maybe could have a resolution to this problem by the next drainage board meeting.

Commissioner Knochel asked if any of the neighbors were here.

Ike Tarvin stated no.

WATER PROBLEM - FLOODING

Eugene R. Kopf, Jr. residing at 4130 Old Romney Road, Lafayette, IN, gave presentation regarding flooding of his property with moderate or heavy rainfalls. On June 24, 2000 the ditch in front of his residence flooded causing water to get within 15 feet of his house. He believes the problem is coming from the subdivision to the south of their property. He showed a video of the water on June 24, 2000, and the flooding it caused. I believe the surveyor has received a letter from Miles Biery, a neighbor, on this flooding problem also. We need something done because it is tearing up the ditch and also the front yard. We have lived at this residence for 10-11 years. Have seen water and flooding a couple other times in the last 2 years, but not as bad as this time. Seems like it is getting worse since the subdivisions have been built. We turned off all the power and left the house. We went to the neighbors because we thought the house was going to flood. Water was flooding from the Buckingham Estates Subdivision through a 4x7' tile. The 42" tile on 400 South is also flooded. This tile was put in about 3 or 4 years ago. There is a lot of debris in this area. There is a lot of water backing up trying to get to Wea Creek.

Steve Murray commented he is going to tell us what happened in the past. I don't have an opinion of why it is happening or what we can do from here. I wasn't involved with drainage board at the time, but certainly was involved with the highway department. Most of the improvements were done as part of Buckingham Estates Subdivision. There are also a couple upstream subdivisions that drain this way as well. They did go through full drainage board approval.

Dave Eichelberger stated there was already flooding calculated 20 years ago on the analysis. We need to look at this situation. Are we really reducing discharges in this direct? Is the flooding already occurring? Any flooding that is happening right now really due to discharge created from upstream or from downstream restrictions. Is something clogged or failed in the downstream system. In the last shot of the video shows a lot of ponding trying to get through the 42" pipe. The ponding could be caused to natural low ground. Before taking for face value that there are all sorts of flooding problems, you have to evaluate where that flooding is coming from. If there is a problem, what is causing the problem?

Commissioner Hudson asked about connecting larger pipes to smaller pipes for drainage.

Steve Murray commented it isn't wrong to connect larger pipes to smaller pipes.

Dave Eichelberger commented in this case they were trying to get the 100-year under the drive with out it over topping, so had to put a large structure in. When you get to the system then it is there responsibility to up size an existing pipe that is an existing ditch which is actually reducing the discharge to that pipe.

Commissioner Hudson asked if they are really reducing discharge.

Dave Eichelberger commented it did look like it was being reduced in 1996 analysis.

Commissioner Hudson stated there are now individuals living in this area that are now experiencing flooding that they have never seen earlier. They had some flooding but not like they are having now since the subdivisions have been built.

Dave Eichelberger commented he would like to see the rain gauge data that has been here lately. What type rain fall and how intense was it. These analyses are made on the assumptions of some much rainfall in a certain amount of time. Did we get something that exceeded the design capabilities that they had to meet for the ordinance? Also are there obstructions along the ditch. There are a lot of different issues in this matter.

Steve Murray stated that the developer went through the proper design and got the proper approvals. Hydraulics is a difficult field. It is hard to say if what is happening was suppose to happen or the design is not performing the way it should perform. At this point all I know to do is have our engineering consultants take a re-look at this. It may be the original design is correct and we may still have this problem. I do not know the solution. Once again, in the developers defense, they did go through proper channels, they submitted the proper information, complied with the ordinance, and by design and calculation should be in compliance with the ordinance and were granted approval from drainage board. We do live in the real world and water doesn't fall on paper, it falls on the ground and some times the calculations and designs really don't work out the way they were suppose to.

Commissioner Knochel asked if Dave Eichelberger re-looked at this could you tell whether or not the water that was suppose to be diverted, actually is being diverted.

Dave Eichelberger said if he could get the as-built survey from the subdivisions they could take a look and see if things actually got built according to plans.

Steve Murray commented he suspects it was all built as submitted. It should be able to be confirmed through as-builts and site investigation. If everything is built properly, but just not performing properly, then at that point, I don't know where we go.

Dave Eichelberger stated we can look at the as-builts and see if got built correctly, re-look at the analysis and re-look at any assumptions that were made. Make sure that those assumptions still seem true. Maybe we can take a look at the site ourselves and see if we think those assumptions are still true. If they are not true then we could plug in what we think is more appropriate and re-look at the analysis for Hawkins Environmental. The general accepted standard practices that are followed, I think were followed in this case. We also need to look at the rain gauge data.

Steve Murray commented at the time this was being reviewed the Highway Department did have some concerns with using this as an outlet. Primarily because of these kind of problems. Regardless of whether that water use to run out of the banks and across those drives, there is always a perception that when a new development goes in upstream, that that development caused the problem. We were involved in reviewing the design and felt it was adequate at the time. Our concern was that this amount of water coming this way could potentially cause a problem in the future. This side ditch is adjacent to Old Romney Road and part of that facility.

Commissioner Knochel asked if we need a motion to have Dave Eichelberger re-look at this problem.

Steve Murray stated No. I think we have a responsibility and an obligation to take a look at this problem. I don't know if that will prove anything other than what was submitted was adequate and meets the ordinance. We still may have the same problem when they get finished with their review.

Commissioner Hudson asked Mr. Kopf if he understood everything that was said.

Mr. Kopf stated yes. It is scary living with all the water coming through the front yard. This water is not right. Something needs to be done to get the water past the house.

Commissioner Hudson stated we would be in touch with Mr. Kopf after reviewing this problem.

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

August 2, 2000

Regular Meeting

Those present were:

Tippecanoe County Commissioners Kathleen Hudson, John Knochel and Ruth Shedd, County Surveyor Stephen Murray, County Attorney Tom Busch, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Davis and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Wednesday, August 3, 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 July 5, 2000, Regular Drainage Board Meeting. Commissioner Shedd moved to approve the minutes of July 5, 2000, Drainage Board Meeting, seconded by Commissioner Knochel. Motion carried.

JEFFERSON COMMONS

Eric Gleissner with Schneider Corporation gave presentation for final approval of Jefferson Commons. This site involves the redevelopment of an existing mobile home park into an apartment complex. The nearly 20-acre site lies along the south side of U.S. 52, about 1500 feet east of County Road 250 West, just west of the Cuppy-McClure Ditch. When completed, the site will include 21 apartment building, a pool, clubhouse facility and parking areas. Stormwater from a majority of the site will be routed via storm sewers to a dry-bottom detention facility located along the eastern property line of the site. The project received Preliminary Approval with Conditions at the July 5, 2000 Drainage Board meeting. This site will be a benefit to both community and Purdue University. On the Christopher B. Burke review letter had one condition to get approval from INDOT for work within the right-a-way. Plans have been submitted to INDOT and are under review now.

Commissioner Hudson asked Steve Murray for any comments.

Steve commented he believes they have met all the requirements with the exception of showing approval from INDOT.

Commissioner Knochel moved for final approval with condition for Jefferson Commons, seconded by Commissioner Shedd. Motion carried.

CUMBERLAND PLACE

Pat Sheehan with Schneider Corporation gave presentation for preliminary approval of Cumberland Place. The site involves the development of a 54,542 square-foot convention center building and 234,305 square-feet of parking and sidewalks on a 7.33-acre tract. The site lies west of U.S. 52 along the north side of the Cumberland Avenue extension. The **Cuppy-McClure Regulated Drain** lies along the west boundary of the site. Runoff from the site is to be routed via storm sewers into a proposed dry detention basin and discharge into the Cuppy-McClure Regulated Drain. A wetland is located in the southeast corner of the site. The proposed project plans indicate that the wetland will be avoided. We still have a few issues that we are still working through. We will be able to work these out in the next couple weeks.

Commissioner Hudson asked for Steve Murray's comments.

Steve commented preliminary approval would be in order. This is in West Lafayette and they do have their own drainage ordinance. It does outlet into a county legal drain and our concern is that the existing tile is adequate as well as surface flow. We felt we should take a look at this project due to the possible impact.

Commissioner Knochel moved for preliminary approval for Cumberland Place, seconded by Commissioner Shedd. Motion carried.

WABASH NATIONAL PARKING IMPROVEMENTS PHASE 1

Steve Marsh with Tillett Engineering gave presentation for final approval of Wabash National Parking Improvements Phase 1. Also present was Bruce Bough with Wabash Corporation. The Wabash National property encompasses 340 acres and is located north of County Road 350 South, between Concord Road and U.S. 52. The stormwater management plan for this site was the subject of several previous studies in 1995. The existing detention facility's adequacy for future development of the Wabash National property was the subject of an additional study. The Drainage Board approved this additional study at the February 9, 2000 meeting, with the requirement that the applicant submit construction plans as the area is developed, and receives final approval for a proposed ditch network. Plans for the proposed ditch network were previously addressed in a Review Memorandum dated June 22, 2000. The applicant has subsequently submitted revised plans for approximately 46 acres of gravel parking along County Road 350 South to be known as Phase 1. We are requesting two (2) variances from the ordinance: use of the Modified Rational Method for determining detention storage volume and peak discharge for a site greater than five (5) acres in size; and ponding of water in the parking lot up to 30 inches, which is greater than the standard seven (7) inches allowed. This is a private parking lot and the only thing being stored here will be semi-trailers. There is no public or employee access to this parking lot.

Commissioner Hudson asked if the 30-inch water ponding would be in the parking area.

Steve Marsh stated in the southwest corner of parking lot is where everything runs too. Water could pond in this area. Trailers are at a 48-inch deck height. Wabash National does not feel this will effect their operation.

Bruce Bough with Wabash National stated this is similar to a lot they have on city property north of McCarty and east of U.S.52. A few years ago we had water 30 inches deep and did not bother the trailer operation.

Commissioner asked Steve Murray for any comments.

Steve stated the drainage board consultant has reviewed this and we feel comfortable with recommending approving the two (2) variances. I do not have a problem with the 30-inch depth height. We might want to make the 30-inch depth height subject to the fact that it continues to be the same usage. If the property is sold and different usage they would have to submit a new drainage plan. I don't see any harm as long as it's being used for trailer storage.

Commissioner Hudson asked about the applicant obtaining approval from the Tippecanoe County Highway Department for any work proposed in the County Road 350 South right-of-way.

Steve Murray stated they will have to grant the two (2) variances and the approval from Tippecanoe County Highway Department would be a condition. The discussions relating to the side ditch for 350 S started when I was still director of the Highway Department. They originally had a separate ditch just inside their burm and that seems a bit ridiculous to have a parallel ditch system, so Highway Department did agree to let them look at using and re cutting the existing 350 S side.

Commissioner Knochel moved to grant final approval, approval of the two (2) variances and one condition, seconded by Commissioner Shedd. Motion carried.

BUTLER MEADOWS SUBDIVISION

Larry O'Connell, attorney, gave presentation for Butler Meadows Subdivision. This site contains approximately 35 acres located south of C.R. 500 South, approximately one-quarter mile east of old U.S. 231. The proposed development is for 113 single-family residential lots. Larry O'Connell asked if there was any restriction if a denial is given about coming back in as far as on a time period.

Steve Murray stated it is not uncommon for a drainage submittal not to be approved and then for them to resubmit next month and be heard.

Larry O'Connell commented basically material has been submitted on Butler Meadows Subdivision. At this point and time based upon what has been submitted we are asking for approval by the drainage board as submitted.

Commissioner Hudson asked Steve Murray for any comments.

Steve Murray stated this was submitted several months ago. There were some problems with the initial submittal. It was reviewed and a couple memos sent. They have not since addressed those comments, so based upon the submittal to date, the drainage board consultant and county surveyor can not recommend the drainage plan be approved as submitted.

Larry O'Connell stated as a plea to clarification, it is my understanding that it is contrary to the drainage ordinance for any detention to be in the county right-a-way. Is that correct?

Steve Murray stated it certainly has been the policy of the county highway department over the last 20 years not to allow detention storage in the county road right-a-way. I believe the ordinance states, as was the case with Jefferson Commons, anything that would need to be done or constructed within county road right-a-way or state road right-a-way would have to have the approval of that department.

Tom Busch stated there probably is another ordinance, not the drainage ordinance that states you can not put something into the right-a-way. This would probably be your problem.

Larry O'Connell stated that it is his understanding that the residential lots extend into the proposed detention facility to the tune of 43 lots, what was submitted and that represents 38 percent of the total lots, which is also contrary to the drainage ordinance.

Dave Eichelberger commented the drainage ordinance specifically says no part of any residential lot can be used as detention. Historically the board has granted variance for that if for a lot of 2 or 3. Thirty-eight (38) percent of the entire subdivision is too much.

Larry O'Connell stated it is also his understanding the ordinance basically prohibits detention being within twenty-five (25) feet of the building pad as set out on the preliminary plat. Is that correct.

Dave Eichelberger commented that is correct. That is again specific to the ordinance saying that all buildings, commercial or residential, need to be at least twenty-five (25) feet from a facility. In this case we had some as close as eight (8) feet.

Larry O'Connell stated once again I would request you approve our drainage plan as submitted.

Commission Hudson asked for any comments or questions.

Commissioner Knochel stated you are requesting approval even through our consultant and the county surveyor is recommending no.

Larry O'Connell stated I am asking you as submitted Mr. Knochel.

Steve Murray stated as submitted to date, we would not recommend approval.

Commissioner Hudson stated hearing no motion for approval this drainage will be set aside to this date.

Larry O'Connell stated once again may I request you reconsider and take action either for or against what has been submitted.

Steve Murray commented we can deny approval.

Commissioner Knochel moved to deny approval of Butler Meadows Subdivision, seconded by Commissioner Shedd. Motion carried.

OTHER BUSINESS

BERLOWITZ ENGINEERING AGREEMENT

Steve Murray gave presentation for Berlowitz Engineering Agreement. We have a proposal from Christopher B. Burke Engineering, Ltd, Indianapolis, IN office to provide professional engineering services related to the design of the Berlowitz Drain watershed improvements located east of Lafayette in Tippecanoe County. The existing drain, which feeds into the South Fork of Wildcat Creek, is located in a rapidly developing area of the County, which requires that the sites have adequate drainage outlets. The proposed drain improvements are located from a point approximately 1,000 feet downstream of County Road 50 South to a point upstream of the intersection of C.R. 100 South and C.R. 500 East, approximately 1.1 miles in length. The proposed construction will occur within Sections 30 and 31, Township 23 North, Range 3 West, and Sections 25 and 36, Township 23 North, Range 4 West, in Perry and Fairfield Townships. Currently the design is being done some what in a piece meal fashion by each individual developer as they do a development. This water shed is large enough and important enough that I think it would be best for the public and the county to have a design in place. As developments happen we can have them design it according to our plans or we construct it and re-coop the money. The agreement is set up in three (3) phases. Phase 1 is \$73,840.00. I am prepared today to recommend that you approve the agreement and give them notice to proceed with Phase I. Phase 1 will involve the field reconnaissance and data collect, soils investigation, wetland and environmental investigation, field survey, hydrologic and hydraulic analyses, conceptual plan and project update meeting which the board will be invited. Phase 2 will involve environmental agency coordination, final design plan development, permit submittals, opinion of probable cost, bid documents and specifications, contract bid related services and legal drain reconstruction documentation and meeting/hearings. Phase 3 will involve construction staking, construction observation and construction administration if the county can find the funding Phase 2 is \$68,810.00 and phase 3 is \$91,190.00. I truly believe we will only get through phase 1 and 2. Phase 3 is too much depended on funding, but I did ask them to include a fee for that at this point. I could recommend the drainage board execute the agreement and give them notice to proceed on phase 1. They have 120 calendar days for phase 1.

Commissioner Knochel asked if they needed to go the council.

Steve Murray commented no. There is SIA TIF money left over. The bond also included any drainage projects that served the road projects. There should be approximately \$400,000.00 left in TIF fund.

Commissioner Knochel moved to approve proposal with Christopher B. Burke, Engineering for Berlowitz Engineering Agreement Phase 1 and give approval to proceed with Phase 1, seconded by Commissioner Shedd. Motion carried.

TARVIN PETITION TO REMOVE OBSTRUCTION

Steve Murray did talk to Bonnie Tarvin this morning and stated board would be discussing the petition situation today. Looking at the statute the next step would be to set a hearing and notify all the affected parties.

Commissioner Hudson stated she had been asked to remove herself from this discussion since her and her husband, Mike, owned this property years ago. Commissioner Hudson was allowed to sit in the back of the room. Commissioner Hudson turned the meeting over to Vice President Commissioner Knochel.

Tom Busch, County Attorney, commented if it comes to a point where she is an interested party than she can participate.

Commissioner Knochel stated let the records show that Commissioner Hudson has removed herself from the meeting.

Fred Meessen, Attorney, represented Gregory and Carolina Grace of 2115 Lindberg Road, W. Lafayette, Indiana. Gregory and Carolina Grace are present. The Grace's filed a petition with the drainage board and so have the Tarvin's. The Tarvin's live on the west side of the Grace's. Philip Kellar lives on the east side of the Grace's. This is a common problem among three properties. Basically the water comes down the street, hits a curb cut, cuts around, swings into the Grace's backyard and is stopped by some form of obstruction or grade there. It makes a big U. The Grace's back yard is being used as a retention pond in violation of the county drainage ordinance. The Grace's filed a petition with the drainage board, but didn't find it in the records. Neighbors have written letters to each other. In one case pointing fingers at each other. The Grace's bought the house on May 13, 1996 and they have heard a lot about Indiana law says this and Indiana law says that, but Indiana law does not require people to live in water. The back yard floods and becomes kind of a retention pond. Their basement has flooded. This has flooded 11 times. We look at the volume of letters and petitions and we find nothing has been done. The history of this property since they bought it is a good argument for not moving to Tippecanoe County because no corrective action has been taken. It has been three (3) years since they first filed their petition. We are asking the drainage board today, and I have talked to Mr. Murray about this, to order the corrective action. The corrective action seems to be the most likely to put tile across all the properties. In conversations with the Grace's Mr. Murray has said this is the best because it is cheaper and would not be man dating the parties to spend more money then the solution required. I just ask the board to order the corrective action and we will worry about the cost and portioning that cost later. I do think three (3) years is long enough to wait for the correction of pooling problem in back yard and flooding. They have done everything they can. They have talked to the board, filed petitions, and I have the papers of who has talked with who and when. I do urge you at the next meeting, when you consider this, to be prepared to order that corrective action. Thank you.

Steve Murray asked Tom Busch to correct him if he is wrong, but I think the main thing I need to tell the board today is if, based on my investigation, there is an obstruction or is not an obstruction. If I say there is an obstruction then we can proceed with setting a hearing to discuss in full detail. The board can then come up with a recommendation or judgment if they so choose.

Steve Murray presented a GIS map for everyone to view. As you can see by the GIS map, when the aeriels were flown several years ago, there is a depression area here. Steve, Commissioner Knochel and Commissioner Shedd did make a trip out to this area since the last drainage board meeting. There was water standing in areas where the GIS aeriels indicate water will stand, due to the depression areas.

Steve Murray commented when the first petition was filed a couple years ago the previous surveyor, Mike Spencer, did go out and do a profile of the low area. As you can see on the profile water has to flow slightly uphill to drain. There does appear to be an obstruction in this general area. If it was trimmed out it would allow the water to flow out of these low spots, so could have a positive fall on through and out into the water way across the Purdue property. Since that time there has been some filling in some low areas, which is going to compound the problem to some degree. It appears from natural siltation and lack of maintenance that this is an obstruction in this area. To make this system work as it was originally designed, that swale would need to be re-cut through area refilled and high spots and on through the Purdue property. In the side ditch there is an old entrance. This entrance does not show on the reconstruction plans for Lindberg in the late 60's or early 70's. This old entrance does obstruct, to some degree, water that comes down the side ditch.

Fred Meessen asked where the curb cut is located.

Gregory Grace commented he is concerned about the water from intersection of McCormick and Lindberg drains into their yard as a retention pond. We have been asking the county for years to have this problem solved. We also asked the Highway Department to act on this and they never would. Gregory Grace brought pictures of the flooding problem. The water starts at curb cut and flows across the Grace's property.

Carolina Grace stated that the Tarvin's have built up their driveway and added onto their house. This is also retaining the water.

Fred Meessen stated the Tarvin's have made enough modifications to have changed things.

Steve Murray stated the old entrance is a Highway issue. Historically the Highway Department has not gone back and taken out drives. One of the complications is the water will come down and go under a cross pipe under Lindberg. This water will drain onto the Reifenberger's property, which there has already been a law suite on a few years ago. This water will also pond on the Reifenberger's property. To some degree it would be passing the problem down the road. I think, from our investigation, there are also tiles that run roughly along the swale.

Fred Meessen asked if it is not possible for the Highway Department and Drainage Board to work together on the curb cut obstruction? Do we have to take this issue up with each department separately?

Steve Murray stated that the Drainage Board in its self does not have the authority to deal with the drive. The Drainage Board is the County Commissioners and the County Commissioners over see the Highway Department.

Fred Meessen commented they have enough over lapping authority to order some sort of corrective action.

Commissioner Knochel asked Gregory Grace if the curb cut was taken care of would the water flow on down.

Gregory Grace stated no. Also would need the side ditch re-dug or re-graded to make the water flow so it would go to the ditch near Sherwood Forrest.

Steve Murray stated he has not looked at this specifically since we looked at Reifenberger's. There is a set of construction plans for Lindberg, but it is my opinion that can not be done. It will take a fairly deep ditch. There is too much crest. We have the information and can probably take a look at redoing the side ditch, but think you will end up with a deep and wide side ditch.

Commissioner Knochel stated it appeared if swale was re-cut on Julia Kellar's property that the water could drain.

Gregory Grace stated that was what they originally asked for. Julia Kellar, owner of property, can not mow ditches very well. She is physically not able and would fall off her tractor. We are concerned that a ditch would not serve the purpose of all three (3) owners.

Steve Murray commented that if the swale was cut with proper slopes it could be mowed. The difference in elevation is just slightly over a foot. We are not talking about cutting a six (6) foot ditch. We are talking about an eighteen (18) inch to maximum of two (2) foot cut and laying slopes back enough for a riding mower.

Steve Murray stated that Purdue University would also need to be notified of the drainage process. I am afraid their reaction will be not wanting this water on their property. To get the proper cut it will have to go from the Kellar's property on through to the Purdue property for 50 to 100 feet. By the next meeting I should know how far the cut should be. What I have seen to date, the easiest, cheapest and most sensible solution would be to re-trim areas to get positive fall so the water drains.

Fred Meessen asked what about the curb cut? When are we going to be taking that up and with whom? The Highway Department or is it sufficient to bring before the Drainage Board.

Steve Murray stated to leave that with the Commissioners and Drainage Board to decide.

Commissioner Knochel stated he thought they could get the Highway Department to take a look at the situation. Get some kind of recommendation.

Fred Meessen asked if they would be sitting as Commissioners, Drainage Board or Highway Department.

Commissioner Knochel stated as a Commissioner.

Tom Busch commented that this petition is a petition to remove an obstruction from a drain. If the curb cut is not an obstruction to the drain then it is a different issue.

Steve Murray commented he thinks he has found an obstruction and the statue requires a hearing to be set.

Commissioner Shedd moved to set hearing on September 6, 2000 at 1:30 p.m. in the Tippecanoe Room on petitions for Tarvin & Graces properties, seconded by Commissioner Knochel. Motion carried.

Commissioner Knochel turned the meeting back to Commissioner Hudson.

WATER PROBLEM - FLOODING

Steve Murray gave presentation to follow up on water problem flooding at July 5, 2000, meeting regarding Eugene R. Kopf , Jr., residing at 4130 Old Romney Road, Lafayette, IN. Christopher B. Burke Engineering has gone back and reviewed the submittal from several years ago. Steve gave all Commissioners a copy of the report.

Steve Murray commented Mr. Biery called this morning to see if we were going to discuss this problem at the meeting today. I told him we were going to have a final comment or say from the Drainage Board consultants. I also told him that it appeared from our preliminary discussions that the original design was correct and that some of the assumptions and statements made in that original study did include the fact that at certain water levels the water was going to run out of the banks and run overland including Mr. Kopf's property. It does not appear that anything done upstream has complicated this problem. It basically was a preexisting problem. I think Mr. Biery understands that there was a natural tendency for water to flow through this area and seek this course. One of his major concerns is that his drive may wash out at some point. I can't speak for him, but I think if somebody replaced or redone his drive pipe that may satisfy Mr. Biery.

Commissioner Hudson stated then we do nothing or replace with larger drainpipe.

Steve Murray commented that would certainly be a step in the right direction. The calculations show that increasing the size of the pipe would not alleviate the problem. A different configuration of the pipe could help lessen the problem on occasions. In the long run the whole situation has more to do with the capacity of that channel. To stop the water from coming onto their property, they would have to raise the top of bank on their side.

Commissioner Hudson asked if this would flood out the addition.

Steve Murray commented no. It would merely keep that water in the channel. I am not recommending this, because then it forces more water into the channel than is going there currently. If the channel was cleaned and improved slightly it would help handle the water flow for some storm events.

Commissioner Knochel asked if that was Highway's responsibility to clean channel.

Steve Murray stated definitely the side ditch is Highway's responsibility.

Dave Eichelberger stated at Christopher B. Engineering has reviewed all the submittals and cannot find anything that has increased flooding. The diversion of 37 acres that was moved out of water shed should have reduced the flow by 15 percent. We could have received more rainfall at this time than normal. Flooding occurred there before they built a house there. It also occurred before they built the subdivision.

It is going to continue to flood unless someone puts a berm up or something like that. I think larger or additional pipes may help for certain flood events.

Steve commented the only other solution would have been for the board at that time not to have granted variance for direct release. Variances have been granted in situations like this in the past. We can not go back at this point and resend the variance.

Commissioner Shedd commented she could not see why this is our problem when not done properly in the beginning. Why do we have to correct the water problem now?

Commissioner Hudson stated she thinks because the drainage board before us approved it. How long has the house been there?

Dave Eichelberger commented at the last meeting Mr. Kopf stated he had lived there 10-11 years. We don't know if he built the house originally. I drove by after the meeting to look at the area and the house didn't look that old. I wouldn't doubt if it weren't built 10-11 years ago. I certainly can't attest to that.

Commissioner Hudson asked if any other comments or questions regarding this meeting.

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 6, 2000

Regular Meeting

Those present were:

Tippecanoe County Commissioners Kathleen Hudson, John Knochel and Ruth Shedd, County Surveyor Stephen Murray, County Attorney Tom Busch, Drainage Board Engineering Consultant Kerry Daily and Drainage Board Secretary Doris Myers.

The Tippecanoe County Drainage Board met Wednesday, September 6, 2000, at 1:30 PM 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 August 2, 2000, Regular Drainage Board Meeting. Commissioner Knochel moved to approve the minutes of August 2, 2000, Drainage Board Meeting, seconded by Commissioner Shedd. Motion carried.

CUMBERLAND PLACE CONVENTION CENTER

Pat Sheehan with Schneider Corporation gave presentation for final approval of Cumberland Place Convention Center. Pat Sheehan was at Drainage Board meeting dated August 2, 2000, and received preliminary approval of Cumberland Place. Cumberland Place Convention Center involves the development of a 54,542 square-foot convention center building and 234,305 square-feet of parking and sidewalks on a 7.33-acre tract. The site lies west of U.S. 52 along the north side of the Cumberland Avenue extension. The Cuppy-McClure Regulated Drain lies along the west boundary of the site. Runoff from the site is to be routed via storm sewers into a proposed dry detention basin and discharge into the Cuppy-McClure Regulated Drain. A wetland is located in the southeast corner of the site. The proposed project plans indicate that the wetland will be avoided. Pat Sheehan with Schneider Corporation is asking for final approval with conditions.

Commissioner Hudson asked Steve Murray for any comments.

Steve Murray commented they are prepared to recommend final approval today subject to a couple conditions, which are outlined in review memo dated August 23, 2000. We had some concern about overland flow path for the Cuppy-McClure drain. The Cuppy-McClure is a sub-surface tile. There is like usual an associated overland flow and we have some concern pending some obstructions in that overland flow, which I think Pat has addressed. Steve Murray asked Pat, at this point, if they do complete the grading plan they have given us, do you feel that it adequately protects Cumberland Avenue?

Pat Sheehan states he believed so. It will provide for an overflow, which is almost (2) two feet lower than the Cumberland low point.

Steve Murray stated that was their primary concern. The water elevation in the Celery Bog is going to be regulated by an inlet, yet to be installed, and our concern was if that inlet clogged up and water ponded high enough it would actually go over Cumberland Avenue. This is why we would need the emergency overland relief flow to the north and they do have permission from Great Lakes to do that necessary grading.

The second issue is the Petition for Encroachment on the Cuppy-McClure Regulated Drain Easement. Their parking lot and some of their detention facility extend out into the regulated drain easements. We are prepared to recommend approval of this subject to (5) five conditions.

Steve Murray asked the County Attorney, Tom Busch, if the drainage board makes these (5) five conditions with the approval of the petition for encroachment this would be as good as what our consultants had asked for in writing.

Tom Busch stated yes.

Steve Murray stated basically the conditions would be as follows:

1. Any disturbed areas within the legal drain easement are to be re-graded and re-seeded with an approved mixture (except parking lot)
2. The owner must maintain their drainage facilities and improvements within the easement if applicable.
3. The owner must remove or spray bush growth (willows, bushes, etc.) and mow legal drain easement as needed.
4. Tippecanoe County will not be responsible for damage to the property owner's improvements within regulated drain easement.
5. All work to be completed as detailed on the approved construction plans.

Commissioner Hudson asked Tom Busch if motions need to be separate. One motion for encroachment petition and one for approval.

Tom Busch stated yes.

Commissioner Knochel moved to grant approval of Petition for Encroachment on Utility and Drainage easement for Cumberland Place, LLC, subject to the (5) five conditions, seconded by Commissioner Shedd. Motion carried.

Commissioner Knochel moved to grant final approval to Cumberland Place Convention Place with conditions, seconded by Commissioner Shedd. Motion carried.

APPLERIDGE AT THE ORCHARD

Pat Sheehan with Schneider Corporation gave presentation for preliminary approval of Appleridge At The Orchard. The proposed Orchard subdivision consists of approximately 96-acres and is located on the north side of State Road (SR) 26, west of the intersection of County Road 250 West with SR 26. The development will include several detention facilities incorporated into the project to control the developed run off. Jordan creek and two unnamed tributaries pass through the site from the north and east and continue to the south under SR 26. These streams carry runoff from several large off-site watersheds through the project site. Two (2) existing lakes also exist at the project site. This is a proposed residential development. To the north of this development is Lindberg Road. It is currently an apple orchard. At this time the developer is proposing to develop 46 acres into two separate developments. Approximately 24 acres to the west is going to be a planned development. There will be 26 duplex's developed on that 24 acres. On the East Side it is approximately 20 acres and is zoned R1 and will be single family residential. Will have approximately 30 to 34 lots. We are proposing to capture a portion of water through storm sewers and conveying it to different locations. The locations will be some proposed ponds and an existing pond. These locations will be holding the storm water back and discharging at a rate so the flow to the Jordan Creek will not be increased. The remainders of the flows that are not captured by the storm sewers run over land into swales that go through the same drainage system. We have submitted some material to Christopher B. Burke Engineering office for preliminary drainage and have received back some of their comments. We are currently taking these comments under consideration as we go through the final design. What we are asking for at this time is preliminary approval of our plans based on what we have here and the approach we are taking on the storm water.

Commissioner Hudson stated she would be interested in hearing any comments because of long list of comments in the review memo from Christopher B. Burke Engineering.

Steve Murray commented that Kerry Daily, consultant from Christopher B. Burke Engineering, and himself had discussed this earlier before the meeting and we are not prepared to recommend preliminary approval of Appleridge At The Orchard at this stage based on the number of questions that still exists.

Pat Sheehan commented that many of the questions are going to be addressed as the file goes through. We were trying to make sure the approaches we were taking would be approved, the drainage basins and such.

Commissioner Hudson asked Pat Sheehan if he thought he was a little premature asking for a preliminary approval.

Pat Sheehan said no. We want to make sure that when we go through with this type of design there will not be problems with the type of analysis we are doing, the basins we are putting it in. We realize there are some corrections with the sizes of the basins and some of the types of flows going through. That is all part of the process. We want to make sure that what we have submitted at that point, we can proceed with.

Commissioner Hudson stated after reviewing this, with all the questions and concerns, and conferred with Steve Murray, I don't know how we could give preliminary approval.

Steve Murray commented that this process is always on going through the surveyor's office and through our consultant. I don't see the advantage to a preliminary if you can work on this in the next month and admit it; you could very well have final at that time. A preliminary doesn't do anything to advance the project to any significance. Once again I am not prepared to recommend preliminary approval at this point.

Pat Sheehan stated he would like to come back to the next drainage board meeting and asked for final approval after submitting all the information. If it is not a requirement that we get preliminary approval, then we want to use this as an information piece to say what we are doing and what we are planning on doing.

Steve Murray stated it is not a requirement to get preliminary approval of a project. If everything is addressed and meets the terms of the ordinance there is not reason you couldn't have final approval at the next meeting.

Commissioner Hudson noted that this was an informational meeting introducing us to this draining project and that we will hear it again next month.

PETITION TO VACATE JAMES N KIRKPATRICK DITCH BRANCH #8

Roger Fine with John E Fisher & Associates gave presentation for Petition to Vacate James N Kirkpatrick Ditch Branch #8. Present today in audience was his engineer associate, Allen Jacobsen. Also present is Gary Carpenter with Cedar Run, the developer of the property. Also present is Jerry Withered, Cedar Run's local attorney.

Roger Fine gave description of the James N Kirkpatrick Ditch Branch #8. The land description of the land of the known owners thought to be affected by the proposed amendment is the following-described land in Tippecanoe County, Indiana, to-wit:

A part of the Northeast Quarter of Section 16, and a part of the Northwest Quarter of Section 15, both in Township 22 North, Range 4 West, Second Principal Meridian, Wea Township, Tippecanoe County, Indiana, being more particularly described as follows:
Beginning at the Northeast Corner of Lot 107 of the Landing at Valley Lakes – Phase I as recorded as Document Number 00-12104 in Plat Cabinet F, Slide 141 in the Tippecanoe County Recorder's Office; thence South 89o50'05" East along the North Line of said Northeast Quarter 1392.77 feet to the Northwest Corner of the Northwest Quarter of said Section 15; thence South 89o45'09" East along the North Line of said Northwest Quarter 5.00 feet; thence South 00o21'30" East parallel with the West Line of Said Northwest Quarter 580.01 feet; thence North 89o51'53" West crossing into the Northeast Quarter of said Section 16 a distance of 35.47 feet; thence South 00o08'07" East 158.81 feet; thence North 87o29'03" West 127.96 feet to a 5/8" reinforcing bar found at the Northwest Corner of property conveyed to B. Yundt and J.E. Kuszmaul as recorded as Document Number 94-16604 in said Recorder's Office; thence South 1o18'27" West along the west line of said Yundt Property 285.57 feet to a 6-inch diameter wood post; thence North 87o31'11" West 1138.64 feet to an iron pipe found marking an angle point on the northern line of property conveyed to Victory Baptist Church as recorded as Deed Record 1984, Page 2080; thence North 89o47'19" West 91.94 feet to the Southeast Corner of Lot 26 in said Phase I; thence along the eastern line of said Phase I the following 7 courses:

1. North 99o12;02" East 199.98 feet;

2. North 89o47'58" West 4.60 feet;
3. North 00o12'02" East 135.00 feet;
4. South 89o47'58" East 30.00 feet
5. North 00o09'55" East 488.06 feet;
6. North 89o50'05" West 31.10 feet;
7. North 00o09'55" East 150.00 feet;

To the Point of Beginning, containing 30.526 acres, more or less.

The above bearings are based on a previous job performed by John E. Fisher & Associates, P.C. dated December 27, 1994, as job number 94.46.IS.

Tom Busch, Tippecanoe County Attorney, stated our view is that there are several other land owners who are assessed for the Branch #8 and they need to be notified and have an opportunity to be heard before it is vacated. This petition could be continued to the next drainage board meeting or a special drainage board meeting.

Steve Murray stated he did not anticipate any problems with vacating this portion if necessary. My only concern, and I have discussed this with Roger, is do we know for sure that's the extent of the private tile to the south and southeast. Worst case would be if that was abandoned and taken out we could cut somebody else's drainage off. The statute requires notification. Generally there aren't any drawings of private tiles and you have to rely on people who have owned or farmed the property to let you know, if in fact, they stop where you think they stop.

Roger Fine asked in order to address this matter could they take some time to show more details. Roger Fine turned the project over to Allen Jacobsen since he designed it.

Allen Jacobsen had large diagram of Phase II area of the site showing the drainage improvements. About 4 foot south of north property line is an existing riser pipe inlet. North of that inlet is Branch #8 of the James N Kirkpatrick Drain. South of that inlet is the private drain in question. Field evidence indicates that it terminates about 35 feet north of the south line of the subject property. There are some remnants of broken tile at that location. It is very shallow at this point, less than 2 feet under the ground surface. We did not find any evidence of tiles continuing from the south that could eventually connect to that.

Commissioner Knochel asked if they dug down to determine this.

Allen Jacobsen stated no. This is based on surface evidence that is in place there now. One of the branches of the proposed storm sewer system for the proposed development is obviously collecting run off in various inlets through out the development itself. This proposed storm sewer improvement pretty much follows the course of the existing field tile except for some of the lot lay outs in the area. There will be 2 more inlets about 4 feet deep installed to allow for any tiles that may approach this area. There is also evidence of seepage water in this area. Ground water coming to the surface, running along the surface and eventually through a swale running into this tile. We are not sure of the source of the seepage water problem. There is an existing pond on the Young property. This pond is fed by ground water. To address the seepage water concern we have provided perforated tiles to insure that the lots at southern end of cultisack will remain dry. The bottom line is to tie any tiles that are discovered into the proposed system.

Tom Busch stated our opinion is that any affected landowners would need to have notice of the hearing.

Steve Murray agreed with Tom Busch that landowners need to be notified. Anyone being assessed for this watershed area should be notified.

Jerry Withered, local attorney for Cedar Run LLC, wanted to address Tom Busch's comment on notifying property owners. Roger Fine filed this petition to vacate frankly because he wasn't too sure of what to file. He wanted to get the petition in front of the drainage board so they could look at this. If you really think about this we are not really vacating anything. All we are doing is an upgrade, an improvement. The

drainage rights of property owners to the south, up on the hill, are not being affected in any way, the ditch is not being vacated, all we are doing is upgrading with the drainage plan for the whole area. We probably don't need to vacate anything to begin with and certainly I don't see why we need to notify property owners if their rights are not being affected. It would almost be like the county going out and doing an upgrade themselves. We are here for a vacation, but if you tell us we do not need to vacate we will dismiss it and draw it and go on our merry way.

Tom Bush stated that what has been filed is a petition to vacate and the statute says that everybody who is effected requires notice before acting upon. As I understand the plan, the system of drainage for these landowners will be changed by the project, hopefully for the better, but the landowners need the opportunity to hear about it and speak to that.

Commissioner Shedd asked Steve Murray if his opinion is to vacate or not.

Steve commented he could recommend the vacation go through, but the question is how do we handle it legally. Again I need to ask Tom Busch for the legal directions to follow.

Tom Bush recommend getting legal notices to landowners and set another hearing in two (2) weeks.

Roger Fine stated as one of the conditions of approval of preliminary plat last June, it was discussed that we would agree to vacate any portion of the Kirkpatrick drain across the property as it came about, prior to approval and recording of the final plan. We can agree to do that and stand behind that 100 percent. We expect the final plat will be filed in October.

Steve Murray commented ultimately what they are asking for we are going to grant. It is just how do we get there.

Roger Fine stated his client is going to spend a lot of money on a construction and if he can not record a final plat because he hasn't vacated a drain, you can bet he will be out for me to get it vacated. I will do all I can to get it done in a timely manner.

Commissioner Hudson set date for hearing to continue on Thursday, September 21, 2000 at 10:30 a.m. at Tippecanoe County Office Building.

OBSTRUCTION PETITION HEARING – TARVIN/GRACE

Commissioner Hudson turned the meeting over to Vice President Commissioner Knochel.

Tom Busch, Tippecanoe County Attorney, gave background on procedure. There have been two petitions to remove obstructions on drains. The petitions that were determined the contents to be appropriate had continuing description of land, explanation of need to remove the obstruction and description of the obstruction. This caused the survey to make an investigation to determine whether an obstruction exists. The survey has communicated to the drainage board his opinion that an obstruction exists, causing the drainage board to set this hearing. The issues to be decided by the drainage board at this hearing are does an obstruction exist, will removal of the obstruction promote better drainage for the petitioner, and whether removal will not cause unreasonable harm to respondent. If answer to any of those three questions is no then there is a finding for the respondent. If answer to all three of those questions are yes then there is a finding for the petitioner. The Commissioners will then proceed to another question, which is whether the obstruction was intentional. If the obstruction was intentional then the person causing the obstruction will be ordered to remove it at that person's expense or the surveyor will be ordered to remove it at that person's expense. If the obstruction is not intentional and is an obstruction to a mutual drain, which I understand is the situation here, then the petitioner or the respondent or the surveyor or a combination of them will be ordered to remove the obstruction and the cost will be apportioned. It will be apportioned according to the length of drain benefited. Those are the issues before the Commissioners today. The first three issues as to whether the drain should be removed and the second issue is to whether it is intentional.

Properties involved in Lindberg Road waterway obstruction are as follows:

Ike & Bonnie L Tarvin, 2121 Lindberg Rd, W. Lafayette, IN 47906

Gregory M & Caroline A Grace, 2115 Lindberg Rd, W. Lafayette, IN 47906

Philip E & Julia M Kellar, 2111 Lindberg Rd., W. Lafayette, IN 47906

Purdue Research Foundation, Hovde Hall, Purdue University, W. Lafayette, IN 47907

Since Tarvin's petition is addressed to Grace and Grace's petition is addressed to Kellar the logical order of procedure is as follows:

Tarvin speaks first to Tarvin's petition.

Grace to speak both to answer Tarvin's petition and speak to Grace's petition.

Kellar to answer Grace's petition.

Tarvin to respond to what Grace said.

Grace to respond to what Kellar said

Then the Commissioners.

The proceeding will be informal. No need for sworn testimony. This proceeding is being recorded. The Commissioners may ask questions at any time. Other parties may ask questions of the people who have testified as well.

Tom Busch, Tippecanoe County Attorney, asked Steve Murray, Tippecanoe County Surveyor, to report on his investigation and give Commissioners background as he sees it.

Steve stated his explanation will be an overview. It will cover both petitions because they do co-mingle. The original petition was from the Grace's asking about an obstruction on Kellar's property behind a metal shed to the South. Mike Spencer, the previous Tippecanoe County Surveyor, did go investigate the site and profiled the swale that runs from Tarvin's across Grace's and to Kellar's and on into Purdue's waterway to the South. Steve displayed this profile view. This area rises approximately 1 to 1 ½ feet and then drops fairly quickly through the Purdue property and through their waterway. The previous surveyor did not profile the waterway to see if that waterway was re-graded how far we would need to get onto the Purdue property in order to get a positive fall. Steve Murray did get that information and it looks like 1 ½ to 2 foot of grading would be needed through the high spot. This would put the waterway back into a fashion where it should function like when originally installed. The 1939 and 1963 aerials, which are in the surveyor's office, show an existing waterway through these three properties. As far as the surface condition I have little doubt the major problem originally was the obstruction that exists across the Kellar property. It appears to have been pretty much natural accumulation or just poor maintenance. I don't think any of the three properties have had much maintenance over the years. No re-grading or re-shaping as necessary. Since the first petition came that the Grace's filed, they have done some filling in their back yard. This varies from approximately 1 ½ to 2 foot and tapers off. This has been placed recently.

Fred Meessen, attorney for the Grace's, asked Steve if this had any affect on the drainage problem.

Steve Murray stated yes. It compounds the problem. If that swale were to be re cut that portion of re-fill in the swale area would need to be removed. The portion of re-fill outside of the swale, that may need to be re-graded, doesn't seem to be causing any additional problems to this drainage swale and how it would function. Steve asked the Commissioners if they had any questions.

Commissioners had no questions at this time.

Tom Busch asked other parties if they had questions for Steve Murray.

Fred Meessen, attorney for Grace's: As I understand this the surveyor has found an obstruction on the Kellar property. This can be corrected? Who pays for this?

Steve Murray: In my opinion yes it can be corrected. Payment will be decided as we go through the process.

Del Bartlett representing the Tarvin's: Steve did your investigation reveal how far back that drainage tile goes, if it crosses onto the Grace property from the Kellar property.

Steve Murray: I made no mention of the drainage tile to date, and on purpose. The petitions we received have spoke to the surface water. I think we have two distinct situations here. One is the surface swale that has obviously been there for years and the other is the subsurface tile that appears to have been put in at approximately the same time.

Del Bartlett: Is it a natural surface watercourse that we are dealing with with respect to the Tarvin and Grace Properties?

Steve Murray: This also includes the Kellar property. In my observation and judgment that does not appear to be a natural surface water. It appears to be man made.

Tom Busch asked if the Kellar's had any questions.

Phil Kellar: Could you demonstrate on the map which way the water is flowing or the way it should flow.

Steve Murray: When originally I have no idea. Would assume this general area was a low spot and a swale was man made and cut and brought so water would flow and come across onto what is now Purdue property. This is all by observation and a testimony from people in the area. It also appears that one property owner owned all this property at one time.

Julia Kellar: We have lived at our residence for 6 years. Water should run down hill. Our land is higher than the Grace's. That ditch will have to be made awfully deep in order for the water to go the other direction.

Steve Murray: The obstruction now is roughly 1 foot to 18 inches. I laid out 2 possible grades and they are only suggestions. At the highest point we would have one at 1 ½ foot of cut for the flatter grade and closer to a 2 foot cut. For a swale in today's terms and standards is not considered a deep swale. Steve showed Kellar's on the map where the cut would be.

Julia Kellar: But the other land is still higher. The other land going toward the Grace's.

Steve Murray: Our profile does not show that. At a point west of Tarvin's drive and culvert it runs up hill in the general direction of Lindberg Road. Water will run up hill if it has enough volume behind it. This is based on investigation, that it appears accumulation of about a foot to eighteen inches, that the swale has either filled itself in or been filled. If this is re-graded then the water will flow on to the south and into defined waterway that you can see across the Purdue property.

Julia Kellar: Will it be mowable.

Steve Murray: Yes, if cut properly. If cut with 3 to 1 or 4 to 1 slopes, yes it will be mowable.

Fred Meessen: You are finding the Kellar obstruction unintentional

Tom Busch: That is for the Commissioner to determine.

Steve Murray: My opinion, to date, I have not seen anything that would make me think it was intentional.

Greg Grace: Asked Steve Murray about the line cuts on the map. Was that the intended grade that the ditch will have to have to properly remove water that is ponding on his property?

Steve Murray: Yes that is a possible grade. There are a multitude of grades that could be constructed.

Phil Kellar: Which way will water flow if graded? Into the Purdue property.

Steve Murray: Correct. If it is re-graded and functions, as I think it was originally intended, then it will flow onto the Purdue property. In fact there will have to be some re-grading done on the Purdue property swale approximately 100 to 150 feet.

Ike Tarvin: Asked why he is flooded out all of sudden overnight.

Steve Murray: I assume because the surface water can't get away. The times I've been called out to look at it, which are the last couple three years roughly, there has been water standing there and that was before the fill was placed here.

Tom Busch: At this point we are into the presentation of the parties and we had best to make the case and the surveyor will be here to answer more questions at a later point.

The Tarvin case is heard first.

Ike Tarvin, 2121 Lindberg Road, W. Lafayette, IN, property owner. Joseph (Del) Bartlett representing Ike and Bonnie Tarvin.

Ike and Bonnie Tarvin purchased property in November of 1998. Moved in January-February 1999. Diagrams were presented with locations of properties. Ike Tarvin verified these were true.

Del Bartlett: When you bought that property, since that time, have you made any grade changes on the property at all?

Ike Tarvin: None what so ever.

Del Bartlett: Driveway was there when you bought the house? Is that correct?

Ike Tarvin: Yes, the driveway was shaped like that.

Del Bartlett: Since you have moved in January of 1999, have you had problems with water accumulating on your property?

Ike Tarvin: Not like we have been having lately. Some water would stay about a day and then was gone.

Del Bartlett: Did there come a time when you observed Mr. Grace bringing material into his property?

Ike Tarvin: Yes, they brought in several loads of dirt to alleviate his problem with a flooding basement he claims. We didn't say anything. Thought we would just see what happens. About 1 ½ to 2 foot of dirt was hauled in. We had rains this spring and I have flooded with 1 ½ to 2 feet of water for like a week.

Del Bartlett: None of this dirt was placed on your property?

Ike Tarvin: No, all was placed on Mr. & Mrs. Grace's. After all the rain I have 4 inches of water in my driveway for 4 to 5 days. I asked Milestone if we didn't get water off my driveway would it erode under my driveway. This is when I called County Commissioners. This problem needs to be corrected.

Del Bartlett: Did you notify Mr. Grace of the water problems he was causing you?

Ike Tarvin: I understand this problem here. We were going to wait and see if it helped them out, but it is now causing us problems. We wrote them a letter stating if we could get this solved.

Del Bartlett: Presented exhibited T15, letter sent to Grace's, to Mr. Tarvin marked for identification.

Ike Tarvin: Yes this is the letter.

Tom Busch: T15 show as admitted without objection.

Del Bartlett: Presented exhibits T1 thru T6 for Mr. Tarvin to relate to the diagram as far as what they detect and which direction we are looking. Some of the exhibits were duplicates.

Ike Tarvin: Identified and explained all the exhibits. These pictures were taken approximately two (2) to three (3) weeks ago. This is what the site looks like now.

Tom Busch: T1 thru T6 show as admitted without objection.

Del Bartlett: Presented exhibits T12, T9, T8 and T7.

Ike Tarvin: Identified and explained all the exhibits.

Tom Busch: T12, T9, T8 and T7 show as admitted without objection.

Del Bartlett: Are you asking the board as part of the relief of your petition to Order the Grace's to remove some or whatever part of that fill is necessary to restore the flow of water off your property when it rains and when it snows?

Ike Tarvin: We think the whole meeting here is to work this out between the three (3) neighbors. I don't want to create Mr. Grace anymore hardship than what he has. He has created me a hardship. Shouldn't have hauled in the dirt without getting some professional help. In a natural waterway you need a permit to do this. We need to work this out. If it means removing the dirt, we need to do that. We need to work with the Kellar's also. I needed to get the attention of the board that this matter needs to be solved. We had talked about a joint venture last year, but it never happened.

Fred Meessen, attorney for Grace's, could now do cross-examinations.

Fred Meessen: Asked Tarvin's when moved into house.

Bonnie Tarvin: Bought property in November 1998 and moved in January-February 1999.

Fred Meessen: Have you increased the size of your house by a third since you moved in?

Tarvin's: No.

Fred Meessen: Did you add anything to your house?

Ike Tarvin: We added a garage for a carriage house.

Fred Meessen: Did you pave your driveway?

Ike Tarvin: Yes we did.

Fred Meessen: In your opinion have any of the improvements you made increased the run off of your property onto the Grace's?

Ike Tarvin: No. I would say that because of the large concrete driveway that we used most of for the carriage house. If probably added another 8 to 10 feet of surface there.

Fred Meessen: Did you lessen in any way the absorption of your property of water by making those improvements.

Bonnie Tarvin: No we did not.

Gregory Grace: When you first approached us and told us that you were going to buy the property, I met you and your real estate agent and we talked at the front of our property. At that time I told you that we were suffering water problems here and I asked you if Kathleen Hudson had disclosed this to you. At that time you said no. You told me not to worry about it because, you as a contractor, had resources to straighten this problem out.

Ike Tarvin: We talked about solving the problem with some of my equipment. But we never got together on it.

Gregory Grace: The day I had my land landscaped, so I could get rid of excess water that ponds on my property, you talked to us and we recognized at that time, this was not going to solve the problem. At the same time you said we should work with you and we said we would go in half's of whatever it cost to put in a tile and deal with this issue. But later on you are saying we did not want to work with you. I think you will see from our letter, that will be presented later, that we were very willing and able to work with you on this situation.

Tom Busch ask for more cross-examination from any of the parties. There was none. Are there any re-directs? None. Another witness?

Tom Busch asked if Commissioners had any questions so far.

Commissioner Shedd: Before you black topped or paved your driveway was that tile originally there at that time.

Ike Tarvin: The same culvert is still there. All we done was put six inches of rock and a surface. We did not change the course of the driveway. We used same road base that was there.

Del Bartlett: Called Gregory Grace to state his full name and address for the records.

Gregory Grace: Gregory Mark Grace, 2115 W. Lindberg Road.

Del Bartlett: Presented exhibit T13 for Gregory Grace to identify for the board.

Gregory Grace: I don't remember seeing this. But I guess it was sent to us. From Mike Spencer.

Del Bartlett: Called Carolina Grace as a witness.

Caroline Grace: My name is Caroline Grace.

Del Bartlett: Presented exhibit T13 for Carolina Grace to identify for the board.

Caroline Grace: I don't remember this. Maybe my husband does.

Del Bartlett: He just said he didn't.

Caroline Grace: I didn't know this was the same since I was over there.

Fred Meessen: Please identify it for the board and read it into the record.

Del Bartlett: For the record it is a letter addressed to Greg and Caroline Grace.

Following is typed copy of letter.

June 19, 1997

Greg & Caroline Grace
2115 Lindberg Road
West Lafayette, IN 47906

Dear Greg:

Enclosed, please find a copy of the topographic survey of the swale in your yard, as you can see water flows from both directions on to you.

I would recommend that you clean out the debris in the tile inlet so the water has a direct inlet to the subsurface tile.

I hope this solves the problem.

Very truly yours,

Michael J. Spencer
Tippecanoe County Surveyor

Cc: Philip Kellar, M.D.
Mikel Hudson

Del Bartlett: Presented exhibit T14 for Carolina Grace to identify.

Caroline Grace: I have seen a survey of our land like this. Is there something particular about this one.

Del Bartlett: The surveyor indicated he had attached that to the letter that is T13. For the purpose of the records I want to introduce T13 and T14.

Caroline Grace: The general picture looks familiar because it is our property. The map is something I have seen in different formats.

Del Bartlett: In the letter the survey says I would recommend you clean out the debris in the tile inlet so the water has a direct inlet to the subsurface tile. Did you ever go out on your property and look for a tile inlet.

Caroline Grace: No, I am not the one that does that. It is my husband, Greg, who does things in the yard.

Del Bartlett: Recalled Gregory Grace to testify along with his wife. Greg did you ever find a tile inlet on your property?

Gregory Grace: Yes there was an old tile there from the old tile system. And I have cleaned it out, it was a tube. But it never got rid of the flooding problems on the properties. I did not have Snow White or some one like that blow it out.

Del Bartlett: Nothing in this letter suggests that you but fill on your property?

Gregory Grace: No we did not.

Del Bartlett: Did the surveyor ever recommend that to you as a solution to the problem?

Gregory Grace: Yes he did.

Del Bartlett: Which surveyor was that?

Gregory Grace: That was Mike Spencer.

Del Bartlett: Did he have that in writing?

Gregory Grace: No, but he told us personally.

Fred Meessen: May I see T14 exhibit. I want to point out to the board in this exhibit that is being offered: Enclosed please find a copy of the topographic survey of the swale in your yard, as you see water flows from both directions **on to you**. No objections.

Tom Busch: T13 and T14 exhibits are admitted. The date of letter is June 19, 1997. Any cross-examinations? Mr. Kellar & Mrs. Kellar any cross-examinations? Have any other witnesses?

Del Bartlett: Called Mrs. Kellar as a witness and asked her to state name for records.

Julia Kellar: Julia Kellar, lived here for 6 years and address is 2111 Lindberg.

Del Bartlett: Have you had an opportunity over that period of time to observe rain water pool and stand on the properties of Mr. & Mrs. Tarvin and Mr. & Mrs. Grace.

Julia Kellar: Yes.

Del Bartlett: During the time you have observed it has it become worse in recent months.

Julia Kellar: Yes it has. This last rain lasted almost a week. Before then it was dried up within a day or day and a half.

Del Bartlett: You have seen the representations that Mr. & Mrs. Tarvin have made to the board with the respect to the pooling of water on their property. Is that an accurate representation in your view.

Julia Kellar: Yes.

Del Bartlett: Nothing further.

Tom Busch: Cross-examination? Does the board have any questions?

Del Bartlett: We have no other witnesses.

Tom Busch: Time for the Grace's to put on their case.

Fred Meessen: I want to give a little preliminary. A diagram was presented of Lindberg Road. Our position is the water comes down Lindberg Road, hits an obstruction on Tarvin property, which is a curb cut, then swings around in a U and collects in your back yard because it can't flow through. What is on the Kellar property?

Gregory Grace: It is a higher raise of land. The water will not go over that obstruction until the volume gets so large that it will verily go over the top.

Fred Meessen: Is there a tile outlet that is blocking it?

Gregory Grace: Originally there was a tile outlet blocking. Also since that time we have found that the rise here is the greatest culprit to not allowing the water to flow off the back of the property.

Fred Meessen: So you found an obstruction on the Tarvin property which in your opinion is a curb cut causing the water to swing around in a U and collect in your back yard in a big pool.

Gregory Grace: Yes. I would also like to point out where this water starts is at McCormick and Lindberg. I was just looking at the intersection last night and the water also comes from other side of road and ponds on my property.

Fred Meessen: Presented exhibit G1 with 3 different things on it.

Gregory Grace: Gregory Grace explained the exhibit. Had North West corner of Tarvin property, Lindberg Road, soccer field area just west of all the properties, front drainage ditch and curb cut. First picture in 1997 of water collecting on Hudson property. This is the Hudson property that is now owned by the Tarvin's. What we are seeing by this is some of the additions that were added by the Tarvin's and has decreased the amount of water their property can hold.

Fred Meessen: Let's go through this bottom series of photographs. What are those showing.

Gregory Grace: The first set of photographs are looking across the Tarvin's property from the border of our houses. The second set of photos are setting directly behind my property.

Fred Meessen: This second row of photos is your property.

Gregory Grace: Yes, my property.

Fred Meessen: Showing the pooling back there as a result of this U shaped flow of water. Correct?

Gregory Grace: Correct.

Fred Meessen: The top photos show your house right after you bought it in 1996 and shows black mildew on walls and some flood damage. Correct?

Gregory Grace: Yes, this is an indication that this problem was occurring before we moved in.

Caroline Grace: Something that was confirmed by previous owners.

Fred Meessen: Asked Grace's to explain other photos.

Gregory Grace: This is water ponding on the curb cut from the Tarvin's property. Other photo is same properties using same perspective that was shot in 1997, day the county commissioners came out to our properties and looked at the flooding. You can see from this that the flooding that occurred is no greater later on as it is in 1997. It just depends upon the amount of rainfall that occurs in one period of time. Next top photo is Tarvin's property and can see blacktop drive and ponding that does occur on their side of property. This is three (3) photographs put together. Bottom photograph is perspective looking at south area of my property and you can see that the ponding exists still at this time.

Fred Meessen: All the bottom photograph is your property showing dead grass and water ponding on there. Right?

Gregory Grace: Yes

Fred Meessen: This satisfactory explains. Do you have any objections to G1?

Tom Busch: G1 is admitted.

Fred Meessen: Presented G2 exhibit for Gregory Grace to identify.

Gregory Grace: This is a letter in response to the letter the Tarvin's had sent us. My wife and I composed this letter the same day and mailed to them. Following is typed copy of Gregory & Caroline Grace letter.

Mr. and Mrs. Gregory Grace
2115 Lindberg Road
West Lafayette, Indiana 47906
June 19, 2000

Mr. and Mrs. Ike Tarvin
2121 Lindberg Road
West Lafayette, Indiana 47906

Dear Mr. and Mrs. Tarvin:

We have received your letter. The last we spoke in person was last year. At that time, we had discussed the water problem. You had requested that – given your resources as a contractor – we refrain from proceeding until you had determined what was necessary to correct the problem, and the cost; something we would split. This is the first you have contacted us about the problem since then.

In addition, you pointed out in your letter that you have been consulting with the county. We are happy to learn this. It is important that we address the issue within the confines of county regulations. However, when we last met with you face to face, you also mentioned that after you called the county for advise on the situation, that the county commissioner Kathleen Hudson had personally come to your house – unsolicited – and had hand delivered a complaint form for you to fill out against us. Given this incident, and prior incidents between us and Kathleen Hudson (e.g., cutting down some of our trees and burying trash on our property without our consent, to name one of many incidents) which show a misuse of power and conflict of interest (she sold both of our properties to us, respectively), we are formally requesting that Kathleen Hudson abstain from further becoming involved.

As we said when we last met with you, we are happy to work with the county; we have worked with them on this issue in the past, and they have proved caring and helpful. In fact, given the agreement we made in our past conversation with you (including the fact that we should wait for further notice from you), and the letter we just received today, perhaps it is best if we go through county arbitration, so that our conversations and the agreements we make can be officially recorded.

As before, we want to resolve this problem, and wait for your reply.

Sincerely,

Caroline Grace Gregory Grace

Fred Meessen: Any objections. G2 is submitted.

Tom Busch: G2 is admitted.

Fred Meessen: When the Graces's came to my office I first asked them to make a chronology from the time they bought the house, basically and even before they bought the house and until before this board. Is that correct?

Caroline Grace: Yes.

Fred Meessen: For four (4) years the Grace's had lived with water inside and outside of their home. They did file a petition against Kellar's three (3) years ago, attempted to go by the system and that petition was not activated. I'm glad we are finally here today, getting some action on new petition. I wanted basically to tell you what the chronology said. What year did you buy the house?

Gregory Grace: May 13, 1996.

Fred Meessen: Caroline since you prepared this will you read it.

Caroline Grace: Our basement is flooding again. This time it is sewage. Did exploratory digging to find the drain tile and septic. While trenching they came across and tore through a septic tile and the drain tile coming through the Kellar's property. Craig Rich, representative from County Health Department care out to site. Lines were active. Could see water and sewage coming out of the tiles respectfully.

Fred Meessen: You could see water and sewage coming out of the tiles?

Caroline Grace: Yes, in our basement.

Fred Meessen: In your basement. I wanted to make that point. Very strongly. OK.

Caroline Grace: These tiles connected to a tile system that drained onto both of our properties. The failure of drainage tile on our properties let the water back up into our basement, because it was the lowest point.

Fred Meessen: Read what I have circled here.

Caroline Grace: Other pertinent points. The number of basement floods. With range of depth from two (2) to six (6) inches. Spring 1997 had 2 floods. Covered by insurance. Covered \$5,000.00 worth of damage. Spring of 1998 had 3 floods. At this point we had lost our insurance coverage. Fall of 1998 one (1) flood. When you walked, you waded through.

Tom Busch: Mr. Bartlett has requested a recess for 15 to 20 minutes so he can attend to another matter in Federal Court. Do you have any objection to breaking at this time. No objections. Broke for 30-minute recess. See later in minutes for continuation of hearing.

Commissioner Knochel turned the meeting back over to Commissioner Hudson during the recess of the Obstruction Petition Hearing – Tarvin/Grace.

PETITION FOR ENCROACHMENT – MEDSURG PROPERTIES, LLC – CROSSPOINTE COMMERCIAL LOT #1 – TREECE MEADOWS RELIEF DRAIN

Steve Murray gave presentation of this petition for encroachment. This petition was a condition of final approval of Crosspointe Commercial Lot #1 on Creasy Lane. They have a parking lot that is encroaching onto the legal drain easement for Treece Meadow Relief drain. We had asked as part of their approval they file a formal petition to encroach. I would recommend approval with the following conditions.

1. Any disturbed areas within the legal drain easement are to be re-graded and re-seeded with an approved mixture (except parking lot)
2. The owner must maintain their drainage facilities and improvements within the easement if applicable.
3. The owner must remove or spray bushy growth (willows, bushes, etc.) and mow legal drain easement as needed.
4. Tippecanoe County will not be responsible for damage to the property owners improvements within regulated drain easement.
5. All work to be completed as detailed on the approved construction plans.

Petition to the Tippecanoe County Commissioners and Tippecanoe County Drainage Board:

The Undersigned, Medburg Properties, LLC, who owns 1411 S. Creasy Lane does hereby request permission of the Tippecanoe County Commissioners and the Tippecanoe County Drainage Board to encroach 48 feet into the utility and drainage easement at the south end of their home on Lot #!, Crosspointe Commercial Subdivision, Fairfield Township, Tippecanoe County, Indiana.

Commissioner Knochel moved for approval of petition for encroachment on utility and drainage easement by Medsburg Properties, LLC at 1411 South Creasy Lane with conditions, seconded by Ruth Shedd. Motion carried.

PETITION FOR ENCROACHMENT – GTE SUBDIVISION LOT #2 – TREECE MEADOW DRAIN

Steve Murray gave presentation for petition for encroachment. This property is just to the North of the previous property on the old original Treece Meadow Drain. I am prepared to recommend that the petition be approved subject to the same conditions listed on the two previous petitions.

Petition to the Tippecanoe County Commissioners and Tippecanoe County Drainage Board.

The undersigned, Michael Zeman, who owns 1165 S. Creasy Ln, does hereby request permission of the Tippecanoe County Commissioners and Tippecanoe County Drainage Board to encroach 28 feet into the utility and drainage easement at the south side of Lot 2, GTE Subdivision, Fairfield Township, Tippecanoe County, Indiana.

Commissioner Knochel moved for approval of petition for encroachment on utility and drainage easement for Michael Zeman at 1165 S. Creasy Ln, with same conditions read on previous encroachment, second by Ruth Shedd. Motion carried.

CONTINUATION OF OBSTRUCTION PETITION HEARING – TARVIN/GRACE

Commissioner Hudson turned meeting back over to Commissioner Knochel.

Fred Meessen: Do you have any additional evidence that you want to submit.

Gregory Grace: Yes, I have videotape of our basement during a flood situation. The Tarvin's have made a suggestion that my house was not flooding. That I did this just to put water onto their property. I actually had my property re-landscaped because I was dealing with the issue of my house flooding all the time, had made an appeal to the Kellar's earlier, the Tarvin's and also the county to help me deal with this issue. No one was forth coming with any help. I was doing anything I could to protect my personal property from being flooded continually.

Caroline Grace: The fill dirt was added close to the house, where the water use to pond, so it would delay the seepage into our basement

Fred Meesen: Can we show a videotape?

Gregory Grace: The video was taken approximately spring 1998. After the county said all we had to do was mow the swale behind the Kellar's to get rid of the flooding.

Videotape was shown.

Gregory Grace: Spent thousands of dollars. Approximately 3 to 4 inches of water on floor. Water was completely inside my basement and had water damage. It was early in the morning when I took this picture, but during the night the flood had gotten to approximately 6 inches through out the basement. This is just one of the videos I have of the reoccurring flooding in my basement. The next segment is a picture showing the Tarvin's dealing with water flooding on their property after they had paved the road. They had a sump pump in the area after they were loosing their grass. When they did put the asphalt in it did change the water flow on their property.

Caroline Grace: So in other words it was after Tarvin's put in the asphalt and before the fill dirt was put in by us.

Fred Meessen: By the video we show water pooling in the Tarvin area. Correct?

Gregory Grace: I was trying to show the board that even there improvements to their house were very nice improvements they have changed the ability of their soil to hold water. It is going to shed my water off and cause more flooding to occur.

Fred Meessen: You didn't notice the pooling before the Tarvin's made the improvements. Correct?

Gregory Grace: No. The Hudson's, who had the property before, just had a gravel road. They always had a wet area, but because the water could flow across the gravel they didn't have that ponding that started in that area.

Fred Meessen: The ponding started in your opinion after the improvements? OK. In two sentences I want you to summarize for the board what the major problems are with the neighboring properties as you see them.

Gregory Grace: I feel as a homeowner I have a situation where both neighbors land have been graded so they flow 100% of their water onto my property. Me being at the lowest point there is no way, anymore, for the water to flow off the property, so I have been turned into a retention pond for all the people that are above as far as the watershed area. Also including the curb cut area on the front of Tarvin's property much of the water that drains off of McCormick and Lindberg also flow onto my property. So my property has been turned into a retention pond not only by my neighbors but also by the county not wanting the water to flow down that ditch and flow directly into Mr. Reifenberger's property.

Fred Meessen: You have identified that the survey has already identified a problem on the Kellar property.

Gregory Grace: Correct.

Fred Meessen: The other major problem is the curb cut an obstruction on the Tarvin property.

Gregory Grace: Yes.

Fred Meessen: Plus some modifications they have made to their house, which has changed the absorption of the water. Correct?

Gregory Grace: Correct.

Fred Meessen: And you have been flooded how many times in that chronology you gave me in the basement?

Gregory and Caroline Grace: I think we state eleven (11) times.

Fred Meessen: Eleven (11) times from two (2) to six (6) inches. Correct?

Gregory and Caroline Grace: Correct.

Fred Meessen: And sometimes you have had raw sewage in your basement. Is that correct?

Gregory Grace: Correct.

Fred Meessen: Anything else you want to tell the board?

Gregory Grace: The dirt I put in behind my property I did as a temporary measure to try to reduce the amount of floods we have on our property. I also talked to Mr. Tarvin and told him I was willing to work with him and go in half's on trying to get a tile in there to remove the excess water. Water does not run up hill.

Caroline Grace: We feel it is hopeless at times.

Tom Busch: Mr. Bartlett do you have any questions for the Grace's?

Del Bartlett: Addressed his questions to Mr. & Mrs. Gregory Grace. The photographs that you have shown on exhibit G1, in the center, that shows ponding of water, when were those taken?

Gregory Grace: In the spring of 1997.

Del Bartlett: Then how is it that you are trying to testify a minute ago that the ponding didn't occur until after the Tarvin's had improved their property by putting a garage in and paving the road.

Gregory & Caroline Grace: No. No.

Del Bartlett: I believe that was what was said on the record. Is that not accurate?

Gregory Grace: Are you referring to the point I was making?

Del Bartlett: I am referring to the ponding that occurs out there.

Gregory Grace: There has always been flooding problems.

Del Bartlett: There has always been ponding.

Gregory Grace: Yes.

Del Bartlett: So Mr. Tarvin's building of his garage and paving of his driveway didn't cause any new ponding? Is that right?

Gregory Grace: Would cause a greater amount of ponding.

Del Bartlett: What is your area of training?

Gregory Grace: I am a biologist. I have a degree in industrial engineering at Purdue.

Del Bartlett: You have no formal training in mechanical engineering. Is that right?

Gregory Grace: No, I don't.

Del Bartlett: Do you have any special knowledge of drainage matters other than we all know that water runs down hill?

Gregory Grace: No, sir I worked in landscaping for eight years. I can run a transit and I can move dirt.

Del Bartlett: But you have given the board an opinion that Mr. Tarvin's paving of his drive way and putting in a garage on house, may have increased the water run off from his property. Is that what your testimony was?

Gregory Grace: I have talked to an engineer.

Del Bartlett: But you are testifying about personal knowledge. I want to know what you know.

Gregory Grace: Yes. You will notice that at any time that there is a county roadway that has ditches on both sides they have to deal with the water that flows off that land. So I think I can make a judgment that when you do pave the roads that the extra water does not percolate through the asphalt. It runs off.

Del Bartlett: Ok. You really haven't done any studies out on the Tarvin's property to verify this. This is just kind of speculation on your part. Right?

Gregory Grace: It is a priority of knowledge.

Del Bartlett: Ok. How did you get the dirt in there to fill the property with that we have been talking about.

Gregory Grace: I had the excavation people bring their tri-axles onto my property using the common driveway that is on our properties.

Del Bartlett: The tri-axle is a truck with a big bed.

Gregory Grace: Yes.

Del Bartlett: How much in cubic yards does it carry at a time?

Gregory Grace: I think they had 2 size trucks. One carried 14 cubic yards and the other was 18 cubic yards.

Del Bartlett: How many of those did you have hauled in there?

Gregory Grace: I would say thirty (30). We did not put all thirty (30) in the same area. A majority of the dirt went against the house and we created a finger of land.

Del Bartlett: You heard Mr. Tarvin testify that you filled in this area along your property line.

Gregory Grace: Yes. He was there and we talked about it.

Del Bartlett: And you don't deny that it impeached the runoff of water from his property?

Gregory Grace: No. I was hoping that would keep my property from flooding. My basement property.

Ike Tarvin and the Grace's discussed the video showing flooding back on Grace's property in 1997 and pooling. Gregory Grace stated there is no argument with you that what we did, it is trying to stop the water from flooding my basement.

Del Bartlett: When the photographs were taken in 1997, do you have any personal knowledge of the amount of rain that fell before that occurred.

Gregory Grace: No. We had a rain fall all night. I would put in a category of 4 to 6 inches. It takes roughly two (2) weeks to leave my property.

Fred Meessen: The primary problem you find again with the Tarvin property is the curb cut, is it not?

Gregory Grace: Correct. In several occasions we have asked the Tarvin's to deal with their curb cut. Since he worked or had a business that dealt with construction that they would be able to remove this, but several times they have done construction, since purchasing the house, and had a bobcat there, he has not removed the curb cut.

Del Bartlett asked to have the curb cut pointed out on an aerial. This was pointed out by Gregory Grace and a discussion was on how the curb cut functioned and flowed. Gregory Grace said he asked the county to remove this curb cut several times. This curb cut turns his property into a retention pond.

Tom Busch asked if anyone had any questions for the Grace's. Any other witnesses Mr. Meessen?

Fred Meessen: No other witnesses.

Tom Busch: It is now time for the Kellar case.

Julia Kellar: What happened first, was when the Grace's bought the property, there was a flooding. He came over and showed me there was like a little overpass for the tractor and it had some tiles in it. These tiles were plugged up so I removed the tiles. It didn't affect the flow of water at all. We very seldom have any water in that swale at all. About a year later we got a letter and were told to dig a trench in the back. Dig it deeper. I called Mike Spencer and Mike came out and look at it. He agreed with me that the water flowed in the other direction toward the Grace's. It did not flow toward our property. It wouldn't do any good to dig it, so I am going to wait till they find a solution. The water that does pile up, is not anywhere close to the Grace's house. I can not figure out how the water gets in unless it is through the tiles. That is why I did not respond to the Grace's letter, because Mike told me to wait and just see what happened. As far as the septic tank goes, they put in a new septic tank. One day they called me over to show me two pipes going from my yard over to where the septic tank was. I had no idea what they were for or anything. They said they were going to plug them up. I told them before they did to give me a chance to get someone out here to take a look at them. I had about a couple hours that morning and Mike from Speedy Rooter came out and said just leave them, I don't think they are connect to yours. He had just cleaned out my septic tank a year before. I found people who lived in the house two families before us, she said the two house were built, and the new house, which the Grace's live in, were given the old septic tank and we were given a new septic. It has been two (2) months since they capped off those pipes and nothing has happened. I do think, putting in that septic tank, they filled it in with a lot of clay. This last rain, I think, is partly why there was so much water accumulating for so long. It couldn't sink into the soil.

Phil Kellar: I will address the rest of this. Just recently I was addressed some knowledge from our down the street neighbor, Mr. Reifenberger, who has probably been there longer than the Grace's, Tarvins, and Kellar's. You talk about a water problem. You need to look at his property that is located exactly across the street. I would like to have him act as one of our witnesses. We are not legally knowledgeable enough to ask him the questions. Perhaps he can address the board by stating his name and location and let us know the past history of what has occurred to all of our properties.

Ron Reifenberger: My name is Ron Reifenberger and live at 2270 Lindberg Road. In my opinion all the problems you heard about today started in May 1993, when West Lafayette Water Company hired A&K Construction, to run a water pipeline along edge of Lindberg Road. Prior to the installation of that water pipeline there were no flooding problems. We have been in our house since 1984. We've gone back trying to resolve our flooding problem. We have gone back about 20 to 30 years talking to former residence. There has been no serious flooding problems before late May 1993. When A&K Construction but in this water pipeline, it is our contention, they disrupted a drain tile that drains our field that runs through this swale that you have heard about all afternoon. Basically this drain tile drained this whole area into the Purdue field. That is our belief. We tried to get this problem solved. The type of problem on our property was we collected about a million gallons of water in late May early June of 1993. We talked extensively with Steve Murray, who was very helpful to us. We talked extensively to Mike Spencer, who wasn't quite as cooperative. We took this whole issue to court. It is a matter of public record. There is sworn testimony in some file cabinet across the way that you are welcome to look at. It is my contention, that basically what has happened, that this plugged drain tile which drains this entire area has worked it's way back and is now affecting everybody along the whole drain tile section. All this flooding stuff you are hearing about is recent, it doesn't go back. No body is talking about 1993, but that is when all the problems started. I don't think anybody in this room has ever seen surface water flow through this swale. I have had a million gallons of water in my front field. I have looked at this property many times across the road. There is no surface water that is going to flow through there that is going to alleviate this problem. The reason this

problem is occurring, is because this drain tile has failed. It failed basically when A&K Construction plugged or destroyed it in some way during this construction problem. In my opinion this is just a plugged drain tile that is causing this water to back up. It has nothing to do with surface flow in my opinion.

Phil Kellar: It looks as though I am the last one to get flooded. I am at the highest level. I am high. I can look down their property, not up their property. I am going to be the third one to get flooded because of this problem. I will cooperate. If somebody from engineering, surveyor or what ever office, tell me that if I bulldoze a ditch through there and this solves all these peoples problems and alleviate one for me, I'll do it. I don't think that is going to solve our problem. If that doesn't, we have spent money for nothing, some agency is responsible.

Commissioner Shedd: Mr. Reifenberger the court case that you had, was it against A&K Construction on destroying the tile.

Mr. Reifenberger: Technically the court case was against West Lafayette Water, which is now called United Water Inc. They in turn got A&K Construction involved. A&K Construction was a sub contractor for United Water, Inc. I believe that case came to trial in January of 1996. I can tell you the outcome of that case. After three (3) days of arguing in front of a judge, the jury found that A&K Construction was 100% responsible for the damage. The damage was a million gallons of water on front yard. Not ponding. We had water three (3) feet deep. We lost 75 trees that were killed because of the flooding. The whole front field was trashed. All the grass and everything out there basically died. The jury found in our favor, but unfortunately, most of the people on the jury lived in the city and didn't understand these land problems. The damage award was not nearly enough to allow us to solve the problem in the way that we proposed.

Commissioner Knochel: In other words you are telling us that they didn't have to go back in and fix the drain outlet that you were referring to.

Mr. Reifenberger: Yes. There were two solutions to the problem in our permit. One was to restore this drain tile and we thought that was not feasible.

Commissioner Knochel: Ok. Do you know for a fact that there is a tile in there?

Mr. Reifenberger: Yes, sir. I have been told recently within the last couple years that a surveyor has actually located the end of that tile somewhere in the vicinity of the Purdue property. This is an issue I have been following clearing for the last seven years of my life. I know for a fact where the drain tile ends in my property. I know for a fact that it goes at least 100 yards into the Tarvin's property, because at the time A&K Construction told us that the problem was not related to their construction efforts, but it was related to root system that had built up in the drain tile in the property that Tarvin's now own. We actually hired Snow White to come in and they jetted out the drain tile. They actually found an obstruction in the drain tile right in the center of where A & K Construction were digging. They also went a few yards toward the property, which the Tarvin's now own and established there were no roots in the drain tile that would obstruct the flow. That is a matter of public record.

Commissioner Knochel: This alleviated the flooding problem you were getting on your ground?

Mr. Reifenberger: No. We are still getting water. I have a pump in my front yard and I am pumping water from Early March until end of June. This year we pumped water from Early March until the 3rd week in July. Usually by the end of June I turn the pumps off and bring them in the house for next spring. There were two solutions for this drain tile. One solution was to restore this drain tile. We decided not to do that at the time because it would involve getting two or three landowners cooperation to do it and we felt that was fortunately impossible to do. The second solution was to actually install a new drain tile running west on Lindberg Road. We actually got Grader Construction to place a bid on that and that was part of cost of the court case. We didn't get money to install that drain tile from the jury. We are at the low end of the road and all the water eventually flows into our property. The problem initially started, to be honest, because A&K Construction, up here at the corner of Lindberg and McCormick, did not restore the ditch to

the proper grade that it had existed. It basically sent all the water from this farm field, in this area, to drain into our property, causing the drain tile to fail. Mr. Murray, some how, got his people to come out and restore the flow of the ditch the proper way, but the drain tile was gone. I think what has happened is the plug in the drain tile has just worked its way down into this area. I have just learned there was a new septic tank put in, and I would bet a nickel that the tiles that were exposed in the digging of this septic tile were part of original drain tile that served to drain the land. I can't prove that.

Someone commented yes, those were the original drain tile.

Mr. Reifenberger: It was. So that means the drain tile has been compromised even further and the installation of the septic field. It is not surface water. If it was surface water it would drain down and out through the drain tile like it was suppose to. This water stands forever.

Phil Kellar: The problem will get greater, because this area is developing. You are going to add more and more surface water and I am going to be flooded next.

Tom Busch: First Phil Kellar will answer questions from Mr. Meessen and then Mr. Bartlett.

Fred Meessen: No questions.

Del Bartlett: Mr. Kellar how familiar are you with the ponding that is shown in G1 and some of the other photographs that I exhibited on the behalf of Mr. Tarvin.

Phil Kellar: I am not familiar with them.

Tom Bush: Mr. Meessen do you have any questions for Mr. Reifenberger or Mr. Kellar?

Fred Meessen: None.

Del Bartlett: I apologize I wasn't here during the first meeting when this matter was brought to the board's attention. It is my understanding that Mrs. Hudson has removed herself from the hearing process and deliberations? Is that correct?

Tom Busch: That is true.

Del Bartlett: Than I would like to call her as a witness. Kathleen state your full name, please.

Kathleen Hudson: Kathleen Faye Hudson.

Del Bartlett: Are you the former owner of the residence that is now occupied by the Grace's in this case.

Kathleen Hudson: Yes.

Del Bartlett: And how long did you live in that house?

Kathleen Hudson: A year.

Del Bartlett: Do you recall when that was?

Kathleen Hudson: We bought it the very end of 1995 and we moved out at the end of 1996.

Del Bartlett: During the time you lived there, did you experience any flooding problems in your basement?

Kathleen Hudson: Never. Not a drop.

Tom Busch: Mr. Meessen do you have any cross-examination? Mr. Kellar do you have any cross-examination?

Mr. Meessen and Mr. Kellar: No cross-examination.

Tom Busch: Any other witnesses?

Del Bartlett: Mrs. Kellar recalling the exhibit G that has some photographs of ponding water, that appear to be on the Grace property, have you observed water ponding there over the past several years?

Julia Kellar: Yes, but it was worse this last rain.

Del Bartlett: About how long would it take for that water to drain away in the past years?

Julia Kellar: A day and a half.

Del Bartlett: Most recently how long have you observed it?

Julia Kellar: A week or so.

Del Bartlett: Over a week. Nothing further.

Fred Meessen: I want to thank you all for making people feel as comfortable as they can be in a situation like this. Mr. Bartlett, council for the Tarvin's, attached great importance to this letter which is T13 dated June 19, 1997, which is about the time the Graces filed their petition with this board. Fred Meessen read the whole letter, which is presented in the above minutes. The Grace's have testified that they did do as the letter asked and it did not solve the problem. I just wanted to point out that this letter says that water flows from both directions onto you. They were more or less forced by continual flooding of their basement which got to the point that even raw sewage came in, that they did a self help landfill on their own, which Mr. Murray says compiles the problem. And it may. I don't deny that. I have a great confidence in two members of the board, Ruth Shedd and Steve Murray, because it wasn't until around July of this year, when things really started to happen. Mrs. Shedd and Mr. Murray went out there and examined these properties and started making recommendations for some solutions. I think it is difficult for people to present their own case. We are not engineers, surveyors and we are not drainage experts, we rely on you for that and the people who advise you. For anybody to suffer eleven floods of a depth of two to six inches since the spring of 1997 and they testified to how this bothered them and a health hazard it is, you can't really blame people for first trying to work out things with neighbors and if that does work do something on your own, because nothing was happening here. I do give the board credit for at least July of this year, especially Mrs. Shedd and Mr. Murray for going out and I have all confidence in the world of what Mr. Murray is going to be recommending as a solution of the problem. Thank you very much.

Del Bartlett: Briefly on behalf of the Tarvin's, I don't know what you will arrive at in a way of a solution to this entire problem. I don't envy you with the task of trying to figure it all out with all the testimony that can in later with all the destroyed tile and problems that that has seemed to have generated. There has been evidence that the Grace's took it upon themselves to put 30 tri-axle loads, by their own estimation, of fill dirt in the area that includes the property line adjacent to the Tarvin property. I believe that Mr. Meessen acknowledged that that may have aggravated the problems that the Tarvin's have experienced. Mr. Tarvin's testimony was he had never experienced the kind of flooding he has now before that was done. I think you have plain guidance in the statute to find that there is an obstruction of material in this case that impedes the flow of water of the Tarvin land. You have the jurisdiction and authority to order that to be removed to elevate that problem as long as it doesn't cause unreasonable damage to the Grace property. I would contend that it would be somewhat of a circular argument for them to contend that their property would be damaged to remove things that were not there in the first place. I think of at least up to that point, the preponderance of the evidence supports the Tarvin's petition. Beyond that, it is hard for me to understand how people would not know the consequences of their acts. In this case, dumping 30 tri-axle loads of fill adjacent to a neighbors property where they know water flows. I think that you can infer from

the facts that this is an intentional obstruction, not malicious, we are not claiming that. You have heard everyone in the case testify that they want to be accommodating to their neighbors and try to work something out. From the Tarvin's perspective there is no relief in their mind but removing the obstacle that holds that water back on their property at this point. I encourage you to make finding in accordance with the preponderance of the evidence that we have presented today with respect to those particular points. Thank you.

Phil Kellar: I really don't have a gripe with either party. I am the highest person. I am going to get flooded last. Purdue will probably be flooded last, because they are beyond me. I will cooperate however. I want some assurance, if we are going to be asked to spend moneys that this problem is going to be resolved for the two neighbors and myself last. I don't want to just blindly start digging ditches and hope that it works. I want some engineering study or something to be reasonable. We have never had flooding in our basement.

Tom Busch: This concludes the presentations. The board has to make some determinations. I assume you want to take under advisement to think about it. Mr. Murray and I would like to meet with the parties who are involved. That would be Mr. Pusey for Purdue, Mr. & Mrs. Reifenberger, Mr. & Mrs. Grace, Mr. & Mrs. Tarvin, Mr. & Mrs. Kellar and their lawyers. To see if we can make some progress on some of the things that were said today, suggest to us, that perhaps we can. We think it would be worth talking about a little bit more. You wouldn't want to be part of that discussion because you are essentially the jury at this moment.

Commissioner Shedd moved to take testimony under advisement and at a later date we will give you our ruling, seconded by Commissioner Knochel. Motion carried.

Being no further business Commissioner Shedd moved to adjourn meeting, seconded by Commissioner Knochel. Meeting adjourned.

Kathleen Hudson, President

Doris Myers, Secretary

John Knochel, Vice President

Ruth 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

Tippecanoe County Drainage Board
June 7, 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, Drainage Board Engineering Consultants Dave Eichelberger and Kerry Daily, Drainage Board Executive Secretary Robert Evans.

The Tippecanoe County Drainage Board met Thursday June 7, 2001 in the Grand Prairie 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 May 2, 2001 Minutes

K.D. Benson made a motion to approve the minutes from the May 2nd 2001 regular Drainage Board Meeting. Ruth Shedd seconded the motion and hearing no opposition, the motion carried.

Sagamore Pines

Congdon Engineering Associates

Chris Badger of Congdon Engineering appeared to request final approval on Sagamore Pines, a 79-lot subdivision including both duplexes and R1B housing. It's located on the west side of Morehouse Road. Section one contains approximately 24 acres. There are some issues in terms of Legal Drains that he thought had either been vacated or relocated in the past. He thought Steve was aware of them and Chris thought they had some solutions. He said there had been a couple of reviews, and they had addressed the questions raised in those reviews. He then asked for any questions from the Board.

John Knochel made reference to the solutions on the Legal Drains, asking if Chris would briefly go through them. Chris thought it referred to changing those Legal Drains if they were still active, and Drainage Board Consultant Dave Eichelberger deferred on that question to County Surveyor Steve Murray. Chris said it looked like they were going to be changing them to what are called 'Regulated Drains', and govern those by the final plat. He checked to see if they had 30 feet for the Regulated Drains, and he thought they did, except for one point which is entering into the dry detention pond. If they needed to, they would then request a Variance on that to be 22 feet instead of 30 feet.

Steve Murray reported that the one drain that goes towards the cemetery is still in place and is still active, based on former County Surveyor Mike Spencer's recollection. The other one to the west was intercepted and dumped into the storm sewer system for Sagamore Point on the south boundary. Based on the best information available, both tiles are still in place and active.

Chris stated there is room to put the 30 feet in for the drain from the Memorial Gardens cemetery that dumps into their dry detention area, so that shouldn't be any problem to maintain. One choice is that the whole common area called out lots A1 and A2, could be kept as part of the Legal Drains.

Working from a blueprint, Chris showed the duplex lots numbered 1- 48, the tile from Memorial Gardens which comes in near a 30 inch corrugated metal pipe, house lines, and the drainage pattern including the dry detention area and Sagamore Point. The old tile is shown, which drains right into the Dempsey-Baker ditch. The other line which was intercepted is also shown. They found an 18-inch tile which outlets as depicted, and the rest of the water came by gravity and was picked up. There is a manhole depicted that was picked up and that picks up the water indicated. Chris looked into it and didn't see it picking up a tile on the inside, but he can't say that there is none. He knows that there is one tile that comes into the drain at another point. There was some concern since it crosses lot 58 and a letter was needed, which he presented to the Board.

The remainder of the lots, 49 through 79 is all R1B. The property ties into Sagamore Point on the north side, and into Lakeshore Subdivision on the west side, which is currently under construction. Some of the other issues already worked out with the county include putting a passing blister on Morehouse Road, and that is detailed in the plans. Also included are; a ditch and an entrance added into the cemetery where they extended a new pipe and more gravel; and widening of Sagamore Pines' half of the road all along their property. He described an acceleration taper and a deceleration lane and taper along with the passing blister.

Chris stated his opinion that one of the Legal Drains terminated on the property and never went on. He showed adequate room to give 30 feet of easement for the drain tile in all but one place if it were to remain a Regulated Drain. He thought that it could still be a Regulated Drain within the plat as shown, and referenced a final plat available at this meeting. He then described areas where there was 20 or 25 feet of space.

K.D. asked if we build houses on top of drains all the time. Steve answered no. He went on to state that they have two options. One is to vacate, which couldn't be supported unless the drainage pattern or the tile terminates on their property. Chris stated that his opinion was that that was the case. K.D. asked if the water drains to Hadley Lake, and the answer is yes, but via the Dempsey-Baker Ditch.

Steve added that the second option, perhaps for the one to the east which goes to the cemetery, is an abbreviated process in the Drainage Statute, 52.5, that we've talked about at several meetings this year. It allows an individual who wants to relocate the drain and reconstruct the drain wholly on their property and at their own expense to follow an abbreviated process whereby the Commissioners approve it at a Board meeting, and then the Drain is merely moved from its existing location to a new location in the storm sewer system. Once again, the minimum statutory width for a situation as this is would be a 30-foot Legal Drain Easement that would be platted on the subdivision, as probably a combination Drainage and Legal Drain Easement.

Steve then said that what he thought we could do at this time is approve it subject to the conditions stated on Burke's review memo dated May 23rd 2001 and also to resolving the vacation and/or relocation issue with the Regulated Drains. Chris stated that their preference is to vacate the one to the south. They will be picking up all the water, and sized the pipe for a 100-year storm event, bringing it all the way down. Steve restated that if the existing Regulated Tile branch terminates on their property, he and the engineering consultant could support vacating it. Chris added that they had given Steve the paperwork and once that determination has been completed, they could take care of that without ever having to change the construction plans. On the other tile, they are extending it as requested another six feet to make the shoulder less steep along the road.

K.D. asked if there hadn't been some concerns expressed by surrounding neighbors about drainage when the project went through the Area Plan Commission? Chris replied that the concerns were about traffic and a fencerow with trees. The passing blister and the location of the ditch which leaves the tree line intact addresses those concerns.

K.D. then moved for final approval with conditions on the May 23rd Burke memo and the conditions specified on the Regulated Drains. Ruth Shedd seconded, and the motion carried.

Brindon Commercial Subdivision, Lot 2 Vester and Associates

Tim Beyer with Vester and Associates requested final approval for Stuckey Car Wash, which is to be located on Lot 2 of Brindon Commercial Subdivision. He referenced two maps that showed the site. He described the location in relation to U. S. 52, McCormick Road, Bethel Christian Life Center, and the proposed Meijer's Store. He also showed the overall Brindon Development including Brindon Apartments; Brindon Planned Development; and Brindon Plaza on the other side of Bethel Drive, which cuts through the middle of the site.

The proposed detention facilities were approved with the Planned Development, (P.D.), and are in place. There is a main line storm sewer to serve the apartments and these three commercial lots, which was approved with the construction of Bethel Drive on out to U.S. 52. On another display he showed a larger depiction of the car wash site with the eight bay car wash near the middle of the site, some vacuum islands out in front, and some on the other side of the building also. He indicated an area, much of which will be paved to allow access into the car wash, and an entrance road coming down on the south portion of the project.

They are proposing two inlets, one of which catches water from the north half of the site, the other catching the water from the south half of the site, tying in to the main line storm sewer that runs over west to the detention pond. He then asked the Board if there were any questions he could answer.

K.D. asked if they had to do anything special with the water before it goes into the storm sewer. Tim indicated that the water from the car wash bays ties into the sanitary sewer after passing through an oil separator.

K.D. also asked if that is something we as a county will have to be doing in a couple of years. Steve replied that car washes already are addressing the issue, but that we'll have similar requirements in the future for other facilities. K.D. said that she didn't want to see a detention pond with soap scum on it.

Steve remarked that the Burke memo dated May 29th recommends final approval, and added that he would recommend it as well, subject to the two standard conditions on Drainage Fees and a restrictive covenant.

K.D. then moved for final approval with the standard conditions, and Ruth seconded. There were no further comments and the motion carried.

Aberdeen Ridge Subdivision Hawkins Environmental

Mark Phipps representing Hawkins Environmental and Turfmaster requested final approval for Aberdeen Ridge Subdivision. He brought two exhibits and showed the surrounding area, including County Road 250 East or Concord Road, a private drive, Aberdeen Way, and an existing subdivision called Concord Place.

Aberdeen Subdivision is to consist of four lots. Just to the south and west of these lots is a natural waterway. The runoff in the existing condition flows from the northeast corner across these four lots to the southwest corner and into the waterway, then to the Wea Creek.

Mark also asked for a Variance from the Drainage Ordinance that would allow development of these four lots without detention storage. The reason is that their calculations of the existing conditions for the ten-year storm runoff are at about 4.76 cfs, (cubic feet per second). They made some assumptions about the types of houses that would be built on these lots, 100 feet of 18-foot wide driveway, patios, large houses, and everything that would go with them. In the developed condition, they calculated in the same ten-year storm event there would be an increased runoff, but only to a level of 5.1 cfs. The ditch which leads to the Wea creek is four to eight feet deep. In a ten-year storm event under existing conditions, the creek is calculated to be 6 inches deep. In the proposed developed condition, the depth is calculated at only 6 ¼ inches deep. They feel this is a negligible level, not even noticeable to downstream landowners in Concord Place and before the Wea Creek.

Steve stated for the record that the Drainage Ordinance requires notification of downstream landowners. President Knochel asked Robert Lahman, a resident of County Road 450 South to come forward. He stated that he was a longtime resident, very well acquainted with the area in question. He had no objection to what Mark had said. He further stated that as long as they don't change the waterway, there would be no objection. There had been some talk on changing the waterway, and if that had been the case, there might have been objections.

John asked what the highest level of water that Mr. Varman had ever seen in that ditch. Mr. Varman replied that it was within the banks. He went on to state that it's plenty deep and wide enough with good banks where the water will enter.

Steve added that he twice inspected the branch of the ditch which feeds up through the south side of Concord Place, the next little development downstream. He reported a well-defined ravine and drainage system. There are two larger developments under review east of Concord Rd. between County Roads 400 and 500 South and north of Aberdeen, on the Pilotte property. These developments are large enough that they will be required to have stormwater detention.

K.D. asked if the ditch was a county regulated one, and Steve replied that it is not, but is a natural drainage system.

John asked the Drainage Board Attorney whether two motions were needed on this request, one to grant approval, and one to grant the Variance. That was the case, and Steve mentioned a condition stated on the Burke memo of June 1st. That was to plat a Drainage Easement along the south boundary. Mark reported no objection to that, and in response to a question from Steve, indicated a proposed width of 75 feet for that easement.

Steve recommended final approval with the conditions on the memo, further defining condition one to specify a 75 foot width for the Drainage Easement.

K.D. made a motion for final approval with the conditions so stated, Ruth Shedd seconded, and the motion carried.

K.D. then made a motion to approve a Variance allowing direct discharge of runoff without detention. Ruth having seconded and there being no objection, the motion carried.

Petitions To Encroach on a Utility and Drainage Easements

J. Shane DeBoer / William S. Kurtz

John noted that the two requests were from properties in very close proximity to each other in the Saddlebrook Subdivision in Perry Township. He suggested that the two petitions be discussed together and then voted on separately. Mr. Kurtz resides on lot 270 at 250 Trackside Drive, and Mr. DeBoer resides on lot 296 at 250 N. Wilmington Lane.

John referenced a memo from Steve Murray recommending approval of these requests. Steve agreed, having reviewed both requests. In Mr. DeBoer's case, he had put up a storage shed, not knowing that there was a 15-foot easement. A field check showed that the shed extends roughly five feet into the easement, is causing no problem now, and is not likely to cause a problem in the future. Since the petitioner obtained letters from the required utilities, Steve recommended granting the petition. He added that these petitions need action by the Board of Commissioners as well as by the Drainage Board. K.D. moved that the Drainage Board grant approval to Mr. DeBoer's petition, Ruth seconded, and hearing no objections, the motion carried.

Steve stated that a field check on the petition of Mr. Kurtz showed that the proposed basketball court would be at grade, so it will not affect the drainage in any way. Mr. Kurtz obtained letters from the required utilities regarding the petition, so Steve recommended granting of this petition as well. K.D. motioned to grant approval, Ruth seconded, and the motion carried.

Engineering Review Fees Ordinance

Steve stated that the current Drainage Ordinance contains a provision to allow for ten hours of engineering review at the County's expense per project. These funds are expended primarily on drainage review for new subdivisions. In 2000 when the Drainage Board requested two additional appropriations for engineering review, it was asked by the County Council to investigate the possibility of lowering the number of free hours or dropping them completely.

Steve discussed this with developers and engineers. It equates to \$650.00 additional cost on each development on average, and he recommended that the Drainage Board eliminate the ten hours of review time paid for by the county completely. He added that with the requirements of Phase II Stormwater coming up, the Board will have to continue to expend more money on drainage issues. Checking with the fifteen largest counties in the state, about half charge for review as well as application fees, and about half do not. But based on the seminars and workshops he's attended on Phase II, most of the other Drainage Boards that are affected by Phase II are going to have to move in that direction.

Drainage Board Attorney Doug Masson remarked that in order to pass the Ordinance through on the first reading, they would need to move to waive the second reading. On discussion of the procedure for passage of this Ordinance, Steve stated that historically, the Drainage Board would vote first, then the Board of Commissioners.

K.D. moved that the Drainage Board pass the Hoffman Luhman Busch draft version 1 dated May 31st 2001, Ordinance on Engineering Review Fees. Ruth seconded, and there being no further comment the motion carried.

Having heard no opposition to the motion, K.D. moved that the Board waive the requirement for a second reading of the Ordinance. Ruth seconded, and that motion also carried.

Steve indicated that there would be a review of the process required for passage to ensure that the Board was in compliance regarding this following Ordinance.

ORDINANCE NO. 2001- -CM

WHEREAS, the members of the Board of Commissioners of the County of Tippecanoe, in the State of Indiana are also members of the Tippecanoe County Drainage Board; and

WHEREAS, the members of the Board of Commissioners of the County of Tippecanoe, State of Indiana, did on the 7th day of November, 1988 adopt Ordinance No. 88-40 CM which established "Tippecanoe County, Indiana, A General Ordinance Establishing Storm Drainage and Sediment Control", commonly known as the "Tippecanoe County Drainage Code", and

WHEREAS, the Drainage Code, as amended, now requires that developers submitting plans for approval of the Drainage Board pursuant to the Drainage Code bear a portion of the professional engineering costs incurred in the review thereof by the Surveyor and Drainage Board, and

WHEREAS, the Tippecanoe County Drainage Board has determined that said developers should bear the full cost of such review;

NOW, THEREFORE BE IT ORDAINED AND ENACTED BY the Board of Commissioners of the County of Tippecanoe, State of Indiana, and the Tippecanoe County Drainage Board that:

a. Section 6 g of Ordinance No. 88-40 CM be amended to read as follows:

6 g. Engineering Review Fees:

As a condition of and prior to approval of final drainage plans by the Drainage Board, the applicant shall pay to the Tippecanoe County Drainage Board the actual costs incurred by the Drainage Board and the Tippecanoe County Surveyor in respect to the review of all preliminary plans, final plans and/or construction plans by a licensed professional engineer.

The Tippecanoe County Surveyor shall furnish to the applicant in writing at least ten (10) days prior to the meeting at which the Board is scheduled to consider approval of applicant's final drainage plan a written statement specifying the total cost of professional engineering fees incurred by the Drainage Board in connection with the review of applicant's plans, including the total hours expended by such professional engineer, the cost per hour incurred by the Drainage Board and/or the Tippecanoe County Surveyor with respect thereto, and the amount required to be paid by applicant prior to approval of final drainage plans by the Drainage Board. As a condition of and prior to approval of final drainage plans by the Drainage Board, applicant shall pay to the Tippecanoe County Treasurer the sum set forth in said statement representing the cost of professional engineering services incurred by the Drainage Board and/or Tippecanoe County Surveyor in connection with the review of applicant's preliminary and final drainage plans and accompanying information and data.

b. This Ordinance shall become effective as of July 1, 2001, after its final passage, approval and publication as required by law.

Passed on first reading at Lafayette, Indiana on this ____ day of _____, 2001.

BOARD OF COMMISSIONERS
OF THE COUNTY OF TIPPECANOE
STATE OF INDIANA

VOTE:

Ruth Shedd, President

John Knochel, Vice President

KD Benson, Member

ATTEST:

Robert Plantenga, Auditor

Adopted and approved by the Tippecanoe County Drainage Board at Lafayette, Indiana, on second reading this ____ day of
, 2001.

TIPPECANOE COUNTY DRAINAGE BOARD

VOTE:

By:

John Knochel, President

Ruth Shedd, Member

KD Benson, Member

ATTEST:

Secretary

**Cuppy-McClure Regulated Drain
Assessment**

Steve related that as a result of some drainage problems on the Cuppy-McClure branch of the Hadley Lake Drain, a review of the file was begun. It showed that back in the late 1980's and early 1990's, there was a petition to establish the Hadley Lake Regulated Drain which was processed and approved with all the required hearings. That drain had three branches, one of which was the outlet of Hadley Lake, which was constructed; the second was the Baker-Dempsey, which the Board discussed earlier for Sagamore Pines. The third was the Cuppy-McClure, which passes through the Great Lakes site. Assessments have been set up on the first two branches, but Steve found that assessment had never been put on for the third, the Cuppy-McClure branch. In talking with former County Surveyor Mike Spencer, Steve learned that they had decided at the time of the petition to wait until the Cuppy-McClure project was completed. It has been completed, the improvements are in and have been accepted. He felt that it had probably been an oversight that the assessment for this portion of the Hadley Lake Drain did not get made effective.

Drainage Board Attorney Dave Luhman gave an opinion to Steve that the proper procedures had been followed, that it was just a matter of the Surveyor reporting that the project had been completed and for the Board to take action to go ahead and make the assessment effective. Steve recommended making the assessment effective because repairs to the tile were necessary recently, and the maintenance fund was established by order at \$5.00 per acre and \$10.00 per platted lot benefited by the project. Mr. Luhman said in electronic mail that the Commissioners need to do an adoption of finding. If the Commissioners are agreeable to making the assessment effective, Steve will have something prepared for the next meeting to take action on.

K.D. asked if the Board were doing this today, would the level have been \$10.00 rather than \$5.00. Steve replied that the \$5.00 assessment would be sufficient. He indicated that it might have been slightly higher than \$5.00 if it were being done today. The Surveyor does a report based on his estimate of what it will take to do any improvement and/or maintenance. With the three branches, his opinion is that this is probably adequate.

K.D. also expressed concern since the average homeowner moves every five years, whether there is a whole new group of people there. She asked whether the Board has to go through renotifying landowners. Steve indicated that Mr. Luhman's opinion had been that renotification was not necessary, since this was a situation where property owners had been properly notified and were simply not billed for taxes that were due, through an oversight by the county.

On further discussion, it was decided that notice to the taxpayers of the assessment should and could be given prior to any tax billing. This is not the same process as required for the original establishment of the Regulated Drain, and can be done with minimal expense.

No further action is required by the Board until the next meeting, it having given Steve Murray approval to proceed.

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
October 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 Thursday October 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 September 5th Minutes

KD Benson made a motion to approve the minutes from the September 5th regular Drainage Board Meeting. Ruth Shedd seconded the motion and hearing no opposition, the motion carried.

China Grove Planned Development

Paul Coutts from C & S Engineering appeared to request final approval and a variance for China Grove Planned Development.

With the aid of a vicinity map given to Board members, Paul showed the location of the Planned Development, reached via County Road 300 East, north of the town of Battleground. The land being developed used to be known as the "Haley Land".

Paul termed the project an 'oversized parcelization'. There are nine lots averaging right around two acres apiece. Lot 1 has an existing farmhouse and a private drive which he described. The nine lots are situated around the private drive. Some land was taken out of the Planned Development and conveyed to the adjacent owners through Exemption E. There are areas for detention storage south of and north of the private drive. The vast majority of the land to the eastern part of the 'T' he described in the private drive drains in a northeasterly direction into a draw. He reported that they had detention storage planned for that area. While there was some uncontrolled release in the design, he remarked that they had balanced that off and overcompensated for it with storage in the two detention areas. They were utilizing the natural landscape by putting the drive in a location where it acts as a little dam to hold the water back. Lot 2 has a drive planned that will also act as something of a dam for the storage facility there.

Paul went on to describe the more unusual part of the development, an area that has many beautiful large hardwood trees. The developer is putting together a tree conservation area roughly equivalent to four football fields in size, with easements so that nobody will be allowed to cut trees or alter the area from its natural state. He requested a waiver from the Board so that they didn't have to provide detention storage for the four lots adjacent to the conservation area. The flow is essentially sheet drainage towards the back of the lots. Notification of landowners to the north had been done as requested, and there is no legal drain before the water makes its way into Burnett's Creek.

County Surveyor Steve Murray expressed support for the variance, pending receipt of the conservation easement, stating that it is a very good concept given the location of the land. He said that if Drainage Board Attorney Dave Luhman agreed, the first thing to do would be to grant the variance requested, subject to the tree conservation easement.

Commissioner and Board member KD Benson asked if the easement would go in as a restrictive covenant, and Mr. Luhman answered that it would be recorded, and would be binding on any subsequent purchasers. She then asked for and received clarification that the ground drains into the trees. Paul went on, stating that there was a steep slope leading to a meandering ravine stream, and Steve added that as far as water quality goes, the best situation is to have natural vegetation as proposed. Regrading and detention would have likely done more damage than good.

KD asked what was due west of China Grove. There is a development called Battlefield Heights which is being marketed as Shawnee Ridge, which also received a variance for some direct release into the same overall ravine system which eventually goes to Burnett's Creek.

KD made a motion to grant a variance for direct release rather than onsite storage/detention for the four lots to the west, on the condition of receipt of the documents for the tree conservation easements. Ruth Shedd seconded, and hearing no opposition, the motion carried.

Steve Murray stated a recommendation for final drainage approval for China Grove subject to conditions on the September 27th 2001 Burke memo, except for condition 2, which would no longer be necessary. KD made another motion to grant final Drainage Board approval for China Grove Planned Development as recommended with conditions 1,3,4, and 5. Ruth seconded, and this motion likewise carried.

University Place Planned Development

Mike Wylie from the Schneider Corporation appeared to request final Drainage Board approval for University Place Planned Development, Phase I. With the aid of a site plan, he showed the location to the north of Lindberg Road and Blackbird Farms, to the west of the Celery Marsh, and to the east of Willowbrook Apartments. This project was being planned in phases. The second and final phases will abut the student housing off of Cumberland Avenue to the north.

The proposal is for a retirement community with a multi-story large facility that's closest to Lindberg Road. It will vary from one to three stories with an underground parking garage in the first phase of construction. The first phase of construction was to be in an area of approximately 28 acres. The total property is 65 acres. The next phase of construction will be additional cottages and so forth to the north.

Three detention basins on site were proposed. Two wet ponds were described as being up front near Lindberg Road. They will capture water that is headed south and will discharge into the infrastructure planned for the Lindberg Road project that is currently under construction. The third pond will be located adjacent to the cottages and will capture water that is coming through their site which has been previously approved with Willowbrook Apartments for discharging offsite water through their existing system. The next phase will include an aquatic filter and everything will then go to the Celery Marsh.

Mike stated that they had worked with Christopher Burke's office, receiving a letter recommending conditional approval, and that they were in agreement with the conditions. He also stated that they had worked with the City Of West Lafayette towards getting their approval as well, the Planned Development currently being the western border of the corporate limits of the City. He stated that their discharge was going outside city limits, through the County and to a Regulated Drain. Steve Murray said that was the reason they were appearing before the Drainage Board. There had been a few developments in that area that either drained to the Celery Marsh and the Cuppy-McClure Regulated Drain. The Board reviews these developments to ensure there will be no negative impact on County drainage, and in this case there will not be such an impact. He also stated that approval by the City would be required as well.

KD asked where the two southern detention ponds outletted, receiving the answer that the water goes across the road, through Blackbird Farms, across the Purdue property towards the railroad tracks to the west.

KD made a motion for approval with the conditions specified on the September 28th 2001 Burke memo. Ruth Shedd seconded, and the motion carried without further comment.

Hickory Hills Subdivision Phase I

Bob Grove appeared on behalf of Eagle's Nest Corporation to request final approval for Hickory Hills Subdivision Phase I. He cited the October 2nd Burke memo which recommended final approval with conditions. He felt that one of the conditions deserved comment.

Condition number 4 expressed concern with the proposed detention basin. He stated that the first phase detention basin would provide detention for some areas that would later be served by a detention/stormwater system to be constructed to the east as part of Phase II.

In the interim he reported, they do have a small watershed that heads in the direction of their basin. He felt the Drainage Board Engineering Consultant was concerned that some of this water would make it into the development's detention basin, which is sized only for the developed land, not undeveloped land.

He proposed a solution involving the cutting of a temporary swale to carry the water from the undeveloped watershed along the edge of the gas line easement, and into an existing ravine which joins the main ravine system at the north edge of the property. He added that both of these ravines have silt dams in them. Once construction on Phase II starts, the temporary swale would be taken out and the water would be taken to the east. He indicated that they would send a plan to the County Surveyor to show that.

Steve Murray stated he and the consultant were prepared to recommend final approval, subject to the conditions listed on the Burke memo of September 26th. Drainage Board Engineering Consultant Dave Eichelberger added that with offsite water,

the standard was to either size to accept the water, or to route it around the site altogether. As he understood the plan, the intent was to route the water around. Mr. Grove specified that they had installed a rock silt dam in the ravine in question. Steve suggested that Bob also show the location of the old Hickory Hills and Pine View Lane, and Bob did so.

KD asked for clarification on condition one, and Steve clarified by saying that the rerouting of water from undeveloped land would address that, and that documentation of that plan was what was required to satisfy that condition.

KD made a motion to grant final approval subject to the conditions on the October 2nd Burke memo, Ruth Shedd seconded, and there being no further discussion, the motion carried.

Other Business

KD Benson reported for the record that the three Commissioners received a very nice letter from Pastor Steven Viars commending the Surveyor's Office, and Drainage Board Executive Secretary Robert Evans in particular. In the letter, he commented that the difference in the way Tippecanoe County handled permitting and the way other counties did so was notable, and that he appreciated all the cooperation. Commissioner Benson provided a copy of the letter to County Surveyor Steve Murray, and President Knochel directed that note be made of receipt of the letter and that it was addressed at the Drainage Board meeting.

KD also asked the status of the request made by Red Strange at the September meeting for a letter from the Board. Steve answered that we would be providing a copy of the signed minutes from that meeting when they became available.

Steve then announced that a meeting had been scheduled for October 16th at 3:30 pm for the County Council and the City Councils of Lafayette and West Lafayette for a presentation on Phase II Stormwater NPDES in anticipation of the fact that they would need to request funds out of EDIT from the County Council to hire Christopher Burke Engineering to get the permit and plan in place and get it filed. Purdue University and both cities are interested and in line for all the entities to work together to get a permit as co-permittees. He requested assistance in encouraging County Council members to attend since it is a fairly involved and technical issue.

At an earlier meeting of the Mayors, representatives from Purdue, and Commissioners Shedd and Knochel, there was general agreement on the direction to take. Cost was estimated at approximately \$160,000.00. Each of the entities would contribute a share based on population and geographical area. Steve added that the other entities had other funds available for this purpose, and the County would need to go for additional appropriations to meet its obligations.

KD Benson then moved to adjourn the meeting, Ruth Shedd seconded, and there being no objection, the meeting adjourned.

John Knochel, President

KD Benson, Vice President

Robert Evans, Secretary

Ruth E. Shedd, Member

Tippecanoe County Drainage Board
Minutes
July 3, 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 and Robert Evans.

Approval of June 6 Minutes

Ruth Shedd made the motion to approve the June 6, 2002 minutes, with John Knochel seconding. The being no objections, the motion carried and the minutes were approved.

Montgomery County Joint Drains

Montgomery County Commissioner Bill McCormick and Montgomery County Surveyor Larry Utz appeared before the Board to discuss Joint Drains between the two Counties. Larry Utz informed the Board in reference to the Rebecca Grimes Ditch that the Montgomery County Drainage Board had waived their rights in 1974, according to their records. Presently there were tile holes on this Drain in their county and he asked the status of the fund balance. Steve reviewed the present balance of the fund and the route of the Rebecca Grimes tile. The balance of the **Rebecca Grimes** ditch was in the red due to maintenance repairs exceeding the assessments collected. He added that this was unfortunately true of several Drains throughout the County at present. He stated there was another Grimes Ditch crossing over county lines, however this drain did not have a maintenance fund. He stated his office would do a review of Regulated Drains with maintenance assessments in the future, and those drains needing an increase of assessment would be presented to the Board for action. A number of the drains' yearly assessments should be increased to accommodate rising costs of maintenance, and a drain could be vacated if landowners affected were unwilling to accept the increase.

He then reviewed the process of notification for Joint Drains' upcoming yearly assessments with adjoining Counties. Steve asked Larry if there were any other concerns he may have had. Larry stated the Martin Gray Ditch was in pretty good shape. Steve stated the **Kirkpatrick One** was in good shape due to maintenance work previously done on the Tippecanoe County side. The **Fugate Ditch** was recently surveyed, and north of 1200 South in Tippecanoe County approximately 1000 feet of blown out tile existed, which had resulted in an open ditch.

Commissioner Bill Montgomery then spoke to the Board and stated the correspondence in 1974 from Tippecanoe County on the **Rebecca Grimes Ditch** requested Montgomery County waive their rights to participate on a Joint Board. The Drainage Board from Montgomery County was unsure as to whether a response was sent. Steve stated he would check the records and inform them of any findings. Steve added while an adjoining County may have waived their rights on a particular drain, he believed it prudent to inform them of any major work done on a drain. Regarding Joint Drains and due to the size of acreage involved in their County, Bill thought it would be wise to waive rights where applicable. As President of Montgomery County Drainage Board, he requested a letter from this Board suggesting a waiver of rights pertaining to the Leader-Newton Joint Drain. He would submit it to the Montgomery County Drainage Board at their next meeting and respond thereafter. This drain had the majority of benefited land in Tippecanoe County with approximately 72 acres benefited in Montgomery County. In reference to raising an assessment rate, Steve stated regardless of rights waived, a Joint Board meeting might be necessary. Steve then confirmed a letter concerning the **Leader-Newton Drain** would be mailed in time to present at their next Drainage Board's meeting. Bill stated drains that had a balanced watershed between the counties could be discussed at a later date.

Steve spoke regarding the **John Mclaughlin Drain**. A Tri-County Drain between Tippecanoe, Clinton and Montgomery Counties, it had been in litigation for the last eight to ten years. He asked the Drainage Board Attorney to check the status of the litigation. Benton County Commissioner Bill McCormick and Surveyor Larry Utz thanked the Board and Surveyor for the time allotted to present their concerns.

Lilly May Estates

Richard Fidler, Surveyor of Indianapolis Indiana, appeared before the Board on behalf of the developer Greg Weilbaker and owner Mr. Frank Howard to present Lilly May Estates Subdivision for conditional approval. The proposed project was located on the west side of State Road 25, approximately one and one quarter of a mile north of I-65 and just north of the NorthBrook Subdivision in Fairfield Township. The site consisted of 18.48 acres and included 21 single-family residential lots. The Area Plan Commission approved the preliminary plat for the project on August 15, 2001.

The first waiver requested concerned the proposed onsite dry detention. Mr. Fidler provided the Board with Exhibit B, a photograph of onsite dry detention, taken in Marion County. He further explained the lots in the picture were used passively as a recreation area and were wet only on occasion. He also noted, as it had been a very wet spring, the area shown in the exhibit had not experienced any standing water. He felt the Lilly Mae Estates' dry detention site would be comparable if not better than the exhibit. The second waiver requested concerned the required timeframe of pond drainage. The submitted calculations showed only two and one-half inches of complying with the present Ordinance. The third waiver requested was the maximum depth allowed by the Ordinance. The maximum depth on the site is 5.8 feet, which is 1.8 feet above the maximum allowable depth of four feet for dry detention facilities. The proposed site rests upon fifty feet of sand and gravel, and the applicant was confident this would indeed help in drainage of the site. Videotape taken by Mr. Howard was provided to the Surveyor and Engineers for their viewing prior to the meeting. This tape showed drainage onsite after a considerable rainfall, which resulted in very little if any standing water. The applicant felt this was due to the soil condition, and while the drainage computations showed four to five feet of water on this site, the applicant felt soil conditions would ensure this was rarely the case. The detention would be largely limited to the back of Lots 1,2,3,4, and 6, touch the swale in Lot 7 and briefly touch the South corner of Lot 5. Several well logs from the area were submitted to the Engineers to verify the fifty to sixty feet of sand and gravel. Drainage Board Engineering Consultant Dave Eichelberger confirmed the borings were received and indicated sand and gravel onsite. Commissioner John Knochel stated he had lived in that area most of his life and had never seen water pond on the proposed site.

Steve stated he was prepared to recommend final approval with conditions as stated on the June 28, 2002 Burke memo. Ruth made the motion of approval for the three waivers, with the third waiver subject to the Surveyor's approval. John Knochel seconded the motion. The motion carried. Ruth Shedd made the motion of final approval for Lilly May Estates with the conditions stated on the June 28, 2002 Burke memo, and John Knochel seconded the motion. As there were no objections the motion carried.

Purdue Research Park

James Farny of Bernardin, Lochmueller and Associates appeared before the Board representing the City of West Lafayette regarding the expansion of Purdue Research Park. This was a 64-acre expansion of the existing industrial research park located east of Kent Avenue, south of Kalberer Road and west of Yeager Road in the City of West Lafayette. The drainage of said site ran north, crossed Kalberer Road and into the **Baker-Dempsey Regulated Drain**. The project consisted of 11 building lots and 2 outlots which drained into the Baker-Dempsey Regulated Drain. A 40-acre tract lying south of the site also drained into the Baker-Dempsey Regulated Drain.

The total area under design in the project was approximately 90 acres. A proposed detention lake would be constructed just south of Kalberer Road, with an outlet tied into an existing storm sewer that lay along Kalberer Road. The existing storm sewer pipe was 24 inches in diameter. The outlet structure would be a 2-stage structure, which consisted of a 21-inch primary pipe and a 24-inch secondary pipe. Mr. Farny stated they would comply with Christopher Burke's conditions within the June 27, 2002 memo. The **Baker Dempsey Regulated Drain** is vacated to the south of Kalberer Road. In response to the drainage consultant's inquiry regarding potential for welling on the site, documentation of mitigation had been provided. Approval would be sought from the City of West Lafayette Engineer's office as suggested in the June 27, 2002 Burke memo. Mr. Farny then offered to provide documentation if requested. The project was reviewed by the Board's Engineering consultant to determine the impact on the regulated drain. As they had complied with the county's drainage ordinance, Steve stated the impact on the regulated drain would be nominal.

Steve also stated condition seven in the memo was not applicable to this project, and was a standard condition. Since the site was inside the West Lafayette city limits, it would not be necessary to provide a copy of the restrictive covenants. Discussion was held pertaining to that portion of the Baker-Dempsey Drain which had been vacated. A confirmation would be sought, although Steve felt it had been vacated. He recommended to the Board final approval with conditions based on the June 27, 2002 Burke memo.

Ruth Shedd moved for final approval on Purdue Research Park Phase II Part III with conditions excluding condition number seven in the June 27, 2002 Burke memo. John Knochel seconded the motion. There being no objections, the motion carried.

Wea Township Baseball Fields

Pat Jarboe with T-Bird Design appeared before the Board representing the Wea Township Summer Recreation Board. The proposed site was being leased to the Recreation Board by the Tippecanoe School Corporation. The 20.9-acre development proposed was located on the west side of County Road 150 East, south of County Road 430 South and south of the Wea Ridge campus.

The site was designed so proposed runoff would drain using surface features which follow existing flow paths. This was an agriculture field and portions to be disturbed would be covered with aglime and/or grass for infields of the proposed baseball diamonds. Calculations of the 100-year storm event would be improved from the current condition of the agriculture field. KD was pleased this site was available to the youth for use and commented as such.

Steve recommended final approval with conditions as stated in the June 28, 2002 Burke memo. Ruth made the motion to waive the standard detention requirements as stated in the Burke June 28, 2002 memo, and John Knochel seconded. Ruth Shedd then made the motion for final approval with conditions stated on the June 28, 2002 Burke memo. John Knochel seconded the motion and the motion carried. The motion carried with no objections.

Paramount-Lakeshore Subdivision

Tim Beyer with Vester and Associates appeared before the Board with an exhibit of the proposed Paramount Lakeshore site. This was a 29-acre commercially zoned site located on the north side of U.S. 52 between Morehouse Road and County Road 250 West (McCormick Road). The **Cuppy-McClure Regulated Drain** ran through the southwest portion of the site via a 48-inch concrete pipe. At this time only transportation and stormwater drainage facilities would be constructed to accommodate future lot development. One wet bottom and two dry bottom detention ponds would be constructed onsite. Each pond would drain directly into the **Cuppy-McClure Regulated Drain**. At the north property line a portion of the proposed street would drain through curb inlets into an existing offsite storm sewer within the Lakeshore Subdivision to the north. Two petitions for encroachment pertaining to the **Cuppy-McClure Regulated Drain** had been submitted to the Surveyor. Steve discussed the right of ways with this site, pertaining to future maintenance of the regulated drain. Excavation of the road in the event of possible maintenance on the regulated drain in the future was discussed. Steve stated there had been instances of pavement over regulated drains, and the life of a 48-inch pipe was typically 30-50 years. Dave Eichelberger reiterated it was a relatively new pipe and should have a long design life. There was more of a chance of future maintenance work needed on the proposed street than the drain underneath it.

Ruth Shedd moved for a waiver on the requirements of maximum depth as stated in condition two of the June 28, 2002 memo and John Knochel seconded. The motion carried. Ruth then made a motion for final approval with conditions as stated on the June 28, 2002 Burke memo. John Knochel seconded the motion and the motion carried. The petitions for encroachment were tabled until the August meeting, allowing the Drainage Board Attorney to review them.

Harrison Highlands Phase 1

Tim Beyer with Vester & Associates then spoke on behalf of the developer for Harrison Highlands Subdivision Phase 1. This site was located east of County Road 50W, north of County Road 600N and south of County Road 650N. The overall site was approximately 102 acres to be subdivided into 220 lots. The proposed Phase 1 site was 52 acres and would be subdivided into 122 single-family lots with 2 outlots. Burnett Creek flows through the northwestern portion of the overall site. The northern portion of the site drains directly to the creek. Storm sewers and swales direct a majority of the developed condition runoff to a wet detention pond, which would be constructed within the southeast portion of the site. Tim stated as a result of speaking with the Highway Department, a new ditch would be constructed along the south side of the pond and drain to **Burnetts Creek**.

The runoff from the site and any offsite runoff would be routed through the new ditch to Burnetts Creek. The pond's overall release rate to the creek was in compliance with the Drainage Ordinance. Discussion was held pertaining to the future development and the access to such. Steve asked if the developer would access the future site by crossing the creek. Tim responded the developer had access from 650N as well and had not made the final decision as of yet.

KD asked about the turning lane on 600N to be constructed for this development. Tim assured KD it was in the plans and would be constructed. This would be coordinated with the Highway Department.

KD asked about the frequency of the flooding of the creek and if the plans allowed for sufficient detention of runoff in order to lessen the impact into the creek. Historically Burnett Creek has had flooding problems. Steve stated he had discussed this with the Drainage Board Engineers and was satisfied the developer has complied with the Drainage Ordinance. He felt the drainage construction should help with the flooding problems in the future. Dave Eichelberger stated the flood plain issues had been reviewed as well and confirmed with Tim those issues had been approved by Department of Natural Resources.

Steve recommended final approval with conditions as stated on the July 1, 2002 Burke memo. Ruth Shedd made the motion for final approval with conditions as stated. John Knochel seconded the motion. With no objections, the motion carried.

County Drainage Ordinance- 2002-24-cm

Steve updated the Board on the status of the Revised County Drainage Ordinance. This would be the 2nd reading. The ordinance was approved on the first reading at the last Drainage Board and Commissioners' meetings. Having heard the ordinance read twice, Ruth Shedd moved to suspend reading of the revised Ordinance at this time. John Knochel seconded the motion. The motion carried. Ruth then moved to hear and approve Ordinance 2002-24-cm on second reading. John Knochel seconded the motion. KD asked for comments from the attendees.

Mr. Bill Davis of T-Bird Designs spoke to the Board. Bill agrees with the changes in the Ordinance and felt it was step in the right direction. His concern was the lack of authority over issues such as filling in swales by property owners, broken curbs, and not building to pad grades, etc. He felt the Building Commission should address these issues. However, as a result of some of these problems, the Drainage Board had from time to time dealt with these issues. Discussion was held regarding the Building Commission responsibilities at this time. Inspection is needed to insure the plans are carried out in compliance with the County's ordinances. Steve stated he would discuss with Bill any concerns he might have had before the next Commissioner's meeting on the 15th of July. Steve noted that changes to the ordinance might be made during the process at hand. The ordinance had been sent digitally to Consultants in the County. KD asked for additional comments from the attendees.

The Drainage Board attorney then read the roll call on voting for the County Drainage Ordinance 2002-24-cm into the record. The vote was as follows: John Knochel yes, Ruth Shedd yes, and KD Benson yes.

Bonds

Steve presented a Maintenance Bond for approval. In accepting maintenance bonds the Board was approving the construction of drainage improvements. As clarification he stated the Surveyor's office oversees the construction and the perpetuation in the future. With that said, Construction Maintenance Bond Number 400SR3756 from Atlas Excavating Inc., for \$10,000.00 for Huntington Farms Drainage Swale and pipe was presented to the Board. This bond and a letter on file guaranteed maintenance work on a 4-inch pipe that had been put into a swale previously. The pipe had been cut several times by utility companies in the past. If the pipe did not drain satisfactorily, Atlas would come in and construct a new drainage system through the back of the four or five lots if needed.

Ruth Shedd moved to accept the Construction Maintenance Bond Number 400SR3756 with Atlas Excavating, and John Knochel seconded the motion. There being no objections, the motion carried.

Other Business

Steve updated the Board on the status of the Wabash Valley Feed and Storage site drainage. Several property owners to the south spoke at the last meeting to the Board. Landowner Larry Sturgeon spoke with Steve concerning his drainage problem. Mr. Sturgeon's property was located across from Wabash Valley Feed and Storage and surrounded by Lindberg Village. Steve had assured him his drainage problem should be significantly less, once the Lindberg Village site was completed.

The Highway Department had since gone out and profiled the ditches along Klondike Road and was aware of the general drainage pattern. As plans were developed for the commercial portion of the Lindberg Village site, the drainage construction would be monitored. Steve stated he had spoke with the Drainage Board Engineers regarding those issues. Also Mr. Coulson, developer of the Wabash Valley Feed and Storage had contacted Steve after the last Drainage Board meeting, in regards to providing an outlet tile for the Wabash Valley Feed and Storage site. The project was approved at the last meeting provided Mr. Coulson worked out a written agreement with landowners downstream of the site.

Since that time, Mr. Coulson had worked out an agreement with a property owner to the east. Steve felt he had complied with the basic requirement of providing an outlet pipe for the site. However, Steve's concern was the plan had been approved with the condition as stated, and felt the Board should be aware of such.

As there was no other business to be discussed, Ruth Shedd made the motion to adjourn and John Knochel seconded. The meeting was adjourned.

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
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
January 3, 2007
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President KD Benson, 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 Project Manager Zachariah Beasley were in attendance. Member Ruth Shedd was absent.

Approval of Minutes

John Knochel made a motion to approve the December 6, 2006 Regular Drainage Board Meeting minutes as written. KD Benson seconded the motion. The December 6, 2006 Regular Drainage Board meeting minutes were approved as written.

Election of Officers

Drainage Board Attorney Dave Luhman accepted nominations for 2007 officers of the Tippecanoe County Drainage Board. KD Benson nominated John Knochel as President for 2007. There were no other nominations. John Knochel was elected President of the Drainage Board with no objections. The Attorney then requested a motion for Vice President. John Knochel nominated Ruth Shedd as Vice President. KD Benson seconded the nomination. Ruth Shedd was elected Vice President in absentia. John Knochel made a motion to appoint Brenda Garrison as the 2007 Drainage Board Secretary. KD Benson seconded the motion. Brenda Garrison was appointed Drainage Board Secretary for 2007.

Contracts for the Drainage Board Attorney as well as Engineer Consultant would be presented during the February Meeting.

Concord Plaza Phase One Lots 3A & 3B

Brandon Fulk of Schneider Corporation appeared before the Board to request final approval for Concord Plaza Phase One Lots 3A and 3B. The site consisted of approximately 1.44 acres - known as Outlot 3 and located at the corner of County Road 350 South and County Road 250 East (Concord Road). Outlot 3 was subdivided into two lots (3A and 3B) and would have a new storm system connected to the main storm sewer constructed at the Wal-Mart Super Center site. The runoff would then discharge to a detention facility also constructed at the WalMart site. Brandon stated the detention facility was constructed to the South of the Wal-Mart building as part of the Master Drainage Plan for the overall Subdivision. Stormwater quantity and quality rules were met at that time. He stated Lot 3B would not be developed at this time and they agreed with the conditions listed on the December 22, 2006 Burke memo. He then requested final approval with the stated conditions at that time.

The Surveyor asked which portion of the existing Stormwater sewer system for Wal-Mart location would the Stormwater end up in. Brandon stated; it would run down a private drive to the west side of WalMart and into the detention facility. In response to the Surveyor, Brandon confirmed it would not be located in the portion which contained the relocated Branch of the J.N. Kirkpatrick Regulated Drain. He stated it was Wal-Mart's responsibility to provide any drainage information for the site. In response to KD, Steve stated he knew of one instance where construction was not done as planned. They would monitor this as construction progressed. John Knochel asked for public comment and there was none.

The Surveyor recommended final approval with the conditions as listed on the December 22, 2006 Burke memo. KD Benson made a motion to grant final approval with the conditions as listed on the December 22, 2006 Burke memo. John Knochel seconded the motion. Concord Plaza Phase One Lots 3A & 3B was granted final approval with conditions as stated.

Unity Oncology Expansion/Faith Hope and Love Center

Brandon Fulk with Schneider Engineering appeared before the Board to request final approval for the Unity Oncology Expansion aka Faith Hope and Love project. The 1.5 acre site located on the east side of Creasy Lane (County Road 350 East) south of Amelia Drive and within the City of Lafayette, was known as Lot 2 of the Crosspointe Commercial Subdivision. The medical building would be expanded in order to provide space for additional radiation equipment. The proposed development would require an Encroachment on the Treece Meadows Relief Drain Easement. The existing storm

sewer system would be utilized with a slight modification due to the expansion of the building extending into the Treece Meadows Relief Drain Easement. The site has a direct outlet to said Relief Drain (which is part of the Wilson Branch of the Elliott Drain) and tributary to the Wilson Branch Regional Detention Facility. Brandon stated the existing two lane drive would be maintained, however five existing parking spaces would be removed. He was requesting approval of a Maintenance Agreement regarding the Treece Meadows Relief Drain as well. The agreement was for the maintenance from the top of the bank of the Treece Meadows Relief Drain to the existing concrete swale (vegetation) - from Creasy Lane to Amelia Ave. As development occurred to the south and the east the Relief Drain would be maintained by any future development in that location at that time. He stated a Petition for Encroachment was previously submitted to the Surveyor for review. In addition, a Vacation of a Regulated Drain Easement regarding the location of the proposed building expansion with a five foot buffer beyond the proposed footprint was requested. He then requested final approval with the conditions as stated on the December 21, 2006 Burke memo along with the approval of a Vacation of the Easement, a Maintenance Agreement and Encroachment Petition. Responding to the Surveyor's inquiry, Brandon stated the dumpster and dumpster pad would be removed and relocated to the southwest corner of the existing parking lot. The Attorney stated the requests would require Drainage Board approval only. He noted while the Encroachment allowed for maintenance on the Drain, if any damage occurred to the parking lot during required maintenance, it would be at the owner/developer's expense. John Knochel asked for public comment and there was none. In response to K D's inquiry, the Surveyor stated his office tried to maintain a twenty-three foot strip (particularly on Urban Drains) from top of bank on one side of a drain - at the least - to enable an excavator to perform maintenance work.

Subject to filing of the legal descriptions for the Maintenance Agreement, the appropriate Encroachment Petition, and Vacation Request (to include recording of those documents), the Surveyor recommended final approval along with the conditions as listed on the December 21, 2006 Burke memo. KD Benson made a motion to grant the proposed Maintenance Agreement, Encroachment and Vacation of Easement subject to submittal of their legal descriptions. John Knochel seconded the motion. KD Benson made a motion to grant final approval with conditions as stated in the December 21, 2006 Burke memo. John Knochel seconded the motion. The Unity Oncology Expansion Project aka Faith Hope and Love Center was granted final approval with the conditions as stated.

Campus Suites-Preliminary Approval

Paul Dietz from Vester and Associates appeared before the Board to request preliminary approval of Campus Suites. The site consisted of approximately 19.9 acres located north of U.S. 52 and Paramount Drive and west of Lakeshore Subdivision. The site was south of Hadley Lake Regulated Drain. Approximately 4 acres in the northern portion of the site lied within the floodplain and would remain undisturbed. (The site's drainage plan was divided by the following: PA1= Center of site PA2= the Southwest corner of the site PA3= North portion of the site)

Paul stated the site would have a direct outlet to the Dempsey Baker Drain, an indirect outlet to the Cuppy - McClure Drain and runoff would eventually drain to the Hadley Lake Regulated Drain. A detention storage waiver and treatment exemption was requested. He stated they agreed to the conditions listed on the December 29, 2006 Burke memo. In response to K D's inquiry, Paul stated the proposed pond was a wet-bottom pond. In response to K D's inquiry, the Attorney stated notification to downstream owners was required before final approval was granted. KD expressed concern regarding the parking lot area's runoff. Dave Eichelberger stated a variance was requested for that area.

The Surveyor stated he had discussed the project site with the Board's Engineer Consultant and they were not prepared today to recommend granting a variance or encroachment. He stated at this time preliminary approval was requested only. Dave Eichelberger reiterated a floodplain was associated with the site. Everything the developer was putting in was outside the floodplain. Any wetlands associated with site were located in the northern portion and they were staying out of the wetlands. There was no offsite areas tributary to the site and no downstream capacity issues. Request for the Variances should not be addressed at this time as the design for their proposed filter strips etc. had not been submitted to date for review. John Knochel asked for public comment and there was none.

The Surveyor recommended preliminary approval with the conditions as stated on the December 29, 2006 Burke memo and NOT to grant any variances or encroachments at this time. KD Benson made a motion to grant Preliminary approval only. John Knochel seconded the motion. Campus Suites was granted Preliminary Approval only at this time.

Leader Newton Regulated Drain

Regarding the pending quote acceptance for the Leader Newton Regulated Drain waterway and tile replacement, the Surveyor informed the Board the quote from Lauramie Excavating in the amount of \$57,706.00 was received after the stated

time requirement therefore could not be accepted. A quote from Birge Farm Drainage in the amount of \$74,833.90 was received before the date and time requirement.

Therefore after tabulation and review he recommended the Board accept Birge Farm Drainage's quote in the amount of \$74,833.90 for the Leader Newton Regulated Drain waterway and tile replacement. KD Benson made a motion to accept the quote submitted by Birge Farm Drainage in the amount of \$74,833.90. John Knochel seconded the motion. Birge Farm Drainage quote of \$74,833.90 for the Leader Newton Regulated Drain waterway and tile replacement was 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
April 4, 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 March 7, 2007 Regular Drainage Board minutes as written. KD noted a couple revisions to be made to the minutes. KD Benson made a motion to amend the minutes to reflect the correct spelling of landowner Roger Verhey's last name (as shown here) and indicate Paul Dietz had stated he notified landowners concerning the Winding Creek Section 5 & 6 project before the board. She then seconded the motion with amendments as stated. The March 7, 2007 Drainage Board meeting minutes were approved with the amendment.

Campus Suites

Paul Dietz from Vester and Associates appeared before the Board to present Campus Suites for final approval. The site consisted of approximately 20 acres and was located north of U.S. 52 south of Hadley Lake. Approximately 4 acres of the site lied within the flood plain and would not be disturbed. The site would accommodate a clubhouse, maintenance building, nine apartment buildings and a mail kiosk. The majority of the site drained north to the Dempsey Baker Drain and Hadley Lake while the remaining portion drained south through Paramount Lakeshore Subdivision to the Cuppy McClure Drain with two exceptions. Approximately 1.7 acres would continue to go south and the net flow would not be increased. Approximately 1.2 acres to the north would flow directly north through a wooded and shrub area to Hadley Lake.

Paul stated he was requesting two variances for this project. The first variance requested regarded the Post Construction Stormwater Quality requirement. The 1.7 acres draining south was treated with a filter strip to 48% before exiting the site to an existing detention pond at Paramount Lakeshore Subdivision. The 1.2 acres which drained north received an uncalculated amount of treatment through the stated trees and shrub area before reaching Hadley Lake. The approximately 13 acres within the site was subject to "double treatment" with Stormwater inserts and an extended dry detention pond to achieve 94%. The overall weighed treatment factor was 77%; this was just short of the 80% required by Ordinance.

A second variance was requested regarded building pad elevation requirements. The Ordinance required building pads to be 1.25 feet or higher above the invert of the emergency flow path. Due to the handicap accessibility design, a modest grade was required from the parking lot to the building. In many cases the buildings were right on top of the parking lots. The handicap access could not be obtained to achieve the required differential and adhere to the building pad elevation requirement. At the C11 inlet and Inlet 2 affecting Building 6 location there are 1.25 feet to the first floor but not to the pads. On top of the pad elevation would be an additional eight inches to the first floor. Beehive #1 affects Building 2 and has the same circumstance. Most of the drainage on the site drained to structures 9 & 12. The buildings surrounding those structures met the requirements of the Ordinance. Paul stated he concurred with the March 27, 2007 Burke memo and requested the variances as well as final approval.

Responding to John's inquiry, Paul discussed the building pad elevations. Concerning the Clubhouse, he stated while the elevation would be approximately a foot higher than the ponded water elevation it still would not reach the required 1.25 elevations. Due to handicap access requirements and topography the building grades could not be higher. Responding to Dave Luhman's inquiry, Paul stated the Clubhouse and Building's 2 & 6 did not meet the building pad elevation requirement. (Building 2 & 6 were residential buildings.) Paul stated the ramp had to have a certain grade and to meet the pad requirements there has to be a certain elevation below the building. On most of the buildings the pad elevation requirement was met, however they were unable to meet that requirement on Buildings 2&6 and the Clubhouse. KD asked why a parking space could not be turned into a handicap ramp. Joe Bumbleburg (Attorney for Tom Lang Developer) stated it was not a question of loosing one parking space. If the building was moved you would loose the parking spaces for the entire length of

the building. So you would lose a whole frontage of parking spaces. He continued that the balancing act was as follows: One- has a system been constructed which met the spirit of the Ordinance, Two – have you placed it and made it work with the handicap situation which was very important, Three - the creation of parking spaces for this area were constructed as a balancing act between the competing interests. He stated he felt Vesters and Associates had done a good job with the interests at hand. Responding to Dave Luhman's inquiry, Paul stated the eight inches between the pad and the first floor elevation would consist of solid concrete. There would be no construction or mechanical materials located within those eight inches. Dave Eichelberger stated the following: The Ordinance required an emergency routing path that has a building pad one foot above the one hundred year elevation. If you do not want to calculate what the one hundred year elevation is then you have to put it one and half feet above the breakout elevation at the minimum. A few areas have less than one and half feet of feed board between the pad and where the water breaks out. One could calculate the elevation or use the table within the ordinance. Five of the eight areas met the requirement and two areas (which were minor) do not.

The Surveyor stated he had a concern of liability with this issue as well. Responding to KD's inquiry, the Surveyor noted he was not aware of any problems in the 2004 rainfall event other than the northern edge which was located within the flood plain. He confirmed that Hadley Lake did not overflow during the 2004 rainfall event. Indian Creek flooded as it jumped its banks and ran south and east into Hadley Lake. The Surveyor stated he concurred with the Board Attorney that the owners of Hadley Lake was not required to be notified of today's meeting in this case. KD brought up the issue of the trails in that location. Mr. Bumbleburg stated the trails were a non issue at this point as he had been in contact with the Superintendent concerning this project. John Knochel asked for public comment. There was none.

The Surveyor recommended approval for Variance #1 regarding the post construction stormwater runoff with the added condition of an addition to the Operation and Maintenance Manual regarding required periodic maintenance of the area to the north. The addition should state this area (which is currently vegetated) would be undisturbed and frequently mowed (2-3 times yearly). Ruth Shedd made a motion to grant Variance #1 with the added condition of the addition to the Operation and Maintenance Manual for the required periodic maintenance of the area to the north (which is currently vegetated). This area would remain undisturbed and is to be frequently mowed (2-3 times yearly).

The Surveyor stated he could not recommend approval of Variance #2 regarding the minimal freeboard requirement as it was technically out of compliance with the Ordinance. John Knochel stated he felt the Board had granted Variances previously on technicalities. In this case and after the explanation by Mr. Dietz he felt the variance could be accepted. He agreed with Commissioner Shedd concerning the need for an agreement which would not hold the Drainage Board liable in the future for the approval of the Variance. Dave Luhman informed the Board the developer was willing to indemnify and hold the County and Drainage Board harmless if the exemption was granted. The Variance could be approved subject to this. The Surveyor then stated he would be comfortable with that. KD Benson stated she preferred they build one less building and meet the Ordinance guidelines. John Knochel asked for those opposed. KD Benson indicated her opposition. On motion by Ruth Shedd, seconded by KD Benson, the Variance #2 was approved subject to the condition that the owner indemnifies and holds the County and the Drainage Board harmless from any damages, costs or expenses arising out of or related to the grant of such Variance. Mr. Bumbleburg advised the Board of the owner's acceptance of and agreement to such condition.

The Surveyor recommended final approval with the conditions as stated on the March 27, 2007 Burke Review memo. Responding to Attorney Luhman's inquiry, the Surveyor stated the third Variance under Stormwater Quantity within the memo was not required as it met the exemption criteria listed in Chapter 3 of the Ordinance. Ruth Shedd made a motion to grant final approval on Campus Suites with the conditions as stated on the March 27, 2007 Burke memo. KD Benson seconded the motion. Campus Suites was granted final approval with conditions as stated.

Other Business

There was no other business presented to the Board.

Public Comment

Norm Bennett landowner at 952 Kerber Road West Lafayette Indiana 47906 approached the Board to inquire about the status of the Mackey-Whaley tile obstruction investigation. He owned property that outlet to the field tile in question. He expressed his desire for the County to make this tile a County Regulated Drain. The wet area was now 6-8 inches from State Road 26 at this time. He expressed concern the State may raise the road elevation at that location and this would flood his field. Responding to KD, the Surveyor stated he had three options: 1- Recommend acceptance as a New Regulated Drain and the Establishment of a County Maintenance Fund 2- Recommend the acceptance as a New Regulated Drain and the

Establishment of a County Maintenance AND County Reconstruction Fund 3- He could also report it was not a public utility and that it should not be accepted as a County Regulated Drain. He explained they have been investigating the tile for the last year plus and it was an ongoing investigation. He reviewed the area for the Board on GIS. They have been unable to get the water table down to review the tile system's condition. He informed the Board some tile repairs were made which Mr. Fred Whaley agreed to and has since paid for. Monies from the General Improvement fund have also been utilized during the investigation process. He reiterated an absolute solution to the problem has not been found. He did not want to recommend a reconstruction if in fact part of the tile system was still salvageable and noted his final report has yet to be presented to the Board. KD stated if something was not done a row of homes in that location would not be usable and the potential for additional homes being flooded was evident. One home had already been foreclosed upon due to the situation at hand. The Board Attorney stated a personal representative of an estate has the authority to act upon the estates interest. The Surveyor noted Mr. Fred Whaley had visited the office within the past week and they continue to be in contact with him. KD asked if the Surveyor could inquire if he- Mr. Fred Whaley would be willing to go ahead and make the necessary repairs. The Surveyor stated historically the property owner (Mr. Fred Whaley's brother-in-law) had refused to do any tile repair, which had resulted in the problem at hand. Responding to KD's suggestion, the Surveyor stated he would speak with Mr. Fred Whaley concerning the issue.

As there was no other public comment, Ruth Shedd 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
June 6, 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 LLC.

Approval of Minutes

John Knochel made a motion to approve the May 2, 2012 Regular Meeting and Hearing minutes as written. Tom Murtaugh seconded the motion. The May 2, 2012 Regular Meeting and Hearing meeting minutes were approved as written.

Faith West PD

Justin Frazier of TBIRD Designs appeared before the Board and requested final approval for the Faith West Planned Development. The 6.39 acre site was located within the City of West Lafayette Boundary, more specifically on the east side of Northwestern Avenue (aka US 231) north of Lindberg Road. The Family Inn was previously located there. The site's drainage only would be reviewed by the Drainage Board. Justin stated the tract was divided into two lots, with Faith West PD located on Lot 1. The City of West Lafayette had jurisdiction over the project. The majority of the site drained northwest to a 4x4 concrete box culvert under Northwestern Ave. Drainage for this site was included in the overall drainage design for the newly constructed KCB Water Quality Improvement Phase 1 (series of three water quality ponds) project located directly across from this tract, on the west side of Northwestern Ave. Two 24" storm sewers also located on the west side of Northwestern across from the site would be utilized for Faith West Development runoff. The project would have an indirect outlet to the Cuppy McClure drain. Responding to the Surveyor's inquiry, Justin noted as he understood the City of West Lafayette would place the oversized storm sewer pipe (planned for runoff conveyance) connecting it to the existing 24" storm sewers on the west side of Northwestern Ave. with the city road project. He agreed with conditions stated in the May 16, 2012 Christopher B. Burke Review memo and requested final approval. The Surveyor recommended final approval with the conditions as stated on the May 16, 2012 Burke memo. John Knochel made a motion to grant final approval with the conditions as stated on the May 16, 2012 Burke memo. Tom Murtaugh seconded the motion. The Faith West Planned Development was granted final approval with the conditions as stated on the May 16, 2012 Burke memo.

Zach Beasley

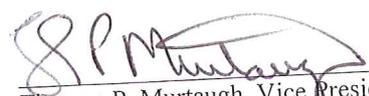
The Surveyor presented Maintenance Bond #105770074, submitted by Duke Energy, written by Travelers Insurance in the amount of \$5000.00. The bond regarded the Duke Energy Line Relocation project located between South County Line Road and SR. 28. John Knochel made a motion to accept the Maintenance Bond as presented by the Surveyor to the Board. Tom Murtaugh seconded the motion. Maintenance Bond #105770074 in the amount of \$5000.00 submitted by Duke Energy regarding their Line Relocation project in the aforementioned location was accepted by the Board.

Public Comment

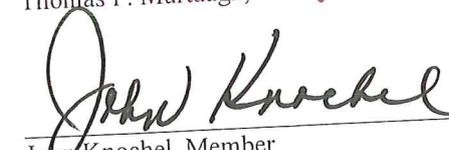
As there was no public comment, Tom Murtaugh made a motion to adjourn. The meeting was adjourned.



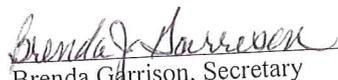
David S. Byers, President



Thomas P. Murtaugh, 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.

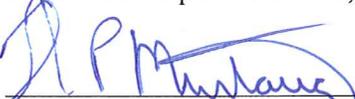
Performance and Payment Bond #929580837/S.W. Elliott Regulated Drain #100 Branch #11 Reconstruction Project

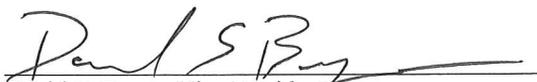
James Butcher presented Performance and Payment Bonds both numbered 929580837 and both in the amount of \$627,760.00 regarding the reconstruction of Branch #11 of the S.W. Elliott Regulated Drain #100, written by Continental Casualty Company and submitted by Milestone Contractors Inc. for acceptance. 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.

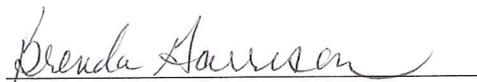
Tom Murtaugh announced once the meeting was adjourned there would be a five minute break before the scheduled Hester Mottsinger Regulated Drain#58 Hearing would begin.

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

September 3, 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 Juhnman, Drainage Board Secretary Brenda Garrison and Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering LLC (CBBEL). Evan Warner, G.I.S. Technician and James Butcher, Project Manager from the Surveyor Office were also in attendance.

Approval of Minutes

John Knochel made a motion to approve the August 6, 2014 regular minutes as written. Tom Murtaugh seconded the motion. Motion carried. The August 6, 2014 regular meeting minutes were approved.

CSX Raub Siding

James Inge from AMEC Engineering (Earth and Environmental) Inc. approached the Board to present CSX Raub Siding project for drainage approval. The project site was located approximately 800 feet south of County Road 800 South to approximately 1000 feet north of County Road 625 South. The site consisted of approximately 19.68 acres total area with approximately 14.63 acres disturbed with this project. Mr. Inge stated they agreed with the July 17, 2014 review memo and would continue to meet the conditions stated. The Surveyor stated the side rail being installed by CSX was located specifically just west of the County Road 800 South and U.S. 231 intersection, where an existing rail crossed County Road 800 South. He then reviewed the area for the Board utilizing G.I.S. He noted there were no regulated drains involved and CSX was in possession of the DNR permit required. He recommended approval with the conditions as stated on the July 17th Burke memo. Responding to Commissioner Byer's inquiry, Mr. Inge stated construction was planned to start next month. John Knochel made a motion to grant approval with the conditions as stated on the July 17, 2014 Burke memo. Tom Murtaugh seconded the motion. The motion carried. CSX Raub siding project was approved with conditions as stated on the July 17, 2014 Burke review memo.

Upper Berlowitz Master Plan

David Eichelberger with Christopher B. Burke Engineering LLC (CBBEL) approached the Board to present an update on the Master Plan regarding the Upper Berlowitz Regulated Drain Watershed. The City of Lafayette and the Tippecanoe County Surveyor Office joined forces and financial responsibility to establish a Master Plan for the upper portion of the Berlowitz Regulated Drain Watershed. Mr. Eichelberger stated the Master Plan included 4 regional detention ponds designed for the 100 year storm event. One pond was located on each side of County Road 550 South; one on the west side of Interstate 65 and one on the south side of McCarty Lane. The pond on the West side of McCarty Lane was partially constructed previously when the county road was extended as a positive outlet. Currently construction of this pond was being completed. The previously built ponds allowed continued development within the watershed to date. The upper portion of the watershed was bound by McCarty Lane, Haggerty Lane and Veterans Memorial Parkway as well as a development to the east. The goals of the plan were to meet the previously determined (1992) detention analysis, provide regional stormwater measures for the upper portion including stormwater collections in the most environmentally friendly way possible. The stormwater collection systems would be placed at convenient locations with minimal amount of disturbance to the area. This would allow future development positive drainage outlets. CBBEL worked with the City of Lafayette's Engineer's Office and the County Surveyor's Office keeping in mind any trails for walking/biking, roads and other amenities located within the watershed. An informal meeting was held on the 25th of August and all watershed landowners were invited to attend. No permits were required with the proposed construction included in the plan. He informed the Board he would be meeting with the City and the County Redevelopment Commissions on the 17th and the 18th of this month as well and would complete the official report in the near future. With this report would be a preliminary set of plans of major features such as; pipe sizes and elevations to be utilized for future developments within the watershed. All stormwater quality measures for the upper portion of the watershed would be provided for within the Master Plan. Developments would not be required to design stormwater quality measures or detention ponds to be included on their site as long as they met the preset perimeters within the Master Plan. Discussion was held regarding cost for detention storage as no amount other than the existing \$15,000.00 per acre storage requirement has been determined. Commissioner Byers stated if there were any specific questions from the attendees they were welcome to speak with Mr. Eichelberger after the meeting today. He thanked Mr. Eichelberger for the status update.

Petition to Encroach Hadley Lake/Cuppy McClure

The Surveyor presented a Petition to Encroach on the Cuppy McClure Branch of Hadley Lake Regulated Drain submitted by M.E.D. Institute and dated August 18, 2014. He noted M.E.D. Institute plans to erect a fence along their boundaries to stop trespassers. This

action requires the Petition as the fence would cross the open ditch and tile of said drain. He stated he reviewed the request and recommended approval by the Board. John Knochel made a motion to approve the Petition to Encroach on the Cuppy McClure Branch of the Hadley Lake Drain as presented by the Surveyor. Tom Murtaugh seconded the motion. Motion carried. The Petition to Encroach on the Cuppy McClure Branch of Hadley Lake Regulated Drain submitted by M.E.D. Institute and dated August 18, 2014 was approved by the Board.

Maintenance Increase Hearings request

The Surveyor requested 2 December 10th 2014 landowner hearings regarding increases in maintenance assessments on the James Kellerman and Harrison Meadows Regulated Drains. The Hearings would immediately follow the regular meeting to be held on that date. John Knochel made a motion to set Landowner Hearings for the James Kellerman and Harrison Meadows Regulated Drains as requested by the Surveyor. Tom Murtaugh seconded the motion. Motion carried. The James Kellerman and Harrison Meadows Regulated Drains Maintenance Increase Hearings would be held immediately following the regular meeting scheduled on December 10th, 2014. (Note this is the second Weds. of the month due to scheduling conflicts with the Board members)

Bonds/Letters of Credit

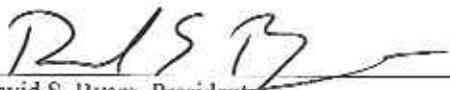
The Surveyor presented a Performance Letter of Credit #305 submitted to his office by Superior Structures in the amount of \$10,000 and written by the Lafayette Savings Bank for the Jessup Paper project. He recommended approval. John Knochel made a motion to approve the Letter of Credit as presented to the Board by the Surveyor. Tom Murtaugh seconded the motion. The motion carried. The Performance Letter of Credit #305 written by Lafayette Savings Bank for the Jessup Paper project in the amount of \$10,000.00 was approved as requested.

Zach Beasley

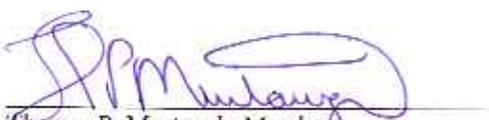
The Surveyor noted he had been receiving complaints from landowners located in existing sections/phases of subdivisions regarding contractors not following the current Drainage Ordinance rules on individual residential lots during the construction of additional phases/sections. He provided the Board with pictures of several residential lots currently being developed / constructed with no stormwater measures being utilized. He noted someone was dumping paint down the storm sewer/curb inlets in one picture. In another photo a concrete pumping truck was being washed in the middle of a cul-de-sac and the dirt/cement off the truck was shown running into the curb inlet. Additional photos of residential lots within subdivisions showed mud in streets, no stormwater measures taken on lots where homes were being constructed, silt fences installed wrong or not at all etc. He stated his office has repeatedly met with contractors/home builders to review the requirements of the ordinance. He continues to get the complaints as many contractors are not following the stormwater measures. He requested the Board direct the Attorney to draft a letter signed by the Board members to all contractors/utilities regarding sediment control rules and the possibility of fines associated with not following rules outlined in the current Stormwater Quality and Quantity Drainage. John Knochel made a motion to direct the Attorney Mr. Luhman to prepare a letter to all contractors/utilities regarding sediment control measures required by Ordinance and the fines which could be implemented by the Drainage Board for failure to follow. Tom Murtaugh seconded the motion. Motion carried. The Attorney would prepare a letter signed by the Board members to all contractors/utilities regarding sediment control measures required by Ordinance and the fines which could be implemented by the Drainage Board. This letter would be sent out by staff in the Surveyor Office.

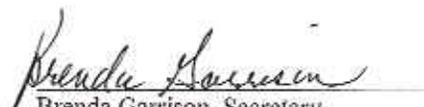
Public Comment

Commissioner Byers 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
February 1, 2017
Regular Meeting Minutes

Those present were:

Tippecanoe County Drainage Board Vice President David S. Byers, member Tracy Brown, 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. President Thomas P. Murtaugh was absent.

Approval of Minutes

Tracy Brown made a motion to approve the January 4, 2017 regular Drainage Board Minutes as written. David Byers seconded the motion. Motion carried.

Franklin Yoe #90 Regulated Drain/ G. Swanson #76 Regulated Drain Maintenance Bid(s) Opening

David Byers referred to the Attorney for the reading of the submitted bids regarding the Franklin Yoe #90 Regulated Drain and the G. Swanson #76 Regulated Drain Maintenance Projects. Attorney Masson read the following:
Regarding the Gustav Swanson Regulated Drain #76 Maintenance Project the bids were as follows:
Tony Garriott submitted a bid in the amount of \$49,595.80; ADI submitted a bid in the amount of \$14,594.00; Huey Excavating submitted a bid in the amount of \$24,672.00

Attorney Masson recommended the bids be taken under advisement. Tracy Brown made a motion to take the submitted bids under advisement. Once bids were reviewed for compliance by the Surveyor's office Project Manager, the Gustav Swanson #76 Maintenance Project bid could be awarded at the end of the meeting. David Byers seconded the motion. Motion carried.

Attorney Masson read the Franklin Yoe Regulated Drain #90 Maintenance Project bids as follows:
ADI submitted a bid in the amount of \$18,563.00; Tony Garriott submitted a bid in the amount of \$33,234.56 Attorney Masson recommended the bids be taken under advisement. Tracy Brown made a motion to take the submitted bids under advisement. Once the bids were reviewed for compliance by the Surveyor's office Project Manager, the Franklin Yoe #90 Maintenance Project bid could be awarded at the end of the meeting. David Byers seconded the motion. Motion carried.

Drainage Board 2017 Professional Engineering Assistance Contract

David Byers referred to the Surveyor regarding presentation of the 2017 Drainage Board Professional Engineering Assistance Contract. Surveyor Beasley noted he as well as Attorney Masson had reviewed the contract. He stated contract's rates had not changed from the past 3-4 years and he saw no additional changes. He recommended approval by the Board. Responding to Tracy Brown's inquiry, the Surveyor stated this was indeed at a cost savings to the county. He had previously in years past reviewed this issue. The cost for the services was approximately \$75,000 annually versus a minimum of \$130,000 cost for the exact work by an office staff member. Tracy Brown made a motion to approve the Drainage Board Engineering Assistance Contract as presented by the Surveyor. David Byers seconded the motion. Motion carried.

Lafayette YMCA

David Buck from BFS appeared before the Board to present the Lafayette YMCA for drainage approval. The site was located within the City of Lafayette at the existing Point East Mobile Home Park. The Board would review this project today for drainage purposes only. Mr. Buck stated a Petition to reduce the drainage easement on the S.W. Elliott Branch #13 was submitted for approval as well. The reduction in the drain maintenance easement would leave a 30 foot easement for maintenance of said branch. He noted they had received the January 12, 2017 Burke memo and was in agreement with the conditions as noted. He requested approval at that time for both the Petition and the project's drainage.

The Surveyor stated the Board's actions today were to approve the aforementioned Petition and the project's drainage only. He noted the project site drained to Branch #13 of the S.W. Elliott drain and continued southwest along Creasy Lane and eventually to the F-Lake Detention Basin. He recommended approval to the Board for the Petition to Reduce the Easement on the S.W. Elliott Branch #13 Drain as well as approval per the January 12, 2017 Burke memo recommendation. Tracy

presented. David Byers seconded the motion. Motion carried. Tracy Brown then made a motion to approve the Lafayette YMCA per the January 12, 2017 Burke memo recommendations. David Byers seconded the motion. Motion carried.

Belle Tire (Lot 4A 26 Crossing Subdivision)

Kyle Betz of Fisher and Associates appeared before the Board to request approval for the Belle Tire project. The site was located within the City of Lafayette and more specifically on Lot 4A in 26 Crossings Subdivision approximately ¼ mile from the interchange of I-65 and SR26. The site consisted of approximately 0.94 acres. This site was adjacent to the Alexander Ross Detention Basin. The site would drain entirely to the F-Lake detention facility. He stated they agreed with the January 25, 2017 Burke memo and requested approval for the project. The Surveyor stated the project had been reviewed and noted calculations were missing from their submittal. David Eichelberger stated calculations for the detention storage were not provided to date and that would need to be provided as soon as possible. The Surveyor agreed with the Consultant and reiterated those calculations should be provided and his recommendations were contingent on this. Mr. Betz agreed to review the report and provide those calculations to the Consultants as soon as possible. Tracy Brown made a motion to grant conditional approval as stated in the January 25, 2017 Burke memo. David Byers seconded the motion. Motion carried.

USGS Geological Stream Gages WREC Contract Support

Stan Lambert from Wabash River Enhancement Corp. (WREC) appeared before the Board to request financial and administrative support of the stream gages contract with the USGS Geological Services. He stated he was requesting to share the cost of the USGS Stream Gage Contract with the Tippecanoe County Partnership for Water Quality (TCPWQ). The streams were: Little Wea at Co. Rd. 800S, S.W. Elliott Ditch at old Romney Road and Little Pine Creek at Co. Rd. 850E with the contract covering the period of Jan. 23, 2017 through Sept. 30, 2017. He noted the data collected would be available on the USGS stream monitoring site on an hourly basis. This information was used as part of Water Quality monitoring by WREC and Purdue University. He noted Sara Peel from his office presented this to the TCPWQ and was given approval by their Board to go forward with support. The Surveyor stated he would review the TCPWQ Board minutes as the MS4 Coordinator to confirm the TCPWQ's intention was to contribute up to \$10,000.00 toward the overall cost of the contract. Tracy Brown made a motion to approve the contract amended \$10,000.00 amount as submitted with the condition the Surveyor as MS4 Coordinator confirms the TCPWQ support. David Byers seconded the motion. Motion carried.

Franklin Yoe#90 Regulated Drain/ G. Swanson #76 Regulated Drain Maintenance Bid(s) Award

Tracy Brown referred to Attorney Masson for the results of the submitted bids on the F. Yoe #90 and G. Swanson #76 Drain Maintenance Projects. Attorney Masson stated the bids were in order and the recommendation was to accept the low bid on each project. Tracy Brown made a motion to grant approval of the bid from ADI regarding the Gustav Swanson #76 and the F. Yoe Regulated Drain #90 Maintenance Projects as the low bidder on each project. David Byers seconded the motion. Motion carried.

2017 Classification Report/2017 Drain Assessment Activity Report

The Surveyor presented an active and inactive drain assessment list regarding county regulated drains with maintenance funds for approval by the Board. He reviewed the annual process for the Board. Tracy Brown made a motion to approve the Active Inactive Drain list as submitted by the Surveyor. David Byers seconded the motion. Tracy Brown made a motion to approve the 2017 Classification Report provided by the Surveyor. David Byers seconded the motion. Motion carried.

Zach Beasley/Other Business

Appointment of Drainage Board member to Tri-County Board

The Surveyor stated he was contacted by Benton County Surveyor David Fisher regarding the Sophia Brumm Joint Drain. The landowners have requested a joint meeting to discuss reconstruction of several lineal feet of the tile within the S. Brumm Drain watershed. The proposed time was February 21, 2017 at 10:00 a.m. at the Benton County Courthouse. An appointment from this Board was requested. David Byers noted there was a Commissioner Meeting at the same date and time. Tracy Brown made a motion to appoint Commissioner David Byers to the Sophia Brumm Tri-County Drainage Board as requested pending a new date and time is set due to conflict. David Byers seconded the motion. Motion carried.

Outstanding Reconstruction Assessments

The Surveyor informed the Board the five year reconstruction payment cycle was coming to a close on a few of the drain reconstruction projects. With that said there were a few landowners who had not paid any payments during this five year period. His understanding was these properties which had outstanding debt for the reconstruction of a drain should be included in the tax sale. He read Indiana Code 36-9-27-86 i.e. regarding the sale of the property due to outstanding drain

reconstruction assessments and referred to Attorney Masson for his direction. He stated he was seeking a recommendation from the Board to proceed as the code dictates in these situations. He noted financially, the deficit could adversely affect the General Drain Improvement Fund and future drain maintenance and reconstruction projects.

Attorney Masson clarified that only the land affected by the delinquency could be sold, that this was not a personal judgement but a liability which stayed with the land only. He would speak with the Auditor and Treasurer to clarify the issue and start utilizing the process in this county from which the code dictates. A lien on the property not the land would be sold. Attorney Masson would follow up on this issue and those landowners who may be affected by this code. He requested authorization to contact landowners who were affected by this regulation. He stated he would work with both the Treasurer and Auditor to set the process which this County can utilize to automatically go forward with the property lien sale when warranted. There was no public comment.

Tracy Brown made a motion to give authorization to the Attorney to begin the process by sending out delinquent reconstruction assessment letters to those landowners who were delinquent as well as listing them on the tax sale when appropriate. David Byers seconded the motion. Motion carried.

Tracy Brown made a motion to adjourn. The meeting was adjourned.

Below is the Surveyor's 2017 Classification Report less Exhibit A:

Classification of Drains

Per IC 36-9-27-34

February 2017

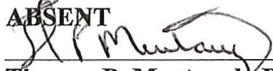
- 1.) Drains in need of Reconstruction
 - a. Elliott, S.W. (#100)
 - b. J.B. Anderson (#02) (Clarks Hill Portion)
 - c. Edwards (Not Maintained)
 - d. McBeth (Not Maintained)
 - e. F.E. Morin (#57)
 - f. Marion Dunkin (#25)
 - g. Huffman-Weimert (Not Maintained)
- 2.) Hearing and Rates Established in 2011, '12, '13, '14, '15 and 2016
 - a. Michael Binder (#10)
 - b. John Blickenstaff (#11)
 - c. Train Coe (#18)
 - d. Fred Haffner (#34)
 - e. E.F. Haywood (#35)
 - f. Mary Southworth (#73)
 - g. Franklin Yoe (#90)
 - h. Jess Dickens (#91)
 - i. Romney Stock Farm (#109)
 - j. John Hengst (#117)
 - k. Calvin Lesley (#48)
 - l. Audrey Oshier (#60)
 - m. Combs Ditch (#118)
 - n. Leader Newton (#115)
 - o. Thomas Ellis (#27)
 - p. John McFarland (#51)
 - q. Hester Mottsinger (#58)
 - r. J. Kelly O'Neal (#59)
 - s. Franklin Resor (#65)
 - t. Harrison Wallace (#82)
 - u. Eldora K. Lois (#119)
 - v. Frank Kirkpatrick (#45)
 - w. Elijah Fugate (#30)
 - x. Mary McKinney (#52)
 - y. Harrison Meadows (#37)
 - z. Shepherds Point (#121)

- aa. James Kellerman (#42)
 - bb. Alonzo Taylor (#77)
 - cc. Clymer Norris (#122)
 - dd. Crist Fassnacht (#29)
 - ee. Peter Rettereth (#66)
 - ff. Ann Montgomery (#56)
 - gg. Gustav Swanson (#76)
 - hh. Nathaniel W. Box (#12)
 - ii. Lydia Hopper (#124)
 - jj. Amanda Kirkpatrick (#44)
 - kk. John McLaughlin (#97)
 - ll. Martin Erwin (#28)
 - mm. Waples McDill (#85)
- 3.) Urban Drains
(I.C. 36-9-27-68 Urban Drains are classified as in need of Reconstruction)
- a. S.W. Elliott (#100)
 - b. Julius Berlowitz (#8) (Include Filbaum)
 - c. Alexander Ross (#48)
 - d. Cuppy McClure
- 4.) Drains in need of Periodic Maintenance
Please see attached sheet-Exhibit A
- 5.) Insufficient Maintenance Funds
- a. E.W. Andrews (#03)
 - b. Floyd Kerschner (#43)
 - c. F.E. Morin (#57)
 - d. John Saltzman (#70)
 - e. Ray Skinner (#71)
 - f. Abe Smith (#72)
 - g. Joseph Sterrett (#74)
 - h. William Stewart (#75)
 - i. John Toohey (#79)
 - j. John Vannatta (#81)
 - k. Suzanna Walters (#83)
 - l. J.B. Anderson (#02)
 - m. Dismal Creek (#93)
 - n. Moses Baker (#114)
 - o. Grant Cole (#19)
 - p. Shawnee Creek (#94)
 - q. Kirkpatrick One (#96)
- 6.) Proposed Drains for hearing in the near future / Request these drains be referred to Surveyor for preparation of Maintenance Report)
- a. Andrew Brown (#13)
 - b. F.E. Morin (#57)
 - c. Parker Lane (#61)
 - d. John Vannatta (#81)
 - e. Dismal Creek (#93)
 - f. Beutler Gosma (#95)
 - g. Jacob Taylor (#78)
 - h. E.W. Andrews (#03)
 - i. Suzanna Walters (#83)
 - j. Jesse B. Anderson (#02)
 - k. Floyd Kerschner (#43)
 - l. Joe Sterrett (#74)
 - m. Moses Baker (#114)
 - n. Grant Cole (#19)
 - o. Shawnee Creek (#94)
 - p. Kirkpatrick One (#96)
 - q. John Saltzman (#70)

- r. Ray Skinner (#71)
 - s. Abe Smith (#72)
 - t. William Stewart (#75)
 - u. John Toohey (#79)
- 7.) Drain Assessments recommended to be raised 25% starting May 2015
No Maintained Regulated Drains Applicable in 2017
 - 8.) Petition for New Regulated Drain referred to Surveyor
 - a. Huffman Weimert Drain (Town of Buck Creek)
 - 9.) Existing Drains referred to Surveyor for Report
 - a. Julius Berlovitz(#08) (Remaining Phases)
 - b. F.E. Morin (#57)
 - c. Huffman Weimert (Not Maintained)
 - d. Marion Dunkin (#25)
 - 10.) Drain that should be vacated
 - a. That portion of the Felbaum Branch (Part of Julius Berlovitz #08 Regulated Drain) East of County Road 550East

Please see Classification of Drains- Exhibit A on file in the Tippecanoe County Surveyor office and Office of the Tippecanoe County Auditor

ABSENT



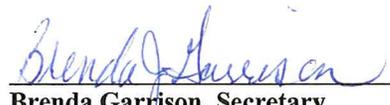
Thomas P. Murtaugh, President



David S. Byers, Vice President



Tracy Brown, Member



Brenda Garrison, Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
September 19, 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.

Dismal Creek Regulated Drain #93 Dredging Contract Bids Opening

The President opened the meeting and referred to the Board Attorney to open the submitted Contract Bids for the Dismal Creek Dredging Project. The Attorney read the bids as follows: Rinehart Excavating \$326,591.36; Huey Excavating \$200,679.00; Garriott Excavating \$313,721.84. The President thank the bidders for their submission and stated they would be reviewed for compliance and the bid would be awarded at end of meeting.

Approval of Minutes

Tracy Brown made a motion to approve the August 8, 2018 Drainage Board minutes as written. Thomas Murtaugh seconded the motion. Motion carried.

Sagamore Commons Master Plan

Cameron Seymour from Schneider Corporation appeared before the Board to present the Sagamore Commons Master Plan project for approval. The site was located on the west side of Sagamore Parkway West, north of the Cumberland Avenue intersection within the city limits of West Lafayette Indiana. The project consisted of a 6-lot commercial development on approximately 24 acres. The Master plan consisted of preparation of 5 outlots, drainage infrastructure and an access drive from Sagamore Parkway West. Mr. Seymour stated the runoff currently outlets from all directions on site into the Cuppy McClure drain. The plan was to construct a detention pond to collect the site's runoff and release it into the Cuppy McClure Drain at the required rates per ordinance. He stated they agreed with the August 16, 2018 Burke Memo and requested conditional approval as recommended. The Surveyor stated the existing detention basin which will be utilized was originally constructed as a borrow pit as part of the Ivy Townhomes and Flats project immediately west of the Cuppy McClure regulated drain. It would be modified to meet their needs. This had been an ongoing process and followed the Indian Creek Resolution regarding more stringent release rates. He then recommended conditional approval as stated on the August 16, 2018 Burke memo. There was no public comment. Thomas Murtaugh made a motion to approve the Sagamore Commons Master Plan project with the conditions as stated on the August 16, 2018 Burke memo. Tracy Brown seconded the motion. Motion carried.

Hoffman Nature Center

Erich Hart of TBIRD Design Services appeared before the Board to present the Hoffman Nature Center Parking Lot for approval. He noted Pat Jarboe from TBird Design Services and Allan Nail from Tippecanoe County Parks Department were also in attendance. The site consisted of approximately 420 acres located on the south side of Old State Road 25 and extended from Sugar Creek Road approximately 1.2 miles to the east. The proposed parking lot would service a future nature center and pavilion. Mr. Seymour noted this was the second phase of the overall project. The first phase consisted of the 800 feet entrance drive presented to and approved by the Board at the September 2, 2015 Drainage Board meeting and constructed in 2016. The conversion of farmland to rain gardens and grass filter strips would compensate for the existing access drive and proposed parking lot which resulted in no change of the volume runoff or discharge rates from the site. The amount of proposed vegetation to be added offset the pervious area of the drive and parking lot. The post project curve numbers peak discharges and volumes were either reduced or the same as pre-project conditions. Future phases of the Hoffman Nature Area would continue the practice of revegetation and added benefit of offsetting project impacts. It is the intent this procedure to become the Master Drainage Plan of future phases for the Hoffman Nature Area. He stated they agreed with the September 12, 2018 Burke memo conditions and requested approval for the project as presented.

Replying to Mr. Murtaugh's inquiry; Mr. Hart stated the exhibits presented today included the entire Master Plan including the future Nature Center and pavilion with the additional parking areas as well. There was no public comment. The Surveyor he instructed a review of the sub-basins by the Engineer's to ensure there would be no increased runoff with this project. He recommended approval with the conditions as stated on the September 12, 2018 Burke memo. Tracy Brown made a motion to approve the Hoffman Nature Center parking lot with the conditions as stated in the September 12, 2018 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Franciscan St. Elizabeth Health Lafayette East Maintenance Building

Kyle Bets of Fisher and Associates appeared before the Board to present a Maintenance Building project at St. Elizabeth Health Lafayette East location. The site consisted of approximately 25 acres and was located east of the existing hospital campus within the limits of the City of Lafayette on Creasy Lane. The site along with approximately 3 acres offsite drained into a large depressional area. The release rate was set using a private open ditch which outlet into Branch #13 of the S.W. Elliott Regulated Drain. A wet detention basin would be constructed to compensate for the entire depressional storage and keep an allowable release rate to downstream. He requested Board approval at that time. The Surveyor noted the project was located within the City limits of Lafayette and the City would be approving the project. The Board would be approving the discharge release into the S.W. Elliott Regulated Drain and the F-Lake Detention Storage Facility only for this project. He noted a storage fee for 1.34-acre feet of storage in F-Lake Basin was required to be paid prior to final approval. He then recommended construction approval as stated on the September 12, 2018 Burke memo. There was no public comment. Tracy Brown made a motion to grant construction approval as stated on the September 12, 2018 Burke memo. Thomas Murtaugh seconded the motion. Motion carried.

Zach Beasley/Other Business

J. Berlowitz Detention Basin

The Surveyor reviewed an aerial of the three (3) Berlowitz Regulated Drain's Detention Basins with the Board. The first Basin was located at the SE corner of Co. Rd. 550East and Co. Rd. 50South, then the Berlowitz "Hammerhead" pond located immediately upstream on the West side of Co. Rd. 550East which traversed west to Interstate 65 and the Third located west of Interstate 65. The basin or pond located on the corner of the Co. Rd. 550East and 50South was the largest of three within the Berlowitz Regulated Drain system. He noted there would be additional basins built in the future between I.U. Hospital and Franciscan Health St. Elizabeth Hospital.

The Surveyor's office had received complaints regarding the large basin located at the intersection of Co. Rd. 550East and 50 South. The complaints consisted of public safety and environmental concerns, ie: criminal activity, insect population, swimming and fishing. There is currently an annual mowing and spraying contract to control woody vegetation around the basin. As the basin was built to control storm water runoff while preventing downstream flooding, the functionality of the pond was the main concern. Once the woody vegetation grew up, beavers moved in and established a dam obstructing the flow of the outlet. This was causing the basin not to drain as designed. The obstruction was removed. Bids were sought for a six-year mowing and spraying contract for the Berlowitz Regulated Drain detention basins. A contract was signed and is ongoing.

He noted the County Storm Water Ordinance required safety signs around detention basins (ponds). Signs were at one time around the basins however, they have been vandalized or stolen. There are additional signs to be placed around the county's detention basins however they state "No swimming, wading or skating" only. The signs were safety oriented and did not state no trespassing, fishing etc. Viewing the aerial of the area utilizing GIS, the Surveyor noted public were parking in the northwestern portion of the property (owned by the Commissioner's) via the construction access lane. They were using this lane to enter the property and fish in the basin (pond). The access lane was left in place for inspection of the outlet to ensure functionality. It was noted there were a lot of homes in that area which resulted in increased foot traffic near the ponds.

Discussion was held and replying to Tracy Brown's inquiry, the Surveyor noted no discussion with the area's H.O.A.'s (Home Owners Associations) had been held regarding the issue. The Surveyor requested the Board take the matter under consideration to determine what needed to be included on signs for the detention basins (ponds).

Mr. Byers stated since this issue was just brought before them, he would like to think about this further and proposed to continue the discussion at the October 2018 monthly meeting. The Surveyor stated the area is an attractive area to the public. The Hammerhead basin channel has been left in its natural state as the channel stays wet. The intention is to leave the channel in its natural state. The number one purpose of detention basins is to protect landowners against flooding. The Berlowitz Detention Basin discussion will continue in the October meeting.

Marion Dunkin #25 Reconstruction Update

The Surveyor informed the Board the Marion Dunkin#25 Regulated Drain reconstruction was approximately 85 percent completed at this time.

Dismal Creek #93 Dredging Contract/ Award of Bid

Project Manager James Butcher stated the bids were in order. Low bidder was Huey Excavating in the amount of \$200,679.00. Thomas Murtaugh made a motion to approve the Contract Bid submitted by Huey Excavating in the amount of \$200,679.00 for the Dismal Creek Regulated Drain #93 Dredging project. Tracy Brown seconded the motion. Motion carried.

Public Comment

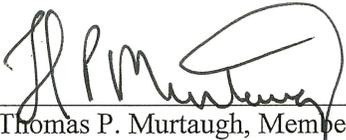
As there was no public comment, Tracy Brown made a motion to adjourn. The meeting was adjourned.



David S. Byers, President



Tracy A. Brown, Vice President



Thomas P. Murtaugh, Member



Brenda Garrison, Executive Administrator