

## JAKES LEWIS F. RECONSTRUCTION REPORT

### DRAIN #40

Referred to the County Surveyor by the Tippecanoe County Drainage Board for  
a Reconstruction Report on April 11, 2005  
July 28, 2005

The Lewis F. Jakes Regulated Drain is located in Wabash Township in Sections 9,10,11,14,15,16 and 23, in Township 24 North, Range 5 West. The Jakes Drain was organized in 1904 in Tippecanoe County Superior Court, Cause Number 7925, File Box Number 343, Order Book 37, Page 576.

The watershed area is 1303.6821 acres.

A maintenance fund of \$1.00 per acre was established by the Tippecanoe County Drainage Board on September 13<sup>th</sup>, 1972.

The maintenance rate was increased to \$2.00 per acre by the Tippecanoe County Drainage Board on April 6, 1983. The increase to \$2.00 was not assessed to the watershed until 2005. See Drainage Board minutes for February 2, 2005. The Jakes Drain currently has 300 feet of open ditch 11,600 feet of main line tile and 6570 feet of branch line tile.

I have personally walked, drove, talked with various landowners, and inspected the Jakes Drain and observed the majority of the breakdowns, blowouts, erosion and spot excavations to examine the existing conditions. Based on my investigation, surveys and plan preparation it is my opinion that the best and cheapest method of reconstructing the Jakes is as follows:

- 1.) The existing tile from the headwall near the South line of Section 14 to a point approximately 1400 feet North of CR 750N, (also being approximately the North line of the South half of the Northwest Quarter of Section 14) is in extremely poor condition with numerous break downs, tile holes and exposed in several places due to erosion. It is recommended that this section be converted from the existing tile to a new open ditch. This would include reshaping the existing ditch below the existing headwall at the outfall for a distance of approximately 800 feet and extending the downstream end of the Jakes to this point. It is recommended to construct an appropriate drop structure at the upper end of the new ditch and the new outfall of the existing tile into the new ditch.
- 2.) Spot repairs due to erosion breakdowns and blowouts are needed on the remainder of the existing Jakes tile system. It is also recommended to install waterways over the existing route of the tile where needed due to erosion over the approximate route of the existing tile. Clearing of trees will also be necessary in a few locations.

3.) The culvert located on CR 750North should be reconstructed or replaced by the Tippecanoe County Highway Department.

It is my opinion that there are not any damages sustained by any owner as a result of this reconstruction. I have considered all benefits accruing to each parcel of land and it is my opinion that the expenses of the proposed reconstruction will be less than the benefits accruing to the owners of the land benefited by the construction and the benefits are not excessive.

It is my opinion each acre of land is benefited by the recommended rates per acre and that all tracts or lots are benefited by the per lot rates as recommended and that all tracts or lots are benefited by the minimum rates as recommended.

The recommended rates are as follows:

Reconstruction; \$5.00 minimum charge, \$50.00 per lot (a lot is 4.99 acres or less) and \$10.00 per acre.

Periodic Maintenance During Reconstruction: \$5.00 minimum, \$10.00 per lot and \$2.00 per acre.

This will result in an assessment total of \$10.00 minimum charge, \$60.00 per lot and \$12.00 per acre for a five-year period.

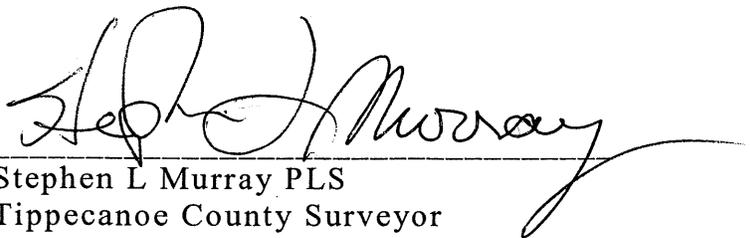
After the end of the five-year period, the rate will drop to a \$5.00 minimum charge, \$15.00 per lot and \$3.00 per acre for periodic maintenance. The fund should be allowed to build to a total of eight times the annual assessment.

The Tippecanoe County Surveyor estimates that a sum of approximately \$72,000.00 is needed to complete the reconstruction of the Jakes Regulated Drain. The Surveyor estimates that a sum of \$2800.00 is needed annually for periodic maintenance during the reconstruction period.

The Surveyor estimates that a sum of \$4200.00 is needed annually for periodic maintenance after the five-year reconstruction period and the fund should be allowed to build to a total of eight times the annual assessment.

I have included and attached hereto a list of all lands that I feel are benefited by the Jakes Drain along with all information as required by I.C. 36-9-27-50 and I.C. 36-9-27-52.

Respectfully Submitted by



Stephen L Murray PLS  
Tippecanoe County Surveyor

SLM/bjg