## HISTORY OF DRAINAGE

## TIPTON COUNTY

Tipton County consists of about 260 square miles or 166,400 acres of Indiana's finest farmland. The highest point in the county, which is 932 feet above sea level, is just south of Kempton along the Kempton Road. The lowest point in the county, which is 840 feet above sea level, is southeast of New Lancaster along County Road 450 South between 700 and 800 East. While this is a 92 foot difference in elevation, no one notices it.

Tipton County also has a divide running east and west across the county that very few people notice either. It generally follows Division Road, south of it west of the Normanda church while north of Division Road east of the church. Water either flows north into the Wabash River or south into the White River.

Early settlers in the 1830 used the 11 natural creeks that existed at the time. Between 1850 and 1880, individuals, private companies and drainage associations cut open drainage ditches or swales to carry surface water to these natural creeks. By 1883, Tipton County had built 190 miles of open ditches which were dug by hand or using horses.

Also around 1850, underground drainage began being used. This began by cutting a trench, laying poles in the trench, and then covering them with soil. Mole plows were also used. These were horse-drawn plows which made a cylinder shaped hole underground, kind of a tile drain without the tile. Then came wooden ditches made by cutting a trench and installing a section of a log with a U or V shape notch cut into the center of it. The logs were laid into the trench sometimes with the U or V upside down and sometimes upright and then covered with a board. Another method was to lay a board in the bottom of the trench and then use two other boards to make a teepee like structure. At some point there were also round wooden tiles made.

Somewhere around 1870 to 1875, clay tile came into use for drainage and was used well into the 1900s. Some of the first clay tiles to be used were brick shaped with a U channel running along its length. When stacked together they formed a tile 2 to 3 inches in diameter. Then came oval tiles with a flat bottom, then hexagon shaped and finally round. Tile production became a big business in Tipton County during the latter part of the 1800s with tile making factories located in or near most of the towns.

It has been estimated that private drainage companies spent close to \$200,000 for approximately 100 miles of tile drainage during the ten year period between 1878 and 1888. The money spent on drainage during this time shows the size of the problem and also the determination of our forefathers to solve it. Our forefathers in many cases spent as much money on draining their land as they had on buying it.

## PRIVATE DRAINAGE

When the central Indiana area was first settled, much of it was marsh or wetlands. In order to drain this ground or lower the water table enough to make it habitable or tillable, drain tiles were buried in the ground to carry the excess water away. Throughout Indiana there are thousands of miles of drainage tiles, some of these tiles were established by county courts or by the County Drainage Board, and then maintained by the County Surveyor's Office. These are known as County Regulated Drains. The remainder of the drain tiles, and the vast majority of all drains in the area are private drainage. These private drain tiles were installed by the landowners on their land or in conjunction with their neighbors to remove excess water from the soil. These drain tiles are not designed to be storm drains to carry surface water, but only to lower the water table in an effort to make the ground suitable for farming. The only way to find if a tile is a private drain tile or a County Regulated Drain is to contact the County Surveyor's Office or Drainage Board. The size of a tile does not determine if it is a County Regulated Drain. Private tiles as large as 24" in diameter have been found to exist in this area.

As urban growth expands into areas that have been farmland in the past, private drains are often encountered. No records were kept by the landowners as to where these drain tiles were located on a piece of property, and land is often purchased without knowledge of existing tiles. If a drain tile that is encountered is not dealt with properly, serious water and drainage problems can arise for the landowner and the upstream landowners along the path of the tile.

**Private drains are not the responsibility of the County Surveyor's Office.** However, this office is willing to assist residents in resolving their private drainage problems. Advice and solutions to private drainage problems may be offered as well as help with determining other affected properties and their landowners.

If an amicable resolution cannot be reached, the Tipton County Surveyor's office may also be of assistance in petitioning of the County Drainage Board for removal of obstructions in private drains. The 1996 Indiana State Legislature provided some relief for property owners that are adversely affected due to downstream blockage(s) in a private drain or unregulated natural surface watercourse. This legislation is Indiana Code 36-9-27.4, effective on July 1, 1996.

## **EVOLUTION OF DRAINAGE LAW**

One of the chief obstacles to agricultural expansion in the early days of the state was the presence of large areas of marshy ground. These marshy areas not only hindered farming but also created health problems such as various fevers. Proper drainage was needed to provide better farms and health.

The first mention of drainage in Indiana statute is an act in 1816 providing for the Highway Supervisor appointed by the County Commissioners to drain roads. This act allowed them to enter upon lands of others if necessary, to open ditches. Also provided was a \$5.00 fine for filling these ditches.

An act in 1832 provided for draining swamps, ponds, marshes and other low lands within Tippecanoe, Montgomery, Clinton, and Warren Counties. This construction and repair of drains was done through the Justice of the Peace. The act also provided for a fine for obstructing drains.

In 1848, the Indiana General Assembly sent a resolution to the U.S. Congress calling for wetlands in Jay and Adams Counties to be sold at a reduced price on condition that owners would drain the land. The resolution also called for forfeiture of the land if not drained by the purchaser within a reasonable period of time. Congress responded in 1850 with an act doing just that for all states. In 1851, Indiana required County Surveyors to locate and designate swamplands. The act set up the procedures required by the Federal Act of 1850.

In 1852, an act was passed by the Indiana Legislature regarding the construction of the levees and drains by five (5) or more landowners forming an association. These associations acted much like a corporation.

An 1861 act provided that landowners had the right to enter upon the land of others in order to deepen or maintain any natural channel, required to drain their land.

The basis of our current drainage law is an act of 1863, which provided that land owners may petition the Board of Commissioners for drainage. The act also provided that the cost was to be borne by landowners within the drainage watershed and those assessments created a lien on the property.

In 1867, a penalty of \$1.00 per day was added for any obstruction to these drains.

In Indiana between 1860 and 1890, new acres were constantly being put to the plow as forests were cleared and swamps were drained. The acreage of tillable land in the State of Indiana almost doubled in the two decades after the Civil War. Towns and cities also sprang up or increased in size thanks in part to the drainage laws and the infrastructure they helped provide.

Many drainage provisions were passed between 1863 and 1965 when a major overhaul of the drainage laws was made. The Indiana Drainage Code compiled 40 separate acts (passed between 1803 and 1964) into one code. The Drainage Code was re-codified in 1981 with relatively minor changes and since then has undergone minor revisions only.

The Indiana Drainage Code creates a Drainage Board in each County consisting of either the County Commissioners or a combination of the Commissioners and freeholders. The County Surveyor serves on the Board as an Ex-Officio Member. This is a non-voting position in which the Surveyor acts as the Board's technical advisor. The Code creates Regulated Drains (also known as legal drains in the original 1965 code or have also been called county drains through the years). A Regulated Drain is a drain which was established through either the Circuit Court or Commissioners Court of the County prior to January 1, 1966 or by the Drainage Board since that date. A regulated drain can be either an open ditch or a tile drain or a combination of both.

The Drainage Code gives the board the ability to create new drains when petitioned by 10% of the landowners in the drainage watershed by acreage, owners of 25% of the assessed valuation within the drainage watershed, the County Commissioners, the City or Town Council for road and street drainage or a School Board to drain school property.

The Drainage Board can maintain, reconstruct or vacate a regulated drain. The board must have hearings for the construction, maintenance, reconstruction or vacation of Regulated Drains. Notice is sent by first class mail to land owners affected by the drain. Landowners within the drainage watershed have the opportunity to object to the proposed project. The board has the discretionary authority to approve, modify or dismiss the project based on those objections. Landowners have the right of judicial review of the board's decision.

The Drainage Code also provides for a 75 foot drainage easement; requires board approval of crossing on the drain and approval of outlets into the drain. The Code also gives the board the right to remove obstructions within the drain.