

**Brooklyn and the Irish Hills Area** 

# **Regional Context**

The Village of Brooklyn is part of Columbia Township and Jackson County, which are located in South-Central Lower Michigan. This part of Jackson County, along with northwestern Lenawee County and northeastern Hillsdale County, is commonly known as the Irish Hills (please see Map 1). The Irish Hills Area is known for its abundance of lakes and hilly terrain.

### **Natural Features**

Information concerning geology, soils, and hydrology is provided about the Village of Brooklyn and the surrounding Irish Hills Area in this subsection.

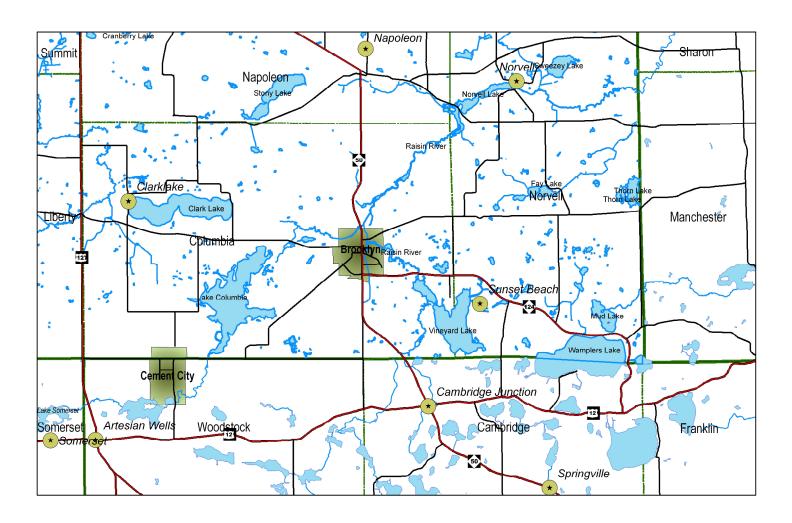
# Geology

In geologic terms, the Lower Michigan is classified as the Michigan Basin. The oldest and deepest formation found in the Irish Hills is the Mississippian which is estimated to have formed 310-345 million years ago, and range in depth up to 1,000 feet. The youngest system of bedrock found in the area is the Pennsylvania which formed approximately 230-310 million years ago. They are found in depths of 0-535 feet.

Glaciers have had the most significant impact on the surface of the Irish Hills Area over the past 300 million years, particularly the Wisconsinian glacier that moved through and retreated 100 million years ago. This glacier is thought to have flowed from the northern Canadian Highlands south to the junction of the Ohio and Missouri Rivers.

As the glaciers flowed south, their tremendous weight gouged out large chunks of the earth and scoured the surface, depositing larger pieces on the bottom and finer particles on top. This deposition of material in an unsorted and unstratified heterogeneous mixture is known as a Till Plain and generally consists of nearly flat to slightly rolling surfaces. The southern and northeastern quadrants of Brooklyn are till plains.

The northwestern quadrant of the Village is composed of Outwash Plains. The outwash area was formed by water that melted from the glacier and deposited sediment in a similar fashion to a river that deposits materials at its mouth. The sediment is typically silt, sand and clay that were suspended for a period of time in water.



# 1. Brooklyn, the Irish Hills, and Surrounding Area







#### Soils

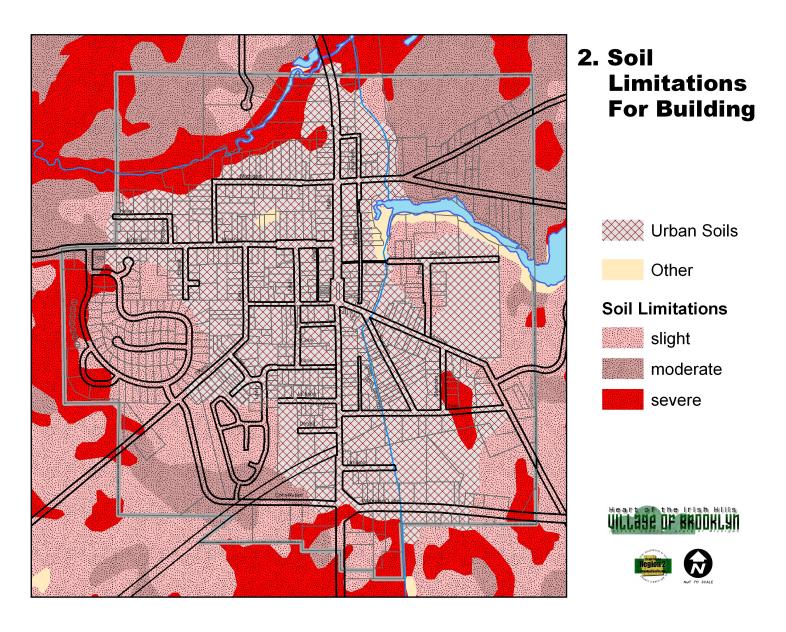
The most detailed and comprehensive source of soils information for Brooklyn is the <u>Soil Survey of Jackson County, Michigan</u>, which identifies and maps major soil types on the basis of the Soil Conservation Service's (SCS) taxonomic classification system. The Survey shows that a great deal of Brooklyn's undeveloped land has only slight or moderate limitations for building (please see Map 2). Most of the soils in the Village are classified as urban. Pockets of soils found along the western and southern Village boundaries have severe limitations to building due to ponding, wetness and low strength. Soils in the vicinity of Goose Creek are located on steep slopes which drop down to a relatively flat area that is prone to flooding and also has low strength. Buildings and roads may require special engineering through these areas.

# Hydrology

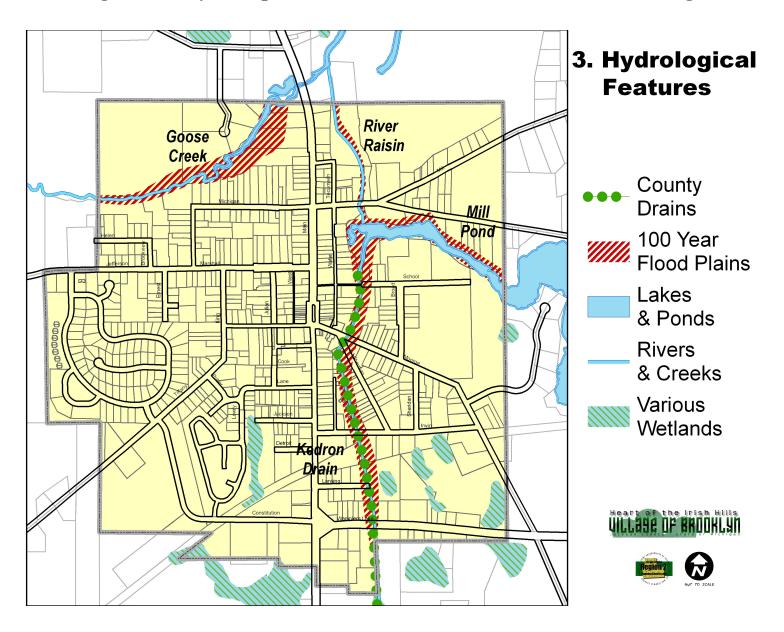
The lakes and rivers, floodplains, and wetlands found within the Village of Brooklyn and the Irish Hills Area may impact future development.

**Lakes and Rivers.** "Brooklyn, Michigan is a cozy little town snuggled between three lakes in the Heart of the Irish Hills . . . The more than 50 lakes within a 10-mile radius of [the] Brooklyn village limits have given it the title 'Heart of the Lakes' . . . . Three of the lakes are large and support substantial numbers of visitors for summer and winter fun" (i.e., Wamplers, Clark, and Vineyard). Lake Columbia lies 2 miles west of Brooklyn and the River Raisin and Goose Creek flow through the Village.

**Floodplains.** Brooklyn has couple of 100-year floodplains corresponding to the River Raisin, the Kedron Drain and Goose Creek. A floodplain is a nearly level alluvial plain that boarders a stream or wetland, and is subject to flooding unless artificially protected. A 100-year floodplain has a 1% chance of being flooded each year. For this reason, structural development should be discouraged and the land put to a better use. Parks and open space are excellent uses for this type of land. Map 3 graphically shows the flood boundaries.



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Wetlands. Part of the floodplains mentioned above fall into the category of wetlands. Specifically, the land on either side of Goose Creek has wetland characteristics. A wetland is a transitional zone between aquatic and terrestrial systems that includes marshes, swamps and bogs. Wetlands perform valuable functions in the natural system, including floodwater storage, water purification, sediment filtering and aquifer recharge. The Goose Creek wetland will have a limiting effect on future development in the Village because of physical constraints and also legal requirements for development. As of 1980, all wetlands contiguous to lakes, ponds, rivers and streams and all others at least 5 acres in size are protected under the Geomaeve-Anderson Wetlands Protection Act. Under the act, a permit from the State Department of Natural Resources is required to fill, dredge, drain or develop any of the above areas.

Many of the areas around the Village categorized as restrictive soils in Map 2 are not classified as wetlands but are still limited to some extent by saturation of the soil. When the seasonal high water table is closer than about 6 feet from the ground surface, it is difficult to build homes with basements. A high water table can also lead to foundation slumping, frost action and road construction problems. Ponding of water is also a problem with these soils. Ponding occurs when there is standing water, sometimes only seasonally, that can only be removed by percolation or evapotranspiration. When the water table is at the surface, percolation cannot occur.

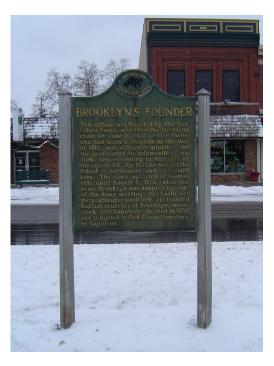
# A Brief History

Brooklyn is rich with history. The beginnings of the community commenced on June 16, 1832, when the first land claim was filed on a 40 acre parcel by the Rev. Calvin Swain. Two years later in July, 1834, the settlement officially became Swainsville with Calvin Swain as postmaster. Rufus Tiffany, a wealthy land owner, acquired a great deal of influence in the area. He and 6 other principal land owners changed the name of Swainsville to a Village to be known as Brooklyn in August, 1836. Since that time, the Village has developed and redeveloped as the population grew. A few structures date back to these early decades and many still remain from the late 1800's and early 1900's.

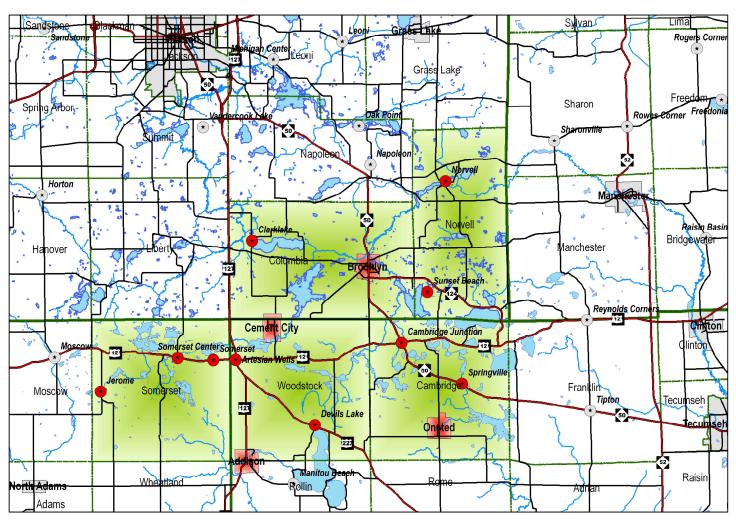
The visual character of many of the old buildings is still intact in many neighborhoods as well as Downtown Brooklyn. Many residents are knowledgeable of the Village's distinct heritage and recognize the civic beauty that these quaint old buildings provide. Preserving our historically significant buildings should be a high priority of every local government particularly in those municipalities that display a great deal of old architecture. Preservation of Brooklyn's heritage will have a number of positive impacts on the overall community. It will preserve cultural, economic, political and architectural history, increase property values, help promote tourism, and strengthen Brooklyn's economy.

# The Irish Hills Urbanizing Area

The Irish Hills is an area prized by residents and visitors for its lakes, hills, and unique institutions. The result is an amorphous region with no agreed-upon boundaries. This is not a problem on a day-to-day basis. However,



arbitrary boundaries must be established for statistical purposes if the Village of Brooklyn is to be compared with the surrounding area. For this purpose, the Irish Hills Urbanizing Area is comprised of Somerset Township in Hillsdale County; The Village of Brooklyn and the Townships of Columbia and Norvell Townships in Jackson County; and the Villages of Addison, Cement City and Onsted and the Townships of Cambridge, Rollin and Woodstock in Lenawee County (please see Map 4).



# 4. The Irish Hills Urbanizing Area





