

PHYSICAL CHARACTERISTICS

Topography

The Town and Village of Herkimer are in what may be described as a very hilly lowland belt traversed by the narrow, rather deeply cut valley of the Mohawk River. The floor of this valley is generally at an elevation of approximately 400 feet above sea level with a rise to about 500 feet along the bluff delineating the valley floor. This bluff is quite close to the river in some sections though nearly two miles from the river at the Village itself. Consequently a considerable plain exists there and this provided an excellent site for the original settlement. North of the bluff and to the east of the West Canada Creek, the land is rolling and reaches an elevation of 800 to 900 feet with a maximum of over 1,000 feet inside of the Town boundaries. On the west side of the Creek, however, the topography is much more hilly with elevations some 200 to 300 feet higher than the eastern portion of the town. Further to the north, above Kast Bridge, the maximum elevation is over 1,600 feet above sea level.

While the entire area was once a plain, considerable erosion has changed the plain into a very hilly area so that little evidence other than the relative accordance of the hilltops remains. The land form is now characterized by many streams and drainage ways in sharp-edged gullies and generally steep slopes. The only really extensive plain areas are flood plain along the West Canada Creek and the Mohawk River, with the alluvial fan from the West Canada Creek the largest such deposit. This

is the present location of the Village of Herkimer and before urbanization, the land was excellent farm land and one of the primary reasons the site was chosen for the first settlement. There is much natural beauty in the landscape, but such a land form is difficult to farm by machinery, except where the land is only gently rolling, as in the area just north of East Herkimer.

Soils

Many varieties of soils are found in the Herkimer area;¹ four types are of particular importance due to the quantities and locations involved. They are:

Mohawk Silt Loam. --Found generally throughout the Town on both sides of the West Canada Creek on higher level hill land. On the west side of the creek this soil is usually bordered by steep, broken land. Surface drainage is good. The soil may be easily cultivated and if well managed is quite productive of corn, oats and hay. Much of this land in the Town is devoted to pasturage and is excellent for the purpose.

Allis Silt Loam. --Found in moderate quantities in the Town, particularly near Beacon Light Corners on high land. This soil is also well suited for pasture. Surface drainage is good or even excessive. Internal drainage is retarded because of the compact, impervious subsoil. The principal crops are hay, oats and some corn, primarily for silage.

¹U.S. Department of Agriculture, Soil Survey--Herkimer County Area (Washington: U.S. Department of Agriculture, 1929).

Yields are generally somewhat lower than for the Mohawk Silt Loam.

Otisville Fine Sandy Loam. --Found in the eastern portion of the Town generally to the north of East Herkimer, this soil is best suited for vegetables though reasonably productive for hay and silage. Due to the sand and gravel in the subsoil the soil is well drained and in dry seasons excessively well drained. Generally excellent for intensive farming.

Palmyra Gravelly Loam. --Found throughout the Town but particularly along streams. Nearly all of the bottom lands along the West Canada Creek and the Mohawk River, including the site of the Village of Herkimer, are of this category. Surface and internal drainage is good. This soil is considered to be one of the best in the area for farming, especially for truck crops.

In addition to these four major soil types, three other categories are of importance but rather than classified by composition of the soil they are classified by condition. These are steep, broken land, poorly drained meadowland and rough, stony land. More than 20 percent of the southern half of Herkimer County is thus classified and considerable of this is in the Town of Herkimer, particularly on the west side of the creek.

It should be noted that the portion of the Town east of West Canada Creek is particularly well suited for intensive cultivation, both in terms of

soils present as well as general topography. On the west of the creek, however, the land is very steep and a large portion is unsuited to the use of machines. This land can best be utilized as pasturage. As the land to the east of the creek is one of the prime natural resources of the Town, every effort should be made to conserve and preserve this land for agricultural purposes. Urban growth should be encouraged in those areas where farming is not as productive. The map entitled "Steep Slope" (land with a slope in excess of 15 percent) clearly illustrates those areas of the Town that are not well suited for farming due to the steep slopes. These lands may well be developed for residential uses, however. This is not to imply that there is any thought of a need or desire for residential development throughout the Town on these slopes, but rather that good farm land, particularly the land north of East Herkimer, should be protected from urban encroachment. Consequently, it is believed that any major new residential growth should be encouraged to the north and west of the Village of Herkimer where the land is less valuable for farming than in the East Herkimer area.

The steep slope map, together with the map of the drainage pattern will also be found to be an excellent guide to those areas where particular attention should be given to the design of new subdivisions. Where land is more or less level, there is little problem in designing a subdivision for the best use of the land and to make the best arrangement of streets and lots for a pleasant neighborhood. On the other hand, when the slope of the land is above 10 to 15 percent, drainage and slope problems are intensified a great deal, and many additional considerations must be kept in mind when designing a subdivision.