## Chapter 2

# Physical Profile of the Merrill – Jonesfield Community

This portion of the Master Plan provides an overview of the physical features and natural resources that shape the Merrill and Jonesfield Township area.

### A. Regional Setting

Jonesfield Township (*Figure 2-1*) is a rural community located at the western edge of Saginaw County. Merrill is a General Law Village that is located entirely within Jonesfield Township.

Jonesfield Township is bounded on the north by Midland County, on the south by Lakefield Township, on the east by Richland Township, and on the west by Gratiot County.

In terms of larger cities, the community is about 20 miles from Saginaw and 60 miles from Lansing.

State Highway M-46, an east/west trunkline, crosses through roughly the southern third of the Township and provides a major access route. It also forms the major east-west transportation corridor in the Village. Several paved county primary roads also provide

important access routes to and from the Township. Merrill and Meridian Roads provide major north/south routes, while Frost road carries east/west traffic. Other county roads provide for the movement of traffic routes through and within the Township. Within the Village of Merrill, vehicular traffic is served by a local street system that consists of over seven miles of paved streets.

# B. Land Use and Development Patterns

Jonesfield Township consists of 24 sections of land and covers an area a little larger than 16,000 acres, including the area that is incorporated within the Village of Merrill. The Village occupies 560 acres. The total area of the Township is smaller than a "standard" Michigan township that consists of 36 sections of land.

Information on existing land uses in the Township and Village have been derived from the Michigan Resource Information System (MIRIS) as compiled and maintained by the Michigan Department of Natural Resources, and from aerial photography that is maintained by Saginaw County.

The major land uses found in the community are discussed below.

Agricultural land (mostly cropland) makes up the largest single category,

comprising about 83% of the community's land area. *Forested land* (mostly hardwood species) is the second largest category, comprising about 10% of the total land area. *Urban areas* (developed uses, including residential and commercial) occupy 6% of the total area. *Open land* (grass and shrub vegetation) makes up just over 1%.

In the Merrill-Jonesfield community, the "urban" land category is represented predominantly by the development within the Village of Merrill. Merrill is largely a residential community that is characterized by single-family homes at medium densities. There are also concentrations of residential development along M-46 both east and west of the Village.

In addition, there are a few small tracts of homes near the following intersections:

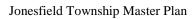
- Meridian and Frost Roads
- Chapin and Dice Roads
- ➤ Ederer and Steel Roads

Commercial development in the area is concentrated in Merrill. The Village has a compact central business district with retail and service establishments located mainly on Saginaw Street (M-46) near its intersection with Midland Street, and along Midland Street north of Saginaw. Some additional commercial development is also located adjacent to M-46 both east and west of the Village.

Merrill Tool is the largest industrial use in the community, and is located near the western edge of the Village south of M-46. Some other light industrial uses are located in the northern part of the Village, largely between Mahoney Street and the railroad tracks,

Other major land uses include the area occupied by the Merrill Community Schools, located along Alice Street south of Saginaw (M-46) and the Merrill Community Park, off the end of Eddy and Mahoney Streets.

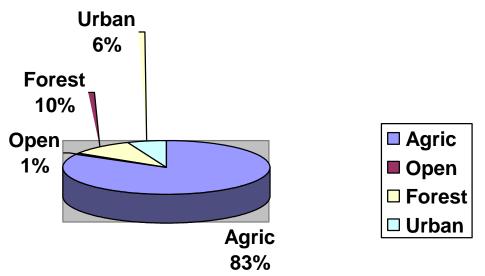
Taken together, the agricultural, open land, and forested categories make up almost 94 percent of the Merrill – Jonesfield community. This further emphasizes the rural character of the area. The distribution of major land uses is displayed as a pie chart in *Figure 2-2*.



Insert Figure 2-1: Location Map

Figure 2-2 Merrill-Jonesfield Land Use Distribution (Township figures include land in the Village of Merrill)

# **Jonesfield Township Land Use**



### C. Soils

Like many rural communities, Jonesfield Township residents and businesses rely on wells and septic systems for their water supply and wastewater disposal needs. A sewer system serves the Village, but Merrill residents rely on individual wells for their water supplies. This means that soil characteristics are a major determinant of the types and intensity of development that may occur in the area.

According to the *Soil Survey of Saginaw County* issued by the U.S. Department of Agriculture, the soils within the Merrill-Jonesfield area have been classified as three major associations:

#### Parkhill-Capac Association.

This association consists of sandy soils on lake plains and waterworked till plains. Their drainage is described as poor. This association is mainly found in the north-central and northwest quarter of the Township. The Soil Survey states that most of areas of this association are used for cropland or woodland. Wetness and poor filtering capacity pose limitations for building sites and sanitary facilities.

Parkhill-Wixom Association These soils are described as nearly level and gently undulating loamy and sandy soils on water-worked till plains. Drainage is described as poor. The soils in this association are found everywhere else in the area, excluding the Parkhill-Capac area that was just described. The Village of Merrill is located entirely within this association. The Soil Survey reports that this association is mostly used for cropland. The soils are poorly suited to use for building sites and sanitary

facilities due to wetness and slow

permeability.

Wixom-Capac-Parkhill Association. These sandy and loamy soils are found on nearly level or gently undulating terrain. They are found on water-worked till plains and other till plains. These soils tend to have poor drainage. These soils are limited to a small area in the southernmost part of the Township, in the south half of Section 35. The Soil Survey states that wetness and moderately slow permeability are the main limitations of these soils for buildings and sanitary facilities. Most of the soils within this association are fairly well suited to cultivated crops if a drainage system is provided.

### D. Water Resources

Jonesfield Township and Merrill are within the Saginaw Bay Drainage Basin. The area is generally drained toward the northeast by small streams and agricultural drains, including Fleming Drain, Weeks Drain, Handy Creek, and Whitmore Drain. Large bodies of surface water are not significant features in the area.

There are no public water supply systems in the Township or Village, and residents rely on wells for their drinking water and other water supply needs.

### E. Transportation System

As mentioned earlier, the Merrill-Jonesfield community is directly served by M-46, also known as Gratiot Road and Saginaw Street within the Village. Recent (2000) data reported by the state shows average daily traffic on M-46 east of Merrill to be about 6,900 vehicles. M-46 provides additional linkages to US-27 at Alma and US-131 to the west, and to I-75 to the east in Saginaw.

Several paved county primary roads provide major access routes to and from the Township. In particular, Merrill and Meridian Roads provide major north/south routes. Meridian Road, at the western edge of the

Township, connects to M-20 north of the Township and west of Midland. Meridian also connects to US-10 further north, near Sanford. Merrill Road (Midland Street in the Village) accommodates north/south travel to areas of Midland County to the north and links with M-57 in southern Saginaw County. Frost Road is another important east/west county primary route that carries traffic both locally and within Saginaw County. Tittabawassee Road, at the Township's northern boundary, is another important east/west route, although it is not classified as a primary road in this vicinity.

There are no commercial aviation facilities in the community. The closest commercial passenger airport is MBS International in Freeland in the northern part of Saginaw County.

An active rail line that is operated by the Mid-Michigan Railroad crosses the Township from east to west, running through Merrill and roughly parallel to M-46 north of the highway.