

Soils on Property

West of the drain to Lake Michigan

36E-Oakville fine sand, 25 to 60 percent slopes

This steep and very steep, well drained soil is on dunes and beach ridges. Areas are irregular in shape and range from 5 to 500 acres in size. Typically, the surface layer is very dark grayish brown fine sand about 4 inches thick. The subsurface layer is brown fine sand about 5 inches thick. The subsoil is yellowish brown and brownish yellow, loose fine sand about 23 inches thick. The substratum to a depth of about 60 inches is very pale brown fine sand. In places the soil is sand throughout. In some small areas thin bands of loamy fine sand are in the subsoil. In other small areas the slope is less than 25 percent. Permeability is rapid. Available water capacity is low. Surface runoff is medium. Most areas are wooded. Some are mined for sand. This soil is generally unsuited to cropland, building site development, septic tank absorption fields, and sewage lagoons because of the slope.

This soil is well suited to woodland. The major management concerns are the erosion hazard, the equipment limitation, and seedling mortality. Because of the erosion hazard, logging roads, skid trails, and landings should be established on gentle grades and water should be removed by water bars, out-sloping road surfaces, culverts, and drop structures. Farrowing on the contour or applying herbicide reduces the seedling mortality rate and helps to control erosion. Selection of planting stock that is more than 2 years old or is containerized increases the seedling survival rate. Carefully selecting sites for logging roads, using widetracked equipment, and limiting the use of this equipment to periods when the soil is frozen or moist help to overcome the equipment limitation. Caution is needed if the equipment is operated on the steeper slopes.

This soil is poorly suited to most recreation uses. The major management concerns are the slope; the soft, loose, sandy surface layer; and the hazard of erosion. Paths and trails can be designed so that they conform to the natural slope of the land. Covering paths and trails with bark and wood chips improves trafficability and helps to control erosion. The plant cover is generally too sparse to withstand heavy foot traffic.

Near the drain that runs through the property

17A-Brems sand, 0 to 2 percent slopes

This nearly level, moderately well drained soil is in low depressions. Areas are irregular in shape and range from 3 to 150 acres in size. Typically, the surface layer is dark brown sand about 10 inches thick. The subsoil is about 50 inches thick. The upper part is dark yellowish brown, loose loamy sand; the next part is yellowish brown, mottled, loose sand; and the lower part is brownish yellow, mottled, loose sand. In some areas the subsoil has bands of loamy sand. In other areas it

has no mottles. Permeability is rapid. Available water capacity is low. Surface runoff is very slow. The seasonal high water table is at a depth of 2 to 3 feet in winter and spring. Most areas of this soil are farmed. Some are used as woodland.

This soil is well suited to woodland. Seedling mortality is the major management concern. Overstocking helps to compensate for expected seedling losses.

Because of the wetness, this soil is poorly suited to building site development. Buildings with basements should be constructed on well compacted fill material, which raises the site. A drainage system reduces the wetness.

This soil is poorly suited to septic tank absorption fields and is generally unsuited to sewage lagoons. The wetness and a poor filtering capacity are the major limitations. Special construction methods, such as filling or mounding with suitable soil material, may be needed to raise septic tank absorption fields above the water table. The soil readily absorbs but does not adequately filter the effluent from septic tanks. The poor filtering capacity can result in the pollution of ground water supplies.

At Ruggles Road to the drain

45B-Covert sand, 0 to 4 percent slopes

This nearly level and undulating, moderately well drained soil is in broad areas, on narrow ridgetops, and on low knolls on lake plains. Areas are narrow or irregularly shaped and range from 3 to 600 acres in size. Typically, the surface layer is very dark grayish brown sand about 8 inches thick. The subsurface layer is light brownish gray sand about 7 inches thick. The subsoil is dark reddish brown and strong brown, loose sand about 20 inches thick. The substratum to a depth of about 60 inches is pale brown, mottled sand. In some places the subsoil is more gray. In other places the soil has no mottles. Permeability is rapid. Available water capacity is low. Surface runoff is very slow. The seasonal high water table is 2.0 to 3.5 feet below the surface from November through April.

This soil is well suited to woodland. Because of the wetness, this soil is only fairly well suited to building site development. It is poorly suited to septic tank absorption fields and generally unsuited to sewage lagoons because of the wetness and a poor filtering capacity. The soil readily absorbs but does not adequately filter the effluent. The poor filtering capacity can result in the pollution of ground water supplies. Buildings with basements should be constructed on well compacted fill material, which raises the site. A drainage system helps to lower the water table. Special construction

methods, such as filling or mounding with suitable material, may be needed to raise septic tank absorption fields above the water table.

