

The Planning Commission has completed a landscape design plan for the Ten Mile Road corridor, as a result of increased development along Ten Mile Road, both from outside and within the Township. The plan prescribes a general layout for landscaping along the road and identifies specific types of trees, shrubs, and grasses associated with the more rural landscape.

Vacant Land Use

Vacant land, which is any land not developed and not farmed, occupies 6,087.5 acres or 29.97 percent of the total land area of the Township, and is the second largest land use category behind residential land use. The loss of vacant land is often felt even more strongly than the loss of agricultural land since vacant land is generally found in a natural state.

Rights-of-Way

Road rights-of-way occupy 739.3 acres or 3.64 percent of the total land area of the Township. This figure does not include rights-of-way where the adjacent parcels are measured to the center of the road. The I-96 freeway, with a 300-foot wide right-of-way, comprises the biggest piece of right-of-way acreage in the Township. Railroad right-of-way is also included in the right-of-way. As the Township develops, the amount of land area for rights-of-way will increase.

Other Land Uses

Airport. The Oakland/Southwest Airport occupies 77 acres, or 0.4 percent of the total land area of the Township. Hangars and other support facilities have been upgraded in recent years, and a master plan is being prepared to address future improvements and expansion.

The 1991 Southeast Michigan Regional Aviation System Plan prepared for SEMCOG indicated that the Oakland/Southwest Airport is a general utility airport, with a 3,128-foot runway. Precision instrument approach operations are not available. The majority of aircraft operating at the airport, according to a 2005 study, are of the single engine and small, twin-engine variety.

Landfill. One of the most prominent land uses in the Township in 1991 was the landfill, which occupied about 124 acres of land on the south side of I-96 west of Milford Road. As noted previously, the landfill is now closed and a community park has been developed on its surface.

Water Bodies. Water bodies occupy 675.8 acres or 3.33 percent of the total land area of the Township. Water bodies include Lake Angela, Haas Lake, part of Kent Lake, Huron River, and the lakes created by gravel extraction.

Natural Areas

In 2004, Oakland County Planning and Economic Development Services contracted with Michigan Natural Features Inventory (MNFI) to update previously collected data regarding

potential natural areas within the County. Potential natural areas are defined as places on the landscape dominated by native vegetation that have potential for harboring high quality natural areas and unique natural features. These areas may provide critical ecological services such as maintaining water quality and quantity, soil development and stabilization, pollination of cropland, wildlife corridors, stopover sites for migratory birds, sources of genetic diversity, and flood water retention.

History. Work to identify potential natural areas began in Oakland County in 1987, when the County contracted with MNFI to conduct a natural area survey. Ten years later, six Oakland County municipalities and the County undertook a more comprehensive study, which became the foundation for the Shiawassee & Huron Headwaters Resource Preservation Project (S&H project). That project developed a systematic process to identify and prioritize natural areas for preservation and further survey efforts.

Oakland County then contracted with MNFI to complete identification and ranking of areas not included in the S&H project, using a more refined process. This resulted in a July 2002 report that identified and ranked over 600 potential natural areas, which represents the least disturbed natural areas remaining within Oakland County. The potential natural areas listed in the 2002 report and the original areas of the S&H project were further refined by MNFI in 2004. Approximately 93,500 acres within Oakland County, representing approximately 16% of the total county acreage, were identified as potential natural areas.

Methodology. The process to identify potential natural areas started with interpretation of digital aerial photos taken in 2002. Emphasis was placed on intactness, wetlands and wetland complexes, riparian corridors, and forested tracts. Then, sites were ranked using a scoring system with points being awarded based on five criteria:

1. Total size of the site. Larger sites tend to have higher species diversity, higher reproductive success, and improved chance of plant and animal species surviving a catastrophic event.
2. Size of core area. The core area is defined as “total size”, minus the area of a 300-foot wide buffer inward from the edge of the site. Studies have shown that there are negative impacts associated with the perimeter of the site for “edge sensitive” animal species, thus a buffer helps minimize impacts for these species in forested landscapes.
3. Presence or absence of a stream corridor. Streams are dynamic systems that interact with the surrounding terrestrial landscape to create new habitats and provide a travel corridor for wildlife to connect isolated patches of natural vegetation.
4. Landscape connectivity. Landscape connectivity is defined as the percentage of a 1/4 mile buffer outward from one site that intersects with another site’s buffer, and the number of times one site’s buffer intersects with other site buffers. High connectivity improves gene flow between populations, allows species to decolonize unoccupied habitat, improves resilience of the ecosystem, and allows ecosystem processes (flooding, fire, pollination, etc.) to occur at a more natural rate and scale.

5. Restorability of surrounding lands. Restorability is defined as the potential for restoration activities in areas adjacent to the site (percentage of agricultural land or old fields within 1/4 mile of the site). Restorability is important for increasing the size of existing natural communities, providing linkages to other habitat patches, and providing a natural buffer from development and human activities.

The scoring system awarded a possible 25 total points for each site, and total scores ranged from 23 to 1. Using the natural break classification method (which identifies breakpoints between classes using a statistical formula called Jenk's optimization), sites scoring between 23 and 12 points were ranked Priority One, sites scoring between 11 and 6 points were ranked Priority Two, and sites scoring between 5 and 1 point were ranked Priority Three.

Oakland County remains rich with high-quality natural resource areas that still look and function the way they did 200 years ago. But, with the high rate of development and its associated stresses on the natural environment, conservation of these remaining areas and their native plant and animal populations are vital if the County's diverse natural heritage is to be maintained.

The 2004 Oakland County Potential Conservation/Natural Areas Report can be used by local municipalities, land trusts and other agencies to prioritize conservation efforts and in finding opportunities to establish an open space system of linked natural areas throughout Oakland County.

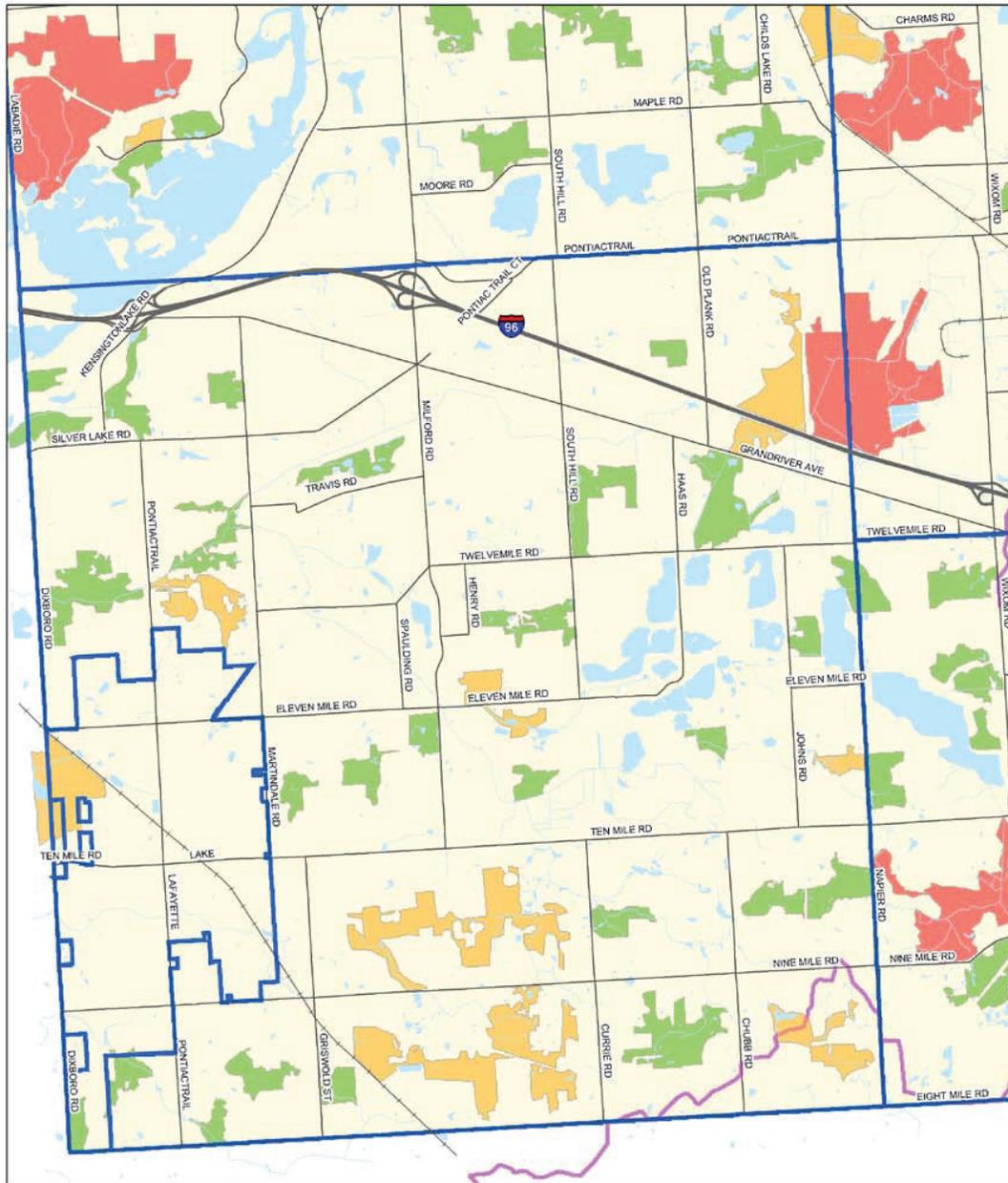
Natural Areas in Lyon Township. As illustrated in Map 2, Lyon Township contains one Priority One area, within Lyon Oaks County Park. The area bounded by Eight Mile, Griswold, Ten Mile and Currie Roads is occupied by a significant amount of Priority Two potential natural areas. Portions of these Priority Two natural areas were within the proposed Meadowcreek Planned Development, which never received final approval. Also, due to significant tree cutting, portions of the Priority Two natural areas may not exist. Lyon Township's other potential natural areas, mostly Priority Three areas, are scattered fairly evenly throughout the Township.

The 2004 Oakland County report recommends that local municipalities identify opportunities to link other possible natural resource sites not mapped. These could include small patches of land, tree and fence row plantings, agriculture land and open fields. Also, it is recommended that field inventories be conducted on the identified potential natural areas, to provide much needed additional site-specific data that should be considered when developing in and around such areas. All identified sites, regardless of their priority, have significance in their local setting. The report further recommends that municipalities adopt a comprehensive conservation/greenway plan, as the conservation of potential natural areas is most effective and successful in the context of an overall conservation/greenway plan.

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Map 2 Potential Natural Areas

Charter Township of Lyon,
Oakland County, Michigan



-  Railroad
-  Highway
-  Major Road
-  Priority One
-  Priority Two
-  Priority Three
-  Municipal Boundaries
-  Lakes & Rivers
-  Rivers & Streams
-  Municipal Boundaries
-  Watershed Boundary

Source: Environmental Stewardship Program
Oakland County Planning and Economic Development
Services, October 29, 2004

MCKenna
ASSOCIATES

4/9/12



