

HOLLY TOWNSHIP

———— 2040 ————



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Table of Contents

Acknowledgments	iii
1. Introduction	1
Introduction.....	2
2. Background Studies	7
Location	8
Access.....	9
Physical Characteristics.....	10
Population and Housing	18
Economic Base	24
Community Services.....	33
Roadways	39
Existing Land Use.....	43
3. Goals and Policies	51
General Goals and Policies	52
Specific Goal & Policy Guidelines	53
4. Land Use Plan	63
Future Land Use Plan.....	64
Zoning Plan.....	71
Corridor and Subarea Plans.....	75
Transportation Plan.....	89
Greenways Plan.....	92
Headwaters Trails.....	102
Implementation Plan.....	104
Action Item Summaries.....	117

LIST OF FIGURES

Figure A: Population Trends – Holly Township, the Village of Holly, and Oakland County	18
Figure B: Population by Age – Holly Township, 2010 to 2013.....	19
Figure C: Racial Composition – Holly Township - 2013	20
Figure D: Population 25 Years of Age and Over with a Bachelor's Degree or Higher – 2013	20
Figure E: Median Household Income – 2013	21
Figure F: Owner Occupied Housing and Median Rent – 2013.....	22
Figure G: Age of Housing Stock – Holly Township.....	23
Figure H: Employment by Industry – Holly Township, 2013	25
Figure I: State Equalized Value – Holly Township, 2004-2014.....	26
Figure J: Emerging Sector Program Success Diagram – Oakland County.....	29
Figure K: Technology Village Future Land Use Map – Grand Blanc Township.....	30
Figure L: Existing Land Use – Holly Township, 2015	43
Figure M: Changes in Acreage – Holly Township, 1990-2015.....	46
Figure N: Future Land Use — Village of Holly.....	69

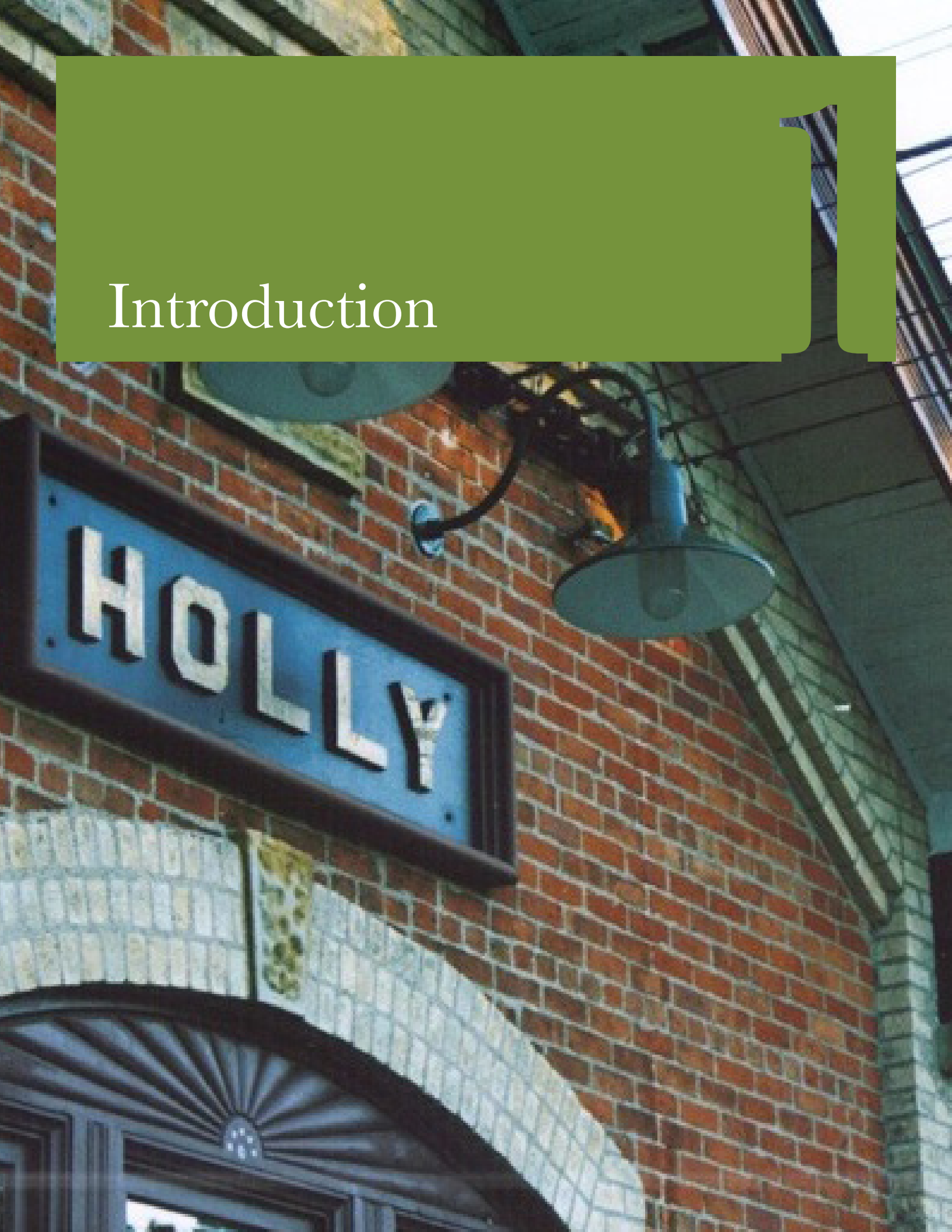
LIST OF TABLES

Table 1: Population Trends – Holly Township, the Village of Holly, and Oakland County	18
Table 2: Age Characteristics – Holly Community and related areas, 2013.....	19
Table 3: Housing Tenure, Median Rent, and Median House Value – Holly Township and Related areas in Oakland and Genesee County, 2013.....	22
Table 4: Housing Types – Holly Township in 2000 and 2010	23
Table 5: Occupational Employment.....	24
Table 6: Major Employers in the Holly Community – 2015.....	25
Table 7: State Equalized Value and Taxable Value, 2014	26
Table 8: Equalized and Taxable Value of Real Property by Class – Holly Community, 2014	26
Table 9: Locations where Holly Community's Employed Residents Work, 2010.....	27
Table 10: Means of Commuting to Work and Commute Time for Residents – Holly Township, 2013.....	27
Table 11: Targeted Emerging Sectors – Oakland and Genesee County Strategies	28
Table 12: Retail Gap Analysis – Holly Township and Surrounding Area.....	32
Table 13: Recreational Facilities	35
Table 14: Boat Launches.....	36
Table 15: School Recreation Areas.....	36
Table 16: Intersection Accidents – Holly Township.....	41
Table 17: Existing Land Use – Holly Township, 2015.....	45
Table 18: Future Land Use	67
Table 19: Future Land Use – Village of Holly.....	69
Table 20: Zoning Plan – Land Use Category / Zoning District Comparison	72

LIST OF MAPS

MAP 1: Michigan Natural Feature Inventory.....	11
MAP 2: Woodlands and Tree Rows	12
MAP 3: Wetlands.....	14
MAP 4: Watersheds	16
MAP 5: Topography.....	17
MAP 6: Recreation Lands.....	38
MAP 7: Functional Classification.....	40
MAP 8: Existing Land Use.....	48
MAP 9: Soil Suitability	50
MAP 10: Future Land Use	68
MAP 11: Future Land Use, Village of Holly.....	70
Map 12: Future Land Use Overlay Zoning.....	73
Map 14: Future ROW.....	91
MAP 15: Greenways Plan.....	96
MAP 16: Trails and Pathways Map.....	97
MAP 17: Green Infrastructure.....	99
MAP 18: Safety Path Master Plan.....	101

Introduction



Introduction

This document represents the revision and update of the Holly Township Master Plan, first adopted in 1977, again in September 1998, and November 2003. The Plan was again updated in 2009. Since adoption of the original plan and the subsequent revisions, a number of changes have occurred both within the Township and the surrounding area. To ensure that development policies reflect current conditions in the Township, it is essential that the Master Plan is periodically evaluated and kept up to date.

WHAT IS PLANNING?

Planning is a process which involves the conscious selection of policy choices relating to land use, growth and development in the community. The Master Plan is the only official Township document that sets forth policies for the future of the community.

The Township derived its authority for the preparation of a Master Plan from the Michigan Planning Enabling Act, P.A. 33 of 2008. Section 31 of the Act states:

1. "A Planning Commission shall make and approve a Master Plan as a guide for development within the planning jurisdiction.
2. In the preparation of a Master Plan, a planning commission shall do all of the following, as applicable:
 - a. Make careful and comprehensive surveys and studies of present conditions and future growth within the planning jurisdiction with due regard to its relation to neighboring jurisdictions.
 - b. Consult with representatives of adjacent local units of government in respect to their planning so that conflicts in master plans and zoning may be avoided.
 - c. Cooperate with all departments of the state and federal governments and other public agencies concerned with programs for economic, social, and physical development within the planning jurisdiction and seek the maximum coordination of the local unit of government's programs with these agencies."

PURPOSE OF THE HOLLY TOWNSHIP MASTER PLAN

The purpose of the Holly Township Plan is not merely to comply with the minimum requirements of the Michigan Planning Enabling Act, Public Act 33 of 2008, but to tell the story of the Township's past, present, and future. The Holly story is unique in how it weaves the shared values of the community in and through its recommendations and policies. The story starts with an explanation of how the Township got to where it is today and how that journey has positioned the Township for what it can be tomorrow.

Holly is a community that has a rich agricultural history, unique development patterns and influences, abundant natural features and open space, located in northwest Oakland County it truly feels like "up north". In addition to the many natural, historical and cultural assets and amenities offered in the Township, the community is ideally situated to take advantage of regional access via I-75, and institutional facilities located in the surrounding communities.

The Holly Master Plan is based on the hopes, dreams, concerns, and ideas of those community members that live, work, and play in Holly. These hopes, dreams, concerns, and ideas represent the values shared by the community and make up the Tenets of the Holly Master Plan.

HOLLY TOWNSHIP PLAN TENETS

Sustainability

Sustainability is an important concept in land use planning. Some use the term to describe environmental initiatives, but according to the United Nations Commission on Sustainable Development, sustainability is defined more broadly to mean, “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” This concept is intended to encompass not only environmental concerns, but also economic and social.

Sustainability is more than just environmental initiatives or green building regulations. Sustainability at the full community level involves providing current and future generations the choices that will result in people choosing to remain in or relocate to Holly Township.

The ICLEI - Local Governments for Sustainability is a worldwide organization that promotes education and awareness of sustainability issues. They suggest that, “Sustainability is not an end goal, but a journey that local governments can take to improve the social equity, environmental, and economic conditions in their jurisdiction.”

In June 2009, the Department of Housing and Urban Development, Department of Transportation, and the Environmental Protection Agency created sustainability policies that acknowledge the balance needed between housing, transportation, and the environment. Their “livability principals” are a good place to start as Holly Township develops its own livability principles:

- Provide more transportation choices. Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- Promote equitable, affordable housing. Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- Enhance economic competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
- Support existing communities. Target federal funding toward existing communities—through strategies like transit oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
- Coordinate and leverage federal policies and investment. Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy
- Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

As Holly Township begins the master planning process, it will be important to assess economic, social, and environmental conditions in the community. While many communities find that the conditions and trends relating to the environment, economy, and society are unsustainable, achieving sustainability is an incremental process, not an overnight transformation.

Diversity

Diversity can be defined, for purposes of the 2015 Holly Township Plan, as the distinction of characteristics, qualities, or elements of the Township. The support of this diversity can foster imagination and entrepreneurial initiatives. For Holly, diversity will be achieved in two main forms — our built environment and the residents that inhabit that environment. Diversity in our built environment will apply to the function, style, and use, while resident diversity will apply to characteristics such as ethnic origin, age, income, gender, and physical ability.

A community that is diverse encourages ownership, actual or perceived, of civic and private amenities. This ownership will evolve into a rich and vibrant place to live, work, and play while at the same time position the Township to attract business and investment to increase economic stability.

Economic Vitality

Economic vitality will be achieved in Holly when all industry sectors are viable and working together toward a shared vision. Holly is an attractive draw for future businesses and residents based on its residents and location. The

Township will not take this for granted and will continue to support economic growth and development. For Holly, this support will come by ensuring that a sustainable return on economic investment takes into consideration the impact that growth and development has on its surroundings.

To maintain a vital market place it is imperative that development be located in areas of the Township that can provide the necessary infrastructure to support such development. New development must be planned and designed to encourage additional development and not discourage people from living or businesses from locating in the Township.

A Sense of Time and Place

Understanding how Holly came to must be remembered, embraced and celebrated. Moments of accelerated growth in the Township can and have caused destruction of natural and historical resources that are often realized too late. The 2015 Holly Township Plan must protect resources still present in the Township and reveal the history of those that have been lost while at the same time responding to the needs of the present and future. Continuity throughout the past, present, and future is of extreme value. By valuing this sense of time and place, Holly recognizes the importance of each moment in time and how that reflects on the Township's identity.

Identity

A unified Holly identity will not be achieved in name or slogan alone. Holly's identity will be shaped by land use, celebration of culture and history, and by creating a "there" there. Holly must strive not to become a collection of homogeneous buildings, roadways, and signs that say they offer variety, but to truly offer choices to residents, businesses and visitors. Through the variety of the Township's landscape and the vision of its residents, Holly will create its identity.

Environmental Protection

Holly Township's natural environment (open space, wetlands, waterways, woodlands, animal habitat) provides the framework upon which the Township was developed. This framework has also established much of the Township's current identity and provides options for residents and visitors to connect with the outdoors and enhance their quality of life. For the Holly Township Plan, future environmental protection will be achieved from not only preservation of existing resources, but through the enhancement and celebration of those resources. Protection of these resources provides the Township with the opportunity to connect all areas of the community and link them with a common theme.

Connectivity

Physical connections will be accomplished in Holly through the use of roadways, pathways, greenways, open space, sidewalks, and public transportation. Providing residents, workers, and visitors with viable options to get from one destination to another in the Township and the region is an immeasurable value to the future success of the Township. Land use and transportation must be planned in concert with one another to ensure that the connections we provide are designed to make humans comfortable while at the same time meet the needs of our automobile centered society.

Fun

Fun is defined as something that provides amusement. Something that is considered fun for one individual may not be considered fun for another. Nevertheless, a community that provides activities and places for people to have fun improves the quality of life for its residents. Holly will be a place that residents, visitors, and workers want to live, work and play only if there are places or activities that bring enjoyment. Fun opportunities will be achieved in Holly through both active and passive leisure and recreation facilities including the celebration of history and culture, incorporation of active parks, walkways, shopping areas, public art and civic events.

Strong Leadership

The leadership of a community (elected and appointed) has the responsibility to plan for and implement the vision of its constituents. Change is not easy and the decisions that leaders must make to foster change can be difficult to say the least. Holly's leaders acknowledge this and will strive to create future policy that implements the vision set forth in the Holly Master Plan.

For many years, the Holly story has been buried under the pressure of a growing community trying to discover its potential and what it is supposed to be in the context of Oakland County, Southeast Michigan and beyond. Through this community based planning process, Holly has found its voice and has identified its future potential in the 2015 Holly Township Plan.

HOW IS THE PLAN TO BE USED?

The plan serves many functions and is to be used in a variety of ways:

1. The Plan is a general statement of the Township's goals and policies and provides a single, comprehensive view of the community's desire for the future.
2. The Plan serves as an aid in daily decision-making. The goals and policies outlined in the Plan guide the Planning Commission and Township Board in their deliberations on zoning, subdivision, capital improvements and other matters relating to land use and development. This provides a stable, long-term basis for decision-making.
3. A third function the plan serves is providing the statutory basis upon which zoning decisions are based. The Michigan Zoning Enabling Act (P. A. 110 of 2006, as amended) requires that the zoning ordinance be based upon a plan designed to promote the public health, safety and general welfare. However, it is important to note that the Master Plan and accompanying maps do not replace other Township Ordinances, specifically the Zoning Ordinance and Map. Zoning is only one of the many legal devices used to implement the Master Plan.
4. The Plan attempts to coordinate public improvements and private development. For example, public investments such as road improvements should be located in areas identified in the Plan as having the greatest benefit to the Township and its residents.
5. Finally, the plan serves as an educational tool and gives citizens, property owners, developers, and adjacent communities a clear indication of the Township's direction for the future.

In summation, the Township Master Plan is the only officially adopted document that sets forth an agenda for the achievement of goals and policies. The plan is not a panacea for the numerous conflicting desires of citizens and Township officials. It is a long-range statement of general goals and policies aimed at unified and coordinated development of the Township. As such, it provides the basis upon which zoning and land use decisions are made.

HISTORY OF PUBLIC INPUT IN HOLLY TOWNSHIP PLANNING

Citizen input is the core of any planning effort. In order for the goals of the plan to be achievable, general consensus regarding the vital issues to the community must be reached. One technique used to facilitate the gathering of citizen input is to conduct a Visioning Workshop. The goal of conducting Visioning Workshops is to attempt to gather citizen input on a variety of topics and to encourage conceptualization of a desired future for the community. The visioning process provides a vehicle for people of diverse viewpoints to identify and agree upon the common dreams they have for their community, and encourages people to express with words a desired future.

The Township held a Visioning Workshop in September 1997. Various groups were invited to attend including representatives from churches, schools neighborhood associations, homebuilders associations, Greenway groups, county representatives and major landholders. In addition, flyers were distributed and a public notice placed in the paper to invite residents. Approximately 35 people attended the workshop, including interested citizens, Township officials, and others interested in future planning for the Township. The Workshop started with a brief overview of the evening's agenda and a presentation of the role of Visioning in the Master Planning process. After this introduction, participants were randomly assigned a small group, each of which addressed the following three topics: 1) Overall Community Character, 2) Land Use and Infrastructure, and 3) Natural Resource Preservation and Recreation. The small groups, entitled "break out groups", were facilitated by Planning Commissioners. The facilitators generated and guided the discussion, and recorded vision statements. The groups brainstormed vision statements regarding the future of the community based upon the following principles:

- Visions should generate new and bold ideas for the future
- All ideas and visions are welcome
- No ideas or visions will be criticized
- Participation from all is encouraged

Following the above principles, each group generated lists of vision statements that reflected individual ideas regarding the various topics. After brainstorming, each group was asked to vote on the top five statements, deemed "Priority Vision Statements." After each group voted, the larger group reconvened and a representative from each

group presented the “Priority Vision Statements” from their group. The large group was then asked to vote on all the “Priority Vision Statements” from all five groups. Overall, concerns regarding the preservation of natural features and the rural character of the Township were prevalent themes. The vision statements generated that evening have assisted the Planning Commission in formulating the goals and policies of the Master Plan.

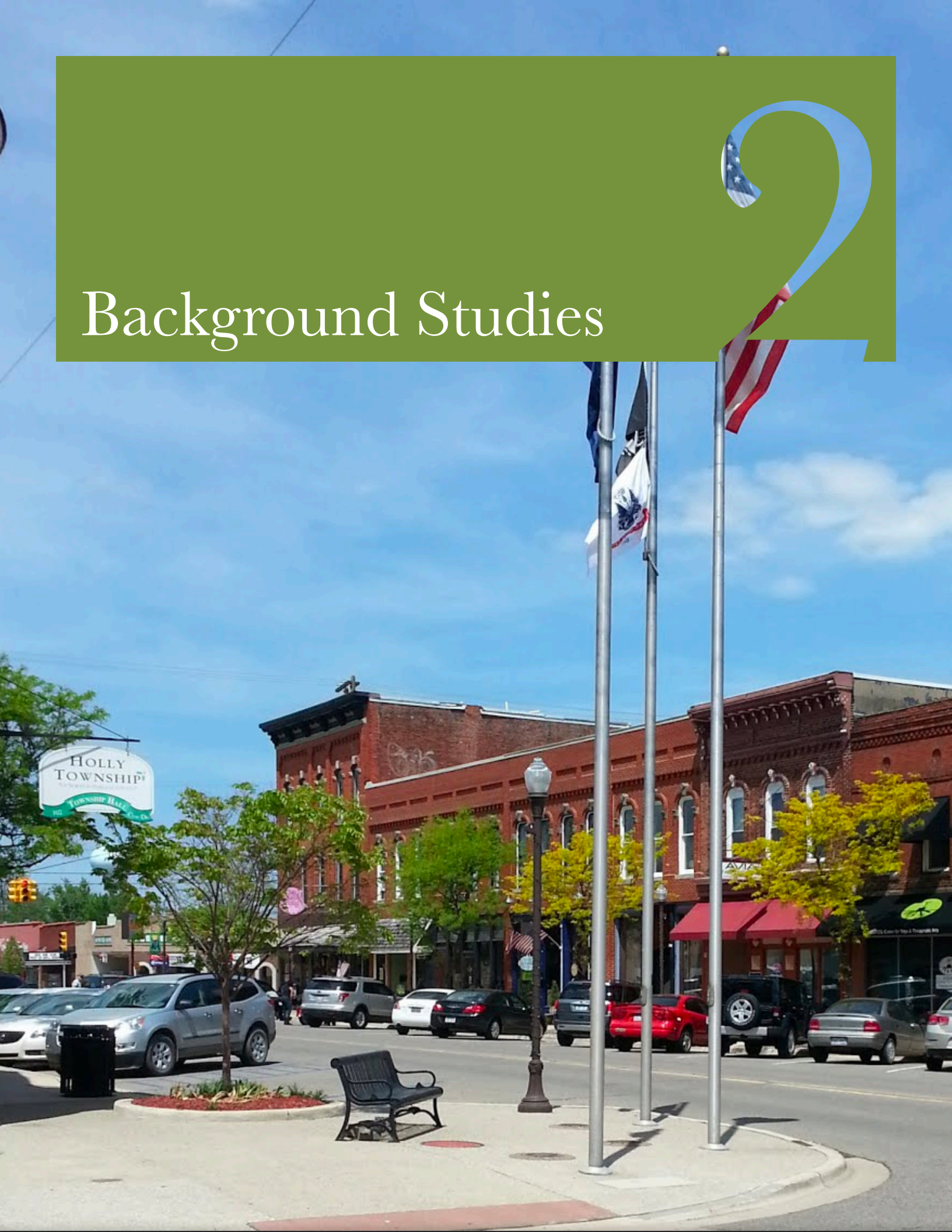
The 2015 Master Plan represents an update to the 2009 Master Plan that incorporates new information on development trends and demographics and an emphasis on implementation strategies. .

HOW IS THE PLAN ORGANIZED?

The Holly Township Master Plan is comprised of three basic sections. The **BACKGROUND STUDIES** section discusses current situations and projected trends, illustrating the point from which planning must begin. The **GOALS AND POLICIES** section outlines policies which provide a framework for a final plan. The **LAND USE PLAN and TRANSPORTATION PLAN** are the result of combining current situations with future concepts. The Implementation section includes specific actions to accomplish the Plan. While the starting point is unalterable, the end result can be changed according to the policies applied.



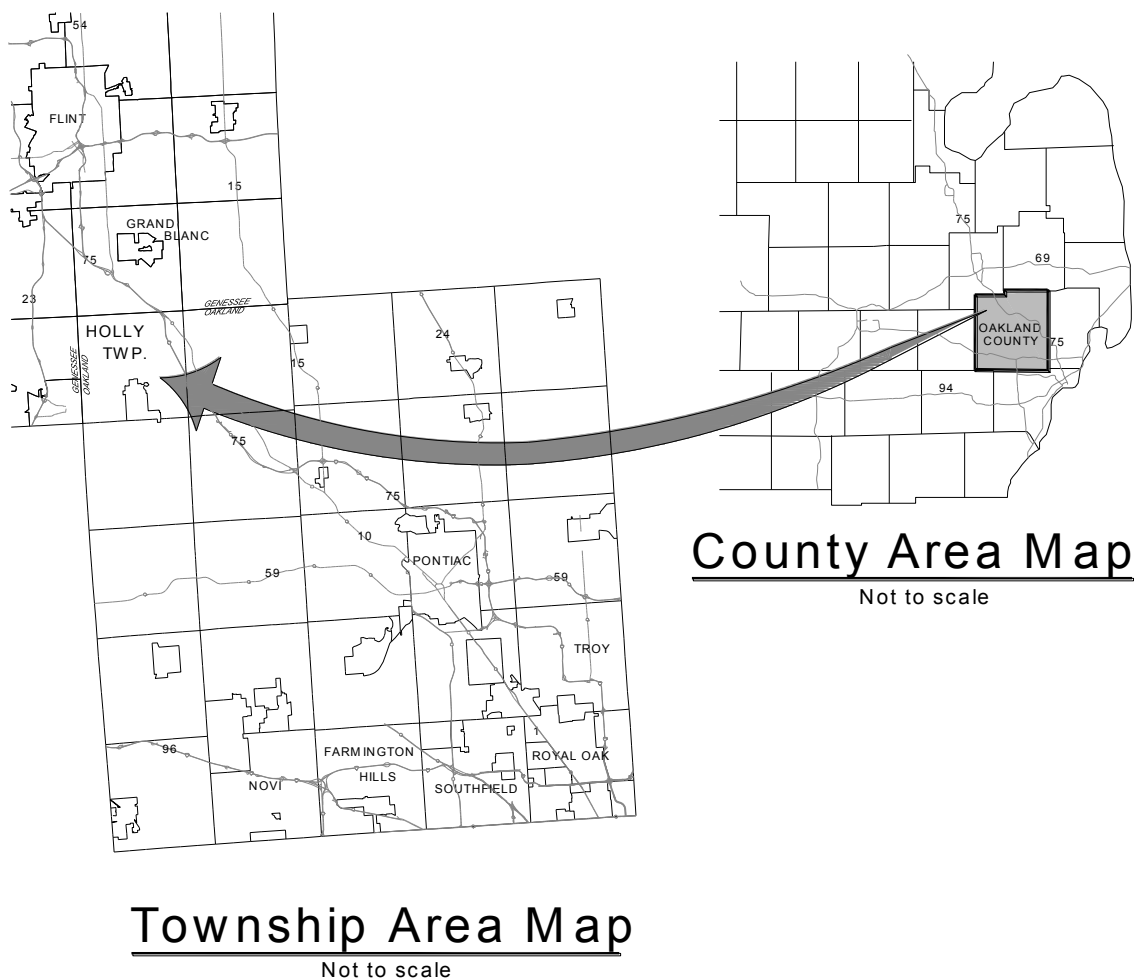
Background Studies



Location

Holly Township is located in the northwest quadrant and is the northwest corner of Oakland County as depicted in Figure A below, fifty (50) miles north of Detroit and fifteen (15) miles south of Flint. The Township is comprised of approximately thirty-six (36) square miles and is bounded on the east by Groveland Township and on the south by Rose Township, both in Oakland County. It is bounded on the west by Fenton Township and the City of Fenton and on the north by Grand Blanc Township, all in Genesee County. The Village of Holly is located in the southern portion of the Township and is approximately two and one half (2.5) square miles in size. Holly Township is accessible from all major Michigan market areas such as Detroit, Pontiac, Flint, Ann Arbor, and Lansing.

Regional Setting of Holly Township



Access

ROADWAYS

Although I-75 runs along the eastern edge of Holly Township, access into the Township is one of its greatest assets. I-75, connecting northern Michigan with southern Florida, links Holly Township directly with Detroit and Flint as well as the Upper Peninsula. The only interchange from I-75 however, is located at Grange Hall Road at the eastern border of the Township. The Dixie Highway cuts across the north-east corner of the Township providing access to a few east-west roads. Dixie Highway becomes State Highway US-24 within Genesee County and connects the Township with Grand Blanc and Flint to the north. US-23, running through adjacent townships is approximately two (2) miles to the west, connecting Holly with Toledo, Ann Arbor, and several statewide east-west arteries.

Access north-south within the Township is provided by Fish Lake Road, Fagan Road, and North Holly Road which traverses the Village of Holly. North Holly Road continues northward, connecting the Township to I-75 and Grand Blanc. South of the Township, East Holly Road provides an additional connection to I-75, while Milford Road provides access to Milford and M-59 and I-96.

East-west access across the state is satisfied by I-96, I-69 and I-94. I-94 traverses the southern portion of the state, connecting Detroit, Ann Arbor, Battle Creek, Kalamazoo and Chicago. It is approximately sixty (60) miles south of Holly Township, accessed by US-23. I-96 ties Detroit to Lansing, Grand Rapids and the west-central coast of Michigan. It is thirty-five (35) miles south of Holly and again, is accessed by US-23. I-69, fifteen (15) miles north of Holly, runs from Port Huron on the east, through Flint, and is a primary route to Lansing.

Within the Township, Grange Hall Road is the major east-west route linking Holly Township and Village with Holly State Recreation Area to the east and the City of Fenton to the west. Thompson Road, in the north-western corner of the Township, provides an additional connection to US-23. It is generally more difficult to traverse the Township when traveling east and west, than when traveling north and south. This is particularly true in the northeastern half of the Township.

RAILROADS

The Grand Trunk West Railroad crosses through the lower part of the Village of Holly and the Township, running northwest of Detroit. The CSX Railway also has a line which runs north-south through the Township traversing the Village of Holly.

AIRPORTS

Complete airport facilities are available at Flint's Bishop International Airport in Flint. Business-oriented flights are also available at Oakland International Airport to the south. Private airfields or landing strips are located in adjacent townships. Detroit Metropolitan Airport is approximately sixty (60) miles south.

TRAILWAYS

Trailways provide many benefits to the community, including environmental preservation, providing a means for all modes of transportation, and promote health and safety. Additionally, trails help maintain the Township's "Up North in Oakland County" character by allowing residents and visitors the opportunity to enjoy the natural resources Holly Township has to offer. There are over 35 miles of trailways located in the Township including through state parks, Safety Path to Schools, and headwater trails.

Physical Characteristics

INVENTORIES

The Holly Township offices hold a comprehensive set of natural resource maps, prepared by the Oakland County Planning and Economic Development Services Division, at the request of the Township. Outlined in a series of color maps throughout this section are: water resources, wetlands and watersheds; land resources including topography, septic suitability, woodlands and tree rows and natural features from the Michigan Natural Features Inventory Program. A discussion of the method of ranking of these natural features, noted in the Oakland County Potential Conservation/Natural Areas Report, is provided in the Appendix of this document.

The Michigan Natural Features Inventory Program identified the most natural, unaltered examples of natural plant communities in Oakland County, three (3) of which are located in Holly Township. A five (5) acre prairie fen located at Cady Lake, a one hundred three (103) acre dry-mesic southern forest located within Seven Lakes State Park, and a (6) acre prairie fen, also within Seven Lakes, were recognized as warranting protection at the county level.

GEOLOGY

Holly Township is situated within one (1) of two (2) broad zones in the southeast Michigan area; the hilly zone. The largest surface geological form in Holly Township is the area of till plain, closely followed by the morainic form. The outwash plain accounts for the least area. Landforms are the result of prehistoric glacial movement and deposits mainly of sand and gravel.

SOILS

General soil mapping indicates that there are four (4) broad soil types in Holly Township. These have been defined as follows:

Marlette-Capac-Houghton: Nearly level to hilly, well drained to very poorly drained loamy and mucky soils; on till plains and moraines and in bogs.

Riddles-Marlette-Houghton: Nearly level to steep, well-drained, moderately well drained, and very poorly drained loamy and mucky soils; on moraines and till plains and in bogs.

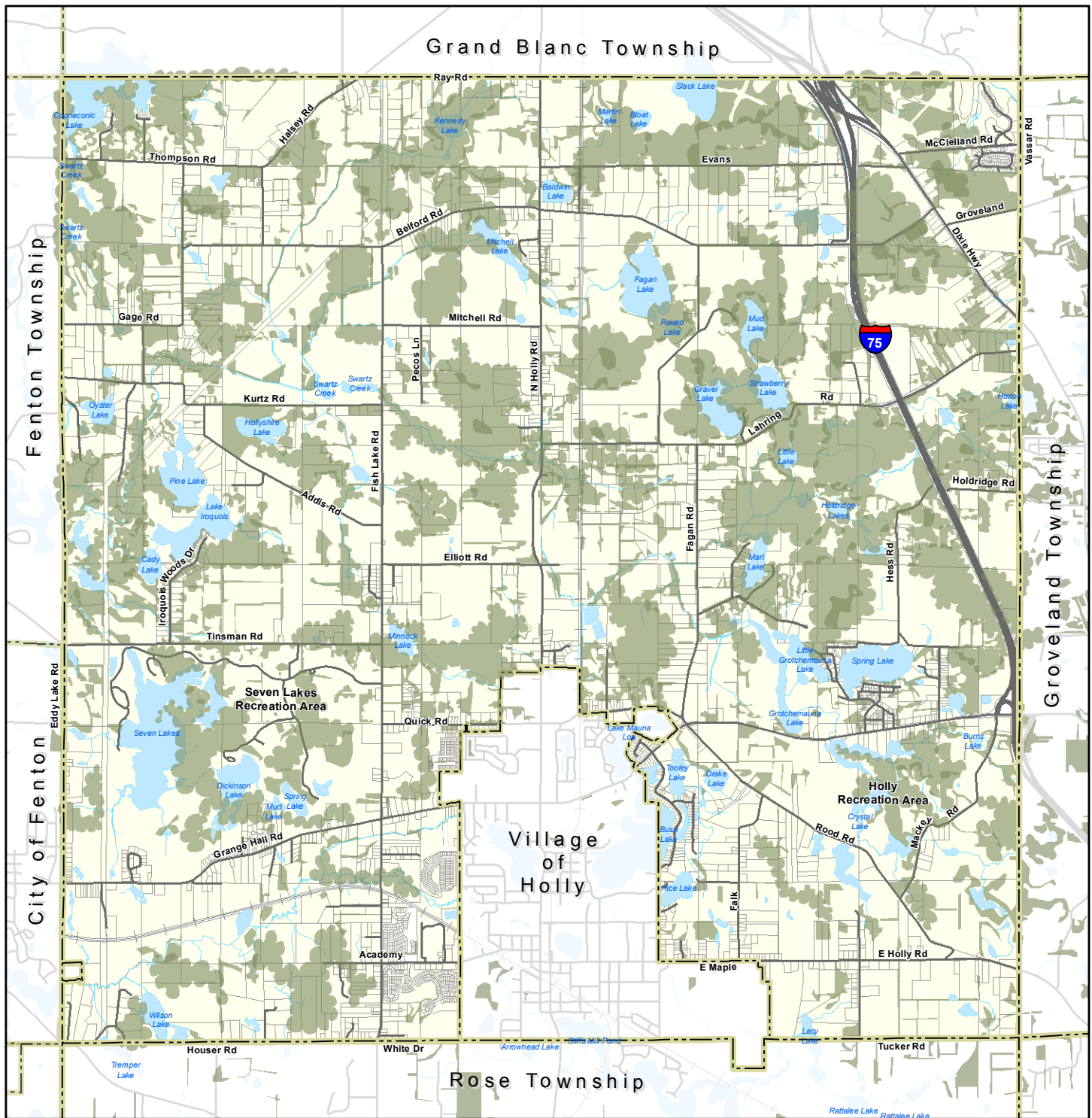
Fox-Oshtemo-Houghton: Nearly level to hilly, well drained and very poorly drained loamy, sandy, and mucky soils; on outwash plains, beach ridges, and moraines and in bogs.

Oshtemo-Spinks-Houghton: Nearly level to steep, well-drained and very poorly drained sandy, and mucky soils; on outwash plains, beach ridges, and moraines and in bogs.

The most prevailing soil types is the Marlette-Capac-Houghton with the Oshtemo-Spinks-Houghton and Riddles-Marlette-Houghton soil types forming the next two (2) soil type classifications, respectively. There is one (1) very small area of Fox-Oshtemo-Houghton along the southeast portion of the Township. The Village of Holly and the most intensively developed portions of the Township, lie within the Marlette-Capac-Houghton soil type and the area of outwash plain. Neither of these natural features is supportive of septic tank development.

VEGETATION

Northern Oakland County lies in a deciduous forest zone in which the climax forest is Beech and Maple. After the retreat of the glaciers, uplands became forested by oak communities. The kettle depressions developed into tamarack or hardwood swamps, and sometimes remained as lakes surrounded by meadows. The channels gradually became extensive swamps or meadows, and were often cut by rivers and streams.



July 21, 2016

Map 2: Woodlands and Tree Rows

Holly Township, Oakland County, Michigan

- Tree Rows
- Water Bodies



Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

WATER RESOURCES

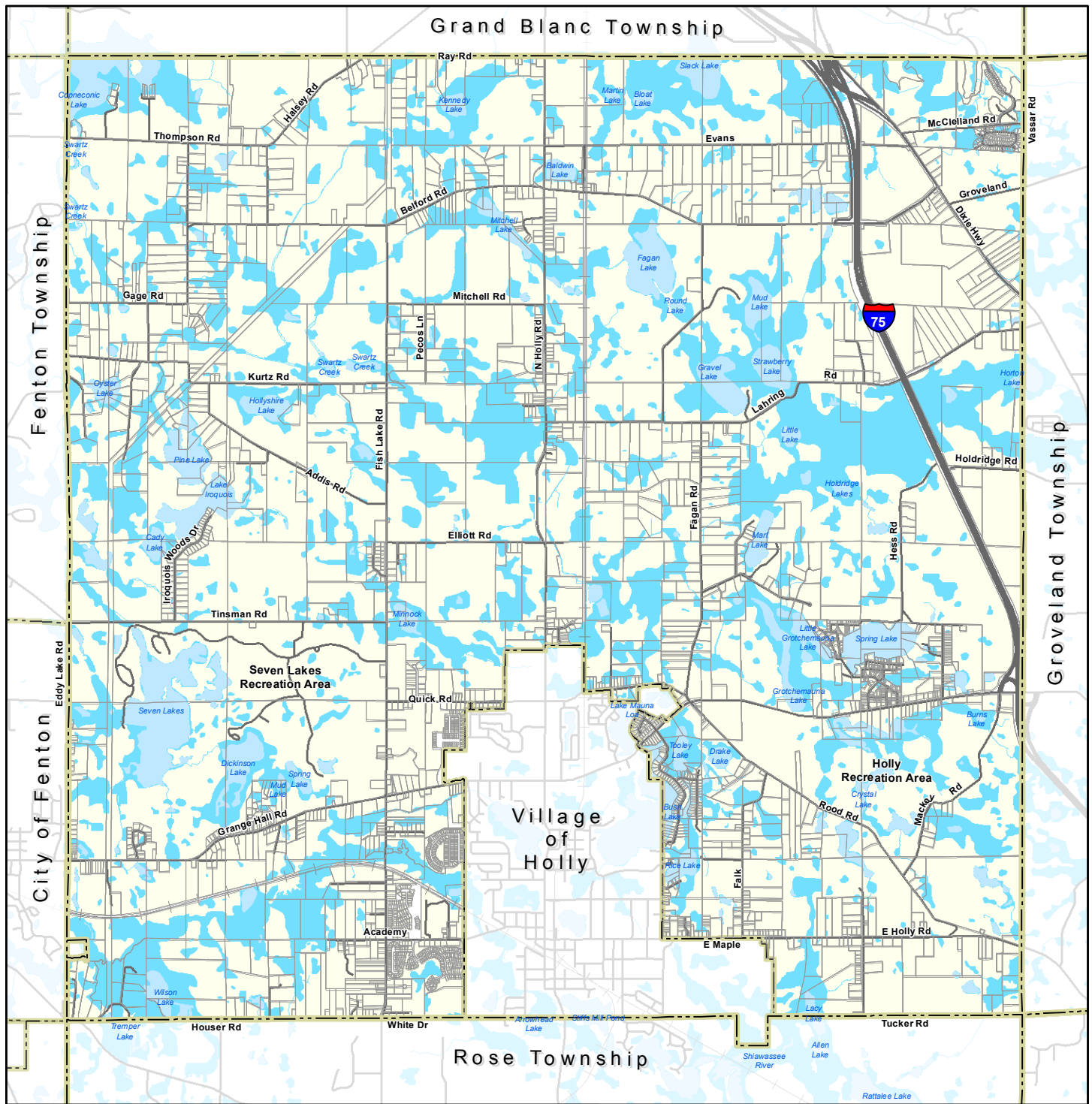
Holly Township has abundant water resources including lakes, wetlands, and streams. More than thirty-five (35) lakes of varying size are scattered extensively throughout the Township, occupying six percent (6%) of total land area. Large areas of wetlands surround the many water bodies as well. The Shiawassee River traverses through the southern portion of the Township, and Swartz Creek is located in the central northern portion.

It is estimated that only three hundred seventy (370) acres or twenty-two percent (22%) of pre-settlement wetlands remain today. Lowland forests total two hundred thirty (230) acres and upland forests three hundred seventy (370) acres, both less than ten percent (10%) of what originally existed in the Township. The Oakland County Planning and Economic Development Services Division in conjunction with Rose Township, the Oakland Land Conservancy, the Michigan Nature Conservancy, and the Michigan Nature Association developed the Rattalee Lake Greenway Project which identifies the Rattalee Lake wetlands area as one of the few remaining pre-settlement landscapes in Oakland County. A small portion of this area is located in Holly Township east of the Village of Holly at the southern boundary of the Township within and surrounding Holly Park #2.

Given that water supply for Township residents is provided with individual wells, groundwater protection measures are essential to protecting the public health, safety, and welfare. Although Wellhead Protection programs generally involve public well systems, other programs can be implemented. The Township currently has site plan review standards which regulate stormwater runoff, erosion control, and hazardous chemicals stored at sites. Enforcement of these regulations is necessary to meet ground water protection objectives. Sites which include storage of hazardous materials or waste, fuels, salt, or chemicals should be designed to prevent spills and discharges of polluting materials to the surface of the ground, groundwater, or nearby water bodies. Other alternatives include:

- Educational efforts to inform citizens of septic system maintenance needs, and potential on-site pollution from failing septic systems.
- Involvement of the Engineer and Fire Department for review of any use with on-site hazardous waste storage.
- Setback standards (100 feet) for septic system drain fields from wetlands, lakes, rivers, or other water bodies.
- Groundwater recharge areas should be protected from potential contamination.
- Coordination with state and county programs.
- Site plan review standards to continue to include information on hazardous waste and containment plans.
- Adoption of a wellhead protection ordinance which manages the sources of pollution for ground water resources.

Consideration must be made to areas with existing groundwater concerns. Water quality information has been provided with this plan and indicates areas with high contamination levels of arsenic and chloride in some areas of the Township. Educational efforts pertaining to these issues are also of importance to the Township and current and future residents. This information should also be continually updated to ensure that the delineations are accurate.



July 21, 2016

Map 3: Wetlands

Holly Township, Oakland County, Michigan



Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a. Data Base: Oakland County Data, 2012

DRAINAGE

Township drainage is composed of an interrelated system of the following natural and manmade elements:

- Natural drainage courses and water bodies such as rivers, floodplains, wetlands, and lakes, some of which are under the MDEQ jurisdiction.
- Established County drains which are under the jurisdiction of the County Water Resources Commission.
- Roadside ditches which are under the jurisdiction of the Road Commission of Oakland County.

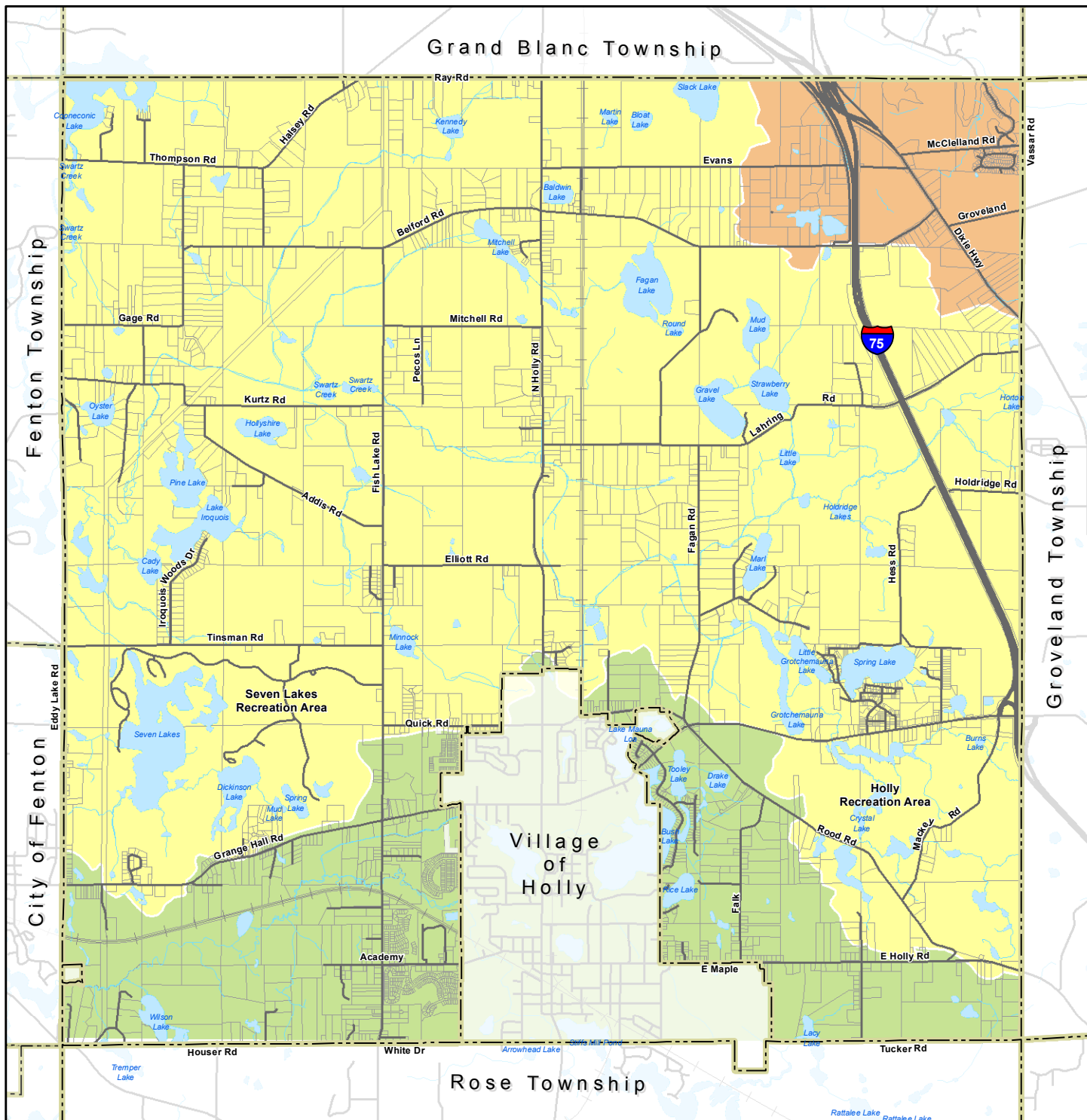
The management of the above combined drainage elements are not coordinated by any one (1) of the three (3) involved governmental bodies, therefore, careful monitoring must occur and problem areas identified in order that the proper management agency can address problems in a prioritized manner. The Township can also ensure that development in areas with lakes and wetlands is done in a sensitive manner with a great effort to minimize impacts upon these natural systems and to encourage the use of Best Management Practices, such as bioswales and rain gardens. Furthermore, as road improvements under the Road Commission for Oakland County jurisdiction occur, coordinated improvements to the drainage in that area can also be addressed.

Because of these considerations and recent changes in legislation, more care needs to be given for drains in the Township in the future.

TOPOGRAPHY

In Southeast Michigan, slopes of twelve percent (12%) or more should generally not be developed because of their uniqueness in the area. Holly Township has considerable areas of twelve percent (12%) slopes, distributed throughout the Township, quite a few of which are part of a wetland environment. This is most significant for water quality purposes because of the high incidence of potential surface runoff from these lands if developed and concurrent pollution of water bodies from urban runoff.

Careful planning around slopes is necessary to minimize erosion, to maintain grade and soil stability, to control amounts and velocities of runoff, and to maintain the community's aesthetic resources. The existing landform shall be made a part of land use planning and design. The primary objective is the preservation of the natural contours, vegetation and drainage patterns. Grading and site preparation shall be kept to a minimum.



July 21, 2016

Map 4: Watersheds

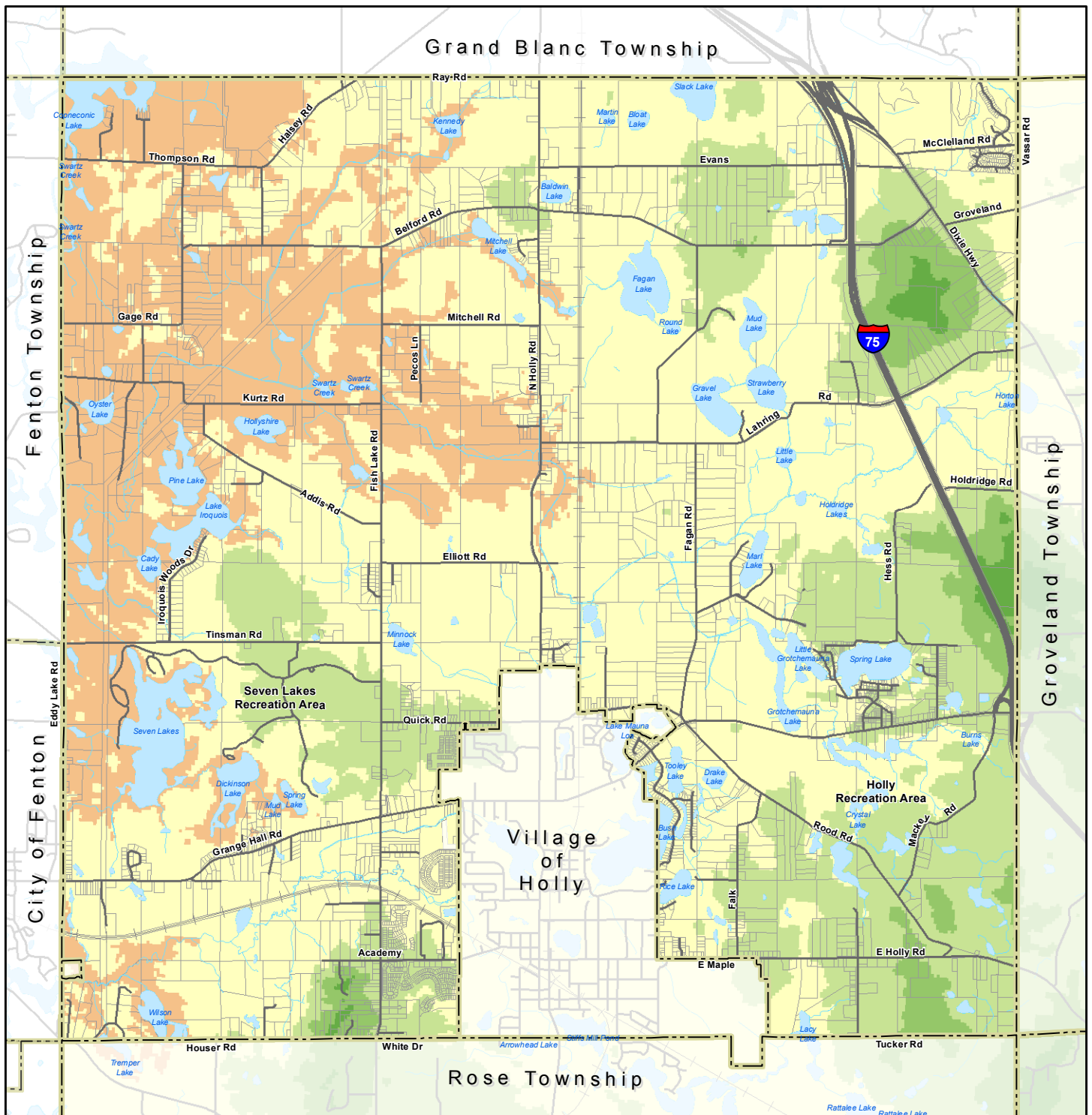
Holly Township, Oakland County, Michigan

- Shiawassee River (Shiawassee River Watershed)
- Swartz Creek (Flint River Watershed)
- Thread Creek (Flint River Watershed)

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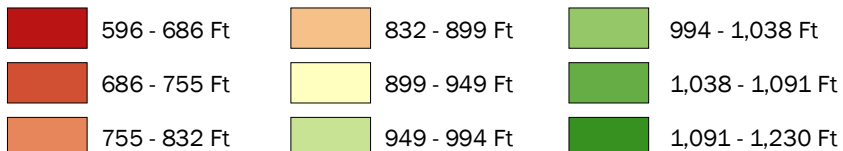
Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012



July 21, 2016

Map 5: Topography

Holly Township, Oakland County, Michigan



0 2,000 4,000 FEET



McKenna
ASSOCIATES

Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

Population and Housing

POPULATION TRENDS

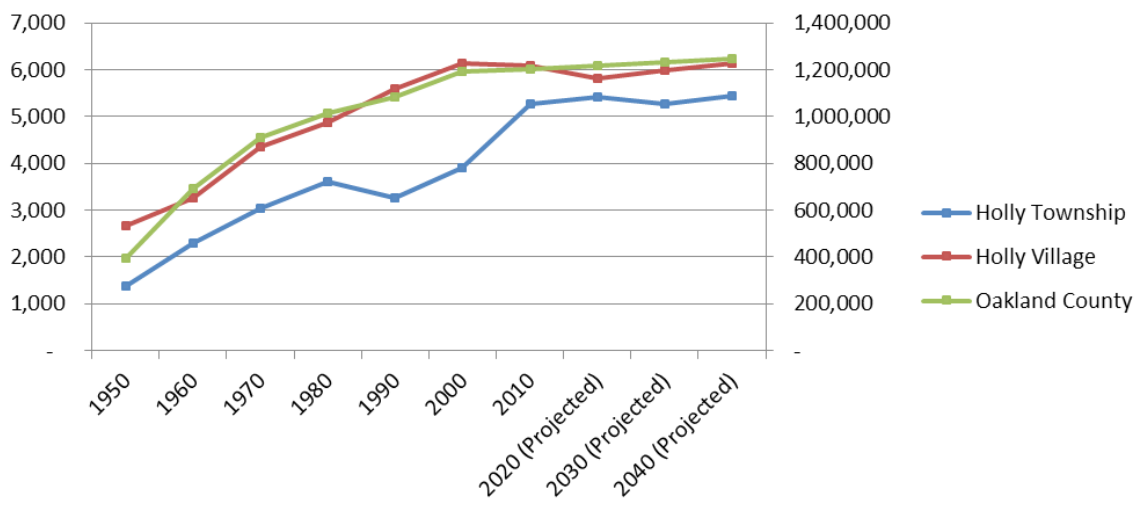
Holly Township and the Village of Holly are located in a historically high growth region within the state of Michigan. The Township has quadrupled in population since 1950, and the Village has mirrored this growth trend by tripling in population during that same time frame. Figure A and Table 1 depict the growth trends and population numbers of both the Village and Township, and compare Oakland County from 1950 to 2010, including population projections for 2020, 2030, and 2040. Many of the following tables include statistics for the total area of Holly Township (36 square miles), as well as the Village of Holly and Holly Township excluding the Village.

Table 1: Population Trends – Holly Township, the Village of Holly, and Oakland County

	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040
Holly Twp. (excluding Village)	1,367	2,282	3,041	3,612	3,257	3,902	5,276	5,418	5,267	5,440
Village of Holly	2,663	3,269	4,355	4,874	5,595	6,135	6,086	5,801	5,997	6,132
Oakland County	396,001	690,259	907,871	1,011,793	1,083,592	1,194,156	1,202,362	1,218,449	1,230,755	1,246,863

Source: U.S. Census Bureau and SEMCOG 2040 Forecast produced in 2012.

Figure A: Population Trends – Holly Township, the Village of Holly, and Oakland County



Source: U.S. Census Bureau and SEMCOG 2040 Forecast produced in 2012.

The Township experienced a surge in population between 1950 and 1960, where the population more than doubled. Both the Village and Township experienced double digit growth rates over the next 40 years, with only the Township dipping in 1990 to a negative growth rate before returning to a 20 percent growth rate in 2000, and 35 percent growth rate in 2010. The first ten years of the 21st century saw the Village of Holly and Holly Township return to growth rates that had not been seen since the 1960s, though this trend is projected to level off and stabilize by the years 2020, 2030, and 2040. This is consistent with what has been seen regionally and nationally, and are in relation to decreasing household sizes and the aging baby-boom population.

Age characteristics for Holly Township and adjacent communities are depicted below in Table 2. At a median age of 41.1 years, Holly Township is less than one year older than the median age of Oakland County. With the average median age for the surrounding local region being 41.34 years, Holly Township reflects general conditions. Figure B displays the age characteristics for the population in Holly Township and how it has fluctuated over the course of the past four (4) year period. Since 2010, the median age has increased by nearly two (2) years, 39.2 years in 2010 to 41.1 years in 2013. This is in part due to a one (1) percent increase in the sixty-five (65) year and older group, while those eighteen (18) years of age and younger have only increased by 0.3 percent since 2010. This increase in median age and slight change in age distribution is more indicative of county, state, and federal population trends, smaller family sizes and an aging baby-boom population; although, as seen in Table 2, more than one-third of the Holly Township population consists of households with children, an above average statistic in comparison to the local region and both Oakland and Genesee County.

Table 2: Age Characteristics – Holly Community and related areas in Oakland and Genesee Counties, 2013

	Holly Township	Holly Village	Rose Township	Groveland Township	Oakland County	Grand Blanc Township	Fenton Township	Fenton City	Genesee County
Total Population	5,286	6,125	6,298	5,522	1,213,406	37,060	15,408	11,656	421,575
Age Characteristics									
Median Age (years)	41.1	36.8	46.3	43.4	40.5	37.1	42.5	37.4	38.8
% Under 5	5.1%	4.4%	3.8%	8.0%	5.6%	6.2%	4.6%	7.4%	6.3%
% Under 18	23.1%	27.8%	19.8%	24.9%	23.1%	25.9%	23.7%	23.8%	24.5%
% 65 and Older	13.7%	11.9%	13.1%	11.6%	13.7%	12.7%	13.5%	14.5%	14.2%
Total Households	1,861	2,269	2,369	1,923	486,332	14,358	5,844	4,815	165,669
% Households with Children	35.9%	39.4%	29.8%	35.8%	31.7%	33.6%	33.6%	30.7%	31.5%

Source: US Census Bureau, 2009-2013 American Community Survey 5-Year Estimates

Figure B: Population by Age – Holly Township, 2010 to 2013

Sources: US Census Bureau, American Community Survey 5-Year Estimates for each year between 2009 and 2013

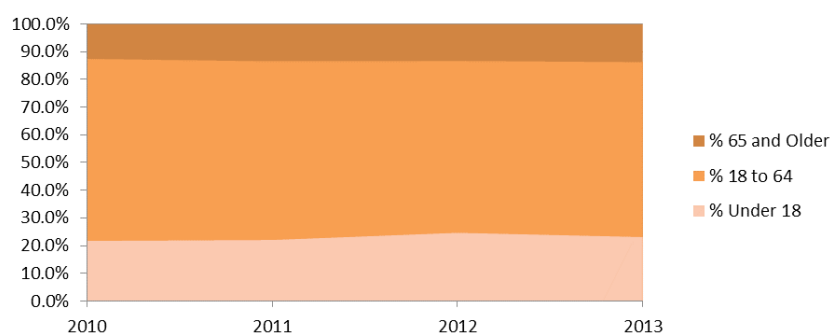
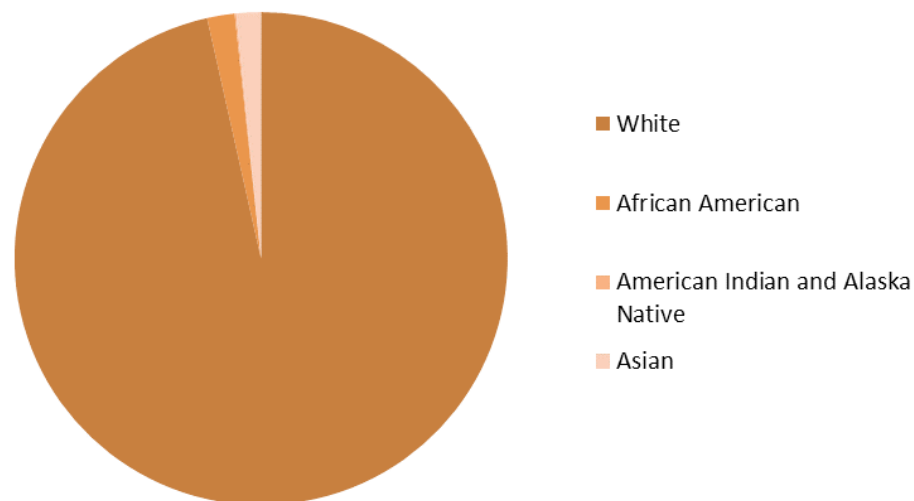


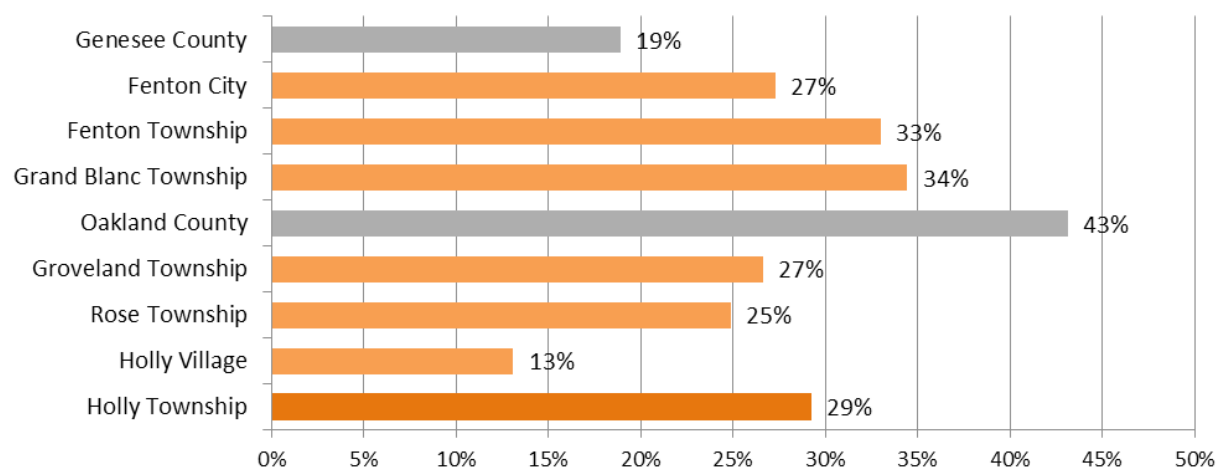
Figure C: Racial Composition – Holly Township - 2013



Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

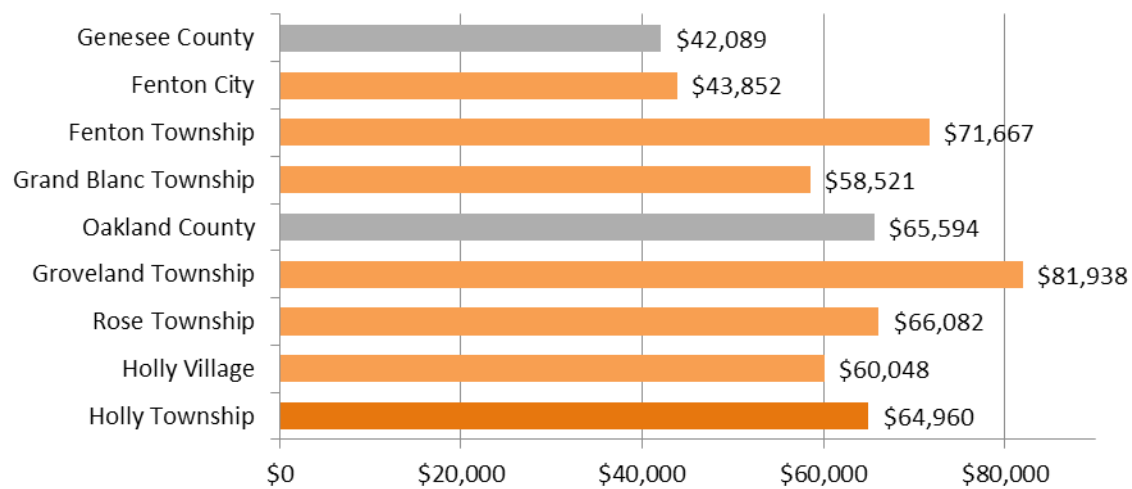
In regards to racial composition, Holly Township's population is 96.1 percent white, compared to Oakland County's population of 79.2 percent white, and Genesee County's population which is 77.3 percent white. African-Americans are the second largest racial group in Holly Township at 1.8 percent of the total population, virtually equal to Rose Township and Fenton City. While Holly Township is a primarily homogeneous community, it isn't dissimilar to the composition of its surrounding neighbors and has a rich history of diversity especially in the Great Lakes Subdivision.

Figure D: Population 25 Years of Age and Over with a Bachelor's Degree or Higher – 2013



Source: US Census Bureau, 2009-2013 American Community Survey 5-Year Estimates

Figure E: Median Household Income – 2013



Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

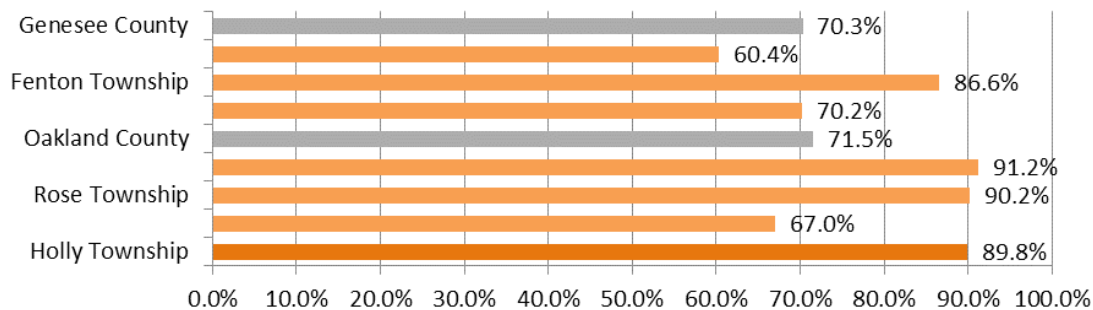
Figure D highlights the percentage of 25 year olds or older in Holly Township and adjacent communities, who have earned a Bachelor's degree or higher. The median percentage of the population with a Bachelor's degree or higher in the local region is 28 percent, one (1) percentage lower than Holly Township's 29 percent which is the third (3rd) highest level in the area outside of county level statistics. When measuring the percentage of the population who have pursued post-secondary education, the percentage of 25 year olds and over rises dramatically to 62 percent, as seen in Table A1 Located in Appendix A. While this rate is ten (10) percentage points below Oakland County, it is seven (7) percentage points higher than that of Genesee County.

Figure E depicts median income levels in regards to the local region around Holly Township. Holly Township is above the average median income for the area and is virtually even with Oakland County at approximately \$65,000, and more than \$20,000 above the median income of Genesee County. At only an estimated ten (10) percent unemployment rate in 2013, Holly Township was the second lowest after Fenton Township (8.3 percent), as seen in Table A2 located in Appendix A. Holly Township also claimed the lowest percentage of families living in poverty status, at two (2) percent; the next closest competitors were Rose Township at two-point-two (2.2) percent, and Fenton Township at seven (7) percent.

HOUSING CHARACTERISTICS

The percentage of owner-occupied housing in Holly Township, approximately 89.8 percent, is higher than every surrounding community listed in Figure F, except for Groveland Township and Rose Township. The 89.8 percent figure is approximately 10 percentage points higher than the average median owner occupied housing percentage for surrounding communities. Holly Township has one of the stronger owner-occupied housing populations in the area.

Figure F: Owner Occupied Housing and Median Rent – 2013



Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

The median housing value, inversely related to median rent, is below the median housing value for surrounding communities. At approximately \$150,000, \$20,000 below Oakland County, Holly Township has the fifth (5th) highest median housing value in comparison to the surrounding area. Whereas the median rent in Holly Township is higher than all adjacent communities, including Oakland County, comparatively at \$919.

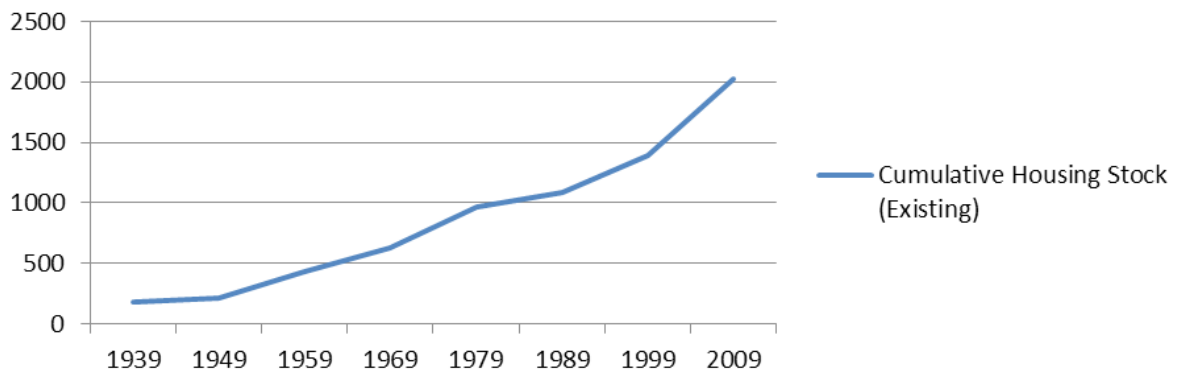
Half of the existing housing stock in Holly Township was constructed before 1970. The greatest percentage of new housing stock, 31 percent, was built between 2000 and 2010. Within Holly Township, the Village possesses the majority of the older housing stock with a large portion of the units constructed prior to 1939. Figure G depicts the age composition of the housing stock in Holly Township. Figure H describes the change in housing types from 2000 to 2010, and describes the composition of housing types within Holly Township. Of the listed housing types, single family homes make-up the largest number of housing types in the community. Although, over the previous ten (10) year period, townhouses/attached condos and mobile homes/manufactured houses experienced the most dramatic growth trend. Specifically, mobile homes/manufactured homes saw a 495 percent increase, and townhouses/attached condos saw a 2,367 percent increase. In contrast, duplexes and Multi-Unit Apartments experienced large losses in the 2000 to 2010 period, respectively losing 67 percent and 45 percent of their previous totals.

Table 3: Housing Tenure, Median Rent, and Median House Value – Holly Township and Related areas in Oakland and Genesee County, 2013

	Holly Township	Holly Village	Rose Township	Groveland Township	Oakland County	Grand Blanc Township	Fenton Township	Fenton City	Genesee County
Occupied housing units	1,861	2,269	2,369	1,923	486,332	14,358	5,844	4,815	165,669
% Owner-occupied	89.8%	67.0%	90.2%	91.2%	71.5%	70.2%	86.6%	60.4%	70.3%
% Renter-occupied	10.2%	33.0%	9.8%	8.8%	28.5%	29.8%	13.4%	39.6%	29.7%
Median Rent (2013 dollars)	\$1,251	\$761	\$795	\$1,012	\$919	\$744	\$891	\$781	\$711
Median House Value (2013 dollars)	\$150,400	\$84,400	\$179,400	\$196,100	\$170,500	\$130,800	\$173,500	\$105,800	\$91,700

Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

Figure G: Age of Housing Stock – Holly Township



Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

Table 4: Housing Types – Holly Township in 2000 and 2010

Housing Type	2000	2010	Change 2000-2010	% Change 2000-2010
Single Family Detached	1,359	1,517	158	12%
Duplex	21	7	(14)	-67%
Townhouse / Attached Condo	6	148	142	2367%
Multi-Unit Apartment	11	6	(5)	-45%
Mobile Home / Manufactured Housing	20	119	99	495%
Total	1,417	1,797	380	27%

Source: U.S. Census Bureau, Census 2000, and 2010 American Community Survey 5-Year Estimates.

Economic Base

EMPLOYMENT CHARACTERISTICS

Holly Township has a diverse job base as seen in Table 5. The Village and Township virtually split the employed concentration of the population, with the Village holding a slight edge at 2,711 employed residents over the age of 16. Four out of every ten (10) employed residents work in the management, business, and science and arts sector; Another three (3) out of ten (10) hold sales and office occupations. Holly Township and Village have the largest sales and office sector in the area, comprising 28 percent of the employed population. The sector with the highest concentration of jobs is management, business, science and arts at 39 percent.

The largest employers in the Holly Community include: Delta Tube and Fabricating Corp., Holly Schools, Camp Ohiyesa, Rose Hill Center, the Holly Convalescent Center, and the Michigan Renaissance Festival. There are a variety of other places of employment, but the list in Table 6 represents what key employment assets the community has. The largest employers are all involved in the base economic sector, including manufacturing, education, health services, and tourism. These industries serve not only the local population, but provide an influx of revenue from outside the community.

Table 5: Occupational Employment

	Holly Township	Holly Village	Rose Township	Groveland Township	Oakland County	Grand Blanc Township	Fenton Township	Fenton City	Genesee County
Civilian employed population 16 years and over	2,583	2,711	2,818	2,492	581,100	16,050	7,088	5,620	158,199
Management, business, science, and arts	39%	28%	35%	44%	47%	45%	42%	31%	30%
Service	15%	17%	19%	17%	15%	15%	15%	20%	20%
Sales and office	28%	27%	26%	20%	25%	24%	23%	23%	25%
Extraction, construction, and maintenance	6%	8%	11%	11%	5%	5%	6%	8%	8%
Production, transportation, and material moving	12%	20%	9%	9%	9%	11%	13%	17%	16%

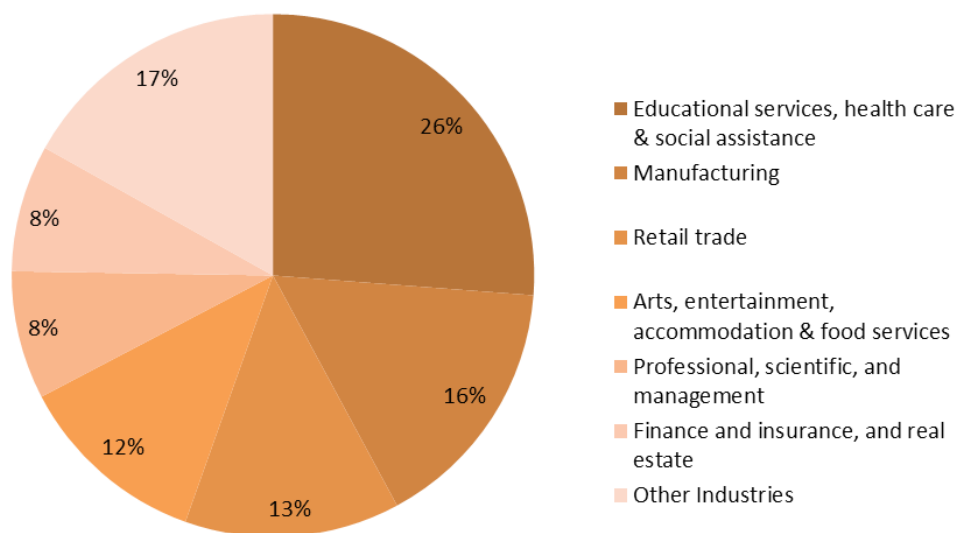
Source: US Census Bureau, 2009-2013 American Community Survey 5-Year Estimates

Table 6: Major Employers in the Holly Community – 2015

Company	Specialty
Delta Tube & Fabricating Corp	Tubing-Metal-Fabricators
Karl Richter Campus School	Schools
Holly High School	Schools
Holly Academy	Schools
Benjamin H Sherman Middle School	Schools
Camp Ohiyesa	Camps
Rose Hill Center	Mental Health Services
Holly Convalescent Center	Nursing & Convalescent Homes
Michigan Renaissance Festival	Carnivals

Source: Reference USA Database, 2015

Labor force characteristics for the Holly Township are presented below in Figure H. The figure shows that over one quarter of Holly Township's employed residents work in educational services, healthcare, and the social assistance sector. A significant portion of residents work in manufacturing, retail trade and arts, entertainment, accommodation and food services. White collar positions comprise of 42 percent of the industry employment, while blue collar work represents 16 percent of industry employment in Holly Township.

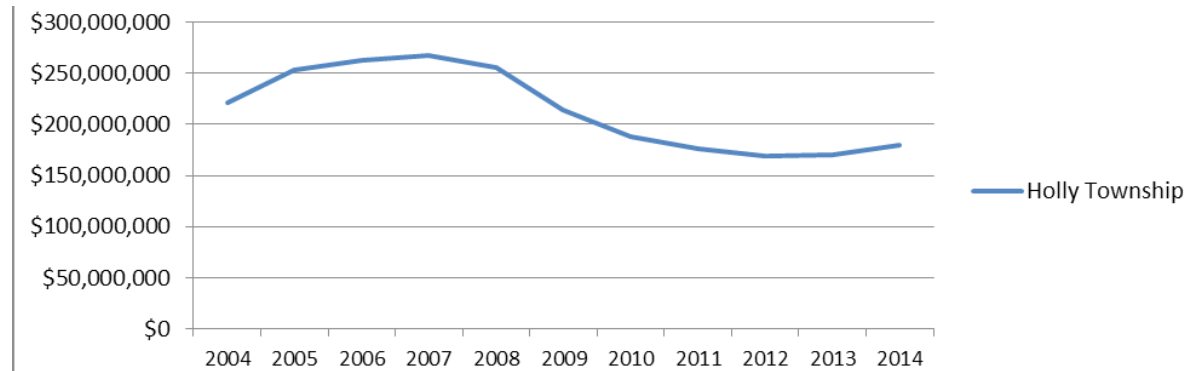
Figure H: Employment by Industry – Holly Township, 2013

Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

TAX BASE

After peaking in 2007 at \$446.3 million, Holly Township's total State Equalized Value (S.E.V.) of real and personal property continuously dropped for the following five (5) years, consistent with the nation's economic recession. The total value loss bottomed out in 2012, when it fell to \$270.1 million, 37 percent below the value recorded in 2007. However, the S.E.V. has been steadily increasing since then, reaching \$285.8 million in 2014, \$259.7 million representing taxable value. This value is both higher than Groveland Township and Rose Township. Of the \$285.8 million, residential real property represents the largest percentage of the value at 84 percent. Figure I and Table 7 depict the S.E.V trend of Holly Township since 2004 and its comparison to surrounding communities, while Table 8 analyzes real property by class.

Figure I: State Equalized Value – Holly Township, 2004-2014



Oakland County Department of Equalization Reports from 2004 to 2014

Source:

Table 7: State Equalized Value and Taxable Value, 2014

	Holly Community	Holly Township	Holly Village	Rose Township	Groveland Township	Oakland County
Equalized Value	\$285,895,670	\$180,228,610	\$105,667,060	\$248,445,980	\$214,295,210	\$55,084,607,293
Taxable Value	\$259,751,110	\$160,037,570	\$99,713,540	\$218,893,500	\$188,883,890	\$50,048,650,087

Source: Oakland County Equalization Reports from 2004 to 2014

Table 8: Equalized and Taxable Value of Real Property by Class – Holly Community, 2014

	Agricultural Real	Commercial Real	Industrial Real	Residential Real	Total Real
Parcel Count	51	236	42	4,907	5,236
Equalized Value	\$6,467,220	\$33,028,720	\$4,723,730	\$225,920,250	\$270,139,920
Equalized Value (% of total real property)	2.4%	12.2%	1.7%	83.6%	-
Taxable Value	\$4,843,190	\$31,405,060	\$4,254,220	\$203,424,270	\$243,926,740
Taxable Value (% of total real property)	2.0%	12.9%	1.7%	83.4%	-

Source: Oakland County Equalization Reports from 2004 to 2014

AVERAGE COMMUTE TIME

As depicted in Occupational Employment, the Holly Community captures the largest percentage of employed residents with one (1) out of five (5) working within the community. The rest of the employed residents commute to surrounding job centers, with the largest percentage, 41.6 percent, traveling to work places that are not located in nearby job centers. And of the 5,100 employed residents listed in Table 10, nearly 88 percent drive alone in a car, truck, or van while only 10 percent carpooled. The distribution for means of commuting travel to work is reflective of surrounding area trends. However, average commute times to work for Holly Township residents is third (3rd) highest in comparison to surrounding communities, and four (4) minutes longer than that of Oakland County residents as a whole. This is indicative of a population that, in general, works outside of the Township in other job centers in the area.

Table 9: Locations where Holly Community's Employed Residents Work, 2010

Where Residents Work	Workers	Percent
Holly Community	945	18.5%
Flint, Genesee County	325	6.4%
Fenton, Genesee County	305	6.0%
Troy	295	5.8%
Waterford Township	240	4.7%
Auburn Hills	230	4.5%
Grand Blanc Township, Genesee County	195	3.8%
Pontiac	190	3.7%
Rochester Hills	140	2.7%
Detroit	115	2.3%
Elsewhere	2,120	41.6%
Total	5,100	

Table 10: Means of Commuting to Work and Commute Time for Residents – Holly Township, 2013

	Holly Township	Holly Village
Workers 16 years and over	2,551	2,586
Car, truck, or van -- drove alone	88.1%	87.6%
Car, truck, or van -- carpooled	9.8%	8.2%
Public transportation	0.0%	0.0%
Walked	0.5%	1.8%
Other means	0.0%	1.1%
Worked at home	1.6%	1.3%
Average commute time to work	30.2	30.4

Source: US Census Bureau, 2009-2013 American Community Survey 5-year estimates

Emerging Sectors

Opportunities for Holly Township's economic growth are not only dependent on its own assets, but can benefit from understanding and capitalizing on trends and actions that neighboring communities are involved in. Through targeted strategy, Holly Township can build a sustainable and successful community that is representative of its historical character, while progressively attracting concentrated growth. This section will include an analysis as to what and how the emerging trends and actions that are occurring in Oakland County, Genesee County, and Grand Blanc Township will impact Holly Township, as well as a retail gap analysis identifying retail market trends within and around the Township.

NEIGHBORING EMERGING SECTOR STRATEGIES

Both Oakland County and Genesee County have implemented strategies that identify emerging trends with the goal of promoting job retention, creation, and economic diversification. The focus of each plan was to target high-tech, medical, and green technology industry sectors that represent potential future economic growth. Table 11 depicts the sectors targeted in each of their respective Counties.

Table 11: Targeted Emerging Sectors – Oakland and Genesee County Strategies

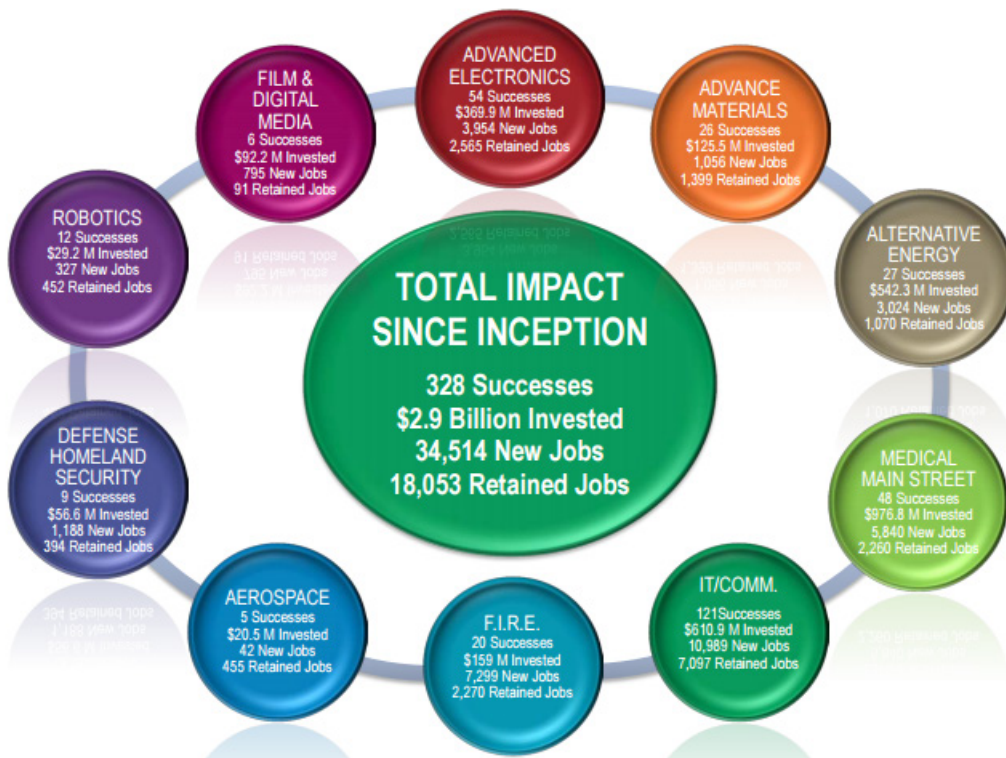
Oakland County	Genesee County
Advanced Electronics	Health care and Education
Advanced Materials	Finance, Insurance, and Real Estate
Aerospace	Professional, Technical, & IT Services
Alternative Energy	Transportation & Utilities
Communications and IT	
Defense and Homeland Security	
Film & Digital Media	
Finance, Insurance & Real Estate	
Medical Main Street	
Robotics	

Source: Oakland County Emerging Sector Plan; 2010 Flint Genesee Economic Development Strategy

Since its inception in 2004, Oakland County has attracted \$2.9 billion of business investment, creating 34,514 new jobs and retaining more than 18 thousand jobs. The details of Oakland County's success can be seen below in Figure K. Medical Main Street has attracted the largest amount of investment at \$976.8 million, while IT and Communications experienced that largest job growth at nearly 11 thousand new jobs.

The emerging sector strategy for Genesee County is encompassed within the 2010 Flint Genesee Economic Development Strategy. This document highlights four (4) sectors that are expected to drive their economic growth for many years to come. The four (4) targeted sectors can be seen above in Figure J. Projected job growth from targeted sector strategies is estimated to attract and create almost 9 thousand new jobs from 2012 to 2022, with health care leading employment growth at 5,800 jobs. Other sectors that are expected to grow within the same time frame are accommodation and food services, manufacturing, and educational services. The plan goes on to say that these projections were deliberately conservative and that aggressive and cohesive leadership within the County could support additional growth statistics.

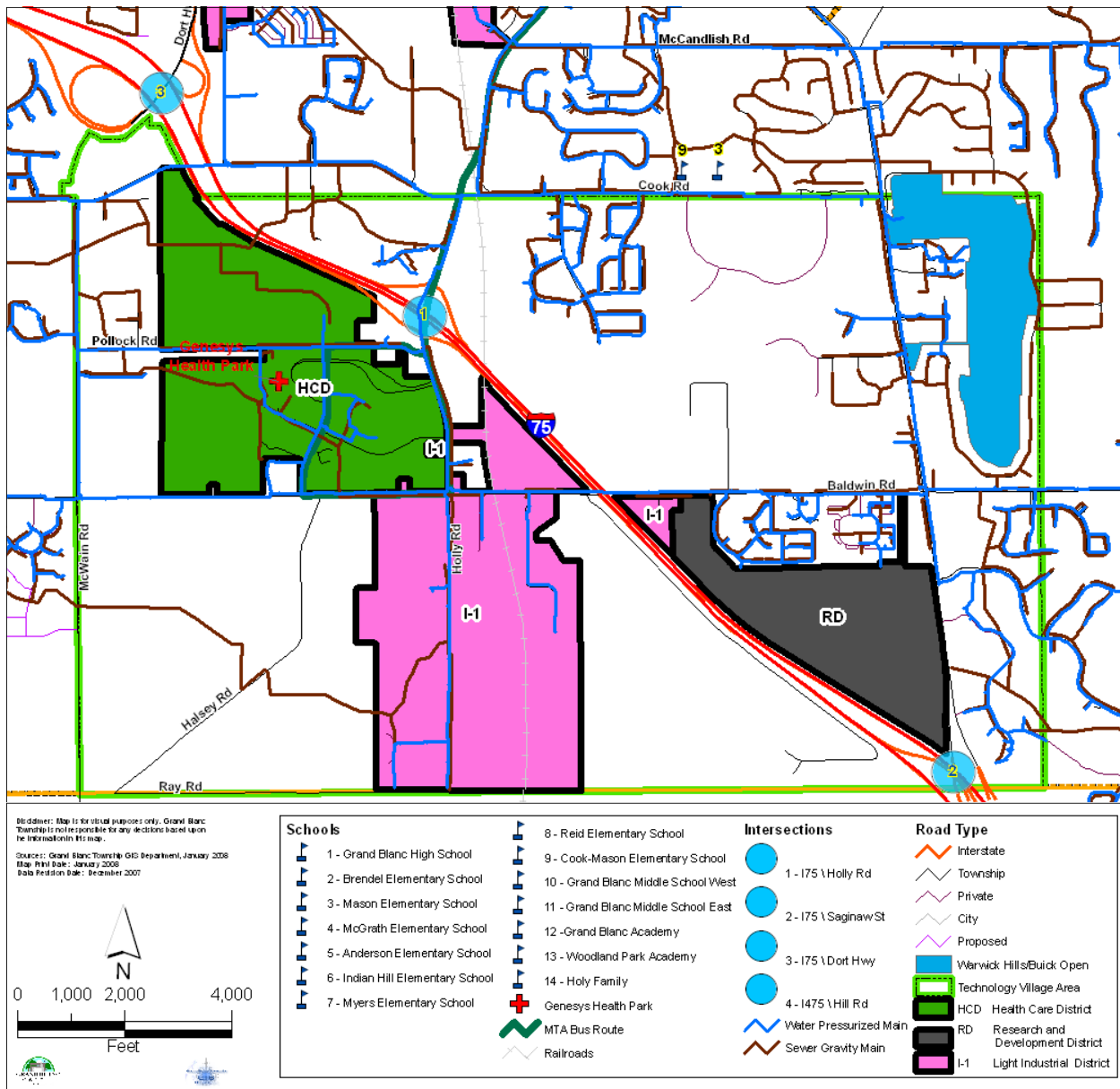
Figure J: Emerging Sector Program Success Diagram – Oakland County



Source: Oakland County Advantage Oakland Initiative

Grand Blanc Township, Holly Township's northern border, is adopting an emerging sector strategy known as the Technology Village Area Plan. This targeted area encompasses 4,103 acres in south central Grand Blanc, and is designed to attract high-tech businesses and talented young residents. This area touts its connections to three (3) high traffic and accessible interchanges, and expansive frontage along I-75. One of the three interchanges includes the Saginaw Road interchange, which sits on the border of Grand Blanc and Holly Township. The Technology Village Area Future Land Use Plan outlines their districting strategy. Much of the footprint is at capacity and can only accommodate infill development. Near the strategic area's southern border and Saginaw Road interchange are large plats of vacant land. As seen in Figure K, Technology Village plans to target this property and develop it as Light Industrial and Research and Development Districts.

Figure K: Technology Village Future Land Use Map – Grand Blanc Township



Source: Grand Blanc Township Technology Village Area Plan 2008

LEVERAGING ASSETS AND TRENDS

Holly Township can benefit from the programs and initiatives that are being implemented within the local region by developing a comprehensive economic development plan that targets area trends as well as leverage local assets for sustainable and progressive growth. Holly Township possesses a high value and talented workforce, historic and entertainment trip generators, and character that cannot be found in any other surrounding community.

Assets

Asset based economic development is a strategy for sustainable economic growth, building upon a community's existing strengths for long-term prosperity. Assets can be categorized into five (5) categories; natural amenities, cultural and historical resources, human capital, current industries, and emerging industries. Holly Township's unique community possesses assets in each of the five categories, creating an attractive place to live, work, and play. Holly Township's assets include the largest ski lodge in southeast Michigan, two high volume annual festivals, plentiful green space and trails, strategic positioning near major highway interchanges, and a historic cemetery where the founders of Holly Township and veterans from every major war since the Revolutionary War lay buried. The Renaissance and Dickens Festivals alone see more than one quarter of a million patrons each year. Holly Township is also home to the beautiful seven (7) mile Shiawassee River Heritage Water Trail, connecting to Fenton. And lastly, this historic community is located amongst several well-connected railways that include the CSX Saginaw Subdivision and the expansive Canadian National Railway. Specifically, the CSX Saginaw Subdivision connects Toledo, OH to Saginaw, MI, and the Canadian National Railway is a Class I railway that serves Canada, and the Midwestern and Southern United States.

Tie-in with Area Initiatives

With Oakland County, Genesee County, and Grand Blanc Township implementing strategies that target emerging sectors, and most notably Grand Blanc's nearby Technology Village plan that targets the Saginaw Road interchange, leveraging existing assets and capitalizing on surrounding trends could support sustainable and concentrated growth for the Township. Holly Township can attract businesses with their well-connected infrastructure and talented workforce (33 percent of employed community residents are working in the management, business, science, and arts sectors), and residents with their beautiful and active community that is located near many different employment centers and recreational and cultural opportunities. The three highlighted strategies play into Holly Township's strengths; technology based industries and residents who are involved in high-tech, health services, and education sectors. This reality can serve as a major economic attractor, and through smart growth strategies, produce a viable and sustainable future for Holly Township.

Retail Gap Analysis

A Retail Gap Analysis is a technique used for identifying the strengths and weaknesses of a local retail market. The analysis estimates if the number of local retail stores are meeting market demands for the community. This is analyzed through gathering how many retail dollars are coming into a community to purchase retail items, and if local residents are sending their dollars elsewhere in order to satisfy their retail needs, also known as out-shopping. This analysis is useful for understanding the gaps and potential retail market opportunities for the areas researched.

A Retail Gap Analysis of Holly Township's immediate area, as well as geographies in excess of one (1) mile and five (5) miles surrounding the jurisdiction, is depicted below in Table 12. At first glance, Holly Township's Retail Gap Analysis identifies retail store demands in seven (7) of the twenty-five (25) industry sectors, with surpluses only in Gasoline Stations, auto-part stores, florists, used merchandise stores, fast food restaurants, and liquor stores. Upon expanding the analysis boundary one (1) mile outside of Holly Township, new store demands expand to a total of ten (10) different industry sectors. The surpluses in industry sectors are even fewer in this geography, with only Gasoline Stations, used merchandise stores, and fast food restaurants exceeding local market demands. Lastly, after expanding the analysis boundary to five (5) miles outside of Holly Township, there are no longer any industry sector surpluses and the list of new store demands expands to nineteen (19) different sectors.

Table 12: Retail Gap Analysis – Holly Township and Surrounding Area

Holly Township	
Category	New Stores Demanded
Automobile Dealers	3
Health and Personal Care Stores	1
Clothing Stores	1
General Merchandise Stores	1
Full Service Restaurants	1
Holly Township Plus One Mile	
Category	New Stores Demanded
Automobile Dealers	6
Electronics and Appliance Stores	1
Grocery Stores	1
Health and Personal Care Stores	2
Clothing Stores	3
Shoe Stores	1
Department Stores	1
General Merchandise Stores	2
Full Service Restaurants	4
Bars	1
Holly Township Plus Five Miles	
Category	New Stores Demanded
Automobile Dealers	4
Other Motor Vehicle Dealers	2
Auto Parts Stores	3
Furniture Stores	1
Home Furnishings Stores	1
Electronics and Appliance Stores	3
Beer, Wine, and Liquor Stores	1
Health and Personal Care Stores	7
Gas Stations	14
Clothing Stores	14
Shoe Stores	5
Jewelry or Luggage Stores	2
Sporting Goods, Hobby, and Music Stores	1
Book Stores	2
Department Stores	1
Florists	2
Full Service Restaurants	14
Fast Food Restaurants	5
Bars	3

Source: ESRI Retail Marketplace Profile

Community Services

The Township of Holly, governed by the Township Board, provides a variety of community services.

FIRE AND POLICE SERVICES

The North Oakland County Fire Authority (NOCFA) proudly protects and serves the residents of Holly Township and Rose Township with a primary response area of sixty-nine (69) square miles, the largest in Oakland County. NOCFA delivers a full range of fire and emergency services from three (3) fire/medical stations which will be consolidated to two stations when the new 16,000 square foot station is completed in 2009 in Holly Township. The department provides 24/7 fire suppression, rescue services and Hazmat Operations/Technical services. In addition, Basic Life Support and Advanced Life Support Ambulance are staffed for medical response and transports. The fire department has one (1) full time Fire Chief, one (1) full time Captain who also serves as the departments training officer and forty-five (45) active paid-on-call members. Police protection is provided by the Michigan State Police.

UTILITIES

Holly Township does not provide municipal water or sewer services. Both gas and electric service is supplied by Consumer's Energy. Holly is the only Township in the county that does not have electricity supplied by DTE. Cellular phone service is available throughout the Township. The range of towers and carriers in Holly has provided adequate coverage throughout the Township. Nextel, AT&T, MetroPCS, Verizon and Sprint are carriers that provide service to residents and visitors to the Township. Cable service and high speed internet is also available to most of the Township.

Even though the Township does not provide municipal sewer or water, two (2) sewer and water districts are located in the Township. The first of these districts is located in the northeast corner of the Township, and is serviced by the Grand Blanc Township sewer system. The second district is located areas along the western boundary of the Village of Holly, and is serviced by the Village sewer system. The purpose of these districts is to permit extension of the sewer facilities from these communities into the Township, to permit higher intensity development which requires these services, and most importantly of all, protect the natural features in these areas.

SCHOOLS

The Holly School District is comprised of approximately four thousand (4,000) students and employs approximately five hundred (500) part-time and full-time employees. The District is one hundred twenty-four (124) square miles in size and encompasses all of Holly Township and Village, and also serves students from parts of Rose, Groveland, Springfield, and White Lake Townships. The district opened a new high school, Holly High School, in 1999 and a new elementary school, Rose Pioneer, which opened in 1997. There are seven (7) total school buildings including four (4) elementary, one (1) middle school, the high school, and one (1) Special Services Building. The district also owns a camp in nearby Rose Township. There are also charter and private schools available within the Township. Holly Academy, which serves kindergarten through eighth grade (K-8), opened within the last ten (10) years. Adelpian Junior Academy, which is associated with the local Seventh Day Adventist church, is also available for K-6 students.

PARKS AND RECREATION

As shown in Map 7 on page 33, Holly Township is supplied with a wealth of all-season recreational resources. Several outstanding regional facilities are located within Township boundaries including two (2) state recreation areas. A large private ski resort is located next to Holly Township in Groveland Township. The preservation and enhancement of these vast resources is an integral part of the future of Holly Township. Table 13 contains detailed information about the parks and related facilities.

STATE PARKS:

Holly State Recreation Area

Holly State Recreation area consists of 7,817 acres of land, shared with Groveland Township to the East. Winter and summer sports are equally provided for including skiing, snowmobiling, hunting, boating, fishing, hiking and horseback trails. Mountain biking trails are also available, including four (4) routes rated from beginner to expert. The recreation area includes one hundred sixty-one (161) modern and semi-modern campsites and two (2) mini-cabins. One (1) of the cabins, the Rolston Rustic Cabin, is located within the park lands near McGinnis Road. Built in 1938, the cabin is located on a small pond and is available for rent year-round.

The State MDNR is also looking to expand the park boundaries in order to fill in any gaps between park lands, more specifically, the state plans to acquire the area between Holdridge Lakes and Crotched Lake in order to connect the existing park lands. Facility plans include expanding the trail system and possibly connecting up with the proposed Headwaters Trail system.

Seven Lakes State Park

Seven Lakes State Park is a relatively new park, opening in 1977. The land was purchased by the State in 1969 from a group of developers. The 1,444 acres that make up the State Park originally included a combination of farmland, rolling hills and forests. A multitude of activities are available for visitors, including trails for hiking, mountain biking, cross country skiing and snowmobiling. The two hundred thirty (230) acres of water that give the park its name provide swimming, boating and fishing. Hunting, picnic areas, volleyball, basketball, softball, playground equipment and horseshoe pits are also available. A seventy-one (71) site campground, which opened in 1992, sits on the edge of Sand Lake and provides a private beach for campers only.

Plans for expansion include acquiring property along the northern and eastern boundary line in order to round out the property line. Current facility plans include expanding the existing campground.

County Parks:

- **Groveland Oaks County Park:** Groveland Oaks County Park is four hundred (400) acres of park land focused towards family camping. Six hundred (600) modern and primitive campsites are available in addition to picnic areas, a waterslide, and swimming beach. It is open seasonally but provides no actual site developments to facilitate specific activities.

Township Parks:

An elected board of seven (7) Township and Village residents operates Holly Township Parks.

- **Holly Township Beach.** Holly Township Beach consists of two and a half (2.5) acres offering swimming, picnicking, shuffle board, sand volleyball, and play areas.
- **Holly Heritage Farm Area.** Located on North Holly Road, this park features two (2) farm houses dating back to the mid 1800's and a peg barn from the same period. The facility is currently undergoing a renovation. Plow days and Holly-ween are just a couple of events that occur here.
- **Harvey Sorenson Park (formerly Township Park II).** An additional Township park is located on the south side of East Holly Road within the Village of Holly. Softball fields, a picnic area, nature center, and five (5) kilometers in trails exist in this ninety-five (95) acre park.

Within the facilities (discussed above) are a number of year-round events and educational programs sponsored by the Holly Township Parks Department. Additional activities are also available throughout the year; information for such is provided at the Holly Township Parks office (248-634-1758 or hollytwpparks@yahoo.com).

Village Parks

The Village of Holly has five (5) local parks, totaling twenty (20) acres, including Lakeside, Crapo, Cyclone, Water Works, and Ganshaw parks. Most parks offer picnicking and play areas, with ball fields provided at Cyclone and fishing available at Morris Fein Arboretum.

Table 13: Recreational Facilities

Activities	Holly State Recreation Area	7 Lakes State Park	Groveland Oaks County Park	Holly Township Park and Beach	Holly Township Sorensen Park	Lakeside Park	Crapo (Village)	Cyclone (Village)	Morris Fein (Village)	Mount Holly (Private)
Camping	161	71	600			✓				
Picnic Areas	✓	✓	✓	✓	✓	✓	✓			
Shelters	✓	✓	✓			✓	✓			
Playground	✓	✓	✓	✓			✓			
Ball Diamond	✓	✓	✓		✓			✓		
Swim Beach	✓	✓	✓	✓						
Canoe/Boat Launch	✓	✓	✓							
Canoe/Boat Rental	✓	✓	✓							
Hiking Trail	✓	✓	✓		✓					
Horse Trail	✓									
Nature Center					✓					
Fishing	✓	✓	✓						✓	
Hunting	✓	✓								
Downhill Skiing										✓
X-Country Skiing	✓	✓	✓							✓
Sledding		✓								
Snowmobiling	✓									
Ice Skating						✓				



PUBLIC ACCESS BOAT LAUNCHES

Public access boat launches, operated by the state parks, are available throughout the Township. Table 14 lists the amenities available at each public boat launch.

Table 14: Boat Launches

Name	Location	Restrooms	Parking	Water Acres
Heron Lake	Holly Recreation Area	YES	48	132
Crotched Lake	Holly Recreation Area	NO	10	14
Dickinson Lake	Seven Lakes State Park	NO	20	44
Holdridge Lake	Holly Recreation Area	NO	10	16
Big Seven Lake	Seven Lakes State Park	YES	12	170
Bush Lake	Village of Holly	NO	N/A	N/A

GOLF COURSES:

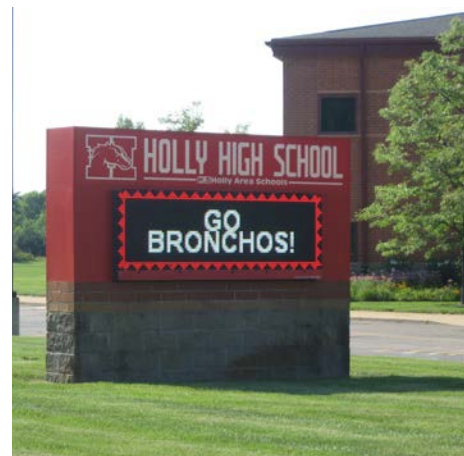
- **Bramblewood Country Club:** Open to the public for a daily fee, Bramblewood offers 18 holes.
- **Captain's Club at Woodfield:** Open to the public for a daily fee, Captain's Club at Woodfield offers 18 holes.

SCHOOL FACILITIES:

Outdoor recreation is also available at Holly area schools on an individual basis. The outdoor athletic fields and courts are accessible to the public when they are not in use by classes. School facilities offering recreation opportunities include the following:

Table 15: School Recreation Areas

Name	Location
Benjamin H. Sherman Middle	Village of Holly
Patterson Elementary	Village of Holly
Adelphian Junior Academy (Private)	Village of Holly
Holly Academy (Charter)	Holly Township
Holly Elementary	Village of Holly
Holly High School	Holly Township
Wellspring/Karl Richter Campus	Village of Holly



PRIVATE FACILITIES

Mount Holly

Mount Holly is a private downhill skiing facility located in the western side of Groveland Township. Mount Holly has nineteen (19) ski runs, seven (7) chair lifts including Michigan's only high-speed detachable quad, five (5) rope tows, two (2) SunKid Wonder Carpets and a ski lodge. Instruction for beginners and intermediate skiers is available. The vertical drop is three hundred fifty (350) feet at Mount Holly, and the longest run is 2,100 feet. It is possible to cross country ski around the Mount Holly area, however facilities are not specifically set up for this activity.

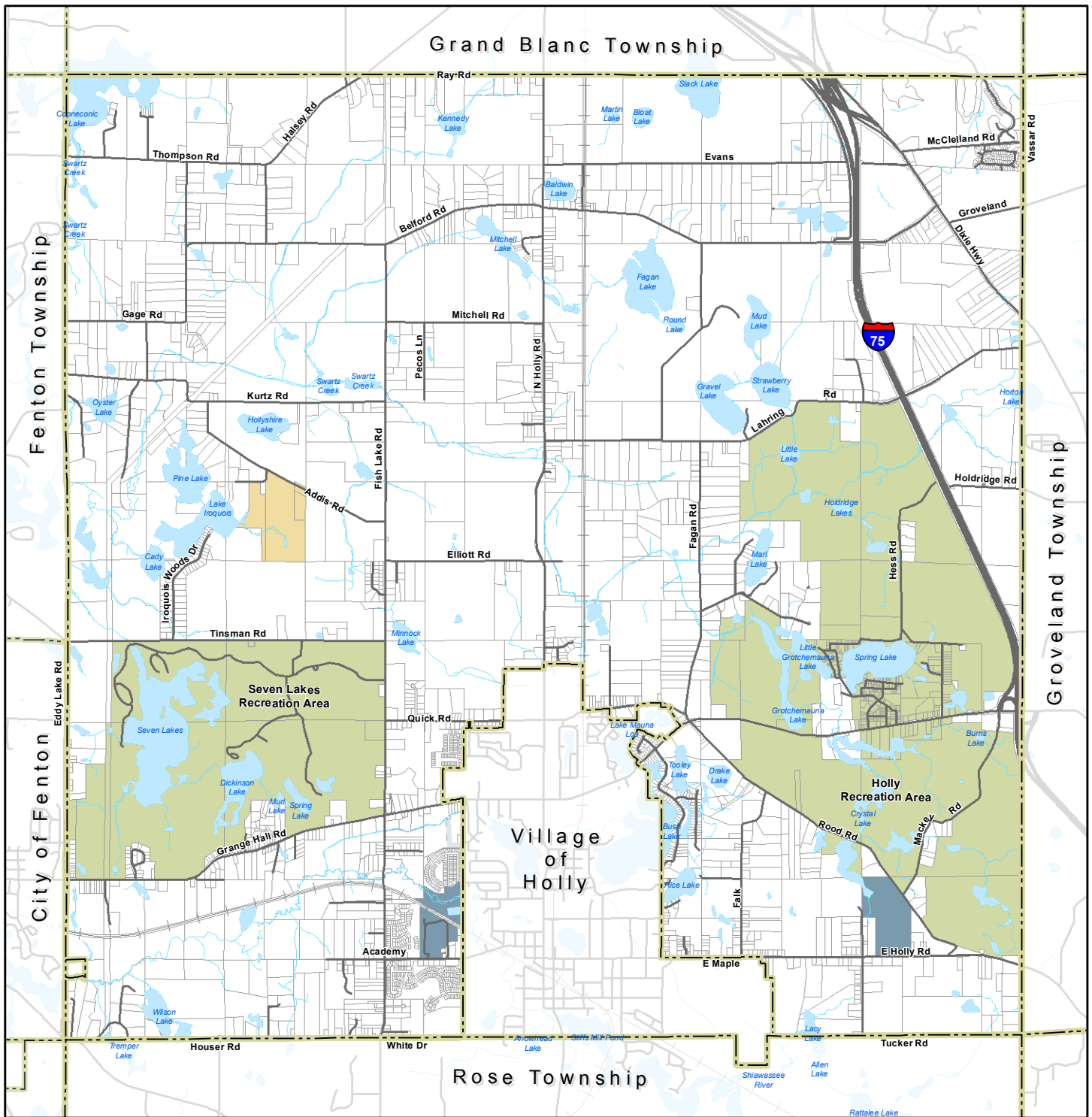
Holly Hills Campsites

Holly Hills Campsites is located just east of Holly Township on Grange Hall Road in Groveland Township. It is approximately a twenty-two (22) acre campground which offers recreation activities such as mini-golf and swimming. It is situated near both the Holly State Recreation Area and Groveland Oaks County Park which offer further recreational activities.

Renaissance Festival

The Renaissance Festival is located along the Holly Township and Groveland Township border. The Festival is held seven (7) weekends each year in the late summer and early fall and provides a glimpse into 16th Century life. Theatre, games, arts and crafts, and other related activities occur at the festival. Over 200,000 visitors attend each year and the visitors are attracted from all over the Midwest.





July 21, 2016

Map 6: Recreation Lands

Holly Township, Oakland County, Michigan

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- Institutional Regional Recreation
- Private
- State Recreation Lands
- Water Bodies



Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

Roadways

According to the Road Commission for Oakland County, there are roughly twenty-three (23) miles of primary road in Holly Township and thirty-six (36) miles of local roads. A majority of road surfaces are gravel.

Since the Township is encouraging tourism and recreational expansion rather than commercial and industrial development, there is no direct need for an increased percentage of paved roads. The Strategic Planning Report of the Road Commission for Oakland County notes that increased maintenance on existing gravel roads is the highest priority for the Township in the future. Better grading, drainage and winter maintenance are specific goals. A second priority is the elimination of safety hazards such as intersections with limited sight distances and dangerous curves.

EXISTING ROAD CLASSIFICATION

Road classifications identify the volume and type of traffic that is appropriate for each segment of the roadway network. For purposes of transportation planning, a functional classification of roads has been developed. Map 8 on the following page shows the National Functional Classification of Holly Township roadways. The following are descriptions of the types of roadways which exist in Holly Township:

National Functional Classification (NFC) is a planning tool which federal, state and local transportation agencies have used since the late 1960's. The Federal Highway Administration (FHWA) developed this system of classifying all streets, roads, and highways according to their function:

Principal Arterials

Principal Arterials are at the top of the NFC hierarchical system. This classification generally carries long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers.

Examples: Interstate and other freeways; other state routes between large cities; important surface streets in large cities.

Minor Arterials

Minor Arterials are similar in function to Principal Arterials, except they carry trips of shorter distance and to lesser traffic generators.

Examples: State routes between smaller cities; surface streets of medium importance in large cities; important surface streets in smaller cities.

Collectors

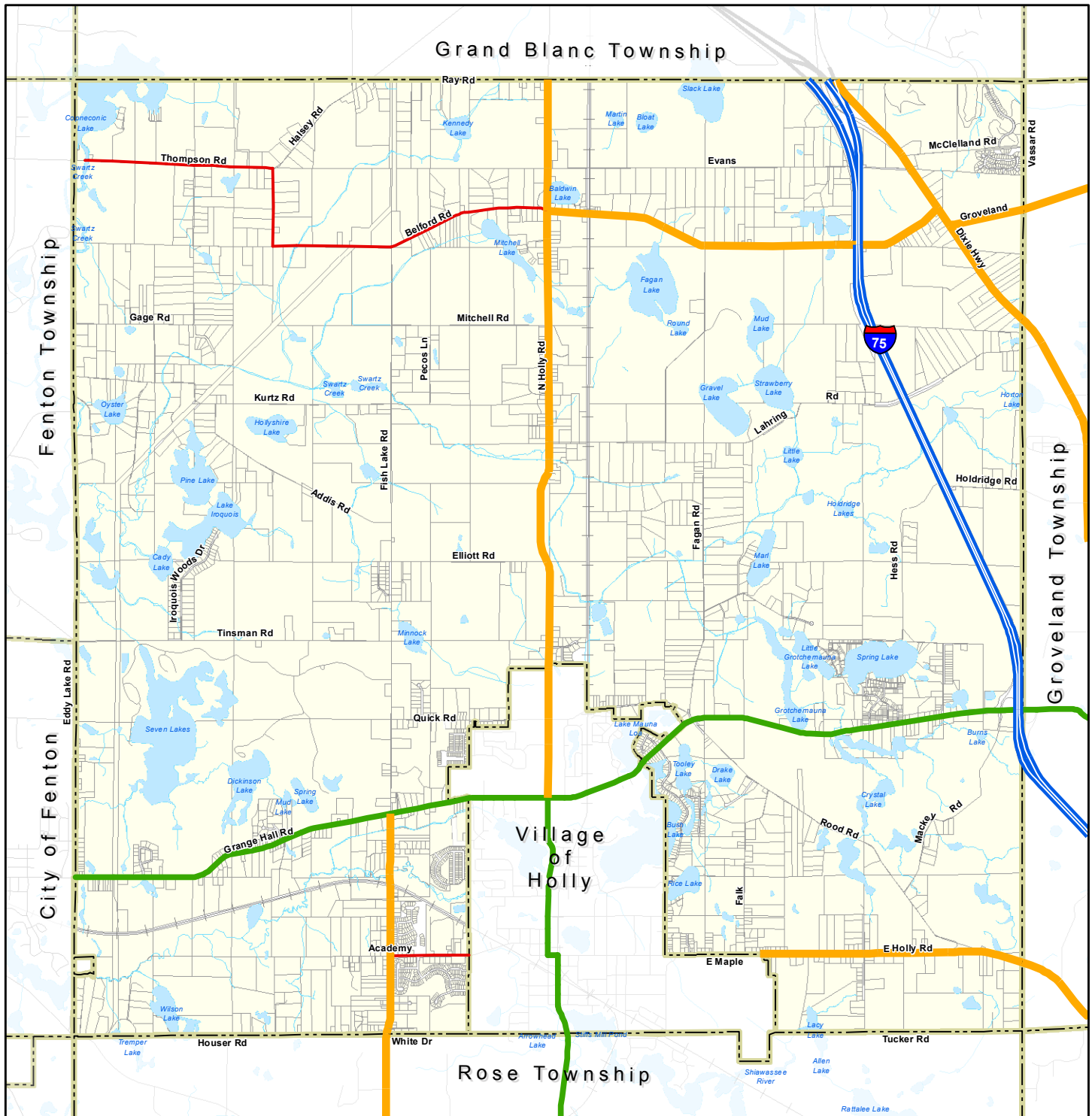
Collectors tend to provide more access to property than do arterials. Collectors also funnel traffic from residential or rural areas to arterials.

Examples: County, farm-to-market roads; various connecting streets in large and small cities.

Local

Local roads primarily provide access to property.

Examples: Residential streets; lightly traveled county roads.



July 21, 2016

Map 7: Functional Classification

Holly Township, Oakland County, Michigan

- Interstate
- Major Collectors
- Minor Arterials
- Minor Collectors
- Surrounding Municipalities
- Water Bodies

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Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

ACCIDENT DATA

Accident data is available by intersection. The accident data available reveals that the Grange Hall Road and Fish Lake Road intersection is the most problematic within the Township. Grange Hall Road and Mackey Road/I-75 Southbound Ramp is also a problematic intersection with a large number of accidents reported over the last four (4) years. Table 15 depicts locations where high numbers of accidents occur with frequency in Holly Township:

Table 16: Intersection Accidents – Holly Township

Intersection	2003-2007	Average	2007
Fish Lake Rd. & Grange Hall Rd.	28	6	3
Grange Hall Rd. & Ramp - South I-75/Grange Hall Rd.	23	5	5
Ramp - Grange Hall Rd./South I-75 & South I-75	20	4	2
Belford Rd. & N. Holly Rd.	14	3	3
Falk Rd. & E. Holly Rd.	12	2	0
E. Holly Rd. & Rood Rd.	12	2	1
Ramp - Dixie/South I-75 & South I-75	9	2	4
Dixie Hwy. & McClelland Rd.	9	2	3
Fagan Rd. & Rood Rd.	9	2	1
Ramp - South I-75/Grange Hall & South I-75	8	2	2

Source: SEMCOG 2035 Regional Development Forecast

JURISDICTIONAL BODIES

Three (3) different governmental agencies have jurisdiction over the roadways:

1. Michigan Department of Transportation (MDOT).
2. Road Commission for Oakland County (RCOC).
3. Cities and Villages.

RCOC has jurisdiction over all the roadways in Holly Township with the exception of Interstate 75, which is maintained by MDOT.

PRIORITIZED PLANNED ROAD IMPROVEMENTS

The Road Commission has identified a future planned road improvement in the Township:

- Paving of Falk Road and Rood Road between East Holly Road and Grange Hall Road.

Holly Township is influenced by what is occurring both outside the Township in adjacent communities, and within. The following is a brief description of the Master Plan designations at the Township borders for these various communities:

Village of Holly (Internal to the Township)

As an incorporated village, the Village of Holly is a separate entity that may levy and collect taxes, borrow money, pass ordinances and similar governmental functions. Residents living within the Village boundaries are Village residents, but are also residents of the Township as well. Village residents pay a percentage of taxes to both the Village and Township.

The Village also serves as a center of commercial, cultural and governmental functions (i.e. the Township Hall is located within the Village). In regards to land use, the Village of Holly has a significant impact upon the Township. Various land use designations exist within the Village that are not found in the Township, such as a large amount of moderate density single family housing and multiple family housing. (see Map 11, the Village of Holly Land Use Plan). Overall, the future land use designations include a commercial core in the downtown, transitional mixed uses north to the Grange Hall/North Holly Road intersection where there is a large commercially designated area. Two (2) industrial areas are designated, one (1) at the south east corner of Grange Hall Road and the C & O Railroad, and another north east of Stiffs Mill Pond in the south portion of the Village. There are pockets of “moderate density residential” which allows up to seven dwelling units per acre. These are located in five (5) areas of the Village. The majority of the edges of the Village are designated as “low density residential”, which allows for up to four (4) to five (5) dwelling units per acre.

City of Fenton (Southwest Boundary)

The City of Fenton is located along the southern half of Holly Township's western border. The land use designation along the border, north of the railroad tracks is for Low Density Single-Family Detached Residential, which permits two (2) units per acre. South of the railroad tracks, the area is planned for Urban Residential, which permits up to eight (8) units per acre.

Fenton Township (Northwest Boundary)

Fenton Township's border is on the west side of Holly Township. Most of the border area is planned for Medium Density Residential, one (1) dwelling unit per acre. Low Density Residential permitting one (1) unit per two (2) acres, is planned for one half (0.5) mile south of Thompson Road. Manufactured Home Residential is designated from Thompson Road north to the municipal line.

Grand Blanc Township (North Boundary)

Grand Blanc has three (3) different land use designations at Holly Township's northern border: Rural Estate residential on the west side which allows for five (5) to ten (10) acre cluster developments, Light Industrial along the North Holly Road corridor, and Low Density Residential which allows a density of one (1) to four (4) units per acre.

Groveland Township (East Boundary)

Groveland Township has nine (9) separate land use designations along Holly Township's eastern border. The nine (9) land uses are listed, however, the vast majority of the boundary is future planned as agricultural, low-density residential or recreational lands, with the industrial, commercial, and extractive being represented near Grange Hall Road. The other land uses are intermittently represented elsewhere along the municipality border.

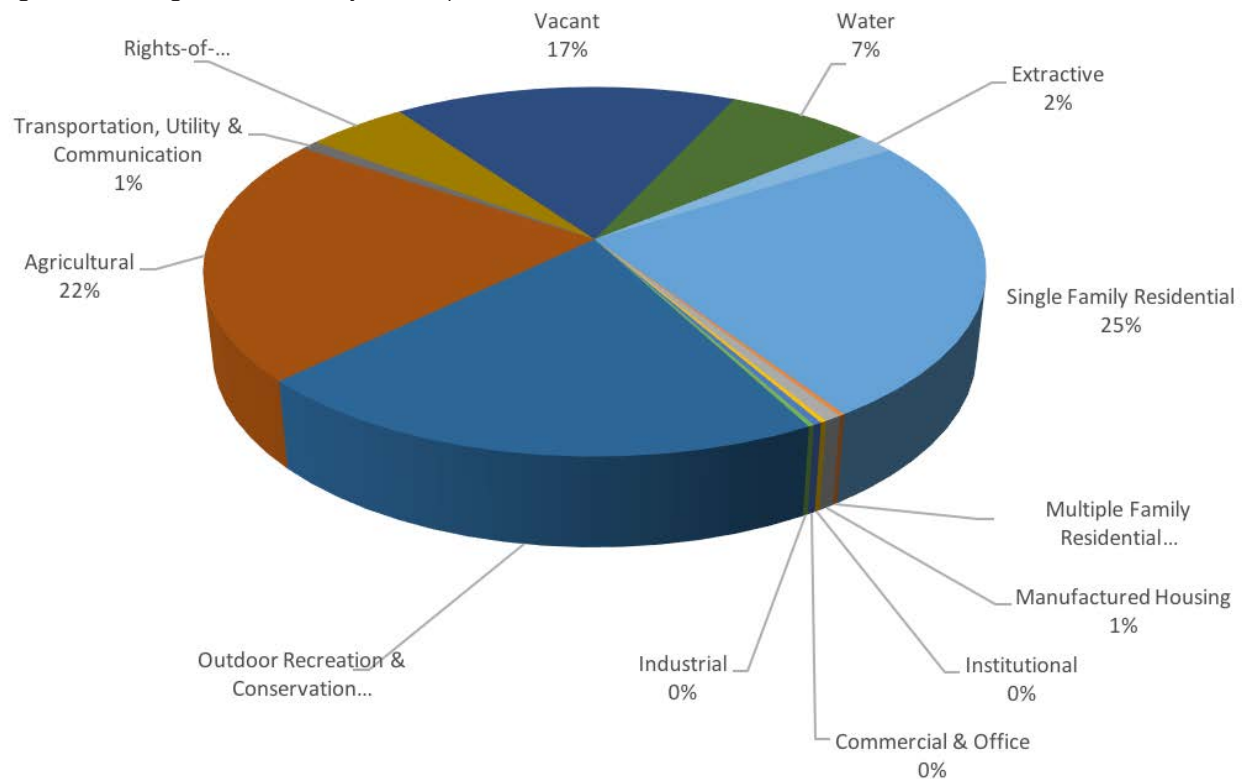
Rose Township (South Boundary)

Rose Township has two (2) land use designations at Holly Township's southern border: a Low Density Residential use which allows for one and one half (1.5) acre lot sizes is located on the west side, and a Rural Residential land use which allows ten (10) acre lot sizes is located predominantly on the east side.

Existing Land Use

In the last ten (10) years, the Township has had a consistent trend of accelerated growth. This has led to growth in single-family land uses, manufactured housing residential and industrial (the percent of growth of single-family residential is discussed in greater detail following Table 16). Agricultural land use has remained significant, representing about eighteen percent (18%) of Township land. Also of importance, land quantities of Recreational and Conservation categories have increased to nearly eighteen percent (18%).

Figure L: Existing Land Use – Holly Township, 2015



Source: Oakland County Planning & Economic Development Services

The following is extracted from the metadata for the 2007 Oakland County Land Use coverage:

Agricultural: Parcels used as cultivated farmland, orchards, or for livestock activity, with or without related farm structures.

Single Family: Improved parcels having three or less units per building in predominately residential use. There are eight classifications of Single Family that are based on the parcel size (density). These classifications are shown below:

- Less than 8,000 square feet

- 8,000 to 13,999 square feet
- 14,000 to 43,559 square feet
- 1 to 2.4 acres
- 2.5 to 4.9 acres
- 5 to 9.9 acres
- Ten acres and greater
- More than one unit per parcel

Multiple Family: Improved parcels having four or more units per building in predominately residential use, including apartments, condominiums, row houses, senior living facilities without skilled nursing care, and terraces plus any streets, service drives, and community areas such as yards, clubhouses, and pools. Hotels, motels, campgrounds, and mobile home parks are not included in this category.

Manufactured Housing: Improved parcels having multiple manufactured home structures that are in the nature of a community or “manufactured housing park” plus any streets, service drives, and community areas such as yards, clubhouses, and pools. A single manufactured home structure on a parcel is not classified as a manufactured home, but “Single Family Residential.”

Commercial/Office: Improved parcels used for wholesale, retail, office, entertainment, or services, including those uses predominately at street level on multi-functional structures, plus related contiguous accessory uses such as parking areas and service drives.

Industrial: Improved parcels used predominately for manufacturing or on which materials or articles are processed or semi-processed, but not retailed, including related storage areas, and warehousing. Commercial waste disposal sites, land fill operations, and junkyards are also shown as industrial.

Public/Institutional: Improved parcels and facilities that are held in the public interest and are usually exempt from real property taxation plus any service drives or roads inside the actual parcel. Examples of this category are churches, educational facilities, governmental offices, hospitals, assisted living and skilled nursing care facilities, municipal parking facilities, day care centers, and cemeteries.

Recreation/Conservation: Parcels for which the primary purpose is for outdoor recreation or natural area conservation. This may include public or private-owned parks, outdoor sporting clubs, golf courses, marinas, campgrounds, or areas for which the primary purpose is preservation and conservation of undeveloped natural areas.

Transportation, Utility & Communication: Improved parcels containing above or below-ground utility or communication facilities, including electric and gas generating plants, transmission lines, booster and transformer stations, related storage yards, county drains, detention/retention basins etc. In addition, airports, railroad yards, buildings related to utility companies, such as Detroit Edison, Consumer’s Energy, and telecommunications companies, plus Waste Water Treatment Plants and Water Works, are also included in this category.

Extractive: Parcels that are primarily used for surface mining and extraction of materials such as gravel, stone, minerals, ore, soil, or peat.

Vacant: All parcels not included in one of the above definitions. These are unimproved areas that are not in a committed use and not in a use that is accessory to an adjacent parcel with a use described above.

Water: Areas that are ordinarily covered by water as depicted in the Oakland County Water body feature class.

Road Right-Of-Way: Areas that are predominately used for vehicular transportation. These areas may also contain pedestrian walkway, utility easements, railroad crossings, and/or on-street parking areas.

Railroad Right-Of-Way: Areas improved with a rail system and predominately used for train traffic.

Table 17 and Figure M quantify the land use changes between 1990 and 2015:

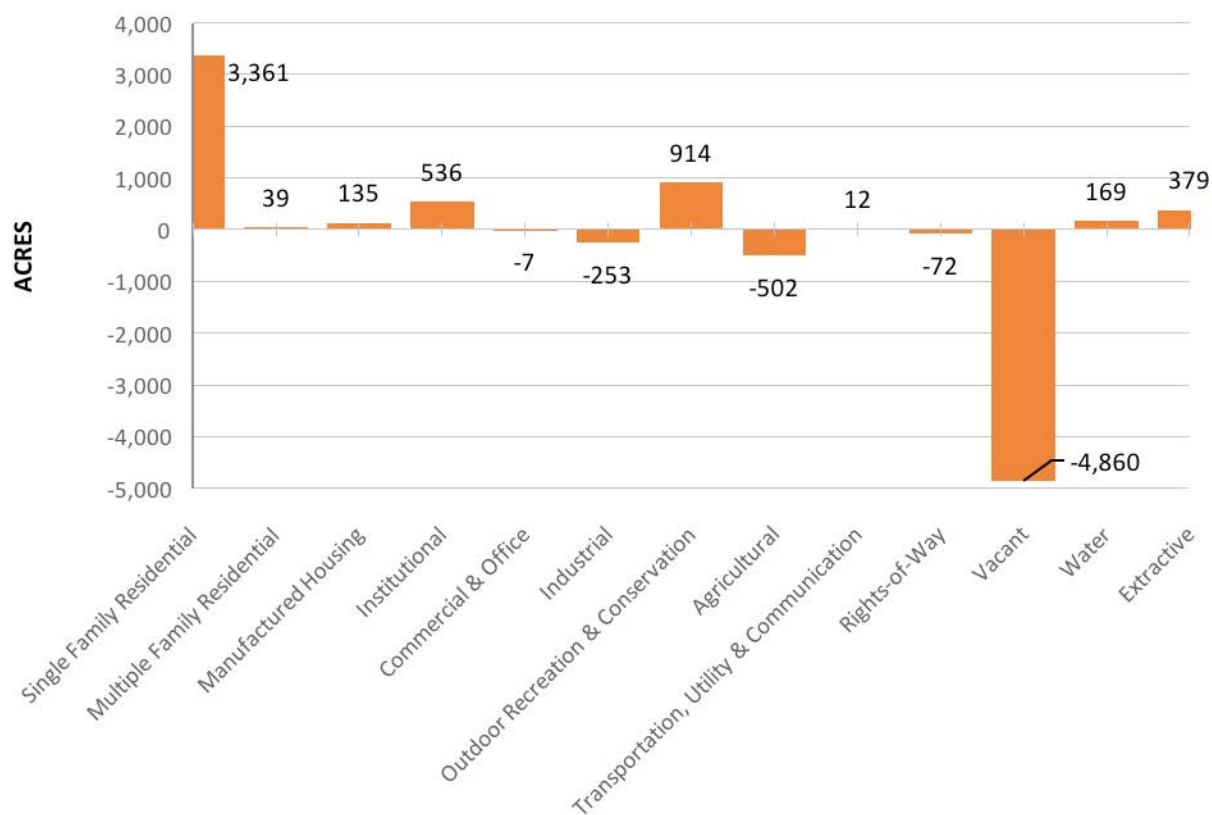
Table 17: Existing Land Use – Holly Township, 2015

Land Use Classification	1990	1992	2001	2007	2015	Change 1990-2015	2015 % of Total
Single Family Residential	1,817	1,953	5,055	5,305	5,178	3,361	24.20%
Multiple Family Residential	0	0	0	39	39	39	0.20%
Manufactured Housing	0	0	193	135	135	135	0.60%
Institutional	91	91	121	607	627	536	0.20%
Commercial & Office	61	59	60	56	54	-7	0.30%
Industrial	289	289	350	37	37	-253	0.20%
Outdoor Recreation & Conservation	3,363	3,378	3,545	3,835	4,277	914	20.00%
Agricultural	5,011	4,946	4,900	3,823	4,509	-502	21.10%
Transportation, Utility & Communication	153	153	169	165	165	12	0.80%
Rights-of-Way	1,088	1,088	930	1,010	1,016	-72	4.80%
Vacant	8,336	8,252	4,623	4,551	3,476	-4,860	16.30%
Water	1,297	1,297	1,419	1,465	1,466	169	6.90%
Extractive	N/A	N/A	N/A	331	379	379	1.80%
TOTAL	21,506	21,506	21,365	21,357	21,357	-149	100.00%

As the table indicates, the largest changes between the 1990 acreage and 2015 acreage occurred within the Single-Family and Vacant categories. In all, 11,329 acres have been converted to a different use between 1990 and 2015. Vacant land use has decreased the most with a total of 4,860 acres converted to almost exclusively single-family residential uses.

Residential growth does account for a portion of this growth, though a very small amount. The biggest reason for this increase was due to an Oakland County change in estimating methods for land figures. Two (2) policies are the cause for this variation; in the first, the dominant use of a mixed use site is totaled as the entire site; in the second, the entire parcel will be shown as a particular use even if only part of the parcel is in use. These policies result in the substantial variation indicated in the single-family and vacant categories of Table 16 and Figure M, in which the land use map indicates a property as single-family even if the majority of the site is left as vacant.

Figure M: Changes in Acreage – Holly Township, 1990-2015



Source: Oakland County Planning & Economic Development Services

LAND USE PATTERNS

The Existing Land Use Map is located on page 48.

- **Single-Family Residential.** Most single family housing is concentrated in the Village of Holly, however, expansion into the Township has been increasingly scattered along major road frontages. The development of Riverside has resulted in significant increases in the amount of Single Family Residential land use west of the Village of Holly. Additionally, small groupings have developed around some lakes, with one (1) large subdivision surrounding Spring Lake in the east and just east of the Village of Holly around Bush and Rice Lakes. Single family is the largest single category of land use in the Township, although the majority of the development is expected to remain relatively low density, with the exception of Riverside.
- **Multiple Family.** This type of residential development has been confined to the north end of the Village of Holly. A phase of the Riverside Development was constructed as an attached condominium. This is the first development of Multiple Family in the Township.
- **Manufactured Housing Park.** There is one (1) area of manufactured housing within the Township at this time, a manufactured housing park on the east side of Falk Road between Rood Road and East Holly Road. The park had one hundred fifty two (152) units in 2000, though a number of phases of construction remain for the park.
- **Public/Institutional.** Institutional uses are scattered throughout the Village of Holly but have not grown extensively into the Township. Expansion to the east of the village is improbable due to lakes and wetlands.

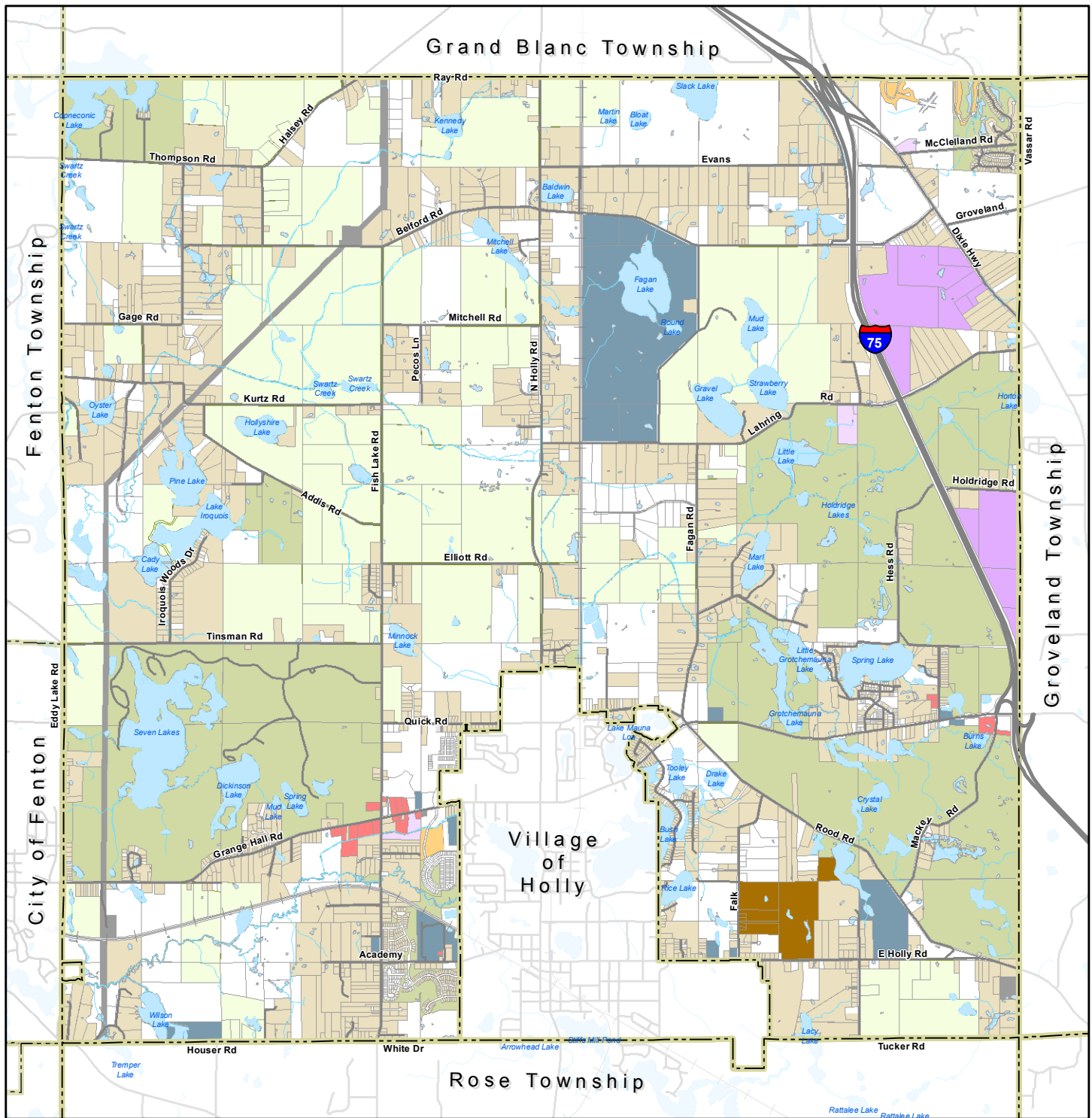
However the recent development of the new High School did occur in this area. Additionally, Holly Heritage Farm is located on North Holly Road that is currently undeveloped with the exception of a pole barn and other associated structures. Most notable is the Great Lakes National Cemetery located off of Belford Road, east of North Holly Road. The cemetery was established in 2005 and is five hundred forty-four (544) acres in size. The cemetery is the 2nd National Cemetery in Michigan.

- **Commercial/Office.** Commercial/Office development is expanding westward also. Holly Township is experiencing growth pressure from Fenton and Flint in the west and northwest, causing development to be drawn in that direction.

Commercial/Office land use in the Township is concentrated on Grange Hall Road, a major thoroughfare connecting I-75 to Fenton and U.S. 23, to the west of the Village. There is very little Commercial/Office elsewhere in the Township with the exception of the Dixie Highway/I-75 Interchange. Small districts are also located at the I-75/Grange Hall Road interchange.

- **Industrial/Extraction.** While industrial land is scattered along rail corridors in the center of the Village of Holly, industrial development in the Township is focused around I-75 in the northeast. Access and exposure to a state highway makes this an economical location. The highway also creates an insurmountable border between high intensity uses and parklands on the other side. A number of these industrial areas are extractive mining operations accessed from Dixie Highway or Belford Road. There are also additional areas of industrial use near the Grange Hall Road/Fish Lake Road intersection.
- **Recreation and Conservation.** Large amount of land is occupied by this category. In the southwest section is Seven Lakes State Park. Running along the eastern border and northward along I-75 is the Holly State Recreation area. These areas are essentially located on both sides of Holly Township, constricting east west expansion in the northern half of the Village. However, the Village of Holly is built on a major north-south axis, likely to influence growth in that direction.
- **Agricultural, Vacant and Open Space.** Agricultural, vacant and open space account for almost forty percent (40%) of total land in Holly Township. In the past, Holly Township has ranked in the top five (5) communities in Oakland County holding land under the Farmland and Open Space Preservation Act, which serves to preserve productive farmland. As of 2003, two hundred ninety-three (293) acres are protected and receive the tax benefits of the program. However, this is a sharp decline from 1991, when one thousand three hundred thirty-six (1,336) acres were designated. The decline in amount of protected land is a concern, as it means that more land in the Township could be developed at any time.

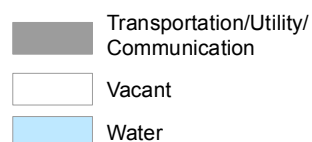
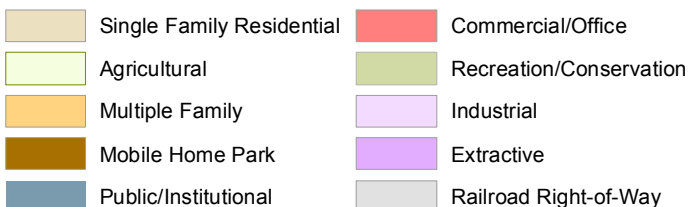
In sum, development in Holly Township has been limited by the roadway access, soils conditions and presence of wetlands, the large amounts of public recreation lands, and the general desire of the community to remain rural in character. However, given the location between the Detroit and Flint metropolitan areas, increasing development pressure in the future will continue to be likely.



July 21, 2016

Map 8: Existing Land Use

Holly Township, Oakland County, Michigan



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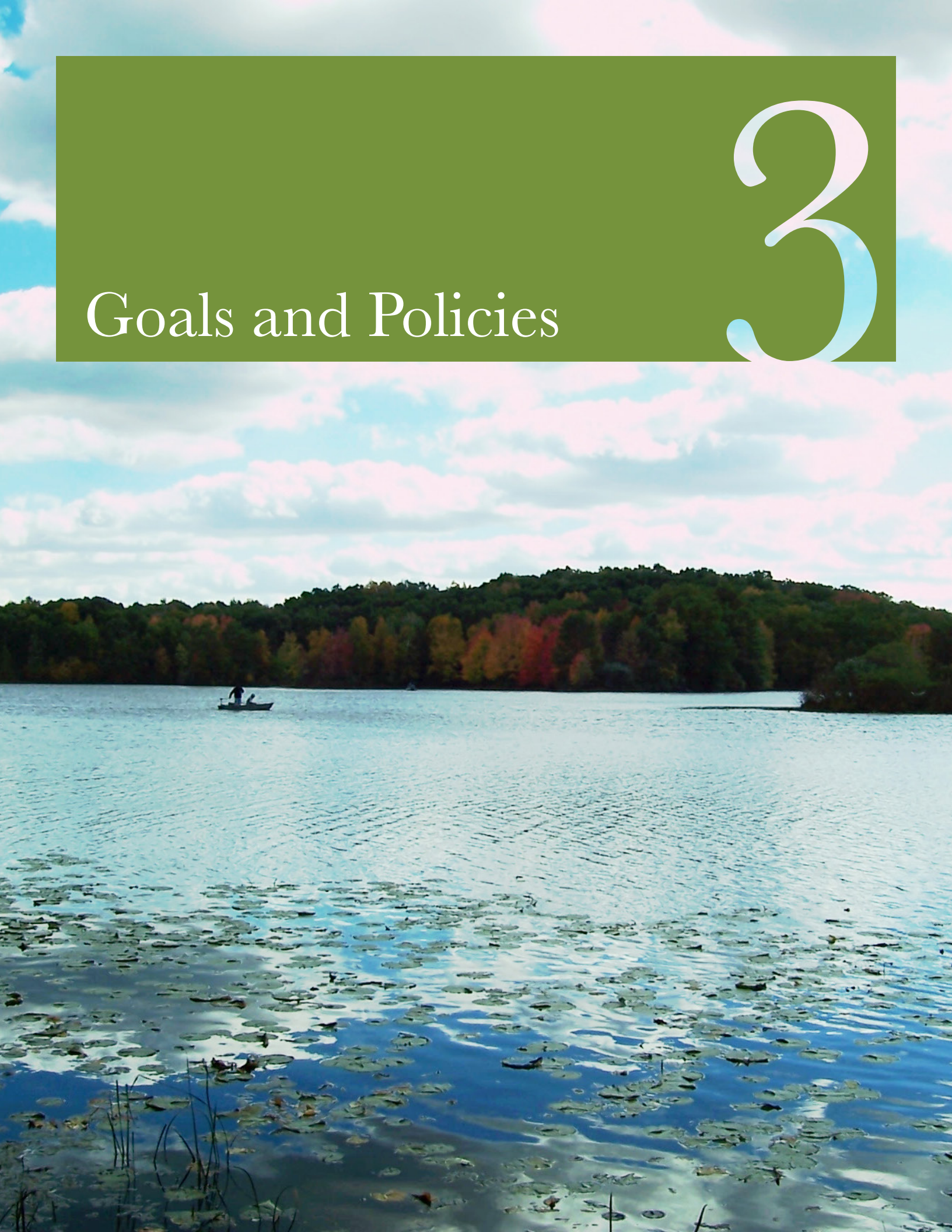
Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

SOIL SUITABILITY

Much of the soil in Holly Township, exhibit limitations to septic capability. Determination of land use designations and densities should consider this factor. Map 9 on the following page depicts soil suitability for septic systems in the Township. The areas with limitations generally follow the existing wetlands systems and associated areas.

3

Goals and Policies



General Goals and Policies

The following pages detail the goals and policies of Holly Township. Goals are statements that define the direction and character of future development that the Township wishes to strive towards. Policies set forth the framework for action and form the basis upon which more detailed development decisions are made. Adoption of policies does not commit the Township to any particular recommendation, but does commit it to take actions that are consistent with the policy guidelines.

The following statements reflect the eleven (11) primary goals of the Township, as stated in the most general terms:

1. **Goal 1: Community Character:** Develop and promote Holly Township's diverse, desirable, and unique rural character as a place to live, work, and play within its abundance of recreational opportunities.
2. **Goal 2: Environmental:** Maintain the abundance and quality of natural resources and vital ecosystems within Holly Township.
3. **Goal 3 - Land Use:** Make decisions and plan with an understanding of the Township's economic and environmental positions in the region, placing uses in appropriate areas where services and infrastructure are available and how uses contribute to the community's image and a vibrant mix of housing, business and recreational opportunities.
4. **Goal 4 - Residential:** Allow for a range of housing choices that are consistent with, and enhance, the existing residential community character and future community vision including low density rural residential on acreage, and mixed-residential neighborhoods that maintain the small-town rural character of surrounding historic single family residential neighborhoods in the Village.
5. **Goal 5 - Shopping and Services:** Encourage high-quality development and redevelopment of commercial properties intended for providing goods and services that meet the needs of current and future Township residents.
6. **Goal 6 - Economic Development:** Promote economic activities which are compatible with the existing character and future vision of Holly Township, with respect, consideration, and in cooperation with surrounding communities.
7. **Goal 7 - Partnerships:** Increase and continue coordination with government entities, community groups, businesses, organizations, and all others who wish to contribute to the success of Holly Township.
8. **Goal 8 - Infrastructure:** Provide appropriate infrastructure that preserves and protects Holly Township's natural features while addressing the community's needs for efficient and safe multimodal access, sewer, and water systems.
9. **Goal 9 - Recreation and Open Space:** Enhance the quality of life for current and future Holly Township residents and make the community more appealing by providing a variety of recreational facilities to accommodate residents of all ages, interests, and physical abilities.
10. **Goal 10 - Sustainability:** Support the economic climate of rural landscapes through enhancing the viability and respectful protection of resources; help existing places thrive by safe guarding downtown, community assets, and investments within Holly Township; focus on placemaking efforts which create vibrant spaces, attract businesses, and people who support the neighborhoods and communities of Holly Township.
11. **Goal 11 - Energy & Climate:** Promote proactive and innovative ways to meet energy needs, cut greenhouse gas (GHG) emissions, and prevent potential impacts that climate change may bring to Holly Township.

Specific Goal & Policy Guidelines

GOAL 1: COMMUNITY CHARACTER

Develop and promote Holly Township's diverse, desirable, and unique rural character as a place to live, work, and play within its abundance of recreational opportunities.

Zoning & Other Ordinance Strategies for Community Character

1. Develop and enforce zoning and design guidelines that reflect Holly Township's unique historical small town rural character.
2. Develop ordinances that require parking to be located and screened to enhance the pedestrian environment, and use trees and other design cues to indicate pedestrian rights of way.
3. Preserve large residential lots and single family housing away from the Village center and designated receiving zones.
4. Increase commercial and pedestrian activity in the Village center and receiving zone area.
5. Incorporate rural design elements into the zoning ordinance including landscaping, fencing, etc.

Partnership Strategies for Community Character

1. Assemble a Citizen's Event and Activities Committee that is in charge of assessing the community's recreational and activity interests, and create partnerships with existing events to engage in co-programming that promotes community assets, and develop the social/community infrastructure within Holly Township.
2. Promote the proximity to regional attractions by developing wayfinding signage and complimentary programming that supports placemaking and development of a strong knit community fabric.
3. Establish a live, work, play program.
4. Encourage property and business owners to proactively improve the commercial vitality of the township and village center through various open air market events and creating distinctive retail center design attributes.



GOAL 2: ENVIRONMENTAL

We will defend and maintain the abundance and quality of natural resources and vital ecosystems within Holly Township.

Zoning & Other Ordinance Strategies for Natural Feature Protection & Preservation:

1. Maintain an updated inventory of natural areas as identified through the Michigan Natural Features Inventory and the supplemental study conducted for the Township by the Nature Conservancy of Michigan.
2. Develop and enforce landscaping requirements to separate and buffer incompatible uses and improve views from the roadway.
3. Continually evaluate Township Zoning Ordinance provisions designed to preserve and protect woodlands and wetlands as features of new development.
4. Review and consider zoning ordinance provisions which would encourage a range of open space development designs.
5. Carefully apply zoning ordinance development standards so as to avoid requirements which result in unnecessary loss of open space.
6. Develop and apply natural feature setbacks to preserve woodlands, wetlands, slopes, floodplain, and watersheds in their natural state as elements of project design.
7. Restrict clear-cutting of trees prior to approval of the development.
8. Encourage transfer of development rights and other conservation initiatives.
9. Promote the usage of natural drainage systems near roads by supporting the inclusion of permeable surfaces into drainage designs.
10. Invest in the rural economy to preserve and promote working lands.
11. Protect, preserve, and restore natural vegetation and topographic features along stream corridors, waterways, and wetlands.
12. Promote the usage of natural drainage systems near roads by supporting the inclusion of permeable surfaces into drainage designs.

Partnership Strategies for Natural Feature Protection & Preservation:

1. Support the use of land trusts or conservancies to accept donations of land, purchase sensitive properties, and manage and protect designated open spaces.
2. Assist in the development of a local land conservancy within Holly Township and institute partnerships with established conservancies in Oakland and Genesee Counties.
3. Acquire environmentally sensitive sites identified as important elements of the Township's long-range recreation plan.
4. Recruit local environmental champions to sponsor environmental protection initiatives.
5. Establish a Woodland Ordinance to protect our natural areas, the quality and character of our community, and to promote environmentally responsible development within Holly Township.

GOAL 3: LAND USE

Make decisions and plan with an understanding of the Township's economic and environmental positions in the region, placing uses in appropriate areas where services and infrastructure are available and how uses contribute to the community's image and a vibrant mix of housing, business and recreational opportunities.

Zoning & Other Ordinance Strategies for Land Use

1. Establish purchase and transfer of development rights ordinances to encourage appropriate land use preservation and development.
2. Zone land in sending zones at very low densities with building in incentives for transferring development rights to receiving zones.
3. Allow some incentives for open space or cluster developments in the sending areas.
4. Zone lands that abut the village and receiving zones to be developed in ways that allow for compact and creative mixed-use development that is compatible with the Village and receiving zone's uses.
5. Establish an intensity of use guideline that evaluates site appropriateness given existing and natural conditions.
6. Provide incentives for ground-floor retail and upper level residential uses in target areas, and encourage existing single use developments to be redeveloped into mixed-use sites.
7. Protect environmentally sensitive lands by guiding development towards appropriate sites and buildable portions of existing parcels.

Partnership Strategies for Land Use:

1. Ensure that Township officials and councils are trained in zoning, land use planning, and historic preservation.
2. Develop cooperative relationships with adjacent communities so that Holly Township will be a partner with adjacent municipalities' planning and development strategies, and effectively leverage existing local and regional assets in order to attract suitable land use developments.
3. Establish priority funding areas to direct to direct development toward areas with infrastructure.
4. Participate in planning and development activities with adjacent and regional planning bodies.

GOAL 4: RESIDENTIAL

Allow for a range of housing choices that are consistent with, and enhance, the existing residential community character and future community vision including low density rural residential on acreage, and mixed-residential neighborhoods that maintain the small-town rural character of surrounding historic single family residential neighborhoods in the Village.

Zoning & Other Ordinance Strategies for Residential Neighborhoods:

1. Plan for the Township's higher residential densities to occur adjacent to the Village or within the Traditional Neighborhood Development receiving zone.
2. Design residential development standards to be directly related to the natural capacity of the land.
3. Develop and/or enhance zoning standards which encourage innovative development patterns that result in open space buffers or other appropriate transitions between residential and non-residential uses.
4. Include zoning ordinance incentives to encourage preservation of open space.
5. Enhance the sense of community and improve pedestrian transportation options by connecting residential developments to schools, parks, and cultural facilities.
6. Develop pedestrian connections between residential neighborhoods.
7. Work with developers to provide recreation land and open space within developments as one way to expand the system of local park facilities.
8. Encourage the development of higher density housing, such as apartments, townhomes, senior housing and mixed-use housing in areas where infrastructure is available or would be provided by the development.
9. Require appropriate water and sewer service for higher density development.
10. Develop and enforce zoning and design guidelines that reflect Holly Township's unique rural character.
11. Maintain large residential lots in the sending zone areas to preserve the low density rural character and natural range of features within these areas.
12. Provide a wide-range of housing options for all age groups.

GOAL 5: SHOPPING AND SERVICES

Encourage high-quality development and redevelopment of commercial properties intended for providing goods and services that meet the needs of current and future Township residents.

Zoning & Other Ordinance Strategies for Shopping & Services:

1. Establish a mixed-use central commercial core or traditional neighborhood center that would include a variety of medium- to high-density residential, retail, cultural, and entertainment uses, in addition to perhaps new municipal services and facilities, that features multimodal access, and serves as Holly Township's Traditional Neighborhood Development area.
2. Promote the concentration of new retail development in sustainable community (Dixie Highway) and traditional neighborhood centers (Fish Lake Road).
3. Continually implement access management techniques, such as shared drives, service roads, internal connections, and proper driveway design, to maintain roadway capacity and safety.
4. Encourage parking in the rear and to the side of stores in order to create more pedestrian-friendly and aesthetically appealing retail developments.
5. Parking areas should be designed in order to allow for efficient access from the roadway, while also maintaining a sense of safety and security for the users.
6. Review existing code enforcement efforts to insure positive response and timely compliance with violation notices.
7. Encourage business establishments that provide goods and services residents need on a daily basis to locate in reasonable proximity to residential areas.
8. Prevent premature commercial development in outlying areas ahead of demand for new floor area and ahead of infrastructure to support the development.
9. Require all major commercial developments to locate where sewer and/or water service is existing or planned.

Partnership Strategies for Shopping & Services:

1. Work with the MDOT, the Road Commission of Oakland County and developers to provide shared driveways whenever possible, and locate new driveways in appropriate locations for safety and access.

GOAL 6: ECONOMIC DEVELOPMENT

Promote economic activities which are compatible with the existing character and future vision of Holly Township, with respect, consideration, and in cooperation with surrounding communities.

Zoning and Other Ordinance Strategies for Economic Development:

1. Allow compatible high tech, research & development uses to locate within the Dixie Highway service area.
2. Encourage high tech, research, and industrial development within planned industrial parks and discourage scattered site development that negatively impacts adjacent land uses, especially residential areas.
3. Promote establishment of high tech, research, and light industrial operations at locations where sewer and/or water service is existing or planned, and where there is appropriate road access for employees and delivery vehicles.
4. Require outdoor storage to be properly screened from public view.
5. Address the relationship between adjacent uses by developing site plan review standards that encourage service drives, combined parking and access drives, and signage which is sensitive to the primarily residential character of Holly Township.
6. Review and enhance the zoning ordinance performance standards to ensure that the health and safety of Township residents is maintained while encouraging appropriate new manufacturing development.
7. Ensure that all manufacturers protect the Township's ground and surface waters by installing primary and secondary containment vessels and leak detection equipment for all hazardous materials and that Wellhead Protection procedures are followed for new manufacturing establishments within the designated wellhead protection areas
8. Locate manufacturing development where it blends in with the natural features of the Township in order to maintain rural character.

Partnership Strategies for Economic Development:

1. Plan for needed roadway improvements to support and enhance new light manufacturing uses.
2. Encourage a partnership between the Township Genesee, and Oakland Counties to raise awareness of development opportunities and the attractive qualities of the Township.
3. Coordinate with Grand Blanc Township with respect to the Technology Village.
4. Identify and support existing industries within the Township and address their utility and infrastructure needs.
5. Evaluate existing assets (cultural, environmental, transportation, and economic) and emerging local and regional economic trends. Develop marketing brochure and update website to reflect asset and emerging sector findings, and how they related to Holly Township's Village and receiving zone plan.
6. Develop cooperative partnerships with community and county level planning so that Holly Township can be a partner in aligning efforts for coordinated business attraction that leverages local and regional strengths.
7. Promote identified assets to attract and retain businesses and high-talent workforce, and ensure that there is compatibility of industries with the existing economy and community character.
8. Designate a business improvement coordinator that establishes a business support tool-kit, identifies possible business site locations, and acts as a liaison on-behalf of the Township.
9. Participate and encourage regional planning considerations within and around Holly Township, develop relationships at multiple levels of government in the area.
10. Encourage the branding efforts of the live, work, play program and develop partnerships with major event attractions and businesses in order to organize recruiting events.
11. Encourage a buy local market program, and support those who pursue the development of eco-tourism attractions.

GOAL 7: PARTNERSHIPS

Increase and continue coordination with government entities, community groups, businesses, organizations, and all others who wish to contribute to the success of Holly Township.

Partnership Strategies:

1. Study surrounding area plans and emerging trends, and evaluate how Holly Township is connected and can support those efforts.
2. Develop cooperative relationship with various public and private entities, and partner with them to achieve coordinated planning efforts.
3. Develop a solid growth boundary policy to protect township investments and preserve township tax base.
4. Attend regional conferences, events, and outings in order to develop relationship and gain Township exposure.
5. Actively engage in SEMCOG, Oakland County, and MTA events.
6. Seek service sharing agreements whenever fiscally prudent.
7. Support cooperative planning efforts and open door policies for those groups who'd like to engage in Holly Township's future.
8. Incorporate developers and other stake holders within the community into the visioning process.

GOAL 8: INFRASTRUCTURE

Provide appropriate infrastructure that preserves and protects Holly Township's natural features while addressing the community's needs for efficient and safe multimodal access, sewer, and water systems.

Zoning and Other Ordinance Strategies for Infrastructure:

1. Ensure that developers of new subdivisions within designated service areas provide sewer and water utilities without added expense to the Township.
2. Target sensitive lake areas as the first priority properties to receive sanitary sewer services.
3. Direct higher-density residential development to receiving areas served by public utilities.
4. Promote access controls and control lanes to improve roadway capacity, circulation, and safety while decreasing the need for roadway widening.
5. Additional residential development should be timed to coincide with adequate roadway, sewer, and water systems needed to support the development.
6. Establish sidewalks and pathways that support multi-modal access throughout the Township.
7. Develop a Complete Streets program that addresses circulation concerns for all users of roadways and sidewalks throughout the Township.

Partnership Strategies for Infrastructure:

1. Expand the water system to provide fire hydrants in new neighborhoods and higher density developments.
2. Fish Lake Road, Lahring Road, and Belford Road as designated Natural Beauty Roads to protect the rural character of these thoroughfares.
3. Review roadway conditions and traffic volumes in order to target areas which should receive priority for road improvements.
4. Continue to work with the Road Commission of Oakland County and MDOT to get traffic signals installed in appropriate locations to improve safety while maintaining traffic flow.
5. Pave existing gravel roadways, where appropriate, in order to improve roadway capacity and traffic flow, while reducing adverse impacts such as dust and noise.
6. Consider developing an additional north-south connector to increase accessibility and improve roadway circulation for the Township's commuters.

GOAL 9: RECREATION AND OPEN SPACE

Enhance the quality of life for current and future White Lake Township residents and make the community more appealing by providing a variety of recreational facilities to accommodate residents of all ages, interests, and physical abilities.

Zoning Strategies for Recreation & Open Space:

1. Consider adopting zoning ordinance standards which will permit and encourage mechanisms to preserve and protect open space while adding to the Township's park land inventory.

Partnership Strategies for Recreation & Open Space:

1. Acquire land to develop small, neighborhood parks. These parks should include picnic areas, playground, and other passive uses.
2. Develop a centrally-located community recreation center, perhaps in conjunction with the traditional neighborhood development area, in order to accommodate Township events and build a sense of community among the residents.
3. Consider natural features, such as wetlands, floodplains, woodlands, lakes, streams, and steep slopes, which can be appropriately incorporated into recreational opportunities.
4. Develop a system of pathways in the Township that can connect residential neighborhoods to each other and with shopping areas.

GOAL 10: SUSTAINABILITY

Support the economic climate of rural landscapes through enhancing the viability and respectful protection of resources; help existing places thrive by safe guarding downtown, community assets, and investments within Holly Township; focus on placemaking efforts which create vibrant spaces, attract businesses, and people who support the neighborhoods and communities of Holly Township.

Strategies for Sustainability:

1. Inform citizens and leadership about the importance of sustainability.
2. Conduct sustainability audit.
3. Establish sustainability goals.
4. Develop sustainability plan.
5. Implement policies and measures.
6. Evaluate and report results.
7. Develop ordinance standards for sustainable development.

GOAL 11: ENERGY & CLIMATE

8. Achieve greenhouse gas emissions and criteria air pollutant reductions in both municipal operations and the community at large, with attention given to reduction and prevention of inequalities.
9. Climate Adaptation Improve the response and resiliency of all communities to climate change impacts on the built, natural and social environments with an emphasis on public health and historically under-served populations.
10. Energy Supply Provide an affordable and secure energy supply that increases the development and use of renewable, least toxic and less carbon-intensive sources.
11. Energy Use Provide affordable and secure energy for all while minimizing demand and consumption.
12. Enhance the energy performance and resource efficiency of a community's building stock throughout its life-cycle.
13. Support low-carbon and high resource-efficiency transportation options through the development of supporting infrastructure, fuel purchasing and local fuel production.
14. Reduce energy use and greenhouse gas emissions in industrial sector operations and throughout the life-cycle of the products manufactured.
15. Encourage the efficient use of resources and reduce greenhouse gas emissions from agricultural and farming processes.

Land Use Plan

4



Future Land Use Plan

The Future Land Use Map is the culmination of the comprehensive planning process, creating a land use guide and visual representation of the direction and future of Holly Township. The map is developed off of the analyses, goals, policies and strategies set forth in their respective sections.

The plan addresses the issues of natural and recreational resource preservation, access management issues, community and neighborhood development, the targeting of strategic economic centers, Holly Township's geographical location, and setting forth a vision of sustainable and smart development so that current and future generations of Holly Township residents may experience a high quality of life. Each district encourages environmentally conscious and innovative development that preserves our natural resources and the respectful use of land. This open space preservation focus can be seen in the tables within each district description, detailing the density bonuses achieved when various forms of land preservation development strategies are undertaken, and are intended to be consistent with the open space preservation application design requirements.

RESIDENTIAL LAND USE

Rural Estate

Rural Estate is a designation for low density single-family neighborhoods that are rural in nature. This district is geared towards large lot sizes that support agricultural uses and buildings, farmhouses, estate homes, and low intensity residential uses.

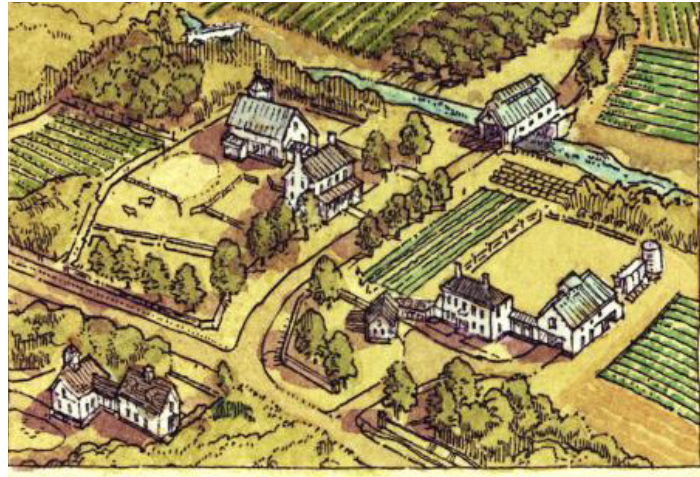
Rural Estate Densities (du/acre)		
Standard Development	Cluster Development	Transfer Development
1:10 to 1:40	1:5	1:2.5



Low Density Residential

Low Density Residential is a designation for low-density single-family neighborhoods that maintain large areas of preserved open space, though at a higher density level than the Rural Estate designation.

Low Density Residential Densities (du/acre)		
Standard Development	Cluster Development	Transfer Development
1:5	1:2.5	1:1



Neighborhood Residential

Neighborhood Residential is a designation for a higher intensity of use than the previous two residential districts. This district surrounds the village and higher density areas, acting as a transition zone near sensitive natural features and protected areas.

Neighborhood Residential Densities (du/acre)		
Standard Development	Cluster Development	Transfer Development
1:1	2:1	3:1

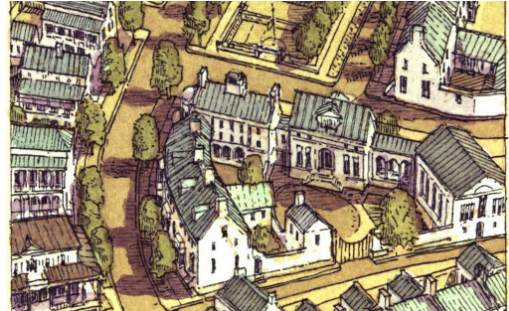


Manufactured Housing Park

Manufactured Housing Park is a designation for equitable residential units that are placed at higher density levels than the Medium Residential designation.

Rural Town Center

Rural Town Center is a designation for small lot, higher-density residential, affordable residential, and mixed-use residential/commercial development. This district is comprised of shop fronts, recreational space such as plazas and pocket parks, buildings set closer to sidewalks, connectivity to active streets and trails, all while maintaining a residential small town community fabric.



COMMERCIAL, OFFICE, INDUSTRIAL AND RESEARCH LAND USES

Commercial Center

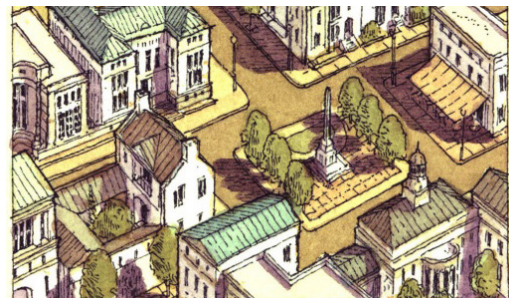
Commercial Center is a designation for intense mixed, commercial, fabrication, and flex-employment uses that are set close to the street. The residential fabric is more intense and incorporates live-work units. The public open space is designed to be more urban and integrated with a tight network of streets, sidewalks, and steady tree canopy coverage along pedestrian walkways.

Research/Office Center

Research/Office Center is a designation for a variety of green and light and moderate manufacturing, technology-based, research and development, and office industry uses.

Light Industrial

Light Industrial is a designation for slightly higher intensity and wider array of uses when compared to the Research/Office Center District. These uses consist of fabrication, green and light manufacturing, technology-based engineering, research and development, and other similar type uses.



OTHER CATEGORIES

Institutional/Local Recreation

Institutional/Local Recreation is a designation for local recreation and public and quasi-public institutional uses.

State Recreation

State Recreation is a designation for a substantial amount of land in the Township and is consistent with existing boundaries of parks and State conserved areas.

Urban Service District

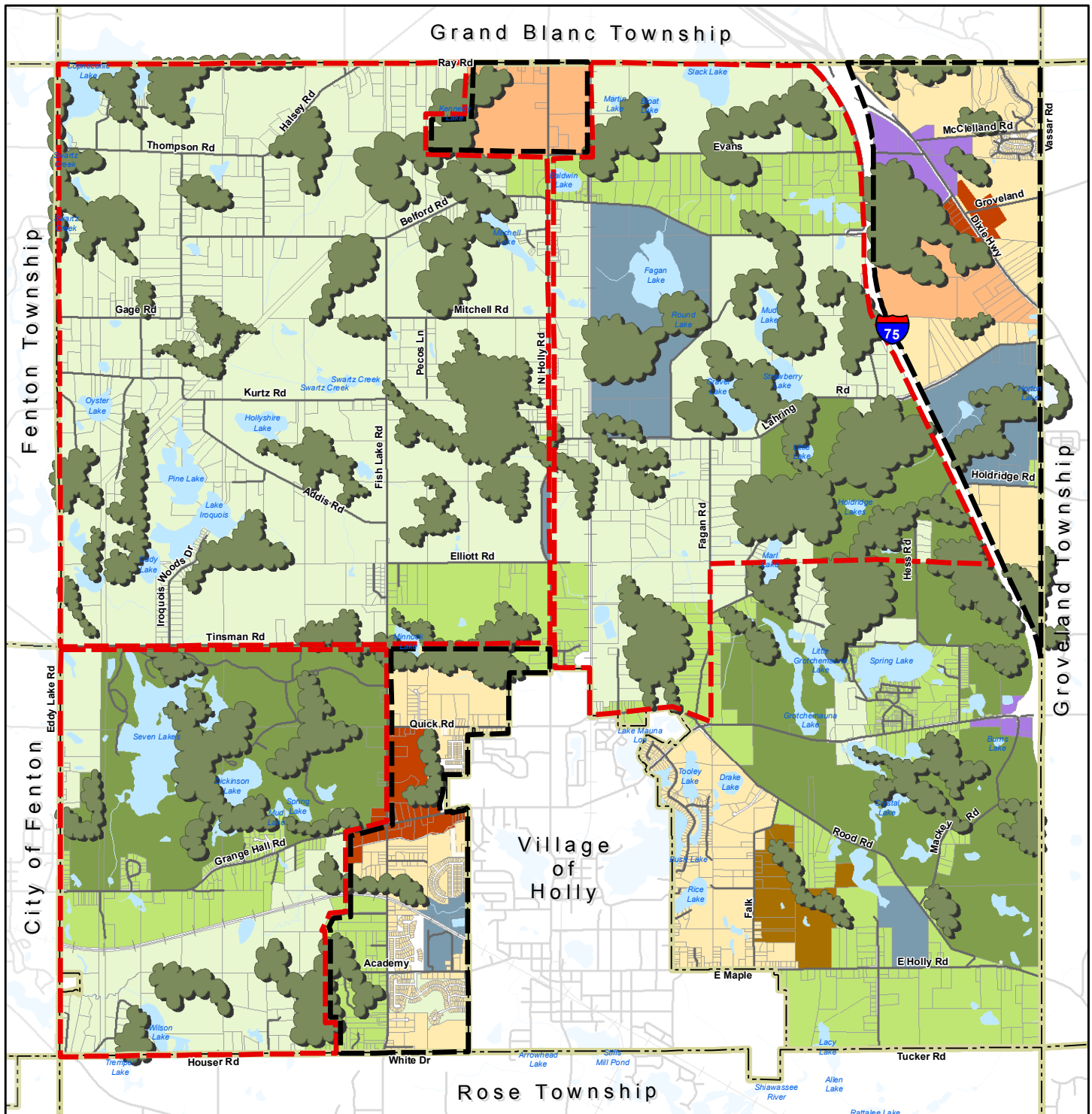
Urban Service District is an overlay designation that includes areas that the Township has supplied essential services to in order to support existing/emerging industries and a live/work population.

Table 18 reveals the total percentages, number of parcels, and total acreage of each land use designation in relation to all other land use designations, and the densities of residential uses.

Table 18: Future Land Use

Future Land Use	# of Parcels	Acreage	% of Total
Rural Estate	758	10,077	48.40
State Recreational Lands	27	3,758	18.05
Low Density Residential	774	2,954	14.19
Neighborhood Residential	1,010	1,874	9.00
Institutional/Local Recreation	23	1000	4.80
Research/Office Center	36	533	2.56
Rural Town	53	224	1.08
Commercial Center	21	204	0.98
Manufactured Housing Park	13	195	0.94
Rural Town	53	224	1.08

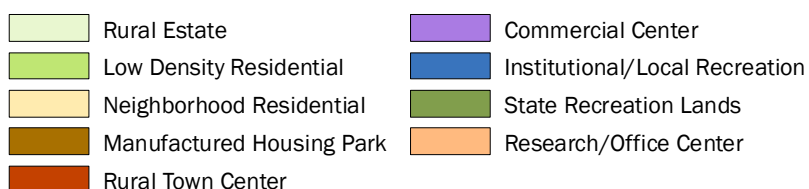
Source: McKenna Associates Inc.



July 21, 2016

Map 10: Future Land Use

Holly Township, Oakland County, Michigan



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FT



Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

The Village of Holly Future Land Use Map is located on the following page. The historic Village is located at the heart of the Holly Township, providing residents with great retail and service opportunities, jobs, entertainment, recreation, community events, and a variety of unique residential housing choices.

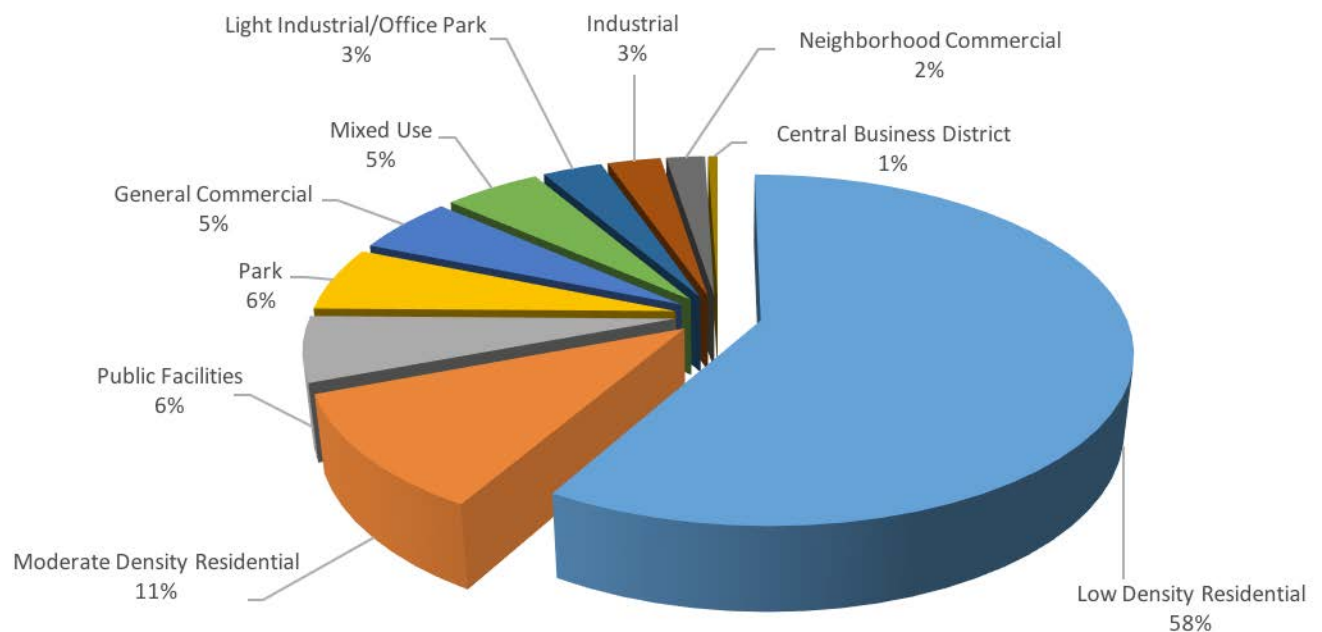
Table 19 and Figure M below gives the various acreages for each of the Village's land use designations:

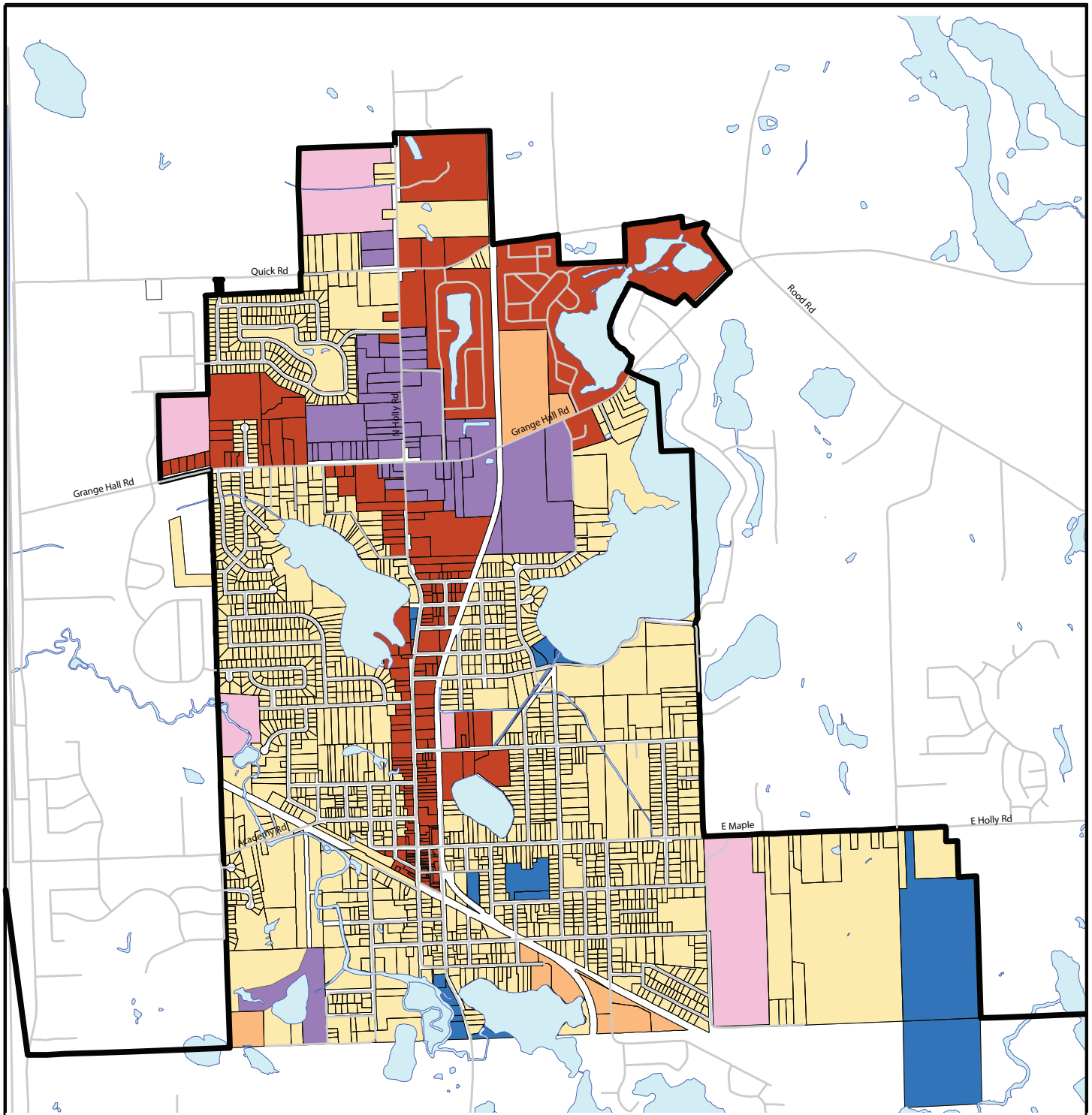
Table 19: Future Land Use — Village of Holly

Land Use Designation	# of Parcels	Acreage	% of Total
Low Density Residential	1713	1007.3	58.37%
Moderate Density Residential	23	187.0	10.84%
Public Facilities	6	104.2	6.04%
Park	18	102.8	5.96%
General Commercial	52	91.1	5.28%
Mixed Use	93	87.4	5.06%
Light Industrial/Office Park	4	54.0	3.13%
Industrial	11	48.2	2.79%
Neighborhood Commercial	34	35.0	2.03%
Central Business District	62	8.7	0.50%

Source: Carlisle/Wortman Associates

Figure N: Future Land Use — Village of Holly

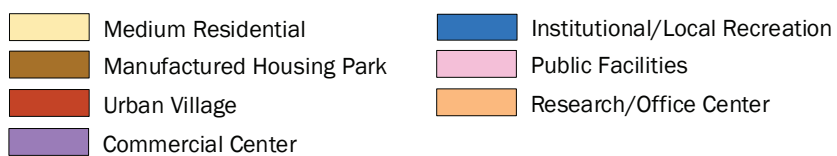




February 1, 2016

Map 11: Village of Holly Future Land Use

Holly Township, Oakland County, Michigan



0 750 1,500
FEET



McKenna
ASSOCIATES

Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

Zoning Plan

Holly Township strives to maintain a high quality of life through the preservation of natural resources and preservation of rural character. However, disconnect between the goals of the Township and the Zoning Ordinance may occur. The Michigan Planning Enabling Act (Public Act 33 of 2008) bridges this disconnect by requiring a Zoning Plan as part of the Master Plan. The Zoning Ordinance is the primary land use implementation tool available to the Township.

ROLE OF THE MASTER PLAN AND ZONING ORDINANCE

The Master Plan sets forth the vision, goals, policies for growth and development in the Township for the next twenty (20) years. It includes strategies for managing growth and change in land uses over this period. The plan is required to be reviewed at least once every five (5) years.

The Zoning Ordinance regulates the use and development of land. By Public Act 110 of 2006, as amended, it is based on a plan designed to promote public safety and general welfare and several additional items as described in the Act.

ROLE OF THE ZONING PLAN

The Zoning Plan describes the relationship between the future land use categories in the Master Plan and the comparable Zoning Ordinance districts. This Plan is required by the Michigan Planning Enabling Act (P. A. 33 of 2008). Not to be confused with the Zoning Ordinance, the Zoning Plan provides generalized recommendations for methods of bringing the Zoning Ordinance in closer relation with the future land use vision. The Zoning Plan compares zoning districts and future land use categories as well as the intent and basic standards that control the height, area, bulk, location, and use of buildings and premises in comparable zoning districts. These matters are regulated by specific standards in the Zoning Ordinance.

DISTRICT STANDARDS

As shown in Table 19 on the following page, the Master Plan sets forth ten (10) future land use categories. The Zoning Ordinance currently has thirteen (13) zoning districts and one (1) overlay district (Grange Hall/Fish Lake Road Overlay District). The Zoning Ordinance, in large part, describes a segregated land use pattern. The Master Plan uses a more integrated approach to land use categorizing.

The format of Table 19, the Land Use Category/Zoning District Comparison, is to provide primary locations of respective zoning districts that are impacted the greatest. One future land use category may be listed in multiple zoning districts due to the transition from the segregated to the integrated approach.

All of the future land use categories can be associated with a zoning district(s). The Mixed Use category provides flexibility and is intended to provoke creative and adaptive land uses which would be compatible with surrounding uses and will likely require the establishment a new mixed use zoning district.

Map 12 illustrates the relationship between the Future Land Use Plan and existing zoning districts.

Table 20: Zoning Plan – Land Use Category / Zoning District Comparison

Future Land Use Category	Density	Corresponding Zoning District(s)
Resource Conservation/Residential	1 dwelling unit / 2.5-20 acres	Agricultural Residential (AGRE)
State Recreation Lands	N/A	Agricultural Residential (AGRE)
Low Density Residential	1 dwelling unit / 1-5 acres	Rural Estate (RE)
Neighborhood Residential	1-5 dwelling unit / 1 acre	Single Family Residential (R-1 and R-2) Multiple Family Residential (RM-1 and RM-2)
Institutional/Local Recreation	N/A	N/A
Research/Office Center	N/A	Office Service (OS)
Manufactured Housing Park	N/A	Mobile Home Park (RMH)
Commercial Center	N/A	Local Commercial (C-1) General Commercial (C-2) Office Service (OS)
Light Industrial	N/A	Limited Industrial (L-1)
Rural Town Center	N/A	**

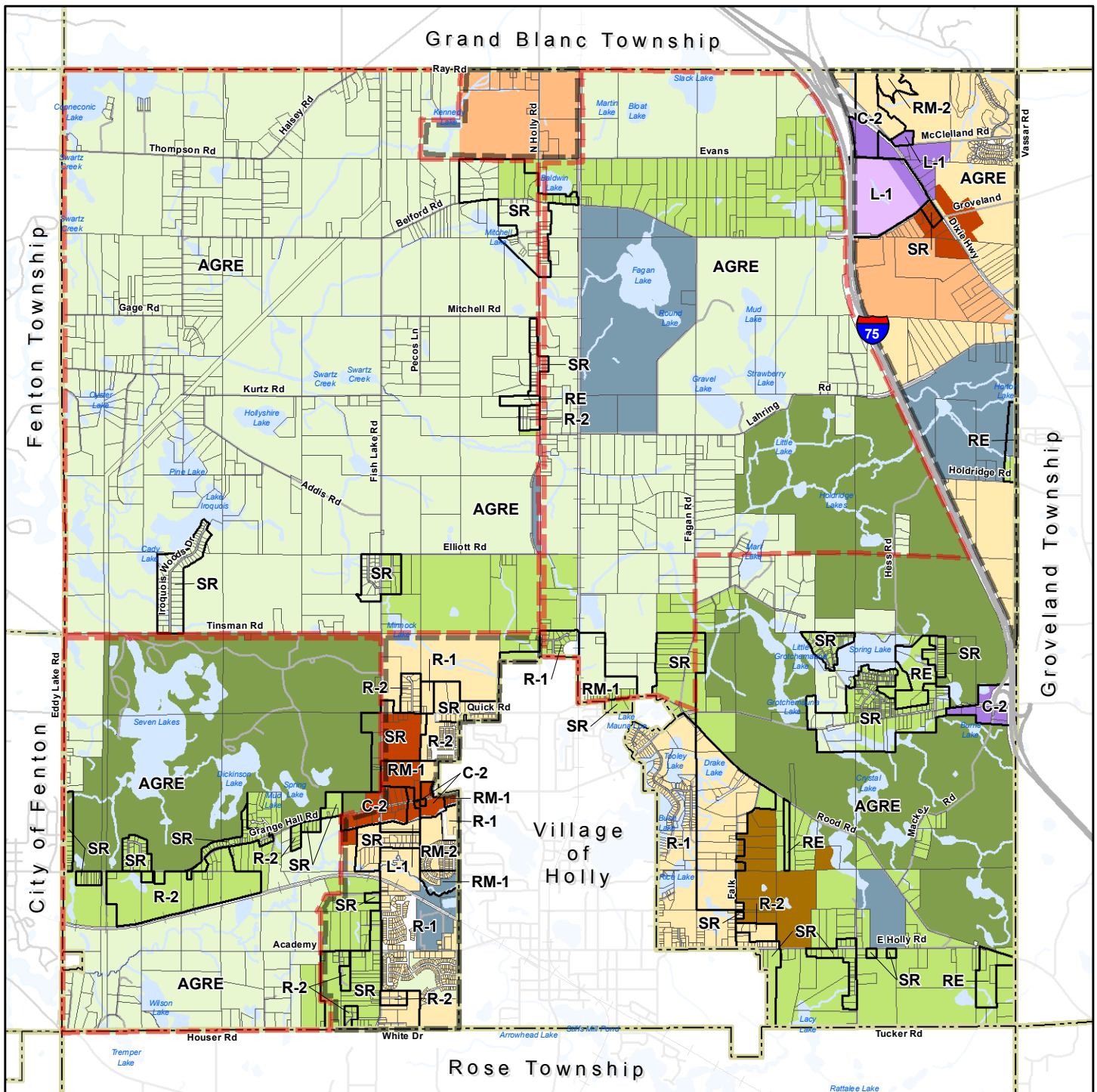
* Provides for varying types of residential uses. Zoning District may vary.

** The Rural Town Center will require the development of a new mixed-use zoning district.

RECOMMENDED ZONING ORDINANCE ACTIONS

Because the Township has consistently refined the Zoning Ordinance throughout the past twenty (20) years, the Zoning Ordinance is relatively consistent with the overall vision of the Township, including the goals and policies. The future land use categories are also consistent. However, the Planning Commission should consider the following issues before the next update of the Master Plan

1. Creation of a Research and Development zoning district to correlate with the Research/Office land use category.
2. Creation of a Mixed-Use zoning district to correlate with the Rural Town Center land use category.
3. Review the Zoning Ordinance to ensure that creative development opportunities exist for single family developments to avoid significant negative environmental impacts that may otherwise occur with conventional developments including residential design standards.
4. Incorporate sustainability incentives and requirements for new development.



July 21, 2016

Map 12: Future Land Use Overlay Zoning

Holly Township, Oakland County, Michigan

	Rural Estate (Resource Conservation)		Rural Town Center (Mixed Use)
	Low Density Residential/Agricultural		Light Industrial
	Low Density Estate Residential (Low Density Estate Residential)		Commercial Center (Commercial/Office)
	Medium Density Residential		Research/Office Center
	Multiple Density Residential		State Recreation Lands
	Neighborhood Residential (Planned Residential)		Urban Service/Receiving District
	Manufactured Housing Park		Sending Area
	Institutional/Local Recreation		

Zoning Districts

AGRE	Agricultural Residential (5.0 ac.)
R-1	Single Family Residential (0.5 ac.)
R-2	Single Family Residential (1.0 ac.)
SR	Suburban Residential (1.5 ac.)
RE	Rural Estate (2.5 ac.)
RMH	Mobile Home Park
RM-1	Multi-Family Residential (RM-1)
RM-2	Multi-Family Residential (RM-2)
C-1	Local Commercial
C-2	General Commercial
OS	Office Service
L-1	Limited Industrial
G-1	General Industrial



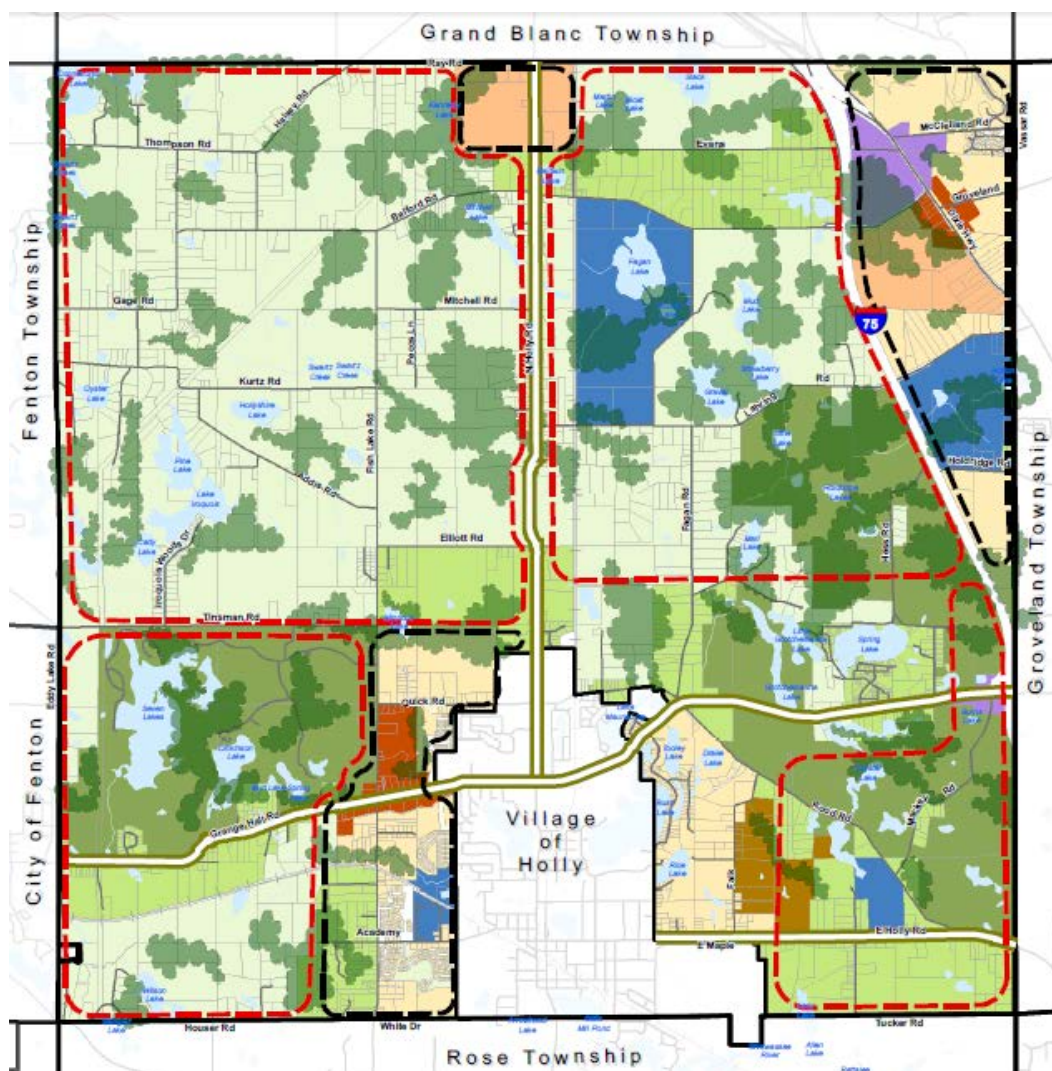
McKenna
ASSOCIATES

Base Map Source: Oakland County GIS, 2014
and Michigan Geographic Framework Version 14a.
Data Source: Carlisle/Wortman Associates, Inc. 2004

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Corridor and Subarea Plans

This section is intended to highlight targeted corridors and subareas within Holly Township that exhibit strategic growth potential in context of its geographical location and connection to the surrounding region. There are four (4) focus areas that include North Holly Road, the Enterprise District, the Great Lakes Community, and the Fish Lake Community. Each plan will consist of unique objectives, development guidelines, and implementation strategies so as to achieve the development pattern desired by Holly Township and its residents, and place Holly Township in the best possible position for a prosperous and sustainable future. The map below depicts Holly Township and the approximate locations of each focus area highlighted by dashed black outlines.



NORTH HOLLY ROAD

North Holly Road plays an integral role in anchoring Holly Township's northern gateway. This area is planned to attract science, technology, engineering, and mathematics (STEM) related research and professional office uses, and leverage its proximity to the Technology Village in Grand Blanc Township. Largely undeveloped and vacant, this portion of the Township is an optimal location for burgeoning and established businesses to develop appropriate facilities that meet their needs, while still reflecting the rural character of the surrounding community.

Objectives

- Create a thriving and innovative research and office center, attracting STEM and burgeoning technologies that can leverage the geography and appreciate the rural advantages that exist within Holly Township.
- Enhance linkages between Holly Township and the Grand Blanc Technology Village
- Encourage intelligent and sustainable design in accordance with LEED Green Building standards, limiting surface lots and their spatial positioning on sites, as well as maintain building design that is consistent with the rural character and connectivity of the surrounding community and its relationship with well-designed walkable streets.

Development Guidelines

- Development should be oriented towards the street with setbacks consistent with the surrounding environment, preserving native vegetation though promoting connectivity to the multi-modal transportation network. The buildings in this district are encouraged to embody the rural architectural style of the community. Rural architecture includes gabled roofs, shuttered windows and large doors, unique window and door trims, weathered and treated woods, river stone and brick, liberal interpretations of barn and farmhouse styled office structures, as well as incorporating modern glass and steel elements to promote green and structural sustainability.
- Buildings should follow LEED Green Building design standards in order to create a well assimilated development that is conscious of the surrounding natural rural environment and topographical contours.
- Surface lots and expansive pavement shall be limited within this district. Encouraged are innovative and shared parking designs, including parking garages beneath elevated buildings, and permeable green surface lots.

Implementation

- Create new zoning classification for Research/Office Center.
- Create architectural design standards to reflect the rural character of the community.
- Rezone properties according to the future land use plan and new Zoning Ordinance.
- Collaborate with adjacent communities, and coordinate with Technology Village to ensure compatibility of projects.
- Encourage LEED certification for new or renovated buildings.
- Improve pedestrian experience through complete streets and walkable scaled amenities.

Grand Blanc Township



ENTERPRISE AND RECREATION DISTRICT

The Enterprise District, located at the northeast corner of Holly Township, is the community's new targeted center of activity and growth. This diverse district focuses on attracting energetic businesses and residents who are looking to create the type of community that offers a high quality of life, full of live/work and recreational opportunities. This area will accommodate a variety of residential options that directly connect to a mixed use corridor situated along Dixie Highway. The location of Dixie Highway and I-75 also provide ample opportunity for research/office and commercial developments to thrive in conjunction with their location to the region as well as their relation to Technology Village.

Objectives

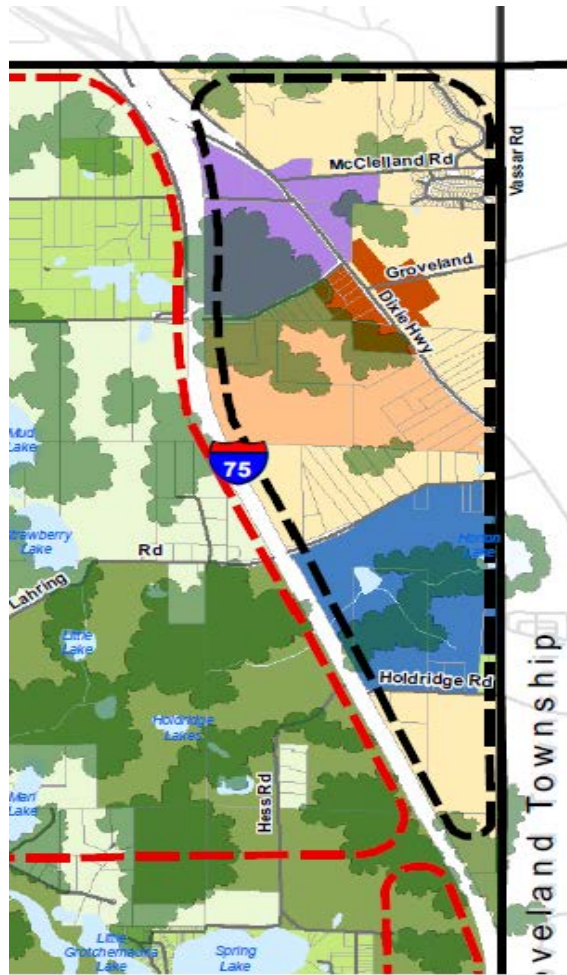
- Create a diverse and interesting community that supports the live, work, and play lifestyle.
- Connect the Enterprise District to assets within Holly Township, supporting the interconnectivity of communities and supporting targeted growth in the northeast corner of the area.
- Enhance linkages between Holly Township and the Grand Blanc Technology Village.
- Encourage intelligent and sustainable design in accordance with LEED Green Building standards, limiting surface lots and their spatial positioning on sites, as well as maintain building design that is consistent with the rural character and connectivity of the surrounding community and its relationship with well-designed walkable streets.
- Reinforce the recreational opportunities within the district including Mt. Holly, Renaissance Festival, potential regional ORV park, and multiple connections to regional trail and recreational opportunities.

Development Guidelines

- Development should be oriented towards the street, with small setbacks and interesting rural architectural design. Rural architecture includes gabled roofs, shuttered windows and large doors, weathered and treated woods, river stone and brick, liberal interpretations of townhome and farmhouse styled offices and residences, as well as incorporating modern glass and steel elements to promote green and structural sustainability.
- Buildings should follow LEED Green Building design standards in order to create a well assimilated development that is conscious of the surrounding natural rural environment and topographical contours.
- Surface lots and expansive pavement shall be limited within this district. Encouraged are street parking patterns, innovative and shared parking designs which include parking garages beneath elevated buildings, and permeable green surface lots.
- Wherever possible, public gathering spaces and pocket parks that preserve the natural environment in ways that the community can enjoy are highly encouraged.

Implementation

- Create and enforce new zoning classification for Rural Town, Research/Office Center and Commercial Center.
- Create architectural design standards to reflect the rural character of the community and achieve the mixed use and concentrated development pattern desired.
- Rezone properties according to the future land use plan and new Zoning Ordinance.
- Collaborate with adjacent communities, and coordinate with Technology Village to ensure compatibility of projects.
- Encourage LEED certification for new or renovated buildings.
- Improve pedestrian experience through complete streets and walkable scaled amenities.
- Create a park and public space standard for targeted districts within Holly Township.



GREAT LAKES COMMUNITY

The Great Lakes Community, located at the southeastern portion of Holly Township near the Groveland Township border, perfectly complements the nearby Village of Holly and is located just down the road from the Enterprise District. The Great Lakes Community is an optimal location for those who would like to live and work in Holly Township's vibrant districts yet still prefer to immerse themselves in a slower pace "up-north" lake front community. The larger lot sizes, Lake Front, and natural wooded and rural landscape define this geography; this plan focuses on the preservation of these historic characteristics and its high quality traditional rural styled development.

Objectives

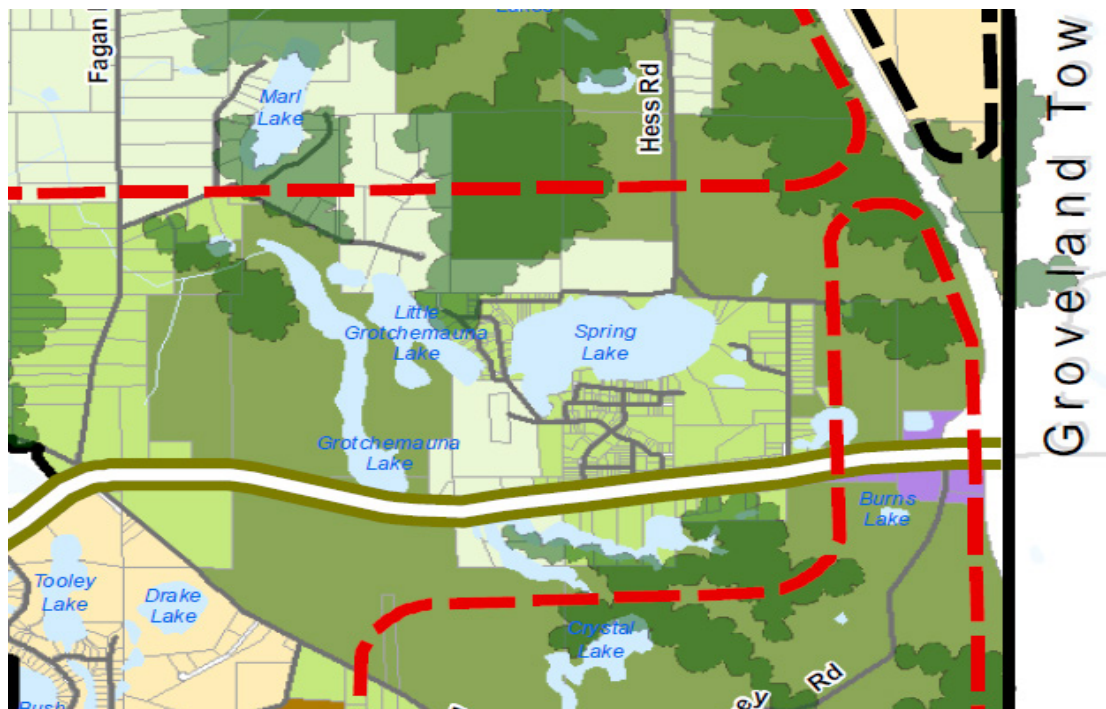
- Preserve the existing lake front "up-north" character of the Great Lakes Community.
- Promote creative residential green design and development patterns to better mitigate stresses on the natural systems of the area, and preserve the wooded, rural character of the community.
- Enhance linkages between each of the surrounding districts within the Township, especially in connecting the Great Lakes Community to greater Holly Township to achieve the live work principles, while preserving the character of the community.

Development Guidelines

- Expansive landscaped lots and broadly sodded fronts are discouraged in this district. Each individual development site should accommodate the natural topography, features, and site lines of the lot, ultimately settling the residence in a position that maximizes the natural untamed beauty and functions of the environment.
- Residences should be consistent with American, Cottage, Folk Farmhouse, and other traditional but informal architectural styles. These recommended architectural styles include such features as 1 to 2 story dwellings with gabled roofs, dormers, large functional shuttered and symmetrical windows, welcoming front covered porches often designed with wooden pillars and ornate railing details, elevation accents and colors to highlight unique design features, and an exterior typically faced with high-quality light colored horizontal siding or traditional red brick. The dwelling footprint is typically squared with an addition of wings for common variations in footprint design.
- Garages and accessory units may be attached or detached, styled as a barn or carriage house in order to further promote the rural farmhouse environment of Holly Township.
- Where fences are desired, wood split rail, picket, or horse fence, is strongly encouraged, installed in such a way as to compliment the rural landscape, site design, and not obstruct or limit the curb appeal of the residence.
- The images below provide a great example of the desired and existing farmhouse storybook character within the Great Lakes Community.

Implementation

- Create and enforce new zoning classification for Low Density Residential and Rural Estate.
- Designate natural beauty roads and preserve the "up north" wooded character of the community.
- Create architectural design standards to reflect the rural residential character of the community and promote high-quality construction and design.
- Rezone properties according to the future land use plan and new Zoning Ordinance.
- Improve pedestrian experience through development of trails.
- Create a park and public space standard for targeted districts within Holly Township. Create architectural design standards to reflect the rural character of the community and achieve the mixed use and concentrated development pattern desired.



FISH LAKE TRADITIONAL NEIGHBORHOOD

The Fish Lake Traditional Neighborhood District, located due west along the Village of Holly, is a higher density center of residential and commercial activity. This district is focused on attracting mixed use developments and further establish the desirable residential community in the area. The Fish Lake Traditional Neighborhood truly provides the active small town experience intermixed with a slower paced residential community. This area will display excellent street design that promotes cooperative transportation modes, recreational programming and opportunities, quality retail and office uses, and most importantly the rural small town character of Holly Township.

Objectives

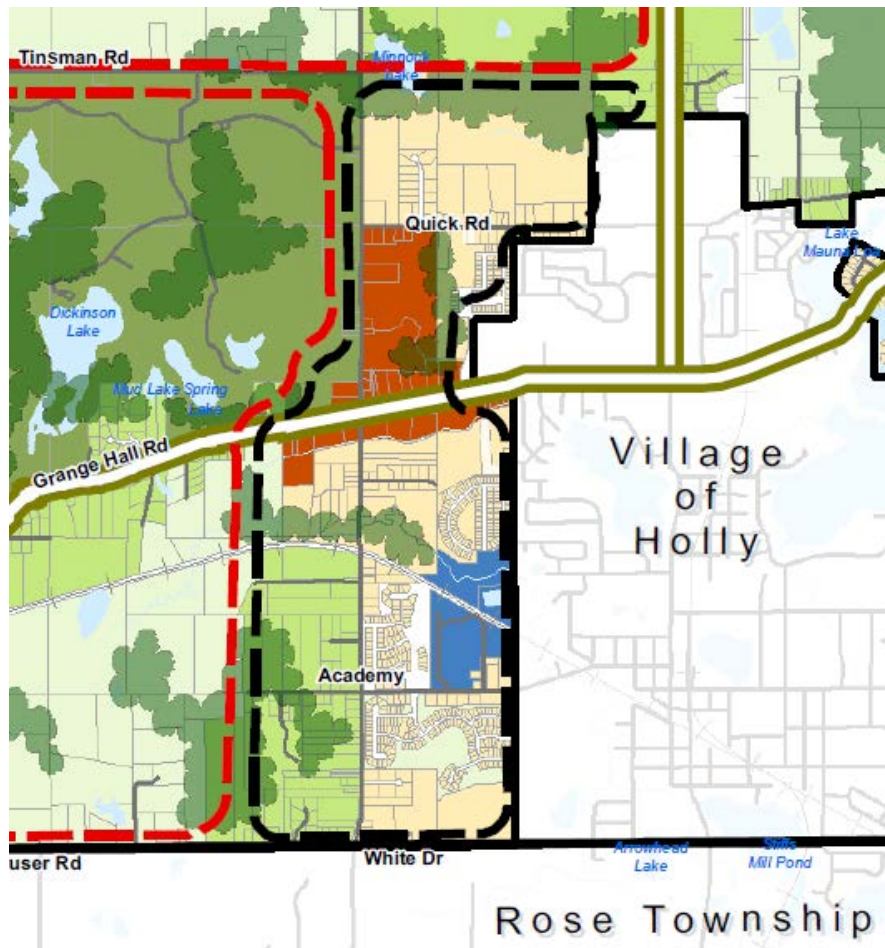
- Create a diverse and interesting community that supports the live, work, and play lifestyle.
- Connect the Fish Lake Traditional Neighborhood District to assets within Holly Township, supporting the interconnectivity of communities.
- Enhance linkages between Holly Township and the Village of Holly.
- Encourage intelligent and sustainable design in accordance with LEED Green Building standards, limiting surface lots and their spatial positioning on sites, as well as maintain building design that is consistent with the rural character and connectivity of the surrounding community and its relationship with well-designed walkable streets.

Development Guidelines

- Development should be oriented towards the street, with small setbacks and interesting rural architectural design. Rural architecture includes gabled roofs, shuttered windows and large doors, weathered and treated woods, river stone and brick, liberal interpretations of townhome and farmhouse styled offices and residences, as well as incorporating modern glass and steel elements to promote green and structural sustainability.
- Buildings should follow LEED Green Building design standards in order to create a well assimilated development that is conscious of the surrounding natural rural environment and topographical contours.
- Surface lots and expansive pavement shall be limited within this district. Encouraged are street parking patterns, innovative and shared parking designs which include parking garages beneath elevated buildings, and permeable green surface lots.
- Wherever possible, public gathering spaces and pocket parks that preserve the natural environment in ways that the community can enjoy are highly encouraged.

Implementation

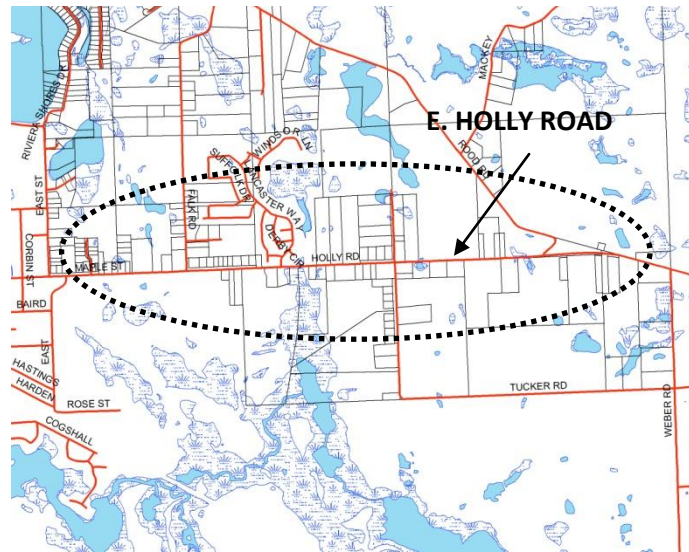
- Create and enforce new zoning classification for Rural Town, Neighborhood Residential, and Research/Office Center and Commercial Center.
- Create architectural design standards to reflect the rural character of the community and achieve the mixed use and concentrated development pattern desired.
- Rezone properties according to the future land use plan and new Zoning Ordinance.
- Collaborate with adjacent communities, and coordinate with the Village of Holly to ensure compatibility of projects.
- Encourage LEED certification for new or renovated buildings.
- Improve pedestrian experience through complete streets and walkable scaled amenities.
- Create a park and public space standard for targeted districts within Holly Township.



EAST HOLLY ROAD CORRIDOR

ISSUES

Transportation/Circulation
Transportation/Traffic Impact
Natural Resources Impacts
Rural Character Impacts
Land Use Conflicts
Vulnerable Land Uses
Multi-jurisdictional
Aesthetics/Image



East Holly Road Corridor Recommendations

As depicted above, the East Holly Road faces many issues and potential impacts. This corridor plays a role in community image due to its location as one (1) of the entry points into the Township. In order to address these issues, the following recommendations have been developed.

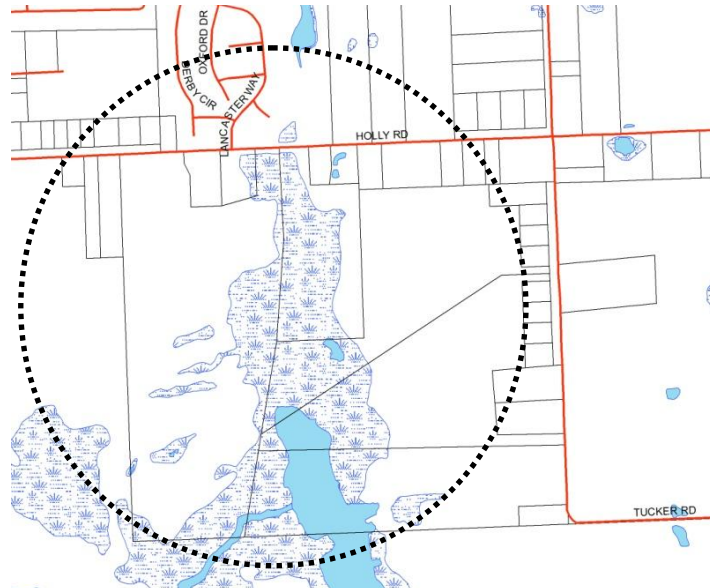
- Promote shared drives to minimize curb cuts along roadway.
- Locate entry signs at eastern entry to Township.
- Promote rural clustering to maintain rural appearance along roadway.
- Coordinate with adjacent communities to encourage compatible land uses.
- Install safety paths in accordance with the Safety Path Master Plan Map as funding becomes available.

Three (3) critical areas are located along the East Holly Road corridor: Holly High School, the manufactured housing park, and the Rattalee Lake wetlands area.

RATTALEE LAKE WETLANDS AREA

ISSUES

Transportation/Circulation	
Transportation/Traffic Impact	
Natural Resources Impacts	✓
Rural Character Impacts	✓
Land Use Conflicts	✓
Vulnerable Land Uses	
Multi-jurisdictional	✓
Aesthetics/Image	✓



Rattalee Lake Wetlands Area Recommendations

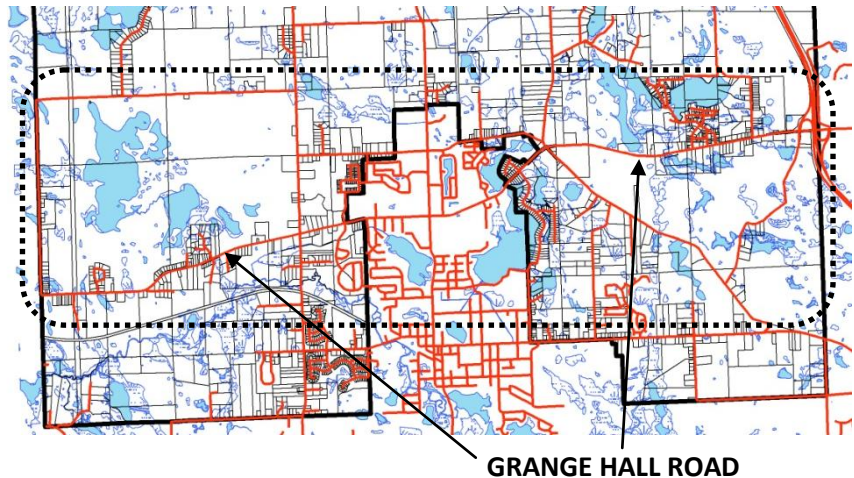
The Rattalee Lake wetlands area is a truly unique asset shared by the Village of Holly, Holly Township, and Rose Township. The area is one (1) of the few areas left in Oakland County which maintains its pre-settlement landscape. Only one half of one percent (0.5%) of Oakland County remains in this undisturbed condition. Holly Township can capitalize on this natural asset by working for its protection and featuring the area as a visitor destination point which represents some of the natural beauty which can be found in the Township. The Rattalee Lake Greenway Project developed the following recommendations in order to preserve this unique asset.

- Conservation easement or parcel donation to a land conservancy to protect undisturbed areas.
- Natural area registration or agreement with a land conservancy.
- Enrollment in the Farmland and Open Space Preservation Act (PA 116).
- Creation of a management agreement to protect against invasion of alien plants or increases in stormwater runoff.
- Implementation of Best Management Practices for stormwater.
- Limitation of land clearing and grading to reduce stormwater runoff and remove pollutants.
- Coordinate with surrounding communities and Oakland County in preservation efforts.
- Promote the area as a destination point for visitors and include in any proposed Township trail system.
- Allow only the least intense uses adjacent to the area to minimize impacts.

GRANGE HALL ROAD CORRIDOR

ISSUES

Transportation/Circulation	✓
Transportation/Traffic Impact	✓
Natural Resources Impacts	
Rural Character Impacts	✓
Land Use Conflicts	✓
Vulnerable Land Uses	
Multi-jurisdictional	✓
Aesthetics/Image	✓



Grange Hall Road Corridor Recommendations

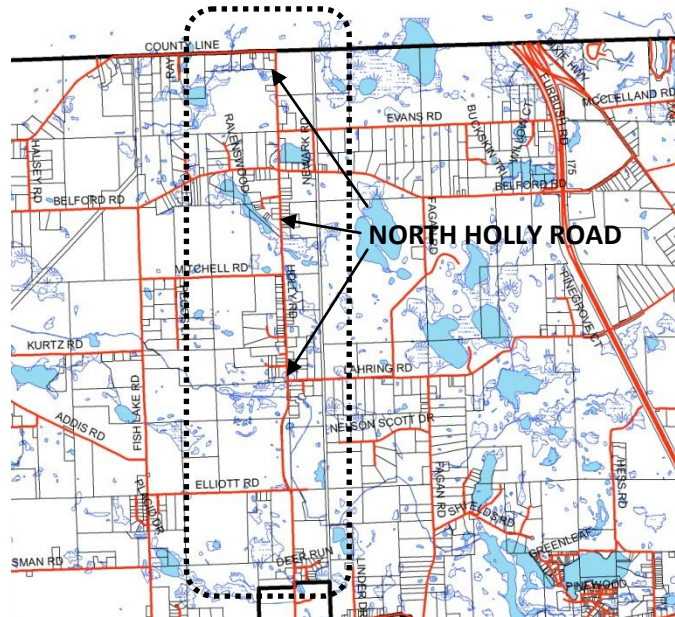
The Grange Hall Road corridor is important to the Township's image as it serves for both east and west main entry points. The following recommendations were developed to attempt to improve the corridor and preserve its function as a major roadway in the Township:

- Develop access management program to minimize curb cuts along roadway.
- Locate entry signs at the eastern and western borders of the Township.
- Ensure needed roadway improvements are installed by developers through the site plan review process.
- Install safety paths in accordance with the Safety Path Master Plan Map as funding becomes available.

NORTH HOLLY ROAD CORRIDOR

ISSUES

Transportation/Circulation	
Transportation/Traffic Impact	✓
Natural Resources Impacts	✓
Rural Character Impacts	✓
Land Use Conflicts	✓
Vulnerable Land Uses	✓
Multi-jurisdictional	✓
Aesthetics/Image	✓



North Holly Road Corridor Recommendations

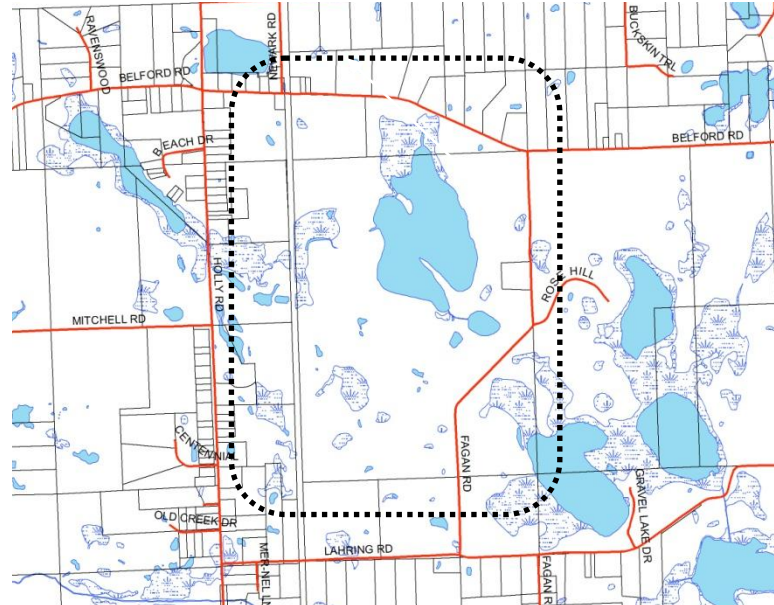
Like Grange Hall Road, North Holly Road serves as an entryway into the Township. The development occurring in Grand Blanc Township, specifically in and around the Genesys Health Complex, may bring increasing amounts of traffic along the North Holly Road corridor and may bring development pressure from the north for commercial, office and light industrial land uses. However, land use trends in Holly Township remain consistent with single family residential uses and more intense uses are not anticipated in the near future. The National Veterans Cemetery will provide a regional attraction to this area of the Township. The following issues should be considered for the corridor:

- Preserve the rural character of roadway by limiting density to the future land use designations of the properties, maintaining the existing tree canopy, and preserving view sheds.
- Develop access management program to minimize curb cuts along the roadway.
- Locate an entry sign at the northern boundary into the Township.
- Ensure needed roadway improvements, such as acceleration/deceleration lanes or intersection improvements, are installed by private developers through the part of site plan review process.
- Since many of the properties located on the corridor have valuable natural resources, density of development will be limited due to septic capability.
- Since the corridor is not located in the Sewer and Water District, services are limited. However, this does not preclude future development. Therefore, development will likely have private wastewater systems.
- Genesee County has in the past offered water and sewer services. Currently, these services are not being extended from the County. If the utilities became available, the Township could consider future development along the corridor.
- Coordinate with Grand Blanc Township and consider transitional zoning for the area. Additionally, coordination with the Township is necessary to ensure that appropriate buffering is provided in transitioning Grand Blanc Township's Light Industrial planned area and Holly Township's Low Density Estate Residential.
- If higher density development is proposed in Grand Blanc Township, both Holly Township and Grand Blanc Township should discuss mutually acceptable ways to minimize any potential conflicts at this border area, including buffers/screening, landscaping and generous setbacks.
- If growth of the Genesys Health Center complex continues south to the Township boundary, then the Township should review future land uses in order to ensure a transition to existing land uses, which are medium to large lot, single family residential in character.
- The Township should coordinate with Genesys regarding future plans for expansion.
- The properties that border Grand Blanc Township have valuable natural resources. These valuable systems should continue to be protected from future development.

GREAT LAKES NATIONAL VETERANS CEMETERY

ISSUES

Transportation/Circulation	
Transportation/Traffic Impact	✓
Natural Resources Impacts	✓
Rural Character Impacts	✓
Land Use Conflicts	✓
Vulnerable Land Uses	✓
Multi-jurisdictional	✓
Aesthetics/Image	✓



Great Lakes National Veterans Cemetery Recommendations

The decision by the Federal Government to construct and operate the Great Lakes National Veterans Cemetery in Holly Township will continue to have a significant impact on the community. It is expected that 80,000 veterans will be buried in the cemetery by 2030, with additional capacity for another twenty (20) years beyond 2030. The effects that the cemetery will have are numerous, including the impacts of the continued development of the site on neighboring properties, additional road use and traffic considerations. The Township and Village should consider the influx of visitors to the community and how such can provide a benefit to the area.

- Start discussions between the Township and Village to develop a strategic plan.
- Investigate programs to encourage visitors of the cemetery to visit the downtown, local businesses, the State and local parks, and any other appropriate locations. This could include signage, an informational booth or kiosk at the cemetery, or other appropriate measures.
- Ensure that businesses, residents, and other properties along the travel routes to the cemetery, are properly maintained and screened, to promote a positive image of the community.
- Work with the cemetery organization, Headwaters Trails, and other applicable organizations to connect the cemetery by trail, create trails through the cemetery, etc.

Transportation Plan

The Transportation Plan proposes major transportation routes serving and resulting from future land use patterns. Based on existing road usage patterns, the land use plan, and estimated population and traffic increases, these routes will be relied upon as major or minor arterials, collector streets or local roads (see Map 7 - Roadway Classification Map, page ____).

As defined in the Goals and Policies section, a “Major Thoroughfare” carries large volumes of traffic across or through the Township and often provides access to state trunklines and expressways. Most major thoroughfares are Class A all-weather roads, and carry the brunt of industrial and truck traffic. These roads receive the highest priority for maintenance and repair.

A “Minor Thoroughfare” serves much the same purpose as a major thoroughfare, but carries a lighter column of traffic. The primary function is to connect major activity centers within the Township and provide access across the Township.

A “Collector” Road transports traffic from local and residential streets to major and minor thoroughfares. Traffic volumes are moderate.

“Local Streets” and Roads provide direct access to individual properties and typically have very low peaks and little traffic.

Major thoroughfares in Holly include North Holly Road and Grange Hall Road. Grange Hall provides the only paved direct east-west artery and accesses both US-23 and I-75. North Holly Road is the only paved direct north-south artery. Both roads currently carry heavy traffic volumes relative to the area. Land use trends north of Holly Township indicate that future high intensity land uses may be focused on North Holly Road, which indicates the need for the Township to consider the recommendations of the North Holly Road Corridor subarea plan previously in the Master Plan.

Minor thoroughfares running north-south include Fish Lake Road which is only partially paved, and Rood Road which is all gravel. Fish Lake provides access to Seven Lakes State Park and Bramblewood Golf Club, two major recreational attractions in the Township. Rood Road provides access to parts of the Holly State Recreation Area including several boat launch sites, and connects to Grange Hall Road, bypassing the Village. Minor thoroughfares running east-west include Lahring Road, connecting North Holly Road and Dixie Highway, and Belford Road, which traverses the entire northern portion of the Township. East Holly Road is also a minor thoroughfare providing direct access between downtown Holly and the Holly Road/I-75 interchange.

Collector Streets which provide access from local and residential roads to major and minor thoroughfares include Tinsman, Kurtz, Quick, Elliot and Fagan Roads.

MASTER RIGHT-OF-WAY PLAN

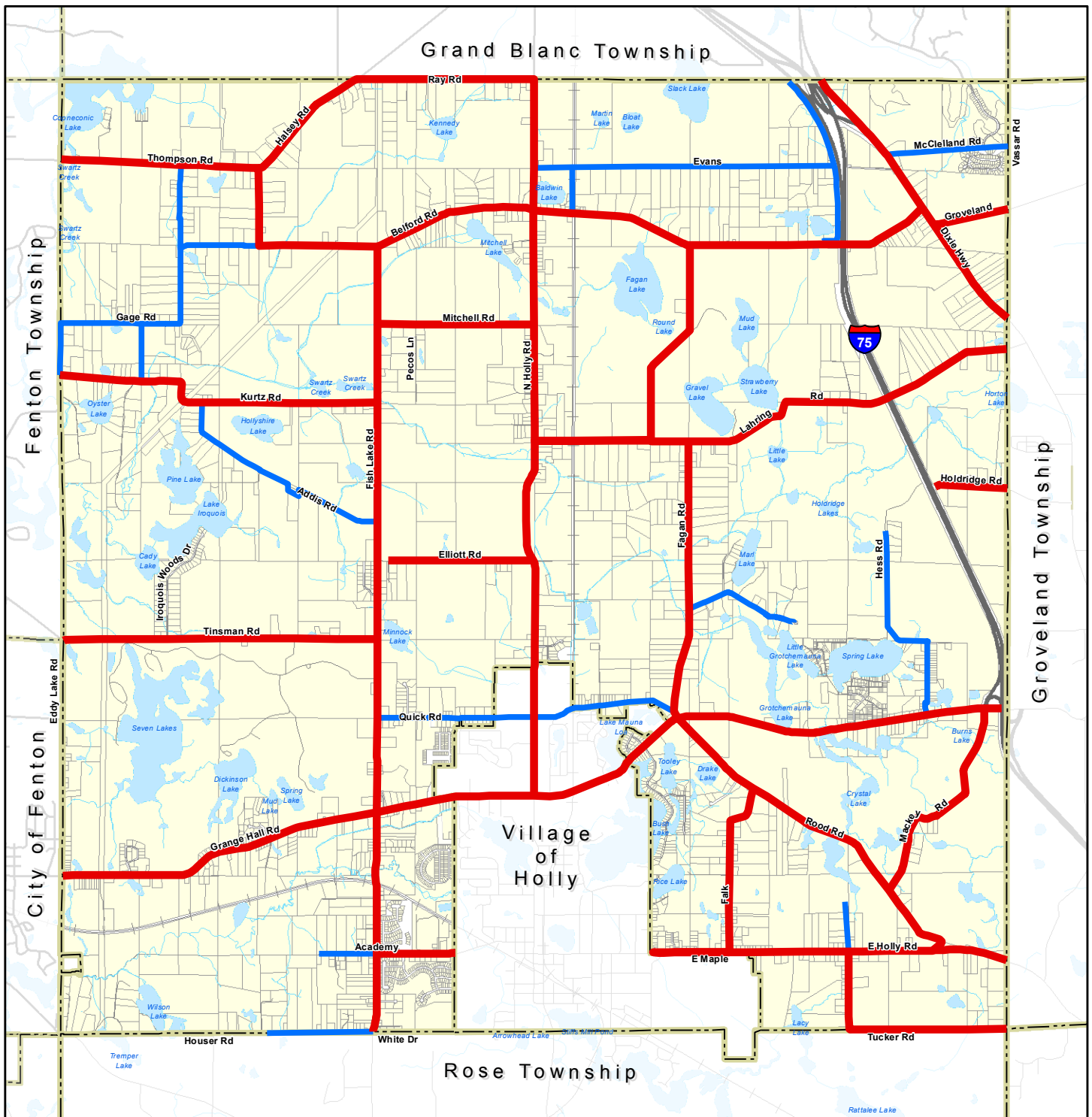
The Holly Township Master Right-of-Way Plan as shown on page ____, prepared by the Road Commission for Oakland County (RCOC), was updated and adopted by the Township in 1996. There are four (4) county road classifications, including super-highway, urban super-highway, thoroughfare, and collector. The Township is limited in terms of development of new roads due to the presence of wetlands, lakes, and state lands. The RCOC is responsible for the majority of roadways in Holly Township. The RCOC should explore additional areas for right-of-way acquisition in the Township to provide alternative north-south and east-west routes. The intersection at Grange Hall and North Holly Road in particular is heavily congested. An alternate route could separate local from through traffic and could help mitigate this increasing problem.

With the exception of a few, all county roads are proposed for one hundred twenty (120) foot right-of-ways, classifying them as “Thoroughfares.” Addis, Gage, Grundyke, Evans, McClelland, Hess and Shields are classified as “Collectors”, having a proposed right-of-way of eighty-six (86) feet. These classifications are adequate to meet the needs of future development in Holly Township as they allow for a wide range of capacity expansion improvements to all existing roadways.



RAIL TRANSIT CENTER

Given that Holly Township is predominantly a bedroom community the provision of transportation alternatives could greatly benefit area residents while also reducing traffic congestion problems. The Township will likely need to be active in this effort by contacting Amtrak and other agencies and businesses. This and other transportation alternatives should be pursued by the Township currently and in the future.



July 21, 2016

Map 14: Master Rights-of-Way

Holly Township, Oakland County, Michigan

0 2,000 4,000 FEET

- 120 Foot Right-of-Way
- 86 Foot Right-of-Way



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Base Map Source: Oakland County GIS, 2014
and Michigan Geographic Framework Version 14a.
Data Source: Carlisle/Wortman Associates, Inc. 2004

Greenways Plan

Greenways are linear networks of open space. These conservation corridors connect communities' natural and cultural resources. Greenways may follow natural features, such as waterways and ridges, or built features, such as abandoned railroads, utility lines, and scenic roads. They can link homes to workplaces, schools, shops, and recreation areas. They conserve green space, protect natural resources, provide recreational opportunities, allow alternative modes of transportation, and allow for visual access of natural areas.

PURPOSE OF THE GREENWAYS PLAN

Greenways serve an important environmental and aesthetic purpose. With increased development and urbanization, the Township's landscape could become progressively more fragmented. With growth unchecked, large tracts of open space would be significantly reduced, as would connections between them. The repercussions of fragmentation would be two fold: 1) humans would not have visual access to large tracts of land, often referred to as viewsheds, and 2) size of wildlife habitats would be significantly reduced, resulting in less diversity, an important component of environmental health.

The Greenways Plan is designed to prevent this visual and habitat fragmentation within the landscape by encouraging connections between distinct tracts of open space so as to form a network. Greenways as conservation corridors of open space maximize the amount of diversity in a habitat, and allow for a design whose visual quality is optimized.

The Greenways Plan presented on the following page identifies the Township's important natural and cultural resources. These features include the following:

- Waterway/wetland corridors and other natural resources
- Parks and other preserved areas
- Priority Trail Routes
- Potential/Proposed Greenways

By identifying these features, the plan illustrates the existing and potential networks of open space throughout the Township. In this way the Greenways Plan communicates how design, development, land use, and acquisition can be directed in a way that encourages those links.

OPPORTUNITIES FOR LINKAGE: CENTRAL COMPONENTS OF THE GREENWAYS PLAN

The Greenways Plan is composed of several separate components that work together to form the greenway network. Each component requires distinct management techniques in order to optimize their respective contribution to the overall plan. Below is a more detailed description of each component and the specific management techniques that can be used to build a system of visual and habitat open space.

TOWNSHIP OWNED PROPERTY

Holly Heritage Farmstead

Located on North Holly Road, north of Elliot Road, this 15 acre parcel has the Swartz Creek running through the back half of the property. A one mile walking nature trail could be developed on this property.

Boundary Meadows

Boundary Meadows consists of three parcels that total 49 acres. The property borders the Village of Holly on the east, and Rose Township to the South. This property is accessed by Fish Lake Road and can connect to both existing and future trails and pathways. While the long term plan for this property may not include recreation use, the Township has the ability to build trails on the site or require any future development to require trails be installed.

WATER/WETLAND CORRIDORS

The Greenways Plan illustrates the major waterway/wetland corridors that run through the Township. The waterway/wetland corridors are based largely on a natural areas survey completed by the Nature Conservancy. Large tracts of undeveloped land, relatively intact riparian corridors, and woodlands still exist in many of these areas. Given these characteristics, special consideration for the preservation of open space and natural habitat through fee simple purchase and/or conservation easements are particularly important in the management of the waterway/wetland corridors. Below is a description of each of these major waterway/wetland systems.

Seven Lakes

Located in the west central area of the Township, this system consists of small and large lakes and related wetlands. The majority of these lakes are within the 1,444 acre Seven Lakes State Park, which serves to protect these valuable natural resources. Seven Lakes also provides recreational facilities such as campsites, bike paths and nature trails, and is an important facility to be connected for pedestrian usage.

Shiawassee

The Shiawassee River waterway/wetland complex is located along the southern portion and boundary of the Township. It is composed of large tracts of undeveloped land and the significant riparian corridor of the Shiawassee River. Acquisition of open space either through direct purchase or conservation easement could protect these large tracts of undeveloped land. New development in this area designed in a cluster layout which minimizes impervious surfaces, protects natural features, and remains out of the floodplain, will protect the integrity of the area. The existing railroad right-of-way and utility easement running through the corridor serve as great potential pedestrian routes, providing direct access to areas directly adjacent to the riparian features of this waterway/wetland system. Four parks are also located in the system, including Holly Township Sorenson Park, Cyclone Park, Crapo Park and Waterworks Park.

Bush Lake

The Bush Lake system consists mostly of Bush Lake, a large lake in the center of the system, and a surrounding collection of mid-size and smaller lakes and ponds and wetlands. A large portion of the area to the east of Bush Lake is built-out; however, there are still areas of open space remaining on the west side of the lake and farther away from the lake to the east. Holly Township Beach Park and Lakeside Park are located at the southwest corner of Bush Lake, and a Priority Trail Route is indicated along the southern portion of the system.

Holly State Recreation

Located along most of the eastern boundary of the Township, this system includes a large number of mid-sized and smaller sized lakes, Swartz Creek, and related wetlands that border each. The wetland corridor that runs along Swartz Creek and the wetland area adjacent to such lakes as Gravel Lake, Strawberry Lake, Holridge Lake and Horton Lake, are some of the largest expanses of continuing wetlands within the Township. Of great importance is the fact that a substantial portion of the land within the system is owned by the state. The Holly State Recreation area includes 7,817 acres, and provides such features as camping, hiking and cross-country ski trails. The central area and southern portions of this system, including land bordering on Spring Lake and Little Crotched Lake, has been developed. Acquisition or conservation easement protection of the open space of the few remaining large tracts of land, and/or new development designed to protect the remaining natural features (i.e. cluster layouts) must be considered.

Swartz Creek

The Swartz Creek waterway/wetland complex runs along most of the north central area of the Township, beginning at the west border of the Holly State Recreation system. It is composed of both large tracts of undeveloped land and smaller parcels of developed land. Swartz Creek runs through the center of this system, creating a large wetland corridor from east to west. A number of lakes are also found within this system near the west boundary of the Township. Protection of the waterway/wetland complex in all future development, particularly by conservation easement, is vital to the health of Swartz Creek and its associated natural features.

Copneconic

Located in the northwest corner of the Township, this area includes Lake Copneconic, the YMCA camp, smaller surrounding lakes, and their associated wetlands. The system is small compared to other Township complexes, though it does have a mix of large undeveloped land and smaller developed parcels.

Kennedy/Black/Mitchell Lakes

Located along the north boundary of the Township, the main features of the system are Kennedy, Black and Mitchell Lakes and their associated wetlands. The wetlands make up a substantial amount of the land within this area, greater in size than the lakes themselves. Most developable land within this area is comprised of large vacant tracts. The potential for pedestrian connection via the Consumers Power utility easement that runs along the system's west border is a consideration for the future.

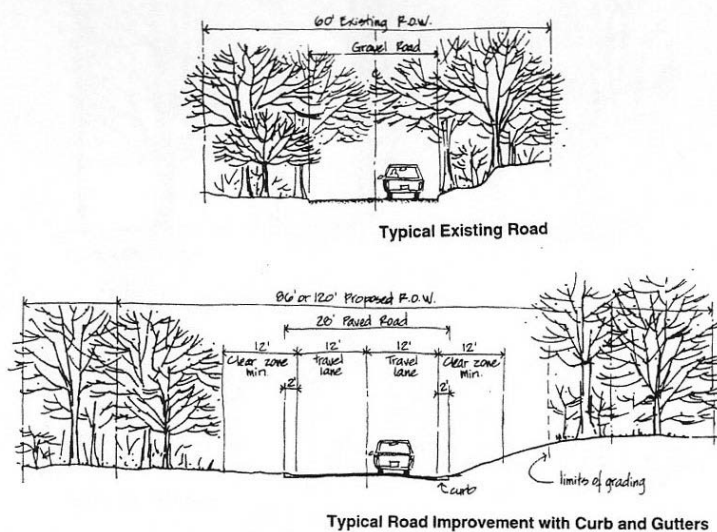
ROADS WITH RURAL CHARACTER

Roads with rural character defined by mature street tree canopies are important aspects of the Greenways Plan both for visual and habitat reasons. The buffer at the side of the road provides limited shelter and habitat connection for wildlife. Additionally, these tree-canopied transportation corridors offer visual access to natural, seemingly expansive areas of open space.

The Road Commission for Oakland County has jurisdiction over all local and primary roads within the Township, and almost all tree-canopied streets come under this category. The Road Commission's design policies do not protect these roads with rural character. The image below shows typical existing roads, and how improvements made by the Road Commission significantly alter their character.

Additionally, utility companies have the right to maintain their lines, and again their design policies do not protect street tree-canopies. While the Township has no control over the Road Commission's and utility companies' actions, the following policies can address this issue:

1. Encourage private internal roads within new developments which retain a rural character by utilizing a planted buffer immediately adjacent to the paved road.
2. Limit the number of individual access drives, the number of frontage splits, and encourage clustered development with shared drives so that the continuity of the tree canopy is maintained.
3. Encourage pruning of trees to accommodate utilities in such a way as to maintain tree shape and integrity. The graphic below depicts existing and recommended pruning.
4. Apply for Natural Beauty Road designation

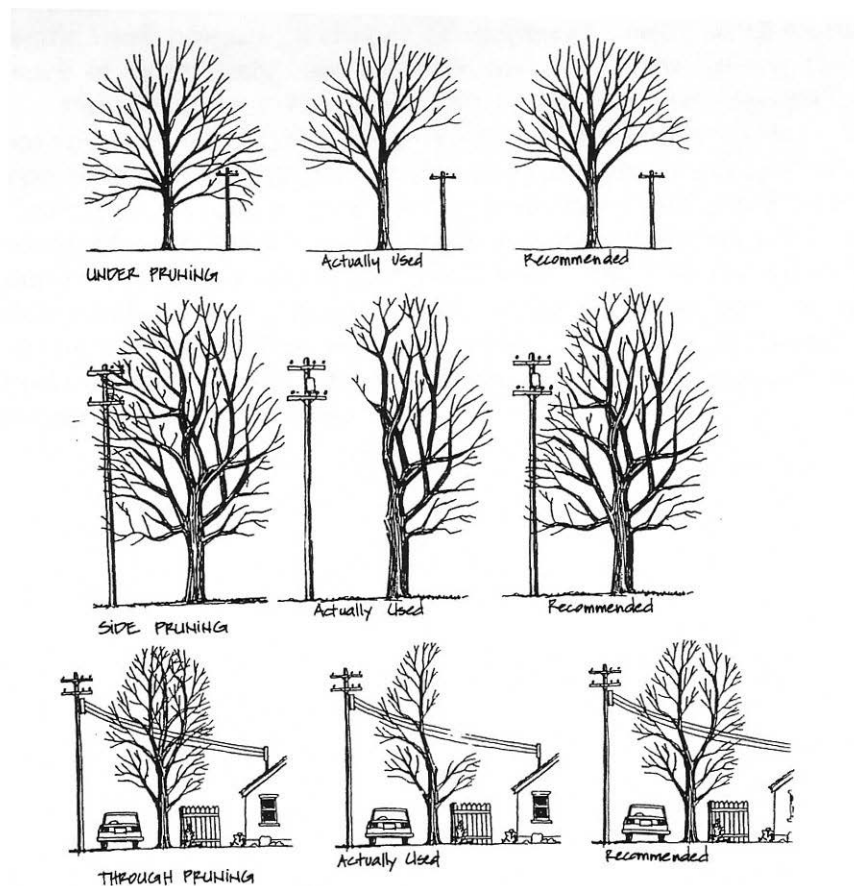


Typical Road Improvement Impacts

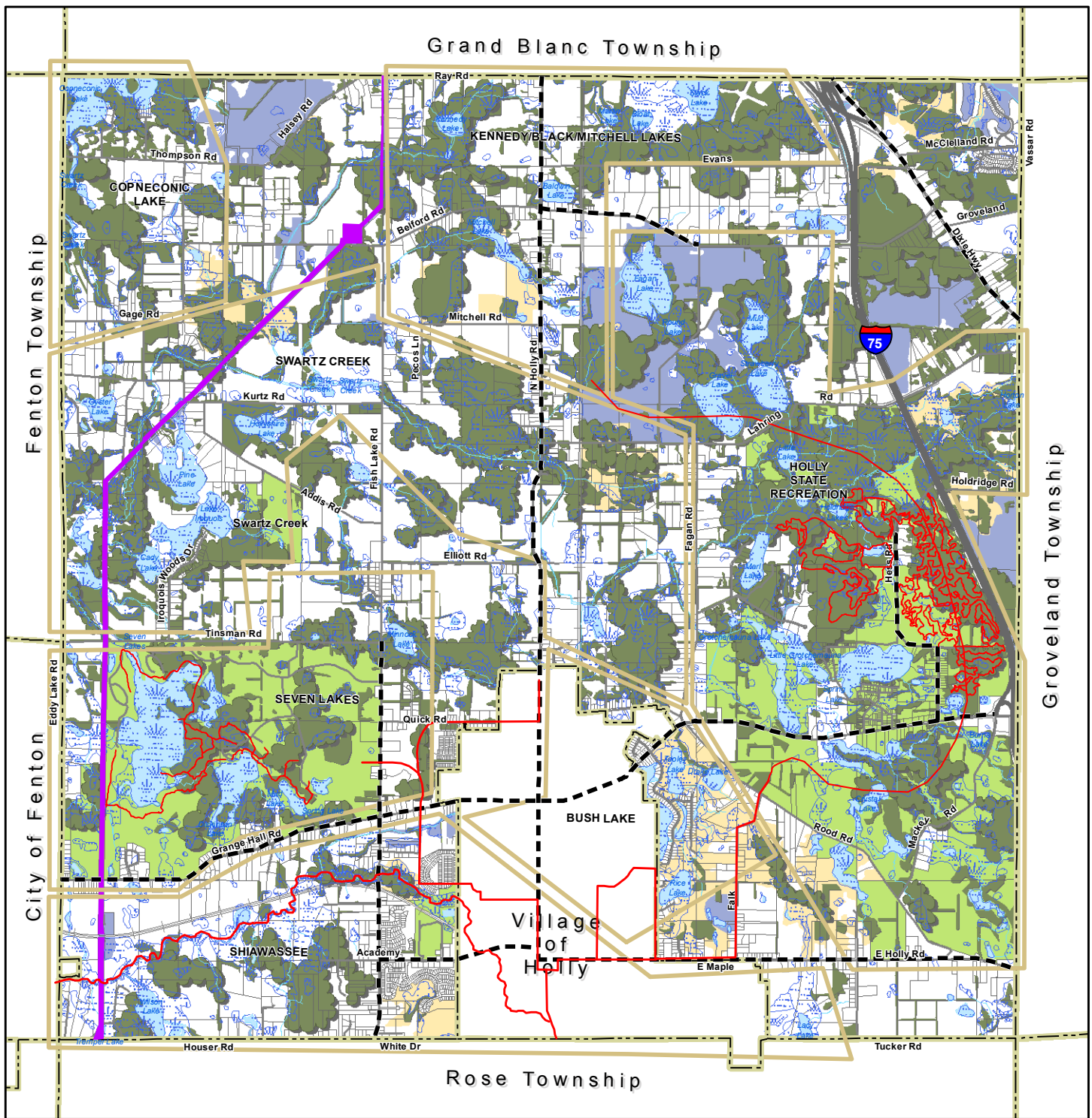
COORDINATION OF OPEN SPACE AMONG DEVELOPMENTS

New development in the Township deserves special attention in the Greenways Plan. Holly Township has provisions in its Zoning Ordinance to permit cluster developments. Clustering can be a very useful tool in the preservation of open space at the site specific level. The proposed Riverside development directly west of the Village will be the first project to employ the cluster option, with the project including open space and natural features preservation benefits in line with the goals of the cluster option.

However, it is more beneficial for a cluster development to not work on its own. To create a network of open space, coordination must be made among clustered developments. In the future, the design of new developments should be coordinated with the preserved open space design of other developments in order to create larger and better configured areas. Though the same amount of open space may be preserved, developments with coordinated open space design produce a less fragmented landscape, thereby offering a more connected wildlife habitat and providing visual access to larger areas of open space.



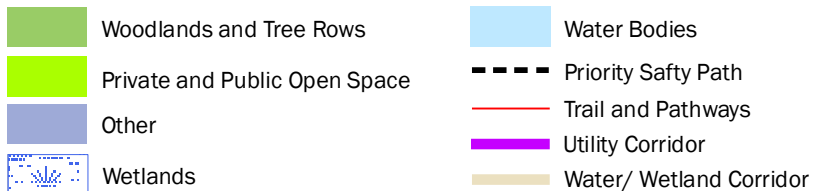
**Tree Pruning Methods
Actually Used and Recommended
for Overhead Line Clearance**



July 21, 2016

Map 15: Greenways Plan

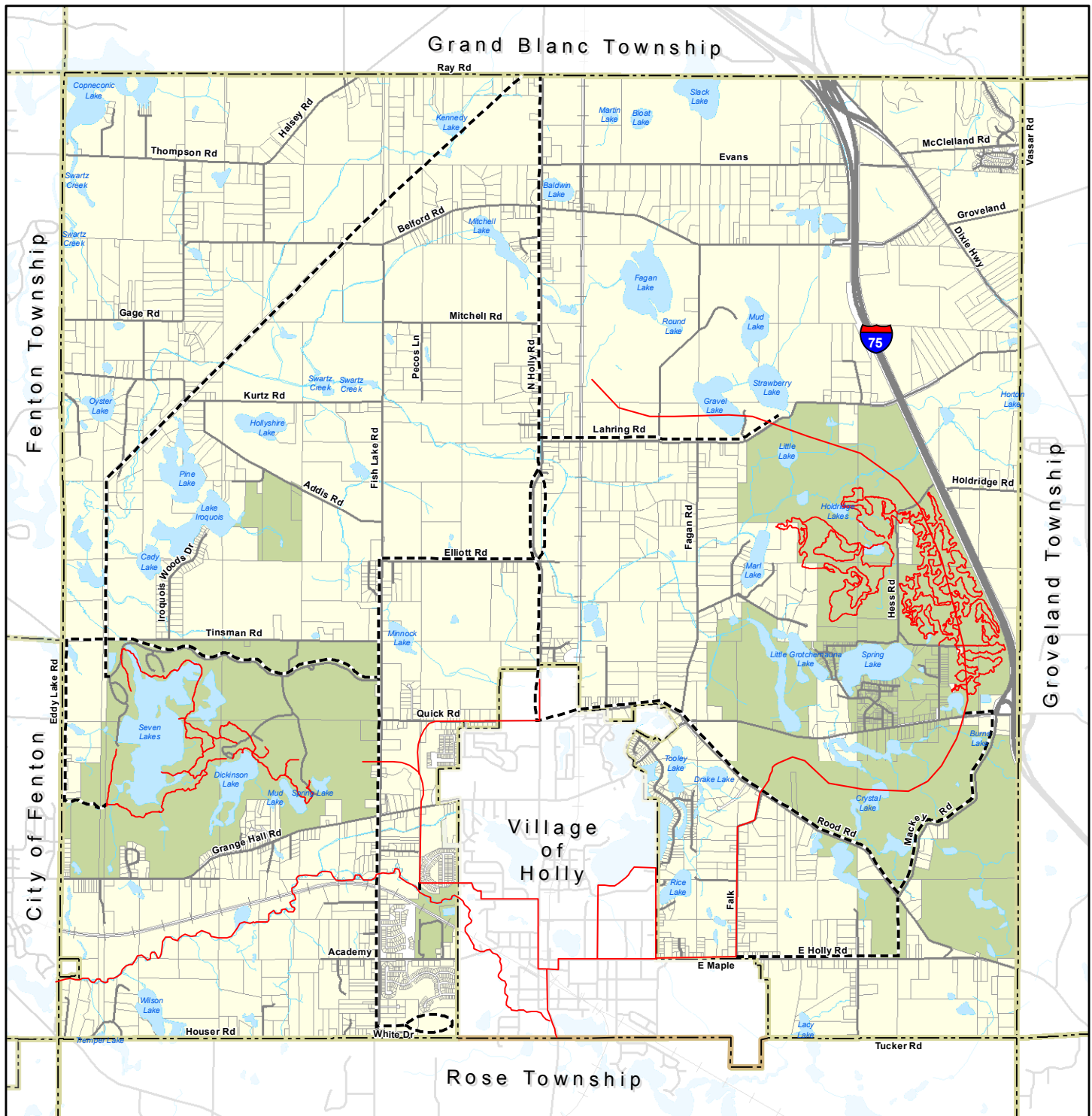
Holly Township, Oakland County, Michigan



0 2,000 4,000 FEET



Base Map Source: Oakland County GIS, 2014 and Michigan Center for Geographic Information, Version 14a. Data Base: Oakland County Data, 2012



July 21, 2016

Map 16: Trails and Pathways

Holly Township, Oakland County, Michigan

GREEN INFRASTRUCTURE

In 2008, Oakland County Planning and Economic Development Services conducted a visioning workshop with Holly Township in order to determine the Township's green infrastructure. Green infrastructure is an interconnected network of open spaces, natural areas and waterways. The focus is on conservation values and the services provided by natural systems in concert with, not in opposition to, land development. A green infrastructure network supports native species, sustains natural ecological processes, maintains air and water resources, and contributes to our health and quality of life. Conserving green infrastructure can produce economic dividends for communities, businesses and residents, as well as providing a framework for sustainable development. Map 15 is a culmination of the visioning session held at the Township. The areas are broken up into four (4) distinct classifications. They are as follows:

Hubs

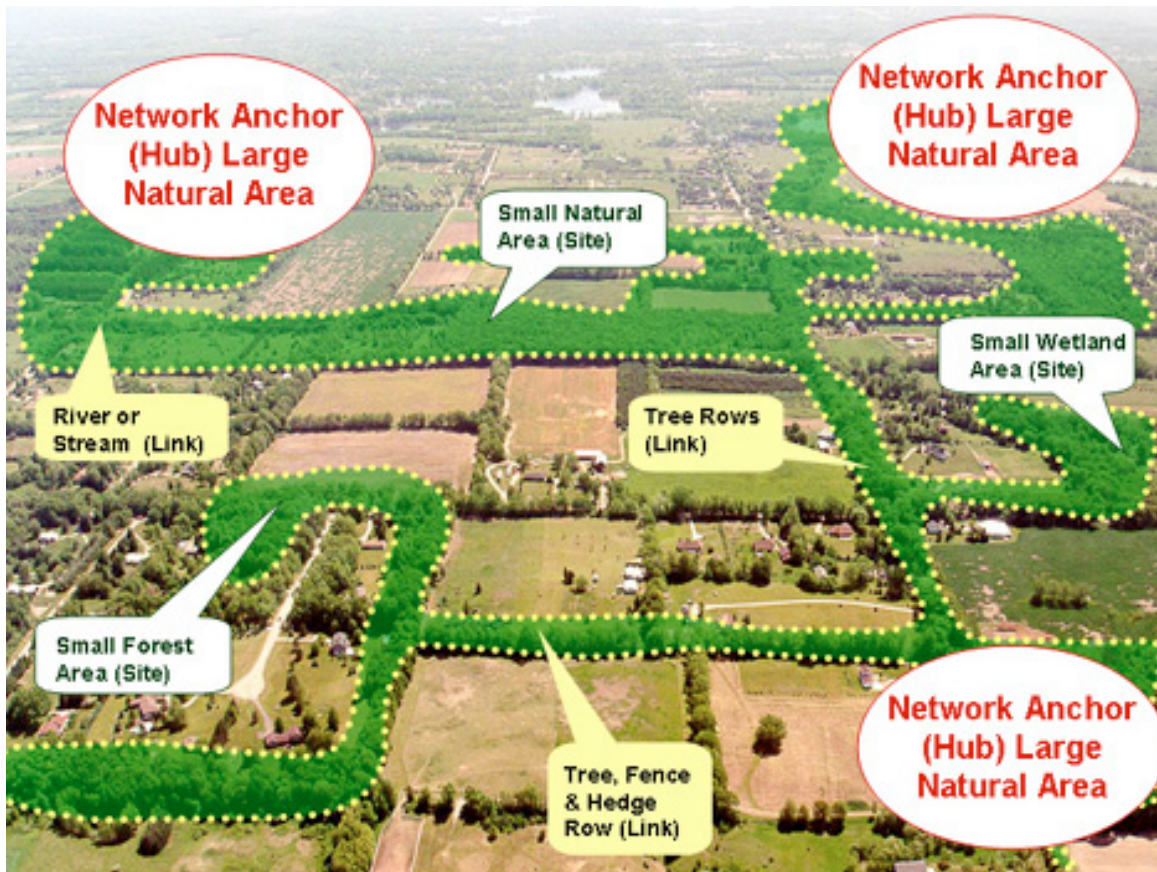
Hubs anchor the network and provide an origin or destination for wildlife. Hubs range in size from large conservation areas to smaller parks and preserves. Hubs provide habitat for native wildlife and help maintain natural ecological processes.

Sites

Sites are smaller ecological landscape features that can serve as a point of origin or destination or incorporate less extensive ecologically important areas.

Links

Links are the connections that hold the network together and enable it to function. They facilitate movement from one hub to another.



OTHER: Areas not classified as hubs, sites or linkages, but will still some importance to the network.

Source: Oakland County Planning & Economic Services

SAFETY PATH MASTER PLAN

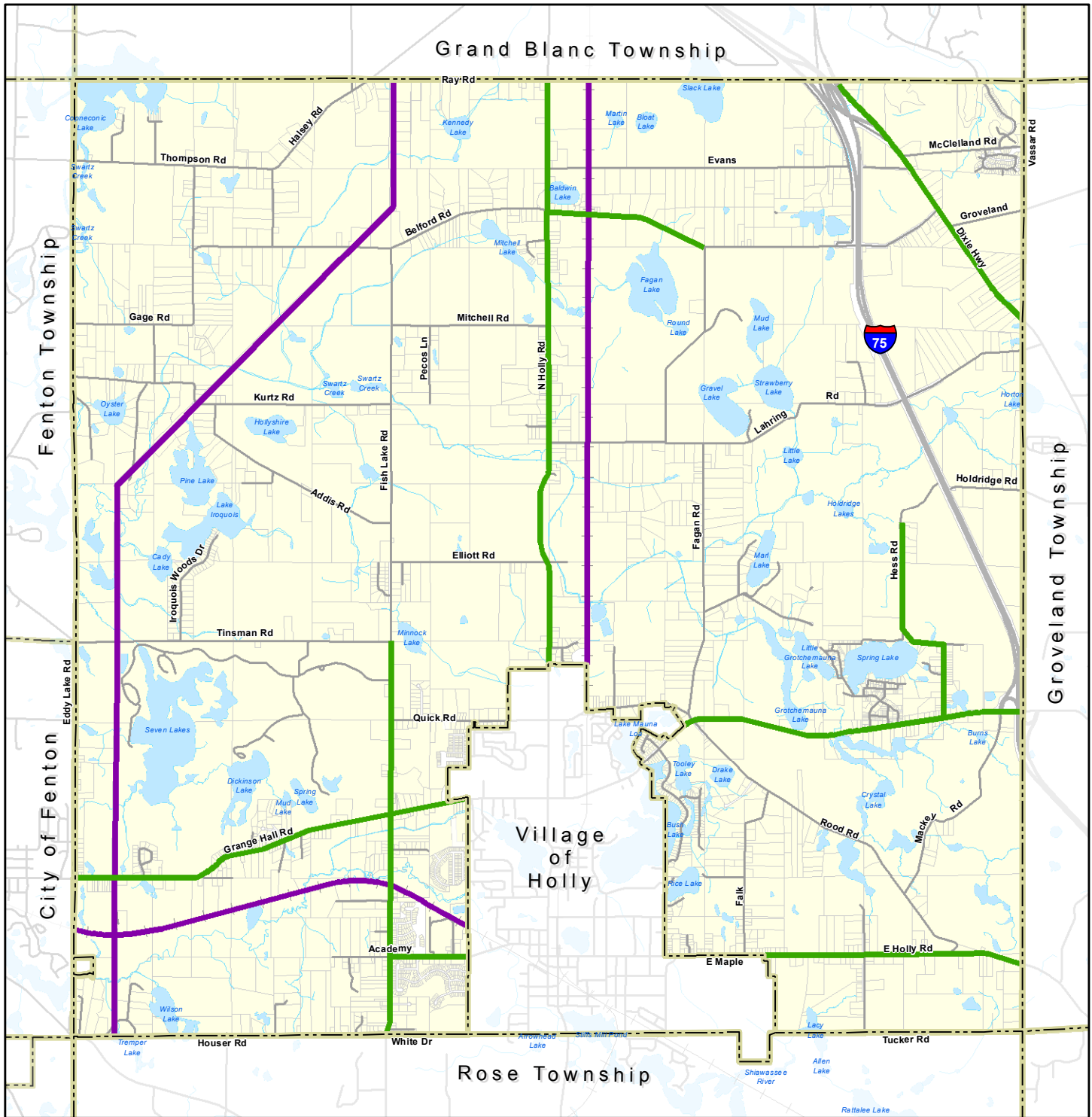
A Safety Path System could be an integral component of the recreational and alternative modes of transportation linkage aspects of the Greenways Plan. Safety paths provide for a path system for pedestrians and bicyclists that are completely separate from the street system. Safety paths in other communities have become invaluable, serving to connect residential areas with schools, shopping areas, and other public facilities. Safety paths also serve as a valuable resource for passive family recreation.

Because of their value, the Township has passed an Ordinance requiring the construction of safety paths in new developments. A Safety Path Master Plan designates priority safety path routes in appropriate areas of the Township. The final goal of the Safety Path Master Plan would be to create a complete, street-based pedestrian network throughout the Township on paved thoroughfares.

Trail planning and development is another method of providing and encouraging effective greenways. Trails can be developed in many types of ways; as part of new developments, along roadways, utility and railroad corridors, etc. Trail planning for the Holly Community, the region and county, has occurred. Many groups have been involved, including Oakland County Planning and Economic Development, Headwaters Trails, etc. A description of some of the opportunities that exist in Holly is followed by a discussion of the Headwaters Trails and the Headwaters Trails District Concept Plan.

The Consumers Power utility easement, which runs north to south in the west portion of the Township, is an existing, uninterrupted corridor of open space which crosses the length of the Township and traverses four of the waterway/wetland corridors.

In addition, the Grand Trunk Western Railroad right-of-way, which runs east to west in the southern portion of the Township, and the Chesapeake and Ohio Railway right-of-way which runs north to south in the central area of the Township, are current or future potential pedestrian corridors.



July 21, 2016

Map 18: Safety Path Master Plan

Holly Township, Oakland County, Michigan

- Surrounding Municipalities
- Future Safety Paths
- Priority Safety Path
- Water Bodies

0 2,000 4,000 FEET



McKenna
ASSOCIATES

Base Map Source: Oakland County GIS, 2014 and Michigan Geographic Framework, Michigan Center for Geographic Information, Version 14a.
Data Base: Oakland County Data, 2012

Headwaters Trails

The Greenways map indicates the most current of proposed trail locations according to the Headwaters Trails District Concept Plan. This plan is included with the Shiawassee Trails Phase 1 document that was prepared by the Headwaters Trails, Inc. Headwaters Trails is a not-for-profit organization which has worked with local communities and other governmental organizations to plan and create a trail network within Northwest Oakland County (Groveland, Holly, Rose and Springfield Township and the Village of Holly).

The Shiawassee Trails Phase I plan provides a network plan for four trail systems with a common trailhead in Waterworks Park in the Village of Holly. The plan indicates that Phase II will complete the trail connections created in Phase I to the south, east and north. The four (4) trails proposed are as follows:

TRAIL 1: RIVER TRAIL

A canoe/kayak trail starting in Waterworks Park and ending at Fenton Mill Pond. The trail will consist of seven (7) river miles, and will include improvements to Waterworks Park (a new canoe launch platform, restrooms and a bridge), a second canoe/kayak platform on land west of Fish Lake Road in Holly Township (currently being purchased from North Oakland Headwaters Land Conservancy), and linkage to the existing launch at Strom Park on the Fenton Mill Pond. It is hoped that the canoe race between Holly and Fenton that occurred for forty (40) years up until 1996 will be reestablished. Other improvements, including a river clean-out, and coordination with the Shiawassee River Task Force, will continue to occur.

TRAIL 2: VILLAGE-TOWNSHIP CONNECTOR

A nearly two (2) mile connector pathway between Waterworks Park and Sorenson Park, with a spur to Lakeside Park. The proposed Class III Bikeway will follow existing roads and sidewalks, connecting six (6) parks and recreation areas, the downtown and residential areas, the depot restoration site, two (2) schools, and with a possible connection to Holly State Recreation Area and the National Veterans Cemetery.

TRAIL 3: SEVEN LAKES CONNECTOR

This new trail reflects work with developers of the Riverside project in this location to include a trail as part of the new development. The approximately 2.6 mile connector will be effective in connecting Seven Lakes State Park to the new development, as well as to the Village and its downtown. The trail will also provide connection for residents of the new neighborhoods and existing neighborhoods within the Village to the two (2) schools adjacent to the site. The connector will also transverse through the Village and connect to Waterworks Park.

TRAIL 4: ROSE OAKS CONNECTOR

A 1.45 mile connector from the Village of Holly to Rose Oaks County Park, the trail would be a vital asset in establishing connectors west into Genesee/Livingston County, east to Springfield Oaks, and south toward Milford. The trailhead property is owned by the Holly Area Schools District and was a former school camp and football training facility under the name Camp Has-O-Rec. The site has a number of potential uses, and arrangements with the School District are currently being made. The proposed trail route parallels the CSX railroad and follows a beautiful natural stream. A portion of the trail will also run along Milford Road, and will be similar to a Class II bikeway.

Trail construction according to Oakland County/Headwaters Trail plans will eventually link the Holly community with, and provide linkage between, Seven Lakes State Park, Holly State Recreation Area, Rose Oaks and Groveland Oaks County Parks, the National Veterans Cemetery and other communities, parks and points in between.

By utilizing these corridors, recreational opportunities for Greenways can be expanded, and pedestrian linkage among several of the water/wetland corridors can be established.

CONCLUSION

The Greenways Plan can be an important tool for developers, Planning Commissioners, designers, and all others involved with land use planning to guide development in such a way that visual and environmental fragmentation is reduced, and land is used most efficiently and effectively. Greenway planning can ensure that land is used in a way that benefits nature, active and passive users, and the overall character of the community.

Implementation Plan

This chapter of the Plan presents tools and techniques that citizens, community leaders, and Township staff can use to implement the land use plan. These implementation measures are only effective if there are people in the community with vision and tenacity who are willing to invest the time, dedication, and effort required to make them work. Community improvement requires a compelling vision; persistence; the flexibility to respond to changing needs and conditions, opportunities, and circumstances; and the ability to achieve a consensus for the betterment of Holly Township. The tools and techniques identified in this chapter are capable of being implemented under current enabling legislation. Inasmuch as adoption of any such new legislation is uncertain, this chapter focuses on the tools that are available under current law and widely recognized best practices.

PUBLIC INFORMATION AND EDUCATION

The success of the Master Plan depends to a great extent on efforts to inform and educate citizens about the Plan and the need for regulatory measures to implement the Plan. Successful implementation requires the support and active participation of residents, property owners, business owners, and all other vested interests. A thoughtfully prepared public education program is imperative in creating a sense of ownership for Township residents.

Education accomplished by holding a series of hearings entirely dedicated to the Master Plan before the Planning Commission will enable the public to review and comment on the plan. A joint workshop should be conducted by the Township Board and Planning Commission to discuss the implementation of this plan. Public input at this point should be focused on implementation, not revising the content. The hearing at which the adoption is scheduled should be well publicized to promote as much attendance as possible. Upon adoption of this plan, a second joint workshop should be conducted to update the residents as to the direction the Township will take towards its future. Substantial advertisement is essential to draw residents to the meetings. The Township must, to the best of its ability, keep its residents updated on progress of the plan. For any plan to be successful, all vested interests in Holly Township must be involved in the implementation of this plan for it to be successful.

Condensed Brochure

The Township can produce a reader-friendly and abridged version of the Plan so that a larger segment of the population can take a small amount of time to understand the Future Land Use Map, our Goals and Objectives, and finally the Implementation Plan for Holly Township. These brochures could be distributed to individuals at Township events and buildings, published on the website, and even mailed to residents and businesses in Holly Township.

Design Standards Manual

One component in the Township's information/education program should be to include the new Design Standards in distribution and outreach initiatives. These standards should be given to all developers and property owners who are or will in the future propose a residential, commercial or office building development. These standards describe the type of responsible and high-quality rural character development desired in the Township. The benefit of a design standard manual is that it can be used to clearly communicate the development expectations that Holly Township holds for its community, and define concepts and ideas that are not typically appropriate for the zoning ordinance. Design guidelines in such a manual include architecture, building orientation, parking and circulation, landscaping, utilities, lighting, signs, and access management.

Maintaining the Plan

Another way for the general public to stay informed about the Master Plan is to keep the Planning Commission and Township Board actively involved in maintaining it. The Plan should be an active document and continually reviewed and updated. An annual, joint meeting between the Commission and Council should be held to review the Plan and any amendments that may have become necessary. This will help ensure that the Plan is not forgotten, and that its strategies and recommendations are implemented. Then, every five years, or earlier if the Commission feels appropriate, another full-scale Master Planning effort should be undertaken. These steps will not only help keep the public aware of the Plan, but they will also make certain the plan does more than “sit on a shelf and collect dust.”

LAND USE CONTROLS

Zoning Regulations

Zoning is the primary regulatory tool used by the Township to implement the Master Plan. Zoning regulations and procedures should be created, or amended where appropriate, to reflect the goals and objectives identified in this plan.

CONVENTIONAL ZONING PROCEDURES

Rezoning to Implement the Master Plan

The land use classifications on the Future Land Use Map provide the basis for evaluating future rezoning requests. Inasmuch, zoning actions that are consistent with the Future Land Use Map shall receive deferential and favorable judicial review if challenged. The Master Plan should be the principal source of information in the investigation of all rezoning requests. The Township is encouraged to initiate rezoning's necessary to place land in conformance with the Future Land Use Map, or they may wait for property owners to come forward and challenge the existing zoning designations for their properties.

Planned Development

Planned development involves the use of special zoning requirements and review procedures that provide design and regulatory flexibility, so as to encourage innovation in land use planning and design. Planned developments should achieve a higher quality of development than might otherwise be possible. Continued use of planned development is recommended to achieve the goals and objectives of this Plan.

Performance Standards

Rather than simply regulate development on the basis of dimensional standards, many communities are establishing performance standards to regulate development based on the permissible effects and impacts of a proposed use. Performance standards were created to supplement conventional zoning standards and add another level of land use compatibility measurements. Performance standards can regulate noise, dust, vibration, odor, glare and heat, safety hazards, and environmental impacts such as air and water pollution. Performance standards can be particularly useful in achieving environmental and resource protection goals, especially in a resource rich community like Holly Township. If based on a strong body of research, standards can be developed that relate to critical environmental areas (such as floodplains, wetlands, lakes, woodlands, groundwater recharge areas, and unique wildlife habitats), and natural resource areas (such as forest lands).

Setback and Other Standards

It is important to review the required setbacks and other dimensional standards to be certain that they promote the desired type of development, and respect the historical setbacks and architectural scale of the community.

INNOVATIVE PLANNING TECHNIQUES

Transfer of Development Rights

Transfer of development rights (TDR) is a “smart growth” market based tool used to manage land development and resource conservation. TDR is a voluntary transfer of development rights from areas with low population needs (sending zones) to areas of high population needs (receiving zones). The sending zones can be environmentally-sensitive properties, open space, agricultural land, wildlife habitat, historic landmarks or any other places that are important to a community. The receiving zones are areas that are appropriate for an increase in density and development. These receiving areas can accommodate the demand for schools, shopping, transportation, and other common urban services. Holly Township will implement this program in order to conserve resource rich lands and focus development in predefined areas where higher-density development is most suitable. The sending and receiving zone boundaries can be seen in the Future Land Use map. Property owners and related interests will be notified once the program is underway.

Ownership Rights

The ownership of land includes rights pertaining to minerals, timber, agriculture, riparian rights, surface and ground water, air, and development. Use of these rights is not absolute. Governmental entities have the right to constrain a property owner’s use of these rights and thus the economic value that the property owner can derive from the property. The most commonly used restraint has been the exercise of an individual’s use of development rights through zoning.

Development Rights

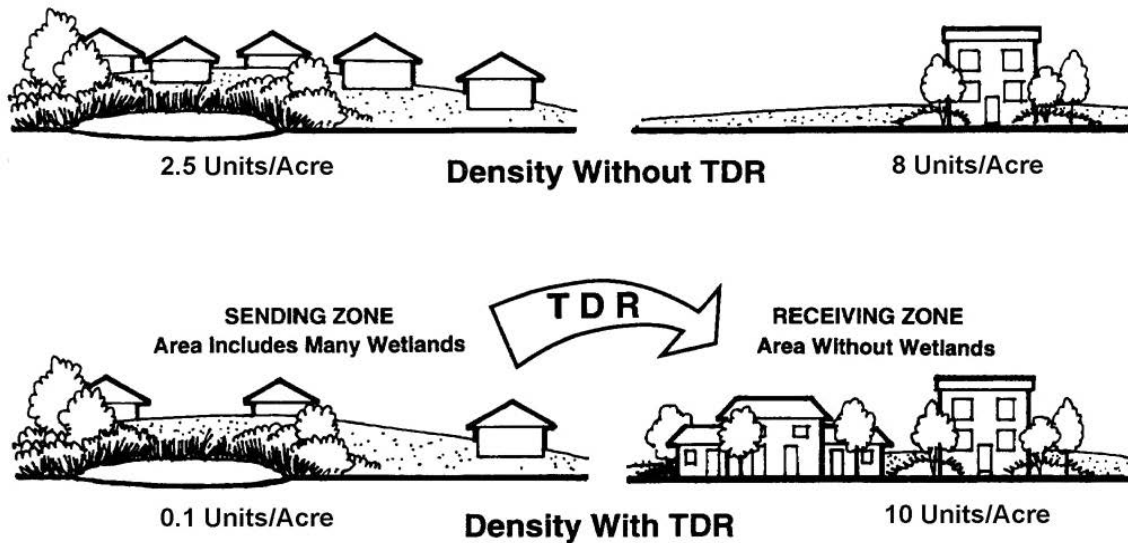
TDRs provide financial compensation to property owners for the sale of their development rights, while the Township imposes land-use regulations guiding the use of development rights to targeted development zones. This approach involves selling the right to develop a given parcel that the public wishes to preserve and transferring those rights to another site where density is appropriate and desirable. The separation of the development rights from property allows the rights to be shifted from one area to another, ultimately giving it economic value. The transfer of development rights requires certainty of where development is desired and where it is not. TDR programs do more than preserve farmland, natural resources, and open space; they change the way development occurs in a community.

Buying Development Rights

A TDR is done in a controlled setting where specified areas are predetermined to be “sending” or “receiving” zones. Private developers and local governments are allowed to purchase the development rights from within the sending zones and transfer them to an area that is to be developed, the “receiving” zone. The TDR gives property owners and interested buyers a mutually beneficial marketplace established for the free exchange (buying and selling) of development rights without having to buy or sell the physical land. This preserves the use rights for sending zone properties while allowing the owner to receive just compensation for their development rights. The down zoning (example - decreasing the density level from one dwelling unit per five acres to one dwelling unit per 40 acres) that a government entity imposes on a sending zone does not reduce the economic value of the property within that zone, that is because the development rights remain in the landowners’ hands and can be used or sold to others in the receiving zone. By transferring their TDRs, the development potential of the owner’s property is essentially frozen. By reducing the negative economic impact of protectively zoning property and enabling the owner to recoup their land’s economic value, the TDR minimizes the objections to such practice.

Basic Function of a TDR Program

The TDR program allows the landowner to sell the development rights to a developer who then uses the development rights to increase the density of houses, or other form of land use development, on another piece of property located in the receiving zone. For example, a developer purchases development rights in the sending zone and applies them to his property which is located in the receiving zone. His property was previously regulated at 1 acre per dwelling unit, after purchasing and applying the development rights he is now able to upgrade the density level to 1/2 acre per dwelling unit. The higher density that is achieved by the transfer of development rights is the developer's incentive.



NATURAL BEAUTY ROADS

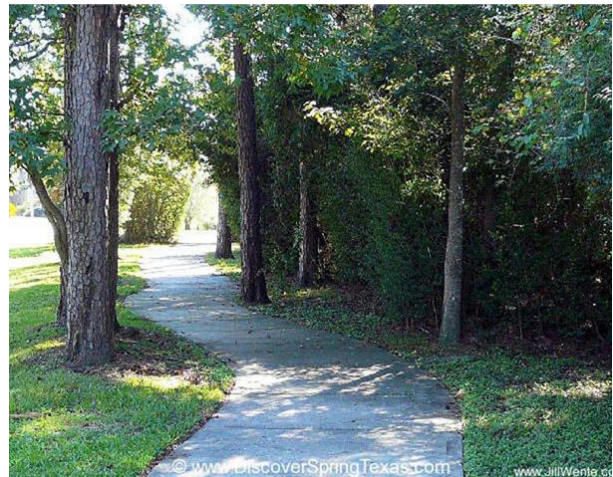
Holly Township contains some of the most scenic roads in Southeast Michigan and are integral in preserving the rural character of the Township. There are many tree-lined drives, beautifully winding roads through wooded hills and around lakes, tree-canopied neighborhood streets, and outstanding or unusual natural beauty by virtue of native vegetation and natural features. The objective of having a Natural Beauty Road ordinance is to protect existing and proposed open vistas, large tree stands, hedgerows, wetlands and historic buildings such as farm houses, barns and silos that define the character of the Township. The natural features and rural character found on our thoroughfares are some of the most valuable and irreplaceable assets of Holly Township.

Since development often disregards indigenous features of a community, often replaced with a landscape that merely duplicates the cultured landscape found throughout the Midwestern United States, the end result may be the loss of character in many of our most visible rural corridors in the Township. The design plan will protect the Township through its three primary design components: 1) unifying elements 2) rural design elements, and 3) community design elements. The Natural Beauty Road design elements should be used for all roadways throughout the Township unless otherwise specified.

Unifying Elements

The following unifying elements should be a part of every development along the Holly Township's roadways:

- Existing natural features, such as wetlands, woodlands, landmark trees, and scenic vistas, should be preserved and incorporated into development or redevelopment.
- To screen uses from the roadway, undulating landforms and a combination of trees, shrubs, and perennials should be used instead of rigid berms and rows of evergreen trees.
- Where feasible, required bicycle paths should meander and undulate through the landscape and not proceed in a straight line parallel to the road. Lower level bike path lighting could be allowed.
- Building setbacks and landscape buffers should be designed as naturalized green spaces, incorporating sustainable storm water management features and creative use of vegetation.
- Consistent street lighting fixtures should be used throughout Township roadways to provide design continuity.
- Coordinated street signage is strongly encouraged and should be used throughout like corridors.
- At least 60% of proposed landscape should come from the Zoning Ordinance's preferred plant list. These materials have been selected because they are non-invasive and are hardy in both rural and suburban settings, inspire rural images and vistas, maintain a healthy condition in a street side environment and provide visual interest to highlight the rural indigenous character of the Township.



Rural Design Elements

Development or redevelopment in rural areas of Holly Township must encompass the following rural design elements.

- Large masses of native or naturalized perennials and grasses should be utilized in the landscape area along roadways. Plantings should be informal, have a natural appearance and require minimal maintenance.
- Irrigation should be used only where needed, only due to the type of plants used.
- Open areas, including those in or near the right-of-way, should be left in a natural state rather than converted to lawn.
- Trees should be clustered and planted at random intervals, and be left in naturalized beds with naturalized undergrowth whenever possible.
- Native vegetation should be maintained along gravel road shoulders and through native cut areas like wetlands.
- Land forms should be smooth, natural, undulating forms with the bike path meandering over, down, around and through the land forms.
- To screen development from roadways, existing hedgerows should be used, new hedgerows created, or ornamental trees planted in a style to mimic orchards. A three-rail horse fence could be used to add visually interesting and unifying elements.
- Shielded street lighting should be limited to intersections only.

Community Design Elements

In the more heavily developed areas of Holly Township, all developments or redevelopment should contain the following design elements.

- Formal landscaped design may be used.
- Use of edging to define and separate planting beds from turf.
- Planting beds should be mulched and weed-free.
- All landscaped and grassed areas must be irrigated.
- Street trees should be planted at regular intervals and provide proper canopy to pedestrians and roadways.
- Mowed grass should be in the right-of-way and around plantings, and between the bicycle paths and road shoulders.
- Shielded lighting should be limited to intersections only.
- A variety of non-invasive species of plant material shall be used.



HOLLY HERITAGE DESIGN STANDARDS

Holly Township is a small rural community situated in the luscious and rolling acres of northern Oakland County, rich in tradition and in its unique “up north” feel. Established in 1838, and later experiencing major development during the rail industry boom of the early 1900’s, Holly Township has found itself in a position where the Township has a quaint characteristic defined by tasteful residential design, rural and preserved lands, and pockets of historic activity centers. This section provides guidelines and design direction that home owners, architects, and developers of all kinds should reference in the preparation of building and landscaping plans. The following will be an overview the goals and design standards that can be attained by the practice of exemplary and quality architectural design, which has been a defining attribute of the Township for its entire history.

Township Character

From the beginning, Holly Township was characterized by its rail lines and productive lands where a number of finely crafted homes were set on large agricultural estates. Holly Township contains some of the most scenic landscapes and roads in Southeast Michigan, all of which are integral in defining the community. Over the years, some of the parcels have been divided into smaller lots, though individuality, craftsmanship, and quality design have remained staples of Holly Township homes. The rural design, combined with place-specific topographic attributes and native vegetation, have contributed to the rustic character, charm and loosely defined neighborhoods of differing fashions.

Today, Holly Township has been influenced by shifting demographics, economic trends, and the long rooted heritage in rail centric pattern. Township leadership is well aware of the forces that influence these patterns of development, as such, recommended the creation of these design guidelines and other planning tools in order to preserve the character and health of the community. These guidelines reflect the values, vision, and goals of the Township, and encourage character sensitive, sustainable development throughout the community.

Design Guidelines

The following guidelines are not a zoning document, but were developed to assure the conformance to the community vision and goals for development, while still allowing design flexibility and creative solutions.

- **Reinforce Holly Township Image.** Holly Township’s building and design pedigree includes an ample number of structures that convey classically rural styles, sensible yet sophisticated, and displays the pride of their owners or proprietors. Quality and consistent design contribute to the rural characteristics that have defined Holly Township for over a century. The renovations, retrofitting’s, and new construction occurring within Holly Township is stewarded by this rural characteristic ideal established by this guideline.
- **Facilitate Contemporary Life.** The traditional and rural style of the building stock has been preserved and maintained over decades. As lifestyles and technology evolve, new homes and retrofits must creatively unite the various aspects of traditional and modern life, accommodating the needs of the community.
- **Encourage Town-Wide Diversity.** A trait that embodies the community, and shall well into the future, is the feeling that no two or three homes are the same. This characteristic of high-quality craftsmanship should be embraced and emulated. A key component in the success of this development pattern of adjacent homes of differing styles is the rigor and discipline the architect applies to the selected style.
- **Foster Creativity.** The guidelines in this section are intended to offer inspiration and potential solutions for important components of high level and unique architectural style; they are not intended to be a checklist. Creative design solutions should build on the opportunities inherent at the site and at neighboring properties, and adhere to fundamental design principles in the execution of an overall vision and style, producing results that inherently reflect the character of Holly Township.
- **Promote and Preserve the Natural Environment.** Holly Township is rich in natural resources. The preservation of these resources is imperative to the continued sustainability of the Township. When developing or renovating a site, the sensitive nature and interconnectivity of all of our natural systems must be taken into account. It is encouraged for developments to mitigate potential runoff issues and abstaining from significant levels of terra forming, minimize the removal of native vegetation, and consider the architectural relationship with the surrounding environment and topography.

Architectural Styles

Since the first settlers constructed their homes and buildings in Holly Township well over 100 years ago, the community has maintained a widely diverse representation of architectural styles. This section briefly displays the various styles already in the Township, as well as the architectural styles that are encouraged with future development. The styles described below can be used in its literal sense, or as inspiration. Nonetheless, high-quality design and construction materials are expected when developing such structures.



In choosing a style to emulate, it is imperative that the designer understand the intricacies and properties of the style being delineated. The defining characteristics of a style, such as roof form, façade composition and other identifying details. Monotonous design, in the form of large box homes with simple façade variations, are strongly discouraged. The above examples display a comprehensive design thought process that considers not only the interior functionality of the structure, but its impact on the exterior appearance and its integrity to the root design.

SITE PLANNING

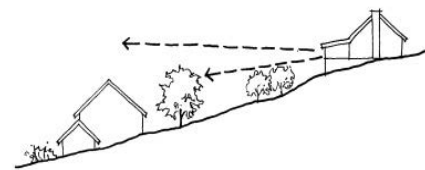
The existing topographical terrain and established tree cover and plant life contribute greatly to the distinctive character of Holly Township. The following are guidelines for the treatment of the natural environment and its relationship to the placement and design of new a remodeled homes.

A. Natural Site Features

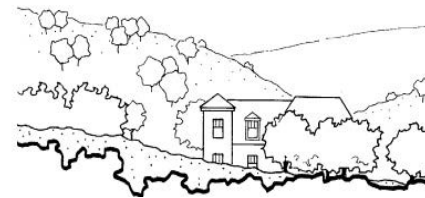
The siting and design of structures should integrate mature and native trees and existing vegetation into the site plan and building design. It is Township policy to prevent significant loss of vegetation through individual development.

B. Topography

1. **Siting.** Siting and design of structures should conform to the natural contours of the site and mitigate the need for extensive cutting, filling, or terracing.
2. **Grading.** Where grading is necessary, contour grading that emulates the topography of the existing slope should be utilized. The site should not be shaped into terraced building pads nor should a flat site be created on a parcel that has existing topography.
3. **Massing.** A building's mass, roof form and projecting elements should be designed so as to minimize the visual impact of the building on the site or slope. Rooflines should be designed in ways that minimize interference with views from neighboring properties, and do not create drainage and runoff problems during torrential conditions.



Landscaping should be placed to screen views to proximate properties while allowing views out.



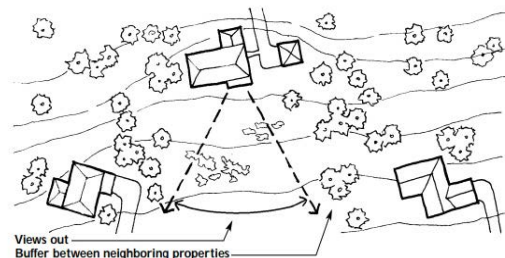
D. Neighborhood Context

Buildings shall conform to setback standards and should generally reflect the established development conditions of neighboring properties, including building setbacks and landscape treatments.

E. Views

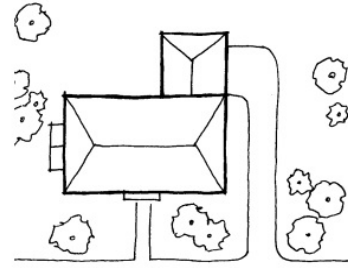
The various topographical, water features, and tree cover conditions that exist in Holly Township create a unique view opportunity that often requires sensitive site planning.

1. **View from the Site.** Where feasible, buildings should be sited so as to maximize the view potential from the site while also maximizing the distance from buildings on adjacent properties.
2. **Views from Neighboring Properties.** The Township does not have an ordinance



protecting views. Where feasible, buildings and trees should be designed and sited so as to minimize the obstruction of key views from adjacent properties.

3. **Parking.** Where feasible, entries to garages should be on the sides of buildings to avoid placing them in direct view from the public street.



MATERIALS AND FINISHES

Building materials and the embodiment of their physical properties and characteristics are important components in the delineation of an architectural style. This section offers guidelines on a number of issues to consider in the selection and application of building materials.

A. Character

The designer and developer must determine the purpose and function of the building, the surrounding environment and neighborhood, and how those components interrelate with the architectural style and materials of the development.

B. Detailing

The choice of materials should be properly scaled to the development. Overly large areas of siding, glass, or other materials without break or differentiation in window and door treatments or material patterns should be avoided unless appropriate for the specific architectural style.

C. Palette

Building materials should not be individual components of a building, but instead fit into the larger design palette consistent with the style and architecture of the building. Physical properties of the materials, such as texture, color and weight, should maintain an aesthetic and stylistic relationship to each other and the architectural design of the building. The appropriate use of textures, materials, and colors can make a strong contribution to the quality and richness of a building.

D. Quality Materials

Building materials and architectural finishes should possess physical properties appropriate to the architectural style, and allow for appropriate maintenance procedures that ensure a long lifespan for the selected material.

FAÇADES

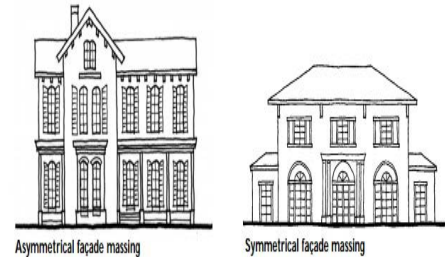
The façade of a building is the countenance that is offered to the outside world, distinguishing the transition between the intimacy of the private function of the development and the very public nature of its visual expression. A building façade is typically the defining component of an architectural style, and offers clues as to the functions of the rooms behind it. This section offers guidelines for some of the important components of building façades.

A. Composition

The composition of all façades of a building shall follow the principles of a given architectural style. The placement of openings on a façade should communicate the building floor plan and the structural logic of the building, while maintaining a balance of design.

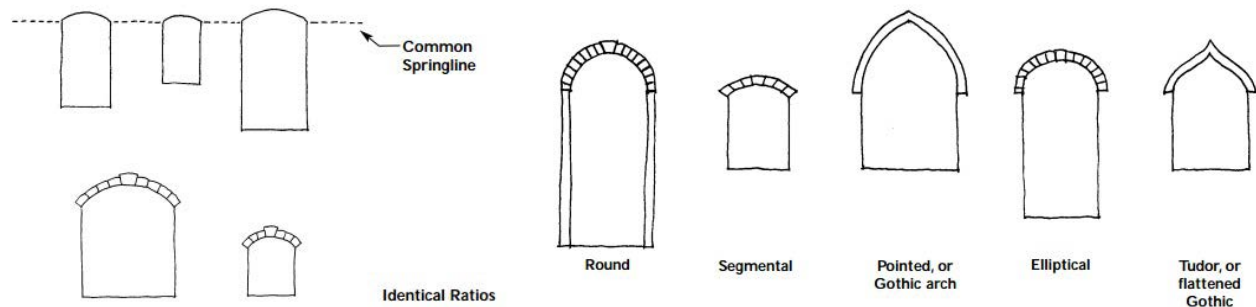
B. Roofing

The height of a façade and its proportional relationship to the roof are principle components of an architectural style. The façade and roof form should communicate the predominate style of the building, dictating door, window and design pattern placement.



C. Arches

Arched doors, windows or other façade openings are used in many different design styles. A careful study of the style will determine the arch shape and proportion that is appropriate for a given design. There are a number of techniques that should be followed to ensure the proper placement of arched openings on a façade, including a common spring line for the arches and identical ratios for arched openings of differing sizes. Openings are encouraged to be framed with uniquely detailed frames, uniformed throughout the comprehensive design of the project.



D. Columns

Columns are placed on the facades of buildings usually as the means to support the roof of a porch. Columns have a number of properties that should be true to the architectural style of the building. These include:

- Height and width
- Column base
- Column top, or capital
- The proportion of all of these elements together

E. Porches

A porch is a transitional space on the building façade between the external and internal environments of the home. It is useful to consider that the porch is a significant feature of many architectural styles in Holly Township and the Midwest, being that its roots lie in American architecture of places with significant shifts in weather conditions over the course of a year's seasons.

Porches are primarily of two forms - either inset into the primary mass of a building or built outside the main building as a separate volume that helps provide consistency between the building mass and the building's architecture.

F. Railings

The use of railings on porches, balconies and upper level windows or door openings should be carefully considered as a component of an architectural style. When properly applied, well designed and properly detailed railings are an opportunity to reinforce specific characteristics of the selected architectural styles. The materials used for the railings should be a part of an appropriate palette of materials for the building.

WINDOWS AND DOORS

In the evolution of building design, windows originated as simple ventilation openings. Later, translucent materials were used to allow light in while offering some control over the elements. Still later, glass came into use. Doors, of course, are the principle means of egress and security. Both of these building features are closely related to the delineation of an architectural style and are dominant features on a building's façade.

G. Fenestration

The size, shape and proportion of window openings should be in keeping with the architectural style of the building and should be consistent on all facades of the building. Although a variety of window types and shapes may be used, there should be harmony within that variety.

H. Material

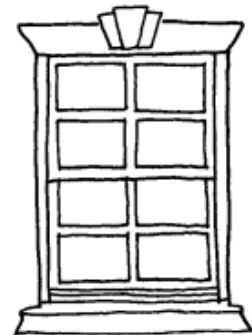
Windows should be constructed of high quality materials that provide long lifespan and are in keeping with the specific architectural style of the building.

I. Reveals

Windows should be installed into walls with an adequate depth, or reveal, to create shadows, which heighten the visual richness of the façade. The depth of the reveal should be in keeping with the architectural style.

J. Trim and Sills

Trim molding, lintels and window sills should be used to express a level of detail on the façade, consistent with the façade design. Windows do more than let light and air in, their placement on a wall affects our understanding of both exterior and interior environments, shaping our views of both worlds.



K. Doors and Entries

Entry features should be scaled to the façade and appropriate to the architectural style. The size and material of the entry door as well as the quality of the door hardware should be appropriate to the scale and style of the house.

LANDSCAPE DESIGN

Well-designed landscaped areas around buildings enhance the property and mitigate the impacts of new construction. Landscape improvements can heighten the aesthetic impacts of a well-designed building and can work in simpatico with the design style chose for the development. This section offers some guidance for the interaction between landscape design and Holly Township buildings.

A. Relationship to Building

Landscaped elements should augment the relationship between the building and its site. Landscaping should be designed to define private outdoor space, and the more public, or street-facing, outdoor space. Trees and lower planting materials should be utilized to help “ground” the building and mitigate its overall mass. The landscape plan will consider this grounding element, as well as goals such as maximizing views or creating visual buffer zones between the properties and neighboring parcels.

B. Water Conservation

The Township historically has been concerned with water and resource conservation. Trees and shrubs should be selected based on their suitability with the climactic characteristics of Holly Township as well as the unique soil characteristics of the area. Native species are highly encouraged as they are well suited for the existing conditions of the location.

C. Fencing and Walls

Design of fences and walls along streets should be compatible with the neighborhood and the architectural style of the building. Landscaping materials shall be planted adjacent to the fence so that there is full coverage of the fence, softening the appearance of the fence material and provide a layering of vegetation in front of the fence. If the fence were to include a pedestrian entry gate or automobile entry gate, the design should reflect the design of the building and contribute to an overall improvement of the property.

D. Lighting

Exterior lighting should not be directed toward the street, the sky, or neighboring parcels. The fixtures should be designed to subtly highlight key features of the landscape design, such as walkways or paths, and augment architectural features of the building.



Action Item Summaries

Action Item	Short- term	Long- term
Smart Growth Strategies		
Conduct a “sustainability audit” of the Zoning Ordinance to identify opportunities for incorporating sustainability standards		X
Encourage low impact development stormwater management techniques.	X	
Amend ordinances to provide incentives for alternative energy systems in all construction.	X	
Develop incentives to encourage developers to utilize energy efficient and environmentally sensitive materials and practices.	X	
Create a resource list to help residents find information about alternative energy sources and low impact development techniques, as well as local suppliers, installers and contractors.	X	
Develop an educational campaign to promote environmental stewardship.		X
Review parking standards for unnecessary impervious surface code requirements.	X	
Amend ordinances to include incentives and requirements for the use of native species for landscaping and stormwater management purposes.		X
Maintain an inventory of wetlands in the Township.	X	

RESIDENTIAL

ACTION ITEM	Short-Term	Long-Term
Encourage traditional housing styles		
Zone appropriate areas for single and multiple family development at a variety of densities.		X
Establish zoning mechanism for transferring development rights in order to preserve natural, low density areas, and encourage development in target areas of the Township.		X
Develop design guidelines/ordinance to ensure high quality development at all densities.	X	
Adopted ordinance requirements to ensure that retirement housing is located near community and civic uses for a range of housing needs and income levels.		X
Amend ordinances to require generous buffers to high volume roads with unifying rural elements and where designated on the Land Use Plan, use appropriate uses to transition to more intensive uses.	X	
Promote open space of appropriate size and function in residential developments based on the character of the area, natural features and location within the community.		
Amend ordinances to require trailways and sidewalks within residential developments to connect to township and regional trailways.		X
Amend ordinances to provide incentives for developers to use residential development options that permit flexibility in design in order to achieve quality development by providing incentives for the preservation of environmental features and open space.	X	
Establish mechanisms to assist in long term maintenance of open space areas.		X
Preserve the residential character of the Township and protect the long-term stability of neighborhoods		
Protect the long-term stability of neighborhoods through adequate code enforcement and zoning regulations.	X	
Amend ordinances to include regulations and incentives that establish high quality design and landscape standards		X
Amend ordinances to included preferred residential designs and elements that are required to be incorporated into residential projects. Develop and provide a brochure to be distributed to residential builders and developers		X
Amend ordinances to provide incentives to single family developments that incorporate certain preferred residential designs and elements, such as side and rear entry garages, high-quality building materials, etc		X
Incorporate traditional neighborhood design elements into residential developments, including sidewalks, street trees, and the location of a central public space from which the surrounding neighborhoods radiate.		
Amend ordinances to require pedestrian connections between areas designated as open space and home sites.	X	
Amend ordinances to require street trees, sidewalks, pedestrian lighting and amenities including benches and attractive street signs in all neighborhoods.		X
Amend ordinances to require street networks in residential developments and connect neighborhoods with each other as well as with shopping and office developments.		X
Require implementation of portions of the Township Pathways Plan through residential site development approval.	X	

COMMERCIAL

ACTION ITEM	Short-Term	Long-Term
Plan for the development and redevelopment of commercial areas sufficient in size and location to meet the shopping needs of Township residents		
Zone appropriate areas for community commercial development at interchanges to permit highway oriented business to locate near interstates and discourage strip development along major roadways.	X	
Amend zoning ordinance standards for existing commercial districts to permit concentrated and attractive community shopping centers to be developed so that smaller strip commercial is discouraged.	X	
Amend the zoning ordinance to give the community quality development that is context-sensitive and unique to the character of Holly Township.	X	
Permit commercial development in selected areas near existing or planned job centers with a mix of uses that serve the businesses and employees in those centers.	X	
Encourage community commercial uses in strategic areas within the Township.		
Encourage community commercial development in locations with sufficient infrastructure, convenient road access and where compatible with surrounding development such as the enterprise district.	X	
Encourage redevelopment of the Fish Lake Road/Grange Hall Road sub area, pursuant to the goals and objectives of the sub area plan.	X	
Develop and apply access management strategies when properties develop or redevelop		X
Develop clear and comprehensive building and site standards to ensure quality development.		X
Plan for selected nodes of neighborhood commercial development throughout the Township and discourage strip commercial development along major roadways		
Zone appropriate areas for neighborhood commercial development at specific major roadway intersections throughout the Township rather than promoting strip commercial development along roadways.		X
Establish design guidelines and screening/landscaping standards that achieve quality development, that reflect Township character.	X	
Review and revise zoning ordinance standards for existing commercial districts to permit development of attractive neighborhood shopping centers of a size sufficient to include various uses, further discouraging smaller strip commercial.	X	
Design setback requirements that discourage large parking lots from being placed within front yards and permit buildings to be brought closer to the street.	X	
Require pedestrian connections with existing residential areas, where possible.	X	
Plan key areas in the Township for Mixed-Use Development projects.		
Identify appropriate areas for mixed-use developments in the Master Plan.	X	
Use form-based codes or other flexible zoning tools to achieve a mixed use or alternative commercial development.		X
Establish design guidelines, screening and landscaping standards, and other appropriate requirements as conditions of approval that achieve quality development, consistent with Township character and the context of the surrounding area.	X	

INDUSTRIAL

Action Item	Short- term	Long- term
Promote the redevelopment of industrial parks and individual buildings and plan for new industrial development with access to major roadways to encourage job-creating businesses to the Township.		
Zone appropriate areas throughout the Township for light and general industrial uses.	X	
Industrial areas should be located in limited areas with access to major roadways and interstates.	X	
Develop a tiered-use zoning approach for light industrial districts that limits permitted uses when adjacent to residential neighborhoods to minimize impacts for residents.		X
Limit more intensive industrial uses to areas not adjacent to residential neighborhoods.	X	
Promote the use of shared driveways and internal connections between individual users to reduce the impact of truck traffic on roadways	X	
Encourage quality design and site planning with development standards.		
Develop landscape standards that require screening along road rights-of-way that is natural in character and consistent with the character of the Township.	X	
Require quality landscape materials to be used that would complement main buildings.	X	
Ensure sign standards are adequate to complement right-of-way treatment and not overwhelm the streetscape.	X	
Require screening between uses to maintain the same theme and provide for alternative screening including preservation of existing vegetation, use of supplemental plantings, screen walls, etc.	X	
Screen rooftop appurtenances from view from property lines and public roads based on zoning ordinance standards.		X
Encourage development of Research and Development uses of a sufficient size and location to attract viable R&D Users which will further the employment opportunities in the community.		
Zone an area large enough to support research and development uses along North Holly Road.	X	
Create an economic development program to promote the area to R&D users and to coordinate marketing efforts with the County and universities.	X	
Develop building and site design standards that call for quality development commensurate with the goal of locating premier R&D users to the area	X	
Continue planning for and promote development that is consistent with Grand Blanc's Technology Village Area.		
Develop partnerships aimed at recruiting new high-tech and medical oriented businesses.	X	
Create sustainable development standards that encourage high-quality development that protects the area's natural resources.	X	
Develop a marketing plan for the Township's research and technology areas.	X	
Establish benchmarks and timeline for North Holly implementation strategies.	X	

THOROUGHFARE

Action Item	Short- term	Long- term
Continue to promote and encourage Access Management Strategies.		
Continue to enforce the Access Management standards within the Township's Zoning Ordinance with respect to driveway quantity, location, spacing, orientation, and design.	X	
Continue to enforce Zoning Ordinance standards for driveway width, turning radius, clear-vision areas, and driveway depth to allow automobiles and trucks to safely and efficiently enter and exit a site.	X	
Encourage shared access to sites by use of shared driveways, frontage roads, and internal connections between sites	X	
Maintain natural areas adjacent to existing roads by pursuing natural beauty road designation on selected roadways		
Work in conjunction with the Road Commission and Oakland County to establish Fish Lake, Ray, Belford, Evans, North Holly, Lahring, Grange Hall, Hess, Tinsman and other roads in the Township as a Natural Beauty Road.		X
Educate residents along the proposed Natural Beauty Road and the general public regarding the benefits of Natural Beauty Roads and how they can assist in maintaining the classification.		X
Establish a policy position that Natural Beauty Roads be limited to two-lanes wide in order to maintain corridor character.	X	
Expansion of roadways should be designed and built to improve the flow of traffic, increase traffic safety, reflect the context of the surrounding area, and accommodate pedestrian activity, where appropriate.		
Target roadway improvements where the density, functional classification, and growth management strategies will demand an increase in road capacity.	X	
Consider design and construction methods to improve the safety of roadways by eliminating roadway offsets, sight distance limitations, driveway spacing, and incorporating access management standards.	X	
Work with the Road Commission to identify which projects should incorporate a boulevard design.		X
Maintain two-lane or three-lane cross-section in areas planned for lower densities or where additional widening is not in context with the area.	X	
Develop the Township's non-motorized transportation network		
Establish a Non-Motorized Capital Improvement Plan.	X	
Improve the Non-Motorized Capital Improvement Plan to identify the side of the road pathways are planned for (if it is only one side).	X	
Adopt standards within the Township Zoning Ordinance requiring the construction of planned pathways along the frontage of individual sites as they develop.		X
Continue to work with road agencies and utilities to ensure that capital improvement projects (widening of roads, new bridges, sewer/water extensions etc.) are designed to accommodate planned non-motorized facilities.	X	

