

Salem Township Master Plan



2019

RESOLUTION OF ADOPTION

Salem Township Master Plan

Salem Township Planning Commission

WHEREAS, the Salem Township Planning Commission has the responsibility and is empowered by the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended) to make and adopt a Master Plan for the physical development of the Township and to amend the Plan as needed; and

WHEREAS, the Salem Township Board of Trustees created the Planning Commission for the purposes stated in Public Act 33 of 2008, as amended, and

WHEREAS, the Salem Township Planning Commission solicited public comment throughout the plan preparation process and, notices having been duly posted and published in accordance with Public Act 33 of 2008, as amended, conducted a public hearing on **April 15, 2019** at the Salem Township Hall to receive public comments on the proposed Master Plan; and

WHEREAS, the Planning Commission finds the updated Master Plan necessary for the appropriate development and preservation of physical areas of the Township.

NOW THEREFORE BE IT RESOLVED, the Salem Township Planning Commission hereby adopts this Master Plan for Salem Township, along with the text, maps, figures, charts, graphs and other descriptive materials contained in the Plan, and

Be It Further Ordered, copies of the Master Plan shall be certified to Washtenaw County, adjacent communities and registered public utility and railroad companies.

AYES: 7

NAYS: ~~0~~

ABSENT: ~~0~~

Resolution Declared Adopted



Pam Merlo, Planning Commission Chair
Salem Township



Bruce Reeve, Planning Commission Secretary
Salem Township

Dated: 4/15/2019

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PART 1 INTRODUCTION

PLANNING DIRECTIVE

The Planning Commission, in the formulation of the Master Plan, recognizes that:

- A. The planning process is a continuous one which requires a close and continuous working relationship between the Salem Township Board, Salem Township Planning Commission, and most importantly, the citizens of Salem Township;
- B. The formulation and updating of the Master Plan has been accomplished with broad citizen representation and participation ensuring all interests have had an opportunity to be heard regarding the future development and preservation of the unique character of the Township;
- C. The formulation of amendments to the Zoning Ordinance text or map and related ordinances and plans will be based upon the policies of the Master Plan; and
- D. Future decision-making associated with proposed development projects in the Township will be based on the Master Plan.

HISTORY OF TOWNSHIP PLANNING

Salem Township first adopted a land use plan map in 1975. Between then and the late 1980's conditions within and affecting the Township changed to the point that a complete re-evaluation of strategies and policies affecting growth, development, environmental concerns, and land use relationships had become warranted. This re-evaluation centered on analyzing Salem Township's unique physical conditions, land use needs, and growth pressures including development trends from surrounding communities that were impacting the Township and projected to continue to do so in the future. Analysis was directed toward an understanding of the Township's character, and putting forth reasonable policies to enhance this character, while providing for reasonable growth at selected locations within the Township. This re-analysis led to the adoption of the Salem Township Growth Management Plan in August 1993.

Policies contained within the 1993 Growth Management Plan continued to strengthen the importance of maintaining the rural character of Salem Township, and specific comprehensive goals, objectives and policies served to protect that character. After adoption of the 1993 Plan, development pressures continued to be recognized that were approaching from outside the Township, mainly along transportation corridors.

Anticipated growth along the M-14 corridor, especially at the interchange with Gotfredson Road, led to a complete review and updating of the Growth Management Plan in late 1997 and early 1998. The 1998 Salem Township Growth Management Plan set aside a specific development area defined as an Urban Service District (USD) for land areas intended to receive urban type development. Within this USD, explicit policies incorporated with design guidelines needed to be prepared. Therefore a study was initiated to update the USD. This effort resulted in the adopting of a Growth Management Plan amendment in 2005 entitled the "Urban Service

District.” In 2009, following adoption of the Michigan Planning Enabling Act (Public Act 33 of 2008), the plan was again revised and updated, and was renamed the Salem Township “Master Plan” consistent with the state act. This current update looks to once again refine and focus details of the plan as they relate to the USD, based on current development pressure and current refined vision for the area using best practices in land development and community planning. In addition, sections of the plan relating to the Township Hamlet, land preservation, agricultural activities and overall township density have been updated.

Salem Township has had roughly 50 years of experience with preparing and using comprehensive plans in decision-making, preservation of natural resources, providing for a variety of land uses, addressing transportation needs, and reviewing public facilities and services. These planning efforts are used extensively in guiding Township Planning Commission and Township Board decisions.

All of Salem Township's planning efforts are based upon the Michigan Planning Enabling Act, which states, “*The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:*

- *Is coordinated, adjusted, harmonious, efficient, and economical.*
- *Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.*
- *Will, in accordance with present and future needs, best promote public health, safety, morals, order; convenience, prosperity, and general welfare.*
- *Includes, among other things, promotion of or adequate provision for 1 or more of the following:*
 - *A system of transportation to lessen congestion on streets;*
 - *Safety from fire and other dangers;*
 - *Light and air;*
 - *Healthful and convenient distribution of population;*
 - *Good civic design and arrangement, and wise and efficient expenditure of public funds;*
 - *Public utilities such as sewage disposal and water supply and other public improvements;*
 - *Recreation; and*
 - *The use of resources in accordance with their character and adaptability.”*

This Master Plan follows the Michigan Planning Enabling Act as outlined above, stressing the unique character of Salem Township as well as specific areas within the Township where detailed policies are set forth. In initiating all of the previous Growth Management Plan programs, the Planning Commission has also involved residents. This involvement has given direction and insight in setting forth issues that the Master Plan should address. Salem Township will also continue to coordinate its policies with those of neighboring communities, and to recognize the interests of those communities while promoting and protecting its own interests in the formulation and implementation of its policies.

GENERALIZED PLANNING GOALS

The following goals will serve as a basis to address the specific issues facing Salem Township. These goals are by nature general; however, they serve as the foundation upon which more detailed policies can be drawn.

- A. To retain the social, economic and environmental qualities and character of land that are unique to Salem Township and that have attracted people to settle there;
- B. To protect and enhance the environment, which is and continues to be conducive to the development of a more meaningful and purposeful life for every citizen as an individual and as a member of the community;
- C. To program the orderly growth of a sound physical environment for those living and working in the Township, recognizing the character of the Township, the needs and desires of its citizens, the capabilities of its natural resources, and the anticipated pressures of its population growth and land development;
- D. To encourage (a) the efficient and sustained use of land and water resources in accordance with their character and adaptability; (b) the preservation and enhancement of scenic and aesthetic features of the Township, and (c) the prohibition of any developments that seriously contaminate, pollute or erode the natural resources of the Township;
- E. To define a land use pattern that (a) preserves the existing character of the Township except where this Plan advocates a change in that character; (b) recognizes the public interest in ensuring the compatibility and reasonable balance among land use activities; (c) anticipates the future demand and amount of land needed for each land use activity relative to the level of public services available at the time new development occurs; (d) identifies the most desirable location for each type of land use activity that allows for efficient sustained operations and future expansion; (e) protects and enhances the environmental quality of the community; and (f) protects and enhances the tax base of the Township in a manner that allows for new development without creating a need for new public services in excess of available revenues.
- F. To protect the public health, safety and welfare of people living in, working in or visiting the Township.

PURPOSE OF THE MASTER PLAN

To preserve the unique character of Salem Township and meet the Township's future needs, a Master Plan must address the major issues confronting the Township. Strategies must be understandable, workable, and provide the structure upon which the plan is based. To accomplish this, the Plan is based upon the following:

- A. The Salem Township Master Plan is a comprehensive statement of community policy and strategies geared toward the preservation and enhancement of natural resources, the preservation of the community's unique character of the Township, and the management of future development within the Township.

- B. The primary purpose of this Master Plan is to establish public policy to guide governmental and private decision-making concerning the preservation, growth, and development of Salem Township. The Master Plan is intended to direct development in a coordinated and harmonious manner to meet the current and long-range needs and aspirations of the Township, to effectively and efficiently maintain, enhance and utilize the resources of the area, and to create a more satisfying environment for its citizens. .
- C. The Plan describes the Township's policies regarding future growth, development, and preservation of the character and resources of the Township, and the strategies that are intended to implement such policies. The strategies are aimed at the fundamental issues which the Planning Commission expects the Township to face during the foreseeable future.
- D. The Plan establishes the existing and desired future character of lands in the Township. The Plan establishes general land use and desired densities in particular areas. It outlines a strategy for provision of new public services and facilities in parts of the Township, as certain circumstances take place. It sets forth the policy basis for revisions to the Zoning Ordinance and for making future public service expenditure decisions.
- E. The Master Plan is not a legislative document. The Plan provides the policy framework for Planning Commission recommendations on rezoning petitions and subdivision plats to the Township Board, and for Planning Commission decisions on site plans. Only regulations adopted by the Township Board, such as the Zoning Ordinance and Subdivision Regulations, provide specific restrictions on individual parcels. The Plan may be amended if the analysis involved in a decision indicates that a change is appropriate.
- F. The Planning Commission intends to periodically evaluate refine, add or otherwise modify the Plan if and when conditions or community goals change. Refinement may be in the form of restating, deleting, or adding to the issues, strategies, goals or policies set forth in the Plan. The need for changes might result from analysis of a specific development proposal (such as a rezoning petition), a capital improvement proposal by the Township or other government agency, a periodic review of the plan by the Planning Commission, or from a detailed study of a part of the Township by the Planning Commission. All changes to the plan shall be performed in accordance with the Planning Enabling Act
- G. The Master Plan, as specified in the Michigan Planning Enabling Act, is a prerequisite to adoption of regulations for land development including zoning, site condominium, and subdivision regulations. Furthermore, the Master Plan is increasingly becoming a prerequisite for state and federal grants to local governments for capital improvements. The Master Plan is based on the conclusions of various technical studies and working papers, significant community involvement, established Township goals, policies, and strategies, and the synthesis of these with commonly accepted planning principles.
- H. Wide individual and group review as well as a public hearing of this Master Plan provided the opportunity for citizen participation, which improved and refined the proposed plan before its adoption. It is advisable that the plan be reviewed annually to determine whether additions or amendments are necessary based on established goals and

sound planning principles. Periodic revision, as well as total evaluation of the plan every five years, is essential if the Master Plan is to be a continually reliable guide for community development and preservation of resources.

- I. Previously the Township Planning Commission had the sole authority to prepare and adopt the Master Plan. The Michigan Planning Enabling Act provides for the Township Board, by resolution, to have final authority for approval of the Master Plan. The Board continues to make all land use and development decisions via the rezoning and the subdivision review processes; approves expenditures for public improvements; provides funds for Planning Commission activities, and appoints Planning Commission members. Most importantly, however, the Board is elected by the citizens of Salem Township and is therefore directly responsible to the public for planning decisions and represents the public's interest in planning matters. It therefore follows that the Township Board should play a key role in preparing the Master Plan and in keeping it up to date. This Master Plan was prepared with this in mind and it reflects Township Board policies as well as those of the Planning Commission.

After adoption of the Master Plan, a review of the Township Zoning Ordinance and Map will be prepared to complement and reflect the conclusions of the Master Plan.

PRINCIPAL FEATURES OF THE MASTER PLAN

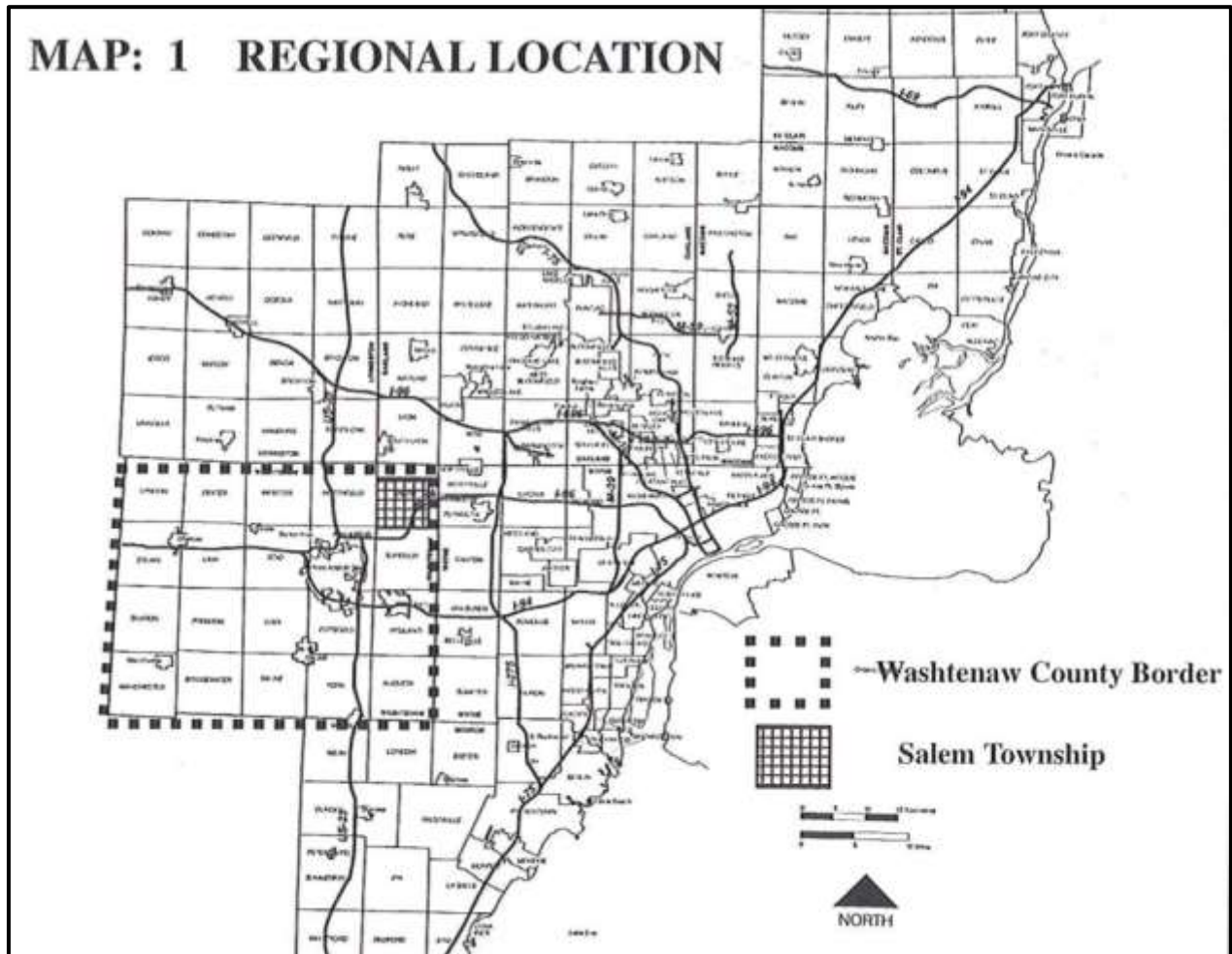
Community Policies: Each chapter identifies community policy statements that relate specifically to the topic or subtopics within the chapter.

Information: The chapter then explores various components of the topic providing more detailed information that helps to define a concept or illustrate the importance to the community.

Strategies: Each chapter identify strategic and initiatives that help to support the community's policies. The implementation of these strategies and initiatives is intended to help the Township achieve the short and long term visions for the community.

THE PLANNING AREA

The planning area for the Master Plan is delineated on Map 1. This area includes all portions of Salem Township. The total acreage of the planning area is 22,002 acres or 34.3 square miles.



PART 2

HISTORY AND CHARACTER

HISTORY OF SALEM TOWNSHIP

The first recorded history of “*Township 1 South, Range 7 East*” (later Salem Township) is found within the survey notes written by Joseph Wampler during the first survey of the Township in the fall of 1815. In an entry dated November 25, 1815 he established a “*true line*” between Sections 23 and 26, which is Brookville Road from Weed Road to Gotfredson Road in the heart of what later became Brookville or Lapham’s Corners. He established a corner where a “*hickory 16 inches in diameter bears north 12 degrees west 11 links and an ivory 5 inches south 18 ½ degrees west 3 links. Timber, beech, sugar ash, oak and undergrowth spice, prickly ash.*” There were later many problems caused by the inaccuracy of the survey of 1815, but Mr. Wampler’s account offers a glimpse of what this part of our Township looked like at time the first settlement developed.

It is not clear when the United States government declared the lands in the Township open for sale, but the first purchasers apparently arrived in 1825; Rufus Thayer Jr. along Napier Road being the first listed purchaser in the Township. Brookville was not far behind. Royal Wheelock, Jr. arrived in 1825 and Elkanah Pratt and Joseph Lapham in 1826.

On June 30, 1828, the Michigan Territorial government’s Legislative Council took action to divide off “Panama Township,” which included the land area of the present Salem and Superior townships, from the existing township of Ypsilanti.

By the early 1830s, the land in and around Brookville Road had been sold.

This corner of the Township was probably more accessible because of a road authorized on November 4, 1829 by the Michigan Territorial government, “*commencing at or near the inn of Timothy S. Sheldon, in the Township of Plymouth, in County of Wayne, thence west on the most direct eligible route through the village of Ann Arbor.*” There is some confusion from early maps as to whether or not this was North Territorial Road, but it is clear that the first settlers came by way of North Territorial Road and settled in that area first. We see dates 1825, 1826, and 1827 along this road, while the great influx of settlers elsewhere in the Township came in 1831 and thereafter. Brookville, along this road, became the first settlement in our Township.

Burr’s Map of 1839 shows a “*one horse sulky road*” from Plymouth to Riders located in Salem Township. Ira Rider was the first postmaster of an office established in 1832, a little west of Lapham’s Corners (Brookville). In 1838, several mail routes had been established, #14 from Plymouth to Dexter, 28 miles, via Riders, Northfield, and Webster Townships.

Settlers were arriving, lands were being cleared, and agriculture was beginning. Pioneers had come to stay. As early as 1829, a sawmill was active with a millpond for power from a dam on the West Branch of the Rouge River (Johnson’s Creek) near where the stream now goes under Salem Road. Population was increasing, schools were being built, and churches were being formed. By 1833, the Township had enough inhabitants to form an independent township. Panama Township was split into Superior Township and Salem Township.

In 1844, Salem Township had to be re-surveyed because the settlers were becoming acutely aware of the inaccuracies of the original survey of 1815. In many sections, especially sections 22, 23, and 24, the purchasers realized the acreages did not match with what they assumed they had purchased. Lucius Lyon, the Surveyor General, came to Salem to interview all concerned and to make a report of shortages to the United States Senate. For example, Elkanah Pratt in Section 23 had purchased what he thought to be 80 acres only to find out he actually had only 56.5 acres. The U.S. Government, because of political changes, never compensated the aggrieved land purchasers.

The Township, nevertheless, prospered and grew into a rich agricultural area. The Agricultural Census of 1850 gives in detail a picture of this activity. One farmer, for example, produced in excess of 400 lbs. of maple sugar in 1850.

By the time of the Civil War, Salem Township was an established community with the necessary country schools, local churches, cemeteries, and local businesses – both in Brookville and in Worden (Pontiac Trail and Five Mile Road). Young men from Salem served and died in the Civil War.

Salem Walker Church (Methodist Episcopal) was built at this time (1864). As Michigan Historical Site #5630, it is known as, “*The least altered of any Greek Revival Church in Michigan.*” The U.S. Department of the Interior has designated both the church and associated cemetery as a National Historic Site.

At this same time, railroads were developing in Michigan, and Salem lay on the proposed route from Detroit to Lansing. This brought on a struggle in Salem Township between those who wished to encourage the railroad with financial support and those who were opposed. Tensions and emotions were high between 1866 and 1870 while legal battles were won and lost. By 1873, with the legal difficulties resolved, the Detroit and Howell Railroad Co. completed its line through Salem Township. A center of business soon developed around the new station, and the new hamlet at Six Mile Road and the railroad track became the center of activities for the Township.

This hamlet with railroad services included various stores, two hotels, a blacksmith shop, a school, two churches, and a milk factory. The hamlet prospered and grew until the advent of the automobile, which made the railroad connection unimportant for commerce and travel. The hamlet no longer served as the hub of activities and settled into an era of general decline until it has become increasingly a nostalgic 19th century relic with historical charm and interest.

In the 1950s, the small school districts of the Township, each with its own one room school, gave way to the pressures of consolidation. The Township was split among several larger districts in the area; Ann Arbor, Northville, Plymouth-Canton, and South Lyon. The social life of children and families no longer was centered in the Township but in communities beyond the borders.

Salem Township has gradually become a residential oasis, relatively isolated from the burgeoning metropolitan giants of Detroit and Ann Arbor. It lies within easy commuting distance of thriving and crowded commercial and industrial areas.

The history of Salem Township, then, is that of hardy pioneers taming the wilderness into a prosperous agricultural community, until the development of modern transportation brought it within commuting distance of the developing commercial and industrial centers. Salem

Township seems to be adapting to a residential role for those centers, while it seeks to maintain its connections to its past.

EXISTING COMMUNITY CHARACTER, DEFINED

Taking Salem Township's rich historical heritage into consideration, it is recognized that a community's character, or image, is shaped by both physical and intangible elements. It is the essence of a place and what one remembers long after leaving. The image of a community is not static; it can and will change as a community grows and matures. Salem Township has a positive image, but an important part of its character, the green and pastoral landscape that is valued highly by residents, is also threatened by development pressures.

Salem Township's character is defined by a number of key physical elements such as the lay of the land, the built environment and roadways. There are also less tangible attributes that shape perceptions of Salem Township. For example, Township residents generally enjoy a high standard of living, have excellent schools, and are close to surrounding metropolitan areas. Together, these elements shape the image of Salem Township as a unique community. The following summarizes some of the more prominent characteristics of Salem Township's image:

- **Natural Features:** Salem Township is relatively flat to gently rolling and open, and its key natural highlights include the Johnson Creek watershed, wetlands, and several stands of mature trees.
- **Wildlife:** Salem's wildlife is increasingly important to its citizens. Due to many large, intact patches of native vegetation that has not been fragmented Salem Township continues to enjoy the presence of small and large animals. It is recognized that interconnected vegetated areas, some along stream corridors intermixed with wetlands offer natural habitats. The survival of wildlife is one over which Salem Township has a degree of control.
- **Rural Landscape:** Most of Salem Township was at one time cultivated or used as pasture for livestock. Salem Township's agricultural roots evoke very powerful images: the open feeling of the fields, stone and historic farm houses, barns and outbuildings, hedge rows and trees that define property boundaries and even certain sounds and smells. Salem Township's agricultural character still dominates much of the southwest and far west portions of the planning area.
- **Salem Hamlet:** Salem Township's original crossroads settlement provides a focal point and center for the community. The historic, pedestrian scaled character of Old Salem Hamlet is defined by the tight pattern of streets, a mix of uses, the size and scale of historic buildings, and the relationship of these buildings to the street. The community has placed high priority on maintaining the character and viability of this as the heart and historic area of the Township.
- **Gateways:** Gateways are points of identification and entry into a community where one feels a sense of arrival. The M- 14/Gotfredson Road interchange is Salem Township's major gateway providing the primary means of access for most residents, employees and visitors. Other gateways are located where other roadways enter the Township such as Pontiac Trail, Curtis, Five, Six, Seven, and Eight Mile Roads, North Territorial, etc. The

gateways give immediate impressions of the Township. A sense of arrival is also apparent at the west and east entrance into the historic Salem Hamlet, the character and scale of buildings abruptly changes, creating a strong sense of arrival and clear boundary for the historic center. New developments must be considered carefully in that they create gateway statements at the entrances to office parks, commercial developments and residential areas.

- **Scenic Roads:** Certain roads in Salem Township possess particularly picturesque views to the countryside and other scenic features. Among them are Pontiac Trail, North Territorial, Six Mile, and Joy Road.
- **Public Infrastructure:** The design and maintenance of the public environment plays a major role in defining Salem Township's character. Streets, public buildings, public places, sidewalks, lights, signage and landscaping are very visible features. Salem Township's public environment is attractive and well maintained.
- **Quality of Life:** Salem Township enjoys a high level of community services, responsive public agencies and is beginning to provide additional public amenities such as the Salem Hamlet's Veteran's Park and the approximately 200-acre Salem Farm Preserve property south of the Hamlet. A year-round calendar of special events and festivals adds to Salem Township's attractiveness. Salem Township's schools provide stability to the environment and play an increasingly important role in attracting new residents and major corporations to the area.
- **Sense of Place:** Salem Township's built and natural environment helps the residents to form a sense of attachment. The total environment provides a comfortable feeling. The Township has special characteristics that set it apart and make it a memorable place.
- **Public Parks and Open Space:** The importance of parks and open space sprinkled throughout the community, to provide recreational opportunities for residents and quality of life are continuing to be reinforced within Salem Township. This will continue to enhance the Township's heritage and character.
- **Gathering Places/Focal Points:** Public gathering places and community focal points are becoming more important and contribute positively to Salem Township's image, and serve to provide a sense of community. Examples include the school and playground as well as Veterans Park within the Salem Hamlet. These features will become more important as development is proposed due to their ability to provide visual reference points and places where the community can interact.
- **High Quality Development:** In general, Salem Township's recent development contributes positively to the community's image. The built environment is characterized by high quality residential, well-landscaped areas, and controlled signage. It is imperative that these characteristics are incorporated into new development and conscientiously designed into commercial areas.

Only a few parts of the Township have a character different from that described above. These are generally located as follows:

- East of the Hamlet of Salem is an industrial area with a mix of small industrial facilities

against the backdrop of a sanitary landfill south of Six Mile Road;

- Some landscape businesses, a restaurant, and other low intensity office/commercial uses near the M-14/Gotfredson Road interchange; and
- A few limited commercial establishments at various historic crossroads, largely for the milk, bread and “quickstop” convenience needs of residents.

FUTURE COMMUNITY CHARACTER

The common vision for the Township's future, as documented in numerous resident surveys and public meetings throughout the Township's long established history of community planning, is founded upon the preservation of the Township's natural features, and retention of the Township's predominantly rural character. This vision is the basis upon which the goals, objectives, and policies of this Master Plan are established.

PART 3

EXISTING CONDITIONS AND TRENDS

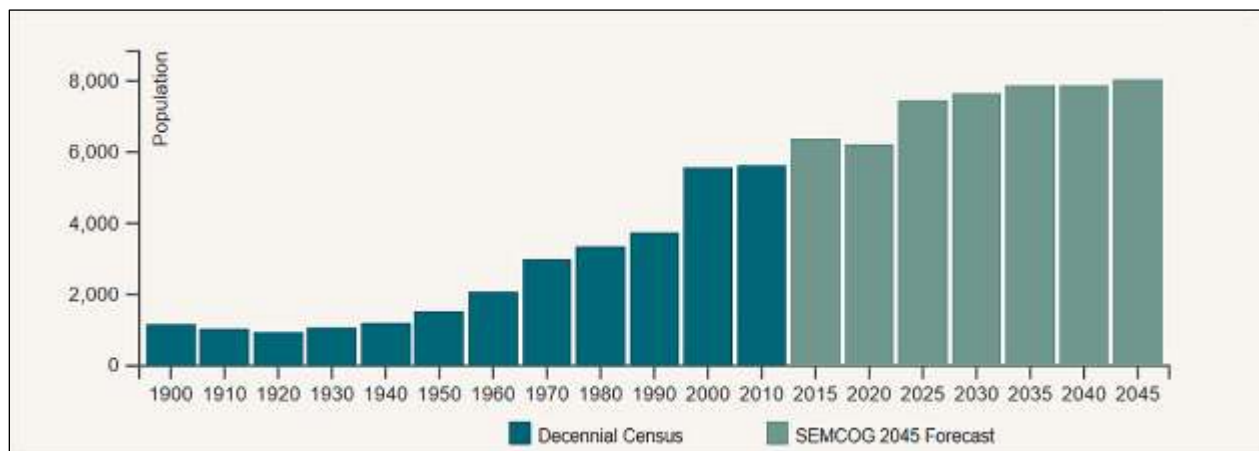
POPULATION

From the turn of the 20th century until World War II, Salem Township experienced a gradual population decline (see Figure 2 below). This reflects the general pattern experienced by many rural communities in the United States during these decades, as more people moved from rural into more urban areas. The post World War II baby boom in the U.S. is also reflected in Figure 1, as the number of residents more than tripled from 1,525 in 1950 to 5,627 in the most recent census. The highest percentage increases in population came between 1960 and 1970 (43% growth), and again between 1990 and 2000 (48% growth).

However, over the next several decades, the Township is projected by the Southeastern Michigan Council of Governments (SEMCOG) to experience a generally slow increase in population trend. This reflects two significant national trends currently impacting communities across the United States: an aging population and a declining birth rate (see Figure 2). These trends will affect local land use and community facility planning for many years to come.

Figure 1 – Population History and Projections (1900 -2040)

1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040
1,158	1,034	938	1,067	1,213	1,525	2,097	3,001	3,342	3,734	5,562	5,627	6,216	7,661	7,887

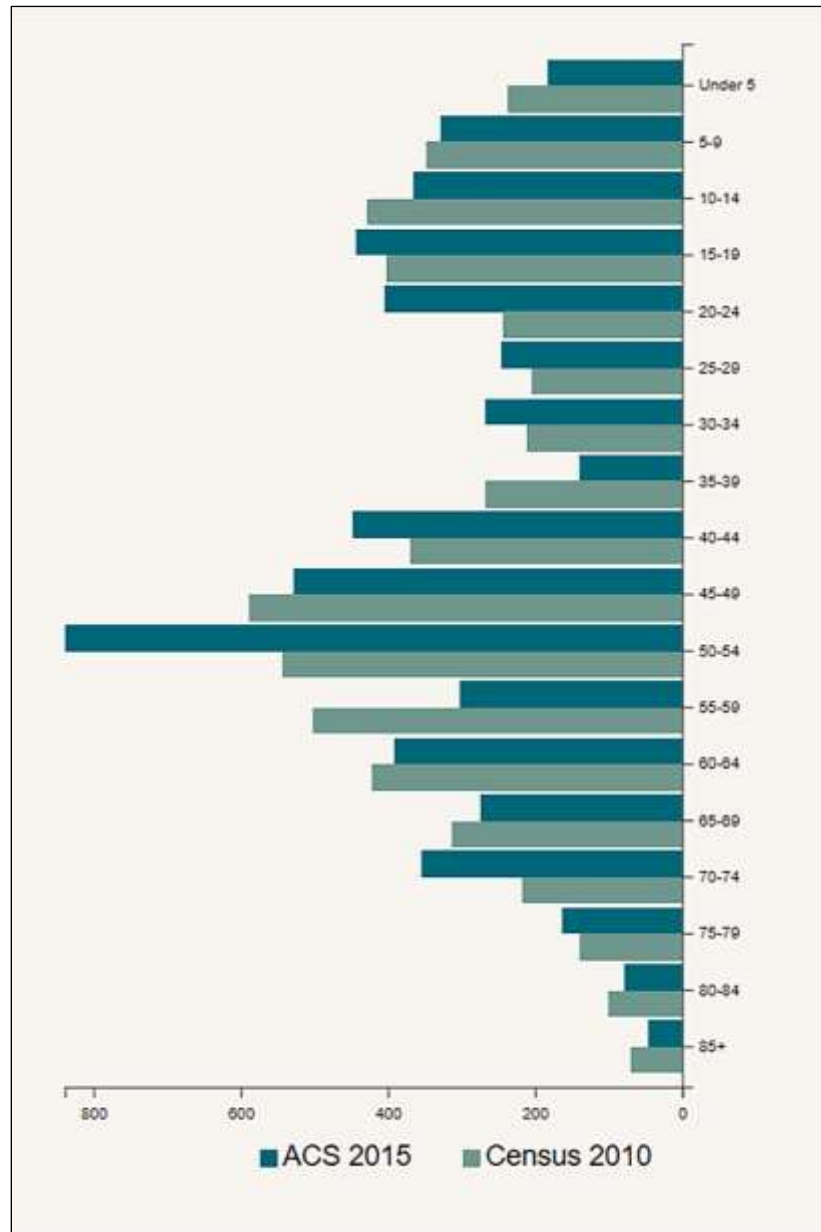


Source: U.S. Census Bureau, Southeastern Michigan Council of Governments (SEMCOG).

Age Distribution and Trends

The population of Salem Township is aging, reflecting national trends of Americans living longer and the “Baby Boomer” generation moving into their retirement years. Overall, the population of adults 65 years and older increased 71% between 2000 and 2010, while the population of young adults and families in their child-bearing years in the Township suffered a more than 30% decline, and the population of school-age children also declined by nearly 13%. These shifts are reflected in the 19% increase in the median age of Township residents between 2000 and 2010, from 38.3 years to 45.7 years. In demographic terms, the changes illustrated in Figure 2 below are fairly dramatic shifts for a ten-year period.

Figure 2 – Population Change by Age (2010 – 2015)



Source: U.S. Census Bureau, Southeastern Michigan Council of Governments (SEMCOG).

Education

Based on the 2015 Census, 15.9% of Township residents 25 years or older have a bachelor's degree or higher, and another 32% have a two-year college degree or have attended "some college." Less than 3% of those in this age group reported not graduating from high school.

Household characteristics

The average household in Salem Township consisted on 2.71 persons, according to the 2010 U.S. Census. This is higher than both the Washtenaw County average of 2.38 persons and the State of Michigan average of 2.49 per household. Average household size is anticipated to continue to decrease, down to a SEMCOG projected low of 2.46 in 2045, following the national trends of smaller families and having children later in the childbearing years.

As noted in figure 3, twenty-nine percent (29%) of Township households in 2015 consisted of families with minor children. Over half of Township households consisted of two or more adults, with no children in the home, and seventeen percent (17%) were one-person households.

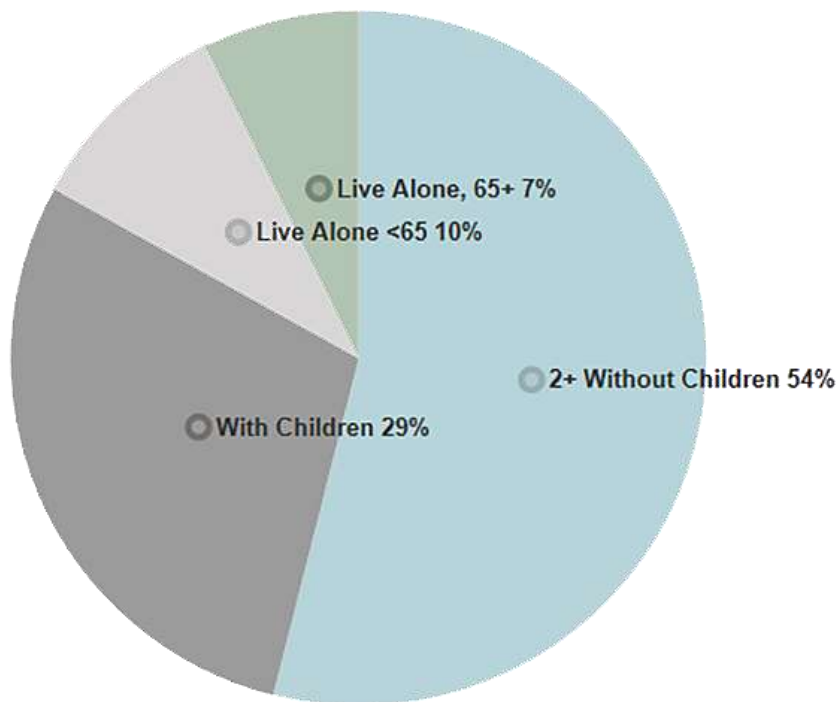


Figure 3 – Types of Households (ACS 2015)

Source: 2015 U.S. Census and the Southeastern Michigan Council of Governments (SEMCOG)

Median Household Income

From 2010 to 2015, the median household income in the Township rose 2.4%, while the overall county's median household income dropped by 5% (see Table 1).

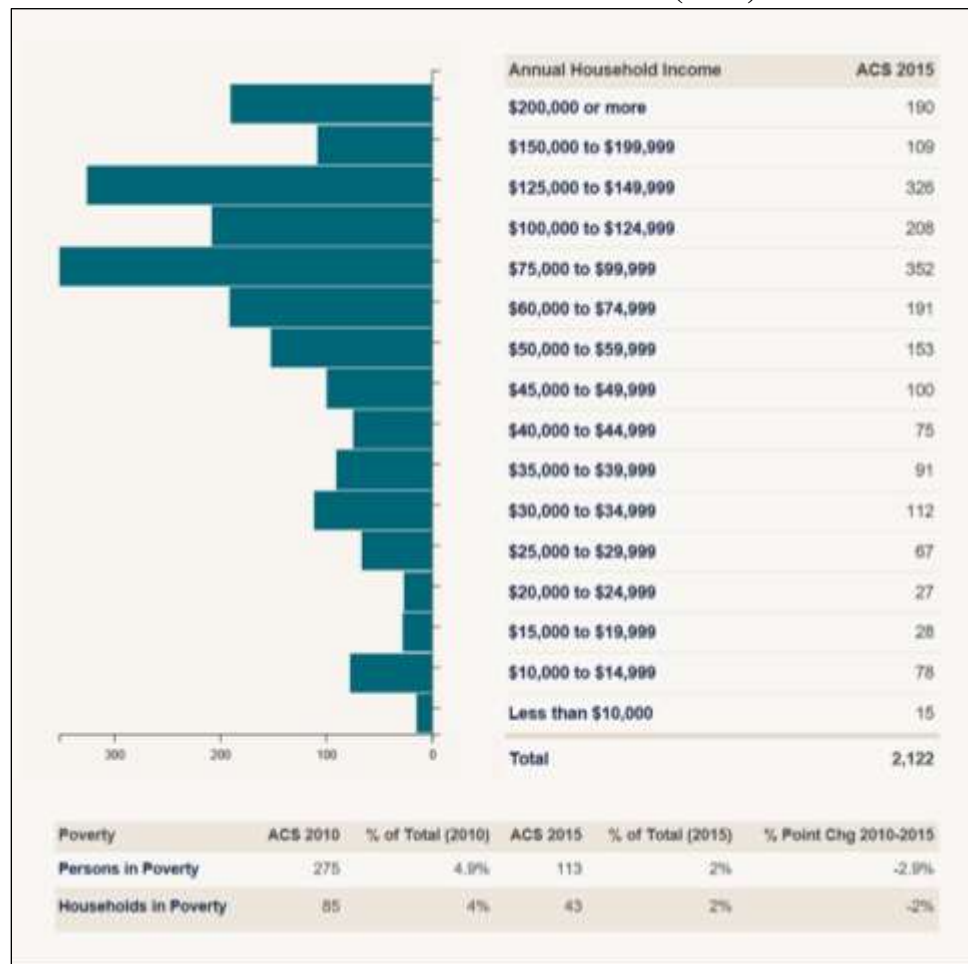
Table 1 Median Household Income (2010 – 2015)

Jurisdiction	2010	2015	Total Change 2010-2015	Percent Change
State of Michigan	\$48,432	\$49,576	+\$1,144	+2.4%
Washtenaw County	\$64,201	\$61,003	-\$3,198	-5%
Salem Township	\$72,502	\$80,434	+\$7,932	+10.9%

Sources: 2010 U. S. Census and 2007-2011 American Community Survey 5-Year Estimates

43 households (or 2% of Township households) lived below the federal poverty level in 2015, which represents a significant decrease over the 2010 Census figure of 85 households (see Figure 4).

**Figure 4
Household Income Distribution (2015)**



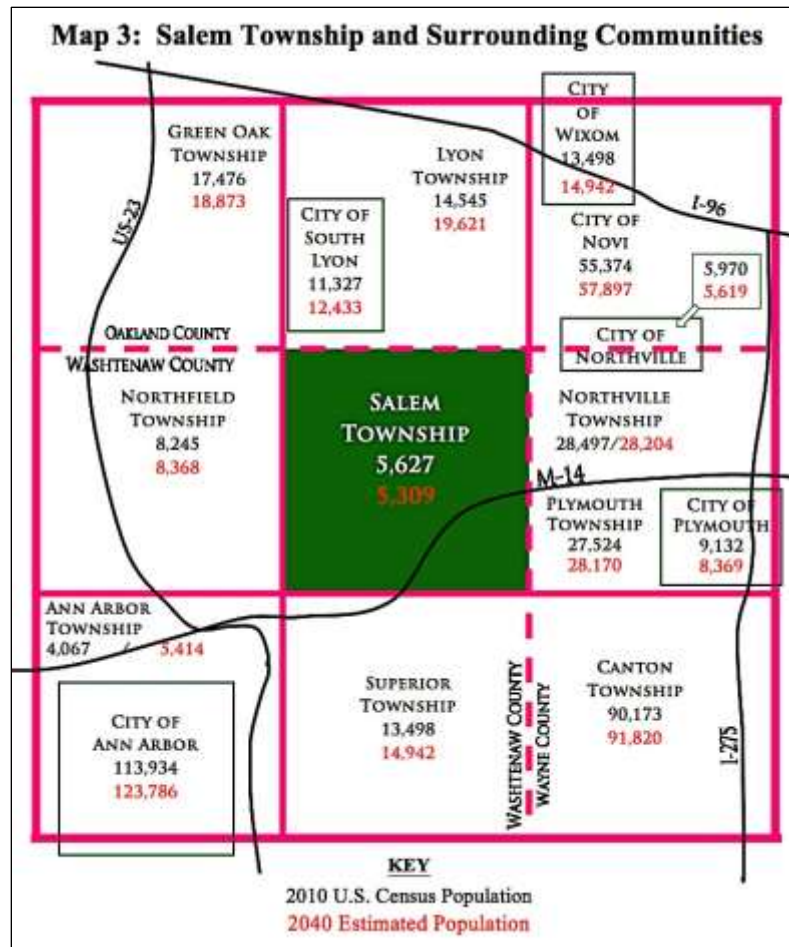
Source: Southeastern Michigan Council of Governments.

Population Change in Surrounding Communities

Salem Township is surrounded by communities that generally have larger populations, and higher population growth. Table 2 lists the 1990, 2000, and 2010 population of Salem Township and all of its neighbors as published by the U.S. Census Bureau and SEMCOG. Also listed is the percent population change from 1990 to 2000 and from 2000 to 2010. Map 3 shows the 2010 population for each community (black text), along with the projected 2040 population (red text).

Surrounding communities to the north, east, and south all experienced double-digit percentage increases in population between 2000 and 2010, despite challenging economic conditions. However, with the exception of Lyon Township, a more modest pattern of future population growth is projected for the region, as reflected in the 2040 projected population totals on Map 3.

Population change in Salem Township reflects past trends, Township planning priorities, and the relative lack of infrastructure in the Township needed to support high-density development. New development that significantly adds to the population has tended to go into adjoining communities where existing infrastructure has been provided or improved.



Source: U.S. Census Bureau, Southeastern Michigan Council of Governments (SEMCOG), and Consultant.

Table 2 – Population Change in Surrounding Communities (1990 -2010)

Community	1990	2000	2010	Percentage Change 1990-2000	Percentage Change 2000-2010
Salem Township	3,734	5,562	5,627	49%	1%
City of Ann Arbor	109,608	114,024	113,934	4%	0%
Ann Arbor Township	3,463	4,385	4,067	27%	-7%
Northfield Township	6,732	8,232	8,245	22%	0%
Green Oak Township	11,604	15,618	17,476	35%	12%
City of South Lyon	6,479	10,036	11,237	55%	12%
Lyon Township	8,828	11,041	14,545	25%	32%
City of Novi	33,148	47,579	55,374	44%	16%
City of Wixom	8,550	13,263	13,498	55%	2%
Northville Township	17,313	21,036	28,497	22%	35%
City of Northville	6,226	6,459	5,970	4%	-8%
Plymouth Township	23,648	27,798	28,497	18%	3%
City of Plymouth	8,560	9,022	9,132	5%	1%
Canton Township	57,040	76,366	90,173	34%	18%
Superior Township	8,720	10,740	13,498	23%	26%
Washtenaw County	282,937	322,770	344,791	14%	7%

Source: U.S. Census Bureau, Southeastern Michigan Council of Governments (SEMCOG), and Consultant.

There are several reasons why the Township has a much lower population than its neighbors:

- A. Salem Township has taken a proactive approach to planning for rural open space preservation, through strategic land purchases, facilitation of purchase of development rights (PDR) efforts within the Township, and planning for the concentration of any higher density development into the designated Gotfredson Road/M-14 Urban Service District.
- B. While it is close to rapidly growing areas, Salem Township does not have the same number or quality of roads that its neighbors have. Many of the roads in the Township are not paved, or are not continuous for the whole length of the Township.
- C. There is only limited public sewer service available to lots within the Salem Hamlet and to the landfill facility, along with a future system planned for the Gotfredson Road/M-14 Urban Service District. Since most soils in the Township have limitations for septic systems, higher density development has not occurred.
- D. A large portion of the Township has other natural features that pose significant constraints to dense development, such as wetlands, floodplains, steep slopes, and soils that pose limitations for septic systems and basements.
- E. With the exception of a few scattered subdivisions on one (1) to two (2) acre lots, many of the original farms in the Township have been divided into rural residential parcels from two (2) to 20 acres in size.

HOUSING

Approximately seventy-eight percent (78%) of the Township’s housing units consist of single-family detached homes on individual lots. A 784-unit mobile home park was approved in 1997 to settle a lawsuit, which resulted in the highest density development in the Township (located on Eight Mile Rd. in Sections 3 & 4). As a result, nineteen percent (19%) of the Township’s housing consists of manufactured housing units.

Housing Unit Types	2010	2015	Change 2010-2015	New Units Permitted 2010-2018
Single-Family Detached	1,572	1,801	229	133
Mobile Home/Manufactured Housing	577	439	-138	0
Multi-Unit Apartment	37	0	-37	0
Duplex	0	41	41	0
Townhouse/Attached Condo	0	22	22	0
Total Housing Units	2,186	2,303	117	133
Units Demolished				10
Net (Total Permitted Units – Units Demolished)				123

Table 4 – Housing Tenure

Housing Unit Occupancy	Census 2010	ACS 2015	Change 2000-2010
Owner-Occupied	1,926	1,974	48
Renter-Occupied	153	148	-5
Vacant	130	181	51
Persons per Household	2.71	2.74	-0.17

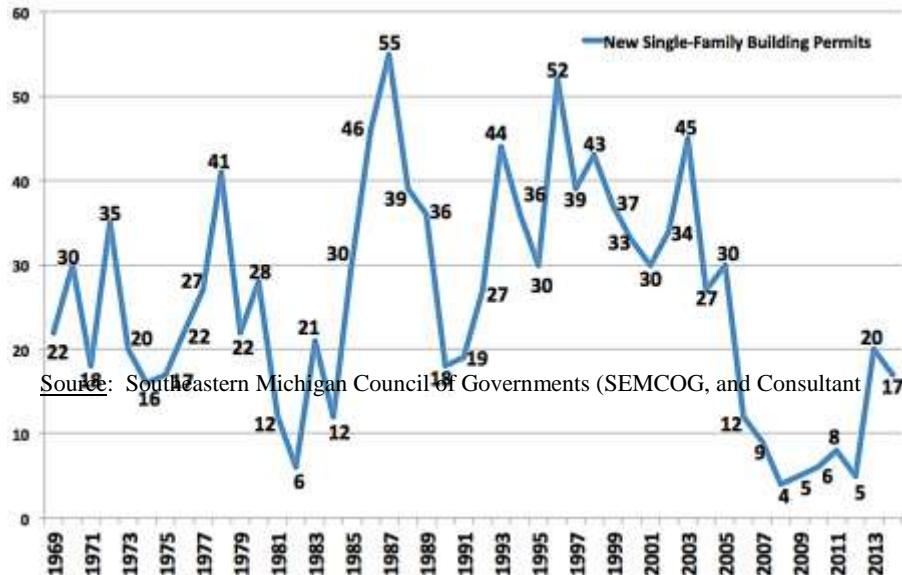
Source: U.S. Census Bureau, 2010 and 2015 American Community Survey

Housing Age and New Construction

Figure 5 illustrates single-family building permit activity per year from 1969 to 2014. Within this time period 1,185 new single-family detached dwellings were constructed. Single-family construction has varied from single-digit lows in 1982, and again between 2007 and 2012, to peaks above 50 new units per year in 1987 and 1996.

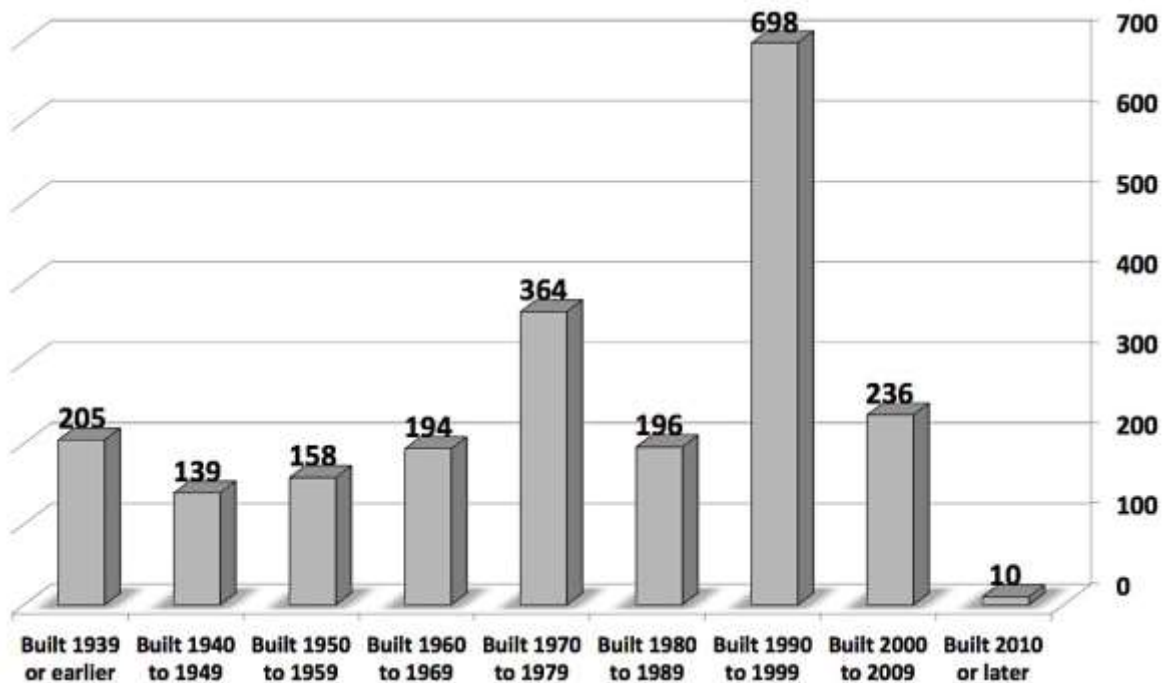
Figure 6 illustrates the relative age of Township housing (including all housing types), based on the 2013 U.S. Census Bureau's American Community Survey data. After factoring out the manufactured housing units, the survey data suggests that more than twelve percent (12%) of the single-family detached dwellings were constructed prior to World War II.

Figure 5 – Single-Family Building Permits (1969 – 2014)



Source: Southeastern Michigan Council of Governments (SEMCOG), and Consultant

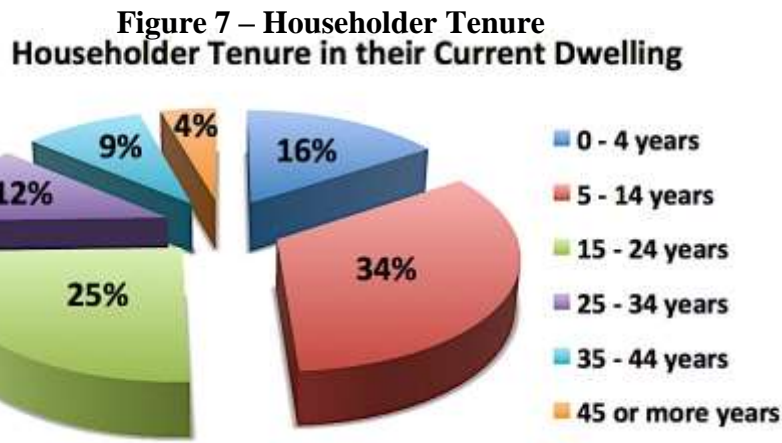
Figure 6 – Age of Housing in Salem Township



Source: U.S. Census Bureau, American Community Survey, 2013

Householder Tenure

The U.S. Census Bureau’s annual American Community Survey also tracks data on how long Township residents have lived in their current home. Figure 7 shows the relative percentages of residency, based on the date that the householder original moved into their dwelling:



Source: U.S. Census Bureau, American Community Survey, 2014

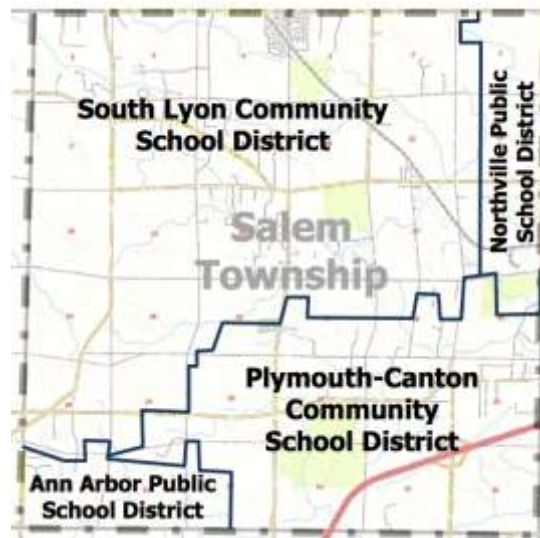
SCHOOLS

Map 5 shows the boundaries of public school districts within Salem Township. The Township is served by four (4) separate school districts: Northville Community Schools, South Lyon Community Schools, Plymouth Community Schools and Ann Arbor Public Schools.

The only public school district facility in the Township is the Salem Elementary School in the Hamlet, which is part of the South Lyon Community Schools. The other school district facilities are located in the adjoining counties of Wayne and Oakland.

The majority of public school students from Salem Township attend school in either the South Lyon or Plymouth-Canton school districts.

Map 5: School District Boundaries



ROADS

The M-14 expressway crosses the southeastern corner of the Township with a major interchange at Gotfredson Road. The US-23 expressway runs north-south several miles west of the Township border. North Territorial Road and Pontiac Trail are important regional arterial roads serving the Township. The majority of roads in the Township are under the jurisdiction of the Washtenaw County Road Commission. Additional information can be found in the Transportation Plan component of this Master Plan.

OTHER PUBLIC FACILITIES AND SERVICES

The following is a summary of other public facilities that are located in Salem Township:

Township-owned facilities include:

- A. The Township Hall is located in the heart of the Salem Hamlet on Six Mile Road. The building includes administration offices, a meeting room, and the adjacent Fire Station.
- B. Rider House, a historic structure located next to the Township Hall, with three administrative offices for the State Police.
- C. Veterans Park, an approximately 0.8 acre developed park in the Hamlet, including a fenced lawn area, gazebo, walking path, and memorial, along with an adjacent gravel parking area.
- D. The Salem Hamlet Sewage Treatment Plant on Salem Road south of the Hamlet.

Public facilities in the Township owned and operated by other public entities include:

- E. The Washtenaw County Road Commission maintenance and storage yard on the corner of Pontiac Trail and Six Mile Road.
- F. An airport/radar beacon at Six Mile Road and Currie Road operated by the Federal Aviation Administration.
- G. The Salem/South Lyon District Library, a 15,000 square-foot public library on 14.4 acres of land, located on Pontiac Trail south of Eight Mile Road.

Additional information can be found in the Community Facilities Plan component of this Master Plan.

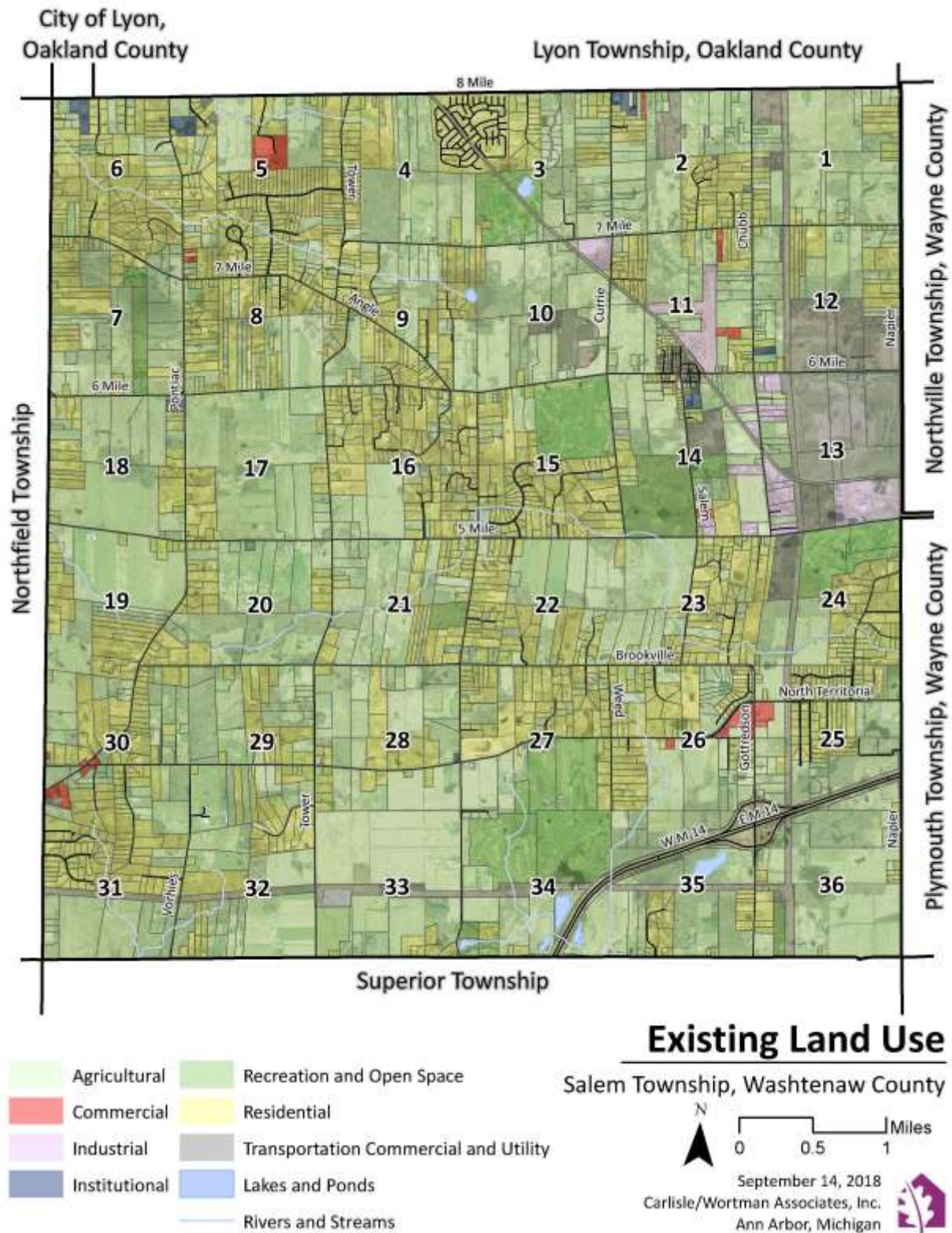
EXISTING LAND USES AND LAND COVER

The evaluation of a community's physical characteristics and land use patterns, including natural resources, land cover patterns, and percentage of active agricultural lands, forms the foundation upon which this land use planning program is based. Recognizing the unique physical features of the community and the roles they play in the environment and land use patterns is the first step in formulating land use and development policies by which significant natural resources can be protected and enhanced. When these resources are left unprotected, misuse or total destruction can take place. Once destroyed, many of these resources can never be replaced.

General Development Pattern

Salem Township remains predominately rural, being primarily comprised of productive agricultural lands and scattered residential lots with on-site septic facilities. The most pronounced agricultural area is in the west-central portion of the Township, where large parcels with few residential dwellings continue to dominate the landscape.

Intermingled within the Township's rural landscape are a number of low density residential neighborhoods, with dwellings commonly located on large lots with a minimum lot size of two acres per dwelling unit.



Commercial development occupies a small percentage of the Township. Small neighborhood service areas exist sparsely throughout the township along major thoroughfares. Examples include the intersections of N. Territorial and Pontiac Trail, Seven Mile and Pontiac Trail, and N. Territorial and Gotfredson.

The eastern half of Salem Township is more diverse, containing a greater assortment of land uses. Uses within this area include the historic Salem Hamlet, a small commercial/residential/community services oriented area where the Township Hall and related facilities are located; four major golf courses; the landfill site; concentrations of residential dwellings in the vicinity of North Territorial and Gotfredson Roads; several industrial uses, generally located along Chubb Road; and commercial uses oriented along Gotfredson Road between North Territorial and M-14.

The Existing Land Use Map illustrates the distribution of the various existing land uses within the Township.

Existing Land Uses and Land Cover

Tables 5 and 6 below provide some additional details about existing land uses and land cover in the Township, based on analysis by SEMCOG:

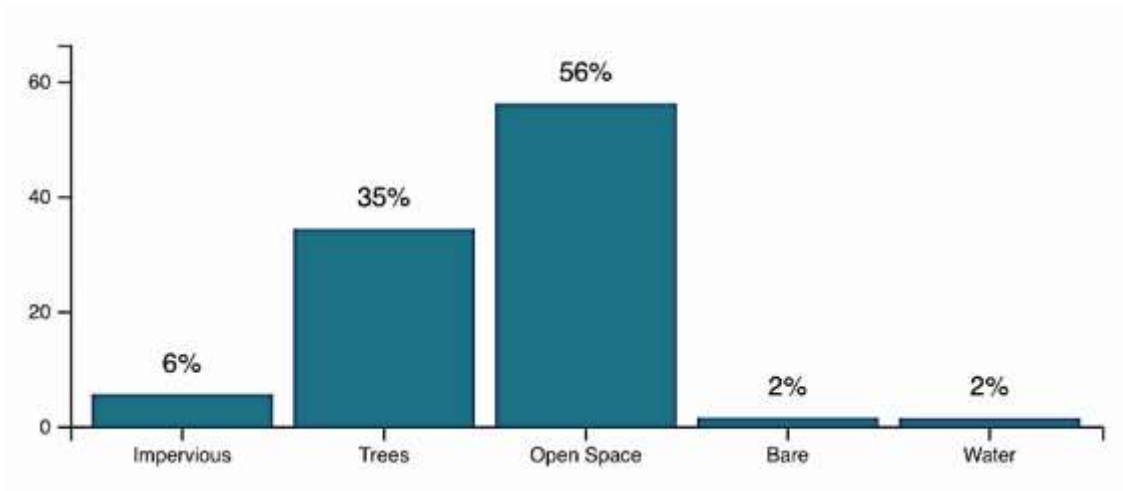
Table 5 – Percent of Total Land Use, 2008

Land Use Category	Total Area (acres)	Percentage of Total Land Area (%)
Agricultural	3,220	14.6%
Single Family Residential	14,690	66.7%
Multiple Family Residential	0	0.0%
Commercial	425	1.9%
Industrial	733	3.3%
Public & Quasi Public	849	3.9%
Parks, Recreation, and Open Space	998	4.5%
Transportation, Communication, and Utility	992	4.5%
Water	104	0.5%
TOTAL	22,011	100%

Source: Southeastern Michigan Council of Governments (SEMCOG)

The rural character of the Township is particularly evident in Figure 8, which depicts the results of an analysis of 2010 “off-leaf” aerial photography. Approximately six percent (6%) of the Township’s land is covered by structures, roads, and other impervious surfaces, as compared to thirty-seven percent (37%) in the City of Ann Arbor.

Figure 8 – Land Cover (2010)



Source: Southeastern Michigan Council of Governments (SEMCOG).

Table 6 – Land Cover, 2010

Land Use Category		Total Area (acres)	Percentage of Total Land Area (%)
Impervious	(structures, roads, driveways, parking lots)	1,269	5.8%
Trees	(woody vegetation, trees)	7,603	34.6%
Open Space	(agricultural fields, grasslands, turfgrass)	12,406	56.4%
Bare	(soil, aggregate piles, unplanted fields)	369	1.7%
Water	(rivers, lakes, drains, ponds)	355	1.6%
TOTAL		22,002	100%

Source: Southeastern Michigan Council of Governments (SEMCOG)

PART 4 BASIC CONCEPTS OF THE MASTER PLAN

PLANNING THE FUTURE

This Master Plan will strive to direct potential growth into appropriate areas based upon the future needs and physical resources of Salem Township. This will permit the Township to utilize its resources more effectively in serving the needs of residents. The creation of a balanced Township economy is a vital goal of the Master Plan. The process, rate, timing, location and mix of land uses associated with achieving this goal will long remain an important public policy issue.

The intent of this Master Plan is to address the challenging problems of growth, which must be anticipated and planned for in advance, rather than after-the-fact when the only choice may be how to manage a problem. Those initiating potential new development must pay for future costs of growth. The Township has pursued this objective in the past for infrastructure elements. This will continue to be an objective in the future.

THE FOUNDATION OF THE MASTER PLAN

A. Establishment of Policies.

The plan structure starts with an overall view of the basic policies for the entire Township, continues with a comprehensive set of policies for major policy areas, and concludes with detailed policies for specific parts of the Township. Salem Township will address issues and develop land use policies that are based upon its established and recognized character. The Planning Commission has evaluated regional and local trends as well as growth pressures in adjoining municipalities. In this evaluation process, Salem Township recognizes its responsibilities to provide for various types of uses, and to take into consideration regional and internal Township obligations. However, the policies of this Master Plan shall not be dominated by development or land use expectations in adjoining communities.

Each new development proposal will be analyzed on an individual basis considering need and specific site criteria. This Master Plan is based upon significant analysis by the Planning Commission and Township Board, and upon sound planning policies and principles. The Planning Commission will incorporate these policies into the Zoning Ordinance and enforce them when evaluating requests for specific zoning changes and other land use proposals. The established character of specific areas of the Township will be reviewed in relation to development proposals brought before the Planning Commission. The Planning Commission will view negatively proposals leading toward any unwarranted alteration of this character or likely to establish unwanted precedents.

B. Description of Uses.

Future uses are assigned to all parts of the Township without regard to a target year or a projected population. The plan relies upon Southeastern Michigan Council of Governments (SEMCOG) projections for future population [see Part 4 (Existing

Conditions and Trends)], which are guidelines for monitoring purposes, not specific targets for allocation of land use acreage or facilities.

THE PLAN ESTABLISHES URBAN AND RURAL BOUNDARIES

The planning area consists of urban and rural areas, with the Township’s two (2) planned future “Urban Service Districts” coinciding with the public sanitary sewer service areas as designated in Parts 10 (Gotfredson Road/M-14 Urban Service District Plan and 11 (Salem Hamlet Area Plan) of this Master Plan. All urban residential, office, commercial, and industrial/research/technology uses will be located in the designated Urban Service Districts. Rural residential/agricultural and suburban residential uses will be dispersed within suitable portions of the remainder of the Township.

No sewer or water services will be allowed to extend beyond the Urban Service Districts’ boundaries established in Part 10 and Part 11 of this Master Plan. It is expected that all developed properties within the designated Urban Service Districts will eventually be connected to public sanitary sewers.

“Urban Service District,” as used in this Master Plan, does not refer to a zoning classification, and should not be conflated or confused with the zoning districts designated on the Township’s Official Zoning Map in accordance with the Michigan Zoning Enabling Act (Public Act 110 of 2006, as amended).

The Salem Hamlet Urban Service District and Gotfredson Road/M-14 Urban Service District, as defined in this Plan, should each be considered as a separate and distinct “*subplan for a geographic area less than the entire planning jurisdiction*,” as provided for in Section 35 of the Michigan Planning Enabling Act (Public Act 33 of 2008).

NATURAL FEATURES

Natural features within the Township will be preserved to the maximum feasible extent. This means preservation and prevention methods shall be required when development is proposed; not only for the specific natural feature, but also of the surrounding eco-system that supports it. Woodlands, stream corridors, and wetlands will be preserved in their present extent and condition. Stream corridors and fencerows, where feasible, will be used as connecting links among wetlands, woodlands, and other open space areas. New connection corridors will be created where needed and possible. Stream corridors and wetlands will be used as parts of the natural drainage system, and to help recharge groundwater aquifers. The system will be augmented where possible with open drainage courses and stormwater retention facilities. Open drainage courses and retention areas will be developed as part of the natural landscape. Groundwater recharge areas will be protected to the extent consistent with sound land development policies.

AGRICULTURE

In recognition of the importance of the sustenance and economic benefits provided by the agricultural industry to the residents of Salem Township, it is the goal of this Master Plan, as expressed in the policies outlined in Part 6 (Plan for Agriculture) of this Plan, to maintain existing agricultural activities in designated areas of the Township, and to retain the agricultural use of prime agricultural soils.

RESIDENTIAL

With the exception of the designed intents of the Salem Hamlet and Gotfredson Road/M-14 Urban Service Districts (see Parts 10 and 11 of this Plan for more information about these Urban Service Districts), Salem Township continues to maintain the character of a rural, agricultural community. Areas away from the major transportation networks have been able to maintain a generally open, somewhat rural character in spite of the urbanizing forces primarily emerging from the north, east, and along transportation arterials. Policies within this Master Plan for future residential land uses are contained in Part 7 of this Plan, and represent a continuing opportunity to preserve the rural, agricultural heritage, rural lifestyle, and environment for both current and future residents.

This Master Plan strives to locate rural housing in suitable areas and prevent its scattering into existing agricultural areas. Following are the residential categories proposed within Salem Township:

- A. The large estate lot rural residential category is characterized by very low density, detached single-family residential uses and agricultural operations, and is intended to protect existing residences on large lots and agricultural activities from intrusion of higher density uses. Clustering concepts shall be encouraged to maximize open space.
- B. A second rural residential category is characterized by low density, single-family residential uses, and is intended to protect existing rural residences from intrusion of higher density uses. Clustering concepts shall be encouraged to maximize open space.
- C. The third major category of residential use is suburban residential. This type of residential use consists of moderate density housing that is predominantly single-family in character, and is intended to be located within a designated Urban Service District where sewer and water services are available. Agricultural activities are not considered to be compatible with this density of housing.
- D. The fourth major category is urban residential. Urban residences range from single-family detached units to apartment type units. All urban residential units will be located within a designated Urban Service District where sewer and water services are available.

Outside traffic and intrusion of uses that are not compatible with residences will be prevented. Special treatment will be required along boundaries between residential and nonresidential uses. Infrastructure in suburban and urban residential areas, such as streets, sidewalks, and street-lighting, will be maintained to encourage neighborhood stability. Establishing and maintaining neighborhood identity will be encouraged. Specific design criteria will be implemented to adequately buffer and screen the designated Urban Service Districts from adjoining lands.

COMMERCIAL

The unique location of Salem Township in relation to urban centers in adjacent communities to the north and east has resulted in a situation where the primary commercial needs of Salem Township residents are being adequately met elsewhere. It is not likely that additional commercial centers will be needed, nor is it likely that they could challenge the market

dominance of adjacent commercial developments where adequate infrastructure exists. Based upon this, general policy recommendations for future commercial land uses and development have been established in Part 8 of this Plan, along with some additional, site-specific policies in Parts 10 (Gotfredson Road/M-14 Urban Service District Plan and 11 (Salem Hamlet Area Plan).

In general, commercial uses within Salem Township will be defined and concentrated in three categories and five areas with specific characteristics. These areas serve the commercial needs of the Township's residents and the motoring public. These defined areas include:

- A. **Historical Locations.** Areas that have historically existed and are allowed to continue however are not intended to expand beyond current borders. These areas are designated as "Small Commercial Centers" which include:
 - Intersection of Pontiac Trail and Seven Mile Road.
 - Intersection of Pontiac Trail and North Territorial Road.
 - Seven Mile Road, west of Chubb Road.
- B. **Gotfredson Road/M-14 Urban Service District.** This area is located in the southeast corner of the Township and specifically defined in Part 10 (Gotfredson Road/M-14 Urban Service District Plan) of this Master Plan.
- C. **Salem Hamlet Urban Service District.** Commercial uses will be small and in conformance with the character of the historic hamlet area of the Township, which is further defined in Part 11 (Salem Hamlet Area Plan) of this Master Plan.

Creeping strip commercial development will not be permitted. Commercial uses will be permitted only in these designated areas.

INDUSTRIAL/RESEARCH/TECHNOLOGY

The primary industrial center is designated generally south of Six Mile Road, west of Napier road, north of Five Mile Road, and along portions of the Chubb Road corridor (see Part 9 of this Plan for more information and policy recommendations). Research and technology applications are also designated within portions of the Gotfredson Road/M-14 Urban Service District in Part 10 of this Master Plan. There is ample undeveloped land suitable for such uses, good access to the freeway system, anticipated public sanitary sewer service in this designated Urban Service District, and an educated and skilled labor force in the area.

TRANSPORTATION

The major road pattern has already been established in the Township. Additional improvements including paving additional lanes or intersection reconfiguration will be provided based on need. Surface streets should not become barriers to neighborhood and community identity and interaction. The freeway system is set, although additional lanes may be needed on M-14 in the future. Additional improvements will be needed for existing collector and regional roadways (North Territorial, Gotfredson, Napier, Joy, etc.) within the Gotfredson Road/M-14 Urban Service District when anticipated projects are developed. Internal and secondary connector roadways will also be required as development proceeds; all such construction will be at the

expense of developers. Streets in residential areas will be interconnected for efficiency in delivering public services and to help promote an integrated community. See Part 13 (Transportation Plan) of this Master Plan for more specific data and policy recommendations.

The need for additional transportation infrastructure within the designated Gotfredson Road/M-14 Urban Service District will require traffic impact analysis. These studies should take place before development is proposed based on the buildout of the development concept plans in Part 10 of this master plan. These analyses should include design and funding options for capacity and safety improvements needed for comprehensive improvement project as a result of individual developments projects to ensure that the percentage of the cost of the improvements associated with a particular development are borne by that development.

PUBLIC FACILITIES AND SERVICES

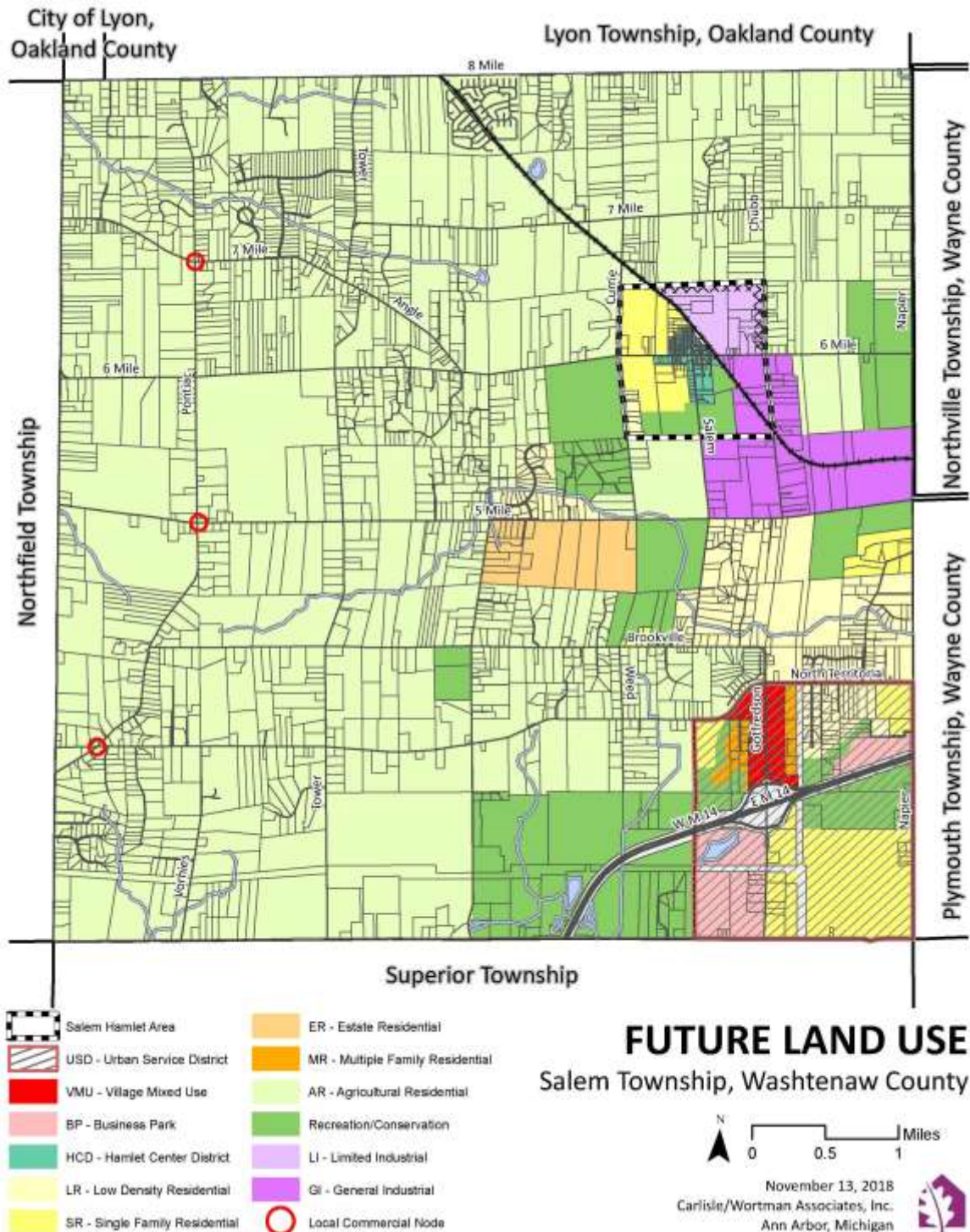
The Township is served by four school districts: Northville Community, South Lyon Community, Plymouth-Canton Community, and Ann Arbor Public Schools. Demand for fire and police protection and general government services will increase with anticipated development of the Urban Service Districts; but if the growth rate is moderate, the requirements should be manageable. See Part 13 (Plan for Community Facilities) of this Master Plan for more specific data and policy recommendations.

FUTURE LAND USE PLAN

The Future Land Use Plan is a basic element of the Master Plan, it designates the future use or reuse of the land within the community. The future land use plan is sometimes considered the most important part of a Master Plan because it serves as a guide to official decisions in regard to the proposed location, and intensity of future land development for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes. The land use plan is intrinsically related to all other aspects of the plan including but not limited to transportation and other infrastructure, recreation and entertainment, economic development, and community character.

The land use strategy in this plan proposes a development and land use pattern which is based on existing development patterns, existing and planned infrastructure, including utilities and roadways, environmental concerns, and the preservation of farm land and open space, but most importantly the preservation of community character and quality of life. These strategies rely on implementation via existing regulatory tools specifically, the Salem Township Zoning Ordinance. The Ordinance defines the regulations for development related to density, form, location, and type of use allowed.

The Future Land Use Strategy recognizes and encourages the continued use of the agricultural residential zoning pattern in most of the Township while focusing higher density residential, and commercial, development around the planned Urban Service District at M-14 and Gotfredson and the Hamlet.



The Future Land Use Map in this plan has been updated using the latest technology in order to make the map a more accurate and useful tool. By including the Township base map and parcel lines it allows a more exact recognition of where proposed use categories are in relation to actual land delineations. Although this map is a general policy guide for land use decision, accuracy is important when comparing various other mapped features such as utilities, farmland, or natural features.

PART 5

NATURAL FEATURES

INTRODUCTION

Salem Township is characterized by a wide variety of natural features including woodlands, streams, wetlands, and rolling topographic features. In addition to being a key attribute in the character of the township, these features perform a wide variety of services and add significant value to private lands within rural settings of the Township, as well as within potential urban settings. The following is a description of the value of the Township's natural resources, as well as the location, extent, and characteristics of these features:

Natural areas in good condition are attractive, raising the value of property containing or adjacent to them. [For example,] Matthei Farms, a residential community in Superior Charter Township, is considered a desirable place to live largely because of the pristine woodlands it contains. It would not have the same economic value or level of appeal were it to replace the woodlands with more houses, much less with concentrated suburban developments such as strip malls. A mature shade tree in a residential area may be valued [from] \$1000.00 to \$10,000.00. Thus, mature shade trees raise the value of property containing them (Marsh 1991). Additionally, researchers have found a significant increase in residential property values associated with trees. Morales et al. (1976) found a 6% increase in value, while Anderson and Cordell (1988) found a 3.5 – 4.5% increase in property value associated with trees.

Yet natural resources do more than provide value to Township residents' land. Intact natural resources also provide residents with a host of...ecosystem services:

- *Soils filter and hold water.*
- *Wetlands and surface waters provide clean water and storage capacity.*
- *Floodplains hold excess floodwaters and filter water flowing to streams.*
- *Woodlands hold soils intact, filter air, provide shade, and absorb noise.*

These are incentives for preserving the Township's natural resources, and mirror the disincentives for degrading or destroying them.

The Township's soils, waters, floodplains, wetlands, and woodlands cannot provide these services if they are sufficiently degraded. Also, the soils underlying the Township's natural areas are poorly suited for development, construction, or the placement of septic systems.

Salem Township's natural resources are thus most valuable to Township residents if they are intact and in good condition. Furthermore, the larger the quality natural area available, the more effectively natural resources can provide these services at a meaningful scale. For example, water with high phosphorous levels needs to pass through a certain volume of soil before the phosphorous is effectively filtered out. An undisturbed river floodplain would provide more filtering capacity than would a floodplain that has been paved and otherwise developed.

[Burnside, Droppleman, Ferguson. **Preparing for Change in Salem Township: A Natural Resource Perspective**, University of Michigan, May 1995]

NATURAL RESOURCE OBJECTIVES

The following natural resource-related objectives are set forth for this Master Plan:

- Protection of the quality of surface water, wetlands, groundwater, and groundwater recharge areas.
- Protection of woodlands, landmark trees, and wildlife habitat.
- Protection of steep slopes from the adverse impacts of development.
- Maintain existing and strategically create new open space areas for nature conservation or recreational use.
- Preserve and protect the current interconnected system of natural environmental areas, including wetlands, woodlands, floodplains, and open areas as needed to create a diverse and viable habitat for wildlife.
- Maintain existing and as new development occurs, create new attractive natural views along all Township roadways, with special attention to entryways into the Township.
- Utilize existing natural resources to buffer rural land uses from more intensive land uses.

WOODLANDS IN THE TOWNSHIP

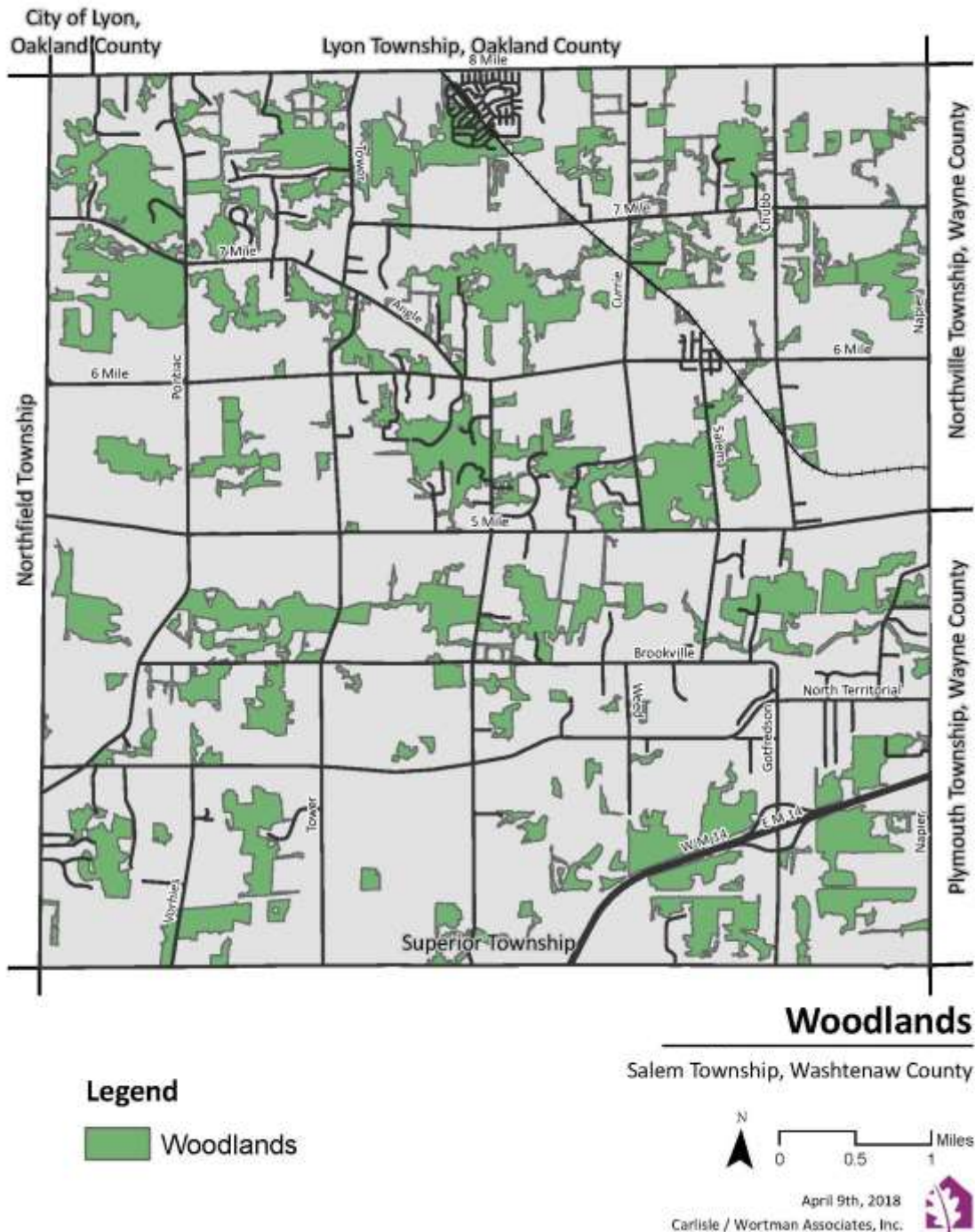
Approximately 13% of Salem Township is presently woodland. The most significant are Oak/Hickory and Red Maple woodlands; with a smaller number of Cottonwood/Sycamore woodlands mostly in section 14. Most of these woodlands are at least partially forested wetlands, (i.e. occurring primarily in hydric soils). There are a total of 57 separate wood lots within the Township. Six of these woodlands are 5 – 10 acres in size, twenty-six are 11 – 40 acres in size, and twenty-five have 40 or more acres. Almost 1/2 of the woodlots are over 40 acres in size. Woodlots of this size can support a wide variety of wildlife and can act as a community within themselves.

Woodlands or woodlots refer to lands that are at least 10% stocked by trees capable of producing timber or other wood products.

Woodlands are important for a number of reasons, including the following:

1. They create a varied and rich habitat for plant and animal life. When connected with other woodlands or fencerows, they provide wildlife corridors for animals and birds.
2. They are a source of timber.
3. They are a source of aesthetic enjoyment and provide areas for recreation.
4. They moderate climatic extremes by providing shade and transpiring water.
5. They protect watersheds from erosion by reducing the impact of rain on soil and by holding soil in place.
6. They help recharge groundwater by holding precipitation, giving it time to percolate into the ground. The woodland floor also helps to filter the percolating water.
7. They filter the air by absorbing pollutants.
8. They absorb sound and act as buffers between land uses.

Woodlands are a valuable natural resource from both environmental and aesthetic points of view. They play an important role by stabilizing soil and slowing runoff and erosion resulting from flooding and high winds. Woodlands are dispersed throughout the Township, and are depicted on Map 8.



DRAINAGE SYSTEMS IN THE TOWNSHIP

The Washtenaw County Water Resource Commissioner's office has identified 18 streams or drains in Salem Township, which flow into two major watersheds; the Huron River and Rouge River. Lands located centrally and along the eastern border of the Township flow east into the River Rouge Basin. Lands in the northwest, west and southern portions of the Township largely flow into the Huron River. Map 9 illustrates the approximate location of the divide between the two watersheds.

The following are excerpts from a research report describing drainage conditions in the Township (William Burnside, Robert Droppleman, and Carl Ferguson. **Preparing Change in Salem Township: A Natural Resource Perspective**, University of Michigan, May 1995):

The four largest streams, Johnson Drain, Fleming Creek, John Wagner Drain, and Walker Drain, drain about 70% of the land area of the Township (Knutilla 1971, Larsen 1975). The table below presents the drainage area, the drainage basin the water flows into, and average slope of these drains:

Major Salem Township Drains			
River Basin	Drain Name	Drainage Area (square miles)	Average Slope (feet per mile)
Huron River	Fleming Creek (above Wagner Drain)	4.37	22.6
	John Wagner Drain	3.92	23.0
	Walker Drain	4.67	12.0
Rouge River	Johnson Drain	11.6	25.4

Another unique feature of the water in this area is that all the drains in Salem Township have their headwaters in the Township. This means that the Township provides water to its neighboring communities and to both river systems, acting as the first users of this water. ...

The water quality in Salem Township has been extensively measured for the Johnson Drain. Water quality for the other drains in the Township is largely unreported. The Johnson system drains 33% of the area of the Township, including the Hamlet of Salem, and much of the central part of the Township (Knutilla 1972). ... However, even though the Johnson Drain is the largest stream system in the Township, it is still a relatively small stream, with highly variable flow rates. The high and low flow rates, measured at the Washtenaw County line were 6.05 cubic feet per second (cfs), collected 4/23/1967, and 0.38 cfs, collected 8/24/1967 (Knutilla 1971).

These data represent flow rates without the influence of any precipitation or storm activity, so the upper flow rate could become much higher for brief periods following storms. The low flow is very small, barely a trickle, measured as it flows out of the Township. The flow in all the upstream areas west of Currie Road is shown as intermittent.

Since all the streams and drains in the Township are headwaters of the Huron and Rouge rivers, it is important to protect water quality and prevent significant increases in the volume of flow, or downstream communities will be negatively affected.

Unfortunately, building practices have often turned water into a form of pollution. In areas of development where protecting water quality has not been of prime importance, runoff is usually:

- too warm for aquatic life;
- contains toxic nutrients and sediments; and
- enters streams in flushes that are not synchronized with natural water flow.

The protection of water quality is important to the people of Salem Township. Of special concern is limiting the total amount of impervious surface. Impervious areas contribute to extremes in the volume and velocity of water flow, and to increased temperatures. Studies have

Impervious surfaces are those that do not permit the infiltration of precipitation into the ground, and include such materials as road pavement and rooftops.

suggested that when impervious surfaces reach 10% to 20% of the watershed, communities of aquatic organisms in streams begin to decline and pollution increases.

Despite the predominantly rural character of Salem Township, this is a significant planning issue. For example, a 1996 Huron River Watershed Council study revealed that, within the portion of the Davis Creek watershed in Salem Township (in the west and northwest part of the Township – one of the lowest density areas), there was already 4% imperviousness.

As new development here and elsewhere in the Township occurs, it will be important to minimize any increase in imperviousness. This will be especially important in the southeast part of the Township where threatened species exist (see next section). In addition, it will be important to ensure that areas along streams and drains have dense vegetative cover, and to limit construction and land alterations in close proximity to these areas.

FLOODPLAINS

Floods are a natural occurrence in the hydrologic cycle. A well-defined floodplain is produced when flooding recurs with some frequency and predictability on the same area. Water exceeding

A floodplain is an area adjoining a lake, stream, river or pond that receives excess water from flooding.

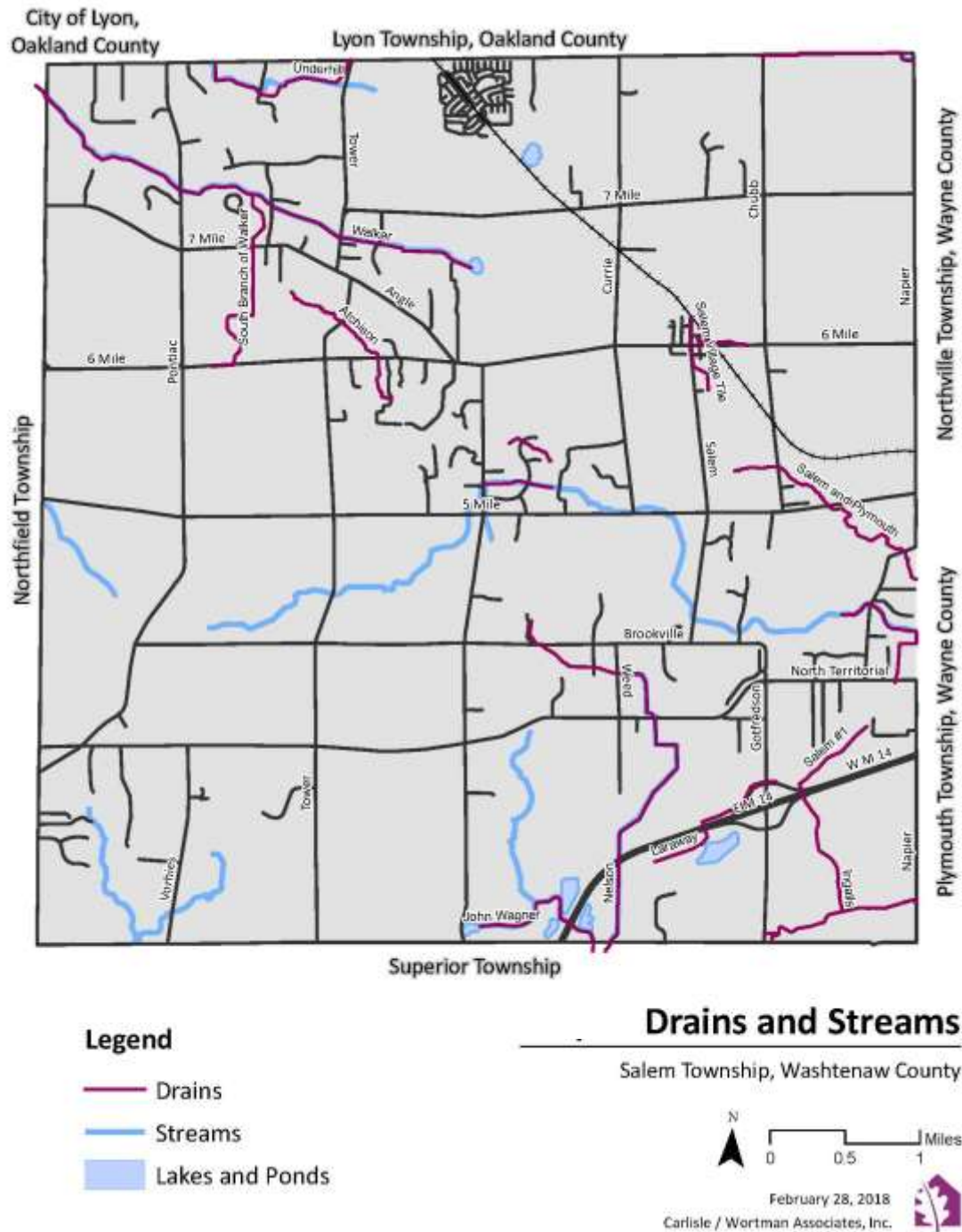
A 100-year flood is a flood that has a probability of reaching a given elevation once in 100 years, or a 1% chance of occurring in any given year.

the normal average level is stored as a temporary lake across a floodplain. As long as the overflow remains on the floodplain, this volume is not added to the floodwater moving downstream. When floodplain storage is restricted by the artificial channelization of water flow, the extent of downstream flooding may increase, causing higher peak flood levels and more damage.

Floodplain areas are measured or "delineated" to indicate the chance of a flood occurring at a given location within a specific period of time; usually once in 50, 100 or 500 years. Floodplain delineation is required for home and business construction loans and the federal government's National Flood Insurance Program, which accepts the 100-year flood plain as the minimum standard for protection.

Johnson Drain and the Salem & Plymouth Drain are the two watercourses in the Township with designated 100-year floodplains (see Map 9). Johnson Drain's unique character is quite

extensive, extending into the central portions of the Township. Also, the distinctiveness of the Fleming Creek watershed covers a large portion of the southern portion of the Township.



WETLANDS

Wetlands are among the most environmentally sensitive lands in the Township, and perform the following basic functions:

1. **Wetland habitats are essential to many species of fish and wildlife.** In their natural condition they are among the most productive of land areas when the total quantity of animal and plant matter produced is considered. They also provide wildlife with breeding grounds, food sources, valuable predator escape cover, and a wide range of vegetative communities. A healthy wetland area is a healthy ecosystem, one that supports a wide variety of species.
2. **Wetland loss increases flood risk.** They influence the quantity of water stored in a watershed and act to retain water during floods, and to reduce fluctuations in the water table level. Wetlands retain water during wet periods and release it slowly during dry periods. During wet periods a wetland will act as a natural sponge, reducing the risk of flooding. During dry periods, wetlands can help keep the water table relatively stable. Wetlands help recharge the groundwater supply and filter the water as it percolates into aquifers.
3. **Wetlands protect water quality.** They do this by trapping and stating nutrients from upland runoff, and by serving as settling basins for silt from upland erosion. This function can only be performed if the nutrients and silt are not in excessive amounts. Excess runoff and nutrients due to development and agricultural activities can overload wetlands and degrade their filtering function.

Wetlands are transitional zones between terrestrial and aquatic systems. The water table is usually near or covering the surface. They are characterized by very low topographic change, poor drainage, specific types of vegetation, and standing water. Marshes, swamps, and bogs are well known terms that have historically referred to wetlands.

Regulation of the use, alteration, and mitigation of wetlands is governed by the State of Michigan's Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994, as amended, and the Township's adopted Wetlands Ordinance.

Wetlands were mapped using U.S. Geological Survey quadrangles and then compared with aerial photographs. A generalized classification system was then developed by the Washtenaw Metropolitan Planning Commission. The most important wetlands were those that are contiguous to lakes, rivers, and streams, and that are important for storm water storage. These wetlands, designated as "first priority" by Washtenaw County are shown on Map 10. Significant wetland concentrations are located in the northwestern and northeastern portions of the Township. Concentrations are also found in close proximity to the Salem & Plymouth

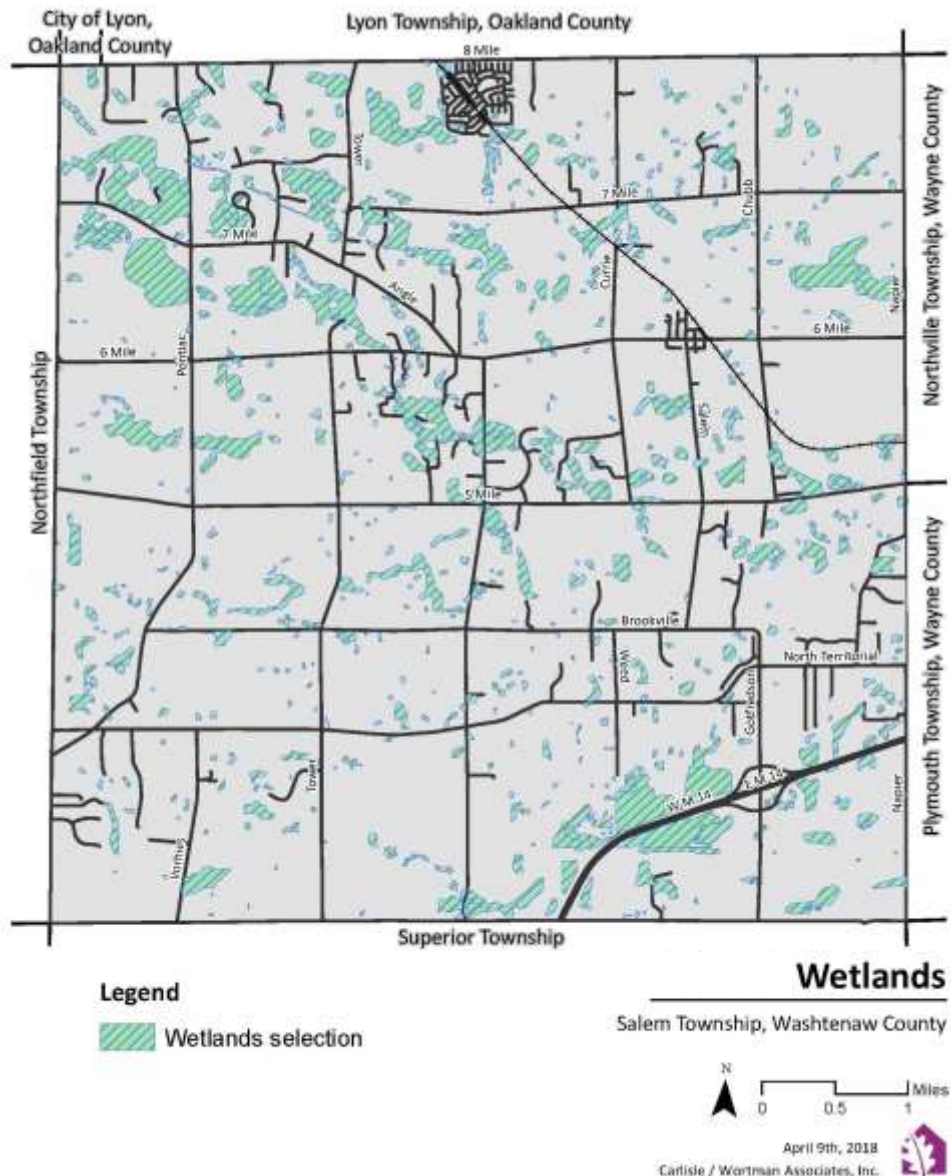
The principal threats to the long-term health and stability of wetlands include:

- ✓ Dredging and filling of wetlands for development, agricultural activities, etc.
- ✓ High volumes and rates of surface water runoff, usually caused by upstream development or other increases in impervious surface area within the watershed.
- ✓ Surface runoff contamination by agricultural or residential fertilizers and other pollutants.
- ✓ Siltation caused by upstream erosion.

Drain. Every section of the Township has some identified wetlands.

Collectively, wetlands cover about 4.5% of the Township's land area. All of the identified wetlands in the Township are Palustrine wetlands, which means they occur in basins, and are not usually influenced by flowing water. This type consists of a wet basin area filled with water or wetland vegetation, which could include woodlands (box elder, willow, red maple, and other water tolerant trees), scrub/shrubs, persistent and non-persistent hydrophytic plants (like cattails, sedges, rushes and reeds) and/or aquatic bed material.

These wetlands have a wide range of water levels and do not have to have surface water at any particular time to be classified as a wetland. Water levels may be seasonally variable or irregularly variable, depending on local precipitation or groundwater conditions. Emergent marsh wetlands account for the largest number of wetlands, while forested and scrub/shrub wetlands account for a smaller numerical share, but tend to be larger in area.



GROUNDWATER RECHARGE AREAS

The Washtenaw County Metropolitan Planning Commission, in its Fragile Lands Study (March, 1981), delineated the principal groundwater recharge areas in the County. The study defines a recharge area as an area with surface characteristics that are suitable for catching and holding precipitation and surface runoff, and with sub-surface characteristics that permit water to percolate readily into the aquifers.

Underground aquifers serve three major functions:

1. They are natural reservoirs of groundwater for human consumption and for irrigation.
2. They are natural filters for groundwater, but can be easily polluted by unsound land use practices in the recharge area.
3. They interconnect with surface water systems and help stabilize surface water levels. They help reduce high water levels during wet periods and add water to surface water bodies during dry periods.

Groundwater is water stored in, and slowly filtering through geologic formations.

An aquifer is a geological formation that contains sufficient ground water to supply wells, lakes, springs, streams and/or wetlands. Precipitation reaches an aquifer by downward percolation from the surface.

A groundwater recharge area is a land surface that readily permits water to move downward into an aquifer.

Groundwater recharge lands have limited filtering and purification capabilities. Therefore, low levels of contaminants over large areas as well as high concentrations of substances on small areas could be detrimental to groundwater quality. Because of rapid to moderately rapid permeability of the underlying geology, the designated recharge areas do not completely filter contaminants from the descending water. Recharge areas and their related aquifers are potentially subject to contamination from sources as diverse as agricultural activities, chemical spills, and sewage system malfunctions. The more rapid the percolation of water; the more susceptible the recharge area and aquifer are to pollution.

The County study divided the recharge areas into two (2) types, based on the area's susceptibility to pollution of the aquifer. Recharge areas were rated as:

- highly sensitive to pollution where permeability is rapid throughout the upper 50 feet; and
- moderately sensitive where the lower 25 feet is moderately rapid.

Three (3) highly sensitive groundwater recharge areas were delineated within Salem Township. One major area is north and south of Seven Mile Road, between Pontiac Trail and Tower Road. Other locations are within sections 26 and 34 of the Township.

Groundwater recharge areas that are moderately sensitive to pollution are located in nine areas of the Township. The largest area is in the vicinity of Curtis Road and Five Mile Road. Other areas exist in the northeast, northwest, and southeast portions of the Township.

Groundwater recharge areas are highly generalized and it must be emphasized that the boundaries are not precise. On-site evaluation and analysis should be undertaken to determine the extent and susceptibility of these designated areas.

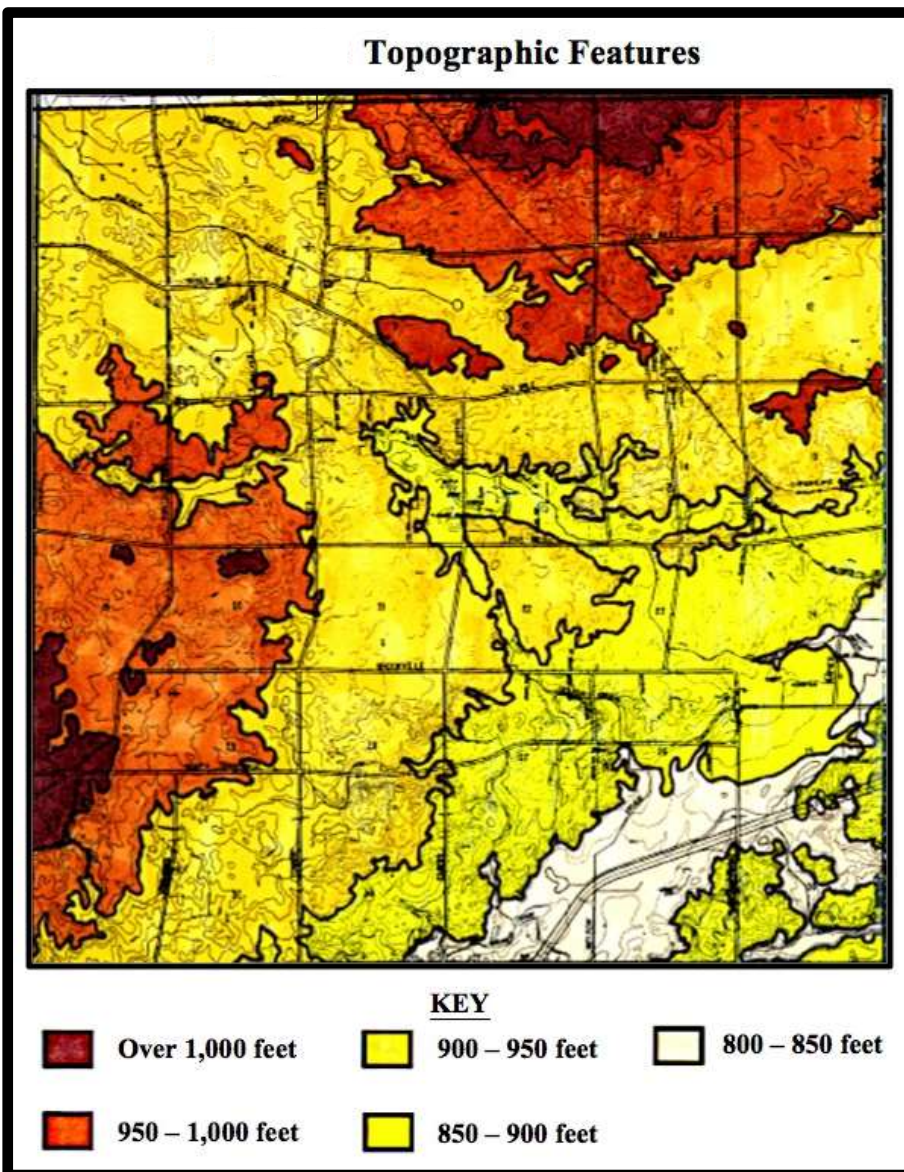
TOPOGRAPHY OF THE TOWNSHIP

Topography is usually referred to in terms of slope. The natural stability of a slope is dependent on the interaction of vegetation, climate, soil, and underlying geology. In general, the greater the slope; the greater the sensitivity to disturbance. Natural slopes that have not been disturbed by human activity are generally stable, at least in the short run. Improper development practices on sensitive slopes can cause significant economic and environmental consequences. Soil type, particle size, permeability, vegetative cover, organic matter, and moisture content will vary the rate of erosion on a particular slope. Slope of land is an integral part of the natural drainage system; it effects soil erosion, adds visual interest to the landscape, and helps make the landscape more attractive.

Within Salem Township, topography ranges from relatively flat areas to gently rolling areas. The highest land in the Township is in Sections 2 & 3 and 30 & 31. The elevation drops from over 1,000 feet to just over 800 feet south and east of these high elevations, as can be seen from Map 11. Slopes ranging from 6% to 12% are predominantly in the central parts of the Township,

with some additional areas in the northeast and southwest.

Steeper slopes ranging from 12% to 18% are only located in the southwest portion of the Township.



THREATENED SPECIES AND UNIQUE FEATURES

The Michigan Department of Natural Resources maintains a Natural Features Inventory of threatened and endangered species in the state. There is one known threatened species in the Township; and another in the area and possibly in the Township, which is certainly affected by the condition of natural resources in the Township. These are the Golden-seal (*Hydrastis canadensis*), a flower found in the southeast part of the Township in 1992; and the Redside Dace (*Clinostomus elongatus*), a small fish found downstream in the Johnson Drain. The Golden-seal is a perennial with a single stem up to 16 inches tall, with a single whitish flower. It is found most often in woods with a rich damp soil.

As noted by Burnside, Droppleman and Ferguson, "These species should be thought of as the only rare plants and animals in the Township identified so far, rather than the only rare or unusual species in the Township (since) there is no evidence that a formal survey has ever been conducted in the Township." Other species with a presence in the Township that have some potential for inclusion on a threatened or endangered list include certain varieties of orchids, American Bitter Sweet, and Michigan Holly.

Burnside, Droppleman and Ferguson also observed:

There is a high quality habitat located in section 16 near Curtis Road, and near one branch of the Johnson Drain (Weatherbee 1995). This area is a small moraine with an excellent Beech/Maple woods on it. This is reported to be an extremely high quality example of this habitat, which is quite rare in this area. Fortunately, the area is held in common as part of a nearby subdivision, and is being maintained and preserved at this time.

Several natural areas of the Township are noteworthy because they are a combination of forests, various wetland types, and river systems. The first of these areas is a large, diverse, and somewhat discontinuous natural area stretching northwest to southeast along the Walker Drain and Johnson Drain in sections 6, 7, 8, 9, 15, and 16. There is also a large wetland area in section 35. These areas may be of special concern both because of their size, and because they are a combination of different types of natural features. The large sizes of these areas provide improved habitat for wildlife requiring larger ranges, and provides a distinct interior of the habitat that is more protected than for smaller areas. Combinations of different natural areas usually support a wider array of biological diversity than individual components of similar size and conditions.

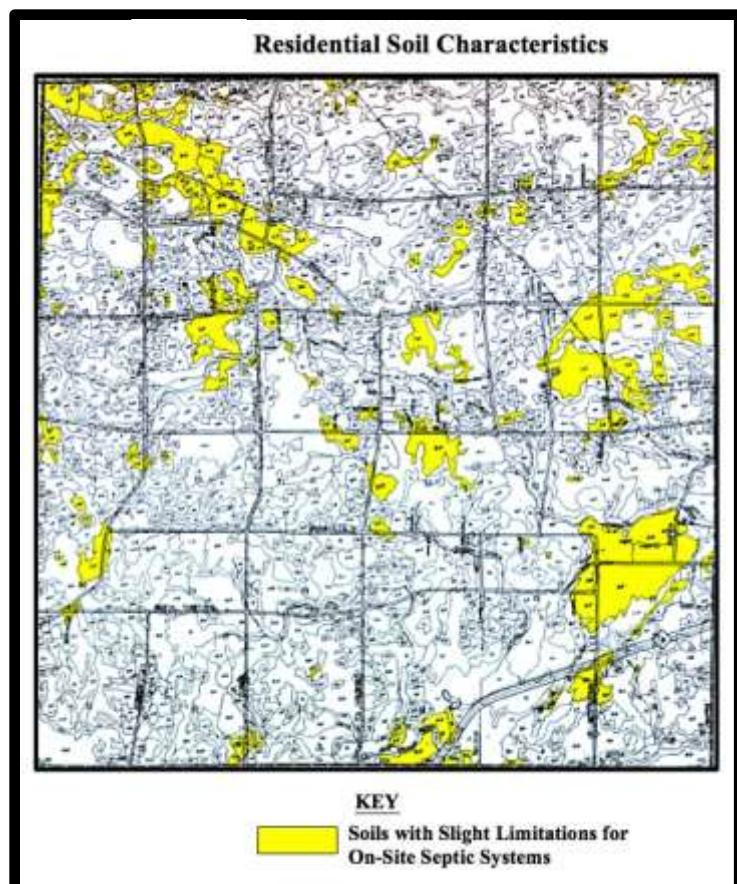
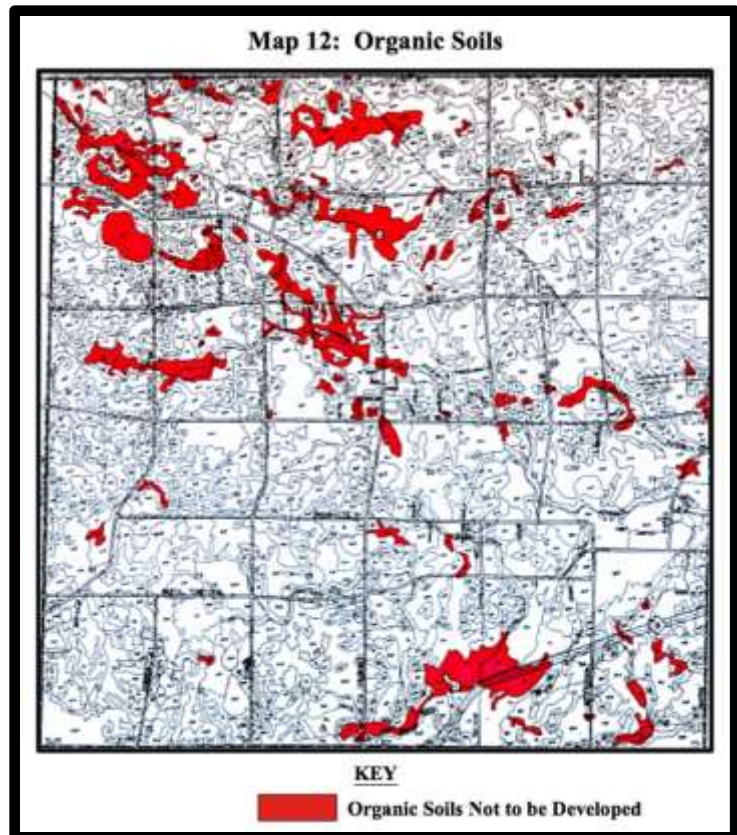
SOILS

One aspect of soil analysis regarding natural resources is to identify those soils that should be protected and not disturbed from an environmental standpoint. Soils of this nature are usually organic in character and classified as muck with high water tables. This analysis, based upon soil characteristics, taken generally at a four-foot soil depth, is to be used only as a guideline regarding possible development. It is understood that the unsuitability of a soil could relate to a slope factor as opposed to an organic or high water table condition. Wetlands and floodplains most often characterize these soils. Due to the sensitive nature of these soils, and the severe limitations they impose on potential development, they should not be subject to development or alteration.

As shown on Map 12, these soils predominate the northwestern and southeastern portions of the Township, and Houghton muck, Pella loam, and Pewamo loam soils underlie many of the remaining natural areas of the Township. Building on these soil types can pose serious development problems. According to the Soil Conservation Service (SCS), Houghton muck has severe limitations for building site development and septic system purposes. Houghton muck is also unsuitable for development because it has low strength and high moisture content, causing it to easily "pond" and subside under the weight of structures. This soil is also poorly suited for septic systems, because it percolates slowly. Pewamo and Pella loam soils are also severely limited with respect to construction and septic system operation. These soil types do not tend to subside, but structures built on them have a high probability of basement flooding.

"Overall, sites located on these soils are very poor choices for construction without fill. However, placing fill on a site creates its own problems for surrounding natural areas, and will do little to change the functioning of septic systems." [Burnside, Droppleman, Ferguson, U of M, May 1995].

Soils with high-water tables, high organic content or dense-like heavy clays pose severe limitations for the effective functioning of septic systems. Map 13 illustrates the limited portions of the Township where there are soils with slight limitations for on-site septic systems. The bulk of the Township has soils with moderate to severe limitations for on-site septic systems.



SUMMARY OF NATURAL RESOURCE-RELATED FINDINGS AND CONCLUSIONS

1. Significant natural features, including woodlands, wetlands, floodplains, topographic features, and waterways, exist in Salem Township, which contribute to a unique Township-wide character and wildlife habitat.
2. Large, mature forested areas exist in Salem Township that must remain undeveloped or, if development is to take place where these resources are located, must be incorporated into the overall development as open space preservation areas. These areas enhance the rural nature of the Township, contribute to a unique environmental character, and provide significant areas for wildlife habitats and timber production. Many of these areas are on hydric soils, which are not suited for development.
3. Numerous areas of organic soils are found within the Township. These soils are unsuitable for structures and must remain untouched and in their natural state to allow positive interaction with the water table and prevent health hazards or wet basements.
4. Wetlands are scattered throughout every section of the Township. Even though most are small, they must be protected due to their influence on water quality and the habitats they create for wildlife.
5. Groundwater recharge areas should be maintained in their natural state as much as possible. They are natural reservoirs for groundwater. Anything that could potentially pollute these areas must be avoided.
6. Drainage ways are common in the Township. They often link various types of natural resources such as wetlands, wooded areas, and organic soils. This encourages an overall, continuous open space system throughout the Township.
7. All streams and drains are part of the headwaters of the Huron River or Rouge River. Total impervious surface in every section of the Township should be kept below 10% to prevent any degradation in water quality or increase in flow rate, volume or temperature that could adversely affect downstream communities.
8. Threatened species habitat must be protected to the extent feasible wherever it occurs in the Township.
9. A detailed township-wide natural features inventory and classification should be considered. This could be linked to an analysis of the development potential of each parcel of land in the Township.

NATURAL RESOURCE POLICIES

To accomplish the natural resource-related goals as presented within this Master Plan, the following policies are set forth:

A. Woodlands

1. Development within woodland areas will be limited to reduce potential adverse impacts.

2. Needless destruction of trees and the conversion of woodlands to other uses shall be discouraged. Uses and development patterns that permit the land to remain forested shall be encouraged.
3. The design of cluster developments, where permitted by the Zoning Ordinance, shall be designed to minimize the impacts of residences, other buildings, and roads on woodlands, wetlands, streams, floodplains, and adjacent fields or pastureland.
4. Deed restrictions and conservation easements will be encouraged for permanent protection and expansion of woodlands.
5. Landmark trees of a specified diameter, outside contained woodland areas, will be protected.

B. Floodplains, Surface and Groundwater, and Wetlands

1. Development will be discouraged within the 100-year floodplain.
2. Surface water, stream corridors, and wetlands will be preserved in their natural condition.
3. Disruption of hydrology or alignment of waterways through alteration of topography or vegetation will be prohibited.
4. Any runoff of stormwater from development will be managed to retain the quantity and quality of water in existing surface water features.
5. Only land uses that limit the potential for groundwater contamination or harmful impact on the operation of the underground water system may be permitted on land identified as groundwater recharge areas. Secondary containment of hazardous substances and other appropriate best management practices shall be used anywhere hazardous substances are stored or regularly used in compliance with applicable regulations.
6. Surface vegetation will be protected over and adjacent to groundwater recharge areas and adjacent to streams and drains to purify or retain stormwater runoff.
7. A description of groundwater recharge areas, floodplains and wetlands and delineation of their borders will be necessary when site plan review is required.
8. Impervious surface shall be limited to preserve the quality, volume, flow rate and temperature of the headwater streams and drains in the Township.

C. Topography

1. Slopes of 12% or greater will be protected from erosion to maintain slope stability, control the amount and velocities of run-off, and to maintain existing positive aesthetic qualities.
2. Development on slopes of 12% or greater and in areas where soil conditions create serious erosion potential will be limited to low densities.

3. Development on slopes greater than 18% will be discouraged.
4. Slopes of 12% or greater shall be maintained with thick natural vegetation, except where an existing building, paved road or new stormwater management device is present.

D. Open Space and Environmental Conservation

1. Only land uses that minimize the potential for adverse impact from development in environmentally sensitive areas will be permitted.
2. Natural features, including wetlands, woodlands, hedgerows, and meadows that support a viable wildlife habitat within environmentally sensitive areas will be protected.
3. A continuous interconnected system of natural resources would allow improved utilization by Township property owners, better protect the overall natural systems for wildlife habitats, allow natural buffering between land uses, and maintain a rural visual character throughout the Township. Where natural features or environmentally sensitive areas occupy the same general area or are in close proximity to one another, they should be interconnected.
4. Natural resources must be preserved as physical buffers and visual enhancements in areas where development is designated to take place.
5. The use of planned unit developments (PUD) and other forms of cluster development and open space preservation will be recommended or required where the subject land contains important natural resources or environmentally sensitive areas.

E. Open Space and Development Utilization

1. Potential areas suitable for year-round public recreation-oriented uses should be identified and protected.
2. Promote the use of open space within areas with potential urban densities for the development of recreation facilities close to the people who may use them.
3. Encourage continuous open-space systems, centered around natural features, to enhance existing concentrations of development; in particular within the Salem Hamlet area and surrounding clusters of residential development.
4. Support the use of natural features (trees, wetlands, drainageways, etc.) as buffers to reduce noise, visual blight, and other land use conflicts.
5. Encourage the incorporation of appropriate governmental holdings into open space systems. Strategic properties should be identified and dedicated for open space or recreational use.
6. The provision of private open space in new developments shall be encouraged.
7. Development of pedestrian, bicycle, and equestrian trails should be coordinated

with environmental conservation areas.

8. Landscaping will be required along Township roads for all new development.
9. Streetscapes along special corridors (i.e., roadways with a recognized scenic or historic character) shall be protected and enhanced as new development occurs.
10. At least 50% of a planned unit development or cluster development should be set aside as permanently protected open space.
11. Open space in a planned unit development or cluster development may include woodlands, wetlands, streams, creeks, drains, ponds, pastureland or other farmland, as well as any approved recreation areas.
12. Density in a planned unit development or cluster development shall be calculated over the developable portion of the site and not averaged over the entire parcel to establish permitted density, except as the Zoning Ordinance otherwise allows.

NATURAL RESOURCE STRATEGIES

To assist in the implementation of the natural resource-related policies of this Master Plan, the following additional strategies are set forth:

1. Consider a comprehensive inventory of natural features within the Township, including an assessment of the development potential of each parcel of land.
2. Review and revise the Zoning Ordinance as necessary to permit and encourage alternative development designs that maximize open space (planned unit development, cluster housing, buffer and landscape strips).
3. Review and revise the Zoning Ordinance to require that a set percentage of the lot area of office, commercial, and industrial lots be maintained as “interior landscaping” (such as court yards) in addition to existing landscaping and transition strip requirements.
4. Revise the Zoning Ordinance to include more comprehensive performance criteria regarding topographical disturbance, bio-chemical pollution, stream channel alteration, and loss of vegetative buffers.
5. Adopt ordinance requirements to protect and/or enhance surface water features, wetlands, and woodlands. Place special emphasis on those features such as wetlands that provide flood control and viable wildlife habitat.
6. Update and enhance the woodland protection requirements in the Zoning Ordinance.
7. Create a water recharge area protection ordinance.
8. Use to the fullest extent possible the site plan review process outlined in the Zoning Ordinance to protect woodlands, wetlands, and other valuable natural features on land subject to development.
9. The Township should acquire properties that are of limited development potential (wetlands, floodplains, etc.), but that would serve to protect and enhance a network of interconnected open space areas throughout the Township.

10. Maximum retention and dedication of open space must be considered during site plan review of development projects.
11. Implement the policies of the Township’s adopted Parks, Recreation, and Open Space Plan.
12. Encourage participation in local, county, and state purchase of development rights programs and the use of private conservation easements and local land trusts to preserve rural open space, natural resources, and environmentally sensitive areas.
13. Work with the state legislature to remove incentives to convert environmentally sensitive lands to other uses (i.e. taxation based on development potential, rather than existing use).
14. Establish Zoning Ordinance standards to ensure impervious surfaces do not result in the degradation of the streams and drains of the Township and downstream communities. These standards may take the form of performance standards to minimize stormwater flow and maximize pollutant removal, or be structured similar to lot coverage requirements.

PART 6

PLAN FOR AGRICULTURE

INTRODUCTION

Agricultural land is a major land use in Salem Township and represents an important part of the township's economy and culture. Agricultural land represents roughly 15% of the land use in the Township. Preservation of productive agricultural land is a major land use issue in the United States. Various departments of the national, state, and local governments, research groups and professional organizations have studied this issue. Agricultural land is relatively fixed in supply, and once used for development or non-agricultural purposes it cannot be easily reclaimed for agricultural use. There is a strong connection in the Salem Township to agricultural activities including crop production, animal husbandry, and equestrian-related activities. Residents continue recognize these to be an important part character of the Township.

AGRICULTURAL GOALS

This Plan for Agriculture is intended to link the Township's overall goals with specific land use policy recommendations for the long-term future of a healthy rural economy based upon provisions for a full-range of agricultural land uses in the Township. In recognition of the importance of the sustenance and economic benefits provided by the agricultural industry to the residents of Salem Township, the primary goals of this element of the Master Plan are to:

- A. Promote the retention, stability, conservation and growth of local agricultural activities; and
- B. Encourage long-term agricultural use and preservation of prime agricultural lands.
- C. Support a healthy agricultural economy in the Township.

AGRICULTURE AND THE RURAL ECONOMY

Retention of agriculture and the large open spaces that are typical of agriculture land use are extremely important to Township residents. There is a desire to allow farmers to farm as long as they want to, to promote and encourage a strong agricultural economy in the Township, and to preserve agricultural land and open space areas of the Township where possible through conservation easements, purchase of development rights, and other available land preservation tools.

The Planning Commission recognizes that the predominant character of local agriculture in the Township and surrounding area has evolved over the past fifty years from a predominantly commodity-based farming model to include more:

- specialty and hobby farming, and equestrian-oriented land uses;
- smaller-scale farming and greenhouse operations; and
- “value added” agricultural activities such as corn mazes, “U-pick” operations, roadside stands, and local farm markets.

This trend is a positive one for Township residents who wish to have greater access and choice in locally produced agricultural products.

The development of new suburban housing can present challenges to local agricultural land uses due to incompatibilities that arise from locating suburban housing close to active agriculture. Challenges can include:

- Increase potential for adverse off-site impacts (and resulting complaints) due to noise, odor, and dust;
- Increase potential for road conditions and traffic conflicts which can inhibit the ability of farmers to easily transport farm equipment to non-contiguous parcels;
- Increase costs for the farmer, including increased cost to rent land and increased risk of crop damage or loss; and
- The direct loss of farmland for residential development.

Incremental loss of farmland can have a compounding effect as more non-farm housing is developed. Investment in local farm equipment and supplies will decrease, resulting in a corresponding loss of the local support services farmers need to support the agricultural economy, such as farm markets, implement dealers and repair shops, large animal veterinarians, feed and grain mills, etc. Without such support services in close proximity, commercial or commodity farming can become unsustainable.

AGRICULTURAL PRESERVATION AREAS

Consistent with the agricultural goals of this Master Plan, the target preservation areas map in part 12 of this plan indicates areas that should be conserved. Those that are already in agricultural use are primary targets for agricultural preservation.

Substantial portions of these areas contain prime agricultural soils, according to the USDA - NRCS Washtenaw County Soil Survey. Within these designated areas are large tracts that continue to be used or are suitable for long-term agricultural uses. A number of parcels within these areas have also been protected from further land division or non-agricultural development through conservation easements or participation in the State of Michigan's PA 116 Farmland and Open Space Preservation Program.

The areas designated on the Target Preservation Map also serve as an overlay to The Future Land Use Map where Agricultural/Residential lands are depicted.

To further protect agricultural activities in the Township, the M-14/Gotfredson Road Urban Service District has been identified in Part 11 of the Master Plan as the appropriate location for more intensive development. This Urban Service District is designed to provide an urban infrastructure to accommodate higher density residential and non-residential development, while minimizing hazards for the Township's environment and adverse impacts on agricultural land uses within the Township that are located outside of this designated Urban Service District.

GROWTH OF SMALL SCALE FARMING OPERATIONS

Technological advances and trends in agricultural land and equipment costs in recent years have increased interest in smaller parcels of land (less than 20 acres), especially for young, entry-level farmers. For example: Hydroponic tomatoes, lettuce, peppers, and other farm products can be produced in good quantity in greenhouses or hoop houses; and a new farmer can potentially establish new niche farms on less acreage of land due to increased outlets for locally grown food including farms markets, restaurants and grocery stores that focus on locally sourced food, and even school lunch programs or other local institutions. The State of Michigan's Generally Accepted Agricultural Management Practices (GAAMPs) have also evolved in recent years to recognize and support a variety of agricultural operations and activities on relatively small parcels of land.

This trend represents a significant expansion of the potential for agriculture in Salem Township, which had been viewed in previous Township planning documents as a gradually disappearing land use. It is anticipated that future growth in Township agricultural activity will come primarily from an increase in the number of smaller-scale farming or greenhouse operations in the Township.

AGRICULTURAL TOURISM ACTIVITIES

Successful agricultural operations tend to have access to multiple income streams. Agricultural-related tourism, or "agritourism," has developed in recent decades into a profitable option for a growing number of farmers in Michigan.

Examples of agritourism activities include, corn mazes, petting zoos, farm-based bed & breakfast inns, wineries, "wedding barns," cider mills, and wagon rides. Other potential activities include outdoor recreation (fishing, hunting, wildlife study or horseback riding), farm-based educational experiences (cannery tours, cooking classes or agricultural heritage events), entertainment (harvest festivals or barn dances), and on-farm direct sales ("U-pick" farms, farmer's markets or roadside stands).

Agritourism: A commercial enterprise at a working farm or other agricultural operation conducted for the enjoyment of visitors, and which generates supplemental income for the owner.

A range of agritourism activities should be allowed in association with Township farming operations, subject to established Township ordinance standards and limitations designed to minimize potential noise and other impacts on the rural areas of the Township.

AGRICULTURAL STRATEGIES

The following list of strategies have been developed to help realize the goals as presented within this Master Plan for the preservation of agricultural activities in Salem Township:

A. Update Development Standards.

- (1) Ensure that more intensive development is directed into the designated Urban Service Districts and not within areas of the Township designated for agricultural use.
- (2) Encourage land developers to utilize the clustering of rural residential housing in the AR District, subject to the following guidelines:
 - No increase in the overall residential density allowed in the AR District;
 - Residential housing sites should be located so as not to interfere with continued farming operations.
 - To preserve the visual character of rural roadways and minimize non-farm residential impacts on farming activities, a landscape or natural features buffer should be established or enhanced between non-farm housing sites and abutting agricultural operations and public road rights-of-way.
 - Permit only agricultural or open space use of the acreage outside of the residential cluster through zoning and deed restrictions.
- (3) Prohibit the extension of public sanitary sewer or water service into areas planned for rural residential and agricultural land uses or located within the AR District.
- (4) Amend the Township Zoning Ordinance and other Township ordinances as needed to implement the policies of this plan.

B. Promote Agricultural Land Use and Open Space Preservation.

- (1) Support landowners who choose to participate in the:
 - State of Michigan's PA 116 Farmland and Open Space Preservation Program;
 - The donation of conservation easements and development rights to local land conservancies;
 - The purchase of development rights (PDR) programs to permit farmers to realize income from the development rights of portions or all of their farmland land while retaining agricultural or open space values; or
 - The transfer of development rights (TDR) program, such as the Township's Planned Unit Development (PUD) Special District provisions for off-site open space preservation, to permit farmers to realize income from the development rights of portions or all of their farmland land while retaining agricultural or open space values.
- (2) Promote land ownership by farmers or entities committed to long-term agricultural use of the land.

- (3) Encourage farmers to make long-term improvements that will enhance the agricultural productivity of their land.
- (4) Promote the continuing development of equine-related rural land uses in the Township.
- (5) Work with county and state agencies to adopt rules, legislation, and/or guidelines that support long term agricultural preservation, including but not limited to:
 - use value assessment;
 - expanded options for purchase/transfer of development rights; and
 - authority to create agricultural security districts.
- (6) Allow large-scale commercial agricultural operations located outside of the designed Agricultural Preservation Areas to continue.

C. Rural Economic Development Strategies.

- (1) Maintain the option for farmers to diversify their sources of income through farm-based tourism/entertainment activities permitted by the Zoning Ordinance, such as corn mazes, “U-pick” operations, direct marketing of farm products to restaurants and local stores, roadside stands, local farm markets, and farm-based bed and breakfast inns.
- (2) Support efforts of area chambers of commerce, county economic development agencies, MSU-Extension offices or other agencies with jurisdiction to identify existing businesses that support and sustain local agriculture, and to develop a retention program to support such businesses.
- (3) Through zoning allow for the location and growth of businesses that provide agricultural support services, such as bulk feed and seed, large animal veterinary care, and related services at appropriate locations in the Township.
- (4) Support Township’s representatives in Lansing who encourage the State of Michigan to treat agriculture as a target industry for economic and job development; to develop new agricultural markets; to encourage food processing businesses in the state; and to upgrade railroad and port facilities to increase the ability to handle farm products.

D. Other Agricultural Planning Strategies.

- (1) Work with the county Road Commission to maintain a road system that allows for safe and convenient movement of farm equipment between noncontiguous farm parcels.
- (2) In consideration of the significant potential for noise, odor, and other adverse impacts, development of farm-based ethanol production facilities authorized by Section 3513 of the Michigan Zoning Enabling Act (Public Act 110 of 2006, as amended) shall be discouraged in Salem Township.

- (3) The Township should support organizations such as Washtenaw County 4-H, MSU-Extension who:
- encourage the creation of a farm incubator program or other cooperative effort to help young farmers get started in agriculture; and/or
 - encourage seasoned farming experts in the Township to become mentors to young men and women interested in agriculture.
 - educate landowners of smaller parcels in the AR District on ways to succeed in agricultural production and specialty farming on smaller parcels.

PART 7

RESIDENTIAL LAND USE

INTRODUCTION

The attractiveness of Salem Township for single family development is quite apparent based on the number of single family dwellings found throughout the Township. Concentrations of single family dwellings exist along major highways passing through the Township or in close proximity to these roads via collector streets from rural subdivisions. This scattering of residential dwellings has infringed into agricultural areas and in many cases contributed to the loss of agricultural land within the Township.

The current popularity of a rural lifestyle will continue to contribute to additional dwellings being constructed within the Township. Also the Township's physical amenities (woodlands, wetlands, rolling topography, agricultural character, etc.) will attract additional residential development. Further, the Township's proximity to regional transportation networks makes it a highly attractive place to meet the location needs of those seeking a rural environment close to urban centers.

Residential objectives, policies, and strategies are directed toward concentrating rural residences into certain areas of the Township. This would contribute to the preservation of remaining agricultural activities by reducing potential conflicts between agricultural and residential uses. The Master Plan strives to provide a variety of housing types, located within desirable residential settings, to ensure a wide choice of dwelling units and a mix of densities within the Township resulting in a diverse population within the Township. Lowest densities are designated for lands with high water tables, soils with limitations for septic systems, lands with significant natural features, and lands abutting the larger agricultural areas. This will minimize public health problems from poorly functioning septic systems, preserve important natural features and minimize negative impacts on abutting farmland. At the same time, higher densities are proposed where soils are better suited for septic systems and fewer farms and natural features are nearby. The highest densities are preserved for residential development with public sewers when they are available. Much of the land in the Urban Service District could only be developed at a density higher than one (1) dwelling unit per two acres if public sewer is not available because of extensive soils with limitations for septic.

More than twice as much land as is projected to be needed is designated for additional rural and urban residential acreage. This policy provides a margin for error in the projections, for unavailability of specific parcels of land at a particular time in the development process, and for variety in choice of location. When approximately 25 percent of the designated additional residential acreage is utilized or committed to use in the form of plat or site plan approvals, the designated area will be reevaluated and the residential area expanded accordingly, if necessary. This policy refers to all urban residential growth, and rural residential growth in concentrated developments, such as subdivisions (see definitions of these terms in the Definitions section of this Plan). The policy does not include scattered, rural non-farm or farm housing in the AR District.

RURAL RESIDENTIAL – GENERAL GUIDELINES

This designation is a primarily rural residential area with certain agricultural activities permitted. Portions of this area are currently developed as single family residential generally at a density of one dwelling unit per two acres. Three categories of rural residential use exist within the area designated as such on the Future Land Use Map. These are described as follows:

1. Rural housing with a minimum lot area requirement of one acre, typically subdivided and platted or in a cluster development (where lot area may be less than one acre in some circumstances). It should be used where natural features preservation is not a primary concern but where rural residential is the intended future land use and paved roads provide service to the development.
2. Rural housing with a minimum lot area requirement of two acres. This type of housing should be used in those areas in which rural housing is a desired use but some farmland and/or natural features exist, such as wooded areas, wetlands or steep slopes. Such features could be damaged or destroyed by rural residential development at densities of greater than one dwelling unit per two acres.
3. Rural housing with a minimum lot area requirement of five acres as designated in the Estate Residential zoning district. This category should be used in areas where natural features are pervasive and the principal objective is to preserve such features.
4. Provision for housing at a density greater than one dwelling unit per acre, including single- family, multi-family modular housing, and manufactured housing in platted subdivisions, planned community developments, planned manufactured housing communities, site condominiums, or traditional neighborhood developments, and having public sewer service, paved roads with curbs and gutters, and street lights shall be located within two primary areas of the Township as provided within the Master Plan. The Salem Hamlet contains a public sewer service area where these types of residential can be accommodated. The second area is the designated Urban Service District centering around the Gotfredson/M-14 interchange as designated within the Master Plan. Both of these areas are designated for such density in the Zoning Ordinance because of the availability of, or long-term potential for, public sewer, water and paved roads, as has been provided in the Master Plan. An existing area that is not intended to expand is the 784-unit mobile home park established in 1997 in section s 3 & 4.
5. Developers of parcels over 20 acres but under 40 acres in size, proposed for conventional subdivision designs shall be required in the Zoning Ordinance to submit plans for both conventional and cluster design with discretion on the design selected left up to the Planning Commission and Township Board. Developers of parcels over 40 acres in size shall submit a cluster design, which conforms to Zoning Ordinance requirements. All cluster designs shall have at least fifty (50%) percent open space.

In order to emphasize the rural character of this area and to permit property owners to utilize the allotted residential density, clustering of dwelling units as part of site condominiums and subdivisions on small parcels will be encouraged. The remaining land in the total parcel would

be held in common ownership; it could remain as open space or be used for agricultural purposes. Clustering of rural residences will be permitted in accordance with the following:

- a. Each residence shall be a single-family detached dwelling unit.
- b. The minimum lot area may be no less than ½ acre or the minimum necessary to obtain County Health Department approval of a water supply well and septic drain field.
- c. Each lot for each dwelling unit should have at least one lot line that abuts the commonly owned open space or agricultural land.
- d. PUD zoning will be required.

Provision of public sanitary sewer services in this area would be incompatible with the low density of development and the intended character of the area. Therefore these services will not be extended into the designated rural area. Presently community septic systems are not allowed within Salem Township. Any future consideration of this type of septic system would only be considered within these areas upon adoption by Salem Township of a specific regulatory ordinance. Adoption of such a regulatory ordinance would only be allowed to promote clustering of residential dwellings resulting in the preservation of natural resources and open space.

Existing natural features in this area, such as fencerows, wetlands, woodlands, and stream corridors shall be preserved. They are essential components of the rural environment and should not be modified or removed for the purpose of either residential construction or conversion of land to agricultural use. The low density of development and clustering of dwelling units will permit natural features to be saved.

URBAN RESIDENTIAL – GENERAL GUIDELINES

This area would allow single-family dwellings on moderately small-sized lots creating a predominately suburban character in those areas which are served by a public sanitary sewer system. This type of residential is for both the Salem Hamlet area and the Urban Service district. Specific designations are planned within the Urban Service District. (See Urban Service District.) The general characteristics of this residential type and the general guidelines that apply to this area include the following:

1. The principal use is intended to be single-family detached dwelling units at a density of one to four units per acre.
2. The urban residential area is intended to be served by public sanitary sewer service. Public sewer service is currently provided within the Salem Hamlet. Both sewer and water service will be provided within the designated Urban Service District centered around the interchange of Gotfredson/M-14. Private wastewater treatment plants or common water supply wells will not be permitted in this area.
3. Because of the relatively small size of urban residential lots, agricultural activities are incompatible with residences on the same lots. Therefore such activities, including the

raising of animals other than common domestic pets, should not be permitted in the urban residential area. However, raising of crops and continuation of existing agricultural operations should be permitted as interim uses pending development of those properties for residential use.

URBAN RESIDENTIAL – GENERAL GUIDELINES

The low-density urban residential area is located in the Township's Urban Service District where the primary type of dwelling unit would be single-family attached, although single family detached might be permitted as part of a PUD type development. Public sanitary sewer and water supply services are required in this area.

The high density urban residential area is intended for single-family attached dwelling units, townhouse dwelling units, dwelling units in apartment type buildings, and dwelling units in mobile home parks at a maximum density of six dwelling units per acre.

RESIDENTIAL OBJECTIVES

- A. Provide housing in a range of densities, locations and types consistent with the natural resource, open space, land use, and infrastructure policies of this Plan.
- B. Ensure adequate infrastructure is available to service the needs of new residential development before or concurrent therewith, especially in higher density areas.
- C. Ensure new residential development will be compatible in density and character with residences and neighborhoods in the immediate area.
- D. Encourage new residential development to be organized around focal points, such as natural features or open space, which help convey a sense of identity that is consistent with the character of the Township.

RESIDENTIAL POLICIES

- A. Residential development will be evaluated as it relates to land capacity to determine the appropriate density of development. The density will be established at a level that will neither damage environmental features nor intrude upon agricultural lands. Density requiring individual on-site septic and well systems shall be fundamentally based on the natural capability of the land to safely process wastes through septic systems while ensuring a potable water supply. Within the Salem Hamlet and the Urban Service District, urban infrastructures will allow a more intense residential density based upon zoning district designations.
- B. Residential development will be considered for portions of the site most suited to development in order to preserve natural features.
- C. Encouragement will be given only to residential developments that create strong,

cohesive neighborhoods and contribute to a positive community identity.

- D. Encourage rural residential uses to locate only on soils which can permanently support on-site utilities and not intrude onto stable agricultural areas.
- E. Encourage rural residential uses to locate according to clustering concepts in order to better provide necessary rural services while minimizing conflicts with agricultural activities.
- F. Encouragement will be given to planned community developments and residential subdivisions of an adequate land module size which adhere to the neighborhood concept and create attractive and stable neighborhoods, especially in urban service areas.
- G. Encourage innovative housing design which increases open space opportunities and decreases negative impacts of development on the visual and natural environment.
- H. A variety of dwelling unit types, in terms of sizes, costs, and architectural styles, will be encouraged to ensure a choice of dwelling units and a mix of population in the Township. A mixture of dwelling unit types should be provided in larger development projects to create a varied appearance and neighborhood character. Mixing of dwelling unit types is not expected in small residential projects.
- I. Residential areas are designated in terms of density, rather than building type. This approach will permit decisions as to the type of dwelling units to be constructed to be made closer to the time of development, when the market is more clear, and to accommodate new housing types or variations in current types. However, density categories are defined in terms of dwelling unit types as illustrations of the meaning of the various density categories.
- J. The designated future residential acreage might include land, which should be retained as open space. In such cases, the number of dwelling units which would have been permitted in the open space areas may be transferred to other areas suitable for development within the same parcel of land in order to preserve the open space, provided standards for density transfer are met. Transfer of density could result in a concentration of dwelling units which would require housing types different from those suggested by the overall density designation. This is acceptable so long as open space is preserved and the overall designated density limit is not exceeded. The Planned Unit Development form of zoning district will be utilized to permit such concentration of dwelling units.
- K. The following should not be included in the total acreage used in estimating the number of dwelling units, which the Growth Management Plan intends for a particular areas.
 - 1. Existing rights-of-way and dedicated easements.
 - 2. Rights-of-way or easements of proposed local and collector streets.
- L. New residential development should be of such density and character so as to be compatible with existing residences in the immediate area. Existing sound and stable

residential areas should be protected. Where a change in density and/or land use is proposed in or adjacent to an established residential area, the change should be timed so that stability and residential character can be retained for the longest reasonable time period.

- M. A high quality of site and architectural design should be encouraged in every residential development to create residential areas of lasting value and stability.
- N. Residential developments should be organized away from major streets, with no direct dwelling unit access to such streets.
- O. Encouragement should be given for new residential areas to be inter-connected in terms of vehicular and pedestrian/bicycle circulation with each other and with existing residential areas, where such interconnection will not adversely affect existing neighborhoods. This policy is intended to create an integrated community especially in areas with existing or planned urban services. Future street and sidewalks/bicycle path connections should be provided as appropriate to assure such integration.
- P. Natural features should be preserved as open space to the maximum feasible extent. Residential developments should be organized around such features, where feasible.

RESIDENTIAL STRATEGIES

- A. Review and where appropriate, revise zoning techniques that reflect the ability of the land to support residential development without damaging natural features.
- B. Encourage the use of planned unit development and cluster zoning, where appropriate to the character of the area, to protect natural features and provide neighborhood recreational facilities and/or common open space.
- C. Consider innovative housing designs and zoning techniques such as clustering, single-family attached, zero lot line, and semi-detached housing units, where appropriate to the character of the area, to protect natural features and provide neighborhood recreational facilities.
- D. Amend the Township Zoning Ordinance to incorporate the residential policies of this Plan.
- E. Initiate a Utility Feasibility Study and depending on the results, a Capital Improvement Program as the basis for establishing a different density.

PART 8 COMMERCIAL LAND USE

INTRODUCTION

Historically two types of commercial activities have existed within the Township. The first form is the small hamlet type, generally originating around the needs of early settlers coming into a certain area. Sometimes the focal point for settlement is a waterway or regional access point. In many instances these early settlements, based upon the importance of their location, continued to expand and became regional commercial centers. Others remained small with few commercial and residential dwellings and were generally surrounded by predominately rural agricultural areas. The Hamlet of Salem has historical significance, however it did not continue to grow but remained small over the years.

The second type of commercial activity that developed within the Township was oriented towards transportation networks and intersections, primarily along Pontiac Trail and North Territorial Road. The small rural stores at some intersections have long since disappeared, however some of the buildings remain, but have been converted to other uses. Presently, major commercial centers in adjacent communities provide the primary commercial services to Salem Township residents.

Currently there are five areas of the Township serving limited commercial needs of the Township's residents:

1. Intersection of Pontiac Trail and Seven Mile Road.
2. Intersection of Pontiac Trail and North Territorial Road.
3. Seven Mile Road, west of Chubb Road.
4. Salem Hamlet Area.
5. South of North Territorial at the intersection with Gotfredson Road, extending south toward the interchange with M-14. (Urban Service District)

These centers provide for the day-to-day limited convenience needs of residents through small commercial areas located where commercial establishments have met these needs for decades. Not to provide for the broader shopping needs of residents because of the ample opportunities to meet those needs within a few miles of the Township borders and the inducement to replicate existing facilities such a policy would foment.

NEIGHBORHOOD COMMERCIAL

The first three existing commercial areas listed above are limited and designed to serve the day-to-day convenience needs of a localized market, generally consisting of the surrounding neighborhoods. These commercial areas are planned to continue. New neighborhood or local

commercial areas, beyond those discussed herein, should not take place within the Township. Commercial development within the Salem Hamlet will be made within the parameters defined by the Salem Hamlet Special Use Area. It is anticipated that additional neighborhood commercial type land uses could take place within the Salem Hamlet area, but of a small scale, unique to a community locality. Development within Salem should enhance the pedestrian environment and incorporate, where feasible, residential uses with new commercial development.

GENERAL COMMERCIAL

The principal general commercial center in Salem Township is designated for the North Territorial Road/Gotfredson Road/M-14 area, within the designated Urban Service District. This area is intended to have general commercial and office uses to serve Salem Township as well as out of Township users coming from the transportation systems. Any development within this area will be designed to establish an attractive entrance to the Township, to facilitate pedestrian and bicycle access, and to minimize adverse impacts on adjacent residential areas. This area is dealt with in more detail in the Special Use Areas section of this Plan.

Other than the North Territorial Road/Gotfredson Road/M-14 Urban Service District, it is not appropriate that additional general commercial development take place within the Township. Existing major commercial centers in adjacent communities provide the primary commercial services to Township residents. It is not likely that additional general commercial development within the Township could challenge the market dominance of existing adjacent commercial developments, nor is it sound regional planning policy to encourage duplication of services which can result in vacant commercial space as well as unnecessary expansion of expensive infrastructure.

Locations for any additional or other commercial land uses should be provided only when and if existing or planned commercial developments, including those in adjacent communities, no longer adequately serve the needs of Township residents.

COMMERCIAL OBJECTIVES

Future commercial uses will continue to be concentrated within and adjacent to the above-designated commercial centers. Specific commercial concentration; however will be focused within the designated Urban Service District, centering around the Gotfredson/M-14 interchange, where urban services will be available. It is designed to serve the demonstrated needs of Township residents and regional needs that depend on a freeway interchange and require visibility as can be provided from M-14. Land uses within this area will be designed to accommodate urban residential, commercial, office, and research/technology land use while not creating hazards for the Township's environment nor creating adverse impacts on existing or proposed residential or agricultural uses nearby.

The intent of focusing more intensive development around the Gotfredson/M-14 interchange and within the designated Urban Service District is to permit commercial diversification, while meeting the needs of travelers, once the demand exists for such uses and public sewer and water are available to accommodate more intensive uses. Salem Township's policy is to direct this type of growth to this defined area where there has also been precedent for commercial and

research/technology land use to take place and the influence of the Gotfredson/M-14 interchange. The regional transportation networks will be the central focal point for this area and serve as an attractor for additional development. Physical limits of potential development shall be defined by the Urban Service District boundary centering upon transportation systems and physical buffers, present within and around this designated area. The land uses proposed within this area will be designed to create an attractive entrance to the Township from Gotfredson Road.

By planning a logical area in which to concentrate potential intensive, largely non-residential development, Salem Township seeks to restrict unwanted non-residential development from other areas of the Township in order to preserve the established character of the Township. By permitting more intensive use in a concentrated area, when public sewer and water are available, it also significantly enhances the economic feasibility of providing public sewer and water service to the area.

Existing land uses would be allowed to remain and would be buffered from potential new developments using existing woodlands and other natural features. New development not dependent on public sewers would be permitted if the use met zoning standards and County Health Department approval for an on-site septic system. When public sewer and water are available to the area, all uses would be required to tap in, as provided by law.

The following specific objectives will be required with any new commercial development within the Township

- A. Commercial uses will be confined to designated areas as depicted within this Master Plan. Piecemeal, scattered and uncoordinated commercial strip development, without controlled vehicular and pedestrian access points, and consolidated parking, emphasizing controlled access and parking configurations shall be avoided and shall be prohibited.
- B. Development of uncoordinated commercial establishments lining Township roads or outside of areas presently indicated for commercial use in this Plan and zoned for such uses shall also be prohibited.
- C. Where individual parcels of land are to be developed for commercial uses, coordination with adjacent properties, including common parking and driveways, shall be encouraged in order to reduce the number of access points to public roads.
- D. Most commercial development will be in shopping center configurations. However the designated Urban Service District can have individual commercial parcels that could be developed independently of adjacent parcels. In this situation vehicular and pedestrian interconnections will be required in new developments to permit travel between adjacent parcels, where such movement is considered appropriate. Driveways should be combined and existing extra drive- ways eliminated, where feasible, to reduce the number of turning locations on access streets.
- E. The largest part of any commercial development, whether individual lots or a shopping center, is the parking lot. While adequate parking is essential to the viability of a commercial business and convenience of its customers, large pavement areas have adverse impacts, such as heat and glare, high rates and volumes of surface water runoff,

transmission of pollutants from the surface of the parking lot directly to surface waters, and general unsightliness. Parking areas should be reduced to the minimum necessary to serve commercial establishments. Excess spaces should be held in landscape reserves, to be constructed only if experience on the site shows they are needed. Parking spaces in parking lots of larger commercial centers that are intended to be used for employee parking, or overflow parking during the one or two peak business periods of the year, should be reduced in size to reduce pavement area and to increase landscape area. These reductions in the size and number of spaces should not be used as an opportunity for increasing building area on a site; the purpose of these reductions is strictly to reduce pavement area and to increase landscape area.

- F. Commercial sites shall be landscaped. Parking lots especially shall be landscaped, both along the perimeter and in the interior to reduce the adverse effects of paved areas. Loading areas and the rear parts of commercial sites should be screened from view from streets and neighboring residential properties.
- G. Designated commercial areas abut residential areas in certain situations in Salem Township. In these situations the commercial areas shall provide landscaped transition zones that will create visual and sound barriers for protection of the residential areas.
- H. Local and general commercial developments shall be accessible by sidewalk and pedestrian/ bicycle paths. The interior of shopping centers and larger commercial sites shall be attractive and convenient for pedestrian movement, both between the parking lots and stores, and between stores, sidewalks along abutting streets, and adjacent properties, where appropriate.
- I. Outside lighting of commercial developments shall be designed to create a balance between efficiency and safety for commercial properties and customers on the one hand, and to reduce light pollution, as represented in the Township's dark skies policy, in the general neighborhood on the other.
- J. Commercial uses should be located only in established sanitary sewer and water service areas. The effluent from commercial operations should be discharged only into a public waste water treatment system where proper treatment is certain; it should not be discharged into septic tanks and drain fields where no monitoring or control is possible. No commercial areas are designated outside the service area in the Master Plan.

New neighborhood or local commercial areas, beyond those discussed herein, should not take place within the Township. It is anticipated that existing major commercial centers in adjacent communities will provide the primary commercial services to Township residents. It is not likely that additional commercial development within the Township could challenge the market dominance of existing adjacent commercial developments, nor is it sound regional planning policy to encourage duplication of services which can result in vacant commercial space as well as unnecessary expansion of expensive infrastructure. Any new commercial development, however, will be encouraged to locate in shopping center configurations. New commercial development on individual lots will be limited to existing lots of record that are located in designated commercial areas either as new development, fillin, or redevelopment of existing sites.

Commercial uses can also be located in mixed-use areas that have technology and office uses, such as business parks. Commercial uses will be considered as secondary to designated permitted uses, both in terms of number of establishments and percentages of total floor area. Therefore mixed-use areas are considered to be more industrial/technology or office in character than commercial. Commercial uses may be allowed in such areas, especially business/ technology parks, to serve employees, customers, and visitors.

COMMERCIAL POLICIES

- A. Commercial centers will be landscaped and, where necessary, should be screened by landscaping from adjacent residential areas to reduce heat and glare from pavement areas, to partially screen parking areas from view, to control noise, and to increase the attractiveness of such centers. Light pollution and stormwater runoff shall be minimized through design that focuses on protection of the character of adjacent rural areas and natural features in both the day and the night.
- B. New commercial areas will be regulated so as to avoid undesirable types of development such as spot zoning which creates incompatible land uses which, in turn, depreciate the value of adjacent housing, overcrowding, unsafe ingress and egress to public highways, garish advertising signs, and unsightly premises. Tall and/or garish advertising signs will not be permitted.
- C. Pedestrian and bicycle access should be provided to local and general commercial centers from the surrounding residential areas.
- D. Existing commercial uses not located within designated commercial areas should be permitted to continue. Such scattered commercial sites are not intended to become nuclei for expanded commercial areas.
- E. New commercial centers shall be located in the designated Urban Service District, except for the existing small centers serving rural areas.
- F. Highway oriented commercial uses within the designated Urban Service District may be a part of a larger employment center, which is the dominant use.
- G. Planned employment centers and related commercial development shall occur only after, or concurrent with the provision of public sewer, and if necessary, public water to the area.

COMMERCIAL STRATEGIES

- A. Areas for new commercial development will be designated within the Master Plan, Future Land Use Map only where the roads have capacity to serve additional development and only where public sanitary sewer may be available to the property. Expansion of existing commercial areas where no public sewer service is available would

be permissible if a need for additional commercial development was demonstrated, if the parcel size is large enough to accommodate the desired structure, plus all required parking, plus space for a septic system and tile field, and space for a replacement field, plus an adequate buffer from adjacent residentially or agriculturally zoned property.

B. Zoning will be adopted that:

1. Accomplishes the strategy described in A. above and the policies that preceded it.
2. Permits integration of commercial, residential, and office land uses when the proposed plan provides the necessary amenities to create a viable pedestrian environment while minimizing conflicts between the various land uses.
3. Limits the scope of highway commercial land uses and permits them by special use permit as part of a larger employment center.
4. Creates landscape buffers between parking and streets.
5. Provides landscaping within parking areas.
6. Limits the number of separate driveways accessing major roads.
7. Requires coordination of vehicular, pedestrian, and bicycle systems within adjacent commercial properties and surrounding areas.
8. Establishes a sign ordinance with standards to:
9. Limit the size, lighting and quantity of signs; and
10. Regulate free-standing signs;
11. Establishes standards to minimize the number, height and intensity of lights ;
12. Establishes standards to limit the amount of impervious surface, and require the retention and treatment of all storm water runoff before release into a stream or drain;
13. Incorporates the commercial policies of this Plan.

C. Initiate a Utility Feasibility Study and depending on the results, a Capital Improvement Program as the basis for establishing the intensity of use and extent of urban services to be provided to commercial uses in the Urban Service District.

PART 9

INDUSTRIAL/TECHNOLOGY/EMPLOYMENT CENTER LAND USE

INTRODUCTION

Industrial type land use activities are currently centered along Chubb and Five Mile Roads. The area has long been zoned for industrial use. However, further industrial development within this area has been slowed by the lack of good, "all weather" road access. For this area to achieve its development potential and preserve existing industrial investment, additional infrastructure improvements are needed. Also industrial land uses within this area can be a good buffer around the nearby landfill. Light industrial uses have been planned as a transition in the area north of Six Mile Road and West of Chubb Road as an attempt to promote the future use of these areas for cleaner and less intense uses than the pattern that has started to develop in this location.

INDUSTRIAL/TECHNOLOGY/EMPLOYMENT OBJECTIVES

- A. New industrial /employment center development should continue to be centered between Five and Six Mile along Chubb. New technology/employment centers could also be focused within these roadway corridors.
- B. New technology/employment center development could also be head quartered in the Urban Service District centering on the Gotfredson Road/M -14 interchange.
- C. Development of industrial/technology/ employment centers in locations other than those described above should not be permitted. Scattered and isolated industrial sites will not be permitted.
- D. Public road improvements necessary to support enhanced industrial/employment center development should be pursued.
- E. The public services necessary to support industrial/technology/employment centers should be in place before or concurrent with new development.
- F. Preservation of existing investment in industrial uses and protection of the existing tax base as well as expansion is desirable provided the policies listed below are implemented.
- G. Promote cleaner less intense land uses in the Light industrial district planned in the area north of Six Mile Road and west of Chubb Road.

INDUSTRIAL/TECHNOLOGY/EMPLOYMENT CENTER POLICIES

- A. New employment centers should consist primarily of research and technological industries and office complexes. Access should be directed toward the Urban Service District from the M-14 at the Gotfredson Road interchange. Additional basic or large scale manufacturing or processing operations should take place in presently designated areas of Section 13 where rail facilities are available.

- B. New employment centers should have a campus-type setting, a low density of development with large open spaces and extensive landscaping. Existing natural features should be pre-served and incorporated into development plans.
- C. Employment centers shall have public sanitary sewer and water service (see the Public Facilities section of this Plan for details). Industrial uses on property zoned for industrial use, but without sanitary sewer and water shall be permitted by zoning standards, which require conformance with all Public Health Department and DEQ standards. The maximum size of employment shall be limited by the approved capacity of the proposed private sewage treatment system, but in no case a use shall exceed 95 employees per shift if served by a septic system, and the parcel shall be large enough to accommodate a replacement tile field as well.
- D. Employment centers should be largely self-contained. Facilities and services needed for the support and convenience of employees and visitors should be included within the centers. This will reduce development pressure on the surrounding lands and the roads leading to the centers.

Support activities such as commercial and office services will be encouraged in larger industrial/technological developments for convenience of employees, customers, and visitors. These services should be designed into the overall setting of the industrial areas; they should be incidental to the industrial character of the development.

- E. Employment centers should have good major road access which promotes easy and efficient vehicular and pedestrian connections to nearby existing or plan commercial and residential areas. These developments should only be permitted where the road system is adequate to serve the anticipated traffic.
- F. Employment centers shall be located only in areas of the Township where adverse impacts on existing or proposed residential or agricultural areas will be avoided as guided by this Plan.

Where industrial areas abut residential property buffers must be provided to protect the residential areas. The buffers may consist of topography, trees, shrubs, and vegetated berms. Existing natural features should be utilized as part of the buffering system where possible.

- G. Existing industrial properties, not located within designated employment centers, should be permitted to continue. However, it is the intent of this Plan that such scattered industrial sites should not become nuclei for future industrial development outside of designated areas.

INDUSTRIAL/TECHNOLOGY/EMPLOYMENT CENTER STRATEGIES

- A. Designate areas for future development as industrial/employment centers along Chubb and Five Mile Roads in accordance with the Future Land Use Map.

- B. Determine the feasibility of upgrading Chubb from Five Mile to Six Mile, and Five Mile Road from Napier to Salem Roads to "Class A", "all weather" Washtenaw County Road Commission Standards, with an eighty-six foot road right-of-way.
- C. Determine the adequacy of public sewer service along Chubb for existing and intended industrial uses as depicted within this Plan. Public sewer service to Five Mile Road is specifically intended to serve the landfill. Public sewer and water service is planned for the Urban Service District as depicted within the Capital Improvement Program.
- D. Support the extension of Gotfredson Road from North Territorial to Chubb Road at Five Mile Road as "all weather" roadway.
- E. Work with land owners and developers of new industrial/employment centers to communicate Township standards and expectations early in the development process.
- F. Establish standards to limit the amount of impervious surface, and require the retention and if necessary, the treatment of all stormwater runoff before release into a stream or drain.
- G. Amend the Township Zoning Ordinance to incorporate the industrial/technology/employment center policies of this Plan.

PART 10

GOTFREDSON ROAD /M-14 URBAN SERVICE DISTRICT PLAN

INTRODUCTION

The Gotfredson Road/M-14 Urban Service District contains lands intended to receive future urban development. This area is designed to serve the needs of Township residents by providing for development that can serve the Township but would not otherwise locate here without municipal utilities and a freeway interchange for greater accessibility as provided by M-14 and Gotfredson Road. Land uses within this area are planned to accommodate a cohesive mix of urban residential, commercial, office, and research/technology land uses, while not creating hazards for the Township's environment nor creating adverse impacts on existing or proposed rural residential or agricultural uses nearby.

A key purpose for establishing this designated Urban Service District is to preserve the unique character of the remainder of the Township by having sufficient land for urban land uses in the designated area, while prohibiting these more intensive land uses in other areas of the Township.

GOTFREDSON ROAD/M-14 URBAN SERVICE DISTRICT DEFINED

The designated Urban Service District is defined as lands within Sections 25, 26, 35, and 36 of Salem Township, and specifically bounded on the north by North Territorial Road, on the west by the eastern one-half of Section 26, On the west by the eastern one-half of Section 35, on the south by Joy Road which is the southernmost section lines of Section 35 and 36, and on the east by Napier Road.



These lands, comprise approximately 1,405 acres center upon the Gotfredson Road/M-14 interchange.

HISTORY

The earliest records of comprehensive land use planning for Salem Township and in particular the Gotfredson Road corridor began in the late 1960s. At that time the Township's Land Use Plan consisted of a map with commercial, multiple residential, and industrial designations within the Gotfredson Road corridor. The long-term policies contained within this plan were that this general area would not remain or continue with an agricultural character.

Following the Township's Land Use Plan, developed in the late 1960s, a revised zoning map was completed. The zoning designations were similar to the land use planning designations, in that commercial, multiple residential, and industrial zoning district classifications were identified for various parcels within the Gotfredson Road corridor.

Prevalent in the reasoning and development of the Land Use Plan in the late 1960s was the influence of the envisioned importance of the Gotfredson Road/North Territorial Road intersection. Both roadways were designated to be of arterial status by the Washtenaw County Road Commission, indicating their importance in commuting patterns of the motoring public.

Since that time the M-14 freeway was constructed with a full service interchange at Gotfredson Road, which was opened to traffic in 1979. This new interchange served to focus vehicle traffic, from various portions of Salem Township and the adjoining areas by providing direct access, for regional transportation needs. After the interchange was built, additional residential development and commercial enterprises located in this area.

It has therefore been understood through historical activities and planning studies that the Gotfredson/M-14 interchange will play a more important role in providing major access point to Salem Township presently and in the future. The interchange will attract increased development interest that will be designed to take advantage of this highway access focal point within the Township.

Following adoption of revisions to the Growth Management Plan in 1998, the creation and study of the “Urban Services District” continued to recognize the immersing significance of the Gotfredson Road/M-14 interchange. Its location continued to be influenced by its setting within two economic regions the Southeast Michigan region and the Ann Arbor/Ypsilanti Urban District. The Southeast Michigan region has seen steady growth primarily to the north and northwest, especially in the I-75 and I-96/1-275 corridors, along with fill-in between these corridors. In recent years regional growth has moved in a more westerly direction, in the M-14 corridor to Plymouth, and toward Ann Arbor. During this time, growth along the I-94 corridor has been relatively less pronounced; however, the US-23 corridor has increased in importance within the last fifteen years. The US-23 corridor serves to connect the Ann Arbor/Ypsilanti area to the Brighton area as well as serving as a connector link to I-96, M-14, I-275, and I-94.

It is anticipated that these growth trends will continue. Salem Township and the Gotfredson Road/M-14 interchange will be influenced to a considerable extent by the regional growth patterns that are already established.

Based upon the above factors the following conclusions serve as a basis for the current area plan amendment to Master Plan:

1. Land use planning concepts since the 1960's have designated the Gotfredson Road corridor for non-agricultural land uses.
2. Limited Parcels along the Gotfredson Road corridor have been zoned for non-agricultural uses since late 1960's.
3. Existing and anticipated future increase in valuation of property along the Gotfredson Road corridor will not support agricultural activities.
4. Increased development pressures have led to a perception that the Gotfredson Road corridor will develop urban oriented uses and there is a probability of urban services (sewer, water, improved transportation and pedestrian networks) being extended into this general area
5. Recent attitudes, expressed by existing landowners within the Gotfredson Road corridor, recognize the likelihood of eventual urban type development.
6. Traffic will continue to be generated by the Gotfredson Road/M-14 interchange area, which offers quick access to nearby urban areas for cultural activities, new jobs, and other public offerings.

EXISTING LAND USE PATTERN

The existing land use pattern in the Gotfredson Road/M-14 Urban Service District consists of:

1. An existing contiguous large lot single family neighborhood adjacent to North Territorial Road, north of M-14 and additional groupings of large lot single family dwellings south of M-14. These neighborhoods access the major road system via private road connections to North Territorial, Napier, Gotfredson, and Joy Roads.
2. Various commercial activities exist north of M-14, east and west of Gotfredson Road, which have direct access on to Gotfredson Road.
3. The oldest commercial uses within this area have historically existed on Old North Territorial Road where it intersects with Gotfredson Road. Since the realignment of North Territorial Road, a short distance to the north, additional commercial development has taken place.
4. The 94-acre Conant Farm south of M-14 and west of Napier Road has been permanently encumbered by private conservation easements that effectively prevent this property from being developed.
5. Several utility corridors cross this area, including a major ITC corridor in sections 25, 35, and 36.
6. Significant natural resources including woodlands, wetlands, lakes, streams and drainage ways exist within this area, which shall be incorporated into all future development concepts.

PRINCIPAL DEVELOPMENT STRATEGIES

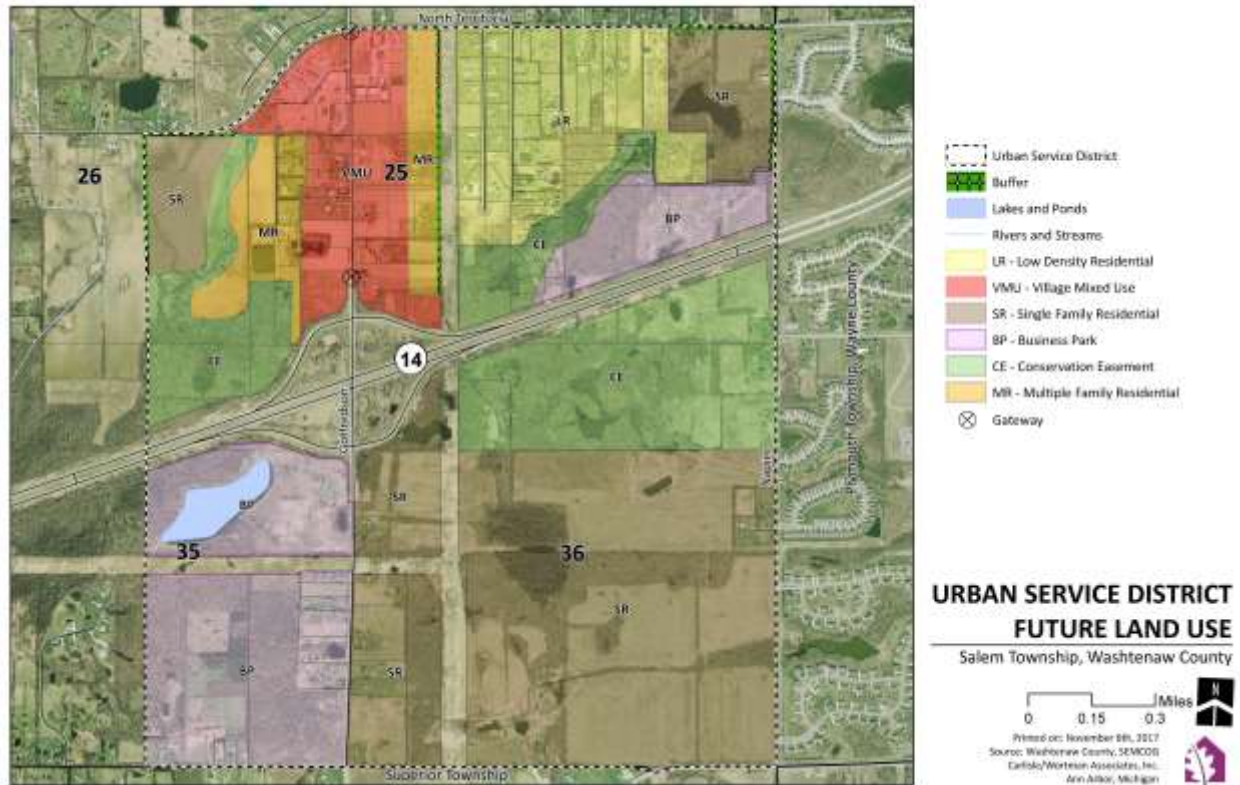
The Urban Service District is intended to be developed incrementally with a clear understanding of the overall final development plan. Consideration for future adjacent development must be made as new developments are designed. Every effort will be undertaken to eliminate the results of sprawl, strip, spotty development commonly creating unattractive landscapes, which downgrade the entire community's appearance creating traffic problems, and an uneconomic use of land. Poor, unorganized development can only attract more of the same, while desirable types of development, conducive to a properly planned and organized development concept, is attracted to and results in a more ordered and stable area. New development should be created using a traditional pattern of design which has multiple connections via the development of an internal road network that creates blocks and connections to neighboring parcels such that a cohesive development pattern will be maintained.

The answer to spotty strip development is development that focuses on design and access. Developing an area wide plan for transportation and internal connectivity will provide better services to residents, allow for a more efficient delivery of governmental services, and create an environment more conducive to a community atmosphere. The alternative tends to be an area that only attracts auto oriented business such as strip malls fast-food restaurants or big box stores designed to attract drive-by business from the highway. Attention to the overall pattern of development for the district and quality design for individual building and site will create greater community value and long term economic stability of the development.

The preservation of natural features such as woodlands or stream corridors can enhance future developments as well as provide buffering for existing less intense land uses in the area, especially those existing residential homes. The thoughtful placement or addition of open space in the form of vegetated buffers or even the use of stormwater management facilities that are designed and landscaped to mimic natural systems can also be installed in strategic locations to provide for buffers or transitions between new developments and existing land uses. Non-motorized pathways along stream corridors or through existing woodlands can provide connections between uses.

FUTURE LAND USE

Land uses within this area are planned to accommodate urban residential, commercial, office, and research/technology type land uses while not creating hazards for the Township's environment nor creating adverse impacts on existing or proposed residential or agricultural uses nearby. All lands within and surrounding this Urban Service District must be shielded from the impact of any future development by the use of buffering and screening techniques.



Development within this designated area shall only take place in a coordinated manner. The following implementation strategy shall be reviewed and incorporated into any development proposed within this designated area:

1. Development within this Urban Service District shall be according to the planned unit development (PUD) regulations as required within the Salem Township Zoning Ordinance. Specific district requirements should be incorporated into the Township's Zoning Ordinance to implement the planned use of this area.
2. Lands within this Urban Service District will be dependent upon a coordinated interior road system with controlled access points onto North Territorial, Napier, Joy, and Gotfredson Roads. Future development will require the development of a road network that includes internal roads which provide for vehicular and pedestrian access to existing and futures uses in a traditional urban block pattern.
3. Streetscapes especially those of major streets, convey an image of community to visitors and are an important part of self-image to the residents of this community. The Township

must work with the Road Commission to develop a roadway design that will meet the needs of the community and the planned development.

- a. North Territorial, Gotfredson, Napier, and Joy Roads, the M-14 corridor, and the interchange with Gotfredson Road should be the highest priority road corridors for development of an ongoing streetscape improvement program. These roadways currently have limited development and much of their appearance and character can be established by the development review process and by careful planning and implementation of street improvement projects. Road improvements must happen prior to or in conjunction with new development.
 - b. Gotfredson Road, both north and south of the interchange with M-14 is characterized as an entrance zone and therefore an important part of the overall streetscape character. This entrance roadway offers a special opportunity to express the image and character that Salem Township residents wish to convey.
4. Development within this Urban Service District shall only be permitted where adverse impacts to natural features will be avoided. Natural features located within the Urban Services District shall be preserved and integrated into all site design.
5. Natural features are important as visual amenities and are critical elements in establishing and maintaining the identity of this Urban Service District, not to mention the importance to the local ecosystem within this area. They perform many interconnected functions. Disruption in any of these systems can have adverse effects on the others and negatively impact the quality of life in both this Urban Service District and its neighboring areas.
6. Complete development within this Urban Service District shall eventually require the availability of a public sanitary sewer and a public water system. It is understood that construction of any future sewer/water system shall be with developer financing with potential reimbursement through user fees [and](#)/or through a special assessment district.
7. Extensive landscaping together with preservation of natural features, found throughout the defined Urban Service District, shall be incorporated into development site plans. This type of buffering shall also be used between land uses within this Urban Service District and surrounding agricultural or residential land uses. Additional landscaping shall be required along Gotfredson and North Territorial Roads within this Urban Service District.
8. The intent of this Urban Service District is a response to the possibility that the M-14/Gotfredson Road interchange attracting future development due to its location as a focal point for highway access within Salem Township and the region. If development is proposed within this area, the strategies outlined within this section should be incorporated as a way to ensure it is appropriately developed at the same time adequate public services are available.
9. Vacant lots remain within this Urban Service District that could potentially have access onto Gotfredson, North Territorial, Napier, and Joy Roads where additional development could take place. In addition redevelopment of existing parcels could also take place. In either case attention must be given to providing necessary public facilities and roadway

improvements including adequate curb cuts that do not result in unwanted traffic congestion or the blocking of vehicle access to internal parcels.

10. Development policies of Salem Township shall be closely coordinated with those of neighboring communities. Salem Township will continue to coordinate its economic and social policies with those of neighboring communities and to recognize the interests of those communities while promoting and protecting its own interests in the formulation and implementation of its policies.

URBAN SERVICE DISTRICT FUTURE LAND USES

Residential Use

The future land use plan for the Urban Services district depicts three different residential land use designations. The designations include Low Density Residential, Single family Residential, and Multiple Family Residential. These category titles were used because they are consistent with existing zoning districts in the Townships Zoning Ordinance. The areas for each were chosen based on existing land use patterns within and surrounding the Urban Service District.

Low Density Residential – is a future land use/zoning designation that is intended to provide areas for rural non-farm residences on lots of sufficient size to permit the use of septic tanks and drain fields and the use of on-site wells. These lots are typically one acre in size or larger. Though public sewer and water may be available for these areas in the future, the only land designated in this area for Low Density Residential are parcels that are already developed for large lot residential use. These neighborhoods are well established and are being incorporated into the future development of the district.

Single Family Residential – is a future land use/zoning designation that is intended to provide for single-family residential developments on moderately small-sized lots or roughly ¼ acre when served by publicly supplied water and sanitary sewers. Without Sewer and water this designation would support one acre and larger lots. These areas have been designated on the periphery of the Urban Service District as a transition to existing neighboring less intense land uses or similar land uses. The bulk of this designation borders Plymouth Township to the east which is comprised entirely of suburban density residential land uses along the border of the Urban Service District. Internally the areas designated as Single Family Residential abut conservation land, open space, undeveloped land designated for Business Park, or existing large lot residential uses. Substantial buffers may be appropriate where deemed necessary by the Planning Commission during the planning process for site development.

Multiple Family Residential – is a future land use/zoning designation that would allow for a moderate density of population and a moderate intensity of land use in those areas which are served by publicly-owned and operated municipal water supply and municipal sanitary sewer systems, and which abut or are adjacent to such other uses, buildings, structures, or amenities that support, complement or serve such a density and intensity.

Village Mixed Use

The areas designated as Village Mixed Use may be the most important element in the Urban Service District. This area will be the most visible and likely the most widely used by residents of the Township as well as visitors. The area along Gotfredson road north of the M-14 interchange to the intersection of North Territorial has generally been planned or used for commercial land use purposes. Many of the parcels of land in the area are already in a commercial zoning designation. This is primarily due to its proximity and access to the M-14 interchange and the anticipation of public utilities. This area presents a unique opportunity to the Township based on the fact that much of the land in this area is undeveloped, or has the potential to be redeveloped.

The Township has created the vision for this area that it will be established in a more traditional village mix use development pattern. The intent is to avoid typical newer commercial development patterns seen in other areas adjacent to highway interchanges. A traditional urban land use pattern is more substantial and sustainable in the long run than a series of disjoint single story, single use, buildings that are designed for specific single end users. When a building is designed for a single end user they become obsolete when the initial business occupant closes or moves. Whereas when buildings are built with substantial materials and have been designed for the functionality of the community, they will be more readily adaptable to future tenants. Such concepts are seminomas with traditional downtown or village settings.

Furthermore, the design conceived for this area is more consistent with traditional designs that relate better to adjacent land uses through a transportation systems that support multiple forms of travel so that the development is not just designed for vehicular users that are passing by on the highway. The concept created for the Village Mixed Use area conceives a series of interconnected local streets. These connect uses in a traditional grid pattern and connect to existing major county roads at specific intersections. This will provide for consistency efficiency and safety.

Development in this area cannot be haphazard. In order to provide for the type of connections and cohesion within the area and to other surrounding areas development must be based on an overall concept plan. It may be appropriate to layout the roadway plan for vehicular and pedestrian connections for the area in order to establish the development pattern within which individual buildings open spaces and associated parking will be built. The concept involves very specific intersections along Gotfredson road with newly established side street from which access to parking areas will be provided.

Each new roadway within the development must provide for a number of accommodations including vehicular travel, pedestrians, on street parking, access to parking lots, landscaping. They should accommodate the potential for gathering spaces or outdoor activity areas in the form of wider sidewalks for outdoor eating areas or sales displays from adjacent shops.



USD Commercial Concept

Salem Township
Washtenaw County, Michigan



0 200 400 800
SCALE: 1" = 400'

Carlisle/Wormian Associates, Inc.
Ann Arbor, Michigan



USD Commercial Concept

Salem Township
Washtenaw County, Michigan



Walkable engaging Commercial Development



Parking integrated into walkable village commercial environment



Higher density housing options that are consistent with community character

Business Park

Business Park – is a designation for low-intensity, low-density business land use. Uses may include general or specialized offices, corporate headquarters, research facilities, or even light manufacturing facilities which are free of nuisances such as noise, smoke, or odor. No outdoor uses, including storage of any kind, associated with any business shall be permitted in this district.

Business park facilities shall be located within spacious, campus environments in a planned, coordinated manner, according to an overall development plan that include large open spaces, extensive landscaping, and preserved natural features. The areas designated for Business Park have extensive existing natural features which shall be preserved and incorporated into the site development. Additionally, the perimeters of these developments must have extensive negative buffers to act as screens or transition zones to existing or plan neighboring residential uses or open space. The use of existing woodlands for this purpose will be required where possible.

Parking lots especially shall be landscaped, both along the perimeter and in the interior to reduce the adverse effects of paved areas. Any loading or unloading area associated with any use in this district shall be minimal and must be screened from view from neighboring properties, as well as neighboring buildings in the development.

Business park development requires vehicular and pedestrian interconnections to permit travel between adjacent developments. Driveways should be combined and existing extra driveways eliminated, where feasible, to reduce the number of turning locations on access streets. Business park developments should be accessible by sidewalk and pedestrian/bicycle paths designed for convenient movement, both between the parking lots and individual buildings. Sidewalks or pathways should also be provided along abutting streets, and adjacent properties, where appropriate and be coordinated with adjacent residential properties.

Business parks should be designed with a cohesive theme. An attractive central architectural theme will be required. Outside lighting shall add to the attractiveness of the park. Lighting of such developments shall be designed to create a balance between aesthetics, efficiency and safety, and the minimization of light pollution.

Office parks shall be connected to a designated sanitary sewer service system. The effluent from office park operations shall be discharged only into a public wastewater treatment system where proper treatment is certain.

URBAN SERVICE DISTRICT SITE DESIGN GUIDELINES

Visual cohesiveness is a primary goal for any development that is anticipated to take place within this Urban Service District. By providing for continuity of building types, setbacks and side yards, landscaping features, and architectural detail, a standard of character and identity can be maintained or enhanced within this area. Though design standards should be different for different land uses, all development must contain quality design elements related to site layout, building elevations, landscaping plans, principal arterial and collector roads, and parking arrangements that contain basic design concepts. Part of the development review process must incorporate design review, taking into consideration architecture and site characteristics.

These design guidelines are intended to:

- Achieve the communities vision for the character of new development while ensuring compatibility with existing land uses within and surrounding this Urban Service District;
- Recognize and incorporate the unique character and natural features, including topography, woodlands, and wetlands, prevalent within and surrounding this Urban Service District; and to
- Provide development concepts that will ensure that the appearance of any intended development is of a character represented by smaller scale, people orientated building profiles.

Conformance to these design guidelines will enhance the quality of individual sites and this Urban Service District as a whole.

A. General Guidelines. Following are general design guidelines:

1. The character, visual prospective, and quality of proposed development must be created through:
 - preservation of natural features;
 - Attractive architecture consisting of finished materials and appropriate shape and design as described more fully in the building and architectural design section of this chapter; Well-designed new interior roads that include features such as pedestrian facilities,
 - street trees and pedestrian scale lighting;
 - Accommodations for pedestrian access, connections, and maneuverability;
 - Natural landscaping for buffered, attractive development sites with minimal change and impacts to native vegetation, surrounding landscapes; and
 - Site lighting and signage that is uniform, compatible with building architecture, ensures public safety, and protects rural character.
2. In multi-building complexes, a distinct visual link must be established among various buildings by using architectural or site design elements such as courtyards, plazas, landscaping, and walkways to unify each individual project and provide relationships to adjoining projects.
3. Natural amenities such as views, mature trees, creeks, and similar features unique to each site should be preserved and used to enhance the design of the development.
4. Development design should utilize the opportunities and reflect the constraints created by floodplains, slopes, soils, vegetation and other physical features found within this Urban Service District. Engineering techniques should not be utilized to force-fit development into the environment without design, environmental or specific site analysis.
5. Natural greenways should be preserved along watercourses to conserve the natural character of floodplains, wetlands, and wooded areas. Utility easements

can provide opportunities for greenways that could link to other open space systems throughout designated development areas. Pedestrian walkways could be provided within existing natural resource areas that provide open space systems, which would allow linkages to other adjacent future uses that may not be subject to development at this time.

- B. Stormwater Management.** Due to concerns over environmental sensitivity related to stormwater management within this Urban Service District, the use of structural, vegetative, or managerial Best Management Practices (BMPs) for low impact development should be designed into each development to minimize degradation of surface water quality. Diligent regulation of stormwater facilities and the preservation of natural systems will prevent flooding, protect water quality, reduce soil erosion, and maintain and improve wildlife habitat. Stormwater management facilities and measures must reflect and incorporate existing grade, natural features, wetlands, and watercourses on the site, to the maximum extent feasible. Creative approaches should be considered and encouraged.

Approaches to open storm drainage and detention must recognize the environmental sensitivity of the existing natural habitat systems in the Urban Service District and adjoining lands. Design should be creative and aesthetically pleasing in character. The following design standards shall be addressed in the stormwater management plan.

1. Open detention basins should be incorporated into the design as an attractive amenity or focal point in the site design.
2. Wet bottom basins are encouraged. The need to provide water movement should be handled creatively with such elements as spray fountains or waterfalls.
3. Dry basins could also be utilized and designed as a primary focal element of the site and as an extensively landscaped open space. If properly designed and maintained, dry bottom basins could be designed as wetlands to remove non-point source pollutants from storm water runoff.
4. Slopes for retention/detention basins should be at a ratio that would not require fencing. Basins should be open to allow views into and across landscaped areas.
5. Natural drainage areas must be preserved with adequate green space to protect existing riparian systems and to allow maintenance access. When natural areas are altered, landscaping should be planted to reestablish the previous riparian habitat. Walkways are encouraged to facilitate pedestrian circulation throughout an individual site and link into adjacent roads and properties, and to pedestrian/trail systems throughout the development areas.
6. Detention basins serving multiple owners and/or development sites within the subject area are recommended in order to reduce the number of basins, to create watersheds of adequate size to support wet bottom basins or wetlands, and to distribute the cost and maintenance of the basins.

- C. Protection of Steep Slopes.** Standards for the protection of steep slopes within this Urban Service District are necessary to protect groundwater recharge and inflow areas,

preserve quality of receiving surface waters and wetlands, minimize soil erosion and siltation, and preserve woodlands and individual trees. No development should be permitted in areas within this Urban Service District where the soil is highly erodible, and in any area with existing steep slopes of twenty five percent (25%) or greater. Land areas with slopes exceeding twelve percent (12%) but less than twenty five percent (25%) would be subject to the following:

1. Where such land areas contain other natural features to be preserved in accordance with applicable provisions of the Salem Township Zoning Ordinance, the integrity and profile of such slopes shall also be maintained.
2. Other land areas with such slopes shall be developed in accordance with policies contained within this document, subject to the following:
 - The integrity and profile of the slope shall be maintained to the maximum extent feasible, provided that maintenance of such slopes shall not cause or exacerbate the loss of other natural features on the development site.
 - Cut and fill activities shall be limited to the minimum necessary to provide reasonable access for use of an individual lot.
 - Buildings may be built into such slopes, subject to the State Construction Code and Township engineering standards.
 - Retaining walls may be used to maximize the preservation of existing slopes where relocation of a road or other site improvement is not feasible.
 - Cut and fill activities within existing and planned road right-of-way, and for public utility and other public improvements, shall be limited to the minimum necessary to comply with the applicable engineering standards of Salem Township and outside agencies with jurisdiction.

D. Parking and Circulation. Large pavement areas have adverse impacts, such as heat and glare, high rates and volumes of surface water runoff, transmission of pollutants from the surface of the parking lot directly to surface waters, and general unsightliness. The following should be considered in the design of parking of vehicles:

- In village Mixed Uses areas, parking areas should be behind buildings. Where parking lots front on side streets they shall be incorporated into the block design and must be buffered from the street by sidewalks and street trees per the design examples in the USD Commercial Concept on page 9.
- To avoid large expanses of paved areas, and to provide easy accessibility to buildings, large parking lots should be divided into smaller parking areas and dispersed around the site.
- Where large parking lots are needed, adequate landscaped pockets should be integrated into parking areas and contain significant landscaping areas.
- Dedicated pedestrian pathways should be provided through large parking lots to allow clear access to buildings.
- Landscape strips between parallel parking rows should be considered with a minimum 10 feet in width. When incorporating pedestrian walkways, such strips

shall be a minimum of 20 feet in width.

- Visual improvements should be considered on both sides of entrance drives to create pleasing tree lined entrances, to direct vehicles into and out of the site, and to provide adequate space for vehicular stacking at exits onto perimeter road ways.
- Parking areas should be reduced to the minimum necessary to serve the intended users and establishments. Excess spaces should be held in landscape reserves, to be constructed only if experience on the site shows they are needed.

E. Lighting. All site lighting must be designed to preserve, protect, and enhance the lawful nighttime use of any and all property through the use of appropriate lighting practices and systems. Individual lighting systems and fixtures must be designed, constructed, and installed to control glare and light trespass, minimize obtrusive light, conserve energy and resources while maintaining safety, security, productivity, as well as being designed to enhance the intended character of the area.. Attention must be given to the following:

- Utilization of a consistent style of light fixture to be installed along all interior roadways. Parking lot and decorative lighting for walkways or buildings on each site.
- The style of lighting should reflect the architectural character of development within the overall development areas.
- Lighting should be used to highlight architectural features and create visual interest.
- Lighting must be downward facing to protect night skies.
- Lighting must be shielded to prevent glare from existing neighboring residential uses.

F. Signage. Signs should be in harmony with the style and character of the developments proposed and must be an integral design component of the building architecture, building materials, landscaping, and overall site development. Ground signs must be of a “monument” style.

BUILDING ARCHITECTURE AND DESIGN IN THE URBAN SERVICE DISTRICT

Architectural design and building form and orientation in this Urban Service District shall be addressed in a coordinated, attractive, and interesting manner that defines the area’s intended image and character as new development occurs. The highest development standards, including building materials, colors, and architectural design, shall be consistent within each development and coordinated between individual developments. However, dissimilar materials could be considered when incorporating other characteristics, such as scale, form, architectural detailing, and color to make the building compatible with the over-all type of development.

- A. All sides of single or multiple buildings within a development must be equally attractive. Architectural details such as texture, pattern, color, and building form used on the front facade should be incorporated on all visible building facades.
- B. Building massing, including the arrangement and placement buildings and site amenities, should be varied to create a logical hierarchy of building forms. Long expanses of facade

should be broken up to create shade and shadow and to create human scale and pedestrian oriented places.

- C. Human scale must be created by building massing form, as well as the use of architectural elements, such as colonnades, canopies, walkways, street-level display windows, lighting, and a variety of building materials.
- D. Franchise or corporate image architectural design elements and colors should be incorporated only as secondary elements to the development and not as the dominant element.
- E. Service and mechanical areas shall be designed as an architectural feature of the building or be completely screened.
- F. Public entrances and primary building elevations must face the street. Main entrances to the buildings must also be well defined.

URBAN SERVICE DISTRICT LANDSCAPING POLICIES

Landscaping should be considered as the organization of outdoor space, and must be treated as a design element incorporating building placement, vehicular circulation, and visual perspectives. The following landscaping related policies apply to land uses and development within this Urban Service District:

- A. **General Purposes.** The landscape concept for any new development in this area shall be designed to buffer neighboring rural and residential areas, create variety, interest, and view corridors for visibility, and to achieve the following purposes:
 - To integrate the various elements of the site.
 - To preserve and enhance the identity of the site.
 - To improve and enhance the character of the site; and to help unify the various parts of the site.
 - To define and articulate outdoor and architectural space.
 - To control soil erosion; moderate harsh or unpleasant sounds; remove air pollutants; control glare and reflection; and slow the effects of erosive winds or water and promote storm water retention, thereby helping to prevent flooding; and to block, divert, or channel winds.
 - To moderate the effects of climate and to create a more desirable microclimate.

Landscape concepts should be combined to form plazas, unified or continuous networked open spaces, and other focal points within each development and promote relationships to adjoining developments.

If proportions of the projects are to be constructed in phases, each phase must be self-contained and land clearing, grubbing or grading must only be conducted immediately preceding the construction of that phase. This is to reduce the probability of erosion and limit aesthetic impacts.

B. Use of Native Plants Preferred. Landscape improvements associated with the proposed developments should recognize the value of incorporating native plant communities on the site. Plants native to Salem Township have evolved over thousands of years existing in particular soil, topographic, and hydrological conditions found within each plant community. Therefore, existing hydrology of a site should be maintained to the greatest extent possible. Landscaping with native plants also encourages environmentally sound maintenance practices by requiring little or no pesticide or fertilizer use, and minimal irrigation.

C. Internal Parking Lot Landscaping. In considering the significant amounts of vehicular parking required for development, it should be noted that all internal parking areas should be integral to the visual perspective of each proposed development. Landscaping within parking lots should minimize the visual impact of surface parking, and address environmental and climatic impacts.

Parking areas should be divided by vegetated landscape islands or vegetated medians for the purpose of channeling traffic flows, breaking up the visual impact of large paved areas, reducing heat and glare from paved surfaces, and improving the attractiveness of individual land uses.

D. Roadway Landscaping. Streetscapes, especially those of major streets, convey an image of a community to visitors and even impart a self-image to the residents of the Township. The streetscapes of M-14, North Territorial, and Gotfredson Road are integral to the visual prospective of this Urban Service District. The M-14/Gotfredson Road interchange and adjoining arterial roads are entrance zones to the Township. The following should be considered:

1. An extensive landscaped buffer, exclusive of roadway right-of-way should be provided along M-14. A substantial landscaped buffer, exclusive of roadway right-of-way should be provided along and the highway adjacent to this Urban Service District.
2. The landscaped buffer would extend across the entire width of the development fronting on the highway.
3. Contextually appropriate landscaping should be provided along county roads depending on the land use planned for the area. For example, in commercial areas landscaping along the roadway should include street trees foundation landscaping around buildings and planting beds or raised boxes near sidewalks or pathways. Adjacent to business park or residential uses more substantial setbacks and denser landscaping may be appropriate.

E. Buffering. A key consideration in the development of new uses in the USD is the protection of existing residential uses within the USD area and surrounding it. Existing use primarily consist of low density single-family home developments or open space on larger rural parcels of land. Sufficiently dens landscaping should be use as a buffer between new higher density, higher intensity land uses and the existing residential uses or open space.

URBAN SERVICE DISTRICT TRANSPORTATION PLAN

In addition to the policies outlined in Part 12, Transportation Plan, the following transportation-related policies are hereby established for the Gotfredson Road/M-14 Urban Service District:

- A. Roads and Streets.** The Gotfredson Urban Service District is traversed by M-14 with an interchange at Gotfredson Road. Gotfredson and North Territorial Road serve as regional arterials through this Urban Service District. Following are guidelines to be incorporated as this Urban Service District develops:
1. Curb cuts should only take place along Gotfredson Road, North Territorial, Napier, and Joy Roads at controlled access points to maintain necessary turning movements, traffic flow, and visual prospective. Allowing random curb cuts would severely limit the function of these roadways and diminish the integrity of this Urban Service District. Access to interior parcels should be from collector roadways to these arterial roadways.
 2. An internal collector transportation roadway system should be developed within this Urban Service District, centering on Gotfredson, North Territorial, Napier, and Joy Roads to access interior portions of this Urban Service District. These roadways would connect with all county or state roads at controlled access points.
 3. Gotfredson and North Territorial Roads will be constructed to boulevard standards within this Urban Service District.
 4. All new streets in the designated Urban Service District shall be paved and constructed to urban standards, based on Washtenaw County Road Commission requirements for urban streets, including curbs and gutters. Existing unpaved public streets within and adjacent to this Urban Service District shall be paved, as development occurs to provide safe and convenient access to adjoining properties. Any existing or new streets within this Urban Service District shall not provide vehicular service less than a "Level of Service "C."
 5. Plans for new development within this Urban Service District shall provide for new roadways or extension of streets to connect with existing or future streets at common boundaries where such extension is determined to be necessary for continuity in the public street system or to provide pedestrian and vehicular access to interior lands. Interconnection of streets is intended to be a means of creating physical integration of all parts of this Urban Service District. Consideration for, and consultation with, existing residential development is paramount in the design and discussion making process.
 6. Each new development shall be required to provide its share of street improvements. The design and character of streets shall be consistent with and subservient to the desired character of Salem Township and the designated Urban Service District. The rights-of-way and number of lanes and pavement width of other streets shall not be as large or dominant as to create barriers between areas on opposite sides of these streets. The maximum rights-of-way width should be consistent with adopted design standards.

7. Whenever possible, the natural landscape shall be preserved along all roads within this Urban Service District. Preservation of the natural landscape shall also be encouraged along roadways characterized by significant natural resources or vistas.
8. Landscaping shall be encouraged and/or required inside and outside of the rights-of-way to retain a scenic quality along roads within this Urban Service District.
9. New private roadways within this Urban Service District shall be discouraged.

B. Pedestrian Circulation. The development of a safe, comprehensive bicycle and pedestrian circulation system to link business and residential areas within this Urban Service District, and to link this Urban Service District with other areas of the Township, shall be required to be developed with an overall development plan for each development project that takes place within the Urban Service District. The following must be evaluated as part of each project:

1. Pleasant and functional pathways for pedestrian travel must be ensured within any future developments.
2. Pedestrian circulation patterns should be considered in equal importance to that of the vehicle and building arrangement.
3. Sidewalks shall be required as an integral component of the circulation system in this Urban Service District. They should:
 - Be provided along all urban streets.
 - Be separated from streets by landscaping or other amenities to provide for safety and pedestrian comfort.
 - Be barrier-free; and
 - Be coordinated with a bicycle system where feasible.

Pathways or sidewalks must be provided along North Territorial Road, Gotfredson Road in conformance with the non-motorized plan. All other roadways within this Urban Service District shall include pedestrian facilities that are consistent with the context of the development which they serve. Pedestrian facilities must be designed to provide connections within and between all land uses in the USD. Additionally trails within greenways, preservation areas, or other open space systems shall be developed as linkages within this Urban Service District and adjacent areas.

Where walkways pass through paved parking areas and drives, a decorative paving material (i.e. pavers, stamped/textured concrete, or color concrete) should be used to delineate the walkway crossing. Trees should be planted between access drives and the sidewalk, with shrubs and berms located between the sidewalk and the access drive or parking lot curb.

PUBLIC UTILITY POLICIES

Based upon environmental factors and the density of potential land uses within this Urban Service District, public sewer service would be necessary concurrent with development at an intensity or density sufficient to require such service. The question of whether, when, and in what manner such service would be provided is currently being addressed. The Township's involvement and/or management of any future public sanitary sewer system will be to serve the public health, safety, and welfare of the Township and residents and to protect the Township's environment, and will be based upon the following policies:

- A. Sanitary Sewer Service District.** Sanitary sewer service shall be a public system that will service but be limited to only the designated areas of this Urban Service District.
 - Extension of sanitary sewer service other than to this Urban Service District shall be prohibited.
 - A cost-efficient strategy should be adopted to provide sanitary sewer and water service within this Urban Service District.
 - Extensions of the sewer system shall be constructed with developer financing, user fees, or through a special assessment district, but shall not be constructed with ad valorem taxes.
 - Any property permitted to develop with on-site services in the designated service area shall be required to connect with public water and sanitary sewer lines, as provided by Township Ordinance or other law, when these become available.
 - Individual private community sanitary sewer systems and wastewater treatment plants shall not be allowed.
- B. Public Water.** Any water service within this Urban Service District should coincide with the sanitary service area.
 - A cost-efficient strategy should be adopted to create a public water service within this Urban Service District.
 - A public water service system shall be constructed with developer financing, user fees, or through a special assessment district, but shall not be constructed with ad valorem taxes.
 - Transmission and distribution lines should be looped to ensure adequate pressure and continuity of service.
 - All new development in this Urban Service District shall be required to connect to a public water system.
 - Private community water systems shall not be allowed.
- C. Infrastructure Maintenance.** The long-term maintenance of the infrastructure associated with public utilities in the Urban Service District will be the responsibility of the Township.
 - An asset management plan must be put in place to assess and monitor the condition of the utility infrastructure within the Urban Service District.

- The Utility Service District is a discrete area of land which will support a finite amount of development growth. The cost to maintain the infrastructure within this area must be supported by the users within the district.
- Appropriate utility user fees must be established that take into consideration long term maintenance and replacement cost of the infrastructure.

PART 11

SALEM HAMLET AREA PLAN

INTRODUCTION

The Salem Hamlet embodies a unique charm and heritage. This community focal point comprised of residential neighborhoods, local commercial buildings, and Township government facilities is envisioned to maintain its character while providing for additional compatible land uses which are dependent upon public sewer service.

This Salem Hamlet Area Plan is a part of the overall Master Plan, yet also contains detailed policies for this specific area. In the event of a conflict between this area plan and the overall Master Plan, the policies in this area plan should control.

SALEM HAMLET AREA DEFINED

The Salem Hamlet area is defined as extending from Currie Road east to Chubb Road, including the southern half of Section 11, and the northern half of Section 14. This area is defined by a physical border comprising natural resource areas farther to the north and south of the designated study area.



The Salem Hamlet presently consists of a concentration of residential dwellings with a central commercial focal point on Six Mile Road. The Township Hall, Salem Veterans Park, the fire station, and Salem Elementary School are located in the immediate area. The eastern portion of the district includes land that is zoned for industrial and light industrial use with development of some such uses. The area has historical significance, dating back to the 19th century. Because of the hamlet's history, and the civil institutional and community elements located within, the area is a primary focal point of the Township.

GENERAL GOALS

The major purpose of this area plan is to maintain and preserve the distinctive character of the Salem Hamlet, its identity, and the resulting sense of community it has within the Township. Emphasis will be placed on policies that encourage and shape appropriate land use and physical design for structures and public space within the Salem Hamlet.

The specific policies of this plan are guided by the following general goals for the Hamlet:

1. Maintain and enhance the physical characteristics of the Hamlet.

The physical characteristics of the Salem Hamlet should be protected and strengthened. The Hamlet can be characterized as a rural village settlement, with prominent buildings along Six Mile Road that display certain qualities reminiscent of the early 1900s. Visual and physical techniques should be incorporated to increase the community-focused awareness of the Salem Hamlet as a unique place. New development in the area should be consistent with the rural village character.

The exterior appearance and physical setting of existing buildings should be preserved. If existing structures, especially those older buildings along Six Mile are maintained, efforts should be made to ensure the unique architecture that adds to the character of the area is preserved or enhanced. Additionally, new development should be designed in such a way to be consistent with the existing or intended character. New development with appropriate design will prove to enhance the Hamlet's character and add to the vibrancy.

2. Preserve the character on Six Mile Road.

The existing character of the Six Mile Road corridor, characterized by the visual cohesiveness of the church, general store, Township Hall and various residences, distinctively define the village identity, and should be preserved. Existing buildings that are not consistent with this character should be remodeled or replaced.

Along the Six Mile Road frontage, flexibility in types of uses should be permitted, so long as these uses are consistent with the Hamlet's established or intended character and primarily intended to cater towards local needs.

Six Mile Road through the Hamlet receives relatively high traffic volumes. While some amount of regional traffic is important to ensure the viability of local business, the roadway through the Salem Hamlet must have a contextually appropriate design for the area. The road width, design speed, and pedestrian and bike facilities within the road right of way should be designed for local traffic rather than being oversized and over engineered to accommodate worst-case scenarios for regional pass-through traffic.

Due to the presence of industrial uses and the waste facility adjacent to the Hamlet, heavy trucks will often use Six Mile as a convenient route. Heavy trucks are not conducive to the character and vibrancy of the Hamlet. The contextually appropriate design for the Hamlet would not support frequent traffic from heavy trucks. Heavy truck traffic within the Hamlet should be prohibited, except for local deliveries.

3. Maintain and enhance the Hamlet’s focal points.

The Township Hall, Salem Elementary School, Salem Bible Church, and Salem Veterans Park are the focal points and social core of the Salem Hamlet community and are also key parts of the internal structure for the physical organization of the community.

People already come to the Hamlet area for certain activities. There may be opportunities to attract other businesses that would be additional local destinations such as a restaurant, an ice cream shop, or service type businesses. All of this will be dependent on the level of daily activity within the Hamlet.

Contextually appropriate opportunities to increase activity may involve the enhancement of the park, installation of decorative lighting, better walkability along Six Mile, pedestrian connections between the village and the school or nearby recreation opportunities.

4. Enhance the pedestrian experience.

Pedestrian connections between the major elements within the Hamlet will help tie the community together, and will increase the community's attractiveness as a social gathering place. Enhanced sidewalks along Six Mile will increase opportunities for pedestrians to walk along the roadway. Pedestrian access from adjoining residential neighborhoods must be provided so that they are physically a part of the Salem Hamlet.

5. Preserve the scale and intensity of land uses.

Each development proposal, such as a rezoning petition, site plan, or subdivision plat, should be reviewed in terms of its relation to the entire Salem Hamlet, in addition to the site's conditions and its relation to neighboring properties.

The scale of uses and buildings must be kept consistent with the existing structures in the area, and a rural village character. Design review should be incorporated into the development review process and be required, in addition to site plan review, to ensure that buildings and landscaping will be consistent with the intended character of the area. Review standards should be established.

There is already a need for additional parking in the hamlet for existing destinations and activities. Also, new businesses or uses will need parking to accommodate the needs of their patrons. The design and location of parking lots must be regulated, so that parking lots will not dominate the visual character of the area.

LAND USE AND DEVELOPMENT POLICIES

Specific recommendations are set forth below regarding development in the Salem Hamlet, and the preservation of the Hamlet area's unique character. It is understood that many of the following policies could be initiated by community residents individually or acting as a unified group. Also, as new development is initiated within the Hamlet, the incorporation of these policies can be a part of the proposed development:

- A. Hamlet Center.** This area constitutes the core of the Salem Hamlet along Six Mile Road and should be gradually converted to a mixed-use area, subject to the following policy priorities:
- Uses permitted in the Hamlet Center should be compatible in size, scope, and intensity with a neighboring residential environment and the desired character of the Hamlet as expressed in this plan.
 - Multi-family units in converted single-family houses, as well as smaller scale new construction such as duplexes, quadplexes, and townhomes will add to the viability and vibrancy of the Hamlet and should be permitted.
 - Commercial and office uses such as boutique or specialty shops, food service establishments, personal service establishments, grocery and convenience retail stores, and medical and professional offices are considered appropriate in this area, provided that maximum size limits are maintained to ensure a residential scale compatible with the intended character of the Hamlet.
 - Drive through operations shall not be permitted.
 - Existing residential structures should be retained but may be converted to non-residential or mixed residential/commercial or residential/office uses that are compatible with the intended character of the Hamlet, provided that all necessary barrier-free access and other required site improvements are addressed in compliance with applicable Township Ordinance and other requirements.
 - New commercial, office, and other non-residential buildings should be compatible in scale and building orientation with the existing structures in the neighborhood, and should have rooflines, architectural proportions, and details that reflect or are compatible with the desired character of the Hamlet as expressed in this Area Plan. Exterior finish materials should be the same as commonly used on single-family dwellings.
 - Buildings should be oriented to the street with main entrances directly accessible from sidewalks within abutting road rights-of-way, and building height should be limited to a scale compatible with the overall community character.
 - Parking for non-residential uses should be located on the street or to the side and rear of the building, and parking lots should be small so that they will not dominate the appearance and character of sites.

- B. Salem Veterans Park.** The Salem Veterans Park will continue to be recognized as a significant visual enhancement and gathering place, and as the Hamlet’s principal open space. The direction provided in the Salem Township Parks, Recreation, and Open Space Master Plan suggests improvements such as benches and picnic table and other amenities that will expand the usability of the park. The Township can explore options to expand the park to include more usable space such as play structures for children and possibly a shelter for picnics or events.

- C. Salem Elementary School.** The existing public-school facility at the south end of the Hamlet area will continue to be recognized as an important defining element for the Hamlet. Every effort should be made to work with the public school district to ensure that this facility remains available to serve future generations of Township children, and available as a center of community and recreational activity in Salem Township.

- D. Open Space.** Open space and rural/agricultural land around the planned perimeter of the Salem Hamlet planning area is an important defining element for the Salem Hamlet area, and the preservation of this open space adjacent to the Hamlet will help to prevent encroachment and domination by development in neighboring areas. Existing natural area in the southern portion of the Hamlet are designated to be recreation conservation areas to maintain these natural features as buffers as well as community assets.

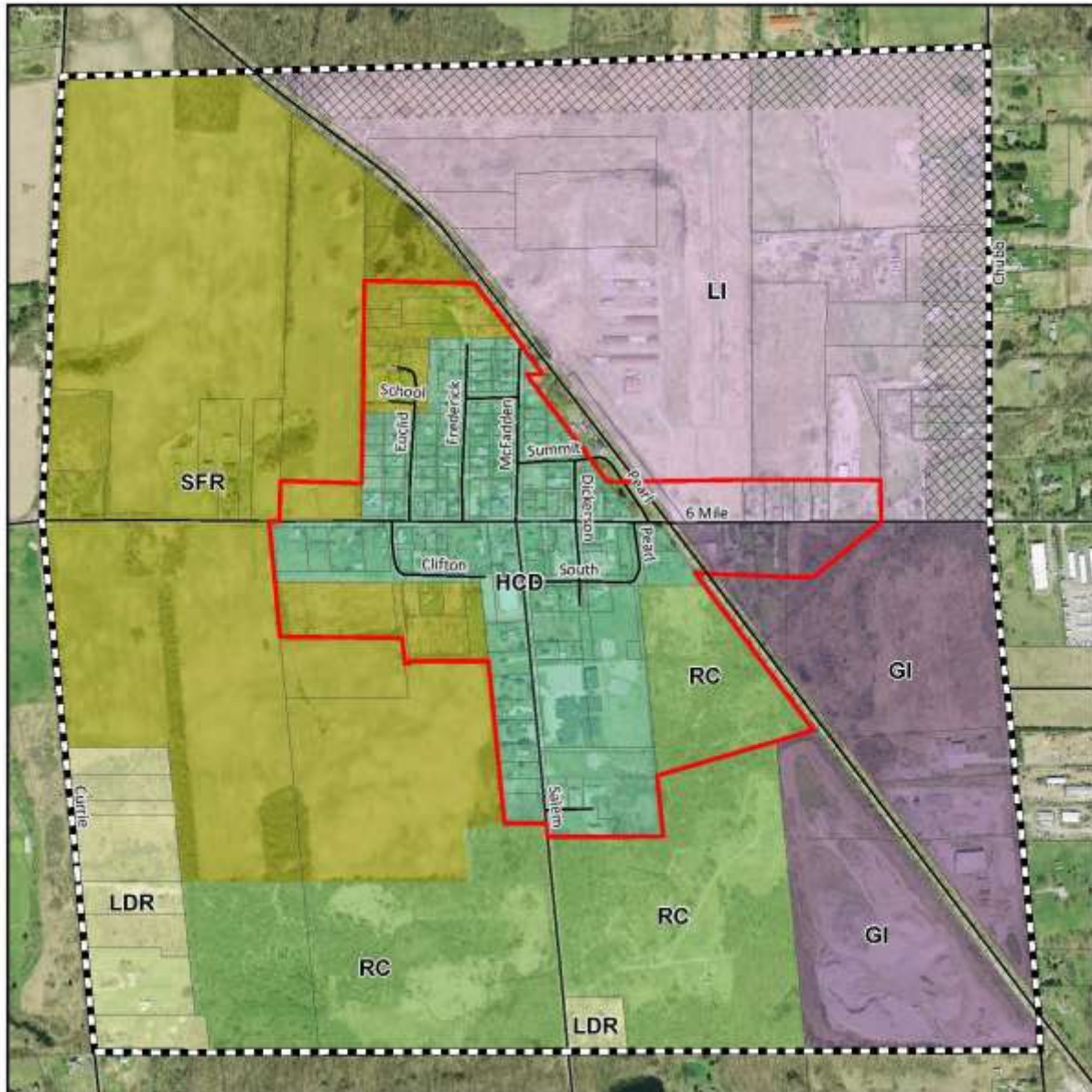
- E. New Residential Development.** Additional residences are needed in the Hamlet area to support a more vibrant local business community. New residential development on undeveloped land shall directly abut and be visually and physically interconnected with the developed area of the Hamlet, and shall be concentrated in the areas along the north and west sides of the Hamlet that are designated for potential new development on the Salem Hamlet Area Future Land Use Plan Map.
 - New single-family dwellings should be permitted as infill development on existing vacant lots within the developed area of the Hamlet. This may require the need to adjust the permitted lot sizes within the district to allow for the use of existing unbuilt lots.
 - New dwellings should be compatible in scale, orientation, rooflines, architectural proportions, exterior finish materials, and details with the existing residences and buildings in the neighborhood.
 - New residential development shall be designed at a net density of one to four dwelling units per acre, and all new dwellings shall be served by the Hamlet’s public sanitary sewerage system.
 - Wastewater treatment capacity has been planned for the existing lots within the Hamlet. However, there is limited capacity in the existing wastewater treatment facility. This means that increased density or expansion of the district will be predicated on the ability to increase capacity. While an expansion of the existing facility is not likely, the Township may need to devise a strategy to bring additional utility capacity to the district without providing it to surrounding areas that are not planned for greater development density.
 - Scattered or disconnected residential development in or adjacent to the Hamlet area shall be discouraged.

- If new developments are planned they must be connected through an extension of the existing road network in order to provide access and maintain continuity with the village character. In addition to any connections to county roads such as Six Mile or Currie, connections must be made to local neighborhood roads such as Euclid, School, Leota and Clifton. Such connections will help to incorporate new residential developments into the Hamlet in a way that is consistent with the village character and will add to vitality of the existing neighborhoods.

D. Industrial Development. There are some existing industrial land areas within the Hamlet Planning Area, primarily east of the railroad tracks. These are parcels that are already developed as industrial uses or are within an industrial zoning district. East of the railroad and south of Six Mile, the land is zoned General Industrial and has been developed as such. To the south and east this area is surrounded by other lands that are planned or have been developed with similar uses. There are however existing residential homes to the north on Six Mile and Chubb Road. General Industrial uses are typically not compatible with residential uses.

Though there are existing residential uses in this area, much of the area east of the railroad and north of Six Mile is zoned Light Industrial. Where industrial uses abut nonindustrial uses, a substantial buffer should be installed consisting of an expanded setback, earthen berms, landscaping and potential fences or walls for screening or sound attenuation. A buffer area has been depicted on the future land use map.

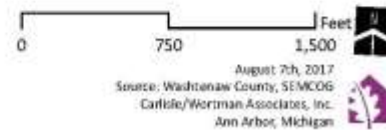
The Salem Hamlet Area Plan Future Land Use map. The Future Land Use map for the Hamlet depicts the land within the planning area and provides the proposed future land use designations for these lands. In general, the proposed future land uses are based on the existing development patterns or existing zoning within this area. As discussed later in this section, development within this planning area will be predicated on a number of factors including the availability of utilities, and the ability to meet regulations which have been designed to achieve the goals for the Hamlet envisioned in this Master Plan.



-  Salem Hamlet Area
-  Current Sanitary Sewer District
-  RC - Recreation/Conservation
-  LDR - Low Density Residential
-  SFR - Single Family Residential
-  HCD - Hamlet Center District
-  LI - Limited Industrial
-  GI - General Industrial
-  Buffer Zone

HAMLET AREA PLAN FUTURE LAND USE

Salem Township, Washtenaw County



SALEM HAMLET TRANSPORTATION AND STREETScape PLAN

The primary objective of this Salem Hamlet Transportation Plan is to help preserve the character of the Hamlet area with a road network that is contextually appropriate for the community's intended character as expressed in this Salem Hamlet Area Plan. The key to achieving this objective is to ensure appropriate pedestrian facilities, prevent the build-up of regional traffic flows through the community, and to ultimately redirect heavy truck traffic away from the Hamlet area. If such traffic is permitted to increase, the quiet residential character of the community will be lost to traffic noise, exhaust fumes, congestion, and hazards. The following specific policies are intended to achieve this objective:

- A. Six Mile Road.** Six Mile Road is the central transportation core of the Salem Hamlet area. Until the recent adoption of a truck route ordinance, Six Mile was subject to substantial heavy truck traffic which detracted from the village character. The objective of policies contained within this Area Plan is to minimize the traffic impacts of Six Mile Road as it passes through the Hamlet. The integrity of the Salem Hamlet can only be maintained by addressing the impacts created by Six Mile Road. The visual perspective of Six Mile Road should be of a village scale and character. This can be accomplished by incorporating the following methods:
- The existing road should not be widened beyond a two-traffic lane roadway within the Salem Hamlet area.
 - Beautification of the streetscape through the addition of pedestrian scale amenities such as sidewalks, enhanced crosswalks, street trees, and decorative lighting.
 - The speed limit in the segment within the Hamlet should be reduced to a maximum of 25 to 35 miles per hour (mph).
 - Maintaining a truck route ordinance that prohibits heavy trucks on Six Mile within the Hamlet.



- B. Traffic Calming Improvements.** A variety of vehicle traffic calming techniques along Six Mile Road can reduce the speed and noise of traffic through the area, and to provide a safer pedestrian environment in the Hamlet.

Such traffic calming improvements could potentially include new roadway curbing along Six Mile within the Salem Hamlet Area to establish greater separation of roadway and adjacent parcels and land uses and potentially to create delineated areas of new on-street vehicle parking.

Enhanced crosswalks using techniques such as bump outs, raised crosswalks or even using different material or different colors for the crosswalk area will slow drivers down.

Proposed streetscape improvements including street trees and decorative lighting create a psychological effect on drivers that will also slow traffic down by virtue of making the road seem more narrow.

- C. Non-Motorized Pathway Improvements.** Expand the network of public sidewalks along both sides of the Six Mile Road corridor within Salem Hamlet Area, with connections to the existing sidewalks serving Salem Elementary School and possible extensions to other local streets within the Hamlet, which would:

- Allow greater pedestrian access to adjacent land uses.
- Provide structured pedestrian access corridors.
- Provide safer pedestrian travel and access to land uses and activities.
- Provide continuity, structure, and focus for pedestrians along roadway corridors.
- Visually create a sense of community and greater opportunities for casual socializing within the community.

- D. On-Street Parking Improvements.** Work with the Washtenaw County Road Commission to allow for areas of on-street parallel vehicle parking adjacent to the north side of Six Mile Road at appropriate locations within the Salem Hamlet, which would:

- Provide parking for adjacent establishments.
- Serve to slow traffic through the Salem Hamlet area.
- Add to the visual character of a centralized community.
- Provide physical separation from vehicle traffic and pedestrians on sidewalks.
- Enhance feeling of safety for pedestrians on sidewalks.

- E. Street Tree Improvements.** Establish a street tree planting and maintenance program to plant and maintain a row of large deciduous trees at locations adjacent to the right-of-way of Six Mile Road within the Salem Hamlet Area where there is sufficient land area to support healthy growth and development, which would:

- Establish continuing visual character of the transportation corridors of the Salem Hamlet area.
- Provide a focused community atmosphere.

- Provide physical and visual separation from establishments adjacent to roadways and vehicles traveling on roadways.
- Enhance roadway and pedestrian access points to Six Mile Road.
- Begin to create additional distinguishing features within the community.

The incorporation of carefully considered traffic-calming techniques and well-designed streetscape improvements and other physical treatments along the Six Mile Road corridor would create a safer environment for motorists, bicyclists, and pedestrians; and would enhance the visual perspective and character of the Salem Hamlet area.



Potential Improvements



Existing Conditions

- F. Perimeter Roadway Treatments.** Work with property owners along the Six Mile Road corridor to establish a consistent decorative treatment along the perimeter of the road right-of-way, such as a row of low profile picket fences or hedges for visual separation of residential areas from Six Mile Road traffic, which:
- Would provide physical separation of residential areas from pedestrian sidewalks and on street parking, while also establishing a more unified character for the Hamlet.
 - Could focus entrances to specific sites or buildings.
- G. Street lighting Improvements.** Street lighting within the Hamlet can help to accomplish objectives involving both safety and aesthetics. Appropriately lit areas are safer for both pedestrians and drivers. Pedestrian scale lighting which is lower and typically more decorative, will:
- Make the area more inviting for walking due to the increased feeling of safety.
 - Enhance the look of the village.
 - Increase the ambiance without creating light pollution. Many fixtures are designed to be completely down directed, there by complying with Township standards and goals articulated in this master plan and still providing appropriate light levels and aesthetic improvements.
- H. Add Outdoor Seating in the Core Hamlet Area.** Provide clustered benches adjacent to sidewalks at selected locations within the public and/or commercial areas of the Salem Hamlet to create a more pedestrian-friendly environment.
- I. Pedestrian Circulation.** There are some existing sidewalks in areas along Six Mile. The completion of the sidewalk system along Six Mile can add to the functionality of the street, as well as enhance the look and feel of the area. Providing sidewalks along both sides of the road would help to make the roadway safer which could encourage pedestrians to utilize the area for walking, thereby, adding people and activity to the street.

Additionally, people's use of the sidewalk would be increased by creating a feeling of safety. This can be done with the appropriate separation between the vehicular way and the pedestrian space. Curbs and green belts with street trees and pedestrian scale lighting can help to accomplish this. Even on-street parking helps to provide the feeling of separation and safety. While the speed limit on Six Mile through the Hamlet is already low, providing enhanced pedestrian crossings at the intersection will help to slow vehicles and increase safety for pedestrian users.

The Township must work with the Washtenaw County Road Commission to enhance pedestrian crossings. At a minimum, bumpouts that reduces the length of roadway which a pedestrian must cross make crossings safer and slowing vehicular speeds. A more robust solution may include the installation of a pedestrian-activated traffic signal system at the established Six Mile Road and Salem Road crosswalk leading to the Salem Elementary School, and perhaps also at the Six Mile Road and Dickerson Road intersection where pedestrian traffic regularly crosses between the Township Hall and the General Store:

- Would reduce traffic speed through the Salem Hamlet area.
- Would allow safe pedestrian crossings of Six Mile Road at control points, without unnecessary disruption of traffic flow.
- Would improve access to Hamlet area amenities, and may increase the use of the community parking lot adjacent to the Salem Veterans Park.

J. Bicycling-Related Improvements. Salem Township and the surrounding townships are attractive destinations, especially for those engaging in longer distance bicycle touring activities and group rides. The Hamlet particularly has the potential to be an attractive destination or stopping place for these area bicyclists.

The Township should consider developing and implementing a plan for physical improvements and new facilities to serve bicyclists in the Hamlet, which could include paved shoulders or bike lanes on area roads, and bike racks for bicycles on Township land and/or adjacent to area businesses.

K. Gateway Improvements. Gateways can be important elements to the community. A gateway feature can be used to mark the entrance to the Hamlet. Such feature can include a sign and landscaping using plantings, stones, decorative walls, or even water features to enhance the aesthetics of the Gateway. Signs and entry features can also help to create a sense of place within the Hamlet by indicating the boundary and displaying pride in the area. Work with property owners to provide entrance signage at each entrance to the Salem Hamlet, which:

- Would serve as a visual element to help motorists understand that they are about to transition from a higher speed, rural driving environment into a lower-speed, village environment.
- Could be used to establish an architectural theme serving to identify the community.
- Could be combined with landscaping and other architectural features characteristic of the community.

THE FUTURE OF THE SALEM VETERANS PARK BLOCK

The Township owns most of the land on the block of the Hamlet bound by Six Mile Road, Dickerson St., South St., and Salem Road. Salem Veterans Park is the dominant feature of this block, which also contains several residential structures, a gravel parking area, and approximately one-half acre of vacant land. The following policies should govern the future development of this block:

- A.** Maintain the existing elements of the park.
- B.** Consider the development of a permanent farmer's market site.
- C.** Consider establishing an entertainment pavilion for community events.
- D.** Expand the usable area within the park.

- E. Add play structures and picnic benches to make the park more attractive to families as a gathering space.
- F. Enhance the parking lot to provide parking for the park, as well as other destinations in the hamlet.

HAMLET AREA PUBLIC FACILITIES AND SERVICES PLAN

When new residential development occurs in the Hamlet area, it may be necessary to make improvements to some public facilities and infrastructure to support the new growth. The nature of improvements, means of financing, and portion of costs to be borne by public and private parties will need to be established by future studies and integrated into the Township's capital improvements program (CIP) for the Salem Hamlet Urban Service District.

A. **Stormwater Management.**

Creative approaches to a comprehensive system for storm water management must be evaluated for the Hamlet area, considering individual developments and based upon the Washtenaw County Water Resources Commissioner's rules and regulations. Open storm drainage and detention areas should be incorporated into the design of existing and future development as an attractive amenity or focal point. Such improvements must be designed as amenities and an asset to the entire community, while providing safe, efficient removal of stormwater.

B. **Hamlet Area Public Sanitary Sewer.**

An existing sewage treatment plant located to the south of the Hamlet and east of Salem Road currently serves the Hamlet area. However, this plant has limited capacity. The Township should explore all available options for the future of this plant and the sewage treatment and disposal needs of the community, including possible plant upgrades or interconnection with an existing sewer system when such a connection becomes feasible.

C. **Township Hall and Fire Station.**

The Township Hall consists of three interconnected structures that include a large meeting room, various administrative offices, and the fire station facilities. A separate historic dwelling on the same parcel, the Rider House, is occupied by the State Police. Future improvements and alterations to these facilities should be carefully planned to make efficient use of Township resources.

Where feasible, any future redevelopment or expansion of the Township Hall should include measures to re-orient the building to the abutting public streets, with provisions for direct public access from the public sidewalks.

D. **Parks and Recreation Facilities.**

Parks and recreation facilities in the Township will be governed by the policies of the Salem Township Parks, Recreation, and Open Space Master Plan.

E Other Utilities.

To the maximum extent possible, electrical, telephone, cable and other existing overhead utilities along the Six Mile Road corridor should be relocated underground. This work should be done in conjunction with major road or underground utility reconstruction projects, or as new development takes place.

PART 12

LAND PRESERVATION

IMPORTANCE OF LAND PRESERVATION

The importance of natural features, open space, and agricultural lands are discussed throughout this Master Plan and particularly in Part 2, Part 5, and Part 6. The elements identified in these Parts are key components that have defined the rural character and helped to shape the identity of Salem Township. As noted throughout this plan, it is this rural character that residents have indicated throughout the planning process over the years as the characteristic that makes the community attractive and why they have chosen to move to or remain in Salem Township.

Beyond the character of the community or the enjoyment of pastoral open space, Part 5 identifies the importance of protecting natural features as it relates to environmental health in particular the protection of ground water for purposes of flood management and water quality. Water quality is critically important to Salem residents who get their drinking water from wells. Additionally, Part 6 describes the importance of agricultural lands as a desired component of the Township's economy. The Township's policies indicate that agricultural uses on large tracts of lands are not looked at as a holding land uses waiting for development, but are the land uses that are desired.

As development continues these features can slowly, and incrementally, be eroded away until there is no continuity between natural areas or tracts of farmland making them less viable. In addition, the loss of these features will lead to a drastic change in the character or community. Based on the identified importance of natural features, open space, and agricultural land, this part 12 dealing with land preservation explores the steps that the community can take to help foster the preservation of lands of Salem Township.

PRESEVATION CRITERIA

Much of Salem Township exists in an undeveloped state. Though the land has been subdivided there are still considerable tracts of land that have not been developed or fully developed. This is represented by parcels with no structures or larger parcels that have only a single-family home and accessory buildings on a small area with the balance in a more or less natural state. Additionally there are large tracts of land that are being used for crop production or the raising and keeping of animals. While it may be desirable to preserve all land that is not currently developed, resources needed to preserve lands must be allocated strategically. For example, land that has limitations for development such as high ground water may not need additional protection. Land that has been developed for a single-family home and wouldn't be easily further divided may not be a priority. On the other hand, a large tract of farm land that is well drained may represent an attractive opportunity for a residential developer. Therefore it is important to prioritize lands that are targeted for preservation. The following criteria have been developed as a basic guideline for targeting land for preservation:

1. Risk of development

a. Proximity to adjacent development.

The protection of land next to development areas can help to provide a buffer to neighboring less intense land uses. Protection of land around a development can help to minimize sprawl.

b. Proximity to adjacent planned development areas.

The community has certain areas that are planned for development. Planned development areas often create interest in adjacent lands. Protection of land around planned development areas can quell the pressure for development to continue into areas where additional development is not planned.

2. Location along entry corridors

The preservation of land near gateways and along roadways used to enter the Township can protect scenic views and the rural community character by maintaining open space, natural features, and agricultural lands and structures.

3. Total acreage of an individual parcel used for agricultural purposes

Especially for farmland to be used for large crop production, there is a threshold of roughly 80 where the size of individual parcels or an overall cluster of farm fields is more economically viable for farming operations.

4. Proximity to other preserved land

Contiguity of preservation land is important for a number of reasons. In addition to that listed above for agricultural land, the consolidation of preserved natural features can provide for stormwater protection, provide increased habitat for animals, maintain transportation corridors for animals, especially if the protected land follows a watercourse. Water recharge areas Continuous land can also facilitate the development of a trail system in the community.

5. Recreation opportunities

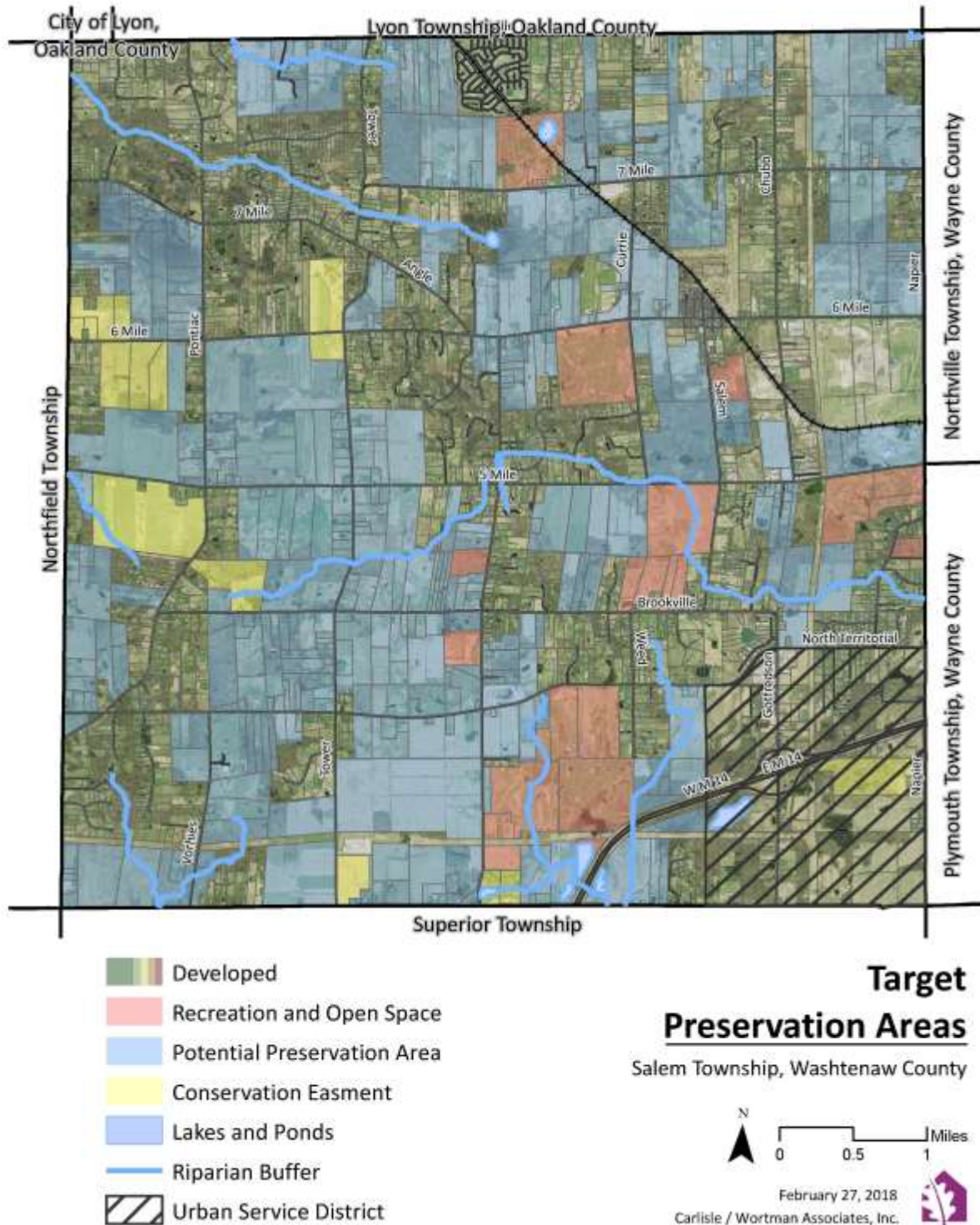
Preserved land can provide both passive and active recreation opportunities. With natural land preservation, passive recreation in the form of trails is typical. Lands can also be identified in proximity to population clusters that can be used for Township parks, which may include elements of active recreation in addition to natural features protection.

6. Important water features

Areas the contain water features that protect or enhance water quality such as natural streams and wetlands. These features not only act as natural stormwater systems that store and convey stormwater, but they also purify the water and facilitate groundwater recharge by allowing water to infiltrate into the soil.

TARGET PRESERVATION AREA

The target preservation area map was developed by using the listed features above as well as other important features recognized in Parts 5 and 6 of this plan to identify primary or target preservation areas. The map is a tool that visually expresses Township preservation policy.



LAND PRESERVATION STATIGIES

- (1) Maintain a Land Preservation Board to implement the preservation policies in this plan.
- (2) The Township should maintain the Acquisition of Land and Development Rights Ordinance which established, among other things, the process and criteria for the accusation of land for preservation within the Township.
- (3) Use the target preservation map and criteria listed in this Part as a tool to assist the Land Preservation Board and the Board of Trustees to further develop strategy for land acquisition and prioritizing efforts and funding.
- (4) Encourage and support landowners within the Target Preservation Areas to participate in the:
 - State of Michigan’s PA 116 Farmland and Open Space Preservation Program;
 - The donation of conservation easements and development rights to local land conservancies;
 - The Purchase of development rights (PDR) programs to permit farmers to realize income from the development rights of portions or all of their farmland land while retaining agricultural or open space values; or
 - Transfer of development rights (TDR) program, such as the Township’s Planned Unit Development (PUD) Special District provisions for off-site open space preservation, to permit farmers to realize income from the development rights of portions or all of their farmland land while retaining agricultural or open space values.
- (5) Encourage participation in local, county, and state purchase of development rights (PDR) programs and the use of private conservation easements and local land trusts to preserve rural open space, natural resources, and environmentally sensitive areas.
- (6) Review the land trust concept as a viable option for obtaining lands to be dedicated as open space and as a method of securing other unique natural resource lands within Salem Township for long term preservation.
- (7) Reference preservation strategies established in other parts of this document such as Part 5 - Natural Features and Part 6 - Plan for Agricultural Plan for support in preservation efforts.

PART 13

TRANSPORTATION

INTRODUCTION

An integral part of the Master Plan is the Township's transportation network. The degree to which land uses interact effectively is dependent upon this concept. The street pattern is well established in Salem Township. To some extent, the character of the community as it evolved has adapted to the framework established by regional arterials - M-14, Eight Mile, Six Mile, North Territorial, Pontiac Trail, Curtis, as well as other major roadways. Many of these roadways will require improvements in the future, especially the interchange of M-14 and Gotfredson Road. The overall transportation system should be managed and improved in such a way as to serve the residents, farmers, business owners, and land owners of Salem Township as well as neighboring communities, while remaining contextually appropriate to the existing or intended character of the various parts of the Township.

The primary objective of this section of the Master Plan is to identify policies and strategies that will enhance the Township's transportation network, which anticipates planned growth, in order to provide safe, convenient, and efficient vehicular and pedestrian circulation. To accomplish this a close cooperation between private developers, Township, County and State officials, and a strict adherence to sound planning principles and design standards will be required. Realignments, improvements, or new roadways, which are designed using criteria contained within this Master Plan may be needed before or in conjunction with new developments. This is particularly important in areas that are planned for growth such as the Urban Services district or the Hamlet.

North Territorial Road, Six Mile between Currie and Angle Roads, Seven, and Eight Mile Roads comprise Salem Township's principal east west surface roads as well as Plymouth Road at the south east corner of the Township. Principal north-south roads consist of portions of Dixboro, Chubb, Pontiac Trail, Curtis, Currie, and Gotfredson. The M-14 freeway contributes significantly to the Township's transportation network. These roads will continue to be the principal roads, with Gotfredson Road gaining increased importance due to its intersection with M-14. Pontiac Trail, Curtis Road and Six, Seven, and Eight Mile Roads will all see increases in traffic as growth in the township and surrounding areas continues due to their importance in the region wide road network. Rail service to the Township should be preserved for its potential industrial significance.

Since the rural character of Salem Township is largely experienced by persons traveling down the roads in the Township, any changes that are necessary to enhance the roadway or right-of-way in the rural areas should be made in a way that is consistent with the character of the area and other pertinent policies in this Plan.

TRANSPORTATION PRINCIPLES

- A. Streetscapes must convey an image of a community and character to visitors and even impart a self-image to the residents of the community. Contextually appropriate roadway cross

section design can help to convey the appropriate image. Appropriate designs will be depending on the surrounding existing or planned land uses.

- B. Township entryways are an important part of the overall street scape. Entryways include the M-14 freeway interchange area and the point where major streets cross the Township's boundaries. Entryways on Pontiac Trail, Curtis, North Territorial, Six, Seven, and Eight Mile Roads offer special opportunities to express the image or character that the community wishes to convey.
- C. All new streets in the designated Urban Service District must be paved. Existing unpaved streets in the Urban Service District should be paved when possible, to provide safe and convenient access to adjoining properties.
- D. Streets located in areas planned for sanitary sewer service should be constructed to urban standards, including curbs and gutters, and other contextually appropriate streetscape elements such as lighting, landscaping, and pedestrian facilities.
- E. Paving of existing unpaved roads that receive larger volumes of traffic should be considered on an individual bases. Traffic count as well as the type of traffic and the character of each unpaved road should be evaluated to determine if the road should be paved. Roads should be pave to Washtenaw County Standards, however, the Township may work with the County to consider alternative techniques for paving of existing gravel roads for interim periods, in order to obtain pavement on these roads at the earliest possible time. They should eventually be upgraded to County standards as well. New streets in the designated suburban and rural parts of the Township should have rural road section streets, based on County Road Commission standards, which include ditches instead of curbs and gutters.
- F. Plans for new development should provide for the extension of streets to connect with existing or future streets at common boundaries where there are planned or existing compatible uses in order to provide interconnectivity.
- G. New streets should be designed and constructed to Washtenaw County Road Commission standards.
- H. Through traffic should be routed around rather than through neighborhoods and other use areas. Local and through traffic should be separated to the extent possible by the design of the street system. In existing residential areas with grid street patterns, the street system should be revised where possible to discourage arterial traffic from cutting through neighborhoods.

- I. Traffic from new developments will likely contribute to the need for improvements on existing roads and intersection. Impacts from such development shall be determined through traffic impact studies. The developer must mitigate impacts by improving roads and intersections or by contributing their share of funds to larger road improvement projects based on their impacts.
- J. The number of driveway openings on arterial and collector streets should be minimized in order to reduce the need for additional lanes and to improve traffic safety.
- K. The design and character of streets should be consistent with and subservient to the desired character of Salem Township. The freeway, by its nature, creates barriers between different parts of the community. The right-of-way and number of lanes and pavement width of other streets should not be so large or dominant as to create barriers between areas on opposite sides of these streets.

TRANSPORTATION GOAL, AND POLICIES

Goals:

- Maintain and enhance a safe, efficient transportation system that facilitates the transportation needs of the Township.
- The transportation network shall support the diverse needs of Township residence, farmers, business owners, land owners, and visitors.
- The transportation network shall support multiple modes of transportation through contextually appropriate infrastructure based on the existing and planned surrounding land uses.
- The transportation system shall complement the existing or intended character of the different areas within the Township.
- The transportation system shall be designed to minimize adverse impacts of traffic, especially of regional traffic, flowing through the Township.

To accomplish these goals the following policies and standards are set forth:

A. Hierarchy of Roadways

Policies

A hierarchy of roadways must be established to provide convenient vehicular circulation, to minimize congestion, and to minimize traffic on gravel roads.

1) Primary Roadways

Definition These roads are designed to carry the highest traffic volumes in the Township and serve both regional and local traffic. These roadways connect local road ways with the interstate system and major roadways in adjoining communities.

Standard

The following design standards should be established for primary roadways.

- 120 to 150 foot right-of-way (R.O.W.), with exceptions as noted below;
- 2 paved lanes minimum; and
- Use of shared driveways and access roads to minimize access points on primary roadways.

Primary roadways R.O.W. widths should be designated as follows:

East/West:

1. North Territorial Road through the Township (150' R.O.W.);
2. Seven Mile from Dixboro Road east to Angle Road continuing north and then easterly through Salem Township (86' R.O.W.);
3. Angle Road connecting Seven Mile Road to Six Mile Road (66' R.O.W.);
4. Six Mile Road between Angle and Curtis Roads (66' R.O.W.);
5. Eight Mile Road through the Township (120' R.O.W.); and
6. Five Mile Road between Chubb and Napier Roads (86' R.O.W.).

North/South:

1. Pontiac Trail (120' R.O.W.);
2. Dixboro Road between Pontiac Trail and Joy Road (120' R.O.W.);
3. Curtis Road between Joy Road and Six Mile Road (86' R.O.W.);
4. Chubb Road between Five Mile and Six Mile Roads (86' R.O.W.);
5. Gotfredson Road between Joy Road and M- 14 (86' R.O.W.); and
6. Gotfredson Road between M-14 and North Territorial Road (150' R.O.W.)

2) Collector Roadways

Definition These roads are intended to serve traffic, which is more local than that which the primary streets carry. Collector roadways primarily serve local traffic and distribute traffic from local roadways to primary roadways. Lots in residential subdivisions should not have direct access to collector roadways.

Design/Standards

The following design standards should be established for collector roadways.

- The right-of-way should be between 66 and 120 feet;
- 2 paved lanes minimum; and
- Minimal access to individual lots.

Collector roadways R.O.W. widths should be designated as follows:

East/West:

1. Six Mile Road excluding the area between Currie and Chubb Roads (66' R.O.W.); and
2. Five Mile Road between Curtis and Chubb Roads (66' R.O.W.).

North/South:

1. Currie Road between Five Mile and Eight Mile Roads (66' R.O.W.); and
2. Napier Road between Five Mile and Eight Mile Roads (66' R.O.W.).

3) Local Roadways

Definition The primary function of these streets is to provide access to abutting properties. Local roadways are intended to primarily serve local traffic, rather than regional or through traffic.

Design/Standards

The following design standards should be established for local roadways.

- 66' R.O.W.;
- 2 lanes paved in new developments;
- 2 lanes gravel in rural areas; and
- 2 lanes gravel in very low density residential developments with private roads.

4) Special Corridors

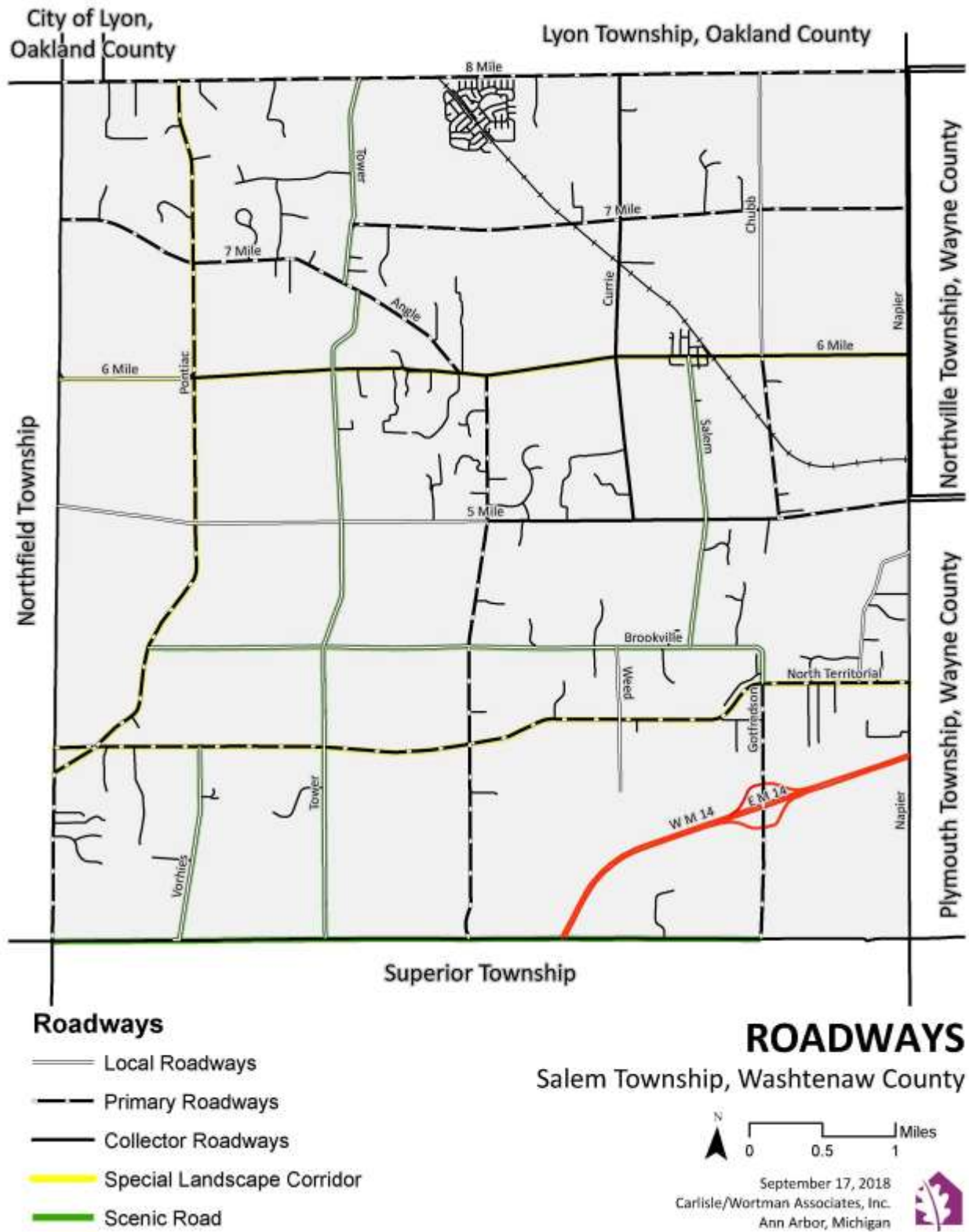
Definition Special corridors are roadways that have a recognized scenic or historic character that should be protected, and other roadways, such as Township entrances, that require special treatment.

Design/Standards

- (1) The character of special corridors shall be protected during maintenance. Special corridors shall not be improved, unless necessary and any such

improvements shall not alter the character of the special corridor.

- (2) The natural landscape should be preserved along scenic Roads as designated in the Road Ways Map. Preservation of the natural landscape shall also be encouraged along roadways characterized by significant natural resources or vistas. These roadways shall be designated as scenic roads. Scenic roads in Salem Township include:
 - (a) Joy Road west of Gotfredson Road
 - (b) Tower Road
 - (c) Salem Road.
 - (d) Brookville Road.
 - (e) Vorhies Road.
- (3) Landscaping could be enhanced or preserved to retain a scenic quality along Special Landscape Corridors. These roadways may be subject to increased development in the future and/or are considered entranceways into and through the Township where scattered development has taken place. Special Landscape Corridors in Salem Township include:
 - (a) North Territorial Road.
 - (b) Pontiac Trail.
 - (c) Six Mile Road.
- (4) Historic sites and structures should be protected from adverse impact from traffic and road improvements.
- (5) The character of the major entrances to the Township shall be protected and enhanced. Entrances of particular concern are:
 - (a) Gotfredson Road.
 - (b) Pontiac Trail and Eight Mile Road.
 - (c) The interchange of M-14 and Gotfredson Road.
 - (d) North Territorial



B. Improvements to Existing Road System

Policies

The following road improvements are a priority:

- a. Improvement of Gotfredson Road interchange with M-14.
- b. Controlled access design of entrance points from Gotfredson and North Territorial Roads within Urban Service District.
- c. Improvements to intersections along North Territorial to improve traffic flow at peak times.
- d. Realignment has been considered for Angle Road, where it intersects Six Mile west of Curtis Road, by the Washtenaw County Road Commission. Additional review and assessment must be undertaken to determine the feasibility of this intersection alteration.
- e. Realign the intersection of North Territorial and Pontiac Trail so that it is at right angles.
- f. Paving of Chubb Road between Five Mile and Six Mile Roads.

Road improvements should be made according to a planned schedule and design standards which ensure sufficient public rights-of-way,

C. Road Systems for new Development

1. Impact on Existing Road System
 - a. Traffic impact studies shall be performed for any new development. Developers must mitigate projected impacts on public roads that result from the new development. Contributions to larger more comprehensive road improvement projects may be more appropriate than individual projects.
 - b. Streets in new developments with lot sizes of one acre or less in size should be paved in order to reduce long-term maintenance costs. Any paving of streets shall be the responsibility of the developer.
2. Access
 - a. The number of curb cuts to primary streets shall be minimized.
 - b. Joint drives or frontage roads shall be required, where feasible, to reduce the number of curb cuts.
 - c. Access patterns should be designed to encourage placement of buildings to face primary and collector streets.
3. Residential Road System
 - a. Plans for new development should provide for extension of roadways into new development areas where such extension is determined by the Township

to be necessary for the continuity of the public street system or to provide adequate vehicular access to interior lands.

- b. Residential areas should be interconnected by public streets. Residential developments that are intended to be isolated from the rest of the community by a system of private streets and absence of street connections with adjacent parcels should be discouraged.
- c. Residential areas should be interconnected with local commercial areas in planned developments unless such connection disrupts the pedestrian environment or encourages through traffic in the residential area.
- d. Access to new development shall be from existing paved roads wherever feasible.

4. Through Traffic

- a. Through traffic should be routed around and not through agricultural land use areas. Through and local traffic should be separated by the design of the street system.
- b. Through traffic should be routed around and not through dense land use areas. Through and local traffic should be separated by the design of the street system.

5. Road Standards

- a. Public and private streets should meet the standards and specifications of the Washtenaw County Road Commission and the Salem Township engineering standards.

6. Financing Road Improvements

- a. Roads within new developments shall be funded through developer financing with subsequent dedication to the public.
- b. Road improvements needed to serve more than one property shall be funded through developer financing or through special assessment districts for all adjacent properties that substantially benefit from the road improvements. Provisions shall be included in such special assessment districts to exclude single-family dwellings and to exclude farmlands that are retained in farming for a predetermined period of time after the improvements are made, or to minimize the costs to such single-family dwellings and farmlands to the extent allowed by law.

D. Pedestrian/Bicycle Circulation

Definition A non-motorized circulation systems made of pathways and sidewalks which provides connections within and between land uses within the Township and with other communities..

Policies

a. Urban Developments

- i. Sidewalks should be required as an integral component of the circulation system in the Urban Service District and residential developments consisting of site condominiums and subdivisions. They should:
 - a) Be provided along all streets.
 - b) Be separated from streets by landscaping or other amenities to provide for safety and pedestrian comfort.
 - c) Be barrier-free; and
 - d) Be coordinated with a bicycle system where feasible.

b. Suburban and Rural Developments

- 1) A cohesive pedestrian and/or bicycle circulation system should be required within residential developments.

c. Bicycle Paths

- 1) The development of a safe, comprehensive bicycle circulation system to link areas of the Township with each other and with bicycle systems in adjacent communities should be investigated. Bicycle trails should be constructed, where feasible, to connect parks and open space areas. The following shall be considered:
 - a) Sidewalks should be considered an integral part of the transportation system. Sidewalks should be provided along all streets in the designated Urban Services District and should be separated from the curb or edge of pavement by a safe margin. The margin should be larger along primary roadways. Sidewalks should be barrier free and should be combined with bikeways where possible and feasible.
 - b) A pedestrian/bicycle path system should be encouraged in the Township and could extend to all residential areas. The Planning Commission should require extensions of the system during review of site plans or subdivision plats. The pedestrian/bicycle path system should extend to recreation and open space areas to provide access from residential areas. It should also be extended to the perimeter of the Township to connect with other pedestrian/bicycle paths.
 - c) The pedestrian/bicycle path system should be physically separate from streets, where possible, but should connect with street sidewalks where possible.

- d) Each development shall provide its share of the pedestrian/ bicycle path system, in accordance with the nonnotarized map.
- e) The pedestrian/bicycle path system must be located within the public right-of-way or within a dedicated easement.

E. Public Transportation

Policies

Public transportation options which provide access within the Urban Service District or to the Urban Service District from neighboring communities should be explored.

a. Bus Access

- 1) The circulation systems in the Urban Service District should be designed to accommodate public bus transit as follows:
 - a) To provide locations for bus stop sites along primary streets, at employment centers, and at commercial centers.
 - b) To provide access from sidewalks to potential bus stops; and
 - c) To separate bus stops from traffic flow with sufficient space to provide a safe, sheltered waiting area or facility.
- 2) Conveniently located park and ride lots shall be incorporated within the Urban Service Area.

IMPLEMENTATION STRATEGIES

- 1. Adopt zoning ordinance requirements to establish:
 - a. Setbacks from proposed rights-of-way as designated in the hierarchy of roadways section in this chapter.
 - b. Standards requiring natural tree species planting along County roads.
 - c. Criteria for land scape treatment along designated Special Corridors including natural tree species.
 - d. Standards to limit the number of curb cuts requiring access from primary and collector roadways.
 - e. Standards which require construction of public sidewalks or bicycle paths along public rights-of-way for all new development in the Urban Services District, or development with a density of one (1) dwelling per acre or less, and where applicable, along Primary and Collector roadways, unless the requirement is waived by the Planning Commission as likely, under the circumstances, to serve no useful public purpose.

- f. Standards for all other Transportation Policies in this Master Plan.
- 2. Coordinate with the Washtenaw County Road Commission to:
 - a. Provide designated rights-of-way for all public roadways;
 - b. Minimize the number of curb cuts requiring access from primary roadways;
 - c. Support designation of and cooperate in protection of natural beauty roads; and
 - d. Develop bicycle paths or lanes along Township roadways.
 - e. Develop strategies for long term road impairments within the township, especially in the Urban Services District.
- 3. Include planned road improvements in the annual Township Capital Improvement Program.
- 4. Undertake a citizen initiative to plant salt tolerant native trees parallel to the proposed future right-of-way width of County roads to create future tree lined corridors.
- 5. Develop a landscaping enhancement or existing vegetation preservation ordinance for scenic roads or special landscape corridors.

PART 14

PUBLIC UTILITIES

INTRODUCTION

It is the intent of this Plan that sewer service not be extended into any portion of the Township that is not planned for such extension. Currently, the only municipal sanitary sewer system within the Township is a small system serving the Salem Hamlet Area, including industrial uses on Chubb Road. This system resulted from the need to correct the failure and inadequacies of existing septic systems within this area. Capacity for the system was designed to accommodate the existing land uses, and provide for limited infill development within the designated Hamlet Sewer District.

It is noted that a 784-unit mobile home park was developed as a result of court proceedings in Sections 3 and 4 along the northern Township border. It was permitted by the State Mobile Home Commission to have its own private sanitary sewer system, which was approved by the DEQ contrary to adopted Township policy. The Township believes the proliferation of such systems would have severe deleterious effects on the water quality of the small headwater streams and drains that serve the Township. If stream water quality is damaged in Salem Township, all downstream riparians will suffer. For that reason, and because properly functioning public sewer treatment is cleaner than septic systems, and because public sewer service greatly facilitates cluster development which is advocated in this Plan, public sewer service should be actively investigated as the preferred alternative for waste disposal.

The adjoining communities of South Lyon to the north, Plymouth and Northville Townships, to the east have municipal systems. Although an extension of public sewer and water currently serve facilities within the sanitary landfill along Napier Road, this was designed only to serve these facilities on a specific contract. An additional municipal sanitary and water system will be needed to service the Urban Service District located adjacent to the M-14/Gotfredson Road interchange to service anticipated urban development. Work to provide this system is currently underway through a joint effort with potential developers.

The Township's involvement and/or management of any future public sanitary sewer system will be to serve the public health, safety, and welfare of the Township and residents and to protect the Township's environment. Other than the Salem Hamlet Area, public sanitary sewer and water will only be allowed within the designated Urban Service District.

GOALS, OBJECTIVES, AND POLICIES

GOAL - Utilities that serve the public health, safety, and welfare and that serve to protect the Township's environment.

To accomplish this goal the following objectives are set forth.

A. Public Sanitary Sewer

Management of any public sanitary sewer system will direct development away from areas designated for agricultural, rural, and suburban residential land uses.

1. Policies

a. Sanitary Sewer Service Area

- 1) Sanitary sewer service shall be limited to only designated areas of Salem Township. Service to any other area shall require prior amendment to the Master Plan.
- 2) Extension of public sewer services into designated agricultural zones shall be prohibited.

b. Phasing of Sanitary Sewer Expansion

- 1) A cost-efficient strategy should be adopted to expand sanitary sewer service (within the designated Urban Service District) only in predetermined phases.

c. Financing System Extensions

- 1) Extensions of the sewer system should be constructed with developer financing, user fees, or through a special assessment district, but shall not be constructed with ad valorem taxes.

d. Financial Impact

- 1) Extension of any sewer system shall be permitted only if such extension will not adversely affect the financial and functional integrity of the Township.

e. Lift Stations

- 1) Gravity systems are preferred which minimize long-term maintenance costs. Other systems may be considered according to Salem Township's regulatory sewer ordinance.

f. Private Sanitary Sewer Systems

- 1) Private community on-site wastewater disposal systems, that serve more than one property (referred to as a "Community Wastewater System" or "PWS"), may be allowed where central sanitary sewer services are not available if the Township is indemnified by the owner and operator of the PWS from any costs or liability in connection with the design, construction, operation, maintenance, repair and/or replacement of that PWS. Also the following conditions shall be met:
 - a) The MDEQ, Township Board, and Washtenaw County Health Department approve the system based upon adopted regulations and ordinances.
 - b) An adequate outlet for effluent discharge is available.
 - c) The development(s) to be served by the system will be consistent with the adopted Master Plan in terms of use and density.
 - d) The system will be installed by the developer and, upon completion, may be dedicated to Salem Township for ownership and maintenance.
 - e) Lateral sewers and appurtenances to be installed in the future will be at developer's expense.
 - f) Development shall be in accordance with Planned Unit Development procedures.
 - g) Development shall be in accordance with any sewer ordinance regulation adopted by Salem Township.

g. Private Septic Systems in Urban Service District

- 1) All new development in the Urban Service District shall be required to connect to a public sanitary sewer system. However, private septic systems may be permitted as interim facilities for individual parcels where a public sewer system will not be available for a significant period of time.
- 2) Any property permitted to have new develop with a private septic system in the designated Urban Service District shall be required to connect with public sanitary sewer lines when these become available.

B. Public Water

Management of a public water system to direct development away from areas designated for agricultural, rural, and suburban residential land uses.

1. Policies

a. Water Service Area

- 1) Any water service area shall coincide with the designated sanitary service area. Thus, public water service shall be limited to the designated Urban Service District of Salem Township.
- 2) Extension of water service into other areas of the Township should only be considered to address health, safety, and environmental issues for existing development.
- 3) Extension of public water services into designated agricultural zones shall be prohibited.
- 4) All required infrastructure for the extension of public water shall be according to adopted Township regulations and ordinances.

b. Phasing of Public Water Service Expansion

- 1) A cost-efficient strategy should be adopted to create a public water service (within the Urban Service District) only in predetermined phases.

c. Financing System Extensions

- 1) A public water service system should be constructed with developer financing, user fees, or through a special assessment district, but shall not be constructed with ad valorem taxes.

d. Financial Impact

- 1) A public water system shall be permitted only if such extension will not adversely affect the financial and functional integrity of any Township and sewer service district.

e. Looping

- 1) Transmission and distribution lines shall be looped to ensure adequate pressure and continuity of service.

f. Private Wells in Urban Service District

- 1) All new development in the designated Urban Service District shall be required to connect to a central public water system. However, private wells may be permitted as interim facilities for individual parcels where public water systems will not be available for a significant period of time.
- 2) Any property permitted to develop with a private well in the designated Urban Service District shall be required to connect with public water when it becomes available.

g. Private Community Wells

- 1) Private community wells may be allowed in areas designated for public water service, however, shall be designed to connect to a public water system when available and such wells shall be required to meet applicable standards of Washtenaw County Department of Environmental Services.
- 2) Community wells shall be prohibited in other areas unless it can be determined that the water quality and quantity is sufficient to serve the proposed development and that the environment and existing individual well will not be adversely impacted by the well.

C. Storm Drainage

A storm drainage system that manages storm water run-off in a safe, sanitary, and environmentally sound manner. The drainage system shall limit storm water run-off from any development area to that which existed under undeveloped, natural conditions in terms of volume, velocity, and water quality. Storm drainage should have equal importance with water and sanitary sewer services in determining the suitability of a parcel for development and for determining proper density of development.

1. Policies

a. Site Evaluation

- 1) Storm drainage shall be included when evaluating the suitability of a site for development and when determining the appropriate density of development.

b. Drainage System Design

- 1) Drainage systems shall meet at least the following criteria:
 - a) All drainage systems shall be designed to meet, at a minimum, the standards of the Washtenaw County Drain Commission.
 - b) All drainage systems within residential developments shall be dedicated and deeded to the Washtenaw County Drain Commission, subject to the approval and conditions of the Drain Commissioner.
 - c) In the event a drainage system is not dedicated and deeded to the Washtenaw County Drain Commission, the developer or his agents shall provide to Salem Township a maintenance plan for the drainage system outlining necessary procedures to maintain the system in proper working order, and a description of the entity which shall be responsible for such maintenance.
 - d) On-site drainage systems shall be adequate to deliver surface run-off to established drainage courses.
 - e) Drainage systems shall be located and designed to prevent sediments and pollutants in surface run-off from entering watercourses and groundwater aquifers.

- f) Generally, impervious surfaces should not be connected to drainage systems. Run-off should be routed over grassy swales or similar areas, which help to filter run-off.
- g) Open and natural drainage courses should be utilized as part of the drainage system where possible, and where the natural drainage course will not be adversely affected.
- h) Open courses should be landscaped to enhance the open space or landscape scheme of the site or area, or be designed to function as natural wetlands.
- i) Existing wetlands should not be incorporated into site drainage systems, unless it can be adequately proven that the wet- lands shall be protected from any adverse impacts. Extensive clearing of vegetation which buffers the wetlands from erosion and filters sediments and pollution from run-off shall be prohibited.

c. Storm Water Management System

- 1) Storm water management systems shall meet at least the following criteria:
 - a) A storm water management system shall be incorporated into the development plan for each project on private property, or as part of an area-wide drainage system, or as a combination of the two.
 - b) A storm water management system shall be designed to control the volume, quality, and rate of storm water run-off and, where appropriate, to recharge the groundwater supply.
 - c) Storm water management systems shall meet the requirements of the Washtenaw County Drain Commission.
 - d) Natural water storage areas (wetlands) shall be preserved in their natural form and condition. Each storage area, including its fringe vegetation, shall be protected from encroachment from development and adverse impact from excessive storm water flow, including quantity, quality, and rate of flow.

- e) Storm water discharge to adjoining properties shall be adequately controlled to prevent any negative impacts to adjoining properties.

D. Cable Utilities

A system of electricity, telephone, and cable television lines serving the Township should be placed underground.

1. Policies

a. Urban and Suburban Service

- 1) Distribution lines servicing urban and suburban development should be placed underground.

b. Rural Service

- 1) Overhead lines servicing low -density (1 dwelling unit or less per acre) rural residential development may be permitted provided that their alignment and visual and physical impact does not adversely affect the Township's natural or aesthetic environment.

c. Transmission Lines

- 1) Overhead lines for transmission and major distribution may be permitted provided that their alignment and visual and physical impact does not adversely affect the Township's natural or aesthetic environment.

d. Design Standards

- 1) All distribution systems, including overhead lines and all easements or rights-of-way for overhead or underground cables shall meet the following criteria:
 - a) They shall be located to avoid disruption of tree stands, specimen trees, significant fencerows, wetlands, or other natural features.
 - b) They shall be located to avoid unwise or inappropriate division of land use or ownership parcels.
 - c) Surface-mounted equipment shall be judiciously placed as

part of a landscape design in order to be attractively and effectively screened.

- d)** Substations shall be located, designed, and landscaped to fit the character of the surrounding areas.

e. Shared Distribution Systems

- 1)** Joint use of trenches for all underground cable utilities shall be encouraged to minimize construction costs, and joint use of poles for all overhead utilities shall be required to minimize visual clutter.

IMPLEMENTATION STRATEGIES

To accomplish the objectives and strategies within this Section, the following assurances and processes are set forth regarding future growth and development:

- A.** To ensure all new development in the Township occurs at a density location, rate and timing that does not exceed the capability of the Township, County, or State to provide necessary public services, and which does not exceed the natural capacity of the land to accommodate the development without pollution of streams, soil, wetland, groundwater or air.
- B.** To ensure all new development within the Urban Service District which has a density or intensity of use requiring public water and/or public sewer has those services available concurrent with or before being developed or occupied.
- C.** To ensure all new development within the Urban Services District which has a density or intensity of use which does not require public sewer or water services is permitted to develop as proposed, provided that no private sewage treatment or water well systems are established other than an individual well and septic system for each lot, and provided that if or when public services become available, all development adjacent taps into these facilities and terminates use of the private well and septic system , as provided by law.
- D.** Work with the Washtenaw County Drain Commission to periodically update standards and requirements and to incorporate appropriate standards within the zoning and site plan review ordinances.
- E.** Incorporate the criteria and standards listed in this Section into the zoning and site plan review ordinances.

PART 15

IMPLEMENTATION POLICIES

INTRODUCTION

An additional stage in the planning process is the implementation of the Master Plan. The studies, no matter how thorough, and recommendations, no matter how sound, are totally reliant on the vigor of local governmental officials and citizens in pursuing the goals of the Plan. Although a governmental agency may be given the responsibility to perform the function of area-wide planning, it is impossible for one unit to implement all elements of a plan alone. Plan implementation necessitates coordination by the various governmental authorities who control specific activities in a township. The County has direct control over local roads, public health, and general law enforcement. The school systems being semi-autonomous are responsible for public education, and the State exercises control over navigable waters. Several federal agencies play critical roles especially in the area of transportation.

Policies in the Master Plan are implemented, for the most part, by day-to-day decisions by the Township's administration, Planning Commission, and Board of Trustees. A government agency might undertake a major project called for in the plan, such as, construction of a road or acquisition of a tract of land for a public school, park or other facility, but these are infrequent events and are not the primary means of policy implementation. To be effective the plan must be used in daily decisions. Used in this manner, the Salem Township Master Plan will provide advance notice to prospective users of land and assurance of stability to property owners and residents. The Master Plan can be a forum for modifying certain policies, with all affected parties involved, when conditions underlying the Master Plan change or new opportunities arise. Thus, in terms of policy implementation, the plan is both a communication and a reference document. Its continuous daily use will help assure that it will be kept current and viable. Salem Township has used its Growth Management Plan in this fashion in the past and will continue to do so in the future.

Townships have several means at their disposal to implement a Master Plan. The Township's power includes control of land use enforced by zoning ordinances, subdivision regulations and other ordinances, and building construction enforced by a building code. A township has authority to establish and administer public utilities and to provide various service activities.

ZONING REGULATIONS

The principal means of implementing comprehensive plan policies is the Zoning Ordinance. Zoning will be used in any one or combination of the following.

- A. **Zoning Districts:** The Michigan Zoning Enabling Act (ZEA) Public Act 110 of 2006 as amended) authorizes organized townships to create, within the unincorporated portions of the township, zoning districts within which land uses, including the construction of buildings, and structures, may be regulated. A zoning ordinance is that body of regulations, standards and procedures adopted by a township as authorized by state law.

The zoning ordinance, when properly adopted, has the force and effect of law. It can be differentiated from the Master Plan by the degree of specificity and the legal effect. They have common ultimate objectives, treat the same general subject matter, and ideally should present no wide divergences. The Township Zoning Ordinance should be based on this Plan and be consistent with it.

Land should be zoned in a manner that is consistent with uses and densities designated in the Master Plan. In many cases, land that is designated in the Master Plan for various densities of residential use or nonresidential uses in the future is currently zoned for agricultural use. Since most land owners in these situations do not want their land zoned for other uses until they are ready to sell it or develop it, rezoning to a use district that is consistent with the designation in the Master Plan should await petition by property owners.

It is suggested that this Plan should be periodically reviewed because of unpredictable, technological advancements, trends in development, and community needs. Review should be based on established goals and sound planning principles, and should be undertaken preferably once a year with a total re-evaluation at least once every five years. Periodic revision is essential if the Plan is to be a continuous, reliable guide for community development and preservation.

B. Density Transfer: This concept involves moving (transferring) proposed development (density) from one part of a site to another part that is considered to be more suitable for development. The process results in a portion of the site remaining undeveloped and the developed part having a higher net density, although the overall density of the site will not be increased. Density transfer may be used to preserve natural features such as wetlands, woodlands, open space, or stream corridors, while permitting a reasonable use of the entire property. This method is applicable to larger parcels and should be used only in conjunction with a special zoning district, such as the Planned Unit Development (PUD) district. Density transfer should meet the following standards:

1. All lands involved in the transfer are located in Salem Township and the owner has fee simple title to the lands.
2. All lands involved are contiguous.
3. The total number of dwelling units allocated to the total land area by the Master Plan will not be exceeded.
4. The transfer is made as part of a single PUD or similar special zoning district that includes all lands involved in the transfer at the same time.
5. The land that receives that transfer of density will, with the additional dwelling units, be compatible with the existing and planned use of the neighboring area.
6. The transfer will not affect the Township's contractual obligations for sanitary sewer services.

- C. Special Districts** The Hamlet and Urban Service district are both consider special districts.

The principal characteristic of a special zoning district is its area plan. An area plan is a form of a site plan that is sufficient to describe the essential features of a proposed development. The features include land use densities, a list of specific uses, and the aesthetic characteristics that will be incorporated on the site. Future use of the property, once the special district is approved, must be in accordance with the approved district. Major changes to any of these features will require a zoning amendment, which will create a new version of the special district. A request for a district modification must be presented to the Planning Commission and approved by the Township Board.

Special zoning districts should be used for one or more of the following purposes:

1. To create a compatible mixture of uses on a site, where a mixture is desirable and consistent with adopted policies.
2. To fit a proposed use into an existing developed area in a compatible manner.
3. To condition zoning on an understanding between the petitioner and Township on uses, densities and layout.

- D. Overlay Zones:** Overlay zones can be used to regulate the use of a specific part of a parcel of land. The regulations of the overlay district are in addition to and supersede the regulations of the underlying basic district. Overlay districts could be used to protect wetlands, woodlands, stream corridors, flood hazard areas, and ground water recharge areas. An overlay zone might not be clearly identifiable at the time the zone is adopted and shown on the official zoning map. The boundaries of such areas, especially wetlands and stream corridors, seldom follow property lines or other features commonly shown on maps. In addition the boundaries of such areas might be somewhat indeterminate until detailed surveys are made. Therefore overlay district regulations should be designed to recognize this fact and to provide a mechanism for the property owner and Township officials to agree on a reasonable delineation of such features at the time of development or use review.

- E. Site Plan Review:** Site plan review is a means of ensuring that proposed developments will meet certain established standards of the Township, including applicable policies in the Master Plan. The review process should be a mechanism whereby the property owner or developer and Township officials coordinate a proposed development to the specific site while remaining harmonious to immediate neighborhoods and to the policies in the Master Plan. All new developments will be processed through site plan review except single-family detached residences or two family attached residences on individual lots and new farm buildings. Completion of all site improvements shown on an approved site plan will be assured by appropriate financial guarantees.

REGULATION OF LAND DIVISION

Land may be divided into smaller parcels by one of three methods: by metes and bounds descriptions, by platting under the Land Division Act, and as a condominium under the Condominium Act.

In the first method, review at the Township level is made by the administration to ensure compliance with the Zoning Ordinance and other Township regulations. This is usually a simple process; major issues regarding Growth Management policies are usually not involved. However, overlay zoning districts might add some complexity to this part of the review process. Nevertheless, Planning Commission or Township Board review is not a part of this method of land division.

Subdividing, or platting, is a more complex method of land division and is regulated by the Land Division Act and the Township's subdivision ordinance. This method of subdividing involves technical review by the Township Engineer and Planner, Planning Commission recommendations, and Township Board action on the various stages of the plat. This process is aimed primarily at zoning compliance, compliance with the Master Plan, proper vehicular and pedestrian circulation, future street extensions, buildable lots, proper relationship with neighboring properties, and provision of all public facilities and utilities. The Township's review should be coordinated with those of County and State agencies. Subdivision review should be used as a means for the Township to ensure that proper infrastructure planning and construction occur without public expense and that natural features are protected.

The site condominium is the third method of land division. In this method, land ownership is divided through the Condominium Act. Purchasers acquire fee simple rights to described physical spaces in which dwelling units may be constructed. (Site condominiums may also be used for non-residential developments.) The site condominium is a variation on the principals of land division involved in subdividing. However, the Condominium Act does not provide a specific review process, as does the Subdivision Control Act. Since the issues and interests are the same from the Township's point of view in either approach to land division, the Township's review process for site condominiums should be as similar as possible to that exercised in subdivision review. The site plan review process should be used to review proposed site condominium developments. Completion of all improvements shown on an approved site plan will be assured by appropriate financial guarantees.

INFRASTRUCTURE

- A. Roads** - All public roads in Salem Township except M-14 are under the jurisdiction of the Washtenaw County Road Commission. Costs of road construction and maintenance are the responsibility of the Road Commission or MDOT. New developments must provide internal roads at the developer's expense. The developer should also be required to pay a reasonable share of any improvements to existing roads, or future roads proposed in this Master Plan, which may be required to adequately and safely serve a new development. An example of this policy would be paving of unpaved roads. The

reasonable shares should be negotiated by the developer and the agency with jurisdiction, and all agreements should be in place before the Township grants final development approval.

- B. Public Utilities** - System maintenance is financed by user fees. Developers must be required to construct, at their expense, lines and appurtenances from the existing or future trunk sewers needed to serve their properties. The Township's policy is that general fund money will not be used to support the water and sanitary sewer systems.
- C. Stormwater Drainage** - On-site retention of storm water is a requirement of all developments. Large-scale retention areas serving several properties will be encouraged, in place of retention areas on each property. Drainage courses, retention areas, and outlets should be constructed at the developer's expense, and should be maintained at the expense of the property served by the facilities. Long-term maintenance of all segments of a drainage system should be established in an acceptable manner before the Township gives final development approval. Open drainage facilities, such as drain age courses and retention areas, should be designed as landscape features, maintained in a manner appropriate for the character and selling of the features, and should remain accessible for use by the property owners.

THE BUILDING CODE

A building code is a compilation of rules, regulations, and standards designed for the construction, alteration, and removal of buildings and structures to better promote the health, safety, and welfare of the community. Building permits should not be issued until zoning conformance has been ascertained.

OTHER REGULATIONS

Legal regulations are sometimes only the beginning in real Plan implementation. A most significant share of the responsibility of implementing the Plan rests on private efforts. A township resident has substantial influence in determining the appearance of the township and influencing public opinion. The influence of an alert and informed citizenry may well compensate in a large part for the limited authority vested in the Township. A Plan cannot be successfully implemented in the absence of government coordination and educated public support.

CAPITAL IMPROVEMENT PROGRAM

One of the most important non-regulatory tools a township has available to implement a Plan is the Capital Improvement Program (CIP). This listing of proposed public facility and infrastructure improvements over the next six to ten years includes a description of each project, its location, cost, means of financing and timing. The first year of the CIP is the capital budget and as each year is completed a new year is added at the end. This tool alerts citizens and developers of the intention of township authorities to make certain improvements in particular places at particular times. This helps coordinate private investment, prevents scattered development and prevents development occurring at a too rapid rate.

PART 16

PLAN MONITORING PROGRAM

INTRODUCTION

The planning process, in order to be effective, must be continuous and must be part of the day-to-day decisions that affect the physical character of the Township. Thus, the Master Plan must be in a form that encourages its regular use in the planning process. The Master Plan is, in effect, the continuously changing representation of the Township's policies for the future. If the Master Plan is to perform its proper function in the continuous planning process, it must be updated on a regular basis. The Master Plan will be evaluated yearly to ensure that policies are consistent with the objectives of the Master Plan. A major review of the comprehensive plan should be made at intervals no longer than 5 years to enable the Planning Commission and Township Board to see the implications of accumulated annual revisions and to apply new perspectives to adopted policies. Annual reviews might indicate the need for a major review in less than 5 years.

BENEFITS OF A MONITORING PROGRAM

There are several benefits to the Township from a regular monitoring program.

1. The Master Plan will be kept up to date.
2. The maintenance program broadens the area of community agreement on basic development policies over time. The process invites reconsideration of alternatives to major decisions and encourages exploration of new issues and secondary questions.
3. Annual review of the Master Plan will keep current the Planning Commission and Township Boards' knowledge of the plan's elements. Along with the Master Plans use in day-to-day decision making, the annual review process will assure that the Master Plan will be a living document, that its policies will not be frozen in time.
4. Annual review will avoid delays that might otherwise be caused by calls for more study on certain issues before the basic plan is adopted. An annual review program assures that issues that require further examination will be studied at proper levels of detail at later times, and the policy changes resulting from such studies will be made in the plan.

DESCRIPTION OF THE PROGRAM

The maintenance program will have two objectives:

1. To determine the extent to which the Township is actually implementing the policies of the Master Plan; and
2. To determine that the Master Plans policies are still desirable and appropriate in light of

changing circumstances.

The basis of the maintenance program will consist of an annual review by the Planning Commission. Such review might result in a change to a portion of the plan reflecting either a policy area or a geographic area. The results of the review will be forwarded to the Township Board in a report.

The actual components of an annual review will be determined by the Planning Commission at the start of work. The following should be among the elements studied by the Commission; others might be added as events suggest.

- A.** Development proposals approved or denied rezoning petitions, site plans, and subdivision plats.
- B.** Land use regulations Zoning Ordinance and subdivision ordinance amendments made in the past year or expected to be needed in the future.
- C.** Building permits issued, by land use categories; estimate of the number of dwelling units, by type, added to the housing stock; estimates of the current population of the planning area.
- D.** State equalized evaluation by assessor's categories; track changes in agricultural and development classifications.
- E.** Traffic counts; relation to road capacities.
- F.** Programmed road improvements.
- G.** Changes in public transportation service during the past year and proposed in the future that affect the planning area.
- H.** Land divisions, other than in approved subdivision plats and condominium site plans.
- I.** Major zoning and land use changes on the perimeter of the planning area in the past year and those that are likely to occur in the coming year.
- J.** Policy changes by adjacent municipalities that affect Salem Township, in the past year and that are likely to occur in the coming year.

PART 17

ZONING PLAN

ZONING PLAN

This Chapter opens with a general description of a zoning plan. It is followed by a brief explanation of the relationship between this Master Plan and the Township Zoning Ordinance. The districts in the Zoning Ordinance are briefly described, and a list of proposed changes to the Zoning Ordinance are proposed. These proposed revisions are suggested to make the Zoning Ordinance more closely conform with this Plan.

WHAT IS A ZONING PLAN

A "zoning plan" is another term for a "zone plan" which is used in the Michigan planning and zoning enabling acts. Section 1(a) of the Township Planning Act, PA 168 of 1959, as amended, requires that the plan prepared under that act (as this Master Plan is), serve as the basis for the zoning plan. Section 203 (1) of Public Act 110, Michigan zoning enabling act of 2006, requires that the zoning ordinance shall be based upon a plan prepared as the basis for the zoning ordinance. It must be based on an inventory of conditions pertinent to zoning in the township and the purposes for which zoning may be adopted (as described in Section 3.06 of the Michigan zoning enabling act of 2006). The zoning plan identifies the zoning districts and their purposes, as well as but not limited to the basic standards proposed to control the height, area, bulk, location, and use of buildings and premises in the Township. These matters are regulated by the specific terms in the Zoning Ordinance.

RELATIONSHIP TO THE MASTER PLAN

This Master Plan sets forth the vision, goals, objectives and policies for growth, development, and preservation of resources in the Township for approximately the next twenty years. It includes a specific strategy for managing growth and change in land uses and infrastructure in the Township over this period, and will be periodically reviewed and updated at least once each five years as required by the Michigan zoning enabling act of 2006. This chapter presenting the Zoning Plan, along with the rest of the relevant parts of this Master Plan, are intended to guide the implementation of and future changes to the Township Zoning Ordinance.

DISTRICTS AND DIMENSIONAL STANDARDS

Following are six general categories within which the nineteen zoning districts in the Salem Township Zoning Ordinance are organized. The general purposes of each of these categories are also indicated. The specific purposes of each district are listed in the specific district provisions of the Zoning Ordinance. The Section references indicate where detailed ordinance language for each district is located within the Zoning Ordinance.

A. Rural Districts

The following zoning districts are considered "rural districts."

Recreation-Conservation District (RC)
Agriculture Residential District (AR)

The basic purposes of these districts focus on conservation of lands with sensitive environmental characteristics like forest land, wetland and other wildlife habitat, and renewable resource lands like farmland. A limited range of agricultural and low density single family residential uses are permitted from one dwelling unit per 10 acres, to one dwelling unit per 2 acres. Most of the land in these districts is served by gravel roads and there are no plans to pave these roads. The land zoned within these districts generally conforms with the area designated as "agricultural lands, conservation or rural residential" or "rural residential" on Map 2 Land Use Strategy and Density.

B. Rural Residential Districts

The following zoning districts are considered "rural residential districts."

Estate Residential District (ER)
Low Density Residential District (LR)

The basic purpose of these districts is to accommodate the large demand for land suited for large lot single family use and served by septic systems and private wells. Most of this land was formerly farmed, and some of it still is. Agriculture is a permitted use. Dwellings are permitted on individual lots ranging in size from one dwelling unit per 5 acres to one dwelling unit per one acre. The land zoned within these districts generally conforms with the area designated as "agricultural lands, conservation or rural residential" or "rural residential" on Map 2 Future Land Use Strategy and Density.

C. Urban Residential Districts

The following zoning districts are considered "urban residential districts."

Single-Family Residential District (SR)
Multiple-Family Residential District (MR)
Mobile Home Park District (MHP)

The principal purpose of these districts is to provide for a range of residential dwelling types at urban densities within individual zones tailored for that specific use. Densities range from one dwelling unit per one acre, to eight dwelling units per acre. Except for the Mobile Home Park District, the land zoned into one of these districts is located within the designated Urban Service District where there is public sewer and water to support development at these densities. There are some historic small lot subdivisions in the Hamlet of Salem that are also in these districts.

D. Business Districts

The following zoning districts are considered "business districts."

Local Commercial District (LC)
General Commercial District (GC)
Highway Commercial District (HC)
Office District (OC)

The basic purpose of these districts is to provide opportunities for regulated commercial or office activities primarily serving a local market. Minimum lot sizes range from 10,000 square feet to one acre in size. There are few properties zoned into these zoning classifications and they are widely scattered throughout the Township. Most represent locations where commercial activity has been in place for many decades.

E. Industrial Districts

The following zoning districts are considered "industrial districts."

Limited Industrial District (LI)
General Industrial District (GI)

The basic purpose of the industrial districts is to provide suitable locations for high tech and light industrial development adjacent to high volume roads and served by public water and sewer. Minimum lot sizes are from one acre to five acres.

F. Special Districts

The following zoning districts are considered "special districts."

Hamlet Center District (HCD)
Research and Research Applications District (RRA)
Residential Office Park (ROP)
Planned Unit Development (PUD)

Special districts use the planned unit development (PUD) authority under Section 5.0 I (3) of the Michigan zoning enabling act, PUD's provide considerable flexibility to the land developer to provide opportunities for development designs that respect both the natural environment and efficiency in the provision of infrastructure and public facilities, and provide the Township with flexibility to ensure mitigation of negative impacts on adjoining properties. A wide range of densities and lot sizes are provided, depending on the district and specific ordinance provisions. Most new land development in the Township is encouraged to use one of these special districts because of the design flexibility provided to the developer and the opportunity for the Township to help fashion a design that is compatible with adjoining properties.

G. Definitions

Ground Floor Coverage GFC: The total ground floor area of the principal and all accessory buildings, divided by the net lot area, both areas being in the same unit of measure, and expressed as a percentage. The term is commonly referred to as SFC.

Floor Area Ratio (FAR): The ratio of the floor area of a building to the area of the lot on which it is located, calculated by dividing the floor area by the lot area and expressing it as a percentage. For example, if a floor area ratio of eighty percent (80%) is specified and the lot area is ten thousand (10,000) square feet, the maximum permitted floor area on the lot is eight thousand (8,000) square feet. Subject to the provisions of this Ordinance regarding height and story limitations, the building area may be four thousand (4,000) square feet for each of two (2) stories, two thousand (2,000) square feet for each of four (4) stories, or one thousand (1,000) square feet for each of eight (8) stories.

Yard: An open space of prescribed width or depth on the same zoning lot with a building or group of buildings between the building or group of buildings and the nearest lot line, and is unoccupied from the ground upward except as otherwise provided herein.

Front Yard: An open space extending the full width of the lot, the depth of which is the minimum horizontal distance between any front lot line or road right-of-way and the nearest point of the principal building.

Rear Yard: The yard directly opposite the designated front yard; or an open space extending across the full width of the lot, the depth of which is the minimum horizontal distance between the rear lot line and the nearest point of the principal building.

Required Yard: An open space or yard area that conforms to the requirements of this Ordinance for yard, setback or other open space requirements.

Side Yard: An open space extending from the front yard to the rear yard on the side of the principal building between the building and the side lot line, the width of which is the minimum horizontal distance between the side lot line and the nearest point of the principal building.

PROPOSED CHANGES TO THE ZONING ORDINANCE

Because this Plan incorporates new policies on land uses, infrastructure improvements and other measures related to further improving quality of life in the Township, there are changes to the Zoning Ordinance that should be made to make it fully consistent with this Master Plan. In other words, as the principal tool for implementing this Plan, each regulatory policy of the Plan must be reflected in one or more zoning requirements. Zoning changes for consideration to the Zoning Ordinance are listed below. These changes should be pursued as the need or opportunity presents itself, but before the Township initiates action to implement one of the new policies in this Plan. In some cases, fuller public discussion of proposed zoning amendments on any of the below

listed elements will result in the need to refine some of the language in this Plan. When that occurs, this Plan should be amended before the zoning amendments are adopted.

A. Corridor Regulations

- Provide regulations for landscaping along those roadways designated on Map 20 Salem Township Circulation Systems and described in Part 13 of this Master Plan. This would include specifying appropriate physical characteristics for the landscaping and the required width for maintaining it.
- Provide regulations for landscaping along all other roadways in the Township.
- Establish minimum setbacks for new buildings based on the rights-of -way for roads as discussed within this Master Plan.
- Add standards to provide for transitional landscaping, building design and layout between areas of intensive use and lower density areas.
- Add access management standards to the Zoning Ordinance consistent with new
- Washtenaw County Road Commission standards and those of the MDOT Access Management Guidebook.

B. District and Related Definition Changes

- Define "native vegetation," "rural character" and "natural landscape."
- Rename agricultural zones to better reflect the policy in this Plan.
- Revise standards in the rural districts to ensure new development is designed and located to minimize negative visual impacts as viewed from the roadway, and to preserve wooded areas when the land is proposed for development.
- Permit a greater mix of land uses in Special Districts within the Urban Service District on and in the Hamlet of Salem. These uses would be linked to character based design standards to ensure compatibility between land uses.
- Consider adding a maximum density standard that supersedes the minimum lot size in the urban residential districts.
- Consider adding a density increase for developments that did one or more of the following: preserved more open space by use of a Purchase of Development Rights (PDR) or Transfer of Development Rights (TOR), preserved more open space via a cluster design, or used a superior layout and exterior design of building s relative to the area in which it was located.
- Change definition of "farm" to be consistent with state Right to Farm Act requirements.
- Include specific value-added agricultural pursuits to list of permitted agricultural activities. These would include hayrides, corn mazes, wineries, haunted house and related activities as specified in the Zoning Ordinance.
- Consider adding buffer areas between new housing and existing agricultural activities in agricultural zones
- Consider creating a separate district for lands protected by conservancies that only allows conservation uses.

C. Site Plan Review Standards

- Add new site plan review standards that better protect groundwater, surface water, wetlands, woodlands and wildlife habitat. Provide adequate links to a new natural features protection ordinance.
- Add new standards that focus on minimizing impervious surfaces.
- Ensure that when new development is proposed on land with special features recognized on a Township Greenspace Plan, that those features receive special attention and protection through the site plan review and approval process.
- Consider revising language to clarify that every residential development that is subject to site plan review, must provide either open space, or active or passive recreation land per new standards.
- Consider adding a set of uniform design standards that address layout, façade and view of the development from the road for all development in rural districts so as to better preserve the rural character of those districts.
- Consider adding passive and active recreational standards for public recreation lands.
- Consider adding additional tree replacement requirements for all developments subject to site plan review.

D. Other New Regulations

- Add narrow street standards in PUD's if approved as public roads by the County Road Commission.
- Require every new development to provide sidewalks or approved trails that link to abutting properties and establish standards for the design and construction of all new sidewalks and trails.
- Limit development on gravel roads below the capacity of the road, unless the developer will contribute to paving the road.
- Establish a limit on impervious surfaces tied to specific land uses in at least the RC, AR, ER, and LR zoning districts.
- Add specific standards for every conditional use.