



2007 Alpine Township Master Plan

Kent County, Michigan
Adopted December 17, 2007

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Township Board

Marta Brechting, Supervisor (Nov. 2004 - present)
Jan Brechting, Treasurer (Nov. 1992 - present)
Jean Wahlfield, Clerk (Nov. 2004 - present)
Ron Cordes (Nov. 2004 - present)
Jim May (Nov. 2004 - present)
Sharon Steffens (Supervisor Nov. '94 - Nov. '00; Trustee Nov. 2000 - present)
Ted Wallace (Nov. 2004 - present)

Planning Commission

Max Dunneback (Jan. 2005 - present)
Nelda Johnson (Jan. 2005 - present)
Greg Madura (Aug. 2005 - present)
Jim May (Jan. 2005 - present)
Jason Rosenzweig (Jan. 2003 - present)
Richard Sedlecky (Sept. 2003 - present)
Jim Townsend (Jan. 2005 - present)

Roger Alberts (May 2002 - Dec. 2004)
Charles Bissonette (Jan. 2002 - May 2002)
Marta Brechting (Sept. 2003 - Nov. 2004)
Kris Cassady-Gall (Jan. 2004 - Dec. 2006)
Kay Chase (Jan. 1993 - Nov. 2004)
Jason Clauser (Aug. 2003 - Apr. 2006)
Steve Gray (Jan. 2000 - Apr. 2005)
Robin Rudden (Jan. 1998 - Aug. 2003)
Ted Wallace (Jan. 2001 – Dec. 2003)
Dave Wiersum (Dec. 1999 - Dec. 2004)

*September 2003 Planning Commission expanded to 9 members

*December 2006 Planning Commission reduced to 7 members

Planning Department Staff

Susan J. H. Thomas, Planning Director (Dec. 2006 - present)
Brendie Vega-Mkhwanazi, Planning Director (Nov. 2004 - Sept. 2006)
Frank Wash, Planning Director (through July 2004)
Tim Johnson of MainStreet Planning, interim Planning Director
(July 2004 - Nov. 2004 and Sept. 2006 - Dec. 2006)
Pat Kolkman, Recording Secretary

Prepared with assistance of:

MainStreet Planning Company (from March 2006)
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(616) 458-3449

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Michigan State University
Urban and Regional Planning Student Practicum (April 2004)

**ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN
RESOLUTION #07- 32**

A RESOLUTION TO ADOPT THE ALPINE TOWNSHIP MASTER PLAN

WHEREAS, the Township Planning Act, Public Act 168, of the Michigan Public Acts of 1959, as amended, requires the Planning Commission to make and adopt a master plan for the physical development of the Township; and

WHEREAS, the Planning Commission has prepared such a plan, including maps, tables and descriptive matter dated November 15, 2007; and

WHEREAS, in the preparation of the Master Plan, the Planning Commission has made careful comprehensive studies and analyses of present conditions and future needs of the Township; and

WHEREAS, the Planning Commission, on November 15, 2007 held a public hearing in accordance with the procedures of Section 8 of Public Act 168 of 1959, as amended; and

WHEREAS, the Planning Commission has considered all comments at the public hearing and discussed in detail each concern raised by the public and the surrounding municipalities; and

WHEREAS, the Township Board of Trustees in Resolution #03-19 has asserted the right to approve or reject the plan; and

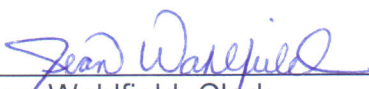
WHEREAS, the Planning Commission unanimously recommended approval of the Master Plan at their November 15, 2007 meeting.

NOW THEREFORE BE IT RESOLVED THAT, the Board of Trustees of Alpine Township, Kent County, Michigan hereby adopts the Master Plan dated November 15, 2007 in its entirety.

BE IT FURTHER RESOLVED THAT the Alpine Township Clerk will submit a certified copy of this resolution to the Office of the Great Seal, the County Clerk, and the Grand Valley Metro Council.

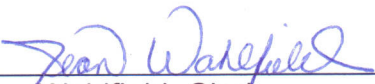
At a regular meeting of the Alpine Township Board of Trustees held on Monday, December 17, 2007, a motion was offered by Cordes, supported by May, to approve the foregoing resolution.

AYE: M. Brechting, Cordes, May, Steffens, Wahlfield, and Wallace.
NAY: None.
ABSENT: J. Brechting.



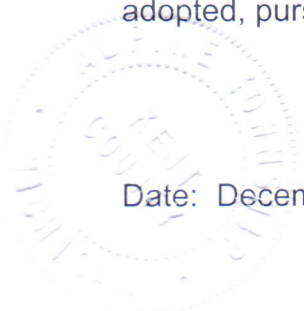
Jean Wahlfield, Clerk

I, Jean Wahlfield, Clerk of Alpine Township, do hereby certify that Resolution #07-32 was approved by the Alpine Township Board at a regular meeting held on Monday, December 17, 2007 and that the forgoing is a true and complete copy of a resolution adopted, pursuant to the required statutory procedures.



Jean Wahlfield, Clerk

Date: December 17, 2007



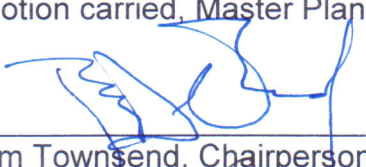
Affidavit of Recommendation of Approval of Master Plan

Alpine Township Planning Commission Kent County, Michigan

1. The Township Planning Act, Public Act 168, of the Michigan Public Acts of 1959, as amended, requires the Planning Commission to make and adopt a master plan for the physical development of the township; and
2. The Commission has prepared such a plan, including maps, tables and descriptive matter dated November 15 2007; and
3. In the preparation of the Master Plan, the Commission has made careful comprehensive studies and analyses of present conditions and future needs of the township; and
4. The Commission, on November 15, 2007 held a public hearing in accordance with the procedures of Section 8 of Public Act 168 of 1959, as amended; and
5. The Commission has considered all comments at the public hearing and discussed in detail each concern raised by the public and the surrounding municipalities; and
6. The Township Board of Trustees in Resolution #03-19 has asserted the right to approve or reject the plan.

Motion to recommend approval of the Alpine Township Master Plan dated November 15,
2007 was made by: Rosenzweig Support from: May
Ayes 5 Nays: 0 Absent: Madura, Sedlecky Date: November 15, 2007

Motion carried, Master Plan referred to the Township Board for adoption.

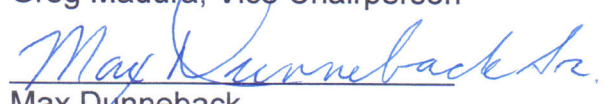

Jim Townsend, Chairperson


Nelda Johnson, Secretary


Jim May


Richard Sedlecky


Greg Madura, Vice Chairperson


Max Dunneback


Jason Rosenzweig

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Future Land Use Map (located in the front pocket of the Master Plan)

INTRODUCTION

The Alpine Township Master Plan has been prepared by the Township Board and Planning Commission under the provisions of the Township Planning Act, Public Act 168 of 1959 (MCL 125.321, *et seq.*), as amended. The Planning Act authorizes Townships to prepare and adopt a plan for the unincorporated areas of the Township. The purpose of that plan, according to the State Act, is to:

- promote the public health, safety, and general welfare;
- encourage the use of resources in accordance with their character and adaptability;
- avoid overcrowding of the land by buildings and people;
- lessen congestion on public roads and streets;
- facilitate a transportation system, sewage disposal, safe and adequate water supply, recreation and other public improvements; and,
- consider the Township's character and suitability for particular uses.

Although the Master Plan has no regulatory power, it states specific land development and preservation goals. These goals are intended to guide both the Planning Commission and the Township Board in making both day-to-day and long-range land use decisions.

This Master Plan has been developed based upon several factors: the existing natural resources of the Township, especially the prime, unique and valuable agricultural land; current land use trends; the need for different types of land use including a mix of land uses within a single unified project; the location of public water and sewer; the future land uses in the City of Walker and adjacent townships and the desired community character as expressed through work sessions with local officials and Township residents.

Alpine Township is known as the beginning of "The Ridge" which denotes areas of unique farmland extending northwest through Ottawa and Kent Counties and east to the City of Belding. "The Ridge" area produces 60% of the apples in the State of Michigan. This area is unique in its rolling topography and climatic relationship to Lake Michigan which provides greater frost protection by good air drainage. This combination makes this farmland truly unique and irreplaceable.

Kent County is recognized as having the greatest number of apple trees in the State and Alpine Township very likely has the largest number for a Township in the State. Within the Grand Rapids metro area, Alpine Township has historically been considered an agricultural community.

An analysis of land use change in Alpine Township conducted as part of the Plan preparation process found that between 1978 and 2002 agricultural land use decreased by over 1,600 acres.

There remains however a strong desire by the Planning Commission and Township Board to preserve the unique natural features and the farming economy and heritage of Alpine Township and it is with this desire in mind that the 2007 Master Plan has been prepared.

Master Plan Review

State law states that each community shall review its Master Plan every five years, and determine whether the plan should be amended or whether a new plan should be adopted. Therefore, the Alpine Township Master Plan addresses land use policy at a minimum for the next five years and at a maximum for the next 15 years. However, after 5 years the Plan should be reviewed to determine whether its stated goals and policies need to be revised.

Use of the Master Plan

The Master Plan's function is to serve as a decision making framework, by providing information valuable to land use decisions, and providing a sound rationale for recommended land uses.

The Master Plan does not dictate the timing of development but rather the Plan sets forth recommendations for what type of land uses can be established in the Township, where they can be established and under what conditions they can be established. Development takes place as land owners seek rezonings and as developers request approval of plans for residential, commercial and industrial projects in response to market demands.

The Alpine Township Master Plan is intended to be flexible in order for the Township to be able to react to changes in the economy and other unforeseen factors. **It is not necessarily intended to establish the precise boundaries of land use areas or the exact locations of individual future land uses.**

In particular, the Plan will assist local officials in the following:

- **Review of rezonings and special use permits.** Applications for rezonings and special use permits should be evaluated not only in terms of specific ordinance standards but also in terms of how consistent the proposed action will be with the goals and objectives of the Master Plan.
- **Review of public improvement projects.** All future public improvement projects, including the construction of new facilities, utilities, or buildings must first be reviewed by the Planning Commission for consistency with the Master Plan, according to PA 168 of 1959. In particular, any public improvement project must be reviewed to see whether it is consistent with the planned future land use pattern in Alpine Township. Public improvement projects include roads, public safety facilities, parks and recreation facilities, utilities, and any other public space, building, or structure.

- **Review of plats and site condominiums.** The subdivision of land, whether by plats or site condominium divisions, has a profound impact upon the character of a community and future public service needs. The Master Plan provides policies to assist the Planning Commission with decisions as to location and design of subdivisions, and the adequacy of public services to meet the increase in demand placed upon the community by the increase in intensity of land use that logically follows land division. Policies for subdivision of land apply not only to residential land use, but to commercial and industrial land use as well.

Maintaining community character while managing growth. Each community has a vision for its future, and a sense for its desired character. However, growth is inevitable in a thriving community. The Master Plan, more than any other document, provides direction for Alpine Township officials in managing growth while retaining the desired community character, and providing the best quality of life possible for current and future residents.

This Plan is a very strong and visible statement by the Township and its residents, regarding the intended future character of the community and strategies to assure that character. As a formal and tangible document this Plan instills a sense of stability and direction for Township officials, Township activities, and Township residents.

Preparation of the Master Plan

Following is a chronology of the process to update the 1998 Master Plan.

- September 11, 2003. The Township Board and Planning Commission held a SWOT Workshop (Strengths, Weaknesses, Opportunities, and Threats) to solicit public comments. Over 75 people attended.
- October 20, 2003. The Township Board adopts Resolution 03-19 which exercises the Board's right to approve or reject the Master Plan as permitted by Public Act 263 of 2001.
- November 20, 2003. Presentations were made to the Township Board and Planning Commission by the West Michigan Strategic Alliance and the Grand Valley Metro Council. A SWOT was conducted by the Board and Planning Commission.
- January 15, 2004. A third joint meeting between the Board and Planning Commission is held to discuss a draft vision statement for the Plan and to appoint a focus group to prepare a RFQ (Request for Qualifications) to use in the hiring of a consultant to assist the Township in updating the Plan.
- February 16, 2004. The Township Board approves the Vision Statement for the Plan.
- April 2004. The Michigan State University Student Practicum is completed. This project compiled a socio-economic analysis of Alpine Township and also prepared future population distribution scenarios along with recommendations for future land use.

- July 2004. Beckett & Raeder, a consulting firm from Ann Arbor, Michigan is retained to assist the Planning Commission in preparing the Master Plan.
- August to December 2004. Beckett & Reader conducts four public master plan work sessions in various Township locations.
- January to October 2005. Beckett & Raeder prepare various drafts of the Plan for consideration by the Planning Commission.
- June 2005. The Master Plan Committee of the Planning Commission holds a work session to complete the Master Plan.
- October 5, 2005. Planning Commission holds open house to present the Draft Plan to the public.
- December 2005. Beckett & Raeder completes a Draft Final Land Use Recommendation.
- January to March 2006. The Master Plan Committee of the Planning Commission holds several work sessions to complete the Master Plan.
- January to March 2007. The Planning Commission continues to revise the Plan with the assistance of MainStreet Planning Company.
- April 30, 2007. The Board and Planning Commission meet to review the Draft Future Land Use Map and to discuss the utility service areas which will be in effect once the treatment plant is constructed for the North Kent Sewer Authority.
- May 10, 2007. The Planning Commission approves the Draft Future Land Use Map.
- August 16, 2007. The Planning Commission approves the Draft Master Plan and forwards it to the Board for review.
- August 20, 2007. The Township Board accepts the Plan for distribution to adjacent municipalities and Kent County as required by the Township Planning Act.
- November 15, 2007. The Planning Commission held a public hearing on the Master Plan and recommended approval of the Plan to the Township Board.
- December 17, 2007. The Township Board adopted the Alpine Township Master Plan.

Brief History of Alpine Township

Alpine Township began as North Walker Township, and was first settled in 1839 by Mr. Solomon Wright II on property which is now Gracewil Golf Course on Four Mile Road. Gradually other settlers appeared, including John Coffee, Richard Goodling, Abel Chase and John Platte. Some of the early surnames are still on the tax rolls of the Township. In 1847, the Township of Alpine became an independent entity, with logging and farming as the two major industries. During this time thirteen district schools were created as well as the Holy Trinity Catholic Church, which remains today. The existence of the Red Brick Tavern (est. 1870), now a private residence on Fruit Ridge Road, remains as evidence of the historical period of toll roads and the stagecoach in Alpine Township.

With the tragedy of the Civil War years came a new demand for agriculture products from Alpine Township. During this time grain held the highest priority as a cash crop in Alpine Township. With the railroad as a major stimulus for continued growth in agriculture for Alpine, the 1880's welcomed an increase in farming which created various outputs ranging from dairy to orchard products as well as wheat.



The most substantial impact on the current cash crop, apples, occurred in 1914 with the invention of an apple storage facility by Henry Kraft. This invention forever changed the face of apple farming in Michigan and put Alpine Township on the map as a strong apple producing farm community. The "Ridge", a six-township agriculture area in Western Michigan including Alpine Township, today produces 60 percent of Michigan's apples for consumption.

In 1900, the population was 1,470. In 1930 it was 2,231. The Depression and World War II slowed the growth, which had only risen to 2,841 residents. By 1960 the population of Alpine Township nearly doubled to 4,744 persons; assisted by the development of the Westgate subdivision between 1957 and 1960 and the post-World War II "Baby Boom". In 1970, the Census gave the population as 8,163 persons. The area became more urbanized as greater needs for water, sewer, street lights, sidewalks, parks, recreation, police protection, fire protection and zoning became the issues dealt with by the Alpine Township Board. In 1990 the population was 9,863 and by 2000 it had reached 13,976 persons.

Today, most of Alpine's population is centered in Section 25 and 36, which include Westgate, York Creek Apartments (1,764 dwelling units) York Creek Estates, condos and single family homes. A significant commercial area has been developed on Alpine Avenue, with stores such as Best Buy, Wal-Mart, Sam's Club, and Menards, Art Van Furniture and numerous smaller businesses and restaurants. Industry is also an important tax base with Behr Industries, Commercial Tool & Die, Advanced Tooling, Rapid Engineering and other industries.

Plainfield Charter Township and Alpine have had a very close relationship since the 1960's when the water system was started and Alpine's residents were important customers in making it happen. That relationship has continued to today. Alpine has a "425" agreement with Plainfield which protects the water system investment and whereby Plainfield at one time, did grounds maintenance for Alpine and all of the burials in Alpine's cemeteries.

Sewer issues have monopolized many meetings since 1996, as the North Kent Sewer System (five communities) has become an Authority addressing many critical concerns facing it today.

Agriculture is still the principal industry, and most of it in orchards, vegetables, cash crops, dairy and bedding plants. Alpine adopted the "sliding scale" farmland preservation zoning in 1989. Today, new tools are being considered and researched to protect this very unique and valuable prime agricultural land.

In 1979, Alpine became a "charter" township under the Charter Township Act, which was designed to make annexation more difficult. In 1996, Alpine de-chartered and again became a "general law" township. This was because of a loophole in the Charter Township Act, which made annexation very easy to accomplish, as the Township had no authority to provide input to or prevent it.

Alpine became a member of the Grand Valley Metropolitan Council in 1993 and is involved in regional planning for managed growth in the area. Alpine Township recognizes that it is not an island, and it must work together with other units of government and agencies to address the additional people expected in the metropolitan area over the next ten to twenty years. In that regard, Alpine Township has begun to prepare for development through the creation of specific master plans which focus on smart growth solutions and agricultural preservation.

For Alpine Township's 150th anniversary, David Wier a local historian and teacher, was commissioned by the Alpine Township Board of Trustees to research and write the history of the Township. The Alpine Historical Commission was also instrumental in assisting with research, photos, and the coordination of the publishing. The book, "150 Years of Alpine Township History", by author David Wier, is available at the Alpine Township Offices.

CHAPTER 1

GOALS AND OBJECTIVES

Planning goals are statements that express a community's long range desires and serve to provide direction for related planning activities such as zoning, development of infrastructure, and economic development. Goals are intended to provide a basic framework upon which long term development decisions may be made as well as day-to-day decisions made by public and private agencies. Goals are necessary in any planning effort as they encourage us to seek a better quality of life.

In updating the Master Plan, the Planning Commission, based on public response obtained in the workshops, decided to also update the Goals adopted in the 1998 Plan. Several of the farm preservation goals were retained as this is still a strong purpose of the Plan. A Vision Statement was also adopted for this Master Plan update by the Township Board.

Vision Statement

"The Alpine Township community will work together to research, analyze and plan for solutions to our current land use challenges, as well as those we can reasonably predict for the future.

Various timelines will be used to judge the effectiveness and success of our work, with some issues taking longer than others to study and address. However, we realize that comprehensive community planning in Alpine Township will require, at a minimum, the following foundational components:

- *Open minded and dynamic cooperation*
- *Undistorted communication, free from jargon and abstractions*
- *Careful analysis of the best available data and methods*
- *Empowered citizen involvement*
- *Bold and visionary public leadership.*

We accept these challenges and will work together to achieve the following goals and objectives:"

Goals & Objectives

Goal 1: Maintain and implement the Alpine Township Farmland Preservation policy which is to preserve the prime, unique and valuable agricultural land in Alpine Township for present and future generations.

Objective 1: Study and implement PDR and TDR ordinances;

Objective 2: Analyze original and current Sliding Scale splits;

Objective 3: Advocate links between local farm products and local consumers;

- Strategy: Continue to support R.E.A.P. (Ridge Economic Area Partners)
- Strategy: Publicize farm market ads on Township web page and in Harvester newsletter

Objective 4: Apply REGIS to increase understanding of the Alpine Township LESA study, PA 116 map, local soils and topography, past and present land use & cover, and watershed management;

Objective 5: Continue to monitor local farmer priorities and concerns;

- Strategy: Survey the farming community
- Strategy: Hold discussion meetings with farmers by type of operations and products
- Strategy: Review Alpine Township farmland preservation policy and zoning ordinances

Objective 6: Monitor State of Michigan farmland legislation and support and implement when appropriate;

- Strategy: Remain active with MTA on farm legislation
- Strategy: Support Right to Farm Act

Objective 7: Buffer working farms from residential development;

- Strategy: Update ordinance standards when appropriate for open space and buffers to protect farmland
- Strategy: Preserve open space in clustered housing developments adjacent to active farmland
- Strategy: Study the permitted density of development parcels adjacent to master planned farm areas
- Strategy: Update Future Land Use Map to address buffering
- Strategy: Establish the area one-half mile south of 6 Mile Road west of Cordes Avenue as a buffer to protect the long term farming activities to the north of 6 Mile Road by minimizing the development potential in this area for non-farm dwellings and other non-agricultural land uses.

Objective 8: Analyze and update permitted and special uses in “A, Agricultural” district to allow increased economic use of farmland and farm buildings;

Objective 9: Research potential for an Alpine Township private land trust and rural land foundation.

Goal 2: Plan for safe, creative and desirable residential neighborhoods that are suitable for people of varying ages, lifestyles and incomes.

Objective 1: Plan for traditional subdivision densities and attached housing units only where public utilities are planned or available;

- Strategy: Maintain public water and sewer district maps

Objective 2: Analyze present and future housing needs based on Census data and best-available demographic analyses and projections;

- Strategy: Conduct build-out study to avoid “over-planning” for growth

Objective 3: Encourage the creative development of new residential areas when and where appropriate through the use of planned unit developments (PUD’s);

- Strategy: Adopt ordinance standards for sidewalks, trails, linked and useable open spaces and natural feature preservation
- Strategy: Adopt ordinances which allow flexibility regarding lot size and area, building setbacks, and design and dwelling unit types within a single unified development
- Strategy: Ensure that PUD ordinances apply to a range of housing densities, not just traditional subdivisions

Objective 4: Protect existing and future residential areas from any unwarranted negative effects of nearby non- residential uses through berming, landscaping, greater setbacks and natural features preservation while still allowing pedestrian and vehicle connections to nearby schools, parks, shopping and employment opportunities via road, trail and sidewalks;

Objective 5: Allow for senior housing developments and related medical care facilities close to shopping, churches, parks, medical offices, sidewalks and public transit in a variety of zoning districts;

- Strategy: Adopt zoning ordinance regulations to allow senior housing and related medical care facilities in residential, office and commercial zoning districts by special land use
- Strategy: Develop a” Senior Housing PUD” district or specifically allow such use in a Town Center or Mixed Use PUD chapter
- Strategy: Survey seniors for input and ideas

Goal 3: Maintain and plan for a safe, efficient and functional public roadway system.

Objective 1: Periodically update the M-37 Access Management Plan;

- Strategy: Use previous plans as reference materials
- Strategy: Use REGIS to map the plan in detail
- Strategy: Partner with MDOT and KCRC to enforce the plan
- Strategy: Require traffic impact studies for development projects
- Strategy: Develop access management link in zoning ordinance

Objective 2: Develop 4 Mile Road Plan with City of Walker, Grand Valley Metro Council, MDOT and the Kent County Road Commission;

- Strategy: Ensure pedestrian access along 4 Mile Road
- Strategy: Ensure public transit access along 4 Mile Road
- Strategy: Develop capital improvements program
- Strategy: Develop access management standards for 4 Mile Road
- Strategy: Develop common site plan and development standards with Walker City
- Strategy: Develop State Park public trailway plan

Objective 3: Plan for future public roads that disperse traffic density and provide alternate travel routes thus improving traffic flow on M-37;

- Strategy: Review and revise the public road master plan map
- Strategy: Develop zoning ordinance regulations to implement master plan future roadways

Objective 4: Require developers to include public road improvements, sidewalks/trails and public transit system components on approved site plans and then build the improvements;

Objective 5: Continue to link Capital Improvement Program (CIP) expenditures and grant opportunities to the public roadway master plan;

Objective 6: Continue and support public bus service partnership with ITP/ The Rapid;

Goal 4: Encourage dynamic commercial and industrial districts.

Objective 1: Monitor and periodically update building design standards in the zoning ordinance using community visual preference survey results as one method;

Objective 2: Survey Alpine Township businesses to understand priorities and concerns;

Objective 3: Partner with local businesses and governmental agencies to seek grants for specific infrastructure and aesthetic improvements;

Objective 4: Connect business and industrial areas with walkways and bicycle paths to allow alternative ways for employees to travel to work;

Objective 5: Develop and adopt Town Center and Mixed Use PUD zoning districts;

- Strategy: Study development potential of Lamoreaux Drive extended area and the Homrich/driving range parcel at Alpine Church Street and Alpine Avenue for either Mixed Use or Town Center use
- Strategy: Study development potential of Henze Street extended area

Objective 6: Research Comstock Park Drive and Rusche Drive linkage;

Objective 7: Periodically review and update commercial and industrial zoning ordinances.

Goal 5: Maintain and develop Township-school relationships.

Objective 1: Cooperate with school officials to align master plans, discuss future school sites and compare demographic data;

Goal 6: Maintain and expand natural, recreational and cultural resource assets.

Objective 1: Map natural features using REGIS;

Objective 2: Map current parks and historical sites with REGIS;

Objective 3: Review and update the Alpine Township Parks and Recreation Master Plan;

Objective 4: Seek parkland acquisition within master planned growth areas;

Objective 5: Encourage developers to provide parks/open space in standard, non-PUD subdivisions;

Objective 6: Periodically review and refine the Alpine Township Stormwater Management Ordinance;

Goal 7: Maintain and expand inter-governmental cooperation and relationships.

- Objective 1: Continue to serve on committees and focus groups to help the State and Federal governments better understand local issues;
- Objective 2: Continue to partner with the Grand Valley Metro Council (GVMC) and REGIS;
- Objective 3: Continue to partner with MDOT and the Kent County Road Commission on access management, drainage and other roadway issues;
- Objective 4: Continue to partner with the City of Walker regarding traffic, drainage and land use issues;
- Objective 5: Continue to partner with Plainfield Township regarding traffic, public water system, drainage and land use issues;
- Objective 6: Continue membership in the North Kent Sewer Authority to maintain a long term, cost efficient sanitary sewer system for Township residents;
- Objective 7: Expand communication with Wright Township, Sparta Township and Algoma Township regarding traffic, drainage and land use issues;
- Objective 8: Continue to partner with the Kent County Drain Commission office regarding drainage issues;
- Objective 9: Continue and enhance alliances with local universities and non-profits.

CHAPTER 2

COMMUNITY DESCRIPTION

This chapter presents factual information and data about Alpine Township. Community facilities, utility information, as well as the social and economic make up of Alpine Township residents and Township services are described in this Chapter.

COMMUNITY FACILITIES

The Alpine Township offices are located at 5255 Alpine Avenue NW which is the northwest corner of Alpine Avenue and 6 Mile Road. The building, a former restaurant, was purchased by the Township in 1996 and renovated. The building which was occupied in October of 1996 provides a larger public meeting room, additional office and storage space and private offices for Township staff and elected officials.

The Alpine Township Branch of the Kent District Library is also located within the building. This branch library was relocated from a building on 7 Mile Road just west of Baumhoff Avenue. The Plainfield Library located on West River Drive in the community of Comstock Park is also used by Alpine Township residents.



Recreation activities are centered primarily at the Alpine Township Sports Complex, located at the southeast corner of Alpine Church Street and Baumhoff Avenue. This is a 20-acre recreation area with three softball fields, several soccer fields, volleyball and tennis courts, a senior citizen walking track (1/2 mile long) and concession stand/restroom area. An extensive adult softball and youth soccer

program is offered annually. Alpine Township also owns Westgate Neighborhood Park on Westshire Drive which offers playground equipment, tennis courts, and restrooms. Wahlfield Park, a 265-acre Kent County owned park at the corner of M-37 and 8 Mile Road, has cross country ski trails, walking trails, restrooms, playground equipment and two picnic pavilions (pictured above).

Alpine Township provides fire fighting and emergency medical services from three locations. The main fire station is located at Alpine Avenue and Alpine Church Street. This site previously included the Township offices until these were relocated in 1996. Fire Station No. 2 is located on 7 Mile Road just east of Fruit Ridge Avenue. Fire Station No. 3 is located on 9 Mile Road between the railroad tracks and Alpine Avenue.

Alpine Township employs a full time Fire Chief; all other firefighters are paid on-call firefighters.

There are three active public cemeteries in the Township: Pine Grove, Alpine Center and Englishville and one inactive public cemetery: Saur-Cross. Holy Trinity Cemetery on Alpine Church Street is a private cemetery.

The restored 1860 Township Hall (old Wheeler School) at 7 Mile Road and Walker Avenue serves as a museum and center of the Historical Commission. The former library at 7 Mile Road and Baumhoff Avenue now houses the historical offices and genealogical collection and the remainder of the building is used by seniors and for general community use.

Utilities

Water

Public water is provided to a portion of Alpine Township by Plainfield Township. The service area for water is shown on Map 1 in Appendix D. Plainfield Township services approximately 67% of Alpine Township citizens. In 1998, Alpine Township approved a 40 year contract with Plainfield Township to provide public water. A complete description of the water system is in Appendix A

Sanitary Sewer

Alpine Township is part of the North Kent Sewer Authority which was formed in 1997. Members include the Townships of Alpine, Courtland, Plainfield and Cannon and the City of Rockford. The proposed service area for sanitary sewer is shown on Map 2 in Appendix D. This area is under the control of Alpine Township. The treatment plant to service the NKSA area is located on the Grand River in Plainfield Township adjacent to Donald J. Lamoreaux Park. This facility was under construction in 2007 and is scheduled to be operable in late 2008.

The new sewer plant will be called PARCC (Plainfield, Alpine, Rockford, Cannon, Courtland) Side Waste Water Treatment Plant. A history of sanitary sewer provision in Alpine Township and the background leading to the formation of the North Kent Sewer Authority and the building of the treatment plant is contained in Appendix A.

Schools

There are three public school districts within Alpine Township; Kenowa Hills, Sparta and Comstock Park. Figure 1 illustrates the boundaries for each district.

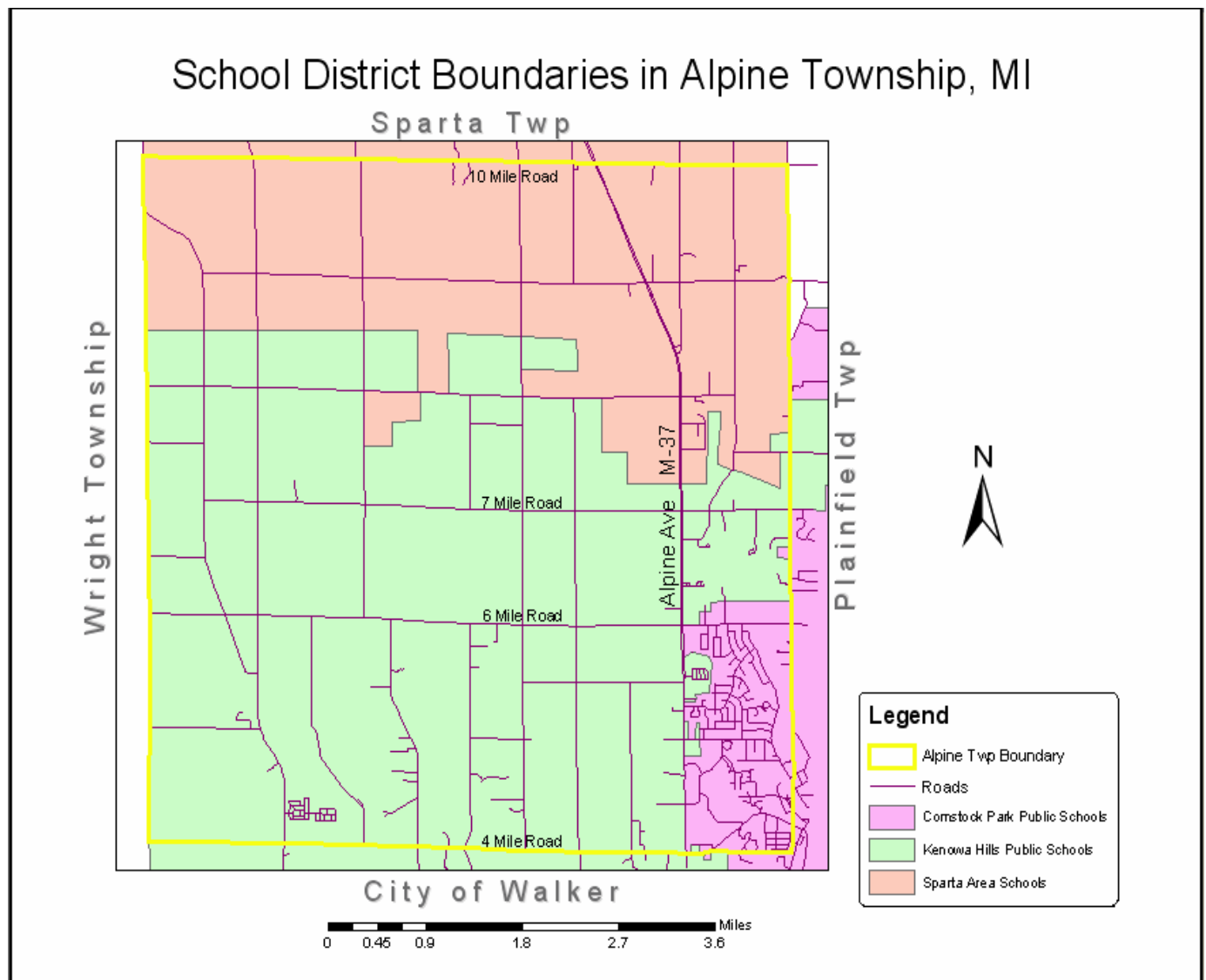
Within the Kenowa Hills portion there are three schools: Kenowa Hills High School on Hendershot Avenue north of 4 Mile Road which opened in 1998; Kenowa Hills Middle School located to the east across Hendershot Avenue; and Alpine Elementary School located at the southeast corner of Alpine Church Street and Baumhoff Avenue.

The Sparta School District contains the Englishville Alternative High School on Vinton Avenue south of 10 Mile Road.

Within the Comstock Park School District, there are two elementary schools; Greenridge Elementary on Oakridge Avenue and Stony Creek Elementary in the Westgate Subdivision on Lantern Street. The North Kent Alternative High School is located on Rusche Drive and 6 Mile Road. Comstock Park High School is located in Plainfield Township on Division Avenue north of 6 Mile Road directly across from Alpine Township.

There is also one Catholic School, Holy Trinity, located on Alpine Church Street and Cordes Avenue that provides preschool through 8th grade education.

Figure 1 Alpine Township School Districts



SOCIAL AND ECONOMIC CHARACTERISTICS

An important step in community planning is understanding the characteristics of the people that make up the community. This section explores historical population changes, age distribution, economic conditions, and other social characteristics which describe the residents.

Table 2-1: Population Comparisons

Location	1980	Percent Change 1970 to 1980	1990	Percent Change 1980 to 1990	2000	Percent Change 1990 to 2000
Alpine Twp.	8,934	9.44	9,863	10.39	13,976	41.70
City of Walker	15,088	31.29	17,279	14.52	21,842	26.40
Plainfield Twp.	20,611	21.70	24,946	21.03	30,195	21.04
Sparta Twp.	6,934	7.23	8,447	21.82	8,938	5.81
Wright Twp.	3,387	13.54	3,285	-3.01	3,286	0.0003
Kent County	444,506	8.14	500,631	12.62	574,335	14.72

Source: 1980, 1990 and 2000 U.S. Census

Table 2-2: 1990 Percentage of Age Distribution

Location	Under 5	5-17	18-24	25-44	45-64	65 +	Median Age
Alpine Twp.	8.1	18.0	11.6	34.4	19.4	8.5	31.2
City of Walker	7.5	17.8	12.5	33.7	17.5	11	31.2
Plainfield Twp.	8.0	21.4	9.2	34.2	18.9	8.2	32.0
Sparta Twp.	9.6	21.4	10.1	32.4	16.5	10.1	29.4
Wright Twp.	8.4	21.6	9.1	30.0	16.7	14.1	31.9
Kent County	8.7	19.5	10.9	33.7	16.4	10.8	30.7

Source: 1990 U.S. Census Data

Table 2-3: 2000 Percentage of Age Distribution

Location	Under 5	5-17	18-24	25-44	45-64	65 +	Median Age
Alpine Twp.	7.6	17.4	17.3	30.4	18.6	8.8	29.0
City of Walker	6.9	19.0	12.4	32.0	19.2	10.6	32.4
Plainfield Twp.	7.2	22.8	8.0	29.9	22.7	9.3	35.1
Sparta Twp.	7.5	22.0	8.6	30.4	20.0	11.6	33.9
Wright Twp.	6.3	23.0	8.0	28.5	22.4	11.8	35.6
Kent County	7.8	20.5	10.2	31.2	19.7	10.4	32.5

Source: 2000 U.S. Census Data

Table 2-4: Number of New Dwelling Units in Alpine Township, 1990 – 2006

Year	Total Number of New Dwelling Units
1990	35
1991	39
1992	98
1993	87
1994	218
1995	360
1996	356
1997	380
1998	373
1999	44
2000	60
2001	56
2002	28
2003	22
2004	47
2005	23
2006	26
Totals	2,252

Sources: 1990-1997 Data: 1998 Alpine Township Master Plan

1998-2006 Data: Alpine Township Assessor; Building Dept. for Mobile Homes

Data does not take into account demolitions or mobile homes that have left the Twp.

Table 2-5: Alpine Township New Dwelling Units by Type, 1998 – 2006

Year	Number of Single-Family Detached Dwelling Units	Number of Attached Dwelling Units	Number of Mobile Homes	Total Number of New Dwelling Units
1998	12	346	15	373
1999	13	19	12	44
2000	28	16	16	60
2001	21	10	25	56
2002	12	2	14	28
2003	13	0	9	22
2004	11	6	30	47
2005	14	0	9	23
2006	12	0	14	26
Totals	136	399	144	679

Sources: 1998-2006 Data: Alpine Township Assessor; Building Dept. for Mobile Homes

Data does not take into account demolitions or mobile homes that have left the Twp.

A Household is defined as an occupied dwelling unit.

Table 2-6: 1990 Household Information				
Location	Number of Households	Persons per Household	Single Person Households	% of Total Households
Alpine Twp.	3,686	2.67	753	20.4
City of Walker	6,669	2.54	1,781	26.7
Plainfield Twp.	8,884	2.80	1,702	19.2
Sparta Twp.	3,009	2.81	607	15.2
Wright Twp.	936	3.25	105	11.2
Kent County	181,740	2.69	41,781	23.0

Source: 1990 U.S. Census Data

Table 2-7: 2000 Household Information				
Location	Number of Households	Persons per Household	Single Person Households	% of Total Households
Alpine Twp.	5,550	2.51	1,341	24.2
City of Walker	8,805	2.45	2,657	30.2
Plainfield Twp.	11,038	2.73	2,396	21.7
Sparta Twp.	3,301	2.68	745	22.6
Wright Twp.	1,037	2.98	180	17.4
Kent County	212,890	2.64	54,466	25.6

Source: 2000 U.S. Census Data

Table 2-8: 1990 Housing Information						
Location	Owner-Occupied		Renter-Occupied		% Vacant of Total Units	Total Units
	Number of Units	% of Total Units	Number of Units	% of Total Units		
Alpine Twp.	2,759	70.3	927	23.7	6.0	3,925
Alpine Twp. 1-1-1998	3,136	57.0	2,123	38.6	4.4	5,498
City of Walker	4,287	60.8	2,382	33.7	5.5	7,060
Plainfield Twp.	7,051	76.0	1,833	19.8	4.2	9,278
Sparta Twp.	2,325	73.6	681	21.6	4.8	3,157
Wright Twp.	856	91.5	80	8.5	2.4	959
Kent County	126,627	65.7	55,113	28.6	5.6	192,698

Source: 1990 U.S. Census Data

Table 2-9: 2000 Housing Information						
Location	Owner-Occupied		Renter-Occupied		% Vacant of Total Units	Total Units
	Number of Units	% of Total Units	Number of Units	% of Total Units		
Alpine Twp.	3,100	53.2	2,450	42.0	4.8	5,830
City of Walker	5,513	59.9	3,292	35.8	4.3	9,201
Plainfield Twp.	9,064	79.1	1,974	17.2	3.6	11,456
Sparta Twp.	2,609	75.6	692	20.0	4.3	3,449
Wright Twp.	947	87.5	90	8.3	4.2	1,082
Kent County	149,679	66.8	63,211	28.2	5.0	224,000

Source: 2000 U.S. Census Data

Table 2-9 gives the most up to date U.S. Census data on housing occupancy for the listed communities. In this case, the same type of data was collected as 1990, including percent of total units. There is an increase in the number housing units in Alpine Township over the past 30 years. However, the increase is primarily in rental units. The number of rental units more than doubled since 1980 (addition of 1,404 units) while the owner occupied units increased by 620 units.

The York Creek Apartment complex located in Section 36 built mostly between 1990 and 2000 drastically changed the amount of available rental units in the Township. In 1980 there were 1,046 renter-occupied units, 927 units in 1990, and then 2,450 units that exist as of 2000. The number of rental units has increased 164% since 1990; an increase much greater than the surrounding areas. The county as a whole only had a 15% increase in the number of rental units during the same time period.

The increase in rental units altered Alpine Township's rental/owner occupancy ratio. In 1990, the owner occupancy status was 70%, which is near the state average of 71% (MSHDA, 1999). In 2000, after the completion of the major apartment complex, the owner occupancy rate fell to 53%.

Table 2-10: Income Information: 1990 Census

Municipality	Median Household Income (dollars)	Median Family Income (dollars)	Per Capita Income (dollars)
Alpine Township	34,109	37,211	13,933
Sparta Township	31,180	35,390	12,345
City of Walker	32,827	38,732	14,221
Wright Township	36,662	39,917	11,109
Plainfield Township	38,532	43,679	15,418
Kent County	32,358	37,783	14,378
State of Michigan	31,020	36,652	14,154

Source: 1990 U.S. Census

Table 2-11: Income Information: 2000 Census

Municipality	Median Household Income (dollars)	Median Family Income (dollars)	Per Capita Income (dollars)
Alpine Township	42,484	50,068	20,412
Sparta Township	42,992	49,491	18,345
City of Walker	44,818	58,912	21,198
Wright Township	51,023	56,389	18,183
Plainfield Township	55,181	62,241	23,753
Kent County	45,980	54,770	21,629
State of Michigan	44,667	53,457	22,168

Source: 2000 U.S. Census

ROADS AND TRAFFIC

Street Classification

The type of roadway and the amount of traffic it is designed to carry greatly influences the type of land uses surrounding it. The National Functional Classification (NFC) is a planning tool which federal, state and local transportation agencies have used since the late 1960's. The Federal Highway Administration (FHWA) developed this system of classifying all streets, roads and highways according to their function. The type of classification also determines what type and how much federal funding the road is eligible to receive. The following breakdown contains descriptions of the four major NFC classes:

National Functional Classification (NFC)

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

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

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

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

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

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

Local roads primarily provide access to property.

EXAMPLES: Residential streets; lightly-traveled county roads.

Source: Michigan Department of Transportation

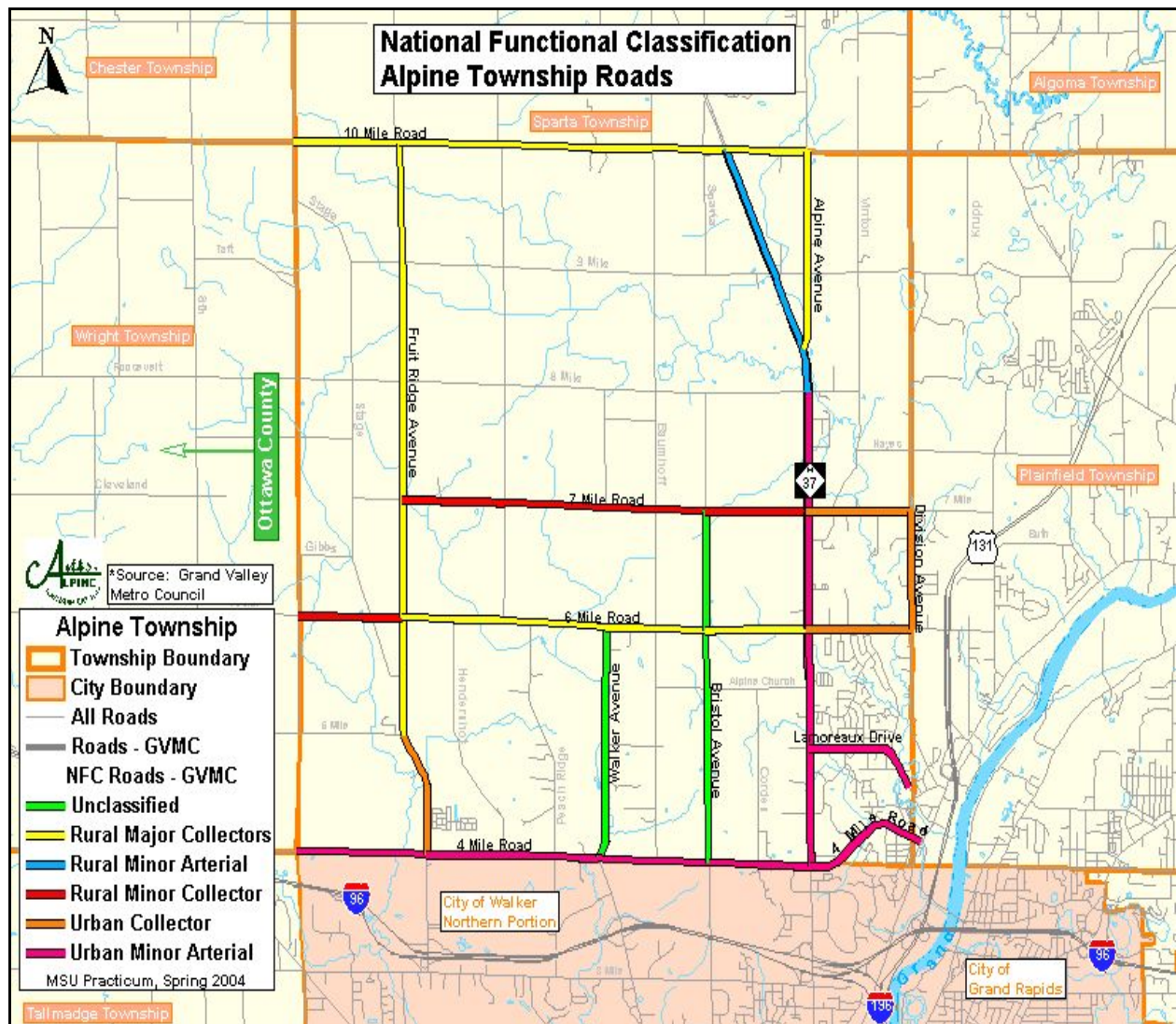
In addition to the above classifications, the NFC system also includes a rural and urban component, as well as, major and minor classifications depending on the characteristics of the roadway. So, for example, each of the above classes can be split further to include an urban or rural description dependent on the location. And, the roadway may be given a major or minor classification dependent on the design and use of the roadway. The following table displays a breakdown of the mileage of each NFC type in Alpine Township. The following map displays where these NFC types are in relation to the Township.

*NOTE: The data provided in the following analyses was collected by the Grand Valley Metro Council. However, the only roads that are displayed are those that are functionally classified (eligible for federal funding) and within Alpine Townships jurisdiction. Therefore, not all roads in Alpine Township have been analyzed.

Table 2-12: Street Classifications in Alpine Township	
National Functional Classification Name	Total Miles
Unclassified (data included)	5 Miles
Rural Major Collector	16 Miles
Rural Minor Collector	5 Miles
Rural Minor Arterials	4 Miles
Urban Collector	4 Miles
Urban Minor Arterial	16 Miles
TOTAL MILES ANALYZED	50 Miles

Source: Michigan Department of Transportation

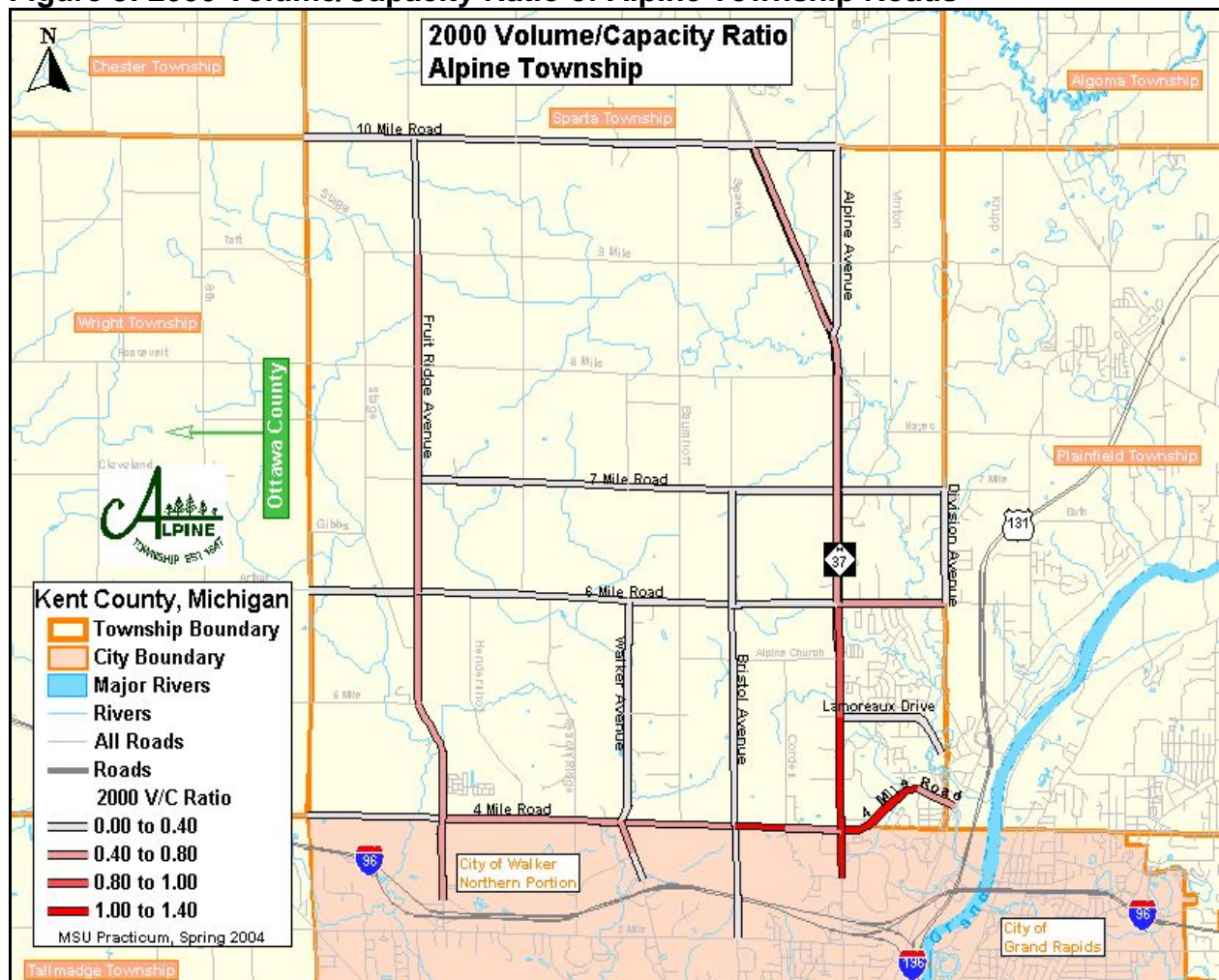
Figure 2: National Function Classification of Alpine Township Roads



Traffic Congestion

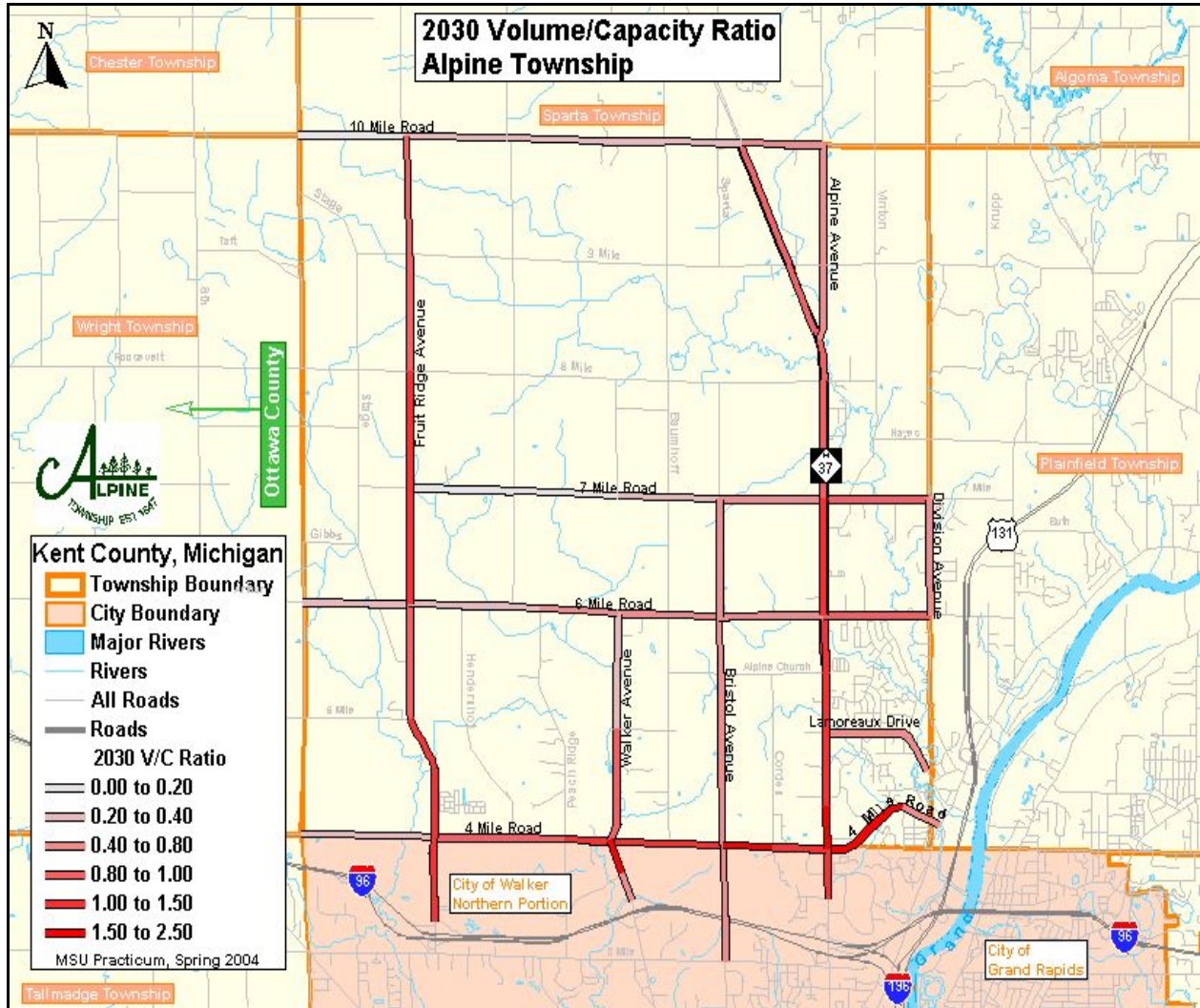
Congestion is measured in many different ways. The two key components are the volume of the roadway, and the capacity of the roadway. Volume is the actual number of vehicles traveling on a given roadway. Volume is usually measured using traffic recorders, or manual traffic counts. Capacity relates to the number of vehicles per hour that the roadway can accommodate. The number of lanes, traffic mix, and characteristics of the road (NFC) will determine the capacity. Congestion is measured by the volume to capacity ratio (V/C ratio). To calculate this number, you simply divide the volume by the capacity of the given roadway. In this analysis the roads are divided into segments based on many different attributes. For each of these segments the volume to capacity measurement is calculated. For the segments that receive a V/C ratio less than 1, the roadway is operating within its capacity. For any segments that receive a V/C ratio greater than 1, the roadway is exceeding its designated capacity. The following two tables and maps display the current V/C ratios (year 2000), and the next map displays the forecasted figures (year 2030).

Figure 3: 2000 Volume/Capacity Ratio of Alpine Township Roads



Currently, the only roads operating above their given capacity are 4 Mile Road between Bristol and Cordes Avenues, and the southern portion of Alpine Avenue (also called M-37).

Figure 4: 2030 Volume/Capacity Ratio of Alpine Township Roads



The forecasted traffic analysis resulted in many more roads operating over their current capacity. As the map displays, the roads located in the southern portion of the township are affected the greatest.



Table 2-13 Traffic Volumes: 2000 Counts & 2030 Estimates

Street	Functional Class	Length	2000 Vol	Capacity	2030 Est. Vol
4 Mile Road	Urban Minor Arterial	1.26	2,114	12,000	4,051
4 Mile Road	Urban Minor Arterial	1.26	5,623	12,000	9,639
4 Mile Road	Urban Minor Arterial	0.42	7,693	12,000	14,831
4 Mile Road	Urban Minor Arterial	1.09	9,001	12,000	17,941
4 Mile Road	Urban Minor Arterial	0.49	12,454	12,000	24,767
4 Mile Road	Urban Minor Arterial	0.51	16,343	26,400	31,971
4 Mile Road	Urban Minor Arterial	0.85	12,021	12,000	18,392
4 Mile Road	Urban Minor Arterial	0.37	14,865	26,400	19,325
6 Mile Road	Rural Minor Collector	1.02	1,853	13,600	3,355
6 Mile Road	Rural Major Collectors	1.24	2,295	13,600	5,415
6 Mile Road	Rural Major Collectors	0.74	3,723	13,600	8,760
6 Mile Road	Rural Major Collectors	0.98	4,080	13,600	8,834
6 Mile Road	Rural Major Collectors	0.99	3,538	13,600	7,442
6 Mile Road	Urban Collector	1.02	5,949	12,150	10,304
7 Mile Road	Rural Minor Collector	1.00	1,239	13,600	2,140
7 Mile Road	Rural Minor Collector	0.99	1,275	13,600	2,175
7 Mile Road	Rural Minor Collector	0.98	2,295	13,600	3,175
7 Mile Road	Rural Minor Collector	0.99	1,863	13,600	8,965
7 Mile Road	Urban Collector	1.02	4,336	13,600	12,617
Alpine Avenue	Rural Major Collectors	0.65	4,315	13,600	5,648
Alpine Avenue	Rural Major Collectors	1.04	4,503	13,600	5,832
Fruit Ridge Avenue	Urban Collector	1.07	7,710	13,600	16,479
Fruit Ridge Avenue	Rural Major Collectors	1.00	7,234	13,600	12,748
Fruit Ridge Avenue	Rural Major Collectors	1.00	6,372	13,600	14,288
Fruit Ridge Avenue	Rural Major Collectors	1.01	6,718	13,600	13,964
Fruit Ridge Avenue	Rural Major Collectors	1.00	5,904	13,600	12,189
Fruit Ridge Avenue	Rural Major Collectors	1.02	4,772	13,600	10,936
Lamoreaux Drive	Urban Minor Arterial	1.16	9,081	26,400	12,805
Walker Avenue	Not Classified - Modeled	0.98	2,277	13,600	12,461
Walker Avenue	Not Classified - Modeled	1.00	2,111	13,600	5,058

Street	Functional Class	Length	2000 Vol	Capacity	2030 Est. Vol
Bristol Avenue	Not Classified - Modeled	1.98	1,699	13,600	6,637
Bristol Avenue	Not Classified - Modeled	1.01	1,009	13,600	9,237
M-37 (Alpine Avenue)	Urban Minor Arterial	0.35	45,390	34,800	58,008
M-37 (Alpine Avenue)	Urban Minor Arterial	0.65	39,018	34,800	49,723
M-37 (Alpine Avenue)	Urban Minor Arterial	0.51	31,554	34,800	41,022
M-37 (Alpine Avenue) NB	Urban Minor Arterial	0.50	15,323	17,500	19,632
M-37 (Alpine Avenue) SB	Urban Minor Arterial	0.50	15,323	17,500	19,412
M-37 (Alpine Avenue) NB	Urban Minor Arterial	1.00	13,341	17,500	18,343
M-37 (Alpine Avenue) SB	Urban Minor Arterial	1.00	13,341	17,500	18,337
M-37 (Alpine Avenue) NB	Urban Minor Arterial	1.00	13,187	17,500	18,143
M-37 (Alpine Avenue) SB	Urban Minor Arterial	1.00	13,187	17,500	17,423
M-37 (Alpine Avenue) NB	Rural Minor Arterial	0.37	12,240	17,500	15,229
M-37 (Alpine Avenue) SB	Rural Minor Arterial	0.44	12,240	17,500	16,494
M-37 NB	Rural Minor Arterial	0.69	12,240	17,500	15,752
M-37 SB	Rural Minor Arterial	0.62	12,240	17,500	16,043
M-37 NB	Rural Minor Arterial	1.16	12,124	17,500	15,174
M-37 SB	Rural Minor Arterial	1.16	12,124	17,500	15,925
Division Avenue	Urban Collector	1.01	2,311	12,150	5,062
10 Mile Road	Rural Major Collectors	1.03	1,281	13,600	2,162
10 Mile Road	Rural Major Collectors	0.96	1,727	13,600	5,286
10 Mile Road	Rural Major Collectors	1.52	2,145	13,600	3,307
10 Mile Road	Rural Major Collectors	0.49	2,589	13,600	3,227
10 Mile Road	Rural Major Collectors	0.23	2,608	13,600	3,990
10 Mile Road	Rural Major Collectors	0.78	3,635	13,600	9,116
Bristol Avenue	Urban Collector	0.99	4,878	13,600	10,313
Fruit Ridge Avenue	Urban Minor Arterial	0.73	13,994	26,400	27,058
Walker Avenue	Urban Minor Arterial	0.25	8,934	34,800	27,767
Walker Avenue	Urban Minor Arterial	0.30	8,934	13,600	27,767
M-37 (Alpine Ave)	Urban Minor Arterial	0.43	48,861	43,500	64,494

Source: Grand Valley Metro Council

CHAPTER 3

EXISTING LAND USE ANALYSIS

This Chapter describes the existing land uses in the Township as of 2006 and analyzes changes that have occurred since 1978 and 1991. Some of this information is taken from a report entitled "Land Use/ Land Use Cover" prepared by the Remote Sensing & Geographic Information Science, Research and Outreach Services of Michigan State University in the Fall of 2003.

An important component of this land use analysis is the effort to identify the Prime, Unique and Valuable (PUV) farmland in Alpine Township. This information was also contained in the 1998 Master Plan.

The identification of these lands provides a quantifiable and scientific basis for the long term preservation of these farm lands in Alpine Township.

EXISTING LAND USE CHANGES

Table 3-1 notes the percent of land use change between 1978 and 2002 for the two largest categories of land use which are Urban and Agriculture as determined by the 2003 MSU Land Use/ Land Use Cover report. As shown in this table, Agriculture as a percentage of total Township acreage decreased from 62.8 percent in 1978 to 54.7 percent in 2002, a reduction of 8.1 percent or 1,644 acres.

The amount of urban land use increased by 1,218 acres from 1978 to 2002 an increase as a percentage of total Township acres of 6.1 percent.

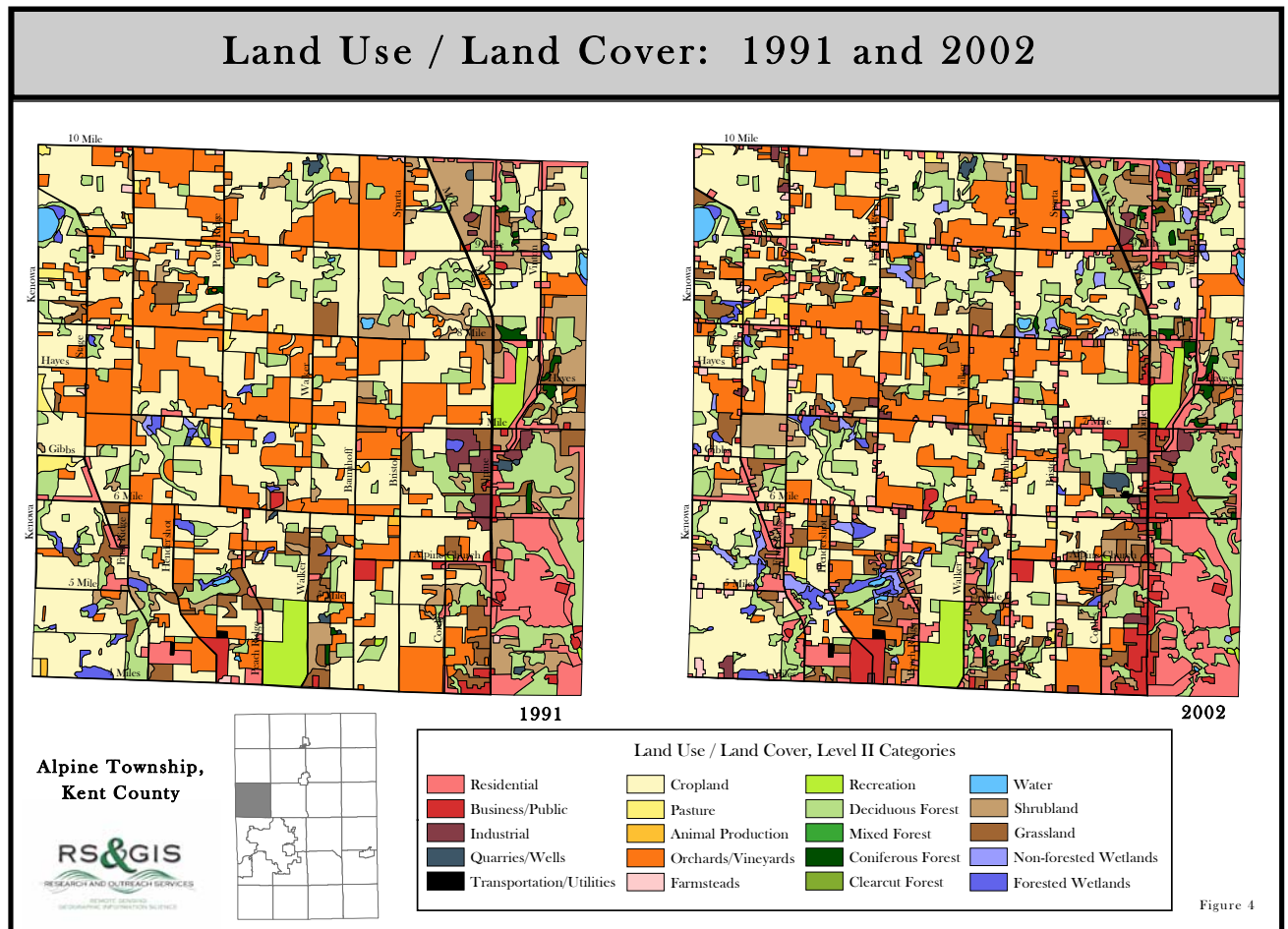
Table 3-1 Alpine Township Land Use/Cover Change: 1978 to 2002

Land Classification	1978 Acreage	2002 Acreage	1978 as a Percent of Total Township Acreage	2002 as a Percent of Total Township Acreage
Urban	2,283	3,501	11.3	17.4
Agriculture	12,644	11,000	62.8	54.7

Source: Remote Sensing and Geographic Information Science, Research & Outreach Services, Michigan State University, Fall 2003

Figure 5 allows for a size by side comparison of the land uses existing in 1991 and 2002.

Figure 5: Land Use Cover 1991 & 2002



AGRICULTURAL LAND USE

Prime, Unique and Valuable Farmland



In 1996 the Water Resource Institute (WRI) of Grand Valley State University received a grant from the Frey Foundation to identify the very best farmland in Alpine Township, and in particular, to identify the land, soil and air drainage characteristics which make Alpine Township so ideal for orchard crops. The lands which have been identified are known as Prime, Unique and Valuable (PUV) farmland.

The process used by WRI to identify PUV lands is known as the Land Evaluation and Site Assessment (LESA) method. This process ranks parcels for their agricultural importance based on both soil quality and certain location characteristics which influence farming and productivity. Map 3 in Appendix D illustrates the PUV lands. The LESA factors upon which the PUV lands were selected are found in Appendix C.

The LESA evaluation found that there were several land characteristics common to good orchard growing conditions such as the presence of soil types Marlette loam and Perrinton loam with slopes of 6 to 12 percent. These are considered to be unique farmlands best suited to the production of fruit.

Prime Farmland

A large percentage of Alpine Township consists of prime farmland soils. These are defined by the U.S. Department of Agriculture as soils which are best suited for feed, forage, fiber and oil seed crops and which produce the highest yields with minimal inputs of energy and economic resources. Certain areas may be prime farmland only when well drained or not flooded during growing season.

Map 4 in Appendix D illustrates areas of Prime Farmland Soils. Table 3-2 presents information on land zoned for farming and how much of this consists of prime farmland soils.

Table 3-2 Prime Farmland Acreage

Total Twp. Acreage	Total Ag. Zoned Land	% of Ag. Zoned land that is Prime Farmland	% of Ag. Zoned land that is Prime if Drained	Total % of Ag. Zoned land that is Prime Farmland
23,163 acres	17,349 acres (75% of the Twp.)	19 % (3,314 acres)	34% (5,874 acres)	53% (9,188 acres)

Source: 2007REGIS and Soil Survey of Kent County, Michigan

Rural Agricultural

This is a zoning district established to implement the recommendations of the 1988 Master Plan. The "RA, Rural Agricultural" zoning district is analogous to the "Rural Estate" future land use designation. This district is designed to permit farming activities but to also allow residential developments on parcels of at least 1.5 acres. This allows opportunity for those who wish to live in a rural setting without using up prime agricultural land. The RA zone also acts as a transition or buffer zone between the Agriculture Zone and more intense land uses.

RA zoned lands are located along the southern border of the Township and in the northeast sections as shown on the Township Zoning Map.

RESIDENTIAL LAND USE

Residential zoned lands include single family, duplex, and multi-family dwelling units. The majority of residential land uses is located east of Alpine Avenue where public utilities are located. The two largest residential areas are the Westgate Subdivision (single family detached dwellings), and York Creek Apartments (a multi-family development).

COMMERCIAL AND INDUSTRIAL LAND USE

The majority of the commercial zoned land is concentrated along both sides of M-37 (Alpine Avenue) between 4 Mile and 7 Mile Road. There are approximately 192 vacant acres zoned for commercial use in May of 2007 compared to approximately 225 acres of vacant commercial zoned land in July 1997.

Assuming an average commercial building would cover 20 percent of a parcel, the 190 vacant acres could accommodate 1.6 million square feet of new commercial building space. The amount of commercial space appears to be adequate to meet the retail shopping needs of Alpine Township residents particularly in light of the amount of commercial development in nearby communities such as the City of Walker, Plainfield Township and the City of Grand Rapids.



The pattern of commercial growth is moving north of Alpine Church Street as land to the south has been developed with large "big box" retail uses. The M-37 Corridor Plan adopted by the Township in 1992 has been implemented successfully so that service roads connect major commercial uses and new driveways have been minimized. In 2004, the Township strengthened its commitment to good access management practices by adding access management standards to the Zoning Ordinance.

Most of the vacant commercial zoned land consists of parcels less than three acres containing a single family dwelling. These parcels are located north of Lamoreaux Drive. These smaller parcels make land assembly difficult for larger retail uses. Developing the

individual parcels, however, is also difficult due to setback and parking restrictions and the need to provide safe and efficient vehicle access.

There are several larger vacant commercial zoned parcels along 4 Mile Road at Fruit Ridge Avenue and the area on 4 Mile Road between Walker and Baumhoff Avenues. These areas have been zoned for commercial use since at least the 1960's with only a few small commercial uses developing.

Sewer and water service are available to the corner of Fruit Ridge Avenue and 4 Mile Road because these utilities were extended to Kenowa Hills High School in 1998. Along 4 Mile Road public water is available from Fruit Ridge Avenue to Alpine Avenue. Sanitary sewer mains will be constructed along 4 Mile Road from the high school to approximately Cordes Avenue during 2008 and 2009 as a function of the Township being a part of the North Kent Sewer Authority. Some of this sanitary sewer main will be high-pressure forcemain.

Other larger vacant parcels are located on the west side of Alpine Avenue just north of the Consumers Energy right-of-way north of 6 Mile Road; along M-37 adjacent to the Marway Subdivision; and along the east side of M-37 just south of 10 Mile Road. The commercial zoned lands south of 10 Mile Road along the east side of M-37 are not likely to be served by public water and sewer and direct driveway access is likely to be decided by the Michigan Department of Transportation

Most of the industrial land is located between 6 and 7 Mile Road behind the existing commercial uses which front on M-37 both east and west of Alpine. Water and sewer service is available to these areas. Another significant industrial area is located north of 9 Mile Road east of M-37. Public utilities are not available to this area at this time.

A fairly large area of I-2 zoned and Master Planned land in Section 24 has become accessible as passage over the railroad track from Rusche Drive has been permitted by the CSX Railroad Company. Access from the north is possible if the owners of Comstock Park Drive, which is a private road, allow it.

According to Township records in May of 2007, there are approximately 150 acres of vacant industrial zoned land. In 1996 there were approximately 276 acres of vacant industrial zoned land.

The amount of vacant industrial land, 150 acres, is an adequate amount for a five year planning horizon. Assuming a typical industrial building will cover 40% of a site the 150 vacant acres would result in 2.6 million square feet of industrial building space.

York Creek Watershed

In 1993, Alpine Township in conjunction with the Michigan Department of Environmental Quality (DEQ) and Grand Valley State University's Water Resources Institute (WRI), began a study of the York Creek Watershed. The goal was to evaluate the quality of the water and habitat in the York Creek Watershed, implement Best Management Practices (BMP's) and begin restoration of the stream system.

The study and the implementation of BMP's were funded from four grants authorized by Section 319 of the Federal Clean Water Act and administered by the DEQ. The York Creek watershed consists of 2110 acres located in west central Kent County. The watershed is situated primarily in Alpine Township, with a small downstream portion located in Plainfield Charter Township. The areas furthest downstream are located in the City of Walker. Additional location detail is displayed in Map 5 in Appendix D, the York Creek Watershed Base Map.

York Creek is the primary water body in the watershed, consisting of approximately six miles, including tributaries. One of the tributaries is the Alpine-Walker Drain, a designated county drain originating in what is now the Green Ridge Shopping Center on Alpine Avenue in the City of Walker. The drain designation continues along the entire length of the tributary to its confluence with York Creek at 4 Mile Road. There are a few small private ponds and detention basins in the watershed.

Additional basins are currently being developed as commercial and residential development expands within the watershed. Nearly all of York Creek downstream from the intersection of 4 Mile Road and York View Drive has been channelized. This is approximately 18% of the stream system.

A number of projects were recommended by the initial York Creek Watershed Management Plan which was completed in late 1994. The implementation Plan focuses on education and public participation, stormwater management, soil erosion and sedimentation control, watershed monitoring, training and stream bank stabilization.

Specific projects accomplished through 1996 include; distribution of the York Creek Journey, a quarterly newsletter detailing progress of the study; Decision Support, a mapping program of the watershed which was developed by WRI and established within the Alpine Township offices, correction of stormwater problems along Alpine Avenue, development and adoption of a stormwater management ordinance, retro-fitting of two stormwater detention basins to correct problems within the Alpine-Walker Drain, updating Alpine-Walker Drainage District boundaries, stenciling of catch basins warning not to dump waste in the basins and stabilizing a stream embankment using trees from the Township's Christmas tree recycling program.

Specific projects accomplished since 1998 within the York Creek Drainage District include the expansion of the original Al Four detention pond in 2007; building a second Al Four detention pond; expanding the "Menards" detention pond and turning it over to the Kent County Drain Commissioner; completing emergency creek bank improvements near 4 Mile Road and West River Drive (also in Plainfield Charter Township); redirecting 4 Mile Road storm water to the "York Creek Apartments" detention pond and turning it over to the Kent County Drain Commissioner; and obtaining a Federal Emergency Management Agency grant to purchase three homes along 4 Mile Road to improve flood plain management (negotiations in progress).

A more complete list of implementation of projects can be obtained from the Alpine Township offices or the Water Resources Institute.

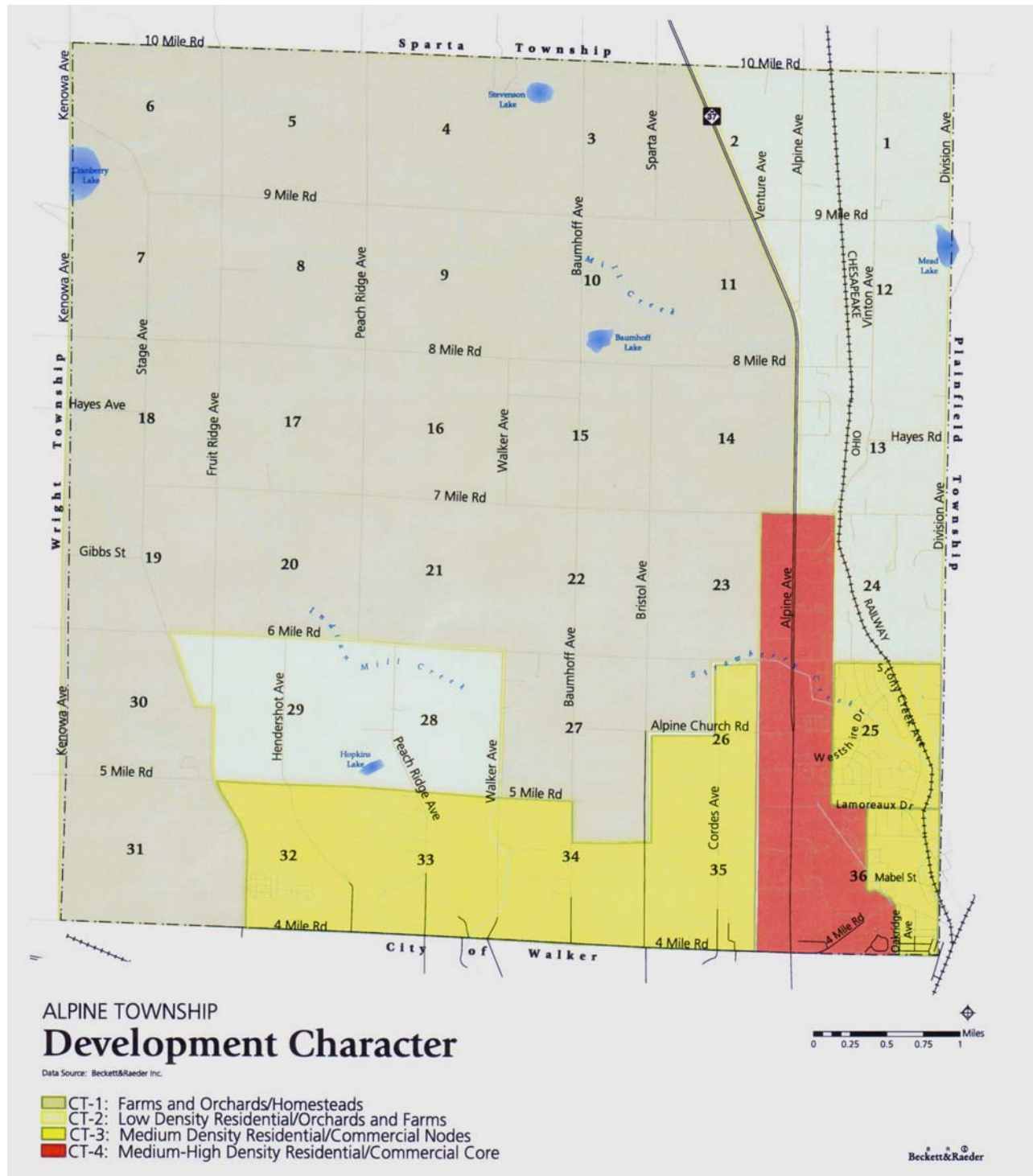
Development Character Areas

A community master plan should be grounded in local public policy and a general development character framework based on how the planning commission and local elected officials envision the future allocation of land use. The Development Character map for Alpine Township is based on a number of variables, which include:

- Existing housing density patterns,
- Existing service area for water and sanitary sewer,
- Existing patterns for land use,
- Traffic corridors,
- Location of public facilities, and
- Emerging development trends

The 2007 Master Plan process identified four distinct Development Character zones. These are illustrated on Figure 6.

Figure 6: Development Character



Farms and Orchards / Farm Homesteads

This area reflects the predominant character of Alpine Township as a rural and active agricultural area. In this zone residential homesteads are typically associated with farming and orchard operations and occur on very large parcels with a density of 1 unit per 100 acres, and 1 unit per 20 acres.

Low Density Residential / Orchards and Farms

This portion of the Township still has active agricultural operations but large lot, or rural residential estate lots, have developed. Densities tend to average between 1 unit per 5 acres to 1 unit per 2 acres. This area serves as a transition between the traditional farming and orchard operations and developed residential areas.

Moderate Density Residential / Commercial Nodes

This development character zone occurs along the 4 Mile Road corridor where small subdivisions and single lot commercial uses occur. Densities average from 1 unit to 3 units per acre. The intersection of 4 Mile Road and Fruit Ridge Avenue will continue to accommodate limited community commercial uses.

Medium-High Density Residential / Commercial Core

This development character zone reflects portions of the Township which have higher density apartments, traditional subdivisions, and continuous commercial developments along Alpine Avenue (M-37). This zone would be typically viewed as an urban area due to the range of higher density developments and the occurrence of regional commercial areas.

The Development Character Map illustrates the general location of these zones within the context of the Township. The predominant character development zone is Farms and Orchards / Farm Homestead zone which comprise over 60% of the land area of the Township.

CHAPTER 4 PUBLIC PARTICIPATION

General Themes

During the visioning workshops, participants covered a wide range of subjects. Some items were repeatedly raised and emerged as areas of focus. Those items include:

- Rural character
- Increased traffic volume and speed on Alpine and local roads
- Aging infrastructure
- Drainage issues, both stormwater and septic
- Development pressure from Walker and Sparta
- Increased crime
- Farmland preservation (land and practice)
- Fire department is stretched thin

The issues that emerged from the community visioning process formed the basis for the development of community themes. These themes serve as the guiding principles of the community master plan and were translated into policy statements that support the achievement of the community goals. A summary of the themes follows.

Farmland Preservation

Farmland is the defining element of Alpine Township. Finding ways to protect this asset will involve strategies to preserve the land and strategies to preserve the practice of farming.

Land / Character

All residents, regardless of what part of the Township they live in, identify with the rural character the farmland provides for Alpine Township. When asked to describe Alpine Township in the future, most participants would like to see the farmland preserved, especially the area known as "The Ridge". However, during the course of the workshops, several participants spoke of converting farmland to large lot residential, particularly along the road frontage.

Practice

An underlying message that emerged from the visioning workshops is that farmers need alternatives to issues they are facing. These include an aging population of farmers, a younger generation that is not interested in farming or seeing the family farm stay in

production, competition from non-local producers, uninformed consumers, easy access for machinery to farmland, and a forum for supporting and promoting local produce.

Traffic

According to workshop participants the traffic volume and speed in Alpine Township has increased and more people are using local roads, such as Baumhoff and Fruit Ridge Avenues, in an effort to avoid the heavily used M-37 (Alpine Avenue). Suggestions presented to address the traffic issues include widening local roads, like Fruit Ridge Avenue and 4 Mile Road, and building a U.S. 131 / M-37 by-pass.

Development Pressure

Alpine Township is experiencing development pressure from the surrounding communities and within its borders. Ways to handle and address development within the Township are key priorities.

Walker & Sparta

What happens in the City of Walker, to the south, the Village of Sparta, to the north, and Plainfield Township to the east, all affect Alpine Township. It will be important to coordinate planning efforts with the surrounding communities, as the impact of development in any of these communities will be felt in Alpine Township.

Landowners

With development moving north from Grand Rapids and Walker, there is growing pressure for landowners in Alpine Township to develop their land. This is aggravated by the decreased interest of younger generations to continue farming and retiring farmers looking for alternative uses for their farmland.

Public Services

Adequate public services are an important quality of life component. This includes adequate utility and public safety services for which workshop participants revealed several concerns.

Utility service

With regard to public utilities, participants are concerned that the utilities in the older, predominately residential neighborhood in the southwest portion of the township are aging and may need improvement. Additionally, many would like to see future development limited to those areas where public services are currently available.

Public Safety

Safety of residents and their property is another important consideration for workshop participants. They indicated there has been an increase in crime and that Fire Department

resources are stretched to their limit. Addressing these concerns before they become larger issues is important.

Drainage

Participants remarked on several drainage issues including stormwater management issues in the York Creek watershed and heavy soils in areas where septic fields are located. The York Creek watershed has experienced the greatest amount of development in the Township resulting in increased impervious land and therefore degradation of the watershed. Controls to prevent further deterioration here or similar degradation in other parts of the community should be addressed. Additionally, participants noted that several areas of the Township are experiencing difficulty with septic systems not draining adequately. It was expressed that development is occurring in areas that may be unsuitable for septic systems or require sewer service.

Community Visioning Summary

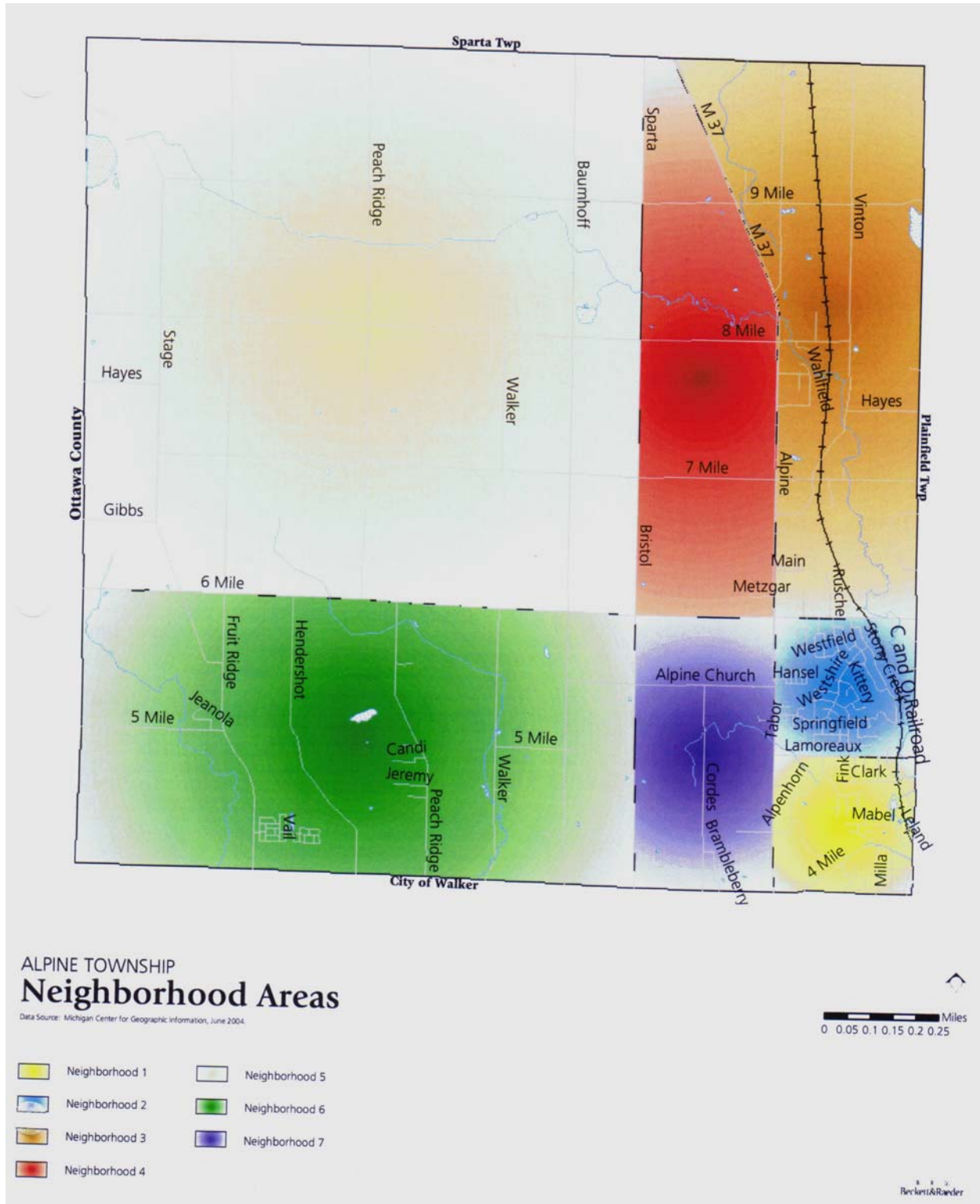
Alpine Township sponsored a series of Community Visioning workshops to solicit public input regarding the state of the Township and ideas for its future. In order to gain a better understanding of the various districts, the Planning Commission divided the Township into seven neighborhoods of approximately equal population that may be facing similar issues (see Figure 7: Alpine Township Neighborhood Areas). Planning consultants Beckett & Raeder facilitated four workshops, one for each group of neighborhoods grouped as 1 & 2, 3 & 4, 5, and 6 & 7.

Each workshop followed the same format. Participants were divided into groups of 4 to 6 people and asked to engage in a series of brainstorming exercises covering four main topics:

- How do we view our neighborhood and the Township?
- What issues is the community facing?
- Where would you like to be?
- How do we get there?

These exercises helped participants to express what they value most in the Township, to identify the issues confronting their community, and to generate ideas on the future direction of the Township.

Figure 7: Alpine Township Neighborhood Areas



How do we view our Neighborhood and the Township?

Participants were asked to discuss what they were "proud" and "sorry" about in the Township and in their neighborhood. After each group had compiled a list, the participants were asked to vote for two items on each list that were most important to them.

Overall, the workshop participants are proud of Alpine Township's rural character, agricultural heritage, unique landform ("The Ridge"), long family histories, and friendly neighbors. The aspects viewed as unfavorable include the volume and speed of traffic, the large amount of apartment and multiple-family residences, aging infrastructure, stormwater management issues in the more developed areas, rising crime rates, and Township politics. A summary of comments from each group of neighborhoods follows.

Neighborhoods 1 & 2 envision the Township as a farming community with good planned growth and a strong fire department. Their concerns for the Township are that the fire department needs additional resources and that there are too many apartments. The participants from Neighborhoods 1 & 2 view their district as walkable, although they could use additional sidewalks and also that while the traffic is good for business, the area is overgrown.

Neighborhoods 3 & 4 appreciate the rural character, farming heritage (both farmland and history of family farming), the uniqueness of "The Ridge," good neighbors, the mixture of land uses, and proximity to town. The participants from these neighborhoods are discouraged by the development pattern on Alpine Avenue, increased traffic on Alpine Avenue and rural roads, the large number of apartments, and the Open Space Neighborhood / Planned Unit Development ordinance. The participants from Neighborhoods 3 & 4 cited the rural character, agricultural history, large lot size, open space, neighbors, fire protection and investment potential as positive qualities in their neighborhoods. They found the negative aspects to be the increased traffic and accidents on Alpine Avenue, noise, the railroad, a lack of sanitary sewer, and the limited number of permitted property splits.

Neighborhood 5 listed the following as valuable Township assets: rural character, scenery, centennial farms, agricultural preservation (especially considering the proximity to Grand Rapids), good neighbors, peace and quiet, and that Alpine Township is a "great place to live." The aspects of the Township that Neighborhood 5 members view as negative include the increase in traffic on Alpine Avenue, rising crime, strained resources, an abundance of multi-family housing, development by York Creek Apartments, conflicts in planning and government, and restrictions on property use.

As for thoughts pertaining to Neighborhood 5, the participants highlighted the success of farmers, the number of centennial farms, scenery, "The Ridge," great neighbors and farm preservation as neighborhood assets. The negative aspects of the area include the increased traffic (both quantity and speed) on the roads, development pressure, increased crime, trespassers, large lots with houses located in the middle of the property, and the Wahlfield County Park (as it reduced the amount of productive farm land).

Neighborhoods 6 & 7 spoke highly of the Township's rural atmosphere, family orientation, agricultural history, centennial farms, beautiful land and easy access to shopping and the highway. The participants in Neighborhoods 6 & 7 spoke about the less desirable aspects including traffic, the abundance of low income housing; new buildings in the Township are empty, areas of dense population, housing developments, and Township politics.

As for their neighborhoods, participants listed rural character, farms, open space, proximity to Grand Rapids, schools, long-time local businesses, and access to public services (sewer and water) as the assets of the area. The deficits cited include traffic (volume and speed), the hodge-podge development on the west side of Alpine Avenue between Lamoreaux Drive and 6 Mile Road, increased housing development, increased vandalism and trespassing, trailer parks, and the increase in non-farm residents moving to the area.

What are the community issues?

Each group then was asked to consider the issues that were facing each neighborhood. After compiling a list of issues, the group members voted for the item that they considered to be the most pressing in each neighborhood. Those issues deemed most critical to each neighborhood are summarized below.

Neighborhood 1: Abundance of apartments / density, watershed issues, crime, traffic, pressure (intense use of) on public services

Neighborhood 2: Outgrowing community services / aging infrastructure, traffic, lack of sidewalks, need for service drives, parks and neighborhoods need maintenance

Neighborhood 3: Industrial growth in Sparta, development pressure, traffic (volume and speed), need for controlled growth, lack of water service in the industrial area, diverse land uses, no sanitary sewer service.

Neighborhood 4: Development pressure, commercial development along Alpine Avenue, traffic, area is the boundary between commercial and agricultural, conflicts between commercial and residential development

Neighborhood 5: Traffic speeds, development pressure from Sparta, farmland preservation, residential development pressure, retiring farmers

Neighborhood 6: 4 Mile Road corridor, traffic, development pressure from the City of Walker, water and septic, losing open space to density, housing growth

Neighborhood 7: Development pressure on utilities, roads are in poor condition, development pressure from the City of Walker, traffic on 4 Mile Road and Alpine Avenue, need for controlled development, resistance to residential growth

Summary of Issues

In summary, the Township is facing development pressures, traffic issues, loss of farmers and farmland, aging infrastructure, drainage concerns, increased crime, and an increased need for recreation facilities. Development pressure comes from Sparta to the north, the City of Walker to the south, and internal pressure for residential and commercial growth. Increased traffic volume and speed is another major community concern, as this issue can be found on many of the roads in the community as people try to find an alternative to Alpine Avenue. Another major challenge in Alpine Township is an aging farmer population and fewer young people interested in farming, which tempts farm owners to think of alternatives for their property.

Where would you like to be?

To understand what type of community participants would like Alpine to be, they were asked to describe their preferred vision of Alpine Township 10 to 15 years in the future. Again, each member voted for his or her top three preferred images for the future. Those images are summarized as follows.

Overwhelmingly, community members would like to have the rural character of the Township preserved. This is not surprising as the rural quality of the Township is something everyone values. Participants reported that they would like to see farms, farmland and "The Ridge" preserved, however, they also expressed a desire for growth. Residents would like to see planned growth and development; growth that keeps the tax base balanced.

The areas most often highlighted as suitable for development include the area south of 5 Mile Road or west of Alpine Avenue. Another way to manage growth raised by the participants was to focus growth where public infrastructure exists rather than extending services. Others felt that relying on large lot residential development would be best for the community.

Another frequently raised "preferred" vision is to have the traffic issues resolved. Suggestions included widening roads to four-lane, such as Fruit Ridge Avenue and 4 Mile Road or building a by-pass between M-37 and U.S.-131. One group suggested light rail service to the City of Grand Rapids. Other groups focused on quality-of-life issues such as providing affordable housing and building an indoor sports center.

How do we get there?

Participants then identified short-term strategies and actions intended to move the community in the direction of the "preferred" scenarios. Following is a list of some of the strategies discussed.

- Educate the community about land-use, zoning, and tax issues
- Enforce ordinances (speed, maintenance)
- Update the Master Plan and Zoning Ordinance

- Increase community participation
- Farmland Preservation Trust, Purchase of Development Rights, pass a millage, promote/market local farms and their products
- Encourage young people to farm, work with schools and local organizations (4-H)
- Control / limit extent of public infrastructure (water and sewer)
- Traffic study
- Cluster homes
- Improve roads (pass a bond, apply for grants, work with MDOT)
- Review/reduce tax on active farmland
- Develop cooperative relationships with surrounding communities (Walker, Sparta, Grand Valley Metro Council)

CHAPTER 5 FUTURE LAND USE PLAN

This chapter contains the recommendations for the future use of the land in Alpine Township. These recommendations were influenced by:

- The viewpoints, concerns and suggestions of Alpine Township residents which were voiced at numerous meetings during the Plan preparation process;
- Location and availability of public utilities;
- Analysis of existing circumstances and future needs;
- The 1998 Master Plan recommendations many of which remain valid;
- The land use plans of nearby municipalities.

Future Land Use Scenarios

As part of the planning process the Planning Commission prepared four Future Land Use Scenarios. Each scenario detailed the amount of acres and percentages of the various land use categories.

Each of the land use scenarios were based on several underlying factors including:

- Protection and continuation of farming and orchard operations;
- Encouraging development within areas already served by municipal utilities; and
- Localizing new development within in-fill parcels and properties served by municipal utilities.

Each of the four scenarios analyzed is presented in the Appendix B.

Future Land Use Designations and Descriptions

The Future Land Use Map, located in the front pocket of the Plan, recommends a number of different future land use classifications. The following descriptions of these classifications explain the type, intensity and location of the proposed uses. Although the Future Land Use Map provides the basis for the Zoning Map, these future land use classifications will not automatically change the zoning for an area. **A property owner will still need to apply to the Township for a zoning change if the Future Land Use designation does not match the current zoning. However, a property owner is permitted to use the land as it is currently zoned even if the zoning is different from the Future Land Use designation.**

The names of the Future Land Use designations do not always match the names of the zoning districts. The Future Land Use designations are intended to describe the type of land use recommended. For example, Low Density Residential (LDR) means the land is

proposed for single family houses at low density. The zoning category, however, is R-1, Single Family Residential. The R-1 term itself, however, does not tell us how the land is proposed to be used so a more descriptive term is used

AP AGRICULTURAL PRESERVATION

The intent of this category is the long term preservation of farmland in Alpine Township. The Future Land Use Map identifies the majority of Township land as being within this category. The principal land use is agriculture or agricultural support services which help to enhance and stabilize the farming industry.

Single family dwellings for farmers and migrant workers are also allowed. Non-farm dwellings would be limited by the Sliding Scale zoning regulations established in 1989 which allow landowners to create up to four buildable lots from a parcel which is over 80 acres.

A visioning session on agricultural preservation was held in the Fall of 2004 for Neighborhood Three which includes Sections 3-10 and 15-22. Participants cited the rural character, agricultural history, large lot size, open space, neighbors, fire protection and investment potential as positive qualities in their neighborhoods although some noted dissatisfaction with the number of permitted lot splits.

Overall the lands recommended for the AP, Agricultural Preservation category do not differ significantly from the AP areas recommended in the 1998 Master Plan. Lands in Section 12 between Division Avenue and the railroad tracks are recommended for Residential Estate instead of AP as was the recommendation in the 1998 Plan. Preserving this land for long term agricultural use did not seem practical in light of planned residential land use in Plainfield Township to the east and land in Alpine Township to the south. The land also did not achieve a high ranking according to the Prime, Unique and Valuable Farmland Map (Map 3).

Land is recommended for AP use in Sections 27, 28, 29, 30 and 31 due to the LESA scoring system and the adjacent existing and planned RE, Residential Estate buffer zone which will protect these lands from conflicts caused by intensive non-farm uses. Additional AP designated lands are north of 6 Mile Road and reflect the LESA scoring system, large tracts of productive farmland, history of agricultural use and zoning, and compatibility with land uses in Wright Township to the west and Sparta Township to the north.

It is the intent of this Master Plan that the area along the south side of 6 Mile Road west of Cordes Avenue to a depth of about one-half mile be considered as a buffer zone to protect the long term farming activities north of 6 Mile Road from encroachment by non-farm residential uses. Six Mile Road frequently carries slow moving farm equipment. Development of the lands abutting 6 Mile Road will produce more traffic and create hazardous driving conditions for both farmers and non-farmers. Minimizing development possibilities within this protective buffer along the south side of 6 Mile Road will lessen traffic conflicts and also reduce problems between farm operators and non-farm residents.

The establishment of this buffer zone is intended to provide farmers some assurance that their livelihood will not be threatened by the construction of nearby non-farm land uses.

RE RESIDENTIAL ESTATE

The RE category of land use was called RA, Rural Agricultural in the 1998 Plan but the intent for the 2007 Plan remains the same although the designation has changed. The RE classification is intended to provide for residential development in a rural setting adjacent to Agricultural Preservation land use areas. With a density of one dwelling unit per one and one half acres, this land use category will also permit general and specialized farming activities but on a much smaller scale than the AP land use category.

The 1.5 acre minimum lot size requirement and agricultural activities recommended for the RE land use classification are intended to satisfy a demand for a rural life style without using up prime agricultural land. Areas planned for RE in Sections 1, 2, 33, 34 already exhibit an established pattern of large lot residential estate use. A number of these large lots developments are served by private roads.

The RE classification is intended to serve as a transition or buffer zone between the AP classification and more intense land uses. This district promotes and supports one of the principal goals of the Alpine Township Master Plan which is to preserve productive farmlands from urban encroachment and maintain the agricultural economy of the Township. The RE areas in the northeast corner of the Township reflect existing larger lots with scattered farms.

Subdivisions in the RE zone, whether they take the form of traditional plats or condominiums, will need to be served by public sanitary sewer due to soil conditions which can make it difficult to concentrate residential development. Public sanitary sewer for subdivisions will help ensure the long-term health and safety of residents in such developments.

LDR LOW DENSITY RESIDENTIAL

This land use category recognizes existing subdivisions and makes provision for new residential areas. LDR is analogous to the R-1 zoning district. For properties with public sewer utilities, a maximum density of 3.2 dwelling units per acre is recommended for this land use category. The single family detached house will be the predominant style in this area although two family (duplex) units will be permitted along arterial streets as shown on Figure 2. Low Density Residential areas are required to be served by public water and sewer and should be located close to schools, parks and shopping opportunities. LDR areas could also be developed as Open Space Neighborhoods.

Existing Low Density Residential areas are located in the southeast corner of the Township south of 6 Mile Road and east of Alpine Avenue. This area is served by public water and sewer. The largest subdivision in this area is Westgate. Another Low Density

Residential area, Marway Subdivision, exists along the east side of Alpine just south of 8 Mile. This subdivision is not served by public water and sewer.

Future LDR areas are expected to develop east and west of Cordes Avenue south of Alpine Church Street as utilities become available. Certain non-residential uses compatible with single family residences, i.e., parks, churches and schools are also permitted within the Low Density Residential classification. Assisted living and elderly housing is recommended as a Special Land Use to accommodate the growing population of older people and to allow for a mix of housing types and age groups within a residential setting.

The south portion of Section 26 is recommended to remain in the LDR designation as it is within the utility service area. A sanitary sewer main is located in this area and because of this existing utility line the adjacent lands were also designated LDR in the 1988 and 1998 Plans.

LDR areas are designated north and east of Kenowa Hills High School which was completed in 1998 as single family dwellings are appropriate next to schools. This LDR area can be served by public water which was extended to serve the school in 1997. Sanitary sewer will need to be extended in order to accommodate the density planned for this area.

There are additional factors which will make this land attractive to developers such as the proximity of the I-96 interchange which makes access very easy to all parts of the metro area and the eventual commercial development of vacant land in nearby Walker.

The Plan recommends that the size of LDR lots which are not served by public sanitary sewer be increased from 15,000 square feet to 30,000 square feet with 150 feet of width. This will allow room for a replacement drain field and proper separation of wells and septic systems on adjoining properties.

MDR MEDIUM DENSITY RESIDENTIAL

This land use category is designed to accommodate up to 8 dwelling units per acre with a variety of housing types such as two, three and four family dwelling units, including attached condominiums. Mobile home parks fit into this category due to their density. The Master Plan does not recommend any new areas for mobile home parks as three parks already exist in the Township. The MDR areas illustrated on the Future Land Use Map represent existing uses such as the Strawberry Creek condominiums on 6 Mile Road east of Alpine Avenue.

Medium density residential areas can be located along or near urban arterial streets and can also serve as a buffer or transition zone between non-residential uses and low density or Residential Estate areas. Public water and sanitary sewer are necessary to serve this type of land use and these areas should not be zoned or developed until proper utility service can be extended to accommodate this type of intensive land use. The MDR designation is the same as the R-2 zoning district. The Plan does not recommend any new

MDR areas due to the large number of existing multi-family dwellings in the Township and because future multi-family dwellings can be accommodated within the Mixed Use PUD areas shown on the Plan.

HDR HIGH DENSITY RESIDENTIAL

High density residential areas are intended for multifamily dwelling units, such as apartments (renter occupied) or condominiums (owner occupied). A maximum density of 12.5 units per acre is recommended for this land use category which shall be served by public utilities. The Plan recognizes the existing York Creek Apartment development south of Lamoreaux Drive and east of Alpine Avenue which is close to commercial land uses and I-96. Multi-family dwelling units also exist near the Westgate subdivision. Another high density residential area, Churchill Apartments, is located along the west side of Alpine Avenue south of Alpine Church Street.

HDR is the same as the R-3 zoning district. Between 1990 and the end of 1997, 1128 multi-family rental dwellings were constructed in Alpine Township which more than doubled the number of rental units which existed in 1990. Rental housing accounts for about 42 percent of the total housing stock in the Township. Some vacant R-3 zoned land still exists, further increasing the amount of rental housing which can be built.

This high number of rental units has increased the need for Township services, especially fire, police and emergency medical services. Traffic volumes have also increased significantly in these areas due to the higher number of dwellings permitted.

The current ratio of rental occupied to owner occupied housing (about 42 to 53 percent respectively) achieves a Master Plan goal of providing for diversified housing opportunities. **The Master Plan therefore recommends that no more land be planned for High Density Residential development.**

MPUD MIXED USE PLANNED UNIT DEVELOPMENT

The Mixed Use PUD land use category is proposed as a means to encourage the creative development of residential areas and to implement an important objective of this Master Plan. Within a Mixed Use PUD a variety of dwelling unit types and lot sizes would be required. Single family detached dwellings may very well be the predominant type but two family and multi-family buildings up to eight units per building including townhouses are also permitted within this category in order to achieve the objective of this category.

The intent of the MPUD district is to encourage land developers to provide a variety of housing options within a unified development project with open space and other amenities for residents in exchange for higher density than allowed by the Low Density Residential category.

Residential uses would be allowed at a maximum overall density of 6 dwelling units per acre depending on compatibility with the uses and character of adjacent lands. Senior

housing and related medical care facilities would be allowed at a density of 8 units per acre, although the Zoning Ordinance would allow the Planning Commission to approve a higher density for senior housing.

As a further means to encourage creativity in neighborhood design and function some limited office/service uses and neighborhood convenience retail uses would also be permitted within a Mixed Use PUD. This will promote another Plan objective of locating employment opportunities within walking distance of residential areas and provide places and opportunities for interaction among neighbors. Commercial use within a Mixed Use PUD would be limited to a certain percentage of the site area perhaps in the range of 25 to 33 percent.

Specific design standards are required in MPUD developments with emphasis placed on preserving the natural terrain, providing usable open space, community or village type greens to promote opportunities for social interaction, providing sidewalks and foot trails in open space areas along with a variety of lot sizes and building setbacks to create a sense of neighborhood which is often missing from traditional subdivision design. Any use within a MPUD shall be served by public utilities.

MPUD areas, because of the flexibility proposed in design standards, can be appropriate in a variety of locations. The Plan recommends several specific locations for MPUD development.

One is the area to the north and south of Lamoreaux extended in Section 35. Reasons for this designation are: the hilly and wooded terrain can be better preserved under the flexibility of a PUD; the variety of housing types allowed enables a developer to achieve a workable density with the least alteration of the natural site features by proper placement of buildings; public utilities can be extended to serve the site; the area abuts land planned for Commercial development and the MPUD design standards would allow for compatibility in design along the common boundary; the density and uses allowed in the MPUD would be sufficient to accommodate the need for public utilities including the construction of Lamoreaux extended west from Alpine Avenue; and an MPUD can be designed to achieve compatibility with adjacent Low Density Residential areas.

A second area proposed for MPUD is located on 4 Mile Road just east of Fruit Ridge Avenue. This 19 acre parcel abuts the Kenowa Hills High School, an existing mobile home park (Alpine Meadows) and a 30 acre parcel to the west zoned for commercial use. Because of this and the fact that public water and sewer are available, a more intense use than detached housing is appropriate.

An MPUD is also designated northwest of the intersection of M-37 and Alpine Church Street. This is a highly visible area served by public utilities. The MPUD designation allows for commercial or office uses along the M-37 frontage and a compatible blending of residential with the Low Density Residential use planned to the west. The flexible development standards of a MPUD will allow for a design to fit the natural contours of the site.

The Alpine Golf Course on M-37 north of 7 Mile Road is also recommended for a Mixed Use PUD. While the existing golf course can continue indefinitely it makes good planning sense to be prepared for other future uses and manage them to meet the goals and objectives of Alpine Township.

This 120 acre site can be served by public water and sanitary sewer and would have its primary access from M-37. The natural site features, rolling terrain, trees, a pond and possible wetlands can be better preserved under the flexible design standards of a MPUD. Flooding near the pond does occur at certain times of the year.

Retaining the low lying lands along M-37 is a prime consideration for any development proposed for this site along with ensuring compatible uses and design with the Marway Subdivision which borders the land on the north. A mix of uses is recommended.

Commercial uses would likely be located at the northern end along M-37 for better visibility. Such uses should be limited and designed for passing traffic and local residents. Attached residential dwellings in conjunction with the golf course would also be a logical use of the site along with office buildings. An active railroad track abuts the site along the east side and this must be considered in proper site planning.

Other locations may be acceptable but such other locations for MPUD projects must be carefully reviewed to ensure compatibility with nearby planned and existing land uses in order to preserve the integrity of the Master Plan and to protect the investment of Alpine Township residents who may have relied on the Plan in making a decision where to live.

In order to assess if other areas may be appropriate for MPUD use as may be requested by land developers the following criteria and site development standards should be used:

- The site must be planned for Low or Medium Density Residential use by the Alpine Township Master Plan
- The site must be served by public water and sanitary sewer or such utilities must be extended to the site by the developer.
- Adjacent public roads must be of sufficient capacity and condition to safely and efficiently accommodate the additional traffic generated by the increase in density allowed in a MPUD.
- It is desirable that the site have natural features such as hills, woods, wetlands which contribute to the area's rural character and which can best be preserved using the flexible development standards of a MPUD or lacking such natural features that the design standards allow for a development which will preserve the rural character.
- The site should allow for lot sizes and dwelling unit types to be placed so they are similar to and compatible with adjacent lands. To this end a MPUD should locate higher density areas and attached dwelling unit types away from the periphery of the site.

- Single family detached houses on lot sizes of ¼ to ½ acre should be located closer to the perimeter to better achieve compatibility with planned Low Density Residential land use. This technique will allow for the MPUD to be a better visual fit for the area as seen from adjacent roadways and properties even though the density for the site may be higher than nearby parcels.

USES COMPLEMENTARY TO RESIDENTIAL AREAS

The Plan recognizes that it is necessary to provide for the establishment of certain non-residential land uses within residential areas subject to the implementation of measures which are designed to ensure compatibility.

Such non-residential uses commonly include:

- Township government,
- Religious and educational institutions,
- Recreational uses such as parks, golf courses and play fields,
- Public utility facilities,
- Home occupations.
- Senior housing and care facilities

Traffic generation, noise, lighting, appearance, drainage and trespass are factors which must be reviewed to mitigate possible negative impacts on residential uses.

Senior Housing. This is not a future land use category in the sense that the Plan designates specific locations as would be done for a multi-family (apartment) land use. From a physical planning view senior housing has certain location requirements such as good access, public utilities, proximity to convenience shopping and medical care facilities, and quiet surroundings.

Senior housing typically generates very little traffic or outside noise and therefore, such a use could be a good fit in many locations. In fact, senior housing would have less impact on a neighborhood than an elementary school. Given the present and future need for such facilities many communities allow them in all zoning districts except Industrial and Agricultural as a Special Land Use.

Alpine Township's Zoning Ordinance allows them in the R-2, R-3, C-1 and C-2 zones as Special Land Uses. The permitted density is 8 dwellings per acre although the Ordinance language would allow the Commission to approve a higher density. However, no vacant land is proposed for R-2 or R-3 land use.

The Plan recommends that the Zoning Ordinance be amended to allow senior housing in the R-1 Zone as a Special Land Use based on future housing needs, the low impact of senior housing and the abundance of planned Low Density Residential (R-1 Zone) land which will provide a variety of locations for such use.

O OFFICE

Office development is similar in many ways to high density residential in terms of characteristics (traffic, appearance, height, etc.) and compatibility with other uses. This makes offices a suitable transition or buffer use in many locations. Office uses should be served by public utilities and generally located along or near the Alpine Avenue corridor. Office uses at major intersections are desirable; as such uses generate less traffic than commercial uses and serve as a buffer for less intensive uses located away from the intersection. Although the Plan does not recommend any specific sites for Office use the category is valid and should be given consideration as a transition use in the appropriate location.

C COMMERCIAL

The majority of the commercial land uses recommended in the Plan are already generally located between 4 and 8 Mile Roads along the Alpine Avenue Corridor. This area serves both the day to day shopping needs of the community as well as the highway traveler. The commercial areas between 7 Mile and 10 Mile Roads consist of existing uses established long before current zoning regulations were adopted, and do not necessarily reflect current Township attitudes toward commercial development.

Commercial areas should be served by public utilities and developed with safe and convenient access through proper site plan review regulations. The recommendations of the *M-37 Corridor Planning Study* have been incorporated into the Township Zoning Ordinance in order to insure that proper access management standards are adhered to for all future development along Alpine Avenue.

The Plan recommends a new area for future commercial use. Land at the northwest corner of 7 Mile Road and Alpine Avenue is proposed for commercial due to the existence of commercial uses on the other three corners. Future uses should be limited close to the intersection and are not proposed to extend to the existing commercial zoned land to the north.

CPUD COMMERCIAL PLANNED UNIT DEVELOPMENT

This land use category is provided as it is recognized that for certain areas in the Township, commercial uses may be appropriate if developed under the unifying, flexible and protective regulations of a Planned Unit Development.

A Commercial Planned Unit Development (CPUD) would permit a broad range of commercial uses which would be designed to provide shopping opportunities for nearby Township residents and workers and to lesser extent passing traffic. Other uses within a CPUD which would serve to support and complement the commercial uses would be offices and senior housing.

The 2007 Master Plan retains the CPUD designation for lands along both sides of Lamoreaux Drive extended in Section 26. Development requests for this land should be reviewed as a CPUD in order to provide flexibility in land use design so as to accommodate the future extension of Lamoreaux Drive, to ensure internally consistent and efficient traffic and pedestrian access and to coordinate utility service.

The uses allowed by the CPUD area are appropriate for this location because of the existing commercial nature of Alpine Avenue and the high traffic volumes. The terrain in this area is hilly and wooded in parts. The flexible regulations of a PUD will allow a commercial development to better preserve these natural features. A CPUD will also allow for better coordination of public streets planned for this area and for a centralized storm water detention system.

Commercial PUD's are expected to be developed under a single unifying site plan to ensure that all uses relate well to each other in both function and design. Any Commercial PUD, however, must be served by public sewer and water. A Commercial PUD would be developed according to specific site development standards to achieve the intended results of the district.

I INDUSTRIAL

The Plan recommends that industrial development occur in those areas where utilities exist or are planned for, with access to an urban arterial (M-37) and railways and which can be protected from conflicting uses. Industrial land use areas are planned between 6 and 7 Mile Roads in Sections 23 and 24 as utilities are available in this area with some extension, railroad service is available in Section 24 and industrial uses and zoning already exist. If the industrial area north of Rusche Drive is provided access this will create additional opportunity for industrial growth.

The 2007 Plan recommends one new area for Industrial land use on the north side of 7 Mile west of Alpine in Section 14. This approximate 60 acre site matches the industrial land use to the south with good access provided by 7 Mile Road which is a County Primary road. According to the LESA assessment this land does not rank high as Prime, Unique and Valuable farmland. Public utilities could be extended to this site as they are available to the south of 7 Mile. All new industrial uses should be connected to public utilities.

P PUBLIC PARKS/RECREATION

This category recognizes government lands, buildings and public recreation areas such as the Township offices, fire stations, the Alpine Township Sports Complex, Westgate Park and Wahlfield Park.

S

SOCIAL, CULTURAL & INSTITUTIONAL

The Future Land Use Map illustrates existing churches, schools, cemeteries and the Alpine Historical Museum as Social, Cultural and Institutional uses.

FUTURE ROADS

Participants in the Township visioning sessions voiced concerns about the speed and volume of traffic on local roads such as Baumhoff and Fruit Ridge Avenues. Planning for improvements in the local road system is an important element in this and past Master Plans as Township residents need alternate travel routes to Alpine Avenue which are safe and efficient. As part of this effort in road planning it is the policy of Township officials to avoid the construction of new roads in Agricultural Preservation areas.

The 2007 Master Plan recommends the following future roads and road improvements.

1. Lamoreaux Drive extended to Baumhoff Avenue The Plan proposes that a segment of 5 Mile Road be constructed between Baumhoff Avenue and Alpine Avenue. This roadway would serve as a minor arterial to permit access from the proposed residential areas in Section 26, 27, 34 and 35 to the shopping and service areas on Alpine Avenue. It is proposed that this roadway intersect at Alpine Avenue opposite Lamoreaux Drive resulting in a major controlled intersection. This connection will also permit better east-west movement through the Township. This is a continuation of the recommendation of the 1988 Master Plan.

2. Alpine Church Street Extended This proposal would extend Alpine Church Street eastward from Alpine Avenue to connect with Westgate Avenue. This local street would provide additional access from the Westgate residential area to Alpine Avenue. This extension was also proposed in the 1988 Master Plan.

3. East-West Collector Road System As shown on the Future Land Use Map this consists of public roads through the planned residential areas in Sections 26, 27, 34 and 35. These east west roads would serve to distribute the traffic movement in these future neighborhoods and allow residents to travel to the shopping and service opportunities along Alpine Avenue. This pattern allows drivers to avoid more heavily traveled 4 Mile Road and Alpine Avenue.

This system includes the extension of Henze Street westward from its current terminus between Wal-Mart and Sam's Club which will be constructed in 2007. A future road is also proposed along the north side of Menard's westward to Cordes Avenue and beyond. These two proposed routes will provide a "back door" for Alpine Township residents to the Alpine Avenue business district.

The east-west collector road system will serve to collect residential traffic from abutting neighborhoods. Uses along these roads will be residential and the design and layout must ensure that residential uses are not compromised by too much traffic utilizing these roads.

4. Vitality Drive This is a local loop road providing interior access to future industrial land in Section 23. The northern portion aligns with Vinton Avenue.

5. Rusche Drive Extended North to Comstock Park Drive This proposed local road is intended to extend northward across the C & O railroad tracks to connect with a private industrial drive south of 7 Mile Road, Comstock Park Drive. This is a logical extension which would open up land proposed for industrial use. The Plan recommends that this be a public road capable of accommodating industrial truck traffic.

6. Fruit Ridge Avenue Additional Right-of-Way This plan recognizes the importance of Fruit Ridge Avenue for future north-south travel through Alpine Township. This road provides a continuous route from I-96 in Walker to Kent City. Traffic is expected to increase as drivers seek alternate routes to M-37. Portions of Fruit Ridge have 80 feet of right-of-way (4-6 Mile and 8-10 Mile) while the area between 6 and 8 mile has 66 feet.

The Plan anticipates that Fruit Ridge may be widened to accommodate future traffic volumes. Additional right-of-way may be needed to safely allow this road widening. **The Plan recommends that the Zoning Ordinance be amended to require a greater setback for new buildings in anticipation that additional right-of-way will be necessary.** When the right-of-way is obtained, the buildings will then have the proper setback.

7. Service Road System The Plan strongly recommends that the service road system serving private properties along Alpine Avenue be continued on both sides of Alpine Avenue as illustrated on Map 6 in Appendix D. As of the Plan adoption date this system has been constructed from 4 Mile Road on the west side of Alpine northward to Menard's. The Plan calls for this to continue to Lamoreaux extended and then northward to York Creek on the west side of Alpine Avenue. This service road system should also be constructed along the east side of Alpine Avenue as development takes place from north of Hachmuth Drive to Lamoreaux Drive. Portions of this system on the east side of Alpine Avenue may include interconnected commercial service drives.

The intersection of this service road on the west side of Alpine Avenue with Lamoreaux Drive extended should be 400-500 feet west of the Alpine Avenue right-of-way line to allow for safe turning movements.

8. 4 Mile Road Additional Right-of-Way. Consideration needs to be given to requiring greater setbacks for buildings along 4 Mile Road as future widening may require additional right-of-way.

Future Considerations

The Future Land Use Map shows the general location of these future roadways. The exact location and alignment will likely not be determined until the property is proposed for development, at which time the Planning Commission and Township Board will make a final determination on the need for the road and agree to its final location.

Payment for the road will also need to be determined by Township officials but to date payment for roads has been by developers. By illustrating these future roads on the Future Land Use Map, the Township is indicating that such roads will improve access in and around the Township and that such roads must be part of any development for that property.

URBAN SERVICES AREA

The proposed sanitary sewer and water service areas, Maps 1 and 2 in Appendix D, illustrate the geographic limits which will receive public utilities in the future. As part of its membership in the North Kent Sewer Authority, Alpine Township is able to establish those areas which will be served by public sanitary sewer.

In effect, the sanitary sewer service area represents that area where more urban or city type densities and uses will be allowed on a long-term basis. The Future Land Use Plan therefore calls for more intensive uses within this boundary. Defining the limits of future utility extensions serves to notify developers and landowners that utilities will not be extended beyond this boundary line. Limiting the utility service area also assures that higher residential density land uses will not encroach into planned Residential Estate and Agricultural Preservation areas, thereby protecting areas for farming activities and preserving rural character.

Certain low intensive areas within the utility service area such as single family houses on acreage lots will not necessarily be required to have public sewer but those land uses which develop according to the Low Density Residential density of the Future Land Use Plan should be served by public utilities.

Sewer extensions within the Utility Service Area will take place as land development proposals are reviewed and approved by Alpine Township. Developers will pay the cost of sewer extensions

SUB-AREA PLANS

Section 6(3) of the Township Planning Act, Act 168 of 1959 as amended, allows the Planning Commission to adopt plans for geographic areas of the Township where a more detailed plan is needed due to unique physical characteristics. These detailed plans can illustrate locations of driveways, service roads, landscaping, parking lot and building locations, preservation of natural features, and require design standards in order to address a particular land use concern.

These detailed plans, known as sub-area plans, serve as the basis for review of site plans for the development of the geographic areas under consideration. Act 168 of 1959 in Section 6(4) states:

"(4) After adoption of a plan under this section, a site plan for a property located in the plan area that is required to be submitted under section 16e of

the township rural zoning act, Act. No. 184 of the Public Acts of 1943, being section 125.286e of the Michigan Compiled Laws, shall comply with the plan adopted under this section."

Thus, any site plan submitted for an area of Alpine Township for which a sub-area plan has been adopted must conform to that sub-area plan. In Alpine Township there are three such areas:

Sub-Area 1

The existing C-2 zoned area on the north side of 4 Mile Road between Baumhoff Avenue and Walker Avenue.

This area is zoned for commercial use to a depth of 500 feet from the right-of-way line for a distance of about one-half mile. This equals about 30 acres of commercially zoned land. This zoning has existed since the 1960's.

The area contains one parcel of 15 acres which is vacant. The remainder of the sub-area consists of parcels ranging from one-half to five acres. Four single family dwellings occupy the smaller lots while the Kenowa Hills School Administration building occupies a five acre parcel. One small business is located at the northeast corner of 4 Mile Road and Walker Avenue.

Single family dwellings are located to the north and are planned to the east within Alpine Township. To the south, the City of Walker Comprehensive Plan proposes Medium Density Residential and Village Center.

4 Mile Road is a two lane county primary road. The Average Daily Traffic (ADT) of 4 Mile Road varies with volumes of 15,000 vehicles per day near M-37 and as low as 5,500 vehicles per day near Fruit Ridge Avenue. Traffic will continue to increase because of continued development at the I-96 / Walker interchange in the City of Walker, the location of Kenowa Hills School and the development of land along the corridor in both Alpine Township and the City of Walker.

The location of this one-half mile stretch of commercially zoned properties on a busy primary roadway has raised concerns about the potential impacts of strip commercial development. Eleven parcels developed separately could have the potential for multiple driveways onto 4 Mile Road which would greatly increase the likelihood for accidents.

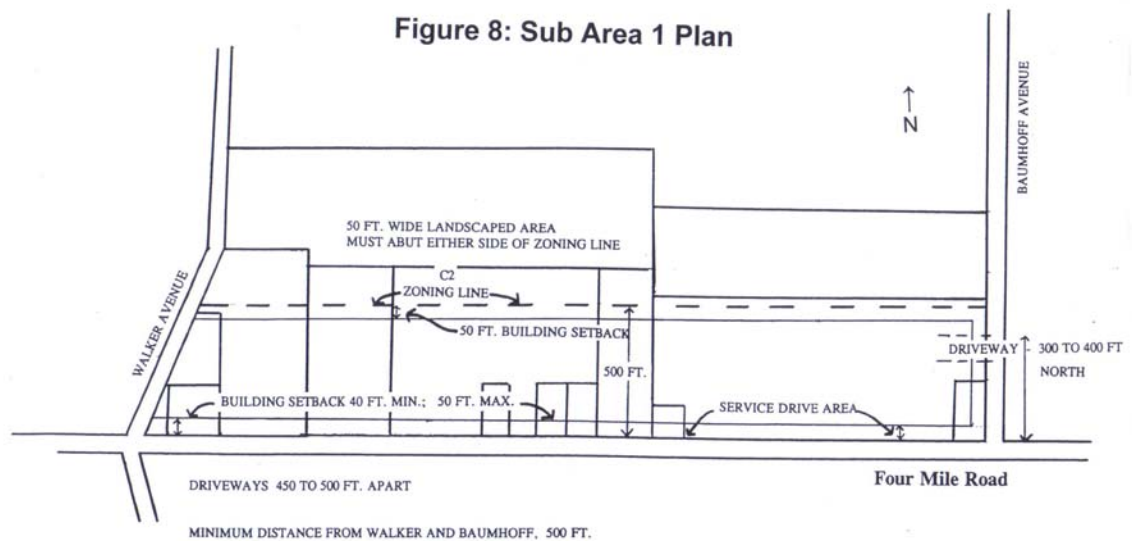
In response to these issues, the Planning Commission recommends that a Sub-Area Plan 1 be established for the existing commercial zoned area between Baumhoff and Walker Avenues on 4 Mile Road. This recommendation is being continued from the 1998 Plan.

The site development standards for this sub-area are as follows:

1. All parcels shall be connected by a front or rear service road or by parking lots according to the Alpine Township access management standards contained in the

Zoning Ordinance. The location shall be as illustrated in Sub-Area Plan 1. Cross access easements shall be provided to and from all property owners as parcels develop.

2. The number and placement of driveways shall be provided as illustrated on Sub-Area Plan 1. Temporary driveways shall be permitted in accordance with the procedures of Chapter 18 of the Alpine Township Zoning Ordinance.
3. Permitted uses shall be as set forth in the Alpine Township Zoning Ordinance for the C-2 zoning district.
4. Building and parking lot setbacks shall be as required by the C-2 Zoning District except for the following:
 - Along 4 Mile Road: 40 feet minimum, 50 feet maximum
 - From North Zoning boundary line: 50 feet.
5. Parking shall be located to the side or rear of buildings.
6. Buildings shall have a pitched roof or articulated roof line to reduce the scale of larger buildings and create a residential or village appearance. The Planning Commission may modify this standard in order to allow buildings which do not have pitched roofs but whose architectural features and design meets the intent of this standard.
7. Landscaping shall be provided around buildings.
8. Lighting on the north and east sides of the sub-area shall not exceed 25 feet above ground whether on poles or buildings. All lighting fixtures shall have cut off fixtures.
9. A 50 feet wide landscaped area shall be provided along the north portion of the sub-area and Baumhoff Avenue. This area shall be planted according to the standards of the Alpine Township Landscape Guidelines. Berming or a screen fence shall be provided within this landscaped area in order to help screen the commercial uses from residential properties to the north and east. The landscaped area may be located north of the commercial zoning line but all landscaping must be on property owned by the developer of the commercial land.
10. Sidewalks shall be provided along 4 Mile Road as properties develop. Walkways from 4 Mile Road to on site uses shall also be provided as required by the Planning Commission.



Sub-Area 2

The northeast corner of 4 Mile Road and Fruit Ridge Avenue.

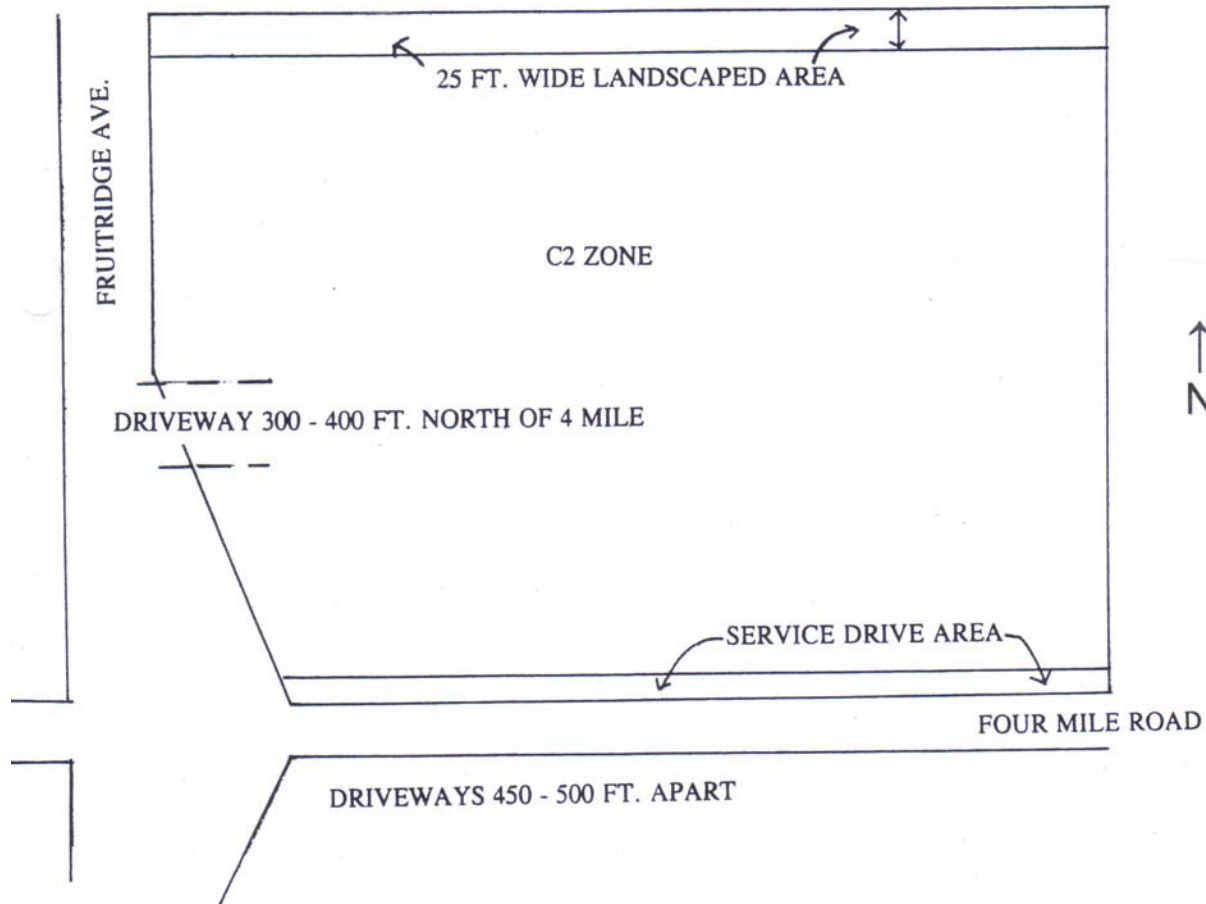
This parcel consists of about 30 acres and has been zoned for commercial use since the 1960's. The site is utilized by Hofacker Equipment, a sales and service business for lawn and garden equipment. The majority of the property is vacant and has potential for development.

Traffic on Fruit Ridge Avenue and 4 Mile is expected to increase due to development to the south in the City of Walker, development to the east on 4 Mile including associated uses with the Kenowa Hills High and Middle Schools.

In order to provide for safer driving conditions in this area, the number and placement of driveways along 4 Mile Road and Fruit Ridge is proposed to be limited according to Sub-Area Plan 2. These driveways would be connected by private service roads or parking lots depending on how the property develops.

Site development standards shall be the same as those established for Sub-Area 1.

Figure 9: Sub Area 2 Plan



Sub-Area 3

The area includes the Rasch homesite at 930 6 Mile Road, extending easterly to contain the West Central Storage site, then southerly to include the mobile home sales business lots, the Gregware Equipment lots, the Oasis Hot Tubs property and the Van Luster homesite.

Their combined area is approximately twenty acres, which is divided into eight lots. Public water and sewer is either currently available or master planned for extension to the lots. This section of Alpine Avenue is an increasingly busy divided highway. The boulevard design restricts left turning movements from these sites but seems to facilitate high speeds and mass movement of vehicular traffic.

Oasis Hot Tubs is a personal service business and presents a well-landscaped, low intensity site. The Rasch and Van Luster home sites both contain established single-family homes and mature landscaping.

Only one lot is currently vacant. The Gregware Equipment and mobile home sales business are both heavily dependent on outdoor display of products. The majority of their inventory is kept outside as a visual stimulus for sales and operations. The West Central warehouse has gone out of business and is apparently being intermittently used by area grocers for storage and shipping. There are many stacked apple boxes and other equipment stored outside on the southwest portion of the lot.

The grouping of outdoor sales and the exposed storage of inventory, when combined with frequent semi-truck deliveries, raises commercial-residential compatibility issues similar to those stated in Sub-Area 1. This sub-area plan seeks to balance the sustainability of local businesses with quality of life issues for present and future residential dwellers on adjacent lots.

There are two significant purposes for a sub-area plan in this location:

1. Improved public safety via a comprehensive access management plan, and
2. Improved quality of life via outdoor lighting controls, building and outdoor storage setbacks plus landscaped buffering of adjacent master planned residential properties.

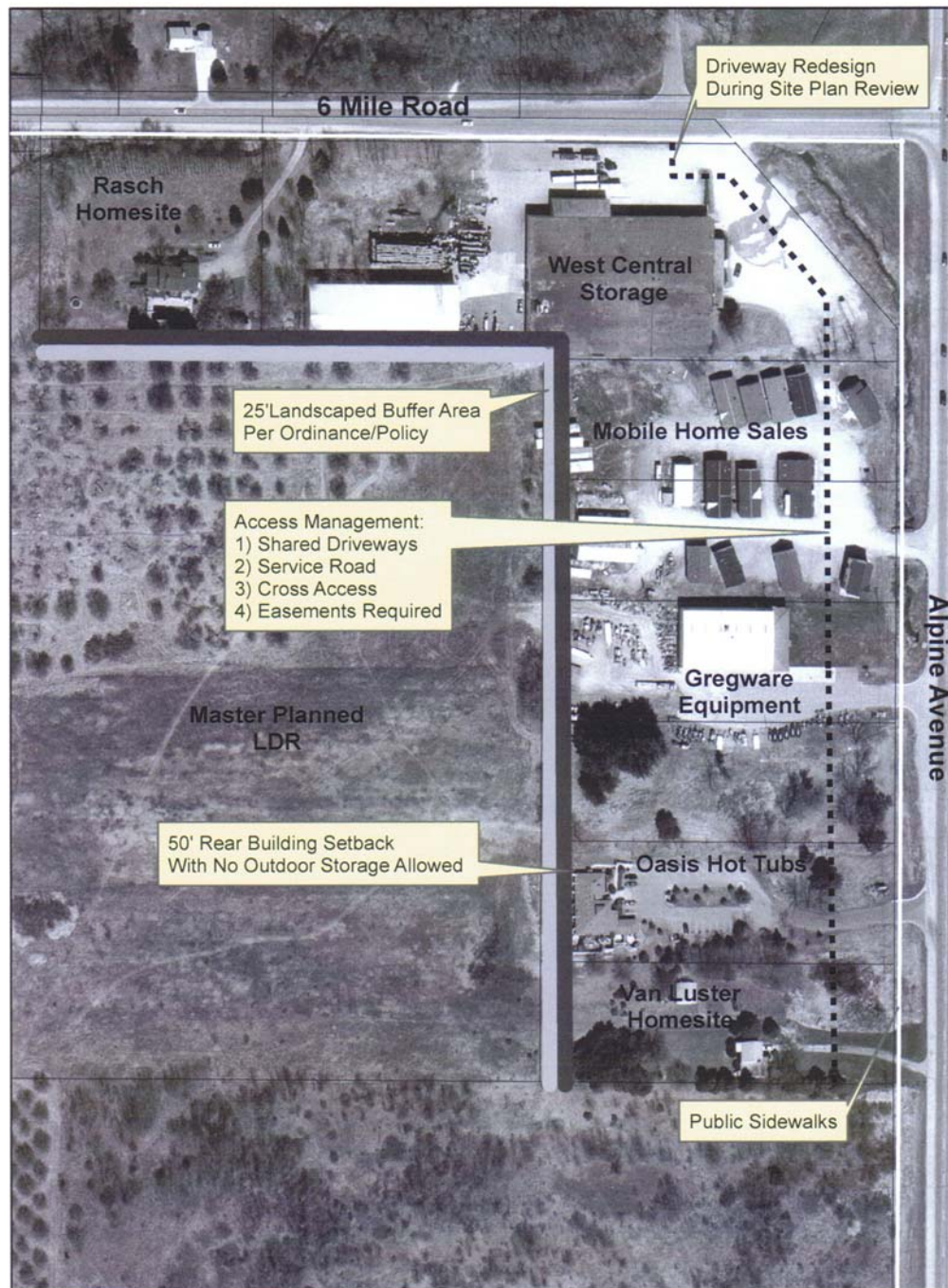
Purpose 1 involves the installation of cross access parking lot connections, a private service road and shared driveways, as detailed on Figure 10. Both the Kent County Road Commission and the Michigan Department of Transportation endorse this type of access management strategy. Service roads and shared driveways can potentially improve public safety by decreasing trips onto Alpine Avenue as customers move from business to business. As sites develop or redevelop, these connections must be constructed to facilitate the creation of an inter-connected network. Cross access and shared driveway easements must also be provided by the site's developer at the time of site plan review.

Purpose 2 above indicates the need for site development standards similar to those noted in Sub-Areas 1 and 2. These design details are displayed on Figure 10 and include:

- Permitted uses are those allowed in the Alpine Township Zoning Ordinance for the Commercial C-2 or C-PUD district, provided that the parcel in question is zoned C-2 or C-PUD.
- Setbacks as required by the C-2 Commercial zoning ordinance, except for the following:
 - Along 6 Mile Road, the rear building and outdoor storage setback shall be 50 feet from adjacent lots master planned for residential uses.
 - Along Alpine Avenue, the rear building and outdoor storage setback shall be 50 feet from adjacent lots master planned for residential uses.
- All outdoor lighting fixtures as required by Chapter 18 of the Alpine Township Zoning Ordinance, except that parking lot light poles shall not exceed 23 feet above the surrounding average parking lot grade anywhere on the site.

- Public sidewalks shall be installed along Alpine Avenue and 6 Mile Road as properties develop.
- A landscaped buffer area must be installed and maintained adjacent to properties master planned for residential uses. This landscaped area must be at least 25 feet wide and include plantings consistent with the standards of the Alpine Township Zoning Ordinance. Berming or decorative fencing shall be installed as part of the landscaping buffer plan and shall be reviewed by the Alpine Township Planning Commission for adequacy and design. No parking, vehicle maneuvering or loading shall be allowed within the 25 foot landscaped buffer area.

Figure 10: Sub-Area 3 Plan



Map produced by the Alpine Twp. Planning Dept. using REGIS, July 2007 (orig. Oct. 2003)

PLANNED NEIGHBORHOOD SHOPPING CENTERS (PSN)

A neighborhood convenience shopping center offers consumer convenience goods, foods and pharmacy, as well as personal services such as laundry and dry cleaning, barbering and shoe repairing, for daily living needs of an immediate neighborhood. The amount of gross leasable area in a neighborhood convenience shopping center may range from 5,000 to 10,000 square feet. The site area for a neighborhood convenience shopping center should range between two to four acres and the support population will range from 3,000 to 6,000 persons within a ten minute driving time.

Neighborhood convenience shopping facilities normally serve a grouping of adjacent residential neighborhoods and are usually located adjacent to an arterial or collector street for convenient accessibility.

The Master Plan recommends a Planned Neighborhood Shopping Center in the area of Lamoreaux extended and Bristol Avenue to serve the convenience shopping needs of future residents in Sections 26, 27, 34 and 35. This location offers good access once Lamoreaux is extended, will be convenient for future residents, and will provide a destination for children.

This future development would be subject to approval as a Special Land Use meeting certain standards. These standards would be pedestrian and bicycle access from adjoining residential areas, a design which fits the neighborhood character, and proper landscaping setbacks and lighting.

When properly designed, neighborhood shopping facilities should pose only minimal impacts to adjacent residential areas while catering to the day to day shopping needs of the residents.

However, such facilities should only be authorized when adequate accessibility exists, when similar competing facilities are not found within a radius of several miles, when compatibility with adjacent residential neighborhoods is demonstrated and when an adequate support population of residents and/or employees exists within a radius of one mile. It is recommended that developments of proposed planned neighborhood shopping centers demonstrate that a need exists for the proposed facility through the use of a market analysis.

CHAPTER 6 IMPLEMENTATION

In order for the Master Plan to serve as an effective guide to the continued development of the Alpine Township it must be implemented. Primary responsibility for implementing the Plan rests with the Township Board, the Planning Commission and the Township staff. This is done through a number of methods, including ordinances, programs, and administrative procedures which are described in this chapter.

It is important to note that the Master Plan itself has no legal authority to regulate development. Implementation of the plan must come from the decisions of the Township Board and Planning Commission to provide needed public improvements and to administer and establish regulatory measures relative to the use of the land.

The private sector, which includes individual land owners as well as developers, is also involved in fulfilling the recommendations of the Master Plan by the actual physical development of land and through the rezoning of land. The authority for this, however, comes from the Township. Cooperation and coordination among individuals, private developers, and public agencies is, therefore, important in successful implementation of the Master Plan.

Chapter 1 of the Plan sets forth goals and objectives which serve to guide the future development of Alpine Township. Many of the specific implementation recommendations of this chapter are taken from these objectives, while others are taken from the land use recommendations made in Chapter 5

The Alpine Township Planning Commission should pursue the following recommendations in order to be pro-active in the implementation of this Master Plan.

Continuous Planning and Revisions to Master Plan

The first implementation strategy is the adoption of the Master Plan by the Alpine Township Board after the Planning Commission's recommendation. However, planning is a continuous process that does not end with its adoption as the various land use districts within the Township will continue to undergo change over time. Planning is an ongoing process of identification, adjustment, and response to problems and opportunities over time. As discussed in Chapter 5, the Planning Commission may prepare sub-area plans to address specific needs. **The Planning Commission's work really begins with the adoption of the Master Plan.**

Amendments to the Township Planning Act effective on January 9, 2002 requires Township Planning Commissions to review their Master Plans every five years and determine whether to amend the plan or adopt a new plan. This review allows the Commission to be responsive to new growth trends and current citizen attitudes. As growth occurs over the years, the Plan's goals, land use information, population projections, and other pertinent data can then be reviewed and revised as necessary so the Plan can continue to serve as a valid guide to the growth of the Township.

Planning Commission Work Program

The Plan recommends that the Planning Commission prepare a work program in January of each year. This work program would set forth the tasks or goals which the Planning Commission determines to accomplish for the upcoming year. This will allow the Commission to stay focused on important tasks, in order to develop and implement goals and strategies identified within this Plan.

Public Information and Education

The success of the Master Plan is, to a great extent, dependent upon the involvement of Alpine Township's citizens. Successful implementation of the Master Plan requires the support and participation of residents, property owners, and business owners.

A successful Master Plan must educate the citizens and the community on both the overall goals desired for the Township and the individual regulatory measures that are needed to implement the desired goals. An informed public can then offer its support to establishing regulations designed to retain the rural character of the Township despite the development pressures it faces. Public education can be achieved through discussions at public meetings, informal discussions in the Township Offices, newsletters, and the preparation of simple summary statements on plans for distribution.

Planning Commission Education

The Planning Commissioners should be kept informed of planning seminars to learn how to best carry out their duties and responsibilities as Planning Commissioners. These seminars are regularly sponsored by the Michigan Association of Planning (MAP) and the Michigan Townships Association (MTA) and are a valuable resource for Planning Commissions.

The Michigan Citizen Planner Program which is administered by the Michigan State University Cooperative Extension Service is also an important education program for Planning Commissioners. There are also several planning publications which are useful information tools for Planning Commissions. The main publications are Planning and Zoning News and Michigan Planner Magazine.

Coordination with City of Walker

Establish a periodic meeting schedule with the City of Walker Planning Commission to discuss items of mutual interest, coordinate plans and provide updates on growth and events in each community.

Zoning

Zoning represents a legal means for the Township to regulate private property to achieve orderly land use relationships. The Zoning Ordinance and the official Zoning Map are the primary implementation tools of the Master Plan; they contain the regulatory power to ensure the compatibility of land uses, to protect natural resources and to protect property values.

The official Zoning Map divides the community into different zones or districts within which certain uses are permitted and others are not. The Zoning Ordinance text notes the uses which are permitted and establishes regulations to control densities, height, bulk, setback, lot sizes, and accessory uses.

The Zoning Ordinance also sets forth procedures for site plan review, conditional uses, and sign controls. These measures permit the Township to control the quality as well as the type of development.

In order for the recommendations of the Plan to be successfully implemented, the following amendments to the Zoning Ordinance must be prepared and adopted:

1. Adopt Mixed Use Planned Unit Development regulations as detailed in Chapter 5
2. Adopt ordinance standards for sidewalks, trails, linked and useable open spaces and natural feature preservation.
3. Adopt Zoning Ordinance regulations to allow senior housing and related medical care facilities in residential, office and commercial zoning districts by special land use.
4. The Plan recommends that the size of LDR lots which are not served by public sanitary sewer be increased from 15,000 square feet to 30,000 square feet with 150 feet of width. This will allow room for a replacement drain field and proper separation of wells and septic systems on adjoining properties.
5. Conduct a complete review of the Township Zoning Ordinance in order to ensure the regulations are relevant to current zoning techniques, procedures and zoning law, to revise vague, outdated and conflicting language, and to facilitate administration and enforcement of the Ordinance.

Agricultural Preservation

The following tasks need to be undertaken to continue the Townships program to preserve farmland.

1. Continue to monitor local farmer priorities and concerns by surveying the farming community, holding discussion meetings with farmers by type of operations and products, and reviewing Alpine Township farmland preservation policy and zoning ordinances to ensure these support farming efforts. This could include a consideration

for a maximum lot size for a dwelling and a re-evaluation of the Transfer of Development Rights (TDR) model program considered by Township officials in 2000.

2. Analyze and update permitted and special uses in “A, Agricultural” district to allow increased economic use of farmland and farm buildings;
3. Continue to support farmland preservation with the Michigan Public Act 116 of 1974 program and the Kent County Purchase of Development Rights program.

4 Mile Road Corridor Recommendations

In April 2007, Alpine Township, the City of Walker, Kent County Road Commission and the Michigan Department of Transportation in conjunction with the Grand Valley Metro Council completed the *4 Mile Road Corridor Study*. Based upon the study’s recommendations, Alpine Township and the City of Walker should jointly prepare zoning regulations for 4 Mile Road which apply to both Alpine Township and the City of Walker. These regulations will pertain to setbacks, access control, lighting, sidewalks, landscaping, signs and other site development standards in order to provide for more uniform development along this common border.

Capital Improvements Program

Capital Improvements Programming (CIP) is the first step in a comprehensive management system designed to relate priorities and programs to community goals and objectives. It is a means of planning ahead for the funding and implementation of major construction and public land acquisition activities. The typical CIP is six years in length and updated yearly. The first year in each CIP contains the capital improvement budget. The program generally includes a survey of the long range needs of the entire governmental unit covering major planned projects along with their expected cost and priority.

The Planning Commission needs to be actively involved and assist in preparing a Capital Improvements Program as another tool to link planning goals with implementation.

Recreation Plan

The Township Recreation Committee is responsible for updating the *2001 to 2005 Alpine Township Recreation Plan*. While the Planning Commission is not involved in this update process, the Commission will be involved in reviewing specific recreation projects recommended by the new Recreation Plan prior to their actual construction. The Planning Commission is required by State of Michigan law to review all public works projects in the Township to ensure coordination with the Master Plan.

Appendix A

Water and Sewer History

WATER SYSTEM

Background of the Water System

In the late 1950's, Everett Ladd began building a small subdivision of 76 lots which is now a part of the larger Westgate subdivision. Since the Township was not ready to get into the business of public water treatment, Mr. Ladd provided a private water system for those first homes. But that new development brought an awareness of the need for future utilities, which the Township Board began to explore. By 1961, Alpine and Plainfield Townships contracted with Williams and Works, who developed a plan for linking Westgate and two existing systems within Plainfield Township. The plan also called for drilling new wells near the Grand River in Plainfield Township and a pumping, purifying, and softening plant. The initial system needed at least 1,000 customers, so the two Townships worked together to form this new system. On December 8, 1961, Alpine and Plainfield Townships signed a contract to put them in the water business. Alpine Township became a retail customer of Plainfield Township. As such, Plainfield supplied public water to residents within Alpine Township and billed them for the same.

Through the 1960's and 1970's, most of the water system and customers were within Westgate, with some smaller projects being developed off Lamoreaux Drive. In 1986-87, the Township, with the cooperation of its residents and businesses along Alpine Ave. constructed a huge water project, which extended down 7 Mile Road to Alpine Avenue, down Alpine Avenue to 4 Mile Road and 4 Mile Road west to Cordes Avenue. The Township's first water tower was constructed behind Westgate Bowling Alley north of Lamoreaux Drive. A second water tower was built just north of 4 Mile Road and east of Cordes Avenue. This new water system brought high pressure water with better fire flows to Alpine Township.

In 1996, Alpine and Plainfield Townships forged a Public Act 425 of 1984 Agreement in an effort to bolster and protect the water system investment made by the two communities. The P.A. 425 Agreement, which extends for a period of 50 years, covers the southern tier of sections within Alpine (Section 31-36), as well as Sections 13, 23, 24, 25, 26, the east half of Section 14, and the southeast quarter section of Section 27. In addition, Alpine Township did approach Plainfield Township to immediately add Wahlfield Park in Section 11 and the southern half of the southwest quarter section of Section 12 due to the County's interest in developing Wahlfield Park, and the discovery of higher nitrate levels in the existing homes tested in Section 13 during the analysis conducted in 1999 as part of the overall Marway Plat area.

In 1997, the Alpine Township built a water line down 4 Mile Road from Cordes Avenue west to Fruit Ridge Avenue, north on Fruit Ridge Avenue and then cross country to Hendershot Avenue and looping back to 4 Mile Road. This system was developed to service Kenowa Hills newly proposed high school, their existing high school (that was converted to a middle school), and their Administration building. An additional benefit to this water main extension was getting public water to an existing mobile home park where 381 units had been experiencing water and sewer problems over the years. This major investment to benefit the school district and mobile home park required the Township to finance a project for the first time in years through the public bonding process. Since this

new water line was being built in front of many homes, some businesses, several large tracts, and vacant properties, the Township made a one-time offer to allow these property owners to participate in a voluntary assessment roll for the cost of water main in front of their property (or a minimum frontage amount with the balance deferred on larger tracts). Those properties that chose a voluntary assessment roll (for a period of ten years), and the mobile home park shares, and school shares of the assessment were part of a Special Assessment bond. The annual principal and interest costs for those amounts are anticipated to be paid by the special assessments. The remaining costs (deferred amounts) were funded through a General Obligation bond. The Water Fund pays those costs through a Water Capital Improvement Charge and trunkage/connection fees. Both bonds are scheduled to be paid in full by 2012.

Plainfield Township services approximately 67% of our citizens. Alpine Township has a 40 year contract with Plainfield that was approved in 1998.

SEWER SYSTEM

Background of the Sewer System

In 1966, the Township Board first began to work toward getting public sanitary sewer to the Township. Septic systems within Stowell Terrace Plat in Section 36 were found to be polluting York Creek. In November 1967, the Board approved the location, acquisition, and construction by the County of the North Kent Sewer System, which Alpine and Plainfield Townships, and the City of Rockford had initiated in 1966. Over the next two years, the first sewer trunklines were built within the two Townships and north to the City of Rockford. Kent County agreed to finance, operate, and maintain the sewer system. The County then entered into an agreement with the City of Grand Rapids for the treatment of sewage delivered from the North Kent Sewer System.

In 1972, the North Kent Sewer System was extended to portions of Cannon Township, and later, in 1979, Courtland Township was added to the system. Throughout those years, various trunklines and subtrunks were added to the system. Also, problems with odor and scale in the pipes were documented. From June 1988 to January 1990, Fishbeck, Thompson, Carr and Huber did various studies and made recommendations on the system regarding the scale build-up and the pH conditions.

Concurrently, in 1973, Alpine Township was expanding its new system. A public hearing was held in 1973 to notify residents of the public health concerns in the Westgate Plat area, where pollution of Strawberry Creek and the failure of septic systems were being evidenced. In 1976-77, a \$3,000,000 sewer project was undertaken in Westgate with the assistance of Federal funding. Sewer to the west side of Alpine Avenue from Alpine Church Street to Lamoreaux Drive was added to this project, as was an extension down Alpine Church Street to Holy Trinity Church and School and cross country to Alpine Elementary.

In 1991, a trunkline was extended from 6 to 7 Mile Roads to service areas in western Plainfield Township and areas east of Alpine Avenue. Special assessment areas for sewer extensions were made in:

- 1) 1979 - the east Alpine Avenue commercial areas, north of 6 Mile Road,
- 2) 1986-87 - 7 Mile Road businesses west of Alpine Avenue and Mill Creek Lane off Division Avenue,
- 3) 1991 - 7 Mile Road, from Mill Creek west to Alpine Baptist Church,
- 4) 1993 - Division Avenue, from the power line to just south of Meadowfield Lane,
- 5) 1995 - Vinton Avenue sewer from Alpine Avenue to Grand Rapids Sash & Door, and
- 6) 2001 - 4 Mile Road from Hachmuth Drive to Alpine Avenue.

There have been other smaller projects that have utilized special assessment districts that have involved only one or two properties as a means of financing sewer projects (i.e. Metzgar and Rusche Drives, Fruit Basket Flowerland, and Pleasant St.) The Township does have a Poverty Exemption Policy in place for residents in special assessment districts that may qualify for exemption.

In September 1995, the North Kent Sewer System experienced collapse of a concrete pipe on Coit Avenue, just west of Plainfield Avenue. In December 1996, a portion of the Belmont Bypass concrete sewer collapsed due to corrosion of the pipe. In January, a study contracted with Kent County and Prein and Newhof at the request of the North Kent Communities documented the severe corrosion of the Northerly Trunk, Belmont Bypass and West River Trunk through video and visual inspections and chemical testing. And on January 22nd of that same year, a portion of West River Drive concrete sewer collapsed due to corrosion of the pipe near the Grand River crossing. In May 1997, a segment of concrete forcemain from the 4 Mile Road Lift Station collapsed.

In 1997, the five communities of the North Kent Sewer System decided to unite as the North Kent Sewer Authority (NKSA) for the purpose of bonding for the improvements recommended in the original and subsequent Prein and Newhof studies, and to work toward the future operation and maintenance of the North Kent Sewer System.

The NKSA has re-built and bonded for the re-construction of the Belmont Bypass and West River Trunk. Bonding and construction of a new 4 Mile Road Lift Station and a new river crossing and Willow Drive trunk were proposed for the next fiscal year. The NKSA has also purchased property for the 4 Mile Road Lift Station and a site for a wastewater treatment plant.

The original bonds to Kent County have been paid in full, but per the contract terms that currently exist, the County continues to own, operate and maintain the system through the year 2017, or the expiration of the contract with the City of Grand Rapids in November 2008.

Issues with Kent County and Grand Rapids

In November 1998, the City of Grand Rapids proposed new contracts to all of their wholesale and retail community customers. The first contract related to water and sewer services, while the second, which was directly tied to the first contract, dealt more with the development of a regional funding source for programs, facilities, and/or other regional amenities that would be approved by a board of representatives from Grand Rapids and the customer communities. The NKSA contracted with their engineers and an independent financial consultant to review the impacts of these new contracts on the NKSA municipalities. We asked both of these consultants to compare those costs to building a new wastewater treatment facility. Both consultants reached the conclusion that the costs from the new Grand Rapids' contracts shifted a higher burden of costs to the customer communities, and was in fact, very similar to the costs of building our own new treatment facility.

The NKSA then contracted for a study to determine the feasibility of building our own wastewater treatment facility in terms of cost and viability. Both proved feasible.

The NKSA and the elected officials from all five of these communities held a series of meetings during this formation and study times for updates, review and discussion. Although there had been a great deal of discussion about staying with the Grand Rapids' system, the community leaders did not feel that the shifts in costs are reasonable or that all aspects of the contracts are legal. NKSA expressed their concerns to Grand Rapids and the customer communities who have signed the GR contracts about the lack of representation of NKSA in the initial discussions, the absence of a voice from the wholesale communities in the negotiations since wholesale and retail customers are very different, and the legal and cost shift concerns. NKSA also asked for an EPA (Environmental Protection Agency) ruling on the legality of those same contract terms since federal funding had been used for the bonding of most of the GR wastewater treatment facility for the entire metro area. NKSA awaited a ruling from the EPA and continued to attempt to negotiate with Grand Rapids and the UAB (Utility Advisory Board). Meanwhile, the NKSA communities have continued on a parallel path to apply for a discharge permit from the DEQ for our wastewater treatment facility. Since the treatment contract between Kent County and Grand Rapids extends through 2008, the NKSA had that period of time to work these issues out.

The NKSA communities' attorney contracted with Prein and Newhof to undertake a study to determine the extent of damages and history of the same to determine if the County was in any way liable for some of these damages. That report was released in November of 1999. The communities have attempted to discuss and work through these issues with the County, but no conclusions have been reached at this time. The NKSA has suggested that the County and communities could amend their current contract to reflect a new relationship between them in terms of ownership, responsibilities, future liability and perhaps future bonding.

Sewer Fund Proposed Master Plan Projects

NKSA: As noted previously, NKSA has the following capital improvements planned. All will be paid for through bonding.

- 1) The 4 Mile Road Lift Station needed to be re-built completely and the older facility torn down. The contractor and bonding for this \$5.9 million dollar project was approved in 2001. Alpine's annual bond payments (principal and interest) will be based on the annual re-evaluation of percentage share in the system. Typically, Alpine Township has made up between 21 and 24% of the system. This would reflect in annual payments of \$91,000 to \$95,000 for a period of 25 years.
- 2) In the spring of 2002, the NKSA bonded for and constructed a second Grand River crossing and Willow Drive trunk improvements. This project tied in with the new 4 Mile Road Lift Station. It should further be noted that the 4 Mile Road Lift Station was built so that the electrical systems and pumps can easily be switched over to pump sewage north to a new wastewater treatment facility rather than south toward the City of Grand Rapids.
- 3) The NKSA Engineers have been working closely with the Michigan Department of Environmental Quality on the permitting and modeling of the Grand River that they have requested for determining whether or not a permit will be issued for our own wastewater treatment facility. The permit was approved along with other required permits. The wastewater treatment facility is currently under construction.

Alpine Township: Alpine Township has at least one major capital improvement project for the sewer system:

In 1999, Alpine Township's Engineers completed a survey and study to submit a request for funding a water and sewer project to the Marway Plat. This study was undertaken after the Township received petitions from residents in the area and, with the cooperation of the Kent County Health Department, recognized a high number of failed septic systems and/or drainfields within the last twenty years of the plat's existence. The Township initiated the study to determine the eligibility for a project here using low interest funding from the State Revolving Fund (2-3% loan funds). Since the State has had a high need for low interest funding in urban areas where sewer and water systems need complete reconstruction, the project was not a high priority. Although there are some instances of high nitrate levels in random sampling of homes and the creek in that area, it is not at a critical point of action or condemnation. The Township will need to continue monitoring this area for future needs.

Since the Township has such heavy clay soils, the number of traditional septic systems within a given area directly impacts our density and growth. Currently, under our contract with Kent County and with Grand Rapids, our system is limited to a service area agreed upon in 1977. In 1998, Grand Rapids did allow Alpine Township to construct a new trunkline to service Kenowa Hills' new and existing high schools and Alpine Meadows Mobile Home park. They did, however, limit the number of other units connecting to that public sanitary sewer line to those deemed to have failed or which had no septic systems. Based on the 1998 Township Master Plan and potential buildout, the Township cannot

extend sewer to other areas of the Township without building trunk lines to accommodate the increased flow that would be generated by allowing more development and sewer connections. This line, Fruit Ridge Avenue sewer, will be redirected to flow east down 4 Mile Road to Cordes Avenue and not south through City of Walker in 2008.

On a related subject, Prein and Newhof have also been working with the Township on an inflow and infiltration (I & I) study over the past years. That study indicated that the Township should be planning for long-term replacement of trunklines along York and Strawberry Creeks. Replacing these trunk lines would serve two major purposes: 1) I & I would be reduced, and thus the costs of treating "clear water" would be reduced; and 2) Installing larger trunklines, rather than lining or replacing the trunks with ones of the same size, would allow the Township more capacity in those lines in the future.

The cost estimate for up-sizing and replacement of the York Creek Trunk (running from Alpine Elementary, southeast and through York Creek Apartments) is \$1,630,000. The cost of upsizing and replacement of the Strawberry Creek Trunk is \$775,000 (in 2003 dollars).

SEWER IMPROVEMENTS

Alpine Township is currently part of the North Kent Sewer System with Kent County doing operations and maintenance. The five communities in the North Kent Sewer System (Alpine, Courtland, Cannon, Plainfield and Rockford) have a contract with Kent County which expires in 2017. The County, in turn, has a contract with the City of Grand Rapids which expires in 2008.

The North Kent System has had three sewer collapses requiring millions of dollars for repair and replacement of lines, manholes and lift stations. The sewer collapses have occurred in Plainfield Township primarily. Each community pays a portion of these costs based on flow through certain areas. The NKSA was unhappy with the operation and maintenance of the system by Kent County and was interested in taking over the system entirely. To that end, a North Kent Sewer Authority has been established and is working toward that goal.

In the meantime, the City of Grand Rapids has negotiated a new contract with some of its retail customers and desires that the wholesale customer communities also sign the new contract even though our existing contracts have not expired yet. NKSA is a wholesale customer and the contract has several new aspects which make it extremely costly over time.

In addition, a second contract is directly tied to the sewer contract which establishes an Urban Cooperation Board with representation from each sewer customer and twelve representatives from the City of Grand Rapids. A "head tax" based on the municipalities estimated population over the entire community and not just the sewer district is to be paid each year. The charge begins at \$1 per person, rises to \$2 and is then adjusted according to the Consumer Price Index.

The Authority contracted for a feasibility study of what it would cost and the pros and cons of building our own sewer plant.

In October 2005, after looking at all the financing aspects, the NKSA approved a \$50 million dollar state of the art sewer plant in Plainfield Township utilizing new technology. Land has been purchased and all required permits have been issued and the NKSA has accepted Triangle Associates to be the Construction Manager/Construction Contractor. The project has an estimated value of \$48 - \$49 million dollars with a completion date of September 2008.

In order to pay for this project, a 25-year \$6,000,000 bond was issued in December 2005 at 4.31%, with an A-rating, and the balance of the project bond was issued at 4.37% in December of 2006. Interest payments are due in May and November with principles due not until 2009. Alpine's share of these bonds are based on 50% Flow and 50% Biological Oxygen Demand (B.O.D.) which is approximately 21.92% at this time and will be reevaluated and adjusted each year.

The new sewer plant is called P.A.R.C.C. (Plainfield, Alpine, Rockford, Cannon, Courtland) Side Waste Water Treatment Plant and will open in the fall of 2008, before the City of Grand Rapids' contract expires in November of 2008.

Appendix B

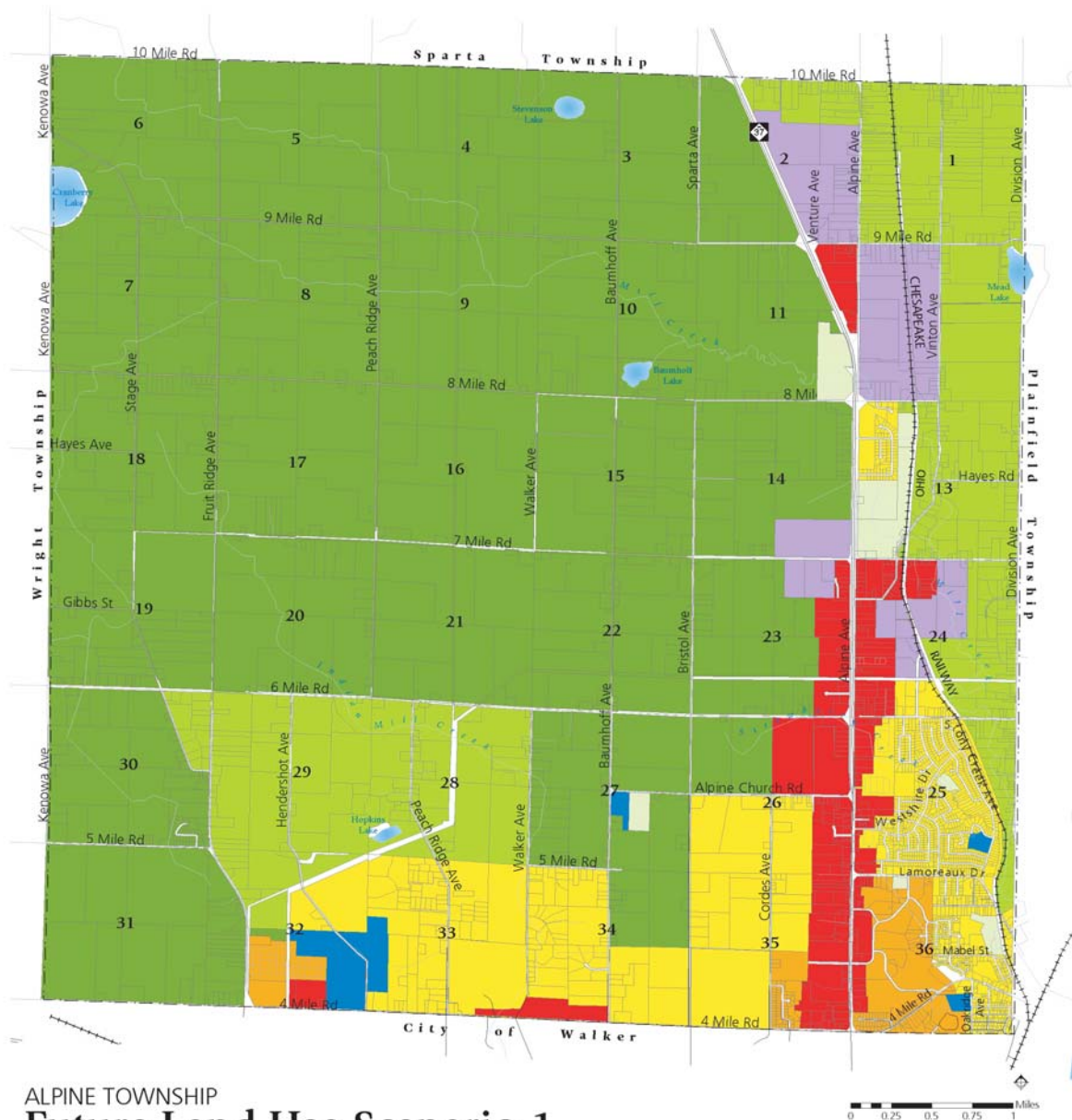
Alternative Future Land Use Scenarios

ALPINE TOWNSHIP | FUTURE LAND USE

Land Use Allocation Table

	Acres	Percent
Residential Estate	3,263	15%
Moderate Density Residential	2,408	11%
High Density Residential	417	2%
Commercial	791	4%
Social and Institutional	167	1%
Agricultural / Orchards	13,996	63%
Light Industrial	839	4%
Public / Parks / Recreation	378	2%
TOTAL	22,259	100%

Future Land Use Scenario 1



ALPINE TOWNSHIP Future Land Use Scenario 1

Data Source: Beckett & Raeder Inc.

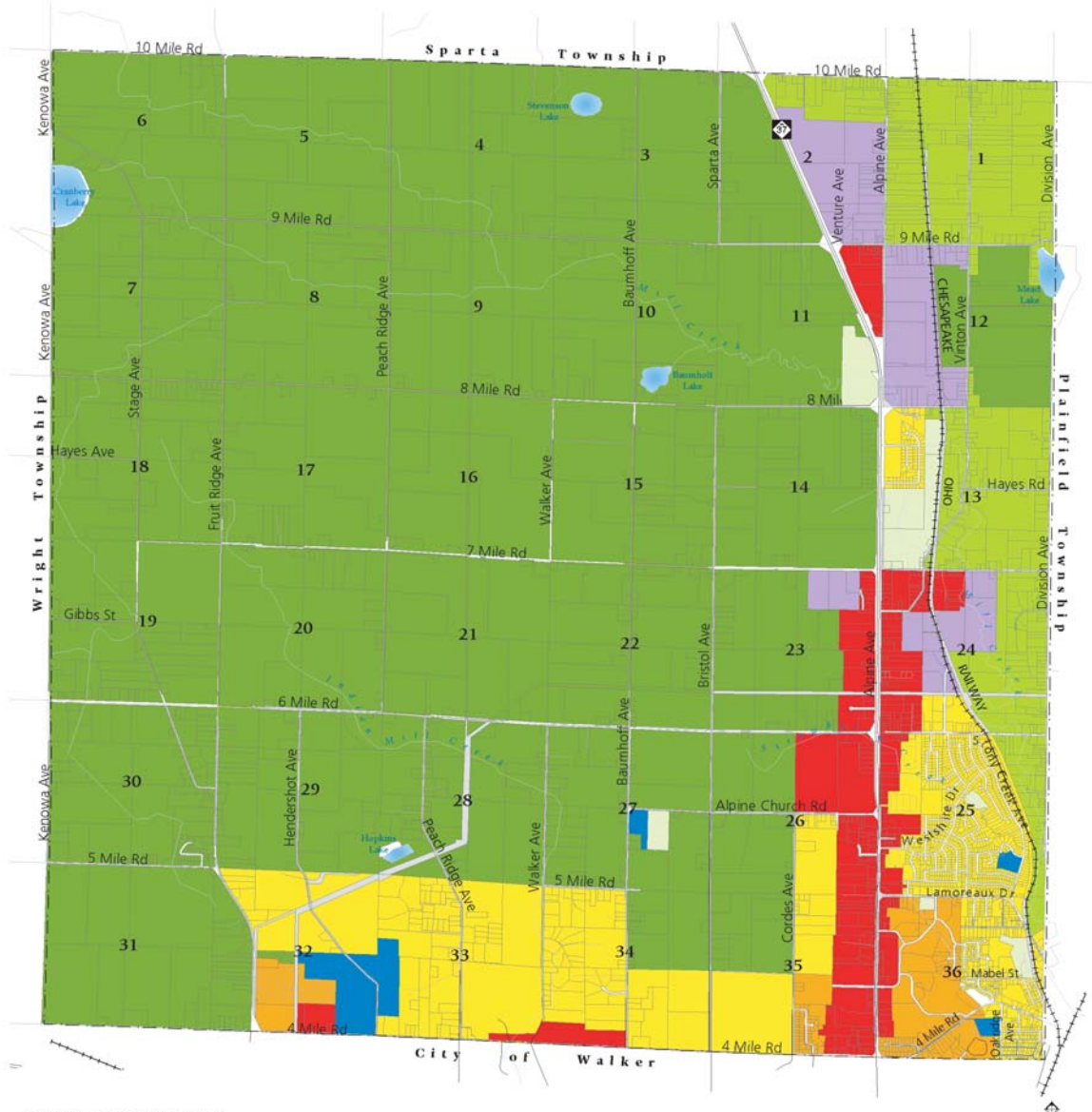
- Rural Residential (1-2 Units/1 Acre)
- Moderate Density Residential (3-4 Units/1 Acre)
- High Density Residential (5-9 Units/1 Acre)
- Commercial
- Social and Institutional
- Agriculture/Orchards
- Light Industrial
- Public/Parks/Recreation

ALPINE TOWNSHIP | FUTURE LAND USE

Land Use Allocation Table

	acres	percent
Residential Estate	1,629	7%
Moderate Density Residential	2,242	10%
High Density Residential	417	2%
Commercial	791	4%
Social and Institutional	167	1%
Agricultural / Orchards	15,935	72%
Light Industrial	700	3%
Public / Parks / Recreation	378	2%
TOTAL	22,259	100%

Future Land Use Scenario 2



ALPINE TOWNSHIP Future Land Use Scenario 2

Data Source: Beckett & Raeder Inc.

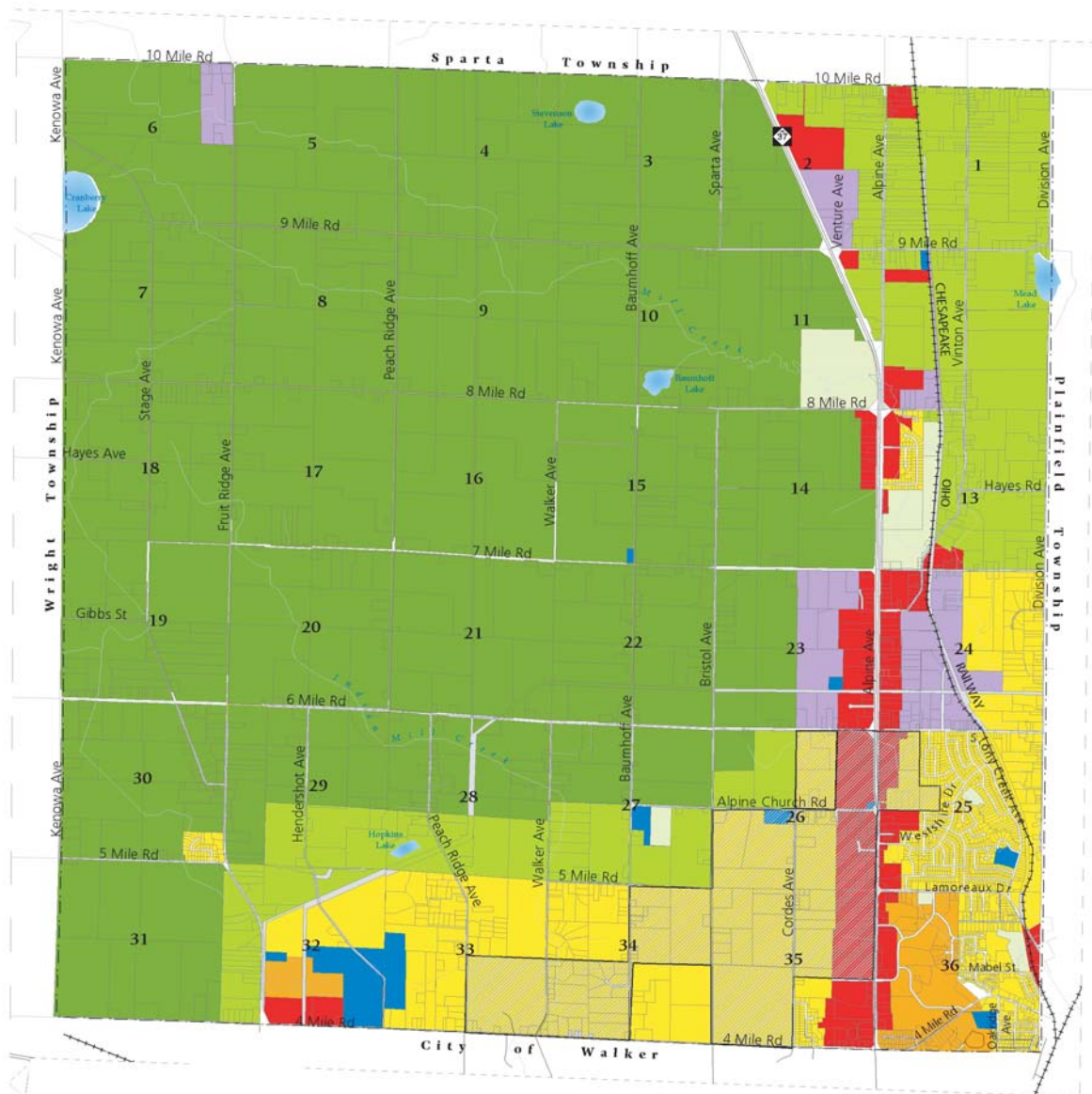
- Rural Residential (1-2Units/1Acre)
- Moderate Density Residential (3-4Units/1Acre)
- High Density Residential (5-9Units/1Acre)
- Commercial
- Social and Institutional
- Agriculture/Orchards
- Light Industrial
- Public/Parks/Recreation

ALPINE TOWNSHIP | FUTURE LAND USE

Land Use Allocation Table

	acres	percent
Residential Estate	2,216	10%
Moderate Density Residential	2,610	12%
High Density Residential	334	2%
Commercial	884	4%
Social and Institutional	167	1%
Agricultural / Orchards	14,937	67%
Light Industrial	698	3%
Public / Parks / Recreation	413	2%
TOTAL	22,259	100%

Future Land Use Scenario 3



ALPINE TOWNSHIP Future Land Use Scenario 3

Data Source: Beckett & Raeder Inc.

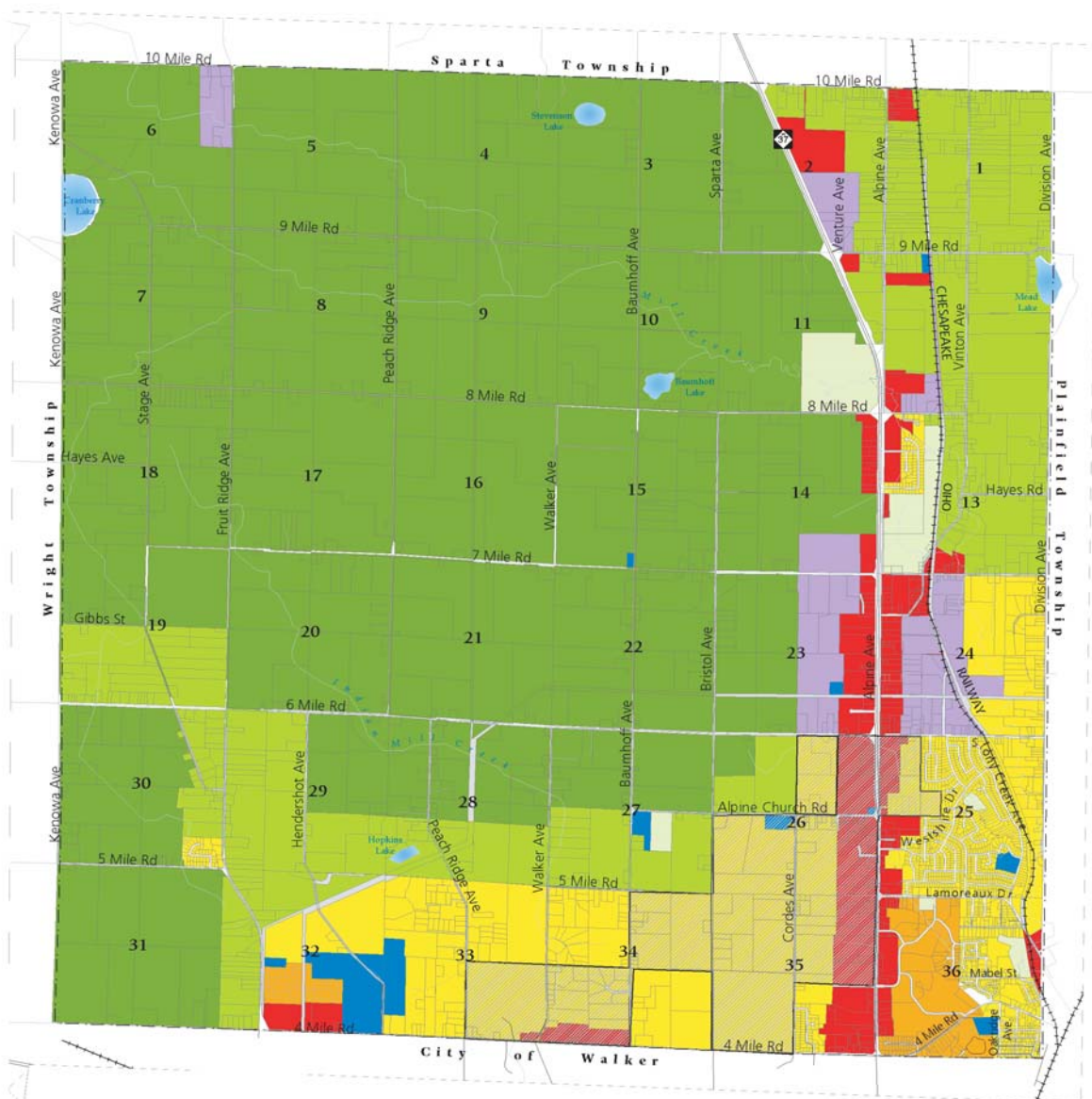
- Residential Estate (1-2 Units/1Acre)
- Residential Moderate Density (3-4 Units/1Acre)
- Residential High Density (5-9 Units/1Acre)
- Commercial
- Residential Mixed Use
- Social and Institutional
- Agriculture/Orchards
- Light Industrial
- Public/Parks/Recreation

ALPINE TOWNSHIP | FUTURE LAND USE

Land Use Allocation Table

	acres	percent
Residential Estate	2,732	12%
Moderate Density Residential	2,610	12%
High Density Residential	329	1%
Commercial	1,007	5%
Social and Institutional	167	1%
Agricultural / Orchards	14,230	64%
Light Industrial	771	3%
Public / Parks / Recreation	413	2%
TOTAL	22,259	100%

Future Land Use Scenario 4



ALPINE TOWNSHIP Future Land Use Scenario 4

Data Source: Beckett & Raeder Inc.

- Residential Estate (1-2Units/1Acre)
- Residential Moderate Density (3-4Units/1Acre)
- Residential High Density (5-9Units/1Acre)
- Commercial
- Residential Mixed Use
- Social and Institutional
- Agriculture/Orchards
- Light Industrial
- Public/Parks/Recreation

Appendix C

LESA Scoring System

LAND EVALUATION AND SITE ASSESSMENT FACTORS (LESA)

Prime, Unique, and Valuable Farmland Parcel Ranking System

Alpine Township

Land Evaluation Factors

***Evaluates soil-based qualities of a site.**

- 1) Determine the percent of the farmland parcel in prime farmland soils (.16)
- 2) Determine the percent of the farmland parcel in unique farmland soil type of Marlette loam , 6-12% and Perriton loam, 6-12% (.18)

SA-1 Factors

***Measure Non-soil site and regional characteristics that could be directly affect potential agricultural productivity or farming practices.**

- 3) Determine the percent of area in conflicting residential land use directly adjacent (perimeter) to the farmland parcel (.15)
- 4) Determine the percent of area in urban or developed land use within a 0.5 mile buffer of the farmland parcel (.15)

SA-2 Factors

***Measure development pressures impacting a farm parcel's continued agricultural use.**

- 5) Determine the zoning districts adjacent to the farmland parcel (.05)
- 6) Determine the number and size of parcels that intercept a 0.5 mile buffer around the farmland parcel that are registered under P.A. 166 (.10)
- 7) Determine if the farmland parcel is presently registered under P.A. 116, the Farmland and Open Space Preservation Act. If so, determine how many years are remaining on the agreement (.10)
- 8) Determine the distance from the closest edge of the farmland parcel to existing and planned sewer and municipal water services (.06)

SA-3 Factors

***Measure public values of a site supporting agricultural use.**

- 9) Is the farmland parcel a centennial farm? (.025)
- 10) Does the farmland parcel provide scenic visual value to the rural landscape? Is the parcel visible from a major highway corridor? (.025)

Information Services Center, Water Resources Institute, Grand Valley State University

Scenic Visual Value – Rating System

Rating

- 1) The parcel **provides limited scenic value**. The parcel is flat, and not well viewed from the road because of structures or vegetation blocking its view. Often the parcel is of row crops or a combination of land uses that do not contribute to its rural character.
- 2) The parcel **provides some scenic value**. The parcel is often flat or sometimes rolling, and is usually associated with row crops and/or occasionally orchards. The view of the parcel can be limited.
- 3) The parcel **provides scenic value**. The parcel is rural in character providing good views of orchards, agricultural operations or forest and wetlands. The parcel also may contain rolling topography. Some of the views are limited in distance and may not provide a sense of openness, but do provide a good sense of being “out in the country”. Orchards are often in close proximity to the road providing an especially attractive view in the spring. This rating can be considered the norm in the Township.
- 4) The parcel **provides good scenic value**. The parcel provides an excellent view of orchards and associated farm buildings that exemplify its rural character. The sense of being “out in the country” is dominant.
- 5) The parcel **provides excellent scenic value**. The parcel provides excellent long distance views. Orchards with associated farm buildings dominate the scene. The topography is rolling but not so much as to limit the view. Several of these parcels together provide some of the best views in the Township providing a strong sense of openness or being “out in the country”.

Information Services Center, Water Resources Institute, Grand Valley State University

LESA Scoring Sheet

Parcel Number: 41-09-05-200-004						
Sample Number: 4						
Map Acres: 105.62						
Deed Acres: 108.68						
	Factor Wts.	Factor Pts.	Weighted Factor Pts.	Sub-Total Pts.	Weighted Max Pts.	% of Max.
Land Evaluation				20.20	<i>34.00</i>	59.4
1) Prime Farmland	0.16	70	11.20			
2) Unique Farmland	0.18	50	9.00			
SA-1Agricultural Use Restriction				28.50	<i>30.00</i>	95.0
3) Adjacent residential land use	0.15	90	13.50			
4) Developed land use within ½ mile buffer	0.15	100	15.00			
SA-2-Development Pressure				27.00	<i>31.00</i>	87.1
5) Agricultural zoning	0.05	100	5.00			
6) P.A. 116 parcels within ½ mile buffer	0.10	80	8.00			
7) P.A. 116 registered parcel	0.10	80	8.00			
8) Distance to sewer or water services	0.06	100	6.00			
SA-3-Public Values				5.00	<i>5.00</i>	100.0
9) Historic place or Centennial Farm	0.025	100	2.50			
10) Visual Value	0.025	100	2.50			
TOTALS	1.00				100.00	
LESA SCORE				80.70		

Information Services Center, Water Resources Institute, Grand Valley State University

LESA Factor Weights

	Factor Weight	Sub-totals	Max Point	Weighted Max Pt.
Land Evaluation	0.34			
1) Prime farmland soils		0.16	100	16.00
2) Unique farmland soils		0.18	100	18.00
SA-1 Potential Farming Practice Limitations	0.30			
3) Adjacent residential land use		0.15	100	15.00
4) Developed land use within ½ mile buffer		0.15	100	15.00
SA-2-Development Pressure	0.31			
5) Adjacent agricultural zoning		0.05	100	5.00
6) P.A. 116 parcels within ½ mile buffer		0.10	100	10.00
7) P.A. 116 registered parcel		0.10	100	10.00
8) Distance to sewer or water services		0.06	100	6.00
SA-3-Public Values	0.05			
9) Centennial Farm		0.025	100	2.50
10) Scenic Visual Value		0.025	100	2.50
TOTALS	1.00	1.00		100.00

Information Services Center, Water Resources Institute, Grand Valley State University

Appendix D

Maps



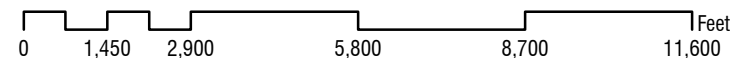
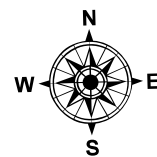
MAP 1

WATER SERVICE AREA

ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

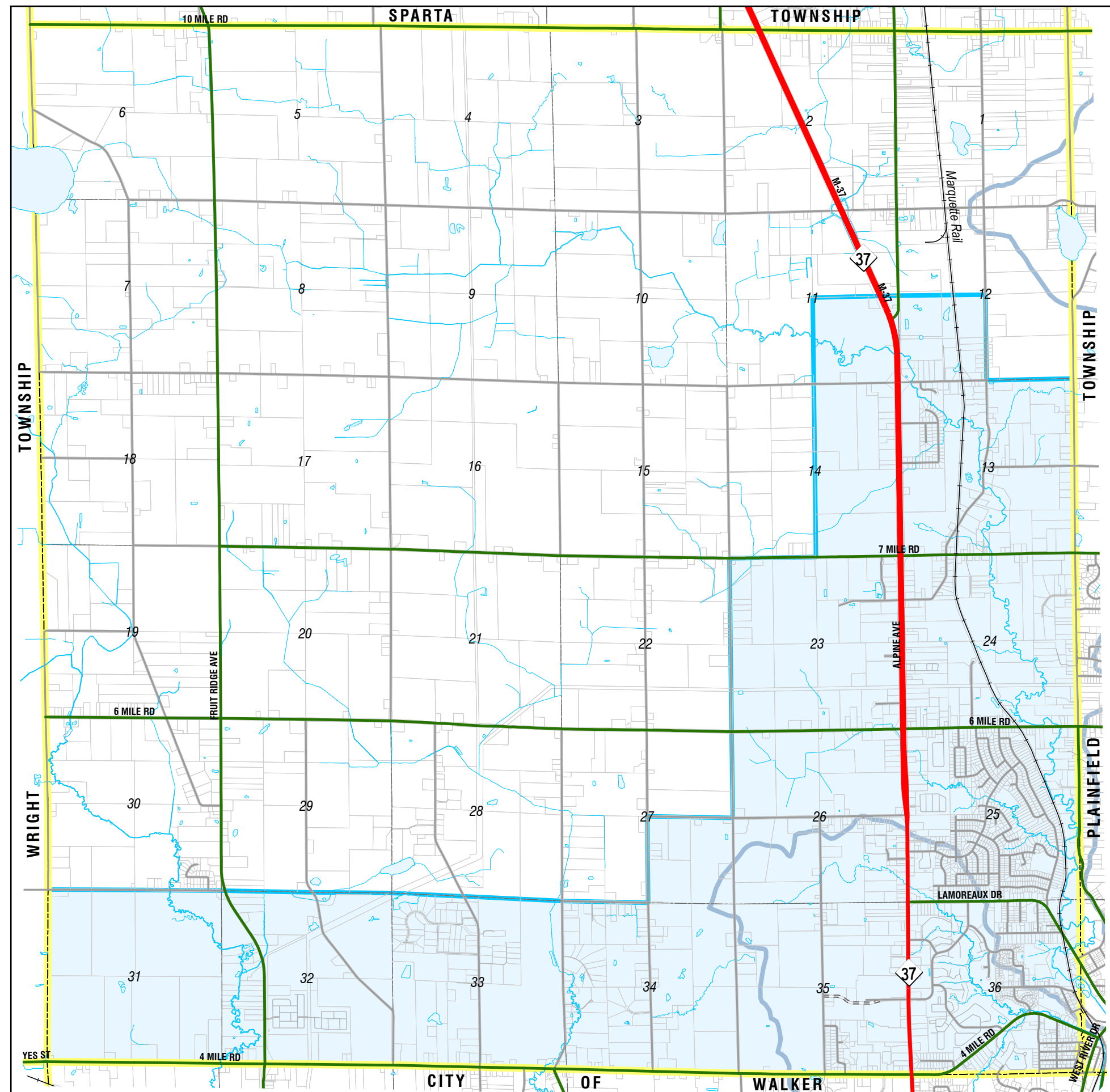
MAP LEGEND

- | | |
|----------------------|---------------------------|
| Water Service Area | Railroads |
| Section Lines | Street Centerlines |
| Municipal Boundaries | Freeway |
| Parcels | Freeway Ramp |
| Lakes & Ponds | Highway |
| Rivers & Streams | Primary |
| | Secondary |
| | Proposed/Under Const. |
| | Private |



This map does not represent a legal document. It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy and should be verified through other means.

Map created July 2007 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS and Alpine Township.
Last Revision: July 31, 2007 CJB





MAP 2

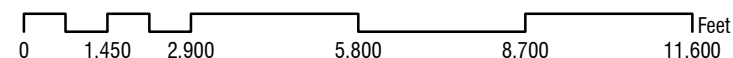
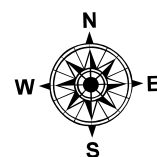
PROPOSED SANITARY SEWER SERVICE AREA*

ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

MAP LEGEND

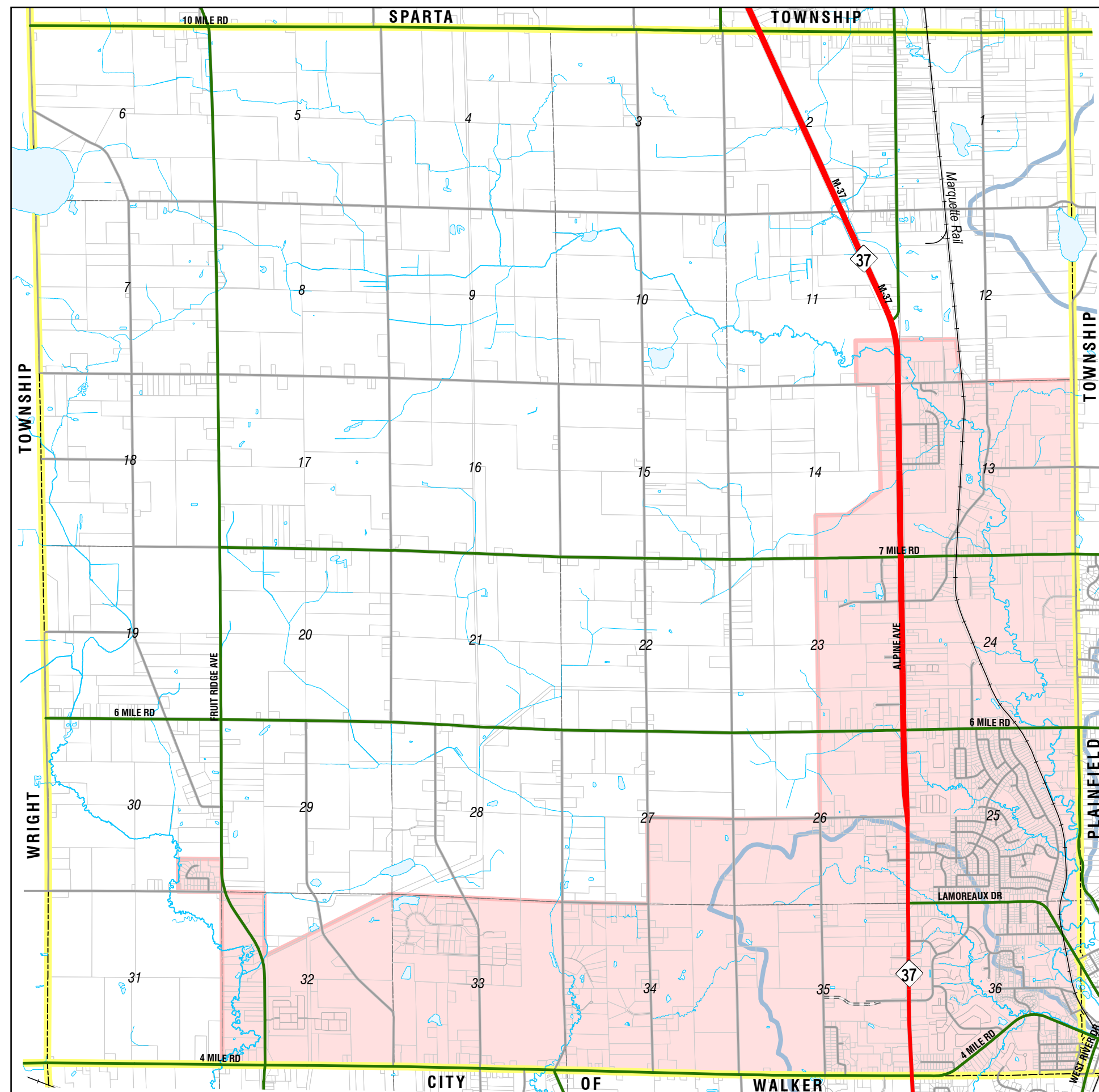
- | | |
|-----------------------------|---------------------------|
| Sanitary Sewer Service Area | Railroads |
| Section Lines | Street Centerlines |
| Municipal Boundaries | Freeway |
| Parcels | Freeway Ramp |
| Lakes & Ponds | Highway |
| Rivers & Streams | Primary |
| | Secondary |
| | Proposed/Under Const. |
| | Private |

*After November 2008.



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Last Revision: August 17, 2007 CJB





MAP 3 PRIME, UNIQUE and VALUABLE FARMLAND

ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

MAP LEGEND

LESA Parcel Scoring

Not Assessed
20 - 46
47 - 56
57 - 81

Section Lines

Municipal Boundaries

Lakes & Ponds

Rivers & Streams

Railroads

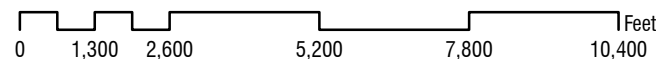
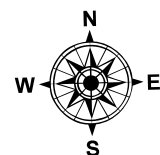
Street Centerlines

Freeway
Freeway Ramp
Highway
Primary
Secondary
Prop./Under Const.
Private

Parcel scoring according to 1997 Land Evaluation and Site Assessment (LESA) by the Grand Valley State University - Annis Water Resources Institute (AWRI).

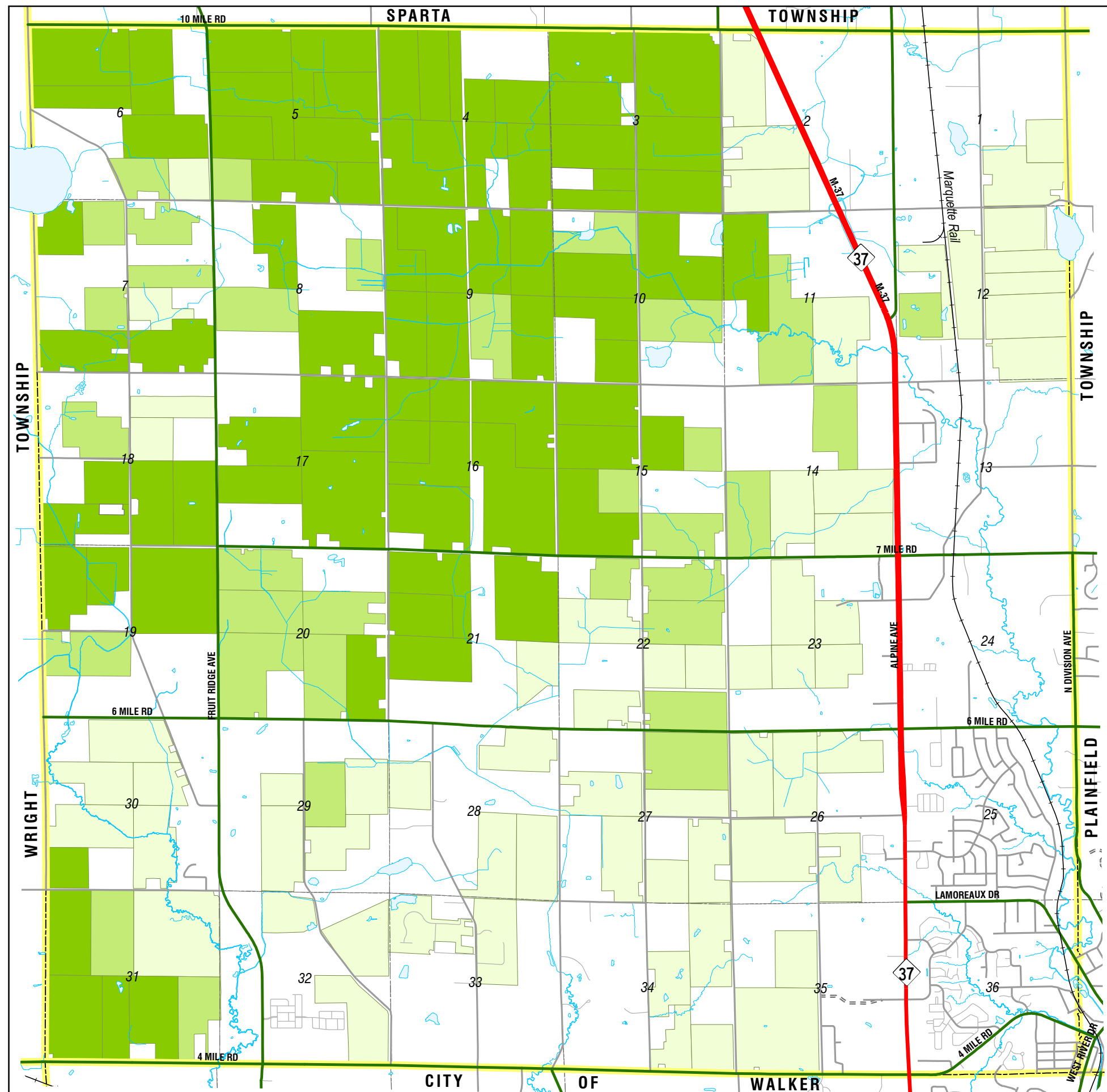
A hypothetical 100 score would represent:

- * A farmland parcel with a majority of soils being prime or unique for orchards.
- * Potential impact by residential or other developed parcels on farming is low.
- * Potential development pressure that could impact the parcel's continued agricultural use is low.
- * Parcel has historical significance to its owner and the public and the parcel provides excellent scenic value.



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Map created July 2007 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS, Alpine Township and GVSU AWRI. Parcel data: 1996. Last Revision: August 7, 2007 CJB





MAP 4

PRIME FARMLAND SOILS

ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

MAP LEGEND

Prime Farmland Soils

- Prime Farmland Soils
- Prime, If Drained

Section Lines

Municipal Boundaries

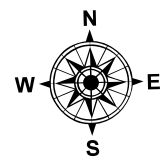
Lakes & Ponds

Rivers & Streams

Railroads

Street Centerlines

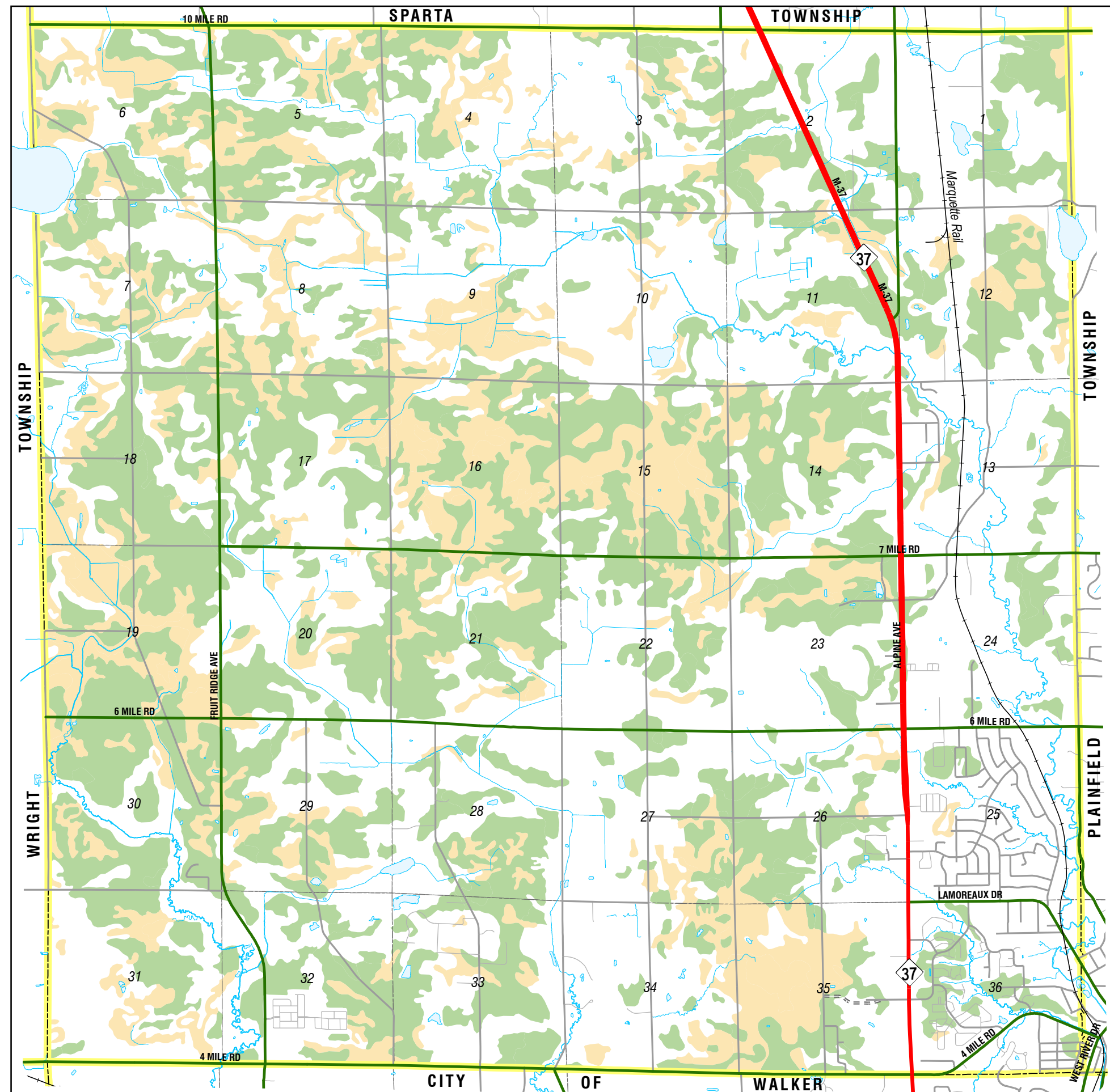
- Freeway
- Freeway Ramp
- Highway
- Primary
- Secondary
- Proposed/Under Const.
- Private



0 1,450 2,900 5,800 8,700 11,600 Feet

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Map created July 2007 by the REGIS Agency in conjunction with Alpine Township Planning staff. Data sources include REGIS and Alpine Township.
Last Revision: July 31, 2007 CJB





MAP 5

YORK CREEK WATERSHED

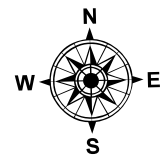
ALPINE TOWNSHIP
KENT COUNTY, MICHIGAN

MAP LEGEND

- York Creek Watershed
- Section Lines
- Municipal Boundaries
- Parcels
- Lakes & Ponds
- Rivers & Streams

Street Centerlines

- Freeway
- Freeway Ramp
- Highway
- Primary
- Secondary
- Proposed/Under Const.
- Private
- Railroads



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Last Revision: July 31, 2007 CJB

