



2018 Master Plan



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*In memory of Steve Baribeau who served on the Grand Ledge Planning Commission
for many years prior to his passing in March, 2016.*

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Chapter 1: Introduction

WHY DOES THE CITY OF GRAND LEDGE NEED A MASTER PLAN?

Grand Ledge is almost fully developed, although a few large tracts of vacant land still exist along the City boundary lines. The City of Grand Ledge is characterized by an attractive historic downtown, outstanding neighborhoods of both historic and contemporary homes, significant natural resources that provide unique recreational opportunities and a high quality of life for its residents. At first glance, it might appear that planning for the future is not needed. But things are not static. There is always change and always opportunity for improvement. This Master Plan reflects the desire to guide the future rather than just react to individual situations. A sound Master Plan helps ensure that decisions made on development, redevelopment, transportation, parks and various capital improvement projects will help preserve the City's many admirable qualities while addressing those areas that can be enhanced.

This Master Plan demonstrates the continued commitment of the City to protect the residential character of the community, improve and diversify its business corridors, and coordinate public improvements to support the community's vision for the future.

Recommendations in this plan are based on an evaluation of existing conditions, issues and goals that were identified by the public and officials through the planning process, and an analysis of options to meet those goals. The City's aspirations and future land use plan will assist City leaders (City Council, all City boards and commissions and the City's administrative staff) in making balanced and



thoughtful decisions which consider the long-term results for the community. These community-wide implications may not be immediately apparent to the individual property owner or citizen, but the impacts of each decision are linked and become visible over time.

The Master Plan can be viewed as a community blueprint for the future. Among the reasons to update the Grand Ledge Master Plan include:

- Grand Ledge has created an identity for itself based in large part on its residential character and “small town” atmosphere. The plan describes a multitude of actions to ensure this residential identity will be preserved. The overall framework provided in a Master Plan, combined with sound decisions by City leaders can ensure this vitality is

maintained and enhanced.

- The City’s prosperity is directly related to decisions on land use, recreation, traffic, public facilities and services, business corridors and decisions outside its borders. The planning process provides a forum to evaluate those related elements together, rather than separately.
- The Master Plan provides a legal foundation for zoning and other regulations on the type, intensity, arrangement and timing of development. The plan is established to balance the rights of individual land owners with the rights of adjacent landowners and the community overall. Therefore, the plan supports the protection of community values from a legal standpoint, as set forth in the state planning and zoning acts.
- The Master Plan provides an outline of the following specific strategies:
 1. Ensure new development, renovations and redevelopment is compatible with the existing historic character, including land uses, site design and building architecture.
 2. Balance land uses to provide a sound tax base for community facilities and services.
 3. Invigorate the community’s most unique built feature - the downtown.
 4. Carefully manage land uses and access along major roadways to provide vibrant, safe and attractive corridors through the City.
 5. Maintain and expand the non-motorized pathway system and arrange land uses to ensure Grand Ledge is a “walkable” community.
 6. Implement a complete streets policy to integrate people and place in the planning, design, construction, operation and maintenance of transportation networks.
 7. Promote both public and private investments to retain the neighborhood character.
 8. Preserve and emphasize the City’s greatest natural asset, the Grand River, riverfront parks and the ledges.
 9. Preserve the historic heritage of the downtown and neighborhoods.
 10. Continue wise public investment in community facilities and improve delivery of emergency and other City services for today and tomorrow.
 11. Provide specific direction for proper development of large undeveloped sites.
 12. Upgrade the transportation system for both motorized and non-motorized travel using the best traffic management tools available and through coordination with the MDOT and the implementation of a complete streets policy.

- The Master Plan assembles suggestions and recommendations from a variety of sources such as the Downtown Development Authority, the Non-Motorized Pathway Plan, the Parks and Recreation Master Plan, the road extension plan, the Eaton County Parks and Recreation Commission Plan and a 1997 “Walkability Audit” prepared by Dan Burden, Walkable Communities, Inc., a nationally recognized authority on creating walkable communities.

In order to ensure the plan continues to accomplish the above described intentions, the City is committed to taking on two important responsibilities. The first of which is continuing to follow the implementation strategies outlined in the plan. City officials, including the City Council, administrative staff and representatives from the Planning Commission, Downtown Development Authority and Parks and Recreation Commission should meet together at the beginning of each calendar year, fiscal year or when the fiscal budget is being planned and develop an annual action plan. This will set a framework for the specific tasks to complete within the given time period. These tasks will be directly linked to the goals and recommendations contained in this document. The City administrative staff, which includes the City administrator and all City department heads, will maintain a status of these projects throughout the year through status reports and joint meetings.

The second responsibility of the City is to continue to evaluate the goals and recommendations of the plan to ensure they are consistent with existing community conditions and development trends. As a result, specific sub area plans may be necessary or Master Plan amendments may also be appropriate.

PLANNING PROCESS

The original plan is based on the values of the community that were identified through a series of workshops. This process not only identified what was most important to the community, but also helped establish priorities, i.e. “what it most valued or needed”. These values are important when considering a development or capital improvement that may meet some goals, but not others.

Values of the Grand Ledge community and its vision for the future were documented through a lengthy, comprehensive and participatory planning process. This involved ample opportunity for residents and other landowners to provide comments and respond to preliminary alternatives. Additionally, this process provided an educational forum for residents, public officials, organizations, and representatives of adjacent communities to discuss community attitudes, success stories, current issues, and concerns.

1. Walking and driving tours by the Planning Commission, City staff and consultant team to discuss past planning efforts, history, issues and ideas.

GRAND LEDGE MASTER PLAN

2. Completion of background information on characteristics and trends of the City's population and housing, existing land use patterns and previous planning documents.
3. A community workshop was held to explain the process and receive input and ideas on the various components of the plan. Attendees included the public, City council members, and representatives of various community and civic groups.
4. City department heads met to discuss future facility needs and help establish priorities.
5. Based on the analysis, drafts of the document were prepared for Planning Commission work sessions. All meetings were open to the public and were devoted to receiving input and building consensus on recommendations.
6. Based on work sessions with the Planning Commission, changes were made to the draft plan, after which a public hearing was held and finally, the Master Plan was adopted
7. In 2008, the Master Plan was updated in its entirety to reflect those items in the original document that have been completed or, based upon new information, are no longer deemed appropriate for the future planning of the community. In addition, all demographic data has been updated to reflect the 2010 U.S. Census figures.

Chapter 2: Community Profile

Located just ten miles west of the City of Lansing, the City of Grand Ledge covers an area that is roughly 3.65 square miles. Grand Ledge was first settled in 1848. The City was first known as “Big Rocks” by the Ojibwa Indians. “Grand Ledge” became the official name in 1850 when local settlers petitioned the legislature to create a post office in the City. The name comes from the ledges of rock found along the Grand River that runs through the City.

As the City grew, residential neighborhoods developed generally south of the Grand River and businesses were established along the north side, close to the railroad. Over time, the Central Business District (CBD) expanded along both sides of the river, surrounded by single family neighborhoods. The availability of public utilities allowed the City to develop more densely than the surrounding townships. Improvements to the highway system made it more convenient to live in Grand Ledge and work elsewhere, and vice versa.

Prospective residents were, and continue to be, attracted to the small town environment located in close proximity to Lansing’s major employment centers. Today’s population includes many who live in Grand Ledge but work in Lansing or somewhere else outside the City. With the ever increasing development in the Lansing area due to expansion of governmental employment, higher education, the auto industry and other emerging industries, the City has been impacted as seen in its population, traffic and economic growth.

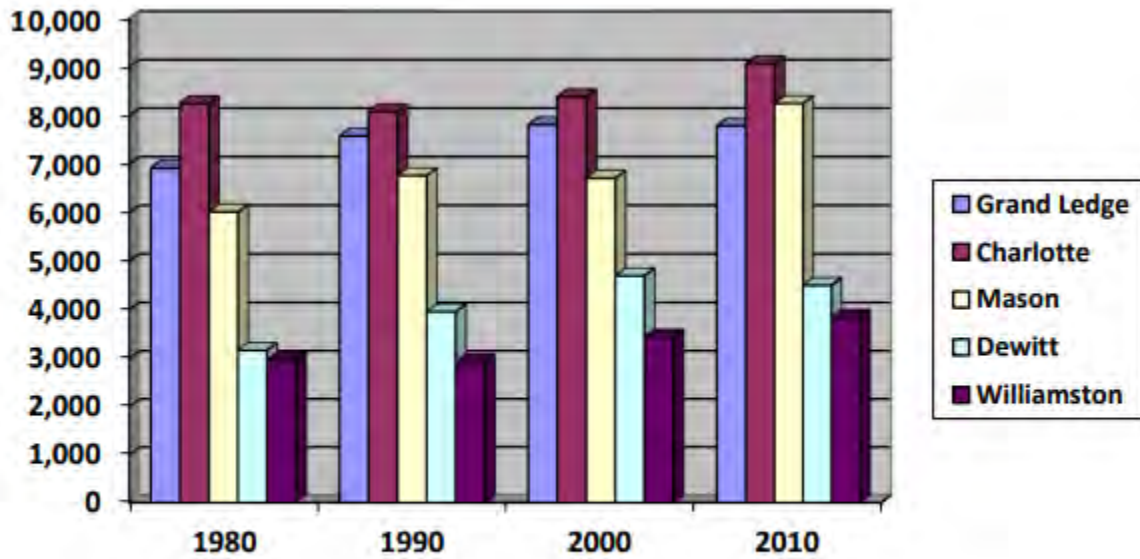
This section provides some general statistical information and comparisons to other communities. Generally, Grand Ledge is about average statistically when compared to similar sized cities in the Lansing area. Much of this information is based on figures in the most recent U.S. Census (2010), supplemented with projections from the Tri-County Regional Planning Commission.

POPULATION CHARACTERISTICS

The 2010 Census reported the population of Grand Ledge to be 7,786 persons. The City grew at a steady pace between 1960 and 1980 with a slow down between 1980 and 1990 due to the unavailability of land for residential development. The City experienced a slight (1%) increase in population between 1990 and 2000 and a slight (-2.3%) decrease in population between 2000 and 2010.

GRAND LEDGE MASTER PLAN

Table 1: Populations of Comparable Communities



Source: United States Census Bureau

The Tri-County Regional Planning Commission projects a 7.8% population increase between 2010 and 2020. The increases in population that have occurred over the past several decades and the projected increase over the next few years are due to annexations of surrounding property, residential developments currently under construction and available vacant land.

As part of this profile, the demographics of communities comparable to Grand Ledge, as determined by the planning commission were considered. The comparable communities include Dewitt, Charlotte, Williamston and Mason. The above table illustrates the population trends for these communities compared to Grand Ledge from 1980-2010. As the above table illustrates, the population changes among the various communities are relatively comparable.

Table 2: Population Trends

Population Trends in Grand Ledge and Surrounding Communities, 1980-2010

	% Change 1980 - 1990	% Change 1990 - 2000	% Change 2000 - 2010*
Grand Ledge	9.28%	10.52%	-0.3%
DeWitt City	25.24%	18.6%	-4.1%
Charlotte	-2.0%	3.8%	8.2%
Mason	12.4%	-0.8%	22.9%
Williamston City	-2.0%	17.8%	12.0%
Eaton County	5.1%	11.6%	4.0%

Sources: U.S. Census Bureau

Table 3: Persons per Household

2010 Persons per Household Grand Ledge and Comparable Communities	
Grand Ledge	2.36
Dewitt	2.60
Charlotte	2.53
Mason	2.26
Williamston	2.35
Eaton County	2.45

Household Size

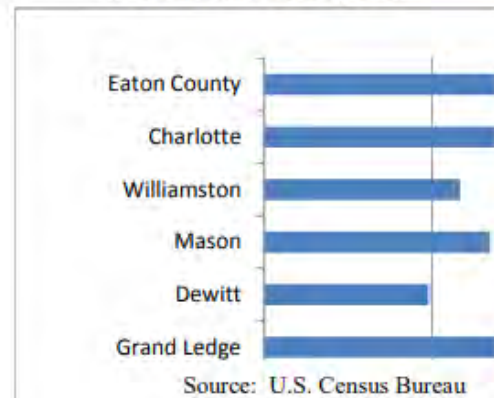
Table 3 indicates 2010 household sizes for Grand Ledge and comparable communities. The growth rate for Grand Ledge can be partially explained by a recent trend toward larger household sizes, i.e. more persons per dwelling unit than in the past few decades. This means that the City’s population may experience some population growth even without the addition of more dwellings.

Age Distribution

The median age in Grand Ledge 2010 was reported at 40.3 years, compared to 35.7 years in 2000. Most of the Grand Ledge population falls into the 25 to 44 year old age category according to the 2010 Census. Grand Ledge also has a significant percentage of people over 65 years of age.

Table 4: Population 65 Years and Older

65 Years and Older, 2010

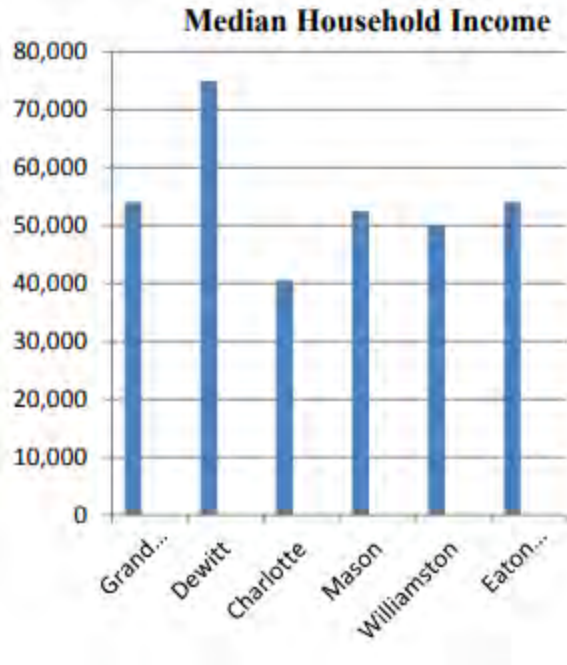


ECONOMICS

Education

Approximately 96.8 percent of Grand Ledge Residents older than 25 years in 2010 had attained the status of high school graduate or higher. This is slightly higher than the 93.4 percent reported for Eaton County. Approximately 25.9 percent of the same persons have a bachelor’s degree or higher as compared to 24.2 percent reported for Eaton County.

Table 5: Median Household Income



Income

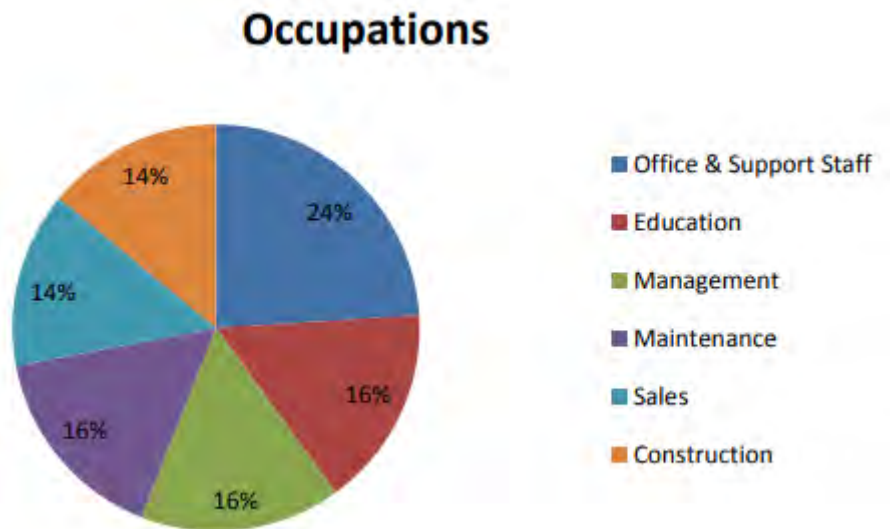
The 2010 median household income reported for Grand Ledge was \$54,104, slightly lower than Eaton County median income of \$54,115. As table 5 indicates, the median income for the City is equivalent to surrounding communities.

Table 6: Occupations

Labor Force

Approximately 70 percent of persons 16 years and over are in the civilian labor force.

Approximately 2.8 percent of the civilian labor force was reported in the 2010 Census as unemployed. The majority of occupations are still high skill.



HOUSING

There were 3,656 housing units reported in the 2010 Census. The following is a comparison of percent of occupied housing units for Grand Ledge and other communities. Table 8 compares median housing values. Grand Ledge offers several affordable housing options.

Table 7: Percent Owner-Occupied and Median Housing Values

Table 7 Percent of Owner Occupied Housing Units		Table 2010 Median Housing Values Grand Ledge and Surrounding Communities	
Grand Ledge	65.7	Grand Ledge	\$119,300
Dewitt	80.5	Dewitt	\$115,600
Mason	62.9	Mason	\$113,900
Charlotte	64.1	Charlotte	\$111,000
Williamston	66.2	Williamston	\$123,601
Eaton County	72.6	Eaton County	\$138,300

EXISTING LAND USE

Existing land use patterns and densities are a major determinant in decisions on the type, location and densities of future land uses. This section describes the existing land use patterns and how it relates to the future land use plan and other recommendations described later.

Development Pattern in General

Grand Ledge’s diverse existing land use pattern resembles a traditional developed Midwestern small city. One of the charms of a small city is that uses frequently defined as “incompatible” in modern zoning can co-exist and contribute to the unique sense of place and a walkable community. In fact, many suburban communities complain that they lack the sense of place which exists in places like Grand Ledge. Grand Ledge provides the community focal point for an area that extends well beyond the City limits because of the commercial, civic and entertainment uses.

The core CBD along the river includes many historic two and three story buildings, and a number of new buildings that have generally blended in with the historic character. The CBD is surrounded by mature stable neighborhoods with sidewalks and relatively narrow tree lined street. More recent residential areas developed around the core CBD. New



commercial establishments have located along the streets with the highest traffic volumes (M-43 and M-100). The most recent industrial development has taken place in the Grand Ledge Willis Industrial Park. The biggest difference in character between the older and newer areas is that the older areas are more historic and compact along grid streets whereas, more recent development has a more suburban atmosphere with bigger lots along curvilinear streets.

Most of the existing land uses are considered fixed, that is, change over time is not desired or likely. In some cases, however, existing land uses are not appropriate in consideration of factors such as compatibility with surrounding land use, capacity of infrastructure or availability of better sites for the use elsewhere in the City. Many of these improperly located uses were established years ago, before planning and zoning tools were available. An example might be a residential neighborhood located between a rail line and an industrial without sufficient buffering between.

The rich diversity of the community can be better understood through real life experience than any written description or map. Thus, this inventory of existing land uses is intended to describe how the City appears today and indicate where land uses need to change or sites need to be improved over time to meet the goals of the Master Plan.

Single-and Two-Family Residential

Single and two family residential uses are the most dominant in the City, as is typical for most small cities. Housing densities are moderately dense compared to surrounding areas, even in the new subdivisions, due in part to the availability of public utilities. Three eras of residential construction are easily discernable extending outward from both sides of the river in a pattern that resembles growth rings in a tree. The oldest neighborhoods were generally built in the early 1880's with relatively small lots and shallow setbacks placed on a grid street pattern at a right angle to the Grand River and immediately adjacent to the CBD. Some of these neighborhoods are eligible as historic districts. Several individual homes are on the national or state register of historic buildings.



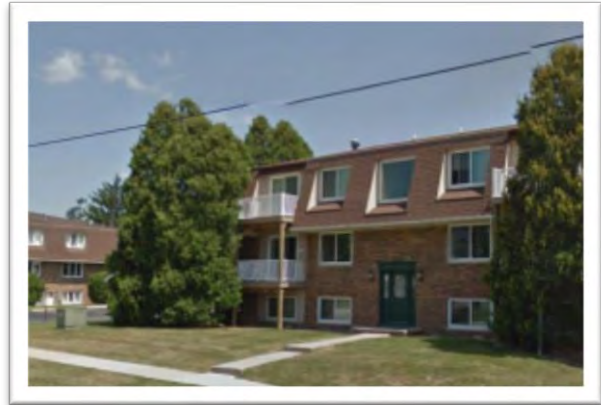
The second large phase of development occurred in the 1940's and is also set on a grid street pattern but on a true north and south direction. This pattern surrounds the previous building period. The most recent development has happened since the 1970's primarily on the outer edges of the City on annexed land. These newer subdivisions are characterized by larger homes with larger garages on larger lots along curvilinear and cul-de-sac streets. The newer subdivisions are

only marginally connected to the main fabric of the community. Two-family residences are scattered throughout the older neighborhoods and mainly consist of converted larger homes.

The average age of the housing stock is obviously older than in more suburban communities. However, most of the older homes have been well maintained. Many of the residential homes in and around the core area of the City have had significant renovations and improvements in the past few years.

Multiple-Family Residential

This category includes buildings that contain more than two dwelling units including converted homes, the adaptive reuse of the former chair factory on the west riverfront into loft apartments, apartment buildings, townhouse and the senior housing facilities on South Clinton Street. The largest multiple family complexes are situated along or in close proximity to the north frontage of Saginaw Highway (M-43) west of South Clinton Street (M-100). Smaller buildings are in scattered



areas throughout the City. Unfortunately, the architectural styles and site design do not reflect the established character of the surrounding single-family neighborhoods.

Mobile Home Parks

Grand Ledge has two large isolated manufactured housing communities. The largest contains 215 units and is south of the river near the far west portion of the City. A sole entrance is through a berm on West Jefferson Street. The other park has 168 units and is north of the rail lines with access from North Clinton Street and Burt Avenue in Oneida Township. This park is under new management and has undergone substantial improvements over the past year.

Commercial and Office

Commercial development occurs in two concentrations. The CBD is at the heart of the community. It is the historic center and spans both sides of the river through a bridge connection. Most buildings are two and three stories and abut against one another. A wide spectrum of uses include civic buildings, banks, convenience and comparison shopping, restaurants, specialty shops, gas stations, churches, offices, apartments, single-family houses and other businesses.



Over the past decade, several buildings in the CBD have undergone substantial façade and interior improvements. In addition, the City has constructed two new, thoughtfully designed parking lots on the north side of the river and has improved the appearance of its parking lots on the south side of the river. There are very few vacancies in the CBD at this time and numerous community events throughout the year draw large numbers of people to the area which helps support the CBD businesses. Speeding traffic and the prevalence of large trucks, however, as a result of Bridge Street being a designated State trunk line makes the downtown less inviting for pedestrians.

Saginaw Highway (M-43) and Clinton/Hartel Road (M-100) is the center point of more recent commercial and office development and functions as the front door to the community. In contrast to the more compact downtown environment, this corridor contains a wide variety of businesses that depend on a high volume of automobile turnover, characterized by larger lots with parking in front of the buildings such as fast food and franchise restaurants, pharmacies, banks, convenience retail, auto repair, auto parts, hardware, farm and outdoor machinery dealerships, offices and gas stations. New commercial development has created a more uniform setback pattern, increased landscaping, a reduction in the amount of driveways and a more consistent sign pattern along M-43. Ledges Commerce Park has continued to develop incorporating shared access, unified landscaping, appropriate site lighting, brick facades and attractive monument signs.



In addition to the major commercial areas, there are a few commercial uses scattered around the City. A number of these uses are either spot zones or nonconforming in terms of zoning.

Industrial

Industrial uses provide important employment opportunities and tax base to support improvements to capital facilities and municipal services. Most of the industrial sites in the City have existed for many years. Industrial concentrations are located along N. Clinton Street from the Bridge Street intersection to north of the CSX rail lines and near W. Jefferson Street in Oneida Township. The grain elevator, lumberyard, ETM Corporation, Robert Sinto Corporation and other uses have been established for many years. Some renovation is needed to correct deterioration of the buildings and sites.



The largest concentration of industrial uses is located within the Grand Ledge Willis Industrial Park which provides greater acreage and modern amenities not available at other industrial locations in the City.

Airport

Abrams Municipal Airport is located just north of Eaton Highway. The airport is operated by the City and includes a few spin-off industrial operations such as airport equipment storage. Several new hangars have been constructed to provide more modern facilities for the storage of airplanes.

Institutional

This category includes city, state and federal buildings, water towers, schools, churches and other public or quasi-public buildings. City offices, police and fire departments, the library, U.S. Post Office, and several churches are directly adjacent to or located within the CBD. These functions strengthen the focus of this district both locally and regionally and provide an important social need. The high and middle schools serve a seven township area. Three elementary (two public and one private) schools and the administration buildings are located in a tight proximity to larger schools. Government operations are discussed in greater detail in the Community Facilities section of this chapter.



Parks and Open Space

Parks, school playgrounds and cemeteries provide important social, recreation and greenspace needs for residents. Eight City and County parks (Fitzgerald Memorial Field, Oak, Jaycee, Fitzgerald, Island, Elaine Dible, Colonial and Riverside Parks) are aligned along the City’s most important natural resource, the Grand River, providing ready open space for several neighborhoods. The Holbrook, Neff, Beagle, and Greenwood elementary school playgrounds and Marsh Field function as parks for neighborhoods located away from the river. Subdivisions in the most recent annexed parcels do not appear to be adequately served. The community facilities chapter in this document and Parks and Recreation Master Plan more completely address service proximity and needs. Finally, a cemetery in the northeast section provides passive visual relief from the hard surfaces of adjacent uses.



Agriculture

There is one actively farmed tract of land in the City, located south of M-43, on the east side of M-100.

Vacant

There are a few tracts of vacant land in the City; the 2 largest of which are the City owned property located west of Fitzgerald Park and the recently annexed parcels located between Saginaw Highway and Old Saginaw Highway. There is also a 40 acre parcel and a 26 acre parcel located on the east side of S. Clinton Street, south of Saginaw Highway. Several modest and smaller areas are located on steep slopes, and adjacent to the railroad and Sandstone Creek.

Distribution of Land Uses

A useful facet of existing land use is comparing dwelling unit numbers and acreage percentages of specific uses to similar communities. By no means should comparisons dictate the community’s vision for the future and the type of environment it desires. However, comparisons can shed light on the other development patterns and potential excesses and deficiencies in land use types.

Table 8: Existing Land Use Acreage Comparison

Existing Land Use Acreage Comparison			
Unit Types	Grand Ledge Percentage	Williamston Percentage	Charlotte Percentage
<i>Residential</i>	41.9%	33.3%	42%
<i>Commercial & Office</i>	5%	6.2%	12%
<i>Industrial</i>	2.1%	8.7%	14%
<i>Institutional Facilities</i>	28%	19.7%	21%
<i>Vacant</i>	23%	32.1%	11%
TOTAL	100%	100%	100%

Sources: Williamston Master Plan, Charlotte Master Plan, Existing Land Use Survey, Grand Ledge

Distribution of dwelling unit type comparisons provide a meaningful foundation for zoning map amendments. The City can utilize the data to base future land use decisions, generate development policies and prepare zoning map amendments. It provides officials with one of several components in decision making. Williamston and Charlotte were selected as comparative examples. As shown, the primary distinctions are that the comparison communities have a significantly greater percentage of industrial land uses.

Existing land use location is used to determine future land use. Williamston and Charlotte provided comparative land acreage numbers from their master plans. The percentages of single and two-family residential land uses were greater in Grand Ledge than in Williamston and Charlotte, yet agricultural and vacant lands comprised a smaller percentage in Grand Ledge

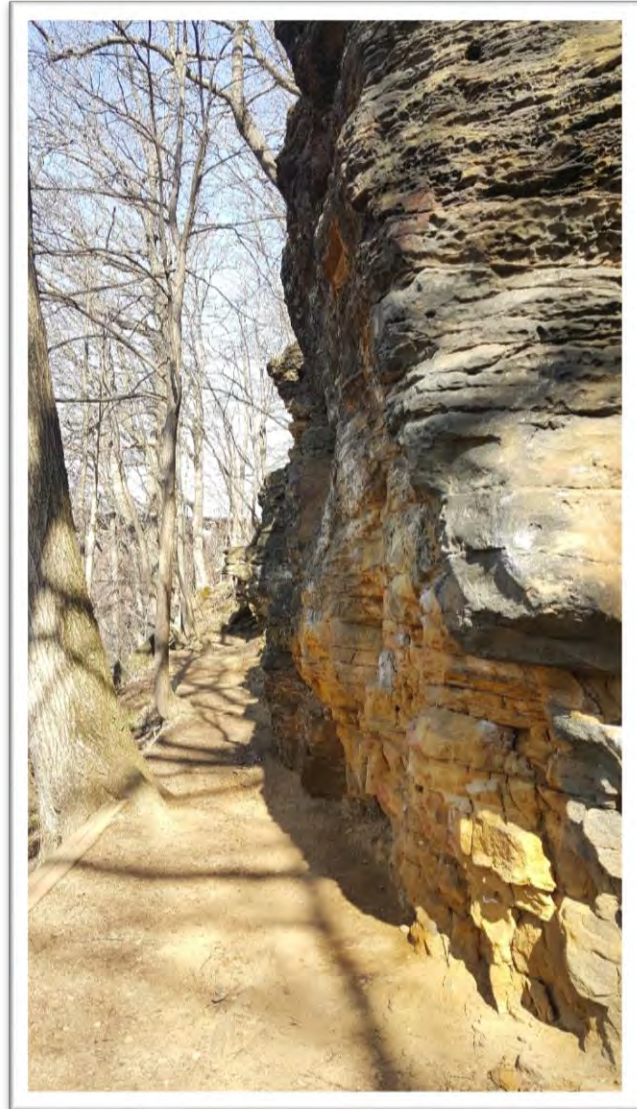
compared to Williamston and a significantly larger percentage in comparison to Charlotte. Map 1 indicates location of distinct uses.

NATURAL FEATURES

In terms of natural features, Grand Ledge is somewhat typical of towns in central Michigan, although some unique features are present. The City sits at an elevation of 860 feet and has some rolling terrain due to the river and glacial activity. This section briefly describes the natural features considered as the plan was developed. In some cases, development in sensitive areas should be limited, in others care should be taken or incentives offered to ensure responsible development.

General topography is characterized as being gently rolling with a downward slope from north to south. The most significant natural features in the City are the Grand River, the Sandstone Creek and the ledges. The Grand River traverses the City in a southeast to northwest fashion and takes a southerly dip in the eastern portion. Sandstone Creek traverses the western part of the City to the south side of the Grand River. The Grand River has a profound presence in the City. At some point, the river is nearly 400 feet wide and the only crossing in the City is by Bridge Street.

The name “Grand Ledge” is a result of the unique natural features created by the Grand River along the two mile stretch within the City. Unlike most river basins in mid-Michigan, this stretch of the Grand River is entrenched in a “valley” of sandstone with walls nearly sixty feet high in some places. The result is beautiful exposed sandstone ledges that gave the City its name and help to create a dramatic and scenic landscape unlike any other in the lower peninsula of Michigan.



Some areas that are located along the Grand River have more gradual banks and are more prone to flooding. Because of the steep ledges along the Grand River, the majority of its local

floodplain is located in the eastern half of the City. As a result of this floodplain, as well as steep slopes, development in this area is limited and reflects the topography.

COMMUNITY FACILITIES

Parks and Recreation

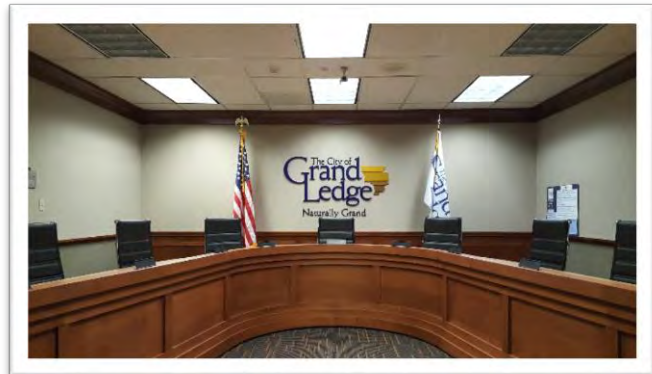


The City offers residents open space and recreation at 13 parks and open spaces totaling 110 +/- acres, including leasing the 78 acre Fitzgerald Park property to Eaton County. The parkland is primarily situated along the Grand River. Under the authority of the City Council, the parks are maintained by the Streets Department. Programs, budgets and improvements are guided by the direction of the Parks & Recreation Commission and the technical assistance provided by the

Director of Public Service and the City Administrator. The City's adopted Master Recreation Plan provides detailed insight into existing facilities and programming needs, and goals for the future.

City Hall

In 2014, the former Greenwood Elementary school at 310 Greenwood Street was renovated into the Grand Ledge city hall and police station. The new building provides state of-the-art facilities for meetings as well as offices for the city's administrative staff and police department. The gymnasium and the playground were retained to continue providing recreational facilities for the surrounding area. The building also serves as a community center as it is used on a regular basis by various community groups. The former city hall building at 200 E. Jefferson Street is now under private ownership and is in the process of being renovated into a customer-oriented commercial establishment.



Library



The library is located across the street from the former city hall property on E. Jefferson Street. The building includes the original library that fronts along E. Jefferson Street and now serves as a meeting room, and a later expansion that was constructed on the north side of the building. The library continues efforts to address barrier-free access to the building and the rapidly changing demands of extended hours, programs, and internet access, although expansion is constrained by adjacent

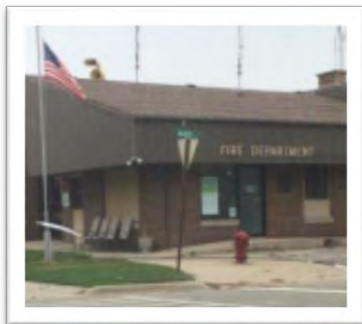
buildings and parking. In 2016, the library constructed a 1,300 square foot addition to the west side of the building that will allow for additional customer space and an elevator that will provide barrier free access to all areas of the building.

Police Department

The police department is currently located in the newly renovated city hall. The new facility provides adequate office space, parking, storage and training facilities that were not available at the former facility on E. Jefferson Street.



Fire Protection



The Fire Station was erected in 1952 and is located at N. Bridge and Halbert Streets. The Department is managed and operated by the Grand Ledge Area Emergency Services authority and serves the City and Oneida Township. Future needs for the Fire Department fall into two categories: fire stations and equipment. The fire station is located on the south side of the railroad tracks that cross N. Clinton Street. In the event of an emergency, problems occur when there is a crisis north of the railroad tracks and trains prohibit fire engines from crossing. In addition, the fire

station is located north of the bridge. If an emergency occurred on the bridge, it could prevent the Fire Department from responding to a call on the south side of the river. The present station is inadequate in size and the design of the buildings prohibits certain fire apparatuses from being stored or parked inside the building. New stations would provide faster responses to emergencies and contribute toward decreasing the ISO ratings for both the City and the Township.

Public Service Buildings and Vehicles

The Department of Public Services is based at a six acre site on Lawson Road in Oneida Township. As the City continues to grow, increased demands will be placed on the department and facilities. Expansion of the garage and the site may be needed. Assuming the City will continue to facilitate garbage collection through private contractors, these expansions will be

adequate to accommodate public services on an expanded scale in the future. The City Recycling Center site, located on Whitney Street, is adequate for the current program.

Sewer System

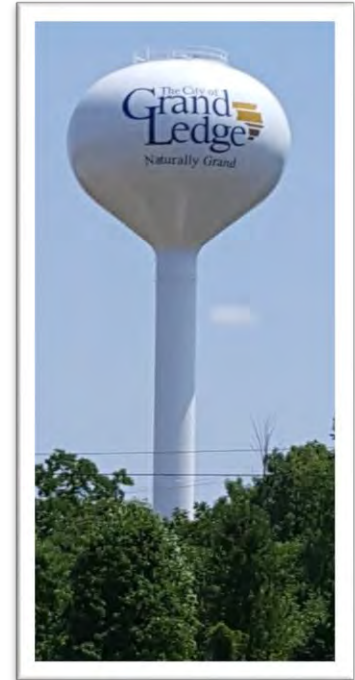
The existing sewage treatment plant is located at Fitzgerald Park. Built in 1975, and upgraded in 2009, the treatment facility may need to be upgraded again to correct any existing problems and to accommodate future demands. Underground lines are monitored and replaced as deficiencies occur.

Water System

Municipal water is an essential component of a City's infrastructure. In general, the City water service appears to function adequately, although there is an apparent need for additional services as development continues.

Wellhead Protection

Due to the high volume and intensity of commercial activity along the M-43 corridor, wellhead protection continues to be a high. Wellhead protection involves regulations on land uses and activities within an identified area to reduce the potential for groundwater contamination. There are a number of potential sources of ground water contamination that may be controlled. These may include discharge of hazardous substances from commercial and industrial facilities, pesticides and fertilizer from residential and agricultural areas, overloaded septic systems, nonpoint source pollution from roadways and parking lots, leading underground storage tanks, and site containing environmental contamination. Additionally, there are a number of pathways by which contaminants can reach the groundwater including air contaminants, leaking underground storage tanks and floor drains that must be considered during development. The City has adopted a wellhead protection ordinance, the requirements of which should be strictly enforced and monitored.



KEY CHAPTER FINDINGS

The following are important findings that were determined as a result of the analysis of the existing conditions of the community. These findings have been utilized in determining the goals and recommendations contained in the Future Development Plan.

Population, Economic and Housing Characteristics

- Due to availability of vacant land for residential development and the consistent growth of the Lansing metropolitan area, Grand Ledge's population is expected to increase at a steady pace in the next 20 years. This implies a need to plan for increased demand for residential, commercial and professional services; and an impact on infrastructure such as

roads and the public sanitary and water systems.

- The City has a relatively high median age due to the large percentage (14.1%) of citizens over the age of 65. The City must plan for various senior living accommodations in order to adequately serve these residents.
- The City has a relatively well-educated population which has allowed for a stable median income, high skill level occupations and higher housing values. Overall, the City has been able to accommodate a substantial amount of desirable affordable housing opportunities. The City should continue to maintain a balance in order to serve all segments of the population. Higher density single family development should be considered to accommodate an aging population that may want to downsize without giving up the option of home ownership.

Existing Land Use and Natural Features

- The residential areas of the community demonstrate traditional neighborhood design with tree lined streets, sidewalk and cozy spacing of homes. There are many signs of reinvestment that demonstrate the residents' devotion to the City's character. This must be preserved as vacant sites develop and existing sites redevelop.
- Commercial and office development is concentrated primarily in the downtown and along Saginaw Highway. Both are valuable to the community yet serve different functions. Future business development must be directed to these areas, as appropriate, and must preserve the character of each of these corridors.
- Industrial development is an important component of the City's tax base. The City should aggressively pursue new industrial businesses in the Grand Ledge Willis Industrial Park.
- Institutional land uses as well as parks and open space are scattered throughout the City and adequately serve the residents. This must continue as the population grows and new residential developments occur.
- Available vacant and agricultural land within the City and beyond the City limits are expected to develop in the next 2 years.
- The City possesses a number of significant natural features, primarily located along the scenic Grand River. This river and its distinct attributes are one of the greatest assets of the community and protection, preservation and enhancement should be continue to be held as a high priority.

Community Facilities and Services

- The Fire department is in need of facility upgrades.
- The current Master Recreation Plan outlines several goals and projects over a five year planning period. These projects should be implemented and at the end of the five year planning period, the plan should be updated.
- The City should continue to rigorously monitor its wells and enforce the City's wellhead protection ordinance.

Chapter 3: Future Development Plan

FUTURE LAND USE

The Future Land Use Plan serves to translate community goals into a narrative and graphic illustration. The Future Land Use map is to be used as a generalized guide to the location of growth and development in the future. Some of the future land use designations may be a reality now or in the near future, while others may take time before becoming an appropriate use of the land.

A number of factors were considered as the arrangement and intensity of land uses were designated. These factors are described below:

- **Growth in the metropolitan area** - The pace of development will be influenced by the economic health and growth in the Lansing metropolitan area.
- **Existing land use** - The core area of the City is built out and therefore, wholesale changes to the existing land use pattern would be difficult. The locations of existing single and multiple family residential, institutional, and parkland uses have been preserved, while commercial, office, and industrial land use have been somewhat refined. There are a few large tracts of undeveloped vacant land located along the City's boundaries that are master planned for residential land use.
- **Goal to remove incompatible uses** - The future land use plan strives to diminish incompatible land use relationships by consolidating areas for commercial, office, and industrial use. Commercial development is planned to be concentrated along Saginaw Highway and the CBD. Office development is directed to Clinton Street, Charlevoix Drive, and Saginaw Highway. Finally, industrial development is proposed to be directed to the Grand Ledge Willis Industrial Park located at northeast corner of the City on the east side of Clinton Street/M-100. Office areas and multiple family residential development serve as a transition between commercial activity and residential neighborhoods and prevents the sprawling of commercial development along Saginaw Highway. Gradually, it is intended that all businesses will be appropriately located within these areas which will protect surrounding neighborhoods.
- **Natural features** - The Grand River, natural topography, and woodlands provide marketable property for residential development. These can best be protected and appropriately developed under the Planned Residential designation. These sites present a

number of opportunities and challenges to development that warrant some flexibility in the design.

- **Infrastructure** - The capacity of the existing and planned sewer and water services and the road network, defines the intensity of uses that may be served without creation of capacity deficiencies or need for unplanned capital improvements.
- **Economic development** - The land use plan provides areas for business expansion and opportunity to diversify the employment and tax base of the City. Construction of a road along the south end of the parcels on Saginaw highway, east of M-100 would allow the south ½ of those parcels to be developed for commercial or office use.
- **Preferences of the City** - The land use pattern desired by City officials and property owners has been expressed with the objective of a diversified tax base, employment opportunities, provision of services for residents, preserving natural features and land along Grand River, and the desire for a mixture of uses and housing opportunities.
- **Planned regional land uses** - In order to fully assess the impacts of planned land uses within the City, the planned land uses within the region were considered. The Regional Future Land Use Map depicts the geographical area considered. The study area is bounded to the north by Grand River Avenue to include the Abrams Municipal Airport; the eastern boundary extends a mile or so past the Oneida Township limits; to the west the area is bounded by Oneida Road and the southern boundary is marked by St. Joseph Highway.

All these factors are depicted in the Future Land Use map and are represented in the various land use types and intensities. The Future Land Use map is a representation of the desired land use pattern for the build-out of the community.

Regional Land Use Pattern

In accordance with the Michigan Municipal Planning Act, it is the responsibility of the City to look beyond its boundaries when planning future land uses. The intent is to ensure that future development within both the City and surrounding townships is harmonious. It is also useful in evaluating traffic impacts on both communities and to plan for the possibility of shared services such as sewer and water. The Regional Future Land Use Map (Map 3) depicts the planned land use pattern within the area. The majority of the parcels outside the City limits are used, zoned, and planned by the townships for either single family homes or operating farms. The City supports the efforts of surrounding communities to continue preservation of agricultural operations to the extent possible, particularly in agricultural areas designated on the map. In the future, however, conditions may change and communities may see a conversion from agricultural operations. This is most likely in the southeast corner of region. If this trend occurs,

GRAND LEDGE MASTER PLAN

the most appropriate and compatible land use for these properties is single family residential developed at a density that is compatible with surrounding development conditions.

The largest amount of industrially zoned land in the city is located within the Grand Ledge Willis Industrial Park, located on the east side of Hartel Road (M-100), south of Eaton Highway. Highway commercial development is primarily concentrated along Saginaw Highway. Surrounding communities are primarily rural townships whose predominant land uses are single family residential and agricultural operations. North of the City, although planned industrial development, is primarily used for agricultural operations.



The Abrams Municipal Airport is a predominant land use to the north and is planned to be surrounded by primarily agricultural use, some single family development, and existing industrial operations. To the east of the City's boundaries, commercial development will continue along M-43 and single family development is planned to the north and south of the corridor. West of the City, single family residential and agricultural operations are planned along with some existing industrial uses. Finally, single family residential is planned to the south, creating a complete ring of single family residential land use around the City.

Analyzing the future land use pattern of this area is important to Grand Ledge for two main reasons. Number one, the development of surrounding communities can impact transportation, land use, natural features, and the economic development of the City. An understanding of their future plans provides the City foresight and the ability to plan and respond accordingly. For example, if surrounding communities planned for their agricultural land to develop as higher density residential development the City would be faced with major impacts to their road system and their businesses and services. There may also be an impact on community facilities such as sewer, water, and parkland

The second reason for analyzing regional land use is to ensure that the City's land use decisions are compatible with adjacent communities. For example, it would not be responsible planning if industrial development was encouraged within the City's boundaries where it directly abutted existing single family development where there was no potential for adequate screening and buffering.

Future Land Use Plan and Categories

The following are the key goals established that guide the recommendations contained in this portion of the document. They are based on input from the public and findings established during the analysis. All of the land use goals and recommendations must be evaluated together, not just

individually, to accomplish the desired vision of the community over the 10 year planning period.

Analysis of the regional future land use map, and other identified elements, assisted the City in preparing a future land use map that offers a strong urban core for the surrounding rural townships. The future land use map for the City offers a development plan that not only will serve the needs of City residents in a responsible manner but will also accommodate the planned growth of the surrounding communities. This section provides a narrative to explain the proposed development pattern illustrated on the future land use map.

Single Family Residential

Single family residential development occupies 41.9% of the land use area within the City. This category encompasses areas that are established residential neighborhoods with single family homes, large vacant parcels that should be developed for single family residential use, and sites that are used for some type of business that should be redeveloped for single family residential use in the future. The details of how these areas should be developed are described in the residential development subarea plan in Chapter 5. There are a few parcels that are designated for single family residential but are currently zoned and/or used for residential dwellings of two or more units and commercial businesses. Although these uses will likely remain for some time into the future, the City does not find them to be desirable within the areas in which they are located. Further, they are not consistent with the goal of concentrating multiple family and business development to more appropriate locations such as in the CBD, along Saginaw Highway and Clinton Street, and within the industrial park. If redevelopment or reuse of these sites is necessary, they will conform to the existing zoning ordinance.

As a City with the potential for future growth, it is important to plan beyond its boundaries to the abutting township. Although much of the land in Oneida Township was devoted to agricultural operations when the Master Plan was prepared, land use trends in the area indicate these areas will be ripe for other development such as residential and neighborhoods services. If the agricultural use changes, single family residential land use is planned for most of these parcels in an attempt to preserve the character of the City and accommodate future growth in and around the community.

An amendment to the zoning ordinance has recently been adopted to permit higher density single family residential development. Smaller single family dwellings (700-1,000 square feet in area) on reduced lot sizes would accommodate the needs of empty nesters, retirees, young professionals and other segments of the population that desire to own rather than rent their homes without having to maintain a 1,400 square foot home on an 8,450 square foot lot as required under the current zoning ordinance.

Multiple Family Residential

Multiple family residential designations include areas for buildings with two or more dwelling units. Although, by ordinance, density is calculated based on the number of rooms in the

structure, these developments typically are a minimum of 6-8 units per acre. It is important to provide and plan for multiple family development within the City in order to offer a variety of housing options for residents. Multiple family units above the businesses along Bridge Street are not shown on the map but are recommended to remain in the plan (see CBD section). Multiple family developments also provide an effective transition between single family residential uses and high intensity uses such as commercial and major thoroughfares.

Within the City limits, areas with this designation are primarily areas already occupied by multiple family uses and where expansion of those existing areas are appropriate. These are located in various small pockets throughout the City. The majority are located along major roadways such as M-43/Saginaw Highway and M-100/Clinton Street. These uses generate a higher concentration of activity and require adequate access and larger sites.

There are a number of areas where multiple family structures are not consistent with the intended character of the area and are planned for alternative uses. Spotty multiple family uses within existing established neighborhoods are not encouraged and should be phased out as the sites redevelop. Where redevelopment is not practical, at a minimum, the site design of these properties must be upgraded. East of M-100 and north of the railroad tracks on Grand Manor Drive is a small strip of multiple family dwellings that is nestled between existing industrial development and the railroad tracks. The land use pattern in this area is predominantly industrial and has resulted in a negative impact on the quality of the neighborhood. Attempting to preserve this multiple family development is not in the best interest of the City and should be converted to industrial use in the future.

The largest areas planned for multiple family residential use are located on the east side of m-100, south of the commercial uses along m-43. Adequate access coupled with the surrounding commercial development makes the sites ideal for multiple family residential.

The entire area east of M-100 should not, however, develop with one, consistently high density residential development. The intent for these sites is to create a natural transition between the commercial uses along M-43 and the agricultural and residential uses south of the City's boundaries. To accomplish this transition, the areas designated for multiple family should be high density (12-15 dwelling units per acre) near the commercial area and along the south access drive. This will provide safe access and circulation for the higher traffic volumes. The density should be less intense approaching Oneida Township in order to provide a more compatible land use with the nearby single family and agricultural operations. Appropriate development in this areas would be either duplexes, attached single family complexes or small lot single family neighborhoods.

Guidelines and recommendations for the design of future multiple family residential developments are described in the residential development subarea plan in Chapter 5.

Planned Unit Development

The Planned Unit Development (PUD) designation identifies sites that are appropriate for residential development of varying densities with accessory commercial use or commercial use along road frontages. Due to specific characteristics directly related to the site, there are a number of constraints that require departure from conventional site design in order to accomplish a successful project that both the City and developer can appreciate. Through the PUD ordinance, the developer should be allowed flexibility from the zoning ordinance requirements and standards to develop the site, provided an overall benefit is achieved for the community.

On the future land use map (Map 4) the PUD sites are numbered. For the development of each site, the City has established a specialized goal that should be accomplished in order to maximize the full potential of the property. Below is a description of how the City intends for each of these sites to be developed.

PUD #1

This site is located in the northwestern corner of the City fronting on Lawson Road. It shares the eastern boundary with Fitzgerald Park. This site presents a few key issues/constraints that need to be addressed in the development of the plan. These include the following:

- Adjacent to Fitzgerald Park
- Valuable natural features
- Nearby industrial development
- Significant frontage on Lawson Road
- Secluded from the rest of the neighborhoods
- Agricultural and single family residential to the north and west

Goal: Develop a single family residential neighborhood that maintains the traditional neighborhood characteristics of Grand Ledge with safe access to Lawson Road and adjacent residential neighborhoods while protecting the natural features of the site and the abutting park and prevents negative impacts that may result from the nearby industrial development.

To maximize the potential for this site and accomplish this goal, there are a number of methods that could be employed. To begin with, to prevent impacts from the industrial area, the City could consider allowing the home sites to be smaller than the minimum lot size and clustered away from the industrial uses, providing a well-designed buffer area. The density of the development could also be higher than typical single family of 5 units per acre to serve as a transition between the industrial and single family development in the surrounding area. In fact, it may be desirable to cluster the homes to attached housing to allow for more open space. Further, proper clustering of the units will allow for flexibility to protect woodlands on the site and along the border of the park.

The road system of the development should provide safe access and a connection to future development to the north. The right-of-way should be utilized in a manner that preserves the traditional neighborhood character of the City. Although it is secluded from the other neighborhoods, they should be designed under the same concepts that are described for single and multiple family residential development. For instance, sidewalks and street trees should be provided with building entrances oriented to the street. A pathway connection should be accomplished that will link the development with the rest of the City.

PUD #2

This site is located just east of PUD #1 and fronts on the north side of West Jefferson Street. The City believes there is a lot of potential in this area that cannot be overlooked. Through flexibility in the PUD development option, both the City and all other parties involved can benefit from a development that revitalizes the neighborhood.

The site is split into two components. The first is north of the railroad tracks along Gulf Street and is planned for higher density multiple family residential development. The second portion primarily fronts on West Jefferson Street and is south of the railroad tracks. This area is planned for lower density single family residential or commercial development. The site possesses the following characteristics that warrant the need for a planned development designation:

- Adjacent to Fitzgerald Park
- Presence of natural features such as a woodlands and Sandstone Creek
- Railroad tracks
- Mobile home park across West Jefferson
- Existing marginal uses on the site and surrounding area
- Renovated industrial building to multiple family

Goal: Redevelop the two components in a manner which preserves natural features on the site and results in high-quality development that is considered a significant reinvestment in the area that will serve as a catalyst for additional improvements to the area.

The northern component is planned for multiple family residential use with a minimum density of 6-8 units per acre and can be developed to meet this goal through a few simple elements. For instance, the road right-of-way must be improved to provide a paved road, curb and gutter for drainage, sidewalks, and street trees. A buffer zone should be established along the railroad tracks to offset noise and safety concerns. Extensive measures must be taken to prevent the clearing of trees and protect the Sandstone Creek, which feeds into the Grand River.

The southern portion of the site is ideal for Medium Density Residential or commercial development. To begin with, clearing existing buildings will be required to redevelop the area. In order for the redevelopment to have the possibility of a profitable investment, a density of

approximately 6-8 units per acre is necessary. While there is a trend of multiple family residential development in the area, there is also a substantial amount of single family and commercial development. A medium density residential development or convenience type commercial uses, designed in a manner that would be harmonious with the surrounding uses, would be most appropriate for the subject property.

To ensure that the project is desirable and that it promotes high quality redevelopment in the area, certain site design elements should be incorporated. First, the site should be configured so that the buildings front on West Jefferson and Perry Street and the required parking areas are in the rear, along the railroad tracks. Second, an effective buffer should be installed between the parking area and the railroad tracks to screen and minimize the impacts of noise from railroad activity. Finally, buildings should possess high quality architecture and materials which are consistent with the traditional neighborhood character of the community.

PUD #3

This development area is located on the south side of East River Street. The site faces Jaycees Park and offers an exceptional view of the Grand River. Existing office and residential uses of the properties do not fully appreciate the value of its view and access to both the river and downtown. Redevelopment of this area has phenomenal potential that can only be maximized through a PUD development option. Findings include:

- View and access to the river
- Close proximity to downtown
- City park across the street
- Shallow lots
- Steep topography
- Mixture of existing land uses
- Adjacent single family residential
- Minimal traffic

Goal: Redevelop this strip of valuable residential land in a manner which maximizes its views to the Grand River and its access to the CBD while preserving the surrounding single family residential character of the neighborhood.

The vision for this site is to develop “row housing”, or townhouse style development along the street front. Parking can be accommodated through a rear driving lane that accesses a carport or garage in the back of the unit and angled parking can be accommodated on the street. The buildings should be predominantly brick with entryways that are oriented to the street and sidewalk. Front porches and/or stoops are encouraged along with other site elements that create a pedestrian oriented environment such as benches and street lights along the roadway.

PUD #4

Situated along Saginaw Highway, this site is triangular in shape and backs up to the Beagle and high school property. To the east and west is an existing multiple family development. The topography of the land is relatively flat and woodlands on the site consist of a narrow tree line along the property boundaries. This site is ideal for recreation play fields and has been acquired by the Grand Ledge Public School District. The following are findings related to this site:

- Substantial frontage on a major roadway
- Adjacent to school property
- Flat land with minimal trees
- Citywide interest in providing more play fields
- Access either prohibited or restricted from Saginaw Highway

Goal: Maximize the potential for the site to provide additional residential or commercial development within the community, should the property become available for private development in the future, while accommodating a community-wide need for active parkland and other institutional facilities.

The City supports the use of the subject property for recreational use by the Grand Ledge School District. However, if the property becomes available for private development, the site should be developed to allow for the expansion of the existing multiple family development on the east side of the site with commercial development along the Saginaw Highway road frontage. The residential portion of the development should be designed to be compatible with traditional neighborhood design, allowing adequate connection to the existing neighborhood.

In exchange for allowing high density development clustered to the east side of the property, there is potential to utilize the remaining open space for active recreation space. It would be desirable to negotiate with the property owner/developer to allow the active recreation to be open to the public and possibly operated by the City or by the school district.

Mobile Home Community

This designation is located where there are established mobile home communities. These are located south of West Jefferson on the west side of the City and west of M-100 in the northern portion. Generally these developments are well-maintained and are located appropriately. The City should continue to monitor the condition of these developments and ensure they remain this way and offer a safe residential environment. These developments are important to the City because coupled with multiple family and single family neighborhoods, this designation allows the opportunity for various housing options within the community.

There is no additional area devoted to mobile home communities for a few reasons. To begin with, the existing developments are 3.2% of the land use acreage in the City which is almost equal to the amount devoted to multiple family residential use. Therefore, the City believes there is ample provision for this type of housing. Equally important, the sites that remain available for

development present a number of constraints such as natural features and have largely been designated for Planned Unit Development.

Central Business District

The Central Business District (CBD) is one of the core elements to the community. The historic character, walkability, diverse retail market and its link to the Grand River distinguishes Grand Ledge’s downtown from other communities in the area. These features have created a real draw to residents living in adjacent Townships and nearby cities such as Delta Township, Oneida Township and Lansing.

Through infrastructure improvements such as parking lot development and reconstruction, park improvements and a building façade grant program, the City has demonstrated its devotion to maintaining the strength and vitality of the CBD. Specific recommendations for the downtown are discussed in the subarea plan.

The area designated for CBD is generally consistent with the Downtown Development Authority boundaries. Along Bridge Street, retail and office activity is encouraged at the street level. These businesses should continue to be oriented to the street environment and accommodate the abundant pedestrian activity. Above the street level, more office development and residential units are encouraged. The mixture of residential, office and commercial is very complimentary in a downtown environment because each use generates activity for the other uses.

Commercial/Highway Services

Retail businesses and services which serve the City and Oneida Township that are not located within the CBD are designated with this category. They are primarily located along Saginaw Highway/M-43 and run a few blocks north and south along Clinton Street/M-100. Specific recommendations on the design and development of this corridor are addressed in the subarea plans. To summarize, the key design issues include:

- Access management
- Architectural design guidelines
- Landscaping/screening



- Lighting v
- Pedestrian circulation

Office

Office development includes uses such as professional offices, medical clinics, and banks. These are primarily located along Saginaw Highway/M-43 with a small pocket along Clinton Street. Offices serve as effective transitions between residential and commercial uses and thoroughfares. An access road south of M-43 on the east side of M-100 would allow for development of the south half of the commercial properties along M-43. Offices in this location would provide an appropriate transition between the commercial uses along Saginaw Highway and the planned multiple family residential development to the south.

Charlevoix Drive is a service drive that has gone a long way towards alleviating traffic on M-43 and has provided safe access for both the commercial and office sites. The planned access road on the opposite side of M-43 would also provide for safer operations along M-43 and at the M-43/M-100 intersection. West of the intersection there is limited area for installation of a service road, however, redevelopment in the area has resulted in the closure of several driveways on M-43 and M-100 and provided for shared and cross access between parking lots.

Industrial

Industrial operations include uses such as manufacturing, assembly and warehousing. Some of the areas designated for industrial operations are existing businesses. Many of these sites are located right at the street front and have outdoor storage. This activity should be controlled through code enforcement and gradually upgraded during site plan review to present an improved appearance along roadways.

New industrial development is concentrated at the northern end of the City in The Grand Ledge Willis Industrial Park. Site design and screening methods should be required to off-set any negative impacts of industrial operations on adjoining residential uses. In addition, a railroad spur should be installed to serve the businesses in the industrial park.

Institutional: Churches, Schools, Public Facilities

Institutional uses provide important services to the community and should be retained. If institutional sites are to be reused, they should be considered for other institutional development. This will ensure that residents will always be provided adequate community facilities.

Although no new parcels are shown for institutional use, there are plans for improvements, relocations and expansions to City owned and operated services. Through capital improvement programming, the City can plan reinvestment of these facilities five to six years in advance. The proposed capital improvement program is contained in a separate section of the document.

Public Open Space/Airport: City and County Parks, Cemeteries

These areas are public sites that should be preserved for the community. The majority of this land is along the Grand River. Preserving views and access along the river has been a tremendous benefit to the community and should continue to be protected. The other unique element to the City's public space is the Abrams Municipal Airport. The airport approach plan and layout plan as approved by the Michigan Aeronautics Commission are incorporated as part of this document. The future use, development, and improvements to the airport should be an integral part of the City's capital improvement programming. The expansion areas for the City cemetery should be prepared for use, as needed.

Similar to the institutional category, no new sites are designated for public open space because there is no available publicly owned land. Providing these facilities for the citizens of Grand Ledge is of paramount importance. Available opportunities include preserved open space areas that is either useable recreation or preserved natural features such as woodlands within Planned Residential Developments. These areas could either be private and maintained by associations or dedicated to the City as public space in the Planned Unit Developments.

ZONING PLAN

The Zoning Ordinance is one of the primary tools used to implement the Master Plan as it provides a guide to how vacant land in the City should develop and certain areas should be redeveloped over time. The Master Plan is a policy document, whereas, the Zoning Ordinance is a legal document that regulates allowable land uses and development requirements in the present. The Regional Future Land Use map, primarily serves as a guide to rezoning land that is annexed into the City.

Section 33 of the Michigan Planning Enabling Act mandates that if a community has adopted a zoning ordinance, a zoning plan describing how the land use categories on the future land use map relate to the districts on the zoning map must be included in the Master Plan. The following table provides a comparison between the land use classifications on the Future Land Use Maps (Maps 3 & 4) and the zoning districts in the Zoning Ordinance.

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Table 9: Future Land Use & Zoning District

Future Land Use Designation	Zoning District
Agricultural	Ag, Agricultural District
Single Family Residential	R-LD & R-MD, Single Family Residential Districts
Planned Residential	R-PC, Residential Planned Community
Multiple Family Residential 2+ Units	R-HD, Multiple Family Residential District
Mobile Home Community	MH, Mobile Home District
Central Business District	CBD, Central Business District
Commercial/Highway Services	B-1, Highway Service District
Office	OS, Office Service District
Industrial	I-1, Light Industrial & I-2, Heavy Industrial Districts
Institutional: Churches, Schools, Public Facilities	R-LD & R-MD, Single Family Residential Districts
Public Open Spaces/Airport, City & County Parks, Cemeteries	R-LD & R-MD, Single Family Residential Districts
	Ag, Agricultural District
	I-1, Light Industrial & I-2, Heavy Industrial Districts

The various zoning districts and the uses permitted therein are consistent with the future land use categories contained in the Master Plan. The zoning map is also consistent with the future land use map, with the exception of certain areas that have been identified as being incompatible with surrounding uses. These areas include, but are not limited to, the multiple family residential uses along Grand Manor Drive and various parcels along W. Jefferson Street that contain commercial and quasi-industrial uses.

NATURAL FEATURES

The Master Plan emphasizes the importance of the resource base of the community. Protection of the City’s resources requires the adoption of policies directed toward specific resource problems including drainage, groundwater quality, natural topography, and vegetation. Resource protection regulations can be incorporated in subdivision, zoning, and PUD regulations. Where sites containing significant natural features are proposed for development, clustered development and other innovative site planning methods should be utilized to preserve and protect the natural features of the site.

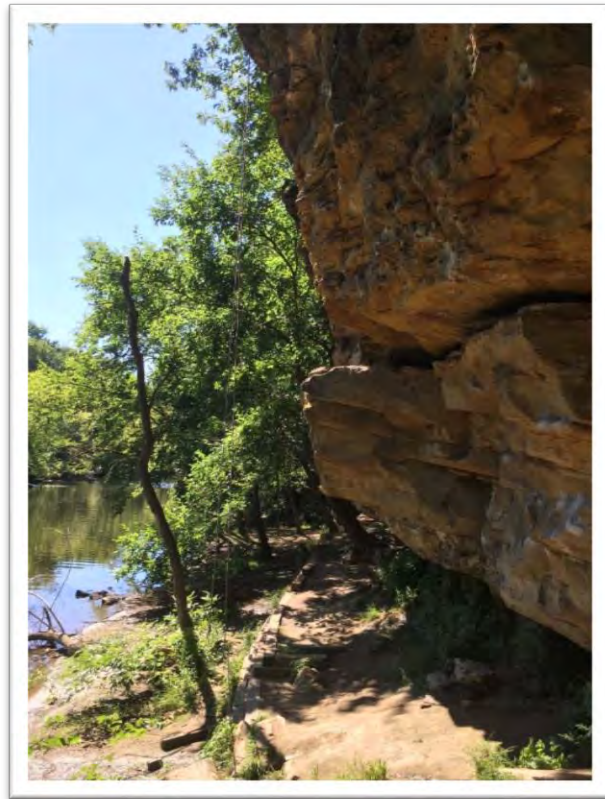
Natural Features Goals

- *Preserve the quality of life in Grand Ledge by retaining significant sensitive amenities within the community.*
- *Encourage integration of natural features such as woodlands and wetlands into site development as aesthetic and functional features while protecting the quality of the features.*
- *Protect the quality of the Grand River and its tributaries while at the same time promoting it as one of the City's greatest assets.*

Natural Features Setback

With the exception of the Grand River, wetlands and other waterways are very limited in the City. However, those that do exist contribute to the aesthetic character of the community and should be incorporated as part of any future development. This will allow the continuance of open and green space as well as contribute to retaining the rural, small-town setting. Maintaining a designated setback will go a long way towards protecting the eco system of any wetlands within the community.

There is a strong basis for this type of requirement. Development surrounding water features, particularly wetlands, affects the function of the water feature. For example, wetlands are dependent upon an interaction between the wetland and the surrounding upland. The upland soil and vegetation surrounding the wetland all affect the amount, the means and the rate at which water enters the wetland following a storm or snow melt. Development of the surrounding upland will alter water flow to the wetland. In other instances, physical improvements such as structures, roads, and storm sewer systems can intercept surface flow to the wetlands. The undisturbed soil between the site improvements and the wetlands acts as a buffer to try to maintain the natural upland/wetland interaction that existed prior to development.



Grand River Protection

The City has gone to great lengths to maintain the natural character and history along its stretch of the Grand River. All of Grand Ledge's beautiful City parks and a county park are located

along the banks of Grand River: Island Park, Jaycee Park, Fitzgerald Field, Riverwalk Park, Fitzgerald Park, and Oak Park. These facilities have allowed ample visual and physical accessibility to the river.

Many components of natural features protection are directly related to the river. The impacts of development throughout the City will slowly make its way to the waterway system. Grand Ledge must continue to emphasize natural features protection in order to prevent future damage to the river. Protection of the river can further be accomplished through the maintenance of open space along the river. As private property develops, there should be a consistent emphasis on the river as an asset to be preserved. Through zoning and PUD regulations, the City can ensure that the Grand River will continue to offer benefits to the community far into the future. A riverfront corridor overlay zoning district could be used to provide these type of regulations, modeled after the MDNR's suggestions.

Seven Islands Dam

The Seven Islands Dam was constructed in 1921 to raise the water level on the Grand River. The dam is approximately 310 feet long, including a fish ladder on the south river bank. The dam consists of two main components: the spillway and a gate structure made up of seven 6-foot wide gates that can be raised or lowered to control the water level behind or upstream of the dam.



A study by ENG. Surveying and Engineering was conducted in November, 2014 to evaluate the condition of the dam and outline various options to address the deteriorating condition of the gates and the ability of the dam to hold back water. The City should develop a plan to fund the implementation of option 3 described study. This option involves removing the dam completely, but maintaining upstream water levels. The dam would be replaced with a series of boulders, channels and pools which would maintain the water elevation upstream and gradually step down to the downstream elevation. This option provides for a more natural river flow.

The advantages to option 3 are:

1. More and better external state and federal financing opportunities (grants)
2. Better water quality and fish passage
3. Better recreational opportunities
4. Removal of the fish ladder

Until such time as option 3 can be implemented, the city should continue to monitor the condition of the dam and make repairs as necessary. In addition, the dam should be inspected at least once every five years by a qualified engineer.

Storm Water Management

For an almost built-out community with more construction planned in the future, one can anticipate additional burden on existing natural drainage systems. Problems with the system may involve localized flooding, environmental damage and costly drainage improvements to be borne by taxpayers. A comprehensive approach to storm water management should be considered which will encourage the preservation of the natural drainage systems of the community. The City should consider creating a storm water management program based on the state's "Best Management Practices" program. The guidelines and policies of this program address sensitive and responsible management of storm water in the City. The City may also consider working with the Eaton County Drain Commissioner's Office and surrounding communities to implement this program as storm water affects a more regional context.

Woodlands

While the City is primarily built-out, there are many sites that remain to be developed or could be redeveloped in the future. Some of the sites contain woodlands and significant trees. The City should regulate the extent of tree clearing and site grading that occurs by requiring an inventory of trees during site plan review and a demonstration that tree were preserved. Also, protection methods should be required during construction to prevent damage.

Fish and Wildlife Habitat

Waterways and natural open space corridors not only provide a benefit for people, they also serve as fish and wildlife habitats. In other words, development immediately adjacent to these areas has an impact on habitat. Protection of the area that lines natural features is also important to wildlife because this is the interface between the aquatic and terrestrial (upland) ecosystems. In Grand Ledge, the primary focus of corridor preservation is on the Grand River.

COMMUNITY FACILITIES AND SERVICES

Community Facilities and Services Goals

- *Provide quality responsive and cost effective services to the community such as prompt response to public inquiries, zoning enforcement, inspections, maintenance of public facilities and roads, recreation, recycling, and waste disposal.*
- *Improve emergency response times through modifications to the transportation to meet the needs of the entire service area.*
- *Continue to improve the park and recreation system, including regular updates of the*

Parks and Recreation Master Plan.

- *Assist with efforts to improve the environment through best management practices for storm water and consideration of environmental impacts on all major capital improvements and municipal operations.*
- *Provide safe quality drinking water and adequate sanitary sewer service through continuous improvements to the system.*

Parks and Recreation

Recommended improvements to the City's park and recreation system are listed in the 2011 Master Recreation Plan. That document contains a number of recommendations regarding improvements and maintenance to the City's parks, and is considered a chapter of this Master Plan. Updates to the plan are necessary every four to five years.

City Hall and Police Department

In 2014, The City completed renovations of the former Greenwood Elementary School building at 310 Greenwood Street for use as a city hall, police department, chamber of commerce and, community/senior center. The new facility includes all City administrative offices, a state-of-the-art police department and several community meeting rooms. Indoor and outdoor recreational facilities are also provided. The new facility should be adequate to accommodate the needs of the City for the foreseeable future.

Grand Ledge Area District Library

In 2016/2017, the library constructed a 1,300 square foot addition to the west side of the building. The addition will provide additional customer space as well as an elevator to make the building handicap accessible. Future expansions should also be considered as necessary to accommodate its growing needs. The most practical expansion seems to be from the rear, which would require relocation of all or part of the GTE fenced lot.

Grand Ledge Area Emergency Services Authority Station

To provide faster responses to emergencies and to contribute toward decreasing the Insurance Services Office (ISO) ratings for both the City and Oneida Township, a new station should be constructed south of the bridge. Substantial alterations to improve its functionality should be made to the existing station if it is to remain in use.

Public Services Department

The Public Service Department facility at 13253 Lawson Road should be evaluated for its adequacy and alterations or expansions made as necessary.

Sewer System

Existing sanitary and storm sewer systems should be monitored and upgraded as necessary to ensure compliance with all state environmental regulations. These systems should also be

evaluated to determine if there is adequate capacity to accommodate all existing demands as well as future growth. An overall plan for replacement of older lines should be considered.

Water System

Water lines should be monitored for problems and replacement coordinated with other capital improvements to maximize efficient use of spending. The water system should also be evaluated to determine whether there is adequate capacity for future needs.

Wellhead Protection

The City shall continue to monitor activities occurring near the City's wells to prevent groundwater contamination.

Chapter 4: Transportation Plan

As an established community that is facing potential growth pressures, Grand Ledge must address not only current transportation concerns, but those associated with increased traffic volumes in the future. Similar to land use, traffic volumes in the City are influenced by development patterns in the region, and the amount of through traffic. Thus, the City must look beyond its boundaries and jurisdiction in order to ensure responsible planning. This involves cooperation with the Eaton County Road Commission, the Michigan Department of Transportation (MDOT), and surrounding communities. In the Lansing area, the Tri-County Regional Planning Commission is available to ensure transportation decisions are based on a regional perspective. This Chapter describes improvements to the transportation system that involves small scale “fine tuning”, an increased emphasis on a walkable environment and more ambitious projects.



Grand Ledge’s development pattern has been greatly influenced by the motorized transportation system. The impact of the river crossing, rail line, convergence of two state highways, and nearby I-96 interchanges is clearly evident when one views the land use map. More intense uses have historically clustered near the river crossing or located along the higher volume state trunk lines (M-43 and M-100).

Streets have influenced the character of the City on a smaller scale. The width, continuity (or lack of it), alignment, and design of individual streets affects the types of vehicles that use it, travel patterns, traffic volumes, vehicular speeds, and its overall appearance. Therefore, the City

must also ensure that future road improvements and development do not jeopardize the pedestrian environment and small town atmosphere of the community. This includes not only in the location and design of the streets, but how they relate to existing and future land uses. In addition, this evaluation must be comprehensive looking not just at the street system for vehicles, but also the rail lines, airport, pedestrian circulation, and non-motorized transportation routes.

MOTORIZED TRANSPORTATION

Motorized Transportation Goals

- *Preserve the capacity, level of service, and safety of the road network to support current and future development.*
- *Utilize the roadway as a design element to create a positive image of the community.*
- *Coordinate road improvements with City policies on land use, non-motorized circulation, natural features preservation and provision of community facilities.*

General Motorized Transportation Issues and Recommendations

Street Pattern

Grand Ledge has three basic street system types that typify the time period of their construction. The innermost core developed from the City's first settlement to around 1910 with a grid pattern set at right angles to the river. In the next growth spurt through about 1950, the street pattern changed to a grid skewed at an angle to the original grid. More recent developments have used a curvilinear, or wrap grid, system. In general, the roads, right-of-way widths, and building setbacks have become wider over time. This pattern has created some distinct characteristics in various neighborhoods - more compact development with narrow streets in the more mature neighborhoods, larger lots and setbacks along wider curved streets in the newer subdivisions.

Jurisdiction

Planning for streets is complicated by the various governmental units that have control over decisions on access permits, improvements and maintenance. Though Grand Ledge has jurisdiction over most streets in the City, M-100 and M-43, are under the jurisdiction of the MDOT. In addition, the Eaton County Road Commission has jurisdiction over most of the roads just outside the City limits. Tri-County Regional Planning Commission has the responsibility to help ensure these three agencies coordinate decisions and investments on streets.

M-100 (Hartel Road/Clinton/Jefferson/Bridge Streets) runs generally north-south through the center of the City. M-100 connects M-43 with the downtown, the north side of the river, and crosses the rail line to connect with the airport and an I-96 interchange approximately 2.5 miles north of the City limits. M-43 (Saginaw Highway) runs east- west near the City's south border. Saginaw Highway carries the highest traffic volumes in the City and has become a significant

commercial corridor. Design, traffic operations, and character along those streets produces the image of Grand Ledge for many motorists since those streets carry the highest traffic volumes and are the primary entrances into the City.

The jurisdictional situation along M-100 and M-43 has caused several concerns. Some MDOT projects aimed at reducing crash potential have been in conflict, to some degree, with the City's vision for a "walkable" community with grand entryways, a median along M-43 and a reduction in the number of driveways. In addition to Grand Ledge, Delta Township to the east also envisions a median along M-43 in the future. The Tri-County long range plan does not currently identify this project.

Cooperation between the City, MDOT, and Eaton County Road Commission can help ensure that the goals of each are being considered with street and pathway projects. The Michigan Municipal Planning Act states that no street shall be constructed in conflict with City's adopted master plan unless approved by the City's Planning Commission. The Planning Commission decision can only be overturned by a 2/3 vote of the City Council (for City streets) or Michigan Transportation Commission (for state trunk lines). Communication early during project development can help ensure the type of cooperation envisioned in the Planning Act.

Cooperative ventures could increase the likelihood for the City to receive funding assistance through MDOT's discretionary funds to help implement recommendations in this plan for street and pathway improvements.

Street Maintenance

Street maintenance is generally the most significant cost to maintaining and improving the City infrastructure. Many City streets are in need of repair and/or resurfacing. The Public Services Department selects certain streets each year for resurfacing based on the condition of the streets and budget constraints. The City should focus on maintaining roads that are already in good shape while continuing to repair and reconstruct roads that are in a state of disrepair. The City should develop a plan to hard-surface all unpaved public streets.

Pedestrian Comfort and Safety

The small town character of Grand Ledge makes it very inviting to those who choose not to drive but rather walk or ride a bike. It is important, therefore, that amenities and safety provisions are in place to accommodate pedestrians.

The City should continue to improve its non-motorized transportation system by:

- Reducing street widths.
- Expanding the City's non-motorized pathway system including extending the riverwalk to Fitzgerald Park.
- Improving existing sidewalk and installing new sidewalk where it currently does not exist.

- Obtaining a study of the Jefferson/Bridge street intersection to determine what modifications would be necessary to increase pedestrian safety at that location, including curb bump outs and alternate pedestrian signal phasing.

Specific Transportation Issues and Recommended Improvements

Map 5 graphically identifies the key transportation issues and locations in the community. The following text directly corresponds to the items listed on this map. Following this map is Map 6 which illustrates some recommendations best represented by a map. Issues and recommendations are discussed below and are based on the above listed motorized transportation goals, with due consideration to the other community goals outlined in this plan.

It should be noted that a traffic operations analysis should be completed before implementation of any of the following recommendations to ensure that traffic and safety requirements are met.

Aesthetics Issues at City Entrances

Strong physical features should be provided at key entrance points to the community to alert motorists they are entering the City. This will accomplish a number of positive objectives. Entrance features will make a positive statement about the community character for visitors and residents as they enter. For motorists traveling through the City along major corridors it will signify the entrance to the community and differentiate the City from other communities located along that route. Providing entrance features to the community may also stimulate the economy and activity in the City as it can help guide motorists to downtown shopping, parks, and neighborhoods.

The key entrance points are identified on the map and include along M-43, M-100/Hartel Road and at West Jefferson. Entrances located along the key corridors should include landscaping and signage. The proposed median will assist in accomplishing a dramatic recognition of the community along M-43. Signage at the M-100/M-43 intersection and at M-100 to the north should include direction to the CBD. More subtle landscaping and signage that exemplifies the residential character of the community should be installed on West Jefferson Street.

Railroad Crossing Delays

Numerous trains each day along the CSX rail line (formerly Pere Marquette Railroad) that intersects M-100 near the north side of town are an impediment to traffic circulation through Grand Ledge. Rail activity at this single grade crossing not only produces long and inconvenient delays for motorists, it can also compromise emergency response service from the Grand Ledge fire, police, and EMS. Vehicles waiting for trains to pass can back-up as far south as the fire station, blocking its driveway. Alternative routes are limited for some distance away. An additional river crossing in closer proximity to Grand Ledge would relieve some of the traffic and provide an alternate route for traffic.

Vehicular Bridge

Bridge Street provides the only crossing of the Grand River within the City and nearby areas. This single crossing results in a large volume of traffic through the downtown and limits the options for emergency response vehicles.

A second river crossing has been discussed on numerous occasions as a viable consideration to evaluate. The future road improvement maps identify two possible locations to consider; one at Nixon Road and the other at Broadbent Road. The most viable option is an extension of Broadbent Road connecting Willow Highway to Eaton Highway.

Traffic Calming

Vehicular speeds through downtown and throughout the community have become a concern. Map 5 identifies two main focus areas - item number 5 at West Jefferson and item number 8 - along Bridge Street in downtown. This segment, however, addresses traffic calming concern throughout the entire community.

Community-Wide Action

Historically, a primary goal of traffic engineering was to provide an efficient, fast, and safe movement of traffic through the road network. As areas develop and traffic volumes increase, fast and efficient roadway design in neighborhoods contributes to problems related to cut-through traffic, especially when the adjacent arterial streets become congested and motorists begin seeking alternate routes. In order to alleviate these traffic problems, traffic calming measures can be employed, particularly in residential neighborhoods.

The Institute of Transportation Engineers defines traffic calming as “the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.” Traffic calming measures are both regulatory features and/or design of a street that causes drivers to slow-down and be more attentive. Traffic calming is a way to visually and physically reduce speeding in residential areas. The physical change is in the road parameters and the psychological change is the “feel” of the driving. The intent is that this reduction in speed will reduce crashes, air pollution, congestion levels, noise pollution, and generally improve the environment of the street. Some of the most desirable traffic calming devices are as follows:

- **Street narrowing, slow points, or chokers** include curb bump-outs, channelization, and landscaping features that narrow the street to a minimum safe width. They are often installed at intersections to reduce speed and/or redirect traffic. They provide for larger areas for landscaping, enhance the neighborhood, facilitate loading and unloading and reduce the distance for pedestrians to cross the streets.
- **Angle points or chicanes** are curbed horizontal deflections in the path of vehicle travel. They are built along the edge of travel-way similar to street narrowing treatments. They

use physical obstacles and parking bays, and are staggered so drivers must slowdown in order to maneuver through the street. Trees are often used at the slow point to restrict driver vision and create a feeling of a “closed” street.

- **Median slow points or channelization** include center located islands that divides the opposing travel lanes at intersections or at mid-blocks, pedestrian refuge treatments and the other standard forms of intersection traffic control islands. These are aimed at reducing speeds while enhancing the pedestrian crossing points and safety.
- **Intersection diverters** are features that partially close an intersection to limit the allowable turning movements and divert traffic. They are used to convert an intersection into two unconnected streets, each making a sharp turn. This alters traffic flow patterns and limits the ability of vehicles to cut-through residential neighborhoods.
- **Street closures** are highly constrictive and affect the network traffic flow by eliminating neighborhood traffic from cutting-through.
- **Getaways or perimeter treatments** are visual and physical treatments used to communicate a message to drivers entering residential neighborhood. Traffic signs, intersection narrowing, medians, textured pavement surfaces such as brick and landscaping features are often used to create this effect. Entry treatments are used to increase driver awareness to changes in roadway environment.

Traffic Calming on the Bridge

Traffic speeds must be specifically addressed in the downtown in order to ensure a safe pedestrian environment and to stimulate activity and exposure for the businesses. To that end, the recommendations of the 2006 traffic calming study should continue to be implemented in coordination with MDOT. The specific recommendations of the 2006 traffic study included a reduction in the number of lanes on Bridge and Jefferson Streets, which has been accomplished, on-street pathways, curb bump-outs at certain intersections and parallel parking on the bridge.

A lane of on-street parking may act as a “visual obstacle” and cause drivers to decrease their speeds. On-street parking also creates a buffer between the sidewalk and the street, having the potential to improve pedestrian safety for those walking across the bridge or watching a baseball game.

Effective Implementation

Implementing a traffic clamming program should consider the following:

- Traffic calming measures should be looked at from an area-wide traffic calming

prospective.

- Traffic calming measures should be used as speed controls rather than volume controls to prevent the diversion of through-traffic to parallel residential streets.
- It is important to highlight the presence of traffic calming measures by landscaping and treating the street edges. These measures complement the engineering design by softening the appearance of speed humps and enhancing the appearance of more aesthetic measures such as chicanes and traffic circles. Also, landscaping measures can enhance engineering measures and make them more effective and safer by highlighting their presence.
- Traffic calming devices should be designed in coordination with emergency services to ensure that safe emergency vehicle access is maintained to all areas. Details such as mountable curbs and gutters can often help resolve the problem.
- A risk management program should be implemented to minimize liability issues through proper design, signage, and lighting of traffic calming devices.

Due to the predominance of residential neighborhoods in the community, the City could turn to the residents to assist in effective traffic calming. The most effective method applied in other communities begins and ends with community involvement. By forming a “Citizens Traffic Committee” the neighborhood creates an organized forum to identify, discuss and resolve traffic speed problems. The components and process the committee should follow is listed below:

1. Problem Identification: Isolate and establish the real problems and dangers.
2. Education: Public campaigns on traffic speed calming can “spread the word” and raise awareness about the issue. This could also involve a neighborhood speed watch program where residents work with the police department to control speeds.
3. Enforcement: If the citizen’s committee worked with the police department, this organized group may have better luck enforcing speeds in this neighborhood.
4. Engineering: If community education policies do not prove to be effective, traffic management tools should be evaluated. These include traffic control devices, traffic calming methods, and roadway markings.

Access Management Issues

Within the community and along the major corridors, access management should continue to be improved. The goal of access management is to provide standards which will facilitate through

traffic operations and improve public safety along major roadways. The access guidelines have two functions: 1) to protect the public investment in the roadway by minimizing congestion and accident potential; and 2) providing property owners with reasonable, though not always direct, access.

Community-Wide Access Management

The City should continue to carefully evaluate the number and placement of driveways in relation to intersections and other driveways throughout the community. Fewer and better spaced driveways will preserve the capacity of the streets and reduce the potential for crashes.

Specific recommendations for traffic management along M-43 are discussed in greater detail in the subarea plan. Essentially, a newly constructed and designed median discussed would create a new and improved environment for access management. The location of the proposed median is noted as item “D” on Map 6.

Truck Traffic in the Downtown Area

Although not perceived as an industrial town, there are two substantial industrial areas at the west and northeast sides of Grand Ledge. These areas require deliveries and pickups from large trucks, and therefore generate daily truck traffic in the downtown area. The majority of this truck traffic enters the City via M-43 (onto M-100 or West Jefferson Street) or M-100 from either the north or south side of town. Trucks often travel through the center of the CBD since Bridge Street offers the most convenient crossing of the Grand River. While recent improvements to the geometrics of the Bridge Street/Jefferson Street intersection have improved turning movements, heavy truck traffic and high speeds continue to create hazards for pedestrians. An alternative crossing of the Grand River would help to reduce the amount of truck traffic in the downtown making it a more inviting atmosphere for pedestrians.

City Street Master Plan

The following are the recommended locations for road extensions that have been prepared as part of the City of Grand Ledge Street Master Plan and are represented on Map 6.

Connect Tallman Road to M-100

A road connection should be constructed along the north line of Meadow Woods Subdivision connecting Tallman Road to M-100. The intent of this road is to provide an alternative traffic route for existing and future development in the West Main Street/Tallman Road area. The proposed road would be designed to alleviate traffic from primarily West Main Street and also Tallman Road. This road and the extension of Eaton Highway described below would be designed in a manner that would not adversely affect the operations at the grain elevator to the north.

Extend Eaton Highway to Tallman Road

Eaton Highway should be extended west to Tallman Road. The intent of this road is to provide an alternative traffic route from Tallman Road to M-100. Currently, a driver trying to get from

Tallman Road to M-100 would need to either take Tallman Road north to State Road or take West Main Street into the City. If the property north of Meadow Woods Subdivision develops, this road would provide a traffic route to M-100 that would not only be more convenient for the future residents of that area; but would also relieve traffic from Tallman Road, State Road and West Main Street.

South Access Road

An access road should be established running parallel with M-43 that extends east from Hartel Road/M-100 to the City limits. The northern boundary of the easement should be 660 feet south of the centerline of M-43. The road should turn north to M-43 to create a four-way intersection with Charlevoix Drive. The easement should be 66 feet wide and serve as an east-west transportation utility corridor.

New Road from M-100 to Fieldview Drive

Access to M-100 for the parcel directly east of Woodview Estates should align with Fieldview Drive.

New Road from School Property to M-43

A new road should be constructed connecting Jenne Street to M-43, through the school property, to align with Old Saginaw highway. A signalized intersection at the new road and Old Saginaw Highway would mitigate safety concerns regarding limited sight lines for turning movements at this location. Another option is to align a new road through the school property with an entrance into the commercially zoned parcel of land just west of where Old Saginaw Highway connects to M-43.

NON-MOTORIZED TRANSPORTATION

Non-Motorized Goals

- *Continue to provide and expand a comprehensive, multi-modal pathway system throughout the community that promotes walkability as well as accessibility for non-motorized traffic.*
- *Ensure that facilities are designed to be safe and accommodate a variety of intended.*
- *Increase accessibility through the City by utilizing pathways to link various points of interest within the community.*
- *Promote the development of new facilities as well as integrated facilities within the developed portions of the community as appropriate.*

Non-motorized circulation throughout a community provides enormous benefits to residents from a social, economic, and environmental perspective that improves the quality of life within the community. These benefits include:

- An alternative to automobiles so traffic volumes can be reduced.
- Improved accessibility to schools, churches, the library and others public or institutional uses.
- Designation of specific areas for non-motorized travel can improve safety since it separates bicyclists (especially the younger and casual bicyclists) from vehicular travel lanes.
- Increased public access to natural features such as the Grand River, woodlands, and wetlands. This will heighten awareness and preservation of sensitive resources.
- Increased access to the river and riverfront parks improves opportunities for recreation.
- Affordable, year round active recreation available to all age groups that improves community health, family togetherness, and neighborhood cohesion.
- Contributions to economic development efforts in the downtown and along other business corridors.
- Improves the value of property situated along the pathway.

The City continues to implement a comprehensive sidewalk and non-motorized pathway system throughout the community. The system is well used by City residents but there remains a number of gaps in the system, particularly along M-43, and expansions are needed to reach newer development on the outskirts of town. In some areas, the pathways are not wide enough to accommodate the higher pedestrian traffic volumes and road crossings are not well marked for safety.

Implement Non-Motorized Pathways Plan

A pathway plan is included as part of this document. There are four significant features to the Plan:

1. Pathways are planned along the following roadways.
 - a. M-100/Clinton Street/Hartel Road
 - b. North and South Bridge Street
 - c. Saginaw Highway
2. A pathway connection is proposed to connect West Jefferson Street through Fitzgerald Park and across the river to Lincoln Brick Park.

3. The riverwalk should be extended from Island Park along the south bank of the river to Fitzgerald Park.



4. A non-motorized bridge connecting South Clinton Street to North Clinton Street would provide a safe location for pedestrians to cross the river without having

to mix with the heavy vehicular traffic that is present in the downtown. A pedestrian bridge at M-100 would also provide another means of connectivity between the north and south sides of the bridge and greater opportunities to expand the City's non-motorized transportation system.

Sidewalk Program

The City should continue to repair, replace, and install new sidewalks as necessary, throughout the City. In accordance with City ordinance, sidewalk is required to be provided along all public street frontages as new development occurs. The gaps in the sidewalk system along M-43 will continue to close as new development or redevelopment occurs.



Additional Recommendations

More consideration must be given towards the design of pedestrian crosswalks to ensure the safety of the pedestrian. This includes pedestrian signals and enough space for pedestrians to stand a safe distance from moving traffic. Pavement should be striped or treated in some way that will alert motorists of common pedestrian crossing areas. Finally, at

larger intersections where pedestrians have to cross four or more lanes of traffic, the sidewalk should project out as much as possible at the corners to decrease the length of the walk.

Funding

Various sources of funding should be explored to implement construction of the pathways. MDOT administers a federal grant program called Transportation Equity Act for the 21st century. This program funds projects that are related to the enhancement and development of transportation facilities such as non-motorized pathways, streetscape, and landscape improvements and historic preservation of transportation related facilities. Finally, the City can assist in funding pathway improvements by incorporating it into the general fiscal year budget through existing revenues, a bond issue or possible special millage.

Coordination

In order to ensure the pathway system is comprehensive, the City must continue to coordinate with neighboring communities such as Delta and Oneida Township to provide pathway connections. There are also many regional efforts to link pathways. The City should support these agencies and organizations by getting involved in their plans and initiatives. For example, in the future if the railroad becomes abandoned, the City and surrounding townships may be in a position to acquire the right-of-way for pathway connections.

Chapter 5: Subarea Plans



The subarea component of the Master Plan offers specific guidance and recommendations on how to achieve the goals for certain areas within the City. The overall intent is to establish strategies and policies which ensure these areas develop in a manner consistent with the unique character of the City of Grand Ledge.



These areas are the residential neighborhoods, Saginaw Highway/M-43 Corridor and the CBD. The residential component embodies all residential areas within the city. Project limits for the corridor discussion is bound to the west where Saginaw Highway and the State Highway Bypass split off and to the east by the city limits at Charlevoix Drive. This is primarily a regional commercial corridor serving motorists traveling through the City at this point. The CBD boundaries are along Bridge Street between North Clinton Street and Lincoln Street.

NEIGHBORHOOD DEVELOPMENT

Neighborhoods are a critical component of the overall community. In the City of Grand Ledge, single family and multiple family residential development can be categorized into three types: the National Register historic district, the traditional neighborhoods, and the newer subdivisions. Although each possesses its own attributes, as neighborhoods within the City, the overall goals are the similar.

Neighborhood Development Goals

- *Preserve the historic, small-town character of the existing neighborhoods.*
- *Ensure new residential development creates neighborhoods that embody sound community design and are consistent with the traditional character of the community.*
- *Promote neighborhoods that possess their own unique and definable sense of identity*

while also being integral parts of the community.

- *Provide connections to safe locations within each neighborhood for recreation.*
- *Ensure property land use transitions between commercial and residential uses.*
- *Ensure in-fill development has compatible design with neighborhood architecture and character.*
- *Provide a well-balanced, sound and diverse mixture of housing types, opportunities, and prices in the City.*

Neighborhood Planning Framework

As described previously in the document, Grand Ledge is characterized primarily by stable traditional neighborhoods that offer a variety of housing options with sidewalks, street trees, neighborhood parks and schools, historic architecture, and inviting front porches. These elements, among others, have contributed to a strong sense of community for residents. This subarea plan includes all areas that provide housing for the City’s residents ranging from large historic homes near downtown to affordable manufactured housing. The plan also addresses multiple family housing.

A majority of the areas designated for residential on the future land use map are established neighborhoods that possess the predominant characteristics described above. The neighborhoods concentrated around the core of the City are part of the grid pattern street network and possess many attributes that define it as the traditional neighborhoods. Directly adjacent to the CBD is a smaller neighborhood area about seven blocks long and three blocks deep that is on the National Register of Historic Places, and is considered the historic neighborhood. Regardless of official designations, both areas possess many important elements that define the traditional, small-town character of the City. Preserving the character of these areas is of utmost importance to the citizens of Grand Ledge. Therefore, they should be preserved and protected in the future as the City changes and develops.

In addition to the established, historic neighborhoods, Grand Ledge has experienced newer “suburban” style residential development on the outskirts of the City. These developments are distinguishable from the older neighborhoods because the roads are designed with a wider cross section, are curvilinear, have longer block faces, and use cul-de-sacs to maximize development of the land. The homes in these developments possess modern architecture and have attached two-car garages. Lot dimensions are somewhat similar however, the new neighborhoods tend to have a larger width to accommodate the two-car garage and driveway.

Neighborhood Design

Although the majority of the City is built-out, there are some larger parcels that have the potential for residential redevelopment. These sites should be developed in a manner which is

consistent with the traditional neighborhood character of the established residential areas but should also possess the modern amenities of the new developments.

As the predominant land use within the City, the residential neighborhoods should be developed and redeveloped in a manner which is consistent with the surrounding character of the area. As mentioned above, there are three categories (historic, traditional and suburban) that describe single family and multiple family neighborhoods that must be considered. Regulations must be developed that will guide the design and layout of these areas. These regulations should apply to both single family and multiple family projects located in the three types of neighborhoods. All attributes and design considerations listed below should be included in the regulations. There are a few considerations that area specific to multiple family residential that are described separately.

Architecture

Residential structures should have curb appeal that creates a friendly environment and promotes interaction between neighbors. The dominant feature as viewed from the street should be the entryway to the home through design features such as a front porch, front walkway, and living area. Garages and garage doors should not dominate the front façade of the home. To prevent this dominance, garages should be recessed, or setback, from the front building line or should be side or rear entry so that the doors are not directly visible from the street. In keeping with the historic character of the neighborhood, detached garages located to the rear of the lot are encouraged.

Building materials should be high quality such as brick, carved stone or wood siding. For in-fill development and renovations, the use and type of materials must possess the high quality elements of adjacent housing. The intent is to ensure new construction is compatible with the existing neighborhood. New residential development should attempt to preserve historic characteristics and at the same time, work to achieve its own unique design theme.

Lot sizes/width

Residential development is recommended throughout the City in the future land use map at varying densities. It is permitted under the three land use designations: single family, multiple family and planned residential. These densities are consistent with existing development and with the intended character of the particular area. The typical minimum lot size for single family development throughout the City is 8,450 square feet, which translates to a lot width of approximately 65 feet. Lot sizes, widths and required setbacks within the single family districts allow for “close-knit:”, yet comfortable spacing between homes. For new single-family development on large tracts of land on the outskirts of the city, these same densities and dimensions should continue in order to perpetuate and enhance the existing traditional neighborhood atmosphere. The Zoning Ordinance has been amended to permit higher density single family residential development (smaller single family dwellings on reduced lot sizes) to accommodate the needs of empty nesters, retirees, young professionals and other segments of the population that desire to own rather than rent their homes without having to maintain a 1,400

square foot minimum home size on an 8,450 square foot lot as previously required under the current Zoning Ordinance.

Multiple family housing includes townhouses, apartments, duplexes, and senior housing. The density of these developments is currently based upon the number of total rooms proposed and the acreage of the site. Planned densities are a minimum of 6 units per acre and no greater than 15 units per acre for stacked flats. The lower density multiple family developments are encouraged to be townhouse style housing with each having an individual entrance to the units. Higher density development may be townhouse style as well, but more likely apartments to increase the number of units.

Neighborhood Parks

Neighborhood parks are a key design element to any quality neighborhood. These can take the form of a public park, a school playground, or a common area held by a subdivision or condominium association. The City should pursue opportunities to create pocket parks or small open space areas within established neighborhoods where accessibility of green space is not currently available. Further, as new residential projects develop, neighborhood parks and open space areas should be required to accommodate the increased demand created by new residents. These parks may either be public and dedicated to the City, or the developer may maintain the land as private under the control and ownership of an association.

Sidewalks/Pathways

Neighborhoods need an integrated pedestrian circulation system which conveniently and safely links residents to other neighborhoods, public gathering places and other key destination points within the City. Currently, the City strictly follows a yearly sidewalk replacement and construction program for the existing system. As new residential development is proposed, the City should ensure that sidewalks are provided throughout the neighborhoods. Additionally, it is important to ensure that appropriate connections are made to adjacent sidewalk and pathway systems and to key, nearby destinations. Pathways and sidewalks should be enhanced by abutting green space and street trees.

Street Lighting

In order to promote activity in the neighborhoods and to establish a safe environment for residents, street lighting should be provided along roadways and sidewalks. Ideally, the lighting should be decorative to ensure consistency with the neighborhood. In some instances, such as intersections, a more powerful light fixture may be more appropriate. Lighting should be reasonably spaced and should by no means negatively impact nearby sites or motorists driving along the road.

Street Design

A traditional street cross-section should be applied throughout the community. This consists of concrete curb and gutter and not excessively wide pavement which accomplishes on-street parking. Streets should be designed to keep speeds and volumes low. Methods to accomplish this

goal include maintaining a narrow pavement with, creating short block faces and accommodating some curves in the road. The use of stop signs should be avoided. Additionally, streets should be interconnecting and provide ample and safe access to the existing network. Where a vehicular connection is not possible, a pedestrian link should be provided.

Streetscape Design

Design feature within the streetscape such as street trees between the sidewalk and curb can also be used to alert a driver to slow down. Streetscape elements also establish the roadway as a design feature and not just an impervious surface for vehicles. Street trees should be provided within a 5'-8' curb lawn area between the street and the sidewalk. Street trees should generally be spaced 30 to 40 feet along the road.

Landmarks

Landmarks are features that create a distinct neighborhood identifier or focal point. Many of the existing neighborhoods possess a landmark and all new development should incorporate such a feature. They can be in the form of natural plantings such as trees and flowers, or a man-made feature such as a sculpture or a fountain situated in a neighborhood park or public gathering area. Often times the landmark feature is a building such as a school or a church. Landmarks provide a sense of place at key locations and create visual focal points by which people can identify. Landmarks can also provide a sense of arrival and identity to a neighborhood.

Walkability

The design and density of new residential development should be at a walkable scale. The actual size of a defined neighborhood should be a reasonable walking distance of ½ mile across. There should be a neighborhood such as a park or school. Residential uses need to be within walkable distance to some form of recreation, civic and/or shopping opportunity to maintain this sense of a “walkable community”.

Blocks

As key aspect of maintaining physical connections throughout the community is an interconnected series of streets and blocks. While new streets do not necessarily need to follow a rigid grid pattern, at a minimum, maintaining street connections should be provided. These links are vital to shortening driving and walking distance within the community. The typical suburban street design element of cul-de-sacs contributes to creating isolated neighborhoods and interruptions of traffic patterns and should, therefore, be avoided.

Signs

Older platted subdivisions within the City have individual names, but are fully integrated into the overall network and do not have any type of signage to delineate their boundary. On the contrary, most subdivisions developed in other communities during the mid 1900's up to the present day have been designed to be separate entities, thereby creating the desire for separate identification. This was not only accomplished through disconnected road systems, it was also perpetuated by the use of subdivision names. Residents no longer referred to their place of residence by the

street name, it was by the subdivision name. The concept is not consistent with the traditional neighborhood design of the community within the core City. Single family residential development within this area should not be provided signs. Multiple family development may provide a sign, however, it must be subtle and low to the ground with planting beds. Illumination of the sign should not be permitted unless the light serves to identify the entrance to the development for motorists. Signs may also be allowed in single family developments located along the outskirts of the City where there is existing “suburban style” neighborhoods. Again, the signage must be subtle.

HISTORIC NEIGHBORHOOD DISTRICT

Within the existing traditional neighborhood framework, there is a segment that is listed on the National Register of Historic Places. The site is seven blocks in length and three blocks deep, less the CBD and a few other properties. The three main roads which home front on are W. Jefferson, Scott and Lincoln. It extends to the southeast to Franklin and to the northwest to Maple.



Establishing local regulations should be considered in this area, if not a great boundary, to control development in this area. This may be accomplished through the establishment of a local Historic Preservation District under the guidelines of Michigan P.A. 213, 1957 and P.A. 169 of 1970, as amended.

The purpose of a Historic Preservation Commission is typically to assist the local body of government in the preservation, protection, enhancement, rehabilitation, reconstruction, or use of historic structures, buildings, site, or areas in the community, and to educate residents regarding the importance of such historic preservation.

To begin with, the legislative body of the local unit of government must first adopt policies and processes relating to historic preservation and create a Historic Preservation Commission to oversee the procedures.

The first step towards adopting such policies is to appoint a historic district study committee to assess the historical merit of portions of the community or community as a whole. In particular, the primary responsibilities of the study committee is to inventory proposed districts, evaluate the significance of existing historic resources based upon the criteria used for inclusion of resources in the National Register of Historic Places, and prepare related summary reports and recommendations for the legislative body of the local units of government.

If the recommendations determine that a historic district or districts are warranted, the final report shall include a draft of the proposed ordinance language defining the membership, qualifications, functions, duties, and duration of appointment of historic commission members. The ordinance shall also delineate boundaries for each proposed district and historical significance of each district as a whole and shall provide for review of alterations of buildings and structures, based upon state rehabilitation standards and guidelines, through Certificates of Appropriateness.

Upon adoption of the local historic preservation ordinance, a historic district commission shall be established and included member with demonstrated interest or knowledge of historic preservation. Upon appointment, historic commission members shall educate and inform on historic preservation issues, review applications for any changes to the exterior appearance or interior arrangement of any resources within a historic district and provide input to government entities on historic preservation issues.

The City shall seek guidance and support for the long established Historic Society which is active in all aspects in the heritage of the community and the historical significance of sites and buildings within the community. The non-governmental organization is 200 members strong and is headed by an appointed ten member board. The Society's activities include creation and operation of the museum and maintenance of the historic archives in the library. The Society also sponsors civic functions and serves as an information advisory role to public officials on matters related to historical preservation in the community.

Multiple Family Residential

The design elements described above for neighborhood developments apply to both single and multiple family developments. However, there are a few recommendations that are only applicable to multiple family or high density housing to ensure they are quality developments and are consistent with the traditional character of the City.

Building Orientation/Space

Multiple family housing is typically a more massive building than single family housing. Therefore, buildings should be set back from the roadway slightly more than a single family home. However, if the structure emulates the scale of a single family home through the use of

front porches or stoops, peaked rooflines and a maximum of two stories, similar setbacks are appropriate. In either case, the entrances should be oriented to the street, providing a sidewalk connection to the right-of-way. For developments which include multiple buildings, the spacing of the structures should be directly related to their size, the acreage of the site and the natural features on the property. Ideally, they should be fairly well spaced. In an attempt to preserve natural features, however, closer spacing may be acceptable.

Open Space

Open space must be provided to adequately serve the recreational needs of the additional population. The required amount of open space must be based on the number of units or rooms in the development. Preservation and protection of natural features is encouraged whenever possible, however, a portion of the open space must be determined to be usable for recreation.

Parking

Multiple family developments commonly provide parking areas for guests and residents. These areas must be appropriately located so as not to be directly visible from the street. Where they are located abutting single family residential, enhanced screening is necessary to offset impacts of noise and lighting. For developments that provide garages for the units, the same design guidelines would be applied as described above which states that garages must not dominate the front façade of the structure as it is viewed from the roadway.

Landscaping/Screening

Although traditional design supports the mixture of uses, there are some instances where screening is appropriate. As discussed above, parking areas and dumpsters should be screened from view of the street and adjacent uses. Sensitivity should be given to nearby single family residential development. Although compatibility is encouraged, there are some instances where the two uses should be buffered in some manner.

Senior Housing Options

The demographic information analyzed in Chapter 2 indicates a large percentage of the population in 2010 is over the age of 65. This percentage has only slightly increased since the 2000 Census. While there is senior citizen housing in the City of Grand Ledge (Serenity Place, Independence Village, Maguire Senior Apartments), it is clear the City must consider more housing options for seniors. Many reasons support this recommendation, the primary motivation being that residents do not want their parents and grandparents to be forced to move out of the community in order to find proper housing. This includes the provision of medium density, single family residential condominium development that allows seniors, as well as other segments of the population to continue as home owners but with less maintenance due to smaller lot and house sizes. Currently, the basic facilities are covered as required by law and are described below. However, there are new trends that have expanded the market for senior housing options that should be considered and accommodated in the Zoning Ordinance.

Adult Foster Care

Currently, the City accommodates state regulated adult foster care facilities in some fashion in a majority of the zoning districts. By this, they are accommodating residential facilities for seniors that are primarily independent but required some medical assistance or simply prefer daily assistance with household activities such as cooking. These facilities range in size from a traditional home environment of six (6) people to congregate facilities of twenty (20) or more. The intent of these facilities is to provide a “group home” environment where facilities are shared by all residents to a certain extent.

Nursing Homes

A few of the districts allow state licensed nursing homes which are facilities for seniors significantly more dependent and require more intensive assistance both medically and in daily activities. These facilities function similar to a hospital where around-the-clock medical assistance is provided.

Recent Trends

Recent trends have expanded the market and offer seniors a variety of housing options that vary in not only the extent of the services offered but also the amenities. This newly created market, coupled with high demand and a strong economy, has developed fierce competition amongst the senior living development community. This has been a benefit for communities because they are seeing higher quality senior living facilities for their current residents as well as future residents.

SAGINAW HIGHWAY



Saginaw Highway, also called M-43, is a state trunk line that functions as the “front door” of the community. This corridor has slowly developed into a thriving regional commercial center for the area. Generally, recent development has produced quality architecture, landscaping and site design. However, further analysis of the corridor reveals that it is missing cohesive elements and the necessary strong visual statement that is needed as one enters Grand Ledge.

Through the recommendations contained in this plan and the commitment of the City, both private and public investment can provide the catalyst to turn this gateway into a positive announcement and welcome into the City.

Saginaw Highway Corridor Goals

- *Limit the number of access points and carefully manage their spacing and placement to preserve street capacity, reduce crash potential, and improve the environment for non-motorized travel.*
- *Ensure new construction and building renovations are harmonious with the established “character” of Grand Ledge.*
- *Maintain strong visual relationships and continuity between the building, the site, and adjacent development.*
- *Commit to enhancing the environment for safe pedestrian movement from within the City and along the corridor.*
- *Construct service drives to allow travel between uses outside of M-43 and increase motorists safety and convenience.*
- *Upgrade new and existing sites with additional landscaping to provide screening, buffering, circulation and site enhancements.*

Development patterns and building placement along Saginaw Highway and South Clinton Street need to be sensitive and complimentary to the overall character of this area of the City. The corridor should not be “suburbanized” with excessive building setbacks and large front parking lots. Excessive building setbacks create an impersonal atmosphere, overemphasized reliance on the automobile, diminish pedestrian activity and produce sterile, unattractive environments. Development in this area needs to relate to the identity of the rest of the community.

Signs

Signs are an aspect of site design which has a major effect on the streetscape. While having adequate signage to advertise and draw customers is important for the viability of a business, uncontrolled proliferation of large, unattractive signs not only degrades the appearance of the community, but also distracts motorists. The City should continue to require the use of monument signs to minimize the negative effects created by large signs that compete for attention. Sign materials and color should match the building materials.

Landscaping

Development should maximize the amount of green through street trees and plantings, landscape parking lot setbacks, providing trees within parking lots, and discouraging large and uninterrupted pavement areas. As new development or redevelopment occurs, parking lot

greenbelt buffers for parking areas between the road and building area are needed. A greenbelt may include berms, hedge rows, and street trees.

In addition to walls, the city should promote the use of landscaping to help buffer residential areas from non-residential uses. The intensity of landscaping should be related to the potential for land use conflict. A combination of preserving existing trees, new landscaping, and walls should be required.

Architecture

Because this area serves as the primary entrance to the community, commercial architecture is of vital importance. The development of franchise commercial tends to homogenize communities and increase a lack of unique identity.

Building architecture is a key component of good site design. Quality architecture can help ensure that a building/use is compatible with surrounding uses and can help protect the investment of adjacent landowners.

Building shapes such as peaked roof lines, archways, and other treatments should be used to provide variety while complementing the existing buildings in the area. Brick with traditional windows are preferred for most commercial, office, and industrial buildings. Concrete block, aluminum siding, dry-vit, and metal panels should be discouraged. Building walls over 100 feet in length should be broken up with varying building lines, architectural accents, and trees.

Lighting

To minimize conflicts between commercial site lighting and adjacent residential areas, special consideration needs to be given to the site lighting plan. The height and intensity of light fixtures need to be minimized. Special attention should be paid to the location and orientation of light location, in relationship to nearby residences. Areas of the site which require more intense lighting, such as parking lots, should be physically located on the site to minimize the impacts of lighting.

Access Management

Saginaw Highway is a critical roadway for traffic. The lack of controls over the number and placement of driveways will increase potential for traffic congestion and crashes. A pattern of closely spaced driveways, which serve individual businesses and homes, will hamper the corridor's ability to accommodate additional traffic without severe congestion. Continued implementation of the City's access management standards will reduce traffic conflicts and preserve the capacity of through-traffic flow.

Service Drives/Shared Access

In addition to recent intersection improvements at M-100 and M-43, the City has begun efforts to alleviate traffic congestion along the corridor through the development of service drives. Charlevoix Drive provides a rear service lane providing road frontage for office development to the north and allows for interconnection of access points for developments that front onto

Saginaw Highway. This allows motorists to access these sites without entering back onto the highway.



The service drive has been so successful, another service drive is planned to run parallel to Saginaw Highway on the southeast side of the road. This will serve a substantial portion of the commercial development along this segment of the corridor. At this point, the only area lacking in plans for connections is the developments on the west side of the intersection. There is a mixture of land uses planned along this segment. Although many of these sites are too shallow for accommodation of a service drive, shared access between parking should be encouraged.

Pedestrian Circulation

As the area develops, pedestrian circulation and non-motorized connections should be accommodated. Consistent with the City’s Non-Motorized Pathway Plan, sidewalks or pathways should be constructed along the Saginaw Highway/M-43 corridor where it does not currently exist. Other sidewalk/pathways connections along the corridor should be provided along existing and planned service drives. Promoting sidewalks along service drives ensures a safer pedestrian environment because it is separated from heavy traffic. To further enhance the benefit of pathways, connections to buildings should be required as well. While there exists an opportunity to connect to adjacent residential neighborhoods, this should also be encouraged.

Identification to Downtown

The downtown area is not identified which causes confusion for visitors unfamiliar to the area as to the core of the community. As a result, motorists pass by without venturing into the City. Better signage should be provided at the M-100/M-43 intersection to enhance way-finding to the downtown area.

CENTRAL BUSINESS DISTRICT

The CBD is the traditional heart of Grand Ledge and provides a strong sense of community for residents and visitors. New residential lofts, parking lot, and building façade improvements over the past decade have provided a renewed sense of vitality to the downtown.



CBD Goals

- *Ensure the economic viability of the downtown through a diversified mixture of complementary commercial, office, residential, and civic uses.*
- *Preserve the historic, small-town character of the downtown.*
- *Maintain and strengthen the “sense of place” which currently exists in the downtown area.*
- *Ensure that renovation of historic buildings in the downtown retains the existing historical and architectural integrity.*
- *Ensure new infill development is compatible with the downtown’s historic architecture, scale, proportion and character.*
- *Ensure proper land use transitions and design treatment between the downtown district and the surrounding residential neighborhoods.*

The CBD possess a mid-western, small-town setting with a variety of land uses, small lots, commercial buildings, built up to the front lot line, and an overall quaint historic appearance. The structures within the downtown are mainly two story buildings, with some buildings one and three stories. The downtown streetscape is characterized by wider sidewalks, pedestrian furniture, formal street trees, ornamental streetlights, and on-street parking.

The CBD generally follows Bridge Street, with the Grand River being the central feature of the downtown. In addition to the elements that define the urban form and character of the downtown, the Grand River and the bridge are key landmarks that help define Grand Ledge as a distinct place.

The downtown is split into two distinct areas that are split by the Grand River. These areas are linked by the bridge which includes pedestrian walkways and ornamental lighting that visually tie the two halves of the downtown together.

Historic Preservation

The CBD contains significant historic, architectural and cultural resources that are a major asset to the community. The Planning Commission needs to carefully consider renovations to older structures in order to ensure that the historic character of these buildings is retained. In addition, development or redevelopment in the district should be designed in keeping with the established building character. In order to ensure consistent enhancements in the future, the City should adopt architectural design guidelines which must be followed by developers to regulate development and redevelopment of property within the area.

Downtown Uses

The desired form of development within the downtown is retail on the first floor, with residential and offices on upper floors. This mixture of uses creates more vitality and strengthens the downtown. While the downtown is relatively small in scale, having some office workers within the downtown helps support the market for commercial uses, particularly restaurants. Redevelopment of some of the currently vacant upper floors of buildings provides an excellent opportunity to introduce additional office space. Upper story apartments and residential neighborhoods within close proximity to the downtown maintain a population within the downtown during evening hours and enhances its vitality. The development of upper story apartments should be encouraged in the downtown.

A mixture of uses should be continued and encouraged. While specific uses will be dictated largely by market factors, the City needs to ensure that a proper mix of uses evolve which are mutually supportive of creating a strong and viable downtown. The City needs to ensure that the physical manifestation of the downtown, including architecture, building height, building location and design of parking areas fosters a cohesive unit that continues to result in a desirable place to live, shop, and work.

Civic Uses

The Post Office and Library bring people and add vitality to the CBD and therefore, these civic uses should remain connected to the downtown area. Criteria should be established to ensure that expansion or redevelopment of these facilities will be compatible with the character of the CBD. For example, the buildings should be located near each other to create a “civic complex”. They should be oriented toward the downtown, the river, and nearby park land so that there is a continuous connection between the various uses. This will generate more activity in the downtown. Also, the architecture should be consistent with the historic downtown.

Proper Scale: Development and redevelopment needs to be consistent with the historic architecture, mixture of uses and compact layout of a traditional small town. The density and design of development needs to be at a scale that puts uses within a walkable distance. There should be a complimentary and integrated mixture of employment, shopping, entertainment, civic, and residential uses within a walkable town. To reinforce the downtown as a distinctive place, it is important that there be a proper transition between the downtown and surrounding neighborhoods.

Relationship to Pedestrians: Buildings should be designed to relate to the pedestrian scale. Pedestrians respond differently to different building frontages. The most attractive and comfortable building frontages to pedestrians are shopfronts with large windows and displayed merchandise. Commercial structures need to have windows that relate to the public sidewalk and provide interest. Building entrances should utilize windows, canopies and awning, provide unity of scale, texture, color, and provide a sense of place. In addition, long, concrete block walls along the sidewalk should be avoided.

Architecture: Special consideration should be given to architecture within the downtown area, as well as other areas of the City. Individual innovation in building design should be allowed, provided the form of an individual development does not detract from the traditional small-town character. Renovations and infill development needs to be compatible with surrounding uses, provide visual harmony between old and new buildings, blend into the streetscape and create a positive image for the City. The primary goal is to maintain architectural styles that foster the intended traditional small-town character and blend with the context of the traditional urban form. The downtown needs to be maintained as a community center that fosters a sense of civic pride. The following standards should be applied to renovations, additions and infill development in the CBD:

- Commercial architecture should contribute to the overall small-town character as a place that has history and substance. Each structure needs to have its own identity and provide variety to the streetscape.
- Architectural styles should be compatible with and not detract from the historic integrity of the downtown. Buildings should provide individualized architectural features, details and ornaments such as archways, colonnades, and cornices to make them distinctive. Building materials and colors need to relate well and be harmonious with the surrounding area. The use of natural building materials such as brick and wood should be encouraged.
- The first floor of the building's front façade should be primarily glass. Upper stores should contain less glass and upper-story windows should be vertical in proportion. The ratio of void to solid of the upper story façade should create a consistent rhythm from one building to another.
- Because many of the commercial buildings back toward residential neighborhoods, the appearance of the rear facades of buildings need to be considered in relation to the front façade.

Corner Locations: Special treatment to the corners of street intersections is an important and effective means to create community landmarks. Buildings located on corner lots can be designed to become very distinct and prominent architectural features. Special consideration towards architecture and site elements should reflect the importance of the building's corner

location and create a positive visual landmark. Particular attention should be given to any redevelopment or renovation of buildings at the corner of Jefferson and Bridge Street and where Bridge Street terminates at Clinton Street.

Creation of Defined Streetscape

Commercial developments need to front towards and relate to the street. Buildings need to be maintained at the front lot line in order to create a defined streetscape through uniform setbacks and proper relationship to adjacent structures.

Landmarks

Landmarks are features that create a distinct community center and focal point such as the bridge over the Grand River. More subtle landmark features can also be provided at key locations such as at “gateways” at prominent corners and at the end of visual corridors. Landmarks are intended to announce entry to a unique area, provide a sense of place at key locations and create visual focal points at the terminus of vistas.

Street Trees

The City currently has street trees along most City streets. Over time, trees will need to be replaced as they overgrow their environment. While the placement of trees along main commercial streets is necessary to give a property a sense of rhythm and enclosure, consideration also needs to be given to the relationship of trees to buildings and signs. Where possible, trees should be planted at lot lines to properly frame the building as seen from the street and opposing sidewalks. As trees are replaced, their location should be determined with consideration given to the spacing from other trees, architectural elements, adjacent buildings and way finding mechanisms within the City. New street trees should also be of a species that creates a canopy and can withstand salt from snow plowing in the winter.

Street Lights

The City currently has good quality, ornamental lighting that is part of the streetscape for the downtown. Using a consistent style of lighting along major streets in other areas of the City such as East and West Jefferson Streets, North and South Clinton Streets and Saginaw Highway is a unifying element that provides a linkage between these areas and the downtown and a “Grand Ledge” identity that is lacking along some of these streets. Ornamental lighting also reinforces linkages by leading pedestrians to other areas of the city such as the riverfront park. It is important that a consistent style of ornamental lighting be used throughout the City.

Public Spaces/Connections to Grand River

Finally, one of the most important aspects of a positive downtown environment is open public spaces in the form of parks and plazas. The Grand River and associated parks throughout the City is a great strength of the community. Development must continue to promote and enhance the connections to the Grand River, Island Park and other parks along the River that have been

preserved through public open space along its banks. The City should continue to maintain and expand park areas along the riverbank within the downtown whenever possible.



Circulation

Vehicle speeds across the bridge are excessive and need to be controlled to give pedestrians a more comfortable environment. Recommendations contained in Chapter 4 offer solutions through lane reductions, curb bump-outs, on street pathways and on-street parking to slow speeds down. Slowing speeds generates more economic activity because motorists have time to read business signs and view what is in the downtown.

Another element of circulation is non-motorized circulation. There are a number of recommendations contained in this plan as an update to the Non-Motorized Plan relate to pedestrian circulation in and around the downtown that should be considered. These comments include extension of pathways along the river and Bridge Street and improving pedestrian crosswalks to increase safety. Finally, the recommendation above regarding slowing traffic on the bridge will strengthen pedestrian safety and encourage more cross activity between the two sides of the river.

The overall design of parking areas on the south side of the bridge should be enhanced to improve the visual impacts. Enhancements needed include redesigning and repaving certain parking lots to more efficiently use space. Landscaping is the most effective method for screening and enhancing parking areas. To provide shade and green space within parking lots, curbed islands should be installed within parking lots in place of striping. The islands should be large enough to accommodate lawn area and one or two large canopy trees. Where rows of parking must be screened from view, a continuous evergreen hedgerow or decorative brick seat wall is recommended. All lots should provide safe, decorative lighting.

Business Retention and Recruitment

In cooperation with the Downtown Development Authority, a marketing strategy should be developed that outlines short and long term goals and implementation strategies for the district. There are a number of potential problems that can be addressed through this recommendation. To begin with, many current and future merchants are small business owners that do not have the benefit of either experience or funding to invest in this type of development plan on their own. If it is done as a team, there is a greater likelihood of success.

A second issue that would be addressed is strengthening the foundation of the downtown small businesses which will allow them to more successfully differentiate themselves with the

businesses along Saginaw Highway. It is not the intention of the City to create direct competition between the two districts. They should develop their own identity and their own market. This can be more clearly defined through a marketing strategy plan. This plan will also serve a dual purpose in retaining existing businesses and also work to promote new businesses to fill vacant spaces. A business district that is dedicated to stabilizing the market for merchants is one that will be significantly more desirable for potential business owners.

Chapter 6: Implementation



JAYCEE PARK AND RIVERFRONT MASTER PLAN
 City of Grand Ledge, Michigan 11.20.13 Concept Plan



In order for the City’s Master Plan to be an effective document for the next ten years, steps must be described to guide community leaders towards implementation. This chapter provides a summary of the recommendations described in previous chapters.

The strategies are divided into two tables. The first table outlines regulatory, construction and policy strategies by topic area including: land use, transportation, natural features, and the subareas. For each action, steps needed toward implementation are described, such as changes to regulations (zoning and other ordinances), use as an on-going policy or other task. For some actions, future planning considerations are listed to describe additional analysis needed in the future.

The second table outlines capital improvements recommended in the Plan. For the purposes of this list, capital improvements are physical items, such as land acquisition, buildings or sewer lines, but do not include equipment, vehicles, furniture or other items that might be included in a complete Capital Improvements Program for annual budgeting by the City Administration and Council. The table is organized by facility and first describes the problems and needs of the service. The next column describes whether additional studies are needed to further analyze solutions or it lists the alternatives that should be considered. Finally, the table lists the recommended next steps towards resolution of the problem.

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
Plan Overall and Future Land Use		
Schedule Review of Master Plan and Implementation	<ul style="list-style-type: none"> ➤ The Planning Commission should review the Master Plan, particularly the goals, and affirm or modify them on an annual basis ➤ An annual joint meeting with City Council to re-familiarize them with the Master Plan and Planning Commission roles could be considered, especially as new members are elected or appointed ➤ Incorporate a thorough process for proposed amendments to the Master Plan 	<ul style="list-style-type: none"> ➤ Update sections on the Master Plan as appropriate to keep it current ➤ Update the Master Plan in its entirety ever five years as required by the Michigan Planning Enabling Act
Motorized Transportation System (see Capital Improvement list for construction projects)		
Explore opportunities and feasibility for second river crossing	<ul style="list-style-type: none"> ➤ Work with Tri-County Regional Planning Commission and nearby municipalities to create a second river crossing in the area 	<ul style="list-style-type: none"> ➤ Improve pedestrian safety in downtown ➤ Explore potential for additional crossing over river to provide alternate traffic routes
Incorporate traffic calming measures in the downtown where appropriate	<ul style="list-style-type: none"> ➤ Obtain a study to determine the appropriate measures for improving pedestrian safety in the downtown and at the Jefferson/Bridge Street intersection in particular ➤ The City should work with MDOT to address the feasibility of installing curb bump-outs at all intersections in the downtown ➤ The City should work with MDOT on traffic signal changes that would improve pedestrian safety at the Jefferson/Bridge Street intersection ➤ Work with TCRPC and surrounding communities to develop a second bridge crossing in the area 	<ul style="list-style-type: none"> ➤ Develop design plans based on action items listed
Improve traffic calming on city streets	<ul style="list-style-type: none"> ➤ The City should review its road design standards to allow streets to be developed similar to those in the historic neighborhoods where appropriate. This may include amendments to the zoning ordinance to allow lots and setbacks similar to those neighborhoods for projects that provide amenities such as sidewalks, street trees, ornamental lighting, traditional home design 	<ul style="list-style-type: none"> ➤ Planning Commission could assist police and Dept. of Public Services in evaluation of any traffic speed problem areas. Could also consider formation of citizens

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
	and public open space ➤ Consider traffic calming measures when there are concerns about traffic speeds in neighborhoods rather than stop signs that may be ineffective	traffic committee with business and resident representatives modeled after other successful programs in Michigan ➤ Work with MDOT to implement the recommendations of the 2006 Traffic Calming Study
Non-Motorized Transportation		
Develop additional connections to the current non-motorized	➤ Continue to implement and support the Non- Motorized Pathways Plan, as amended ➤ Continue to require installation of sidewalks and pathways for new site plans and major redevelopment projects ➤ Continue to seek funding for the installation of planned pathway routes from both internal and external sources	➤ Prepare detailed engineering plans to establish the actual location and design of proposed pathways ➤ Update the non-motorized plan as needed
Create a safe pedestrian environment throughout the City	➤ Secure funding to extend the riverwalk-from Island Park to Fitzgerald, Oak And Lincoln Brick Parks ➤ Provide a pedestrian crossing over the Grand River from S. Clinton Street to N. Clinton Street ➤ Utilize pavement markings to create a wide pedestrian crossing areas ➤ Pavement marking coupled with other signage should be utilized to effectively alert motorists of a pedestrian crossing area ➤ Allow ample space at intersections and install curb bump-outs in certain locations in the downtown to provide a safe waiting area for pedestrians	➤ Take into consideration all possible destinations and open space corridors to ensure they are planned for in the future
Coordinate with neighboring communities and outside agencies to provide a regional system	➤ Ensure that pathway connections link to existing and planned networks of surrounding communities	➤ Participate in future initiatives to establish a regional pathway and greenway system ➤ Plan for potential abandonment of rail lines to convert to pathways
Explore funding opportunities	➤ Grant funding, bond issues, special assessment districts and special millage levies have been successful in other communities in obtaining funding for pathway installation	➤ The City should continue to apply for TEA -21 grant funding for qualifying pathway and

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
		streetscape enhancement projects
Natural Features		
Protect the City’s natural features as new development occurs	<ul style="list-style-type: none"> ➤ Consider a minimum setback from natural features in the zoning ordinance ➤ Revise the R-PC district regulations to allow flexibility in site design with additional incentives to preserve natural features such as Grand River, wetlands, steep slope and woodlands ➤ Consider overlay zoning along the Grand River to protect its banks, vegetation and views 	<ul style="list-style-type: none"> ➤ Work with the MDNR/MDEQ, adjacent communities and other groups to evaluate the river corridor and determine improvements to protect its ecosystem
Preserve open space throughout the community	<ul style="list-style-type: none"> ➤ Revise the subdivision control regulations, the R-PC design standards and other applicable districts to require open space and parkland for all new projects that may be dedicated to the public or used as private parkland for the homeowners or condominium association ➤ Evaluate available vacant lots and explore the feasibility of acquisition for small neighborhood park 	
Neighborhood Development		
Ensure residential architecture is high quality and compatible with the neighborhood	<ul style="list-style-type: none"> ➤ Develop architectural design standards that require homes to possess traditional characteristics yet allows them to achieve its own unique design theme ➤ Require building materials to be high quality and durable 	
Provide neighborhoods with adequate open spaces and recreation areas	<ul style="list-style-type: none"> ➤ Require new residential development to provide open space that is usable as parkland for the association or entire community 	
Ensure the right-of-way of residential neighborhoods is appropriately enhanced and designed	<ul style="list-style-type: none"> ➤ Continue to require all new construction to provide sidewalks along the roadways and require linkages to nearby destinations ➤ Require that all new residential developments provide street lighting along sidewalks and at major intersections ➤ The City should evaluate existing neighborhoods to determine deficiencies and 	<ul style="list-style-type: none"> ➤ Update the City’s Non-Motorized Pathway Plan as needed

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
	develop a strategy for implementation	
Residential streets should be designed to reinforce the traditional street network	<ul style="list-style-type: none"> ➤ Require road connections to existing neighborhoods and other adjacent land uses ➤ Limit the pavement width to the minimum necessary to allow two driving lanes and on-street parking ➤ All streets should have a concrete curb and gutter 	
All residential neighborhoods should provide traditional neighborhood characteristics	<ul style="list-style-type: none"> ➤ Promote the provision of landmarks within the neighborhood as a focal point and gathering area for residents ➤ The street layout and use of blocks should promote walkability 	
Preserve the historic residential neighborhoods	<ul style="list-style-type: none"> ➤ Establish a local historic district ➤ Regulate construction within the district through architectural guidelines ➤ Establish an Historical Commission to review architecture and serve as an advisory board for all permits and approvals for sites within the district 	<ul style="list-style-type: none"> ➤ An historic preservation plan may be necessary that identifies key attributes and guidelines that set the framework for requirements
Ensure high quality multiple family development	<ul style="list-style-type: none"> ➤ Establish design guidelines that are promote similar characteristics as the single family neighborhoods ➤ Require buildings and the main entrances to be oriented towards the street with similar setbacks as single family ➤ Require open space and park land based on occupancy ➤ Restrict parking to rear and side yards with appropriate screening ➤ Require screening/buffer areas where appropriate 	
Saginaw Highway		
Improve coordination with outside agencies on project development	<ul style="list-style-type: none"> ➤ The Planning Commission should affirm its role with MDOT in reviewing major road improvements and ensure its involvement early in the project development phase so Master Plan goals are considered ➤ The City should work with Oneida Township , Tri-County Regional Planning Commission and other nearby communities to evaluate M-43 as it relates to land use, traffic management and overall appearance ➤ Coordination with outside agency should present funding opportunities and potential joint grant applications 	

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
Ensure high quality site design that projects a positive image as the entrance to the community	<ul style="list-style-type: none"> ➤ Require business signs that adequately serve businesses but are subtle, low to the ground and offer materials, colors and landscaping that complement the building ➤ Landscaping should be required that enhances the site along the street and within the parking lot ➤ Landscaping should also be used to screen and buffer between sites ➤ Buildings should be required to be designed to offer a compatible and high quality design element to the site ➤ Site lighting should be the minimum amount necessary to avoid negative off site glares. It is appropriate to use lighting as an ornamental feature ➤ Create an image along Saginaw Highway and at the M-43/M-100 Intersection in particular that distinguishes Grand Ledge from any other highway commercial intersection 	<ul style="list-style-type: none"> ➤ A more detailed corridor plan may be necessary which identifies landscape designs, specific driveway locations and lighting locations to better guide regulations ➤ Provide signage at the M-43/M-100 intersection identifying the route to the downtown ➤ Install lighting along all major streets and at the M-43/M-100 intersection consistent with the lighting along Bridge Street ➤ Install signage on the light poles identifying the City of Grand Ledge
Provide safe and adequate circulation along the corridor and within the sites	<ul style="list-style-type: none"> ➤ Driveway spacing and location standards should continue to be enforced ➤ Shared access and rear service drives should be accommodated for all sites located along the corridor ➤ Pedestrian circulation must be accommodated through sidewalk connections and clear and easy access for pedestrians to businesses 	
Central Business District		
Accommodate a variety of uses within the CBD that promote the traditional character of the city	<ul style="list-style-type: none"> ➤ The list of permitted uses in the downtown should comprise of office, commercial, civic and residential ➤ Encourage infill development of “Maypole Park” in the 200 block of S. Bridge Street with building(s) that are consistent in design, scale & materials with the majority of the other buildings in the downtown area 	
Sites should preserve the historic integrity of the downtown and offer a positive pedestrian environment	<ul style="list-style-type: none"> ➤ Develop detailed architectural design guidelines which regulate scale, design, prominence and building materials of all buildings within the CBD ➤ Maintain a consistent building setback along the road ➤ Continue to provide street trees and ornamental lighting ➤ Provide for landmark features at key locations such as the entrances to the 	<ul style="list-style-type: none"> ➤ A historic preservation plan may be appropriate for the CBD to better establish key issues and set the framework for design guidelines or requirements

Master Plan Implementation Table

PLAN RECOMMENDATION	ACTIONS	FUTURE PLANNING
	downtown to establish a sense of place ➤ Accommodate public open spaces for people to gather ➤ Utilize open spaces to create safe connections to the river	
Accommodate safe circulation throughout the downtown	➤ Utilize methods such as curb bump-outs, designated pedestrian crosswalks and traffic signal changes to calm speeds in the downtown ➤ Provide for sidewalk and pathway connections for non-motorized access to the downtown	

Capital Improvement Program Outline

IDENTIFIED ISSUES	ADDITIONAL STUDIES NEED OR ALTERNATIVES	RECOMMENDED ACTIONS
CITY FACILITIES		
Fire Station		
<ul style="list-style-type: none"> ➤ Insufficient building size ➤ Functionally inadequate ➤ Poor access due to location and rail crossing ➤ Only one bridge crossing over river 	<ul style="list-style-type: none"> ➤ Expand existing building ➤ Rebuild on new site(s) 	<ul style="list-style-type: none"> ➤ Construct a new fire station on property already owned by the Fire Department south of the City limits on M-100 ➤ Use existing building for EMS Station
Parks and Recreation		
<ul style="list-style-type: none"> ➤ Few neighborhood parks ➤ No barrier at Oak Park identifying where extra caution is required ➤ 	<ul style="list-style-type: none"> ➤ Determine the proper location and type of barrier needed for Oak Park ➤ Research grant funding opportunities for completion of goals outlined in the 2017-2021-Parks & Recreation Master Plan ➤ Implement the Jaycee Park Master Plan ➤ Extend riverwalk to connect to Island, Oak, Lincoln Brick and Fitzgerald Parks 	<ul style="list-style-type: none"> ➤ Amend Subdivision Ordinance to require neighborhood parks ➤ Construct wall or other barrier along top of Ledges in Oak Park ➤ Utilize Parks & Recreation Master Plan as a guide for completion of all parks projects Including implementation of the Jaycee Park Master Plan ➤ Develop a complete riverwalk system that connects to all parks and non-motorized pathways
Department of Public Services		
<ul style="list-style-type: none"> ➤ Aging Facility on Lawson Road 	<ul style="list-style-type: none"> ➤ Renovate and Expand existing buildings ➤ Tear down and rebuild new buildings 	<ul style="list-style-type: none"> ➤ Continue to monitor and accommodate the needs of the Public Service Dept.
Sanitary Sewer/Storm Sewer/Drainage System		

Capital Improvement Program Outline

IDENTIFIED ISSUES	ADDITIONAL STUDIES NEED OR ALTERNATIVES	RECOMMENDED ACTIONS
<ul style="list-style-type: none"> ➤ Expansion needed for treatment facilities ➤ Systems Need To Be Expanded And Upgraded 	<ul style="list-style-type: none"> ➤ Wastewater Collection and Treatment Master Plan 	<ul style="list-style-type: none"> ➤ Upgrade sanitary and storm sewer in needed areas
Water System		
<ul style="list-style-type: none"> ➤ Water mains need to be expanded and upgraded 	<ul style="list-style-type: none"> ➤ Water System Master Plan 	<ul style="list-style-type: none"> ➤ Upgrade water mains in needed areas
City Street Maintenance and Reconstruction		
<ul style="list-style-type: none"> ➤ Gravel/dirt roads ➤ Streets in poor or failed condition ➤ Traffic calming ➤ Poor access management in certain areas 	<ul style="list-style-type: none"> ➤ Pave all gravel/dirt roads ➤ Continue to improve access management on M-43 and M-100 as new development occurs ➤ Implement traffic calming measures including reducing the width of local streets, installing curb bump-outs, pedestrian cross walks and traffic signal controls 	<ul style="list-style-type: none"> ➤ Focus resources on maintaining streets already in good condition to prevent deterioration ➤ Use traffic operations analysis to determine appropriate traffic calming measures ➤ Use “Street Condition Survey” as a guide for prioritizing resurfacing projects ➤ Reconstruct streets as necessary ➤ Construct boulevard on M-43
New Access Road along M-43		
<ul style="list-style-type: none"> ➤ Need alternative to numerous poorly spaced driveways along the south side of M-43 ➤ Need to complete gaps in the street system per City’s Street Master Plan 	<ul style="list-style-type: none"> ➤ A number of alternatives were considered before the City platted the road alignment ➤ Traffic operations analysis and preliminary engineering would need to be completed to refine concepts 	<ul style="list-style-type: none"> ➤ Construct future roads identified in the Master Plan ➤ Work with MDOT and surrounding communities to build median boulevard on M-43 east of M-100 and further manage traffic ➤ Connect Tallman Road to M-100 ➤ Extend Eaton Highway to Tallman Road ➤ Require that access to the property on the east side of M-100 align with Fieldview

Capital Improvement Program Outline

IDENTIFIED ISSUES	ADDITIONAL STUDIES NEED OR ALTERNATIVES	RECOMMENDED ACTIONS
		Drive
Sidewalks/Pathways		
<ul style="list-style-type: none"> ➤ Deteriorated and dangerous sidewalks ➤ No sidewalks in certain areas ➤ Limited non-motorized pathways ➤ Certain sidewalks lack barrier free ramps 	<ul style="list-style-type: none"> ➤ Construct pathways on/off streets in those areas designated on the map included with this Plan ➤ Construct sidewalks along all City streets ➤ Obtain funding for the continued development of a pedestrian riverwalk 	<ul style="list-style-type: none"> ➤ Repair all deteriorated or dangerous sidewalks ➤ Construct new sidewalks where currently does not exist ➤ Make all sidewalks barrier-free ➤ Install pathways as designated in Master Plan ➤ Continued development of the riverwalk connecting ALL City and county parks

Map 2 Community Facilities

Grand Ledge Master Plan
City of Grand Ledge, Michigan

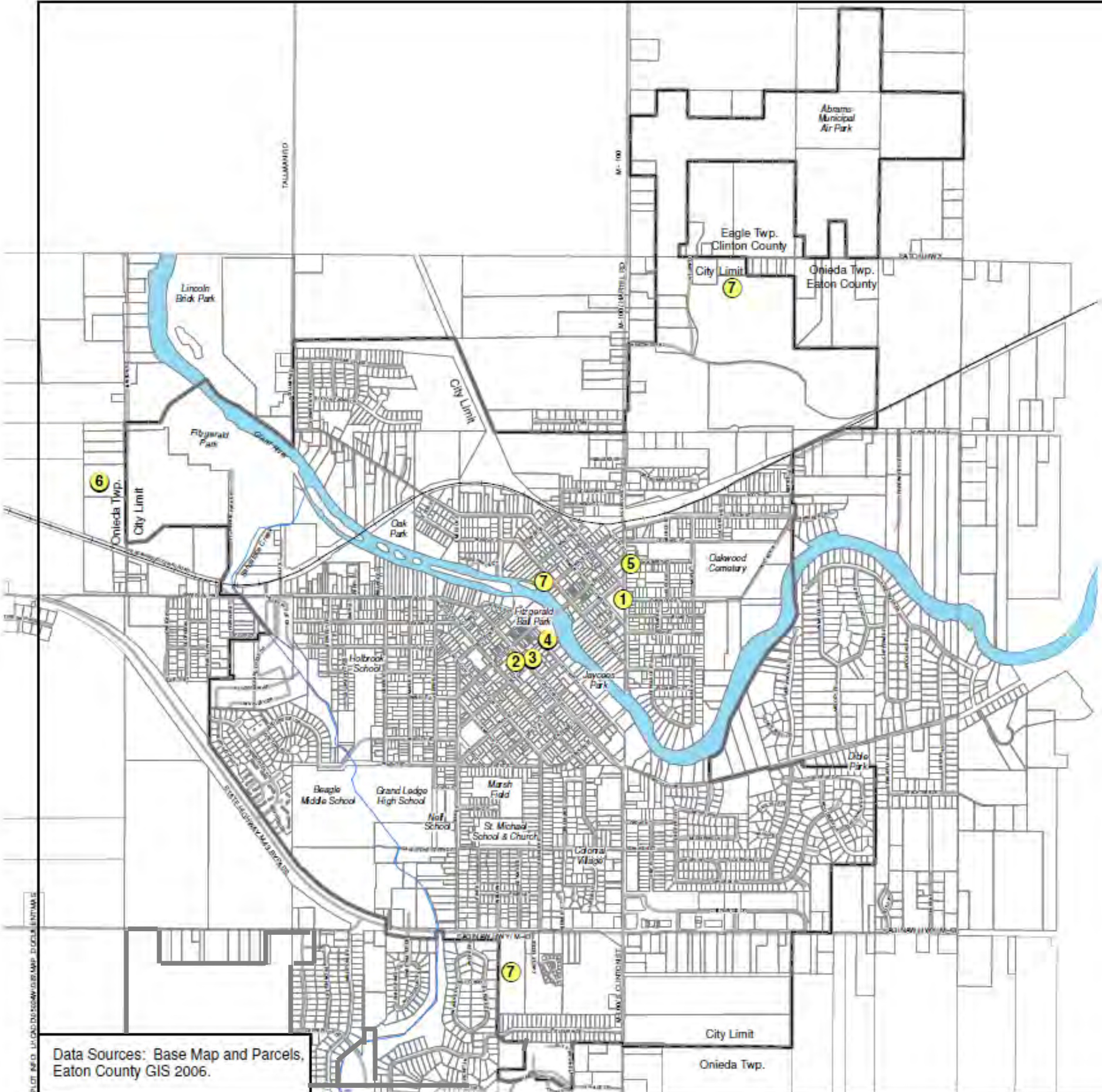
Legend

- ① City Hall, Police Department, Chamber of Commerce
- ② U.S. Post Office
- ③ Public Library
- ④ Opera House
- ⑤ Fire Department
- ⑥ DPW Lot
- ⑦ City Water Tower



January, 2018

0 1,500 Feet

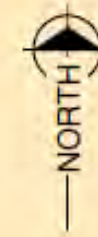


Data Sources: Base Map and Parcels,
Eaton County GIS 2006.

Map 3
**Regional
 Future Land Use**
 Grand Ledge Master Plan
 City of Grand Ledge, Michigan

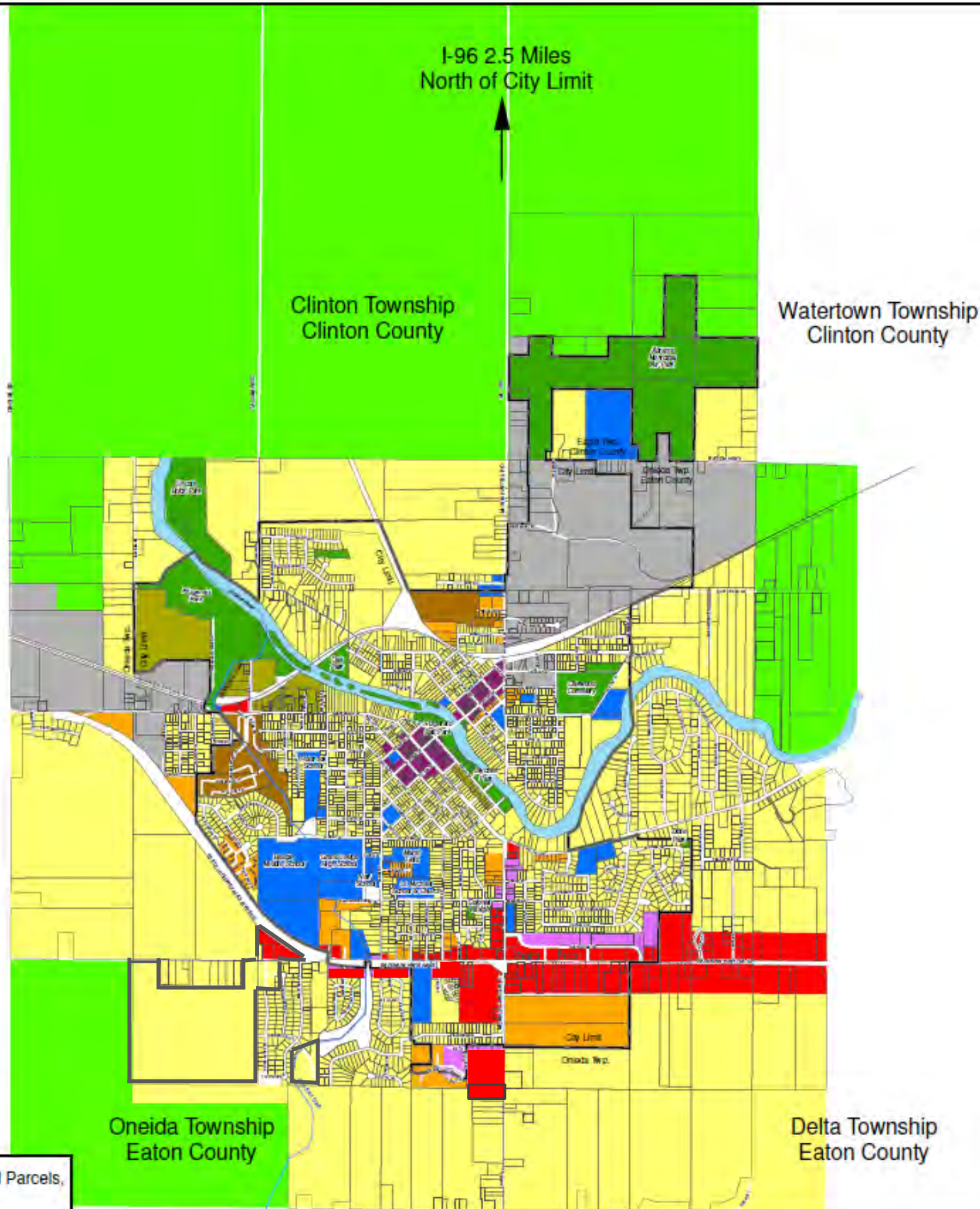
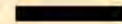
Legend

- Single Family Residential
- Planned Unit Development
- Multiple Family Residential 2+ Units
- Mobile Home Community
- Central Business District
- Commercial/Highway Services
- Office
- Industrial
- Institutional: Churches, Schools, Public Facilities
- Public Open Space/Airport, City & County Parks, Cemeteries
- Agricultural



January, 2018

0 1,500 Feet



I-96 2.5 Miles
 North of City Limit

Clinton Township
 Clinton County

Watertown Township
 Clinton County

Oneida Township
 Eaton County

Delta Township
 Eaton County

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Data Sources: Base Map and Parcels,
 Eaton County GIS 2006.

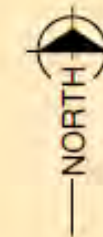
Map 5 Transportation Issues

Grand Ledge Master Plan City of Grand Ledge, Michigan

Legend

- 0000 — 2015 Annual Average Daily Traffic
- (000) — Commercial Annual Average Daily Traffic
- ① Aesthetics Issues at City Entrances
- ② Railroad Crossing Delays
- ③ Traffic Calming
- ④ Truck Traffic in the Downtown Area
- ⑤ High Speed Bridge Traffic
- ⑥ Median / Boulevard - M100 to E. City Limits

Note: Refer to text for description and discussion of citywide transportation issues.

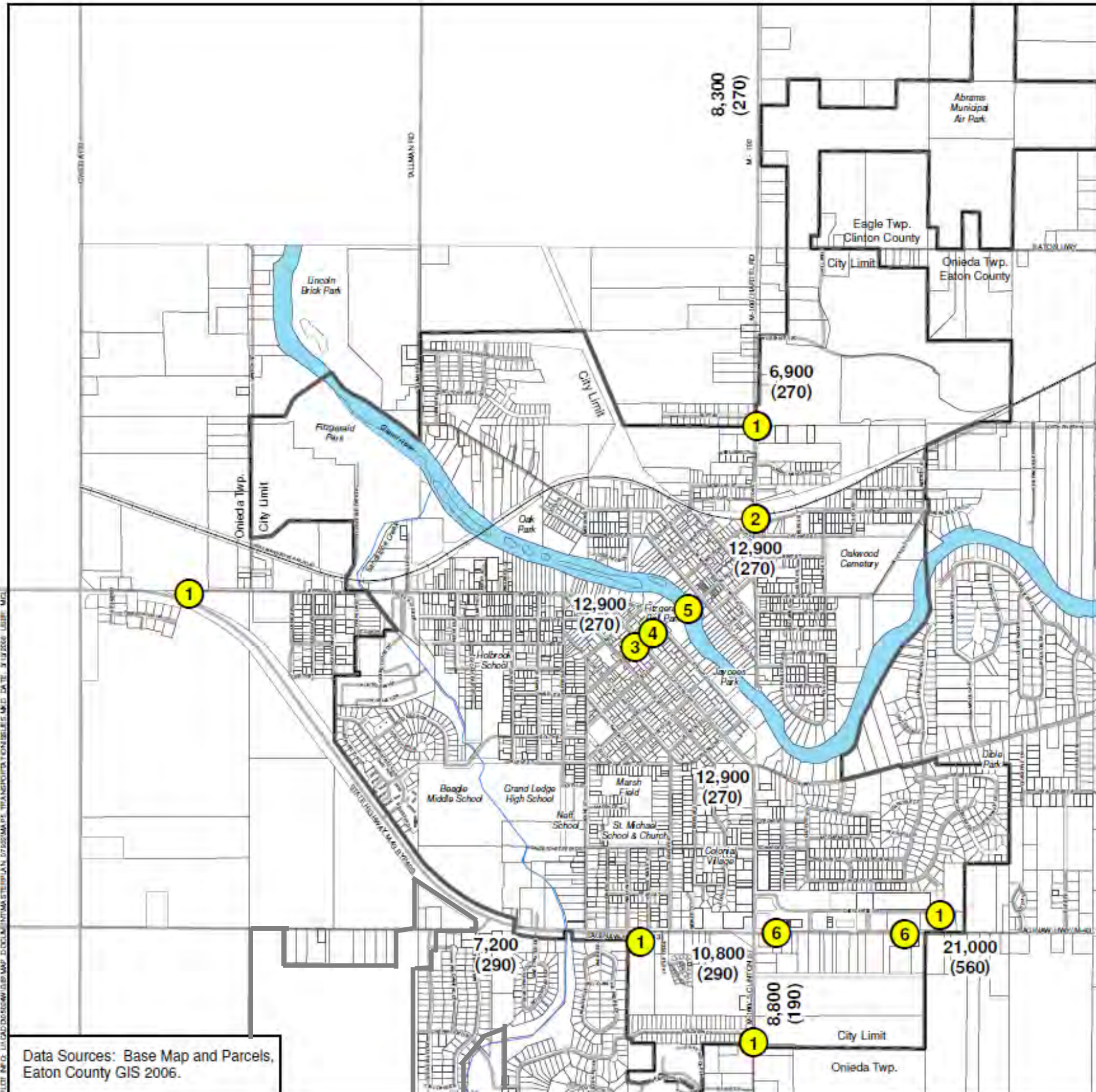


January, 2018

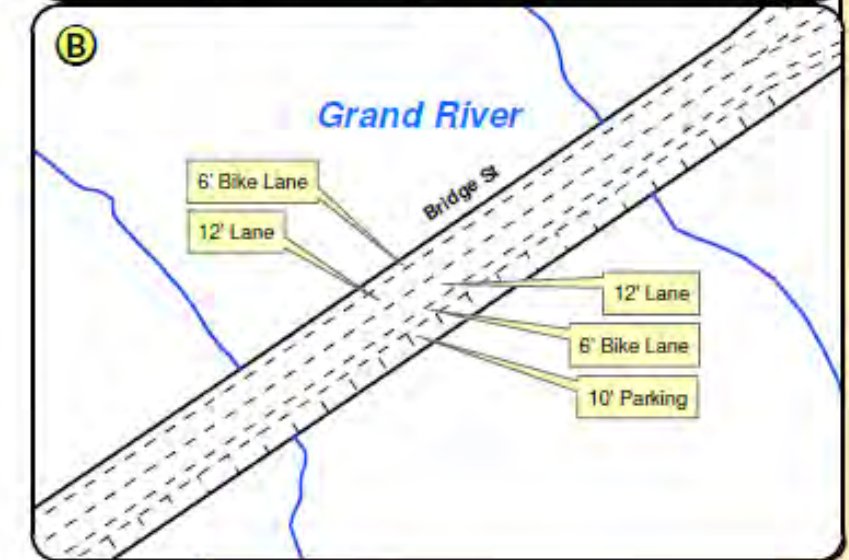
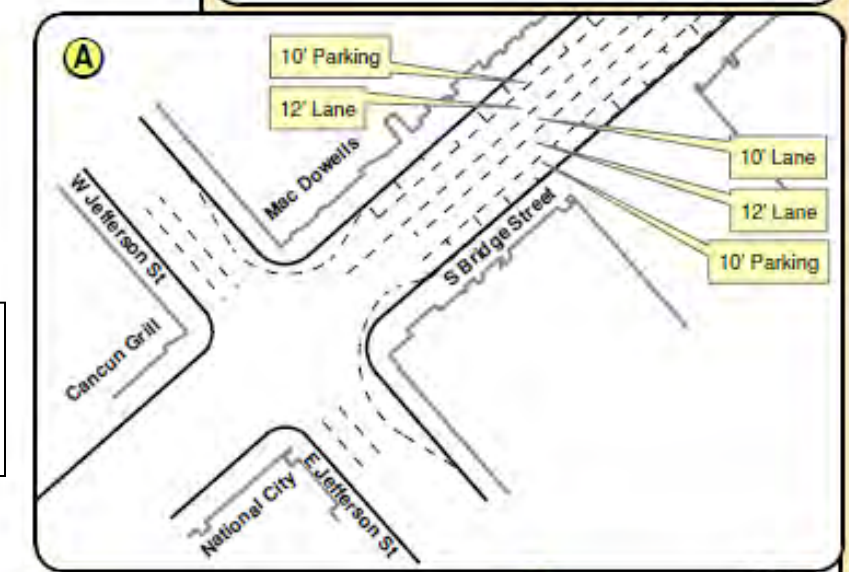
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Data Sources: Base Map and Parcels,
Eaton County GIS 2006.



Map 6
Future Street
Improvements
 Grand Ledge Master Plan
 City of Grand Ledge, Michigan



Change to:
 Possible Crossing
 at Broadbent Road

Possible Crossing
 at Nixon Road

Remove proposed streets in red
 and replace with street in green

- Legend**
- Proposed Streets
 - Proposed Bridge Crossing (Vehicular Traffic)
 - Evaluate alternatives to improve intersection traffic operation and safety.
 - Utilize traffic calming measures where appropriate (refer to text).

January, 2018

0 1,500 Feet

PLOT INFO: LA CROIX DESIGN GROUP, DOCUMENTATION PLAN, CITY OF GRAND LEDGE, DATE: 2/13/2018, USER: MCL

Data Sources: Base Map and Parcels,
 Eaton County GIS 2006.

