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MEMORANDUM

To: Laketown Township Planning Commission
From: Gregory L. Ransford, MPA
Date: January 4, 2019
Re: Proposed Master Plan Chapter Seven, Chapter Eight, Chapter Nine, and Chapter Ten /
Revised Chapter Three, Chapter Four, Chapter Five, and Chapter Six

Pursuant to the Laketown Township Master Plan Framework, attached for your review are drafts of proposed Chapter Seven – Recreational and Facilities, Chapter Eight – Utilities, Chapter Nine – Transportation, and Chapter Ten – Environment to update the Laketown Township Master Plan.

The content of these chapters are primarily from existing master plan documents since they were not directly discussed during the public workshops, although some data has been incorporated as a result of the workshops. Consistent with the previous chapters, we have provided additional suggested language in each chapter. As always, we have provided reference in bold parentheses to indicate the location from which existing language was incorporated. Beyond the restructuring of information, we have proposed a conclusion to the introduction of each of the chapters as well as additional Goals, Recommendations, and Strategies, where applicable, that are not found within the current plan documents.

Proposed additions are shown in bold text and proposed deletions are shown in strikethrough text. Additionally, a clean copy of the language is attached for your convenience. Given that a significant amount of the provisions for each chapter exist within the current Master Plan documents, we do not have substantial revisions for your consideration. Rather, we only have two (2) items of note for your attention.

1. Utilities Chapter – The revisions within Chapter Eight – Utilities were performed based on the 2008 red-lined maps from the township engineer, Prein and Newhof. We understand these are the most current maps. In addition, a copy of Chapter Eight has been provided to the township engineer for review and comment. Once we receive those comments, we will transmit them to you.
2. Transportation Chapter – The third Strategy suggests that the township consider shared driveway language within its Zoning Ordinance. We provide this suggestion because we were unable to locate language in this regard within the Zoning Ordinance. If our observation is incorrect, we will need to revise this Strategy accordingly.

Chapters Three, Four, Five, and Six

Pursuant to your direction at your November 26, 2018 meeting, attached are revisions to Chapters Three, Four, Five, and Six. Given that the changes were not extensive and we believe the revision documents to be self-explanatory, we do not provide a synopsis of your direction herein. In the instance you require a copy of your direction, please let us know and we will provide it to you. We will be prepared to discuss these items further at your January 14, 2019 meeting. If you have any questions, please let us know.

GLR
Principal Planner

Attachments

Chapter Seven Recreational & Facilities

Introduction

Laketown Township offers a number of recreational and community facilities to its residents and visitors, including seven parks, six owned by Laketown Township and one owned by the Michigan Department of Natural Resources (DNR), a Land Conservancy Nature Preserve, lakes, pathways, and a Michigan Department of Transportation rest area. A summary of several of the larger facilities in Laketown Township is provided below.

Parks and Recreation

The Huyser Farm

The Huyser Farm is a 102-acre parcel at the corner of 142nd Avenue and 64th Street. The Huyser Farm Subcommittee, a part of the Township Parks Commission, has developed a long-term strategic plan for the preservation, development, and maintenance of the farm. The plan intends that Huyser Farm will become an educational and ecological center that will draw visitors to the area. The Land Conservancy of West Michigan holds a conservation easement on the property insuring that the lands will be enjoyed by the public for years to come.

Laketown Township Beach Park

This 2.7 acre park, located at the western end of 142nd Avenue, has two hundred feet of Lake Michigan frontage and is used for swimming and other beach related activities. A large sand dune separates the parking area and the beach, which is traversable by a wooden stairway leading up and over the dune. The stairway helps to protect the fragile dune environment while affording visitors access to the lake.

Sanctuary Woods Preserve

Sanctuary Woods Preserve is approximately forty acres in the northwestern corner of the township, on 66th Street near Ottogan Street. Phase I and Phase II of development of the park have been completed. Phase III development is a long range goal and includes restoration of the historical Interurban Bridge, interpretive signs, trail signs, improved erosion control, and restrooms.

Saugatuck Dunes State Park

Saugatuck Dunes State Park offers 1,000 acres of land with two and a half miles of shoreline, located within Sections 28, 33, and 34 along the west side of the township. In 2010, the Phase I General Management Plan for Saugatuck Dunes State Park was approved, which designates management zones that reflect the land preservation goals and recreation programming for

different areas within the park. Currently, the Michigan Department of Natural Resources is in the process of developing a Phase 2 General Management Plan to establish long-range action goals for the park as a whole.

Pathways

There are 10.25 miles of non-motorized pathway in the township, including a north-south corridor that connects with Saugatuck Township to the south and Park Township and the City of Holland to the north. Future goals for pathways in Laketown Township include the expansion of the system with priority for pathways to Saugatuck Dunes State Park and Laketown Beach. In addition, a 500-mile route from Indiana through Michigan (US Bike Route 35) follows the west coast shoreline through to the eastern upper Peninsula to Sault Ste. Marie, Canada.

Lakes

There are also several lakes in the township, including Gilligan Lake, Goshorn Lake, and Kelly Lake, offering fishing, swimming, and boating amenities to residents and visitors.

Community Facilities

Historic Town Hall

The former Township Hall is located on 142nd Street just west of Beeline Road. In 2000, a historical marker was erected on site. The Parks Commission has considered moving the building to other locations for the purpose of installing restrooms or educational meeting space.

Township Hall Recreation Complex

The Township Hall Recreation Complex is a 6.4 acre park that features a softball diamond, soccer field, picnic gazebo, and meeting place for classes and indoor activities.

Laketown Township approved a new five-year recreation plan in October 2017, known as the 2018 Community Parks and Recreation Plan, which includes a comprehensive Action Program and Capital Improvement Plan, and serves as a guide for the future development of recreational opportunities and parks within the township.

In conjunction with that plan, we have concluded that the following goals are principal for maintaining the long-term success of Laketown Township's parks as well as recreational and community facilities. Several of the recommendations and strategies to achieve success provided below are concepts identified in the Action Program of the 2018 Community Parks and Recreation Plan.

Goals, Recommendations, and Strategies

Goals

- Provide and maintain a park, trail, and open space system including access to Lake Michigan that is responsive to the needs and priorities of the township residents
- Ensure that future park sites (local and centralized) are identified and preserved
- Provide public facilities and services that are adequate to serve the needs of township residents
- Provide residents an opportunity to pursue recreational activities on a year-round basis
- Encourage and assist private land owners in developing preservation strategies for their properties
- Develop access to recreational facilities for residents with limited physical abilities
- Maintain a plan for the identification and protection of historical sites within the township
- Provide recreational opportunities for all age groups
- New community facilities and services should be placed in locations convenient to the populations for which they were planned

Recommendations

- Better utilize the Saugatuck Dunes State Park by connecting it to existing pathways in Laketown Township
- Provide adequate public recreation access to the lakeshore and other water resources throughout the township
- Acquire and otherwise protect open space in developing areas to maintain the rural character of the township and assure adequate recreational opportunities in the future
- Work with other Laketown Township commissions to integrate requirements for developers of raw land to provide park sites, trails, or open spaces as a part of development planning
- Collaborate with neighboring communities and organizations to establish and expand a network of greenways as corridors for wildlife and trails for hiking, biking, cross-country skiing and other recreational activities

Strategies

- Implement the Action Program and Capital Improvement Plan outlined in the 2018 Community Parks & Recreation Plan
- Acquire additional property suitable for development of active and passive recreation, funding through the general fund, donor funds, and grant funds

- Develop and implement ordinance language that requires new land developments to expand non-motorized opportunities throughout the township using a combination of shared use paths and bike lanes
- Apply for grant funds from a variety of sources, such as Allegan County, the Michigan Natural Resources Trust Fund, the Michigan Department of Transportation, and the Land and Water Conservation Fund through DNR, as well as private foundations and sources
- The Township Board should continue to support the implementation of the 2018 Community Parks & Recreation Plan

Chapter Seven Recreational & Facilities

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Laketown Township Beach Park (park identified in 1991 Master Plan, page 37)

This 2.7 acre park, located at the western end of 142nd Avenue, has two hundred feet of Lake Michigan frontage and is used for swimming and other beach related activities. A large sand dune separates the parking area and the beach, **which is traversable by a wooden stairway leading up and over the dune. The stairway helps to protect the fragile dune environment while affording visitors access to the lake.** ~~The results of the Parks Survey, taken in 1989, indicated that 72.3% of the township residents who responded want a wooden footpath constructed across the dune to provide more convenient beach access. This footpath would also assist in preserving the slope of the dune by decreasing the amount of erosion caused by foot traffic.~~

Sanctuary Woods Preserve

Sanctuary Woods Preserve is approximately forty acres in the northwestern corner of the township, on 66th Street near Ottogon Street. Phase I and Phase II of development of the park have been completed. Phase III development is a long range goal and includes restoration of the historical Interurban Bridge, interpretive signs, trail signs, improved erosion control, and restrooms.

Saugatuck Dunes State Park (park identified in 1991 Master Plan, page 36)

Saugatuck Dunes State Park offers 1,000 acres of land with two and a half miles of shoreline, located within Sections 28, 33, and 34 along the west side of the township. In 2010, the Phase I General Management Plan for Saugatuck Dunes State Park was approved, which designates management zones that reflect the land preservation goals and recreation programming for different areas within the park. Currently, the Michigan Department of Natural Resources is in the process of developing a Phase 2 General Management Plan to establish long-range action goals for the park as a whole.

Pathways

There are 10.25 miles of non-motorized pathway in the township, including a north-south corridor that connects with Saugatuck Township to the south and Park Township and the City of Holland to the north. Future goals for pathways in Laketown Township include the expansion of the system with priority for pathways to Saugatuck Dunes State Park and Laketown Beach. In addition, a 500-mile route from Indiana through Michigan (US Bike Route 35) follows the west coast shoreline through to the eastern upper Peninsula to Sault Ste. Marie, Canada.

Lakes

There are also several lakes in the township, including Gilligan Lake, Goshorn Lake, and Kelly Lake, offering fishing, swimming, and boating amenities to residents and visitors.

Community Facilities

Historic Town Hall (facility identified in 1991 Master Plan, page 40)

The former Township Hall is located on 142nd Street just west of Beeline Road. In 2000, a historical marker was erected on site. The Parks Commission has considered moving the building to other locations for the purpose of installing restrooms or educational meeting space.

Township Hall Recreation Complex

The Township Hall Recreation Complex is a 6.4 acre park that features a softball diamond, soccer field, picnic gazebo, and meeting place for classes and indoor activities.

Laketown Township approved a new five-year recreation plan in October 2017, known as the 2018 Community Parks and Recreation Plan, which includes a comprehensive Action Program and Capital Improvement Plan, and serves as a guide for the future development of recreational opportunities and parks within the township.

In conjunction with that plan, we have concluded that the following goals are principal for maintaining the long-term success of Laketown Township's parks as well as recreational and community facilities. Several of the recommendations and strategies to achieve success provided

below are concepts identified in the Action Program of the 2018 Community Parks and Recreation Plan.

Goals, Recommendations and Strategies

Goals

- Provide and maintain a park, trail, and open space system including access to Lake Michigan that is responsive to the needs and priorities of the township residents
- Ensure that future park sites (local and centralized) are identified and preserved
- Provide public facilities and services that are adequate to serve the needs of township residents
- Provide residents an opportunity to pursue recreational activities on a year-round basis
- Encourage and assist private land owners in developing preservation strategies for their properties **(Copied from 2018 Community Parks & Recreation Plan.)**
- Develop access to recreational facilities for residents with limited physical abilities **(Copied from 2018 Community Parks & Recreation Plan.)**
- Maintain a plan for the identification and protection of historical sites within the township **(Copied from 2018 Community Parks & Recreation Plan.)**
- **Provide** recreational opportunities ~~should be available~~ for all age groups **(Moved from 1991 Master Plan, page 6.)**
- New community facilities and services should be placed in locations convenient to the populations for which they were planned **(Moved from 1991 Master Plan, page 7.)**

Recommendations

- ~~• The State owned park land in the township (2 miles of shoreline) needs to be better utilized.~~
- **Better utilize the Saugatuck Dunes State Park by connecting it to existing pathways in Laketown Township (Re-worded from 1991 Master Plan, page 6 (see above))**
- Provide adequate public recreation access to the lakeshore and other water resources throughout the township **(Moved from 1991 Master Plan, page 6.)**
- Acquire and otherwise protect open space in developing areas to maintain the rural character of the township and assure adequate recreational opportunities in the future **(Copied from 2018 Community Parks & Recreation Plan.)**
- Work with other Laketown Township commissions to integrate requirements for developers of raw land to provide park sites, trails, or open spaces as a part of development planning **(Copied from 2018 Community Parks & Recreation Plan.)**
- Collaborate with neighboring communities and organizations to establish and expand a network of greenways as corridors for wildlife and trails for hiking, biking, cross-country skiing and other recreational activities **(Copied from 2018 Community Parks & Recreation Plan.)**

Strategies

- **Implement the Action Program and Capital Improvement Plan outlined in the 2018 Community Parks & Recreation Plan**
- Acquire additional property suitable for development of active and passive recreation, funding through the general fund, donor funds, and grant funds **(Copied from 2018 Community Parks & Recreation Plan.)**
- Develop and implement ordinance language that requires new land developments to expand non-motorized opportunities throughout the township using a combination of shared use paths and bike lanes **(Re-worded from 2018 Community Parks & Recreation Plan.)**
- Apply for grant funds from a variety of sources, such as Allegan County, the Michigan Natural Resources Trust Fund, the Michigan Department of Transportation, ~~CMZ~~, and the Land and Water Conservation Fund through DNR, as well as private foundations and sources **(Copied from 2018 Community Parks & Recreation Plan.)**
- **The Township Board should continue to support the implementation of the 2018 Community Parks & Recreation Plan**

Chapter Eight Utilities

Introduction

The residents and businesses of Laketown Township receive utility service from one of four sources: 1) Allegan County Sewage Disposal System; 2) City of Holland; 3) Kalamazoo Lake Sewer and Water Authority; 4) residential wells and septic disposal fields. Water and sanitary sewer service is concentrated in the northern portion of the township, north of 146th Avenue, with a limited area of service in the southern portion of the township along 136th Avenue. The remainder of the township is served by residential wells and septic disposal fields, which are regulated by the Allegan County Environmental Health Department. However, the township's soils and high water table limit the development capacity of the land for on-site sewer and water facilities. These soils drain poorly and have severe limitations for septic disposal fields. As such, intense residential development is limited to the area where sewer and water service is provided; north of 146th Avenue.

All of Laketown Township is physically capable of being served by the City of Holland's sewer and water service districts. However, only the more populated northern portion of the township currently receives sewer and water service from the City. The Waste Water Treatment Plant (WWTP) in Holland is jointly owned by Laketown, Park, Fillmore, and Holland Townships and the City of Holland. The Kalamazoo Lake Sewer and Water Authority also provides water and sanitary sewer service to a limited area of the township. The Kalamazoo Lake Sewer and Water Authority's waste water treatment facility located in Saugatuck, extended Saugatuck Township's water distribution system and sanitary sewer collection system in 2001 into the Goshorn Lake vicinity which improved service for Laketown residents. The possible expansion of public utility services from Holland and Saugatuck will increase the development capacity within the township. The areas south of 146th Avenue, which are considered to have limitations for development because of the soils, will experience increased development pressures.

In considering utilities for commercial development, it is imperative to study the Blue Star Highway, which currently has no public water or sanitary sewer. Previous planning efforts have identified the lack of utilities in this area as one of the key impediments to orderly and well-planned commercial development in Laketown Township. At the Blue Star Highway public workshop, held in July 2018, attendees identified the lack of public utility expansions as a top weakness in the Blue Star Highway. They also recognized the expansion of public utilities as an opportunity for the area. Public utilities, particularly water and sewer, could be funded by prospective developers or businesses.

As a result of various planning meetings, and coupled with modern planning principles, we have concluded that the following goals are paramount for planning for public utility expansion in Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations, and Strategies

Goals

- Provide public facilities and services that are adequate to serve the needs of township residents
- New commercial and industrial development should be directed to selected areas which have public utility services or are planned to receive them
- Prior to considering major development along the Blue Star Highway, an extended public utility system or individual private systems must be evaluated, based on their ability to adequately service the existing and future needs along the corridor in a cost efficient and coordinated manner

Recommendations

- Land use and utility services should be coordinated to insure that greater intensity of growth occurs only where utility services are provided or planned
- When reviewing site improvement plans or preliminary plats, work with developers to ensure that sanitary sewer and public water facilities are expanded within the township
- Maintain a positive relationship with the Cities of Holland and Saugatuck to ensure proper coordination of sewer and water service extensions in the future

Strategies

- Development or strengthening of regulations applicable to groundwater protection are necessary to ensure adequate well water supply and safety for the future. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.
- Provide adequate protection of groundwater sources
- Improve ordinance controls for hazardous material storage and outdoor uses that could negatively impact groundwater
- Conduct a groundwater aquifer quality study, if existing evidence reveals water quality concerns
- Establish or maintain density standards that are consistent with the natural capacity of soils to handle on-site septic systems unless public sewer is present

Chapter Eight Utilities

Introduction

The residents **and businesses** of Laketown Township receive utility service from one of ~~four~~ **three** sources: **1) Allegan County Sewage Disposal System**; 2) City of Holland; 3) Kalamazoo Lake Sewer and Water Authority; 4) residential wells and septic disposal fields. **Water and sanitary sewer service is concentrated in the northern portion of the township, north of 146th Avenue, with a limited area of service in the southern portion of the township along 136th Avenue. The remainder of the township is served by residential wells and septic disposal fields, which are regulated by the Allegan County Environmental Health Department.** ~~All of Laketown Township is physically capable of being served by the City of Holland's sewer and water service districts. However, only the more populated northern portion of the township currently receives sewer and water service.~~ (relocated to paragraph below) ~~The Kalamazoo Lake Sewer and Water Authority provides sanitary water service to the Michigan Dunes Correctional Facility. However, the township's soils and high water table limit the development capacity of the land for on-site sewer and water facilities. These soils drain poorly and have severe limitations for septic disposal fields. As such, intense residential development is limited to the area where sewer and water service is provided; north of 146th Avenue.~~ **(Moved from 1991 Master Plan pages 41-42)**

All of Laketown Township is physically capable of being served by the City of Holland's sewer and water service districts. However, only the more populated northern portion of the township currently receives sewer and water service **from the City**. The Waste Water Treatment Plant (WWTP) in Holland is jointly owned by Laketown, Park, Fillmore, and Holland Townships and the City of Holland, ~~has a capacity of 8.5 million gallons per day (MGD) with an ability to expand 4 to 5 MGD. Laketown Township owns or has reserved, 270,000 gallons per day (GPD) of the total plan capacity, 25% of which is currently being used.~~ **The Kalamazoo Lake Sewer and Water Authority also provides water and sanitary sewer service to a limited area of the township.** The Kalamazoo Lake Sewer and Water Authority's waste water treatment facility located in Saugatuck, **extended Saugatuck Township's water distribution system and sanitary sewer collection system in 2001 into the Goshorn Lake vicinity which improved service for Laketown residents** ~~provides Laketown Township with 60,000 GPD of reserved capacity. The Michigan Dunes State Correctional Facility currently uses 50,000 GPD of that reserved capacity through a 6 inch force main running from Blue Star Highway, north on 64th street, and west on 138th Avenue. The remaining 10,000 GPD of capacity is not currently being used by the township.~~ The possible expansion of public utility services from Holland and Saugatuck will increase the development capacity within the township. The areas south of 146th Avenue, which are considered to have limitations for development because of the soils, will experience increased development pressures. **(Moved from 1991 Master Plan pages 41-42)**

In considering utilities for commercial development, it is imperative to study the Blue Star Highway, The Blue Star Highway which currently has no public water or sanitary sewer and. Previous planning efforts have identified the lack of utilities in this area as one of the key impediments to orderly and well-planned commercial development in Laketown Township. However, water and sewer are available along 64th Street up to Island Lake Road. The Township has negotiated and approved an agreement to provide public sanitary sewer east of the I-196 interchange. At the Blue Star Highway public workshop, held in July 2018, attendees identified the lack of public utility expansions as a top weakness in the Blue Star Highway. They also recognized the expansion of public utilities as an opportunity for the area. Public utilities, particularly water and sewer, could be funded by prospective developers or businesses. (Moved from 2008 Blue Star Sub-Area Plan, page 4.)

As a result of various planning meetings, and coupled with modern planning principles, we have concluded that the following goals are paramount for planning for public utility expansion in Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations and Strategies

Goals

- Provide public facilities and services that are adequate to serve the needs of township residents
- New commercial and industrial development should be directed to selected areas which have public utility services or are planned to receive them (Moved from 1991 Master Plan, page 5.)
- Prior to considering major development along the Blue Star Highway, an extended public utility system or individual private systems must be evaluated, based on their ability to adequately service the existing and future needs along the corridor in a cost efficient and coordinated manner (Moved from 2008 Blue Star Sub-Area Plan, page 13.)

Recommendations

- Land use and utility services should be coordinated to insure that greater intensity of growth occurs only where utility services are provided or planned (Moved from 2008 Blue Star Sub-Area Plan, page 7.)
- When reviewing site improvement plans or preliminary plats, work with developers to ensure that sanitary sewer and public water facilities are expanded within the township
- Maintain a positive relationship with the Cities of Holland and Saugatuck to ensure proper coordination of sewer and water service extensions in the future (Moved from 2008 Blue Star Sub-Area Plan, page 7.)

Strategies

- ~~Finally, d~~Development or strengthening of regulations applicable to groundwater protection are necessary **to ensure adequate well water supply and safety for the future.** These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials **(Modified from 1991 Master Plan, page 15.)**
- ~~With so many township residents dependent on well water services, groundwater protection is a concern. Provide adequate~~ protection of the groundwater sources is critical to the long term usefulness of a well system. To this end, consideration of a groundwater protection program for the township would be beneficial. The following steps may be followed to develop such a program. **(Moved from 1991 Master Plan, page 15.)**
- Improve ordinance controls for hazardous material storage and outdoor uses that could negatively impact groundwater
- Conduct a groundwater aquifer quality study, if existing evidence reveals water quality concerns
- Establish or maintain density standards that are consistent with the natural capacity of soils to handle on-site septic systems, unless public sewer is present

Chapter Nine Transportation

Introduction

Transportation in Laketown Township is influenced by a number of agencies, from the township itself, to the Allegan County Road Commission, to the Michigan Department of Transportation (MDOT). Planning for transportation at the local level often falls to the Metropolitan Planning Organization (MPO) for the area. An MPO is the designated local decision-making body that is responsible for carrying out the metropolitan transportation planning process. As such, the MPO is federally mandated to administer transportation planning within its boundaries.

The Macatawa Area Coordinating Council (MACC) operates as the MPO for portions of Ottawa and Allegan Counties that includes Laketown Township. The MACC generates data on traffic and roadway conditions within its jurisdictional boundaries, including the Average Annual Daily Trip (AADT), which is a simple measurement of the business of a road. For the roadways in Laketown Township where MACC computed AADT in 2017, traffic volumes ranged from 230 trips (138th Street at 60th Street) to 3,186 trips (64th Street at the Blue Star Highway). Compared to neighboring municipalities, the City of Holland and Fillmore Township, traffic volume in Laketown Township was relatively low. This was reflected in the Master Plan public workshops held in 2018, as very few participants emphasized traffic as one of the primary weaknesses or threats to Laketown Township.

The Macatawa Area Coordinating Council is also tasked with rating the condition of Federal Aid roads within their jurisdiction to help identify and prioritize future road resurfacing projects. In 2018, MACC rated 25% of the roads in Allegan and Ottawa Counties as poor, 25% of the roads as good, and 50% of the roads as fair. MACC published a report that includes a map color-coding which roads received specific rankings. There were roadways in Laketown Township that received poor, fair, and good rankings. It should be noted that 64th Street was definitively ranked “poor” within Laketown Township boundaries.

Existing Roadways

The two purposes of roadways within the township are to move traffic and to provide access to adjacent property. Each road within the township serves both of these purposes to a varying degree. The roads in Laketown Township are classified into four roadway functional classifications. This classification system assists the ACRC and the MDOT in determining the order in which improvement projects should be completed. The township can also use this classification system to assist in the determination of appropriate land uses along each roadway.

Expressways

This category includes major highways, often under county or state jurisdiction, which serves trips between communities and other major activity centers throughout a region. Roadways of

this type are designed to provide the highest level of traffic mobility, usually traveling at speeds ranging from 65 to 75 miles per hour (mph). Since the primary function of the expressway is to provide mobility, access to adjacent land uses is limited in order to optimize capacity along the roadway. Both I-196 and U.S. 31 within the township are classified by the ACRC as Federal and State routes. The Blue Star Highway is categorized as an inter-county highway route.

County Primary Roads (Paved)

County Primary Roads are those which serve longer trips within an urban area, sometimes extending beyond municipal boundaries to connect to adjacent population centers or larger arterials. County Primaries are designed for moderate to large traffic volumes and speeds of 45 to 55 mph. Some access to adjacent development may be permitted from roadways of this type, but on-street parking and curb cuts are regulated to preserve capacity of the street.

The ACRC classifies the following roadways within the township as County Primaries:

- 60th Street
- 64th Street
- 66th Street (north of 146th Avenue)
- 136th Avenue (east of 64th Street)
- 140th Avenue (east of 64th Street)
- 146th Avenue (east of 66th Street)
- Washington Avenue (Blue Star Highway)

County Local Roads (Paved)

These roads collect and distribute traffic to and from the higher classified systems. These roads tend to accommodate slightly shorter trips and are generally designed for moderate traffic volumes and speeds of 35 to 45 mph. Traffic mobility is often sacrificed through additional curb cuts to provide more access to adjacent property.

County Local roads within the township, as classified by the ACRC, include:

- 32nd Street
- 61st Street
- 62nd Street
- 63rd Street
- 65th Street
- 66th Street (between 146th and 140th Avenues)
- 138th Avenue
- 139th Avenue
- 140th Avenue (west of 64th Street)
- 141st Avenue
- 142nd Avenue
- 143rd Avenue
- 144th Avenue
- 145th Avenue
- 147th Avenue
- Beeline Road
- Island Lake Road

County Local Roads (Unpaved)

The remainder of the county roads within the township provide access to individual properties, with limited continuity and mobility. These roads are designed for low volumes and speeds of 35 mph or less. These streets are linked by other paved County Local roadways to other land uses or County Primary roads.

Unpaved County Local roads within the township include:

- 142nd Avenue (limited portion east of 62nd Street and west of I-196)
- 62nd Street (limited portion south of 142nd Avenue and west of I-196)
- 61st Street (north side of 138th Avenue)

Other Roads

The remainder of the roads in the township are classified as subdivision streets or private roads.

Multi-modal Transportation

While roadways are the predominant method of transportation throughout Laketown Township, it is necessary to emphasize alternative methods of transportation as well. The prevalence of bicycling and walking continues to increase as alternative modes of transportation, with positive impacts for both the environment and health of township residents and visitors. It is important to ensure that travelers that are not in vehicles have safe routes throughout the township as well, connecting places of residence, business, recreation, and education. The maintenance and expansion of pathways for bicycles and pedestrians is emphasized in the Residential, Recreational and Community Facilities, Blue Star Highway, and Environment Chapters.

As a result of various planning meetings, and coupled with modern planning principles, we have concluded that the following goals are paramount for planning for effective modes of transportation in Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations, and Strategies

Goals

- An emphasis on interconnected drives and streets should be promoted so that internal trips can be made without compelling drivers to exit and enter multiple times
- A system of integrated shared use paths should be promoted for all new developments to provide safe walking routes to surrounding stores and uses
- Establish adequate transportation routes to ensure the safety and well-being of Township residents

Recommendations

- Developers should work with the Allegan County Road Commission and the Allegan County Sheriff's Department to improve traffic safety (sight distance, sign visibility) and coordination of improvements when preparing Site Improvement Plans and Plats
- Interconnect service drives to improve traffic distribution and to promote access management along Blue Star Highway
- Provide all land uses with adequate access to the road system
- Strive to minimize traffic disruptions on thoroughfares, while keeping through traffic off of the local residential streets
- Strive to create a multi-modal transportation system, encompassing bicycles, pedestrian, and automobile traffic

Strategies

- Require the layout of new residential developments to be extensions of existing neighborhoods, where possible. This should apply to roadway extensions, to ensure inter-connected neighborhoods.
- Consider adopting Access Management Regulations to the Zoning Ordinance, in particular along the Blue Star Highway
- Establish site plan review procedures to consider shared driveways in heavily traveled corridors
- Modify the Zoning Ordinance to require pedestrian pathways in new developments

Complete Streets Plan

In 2010, the Michigan Planning Enabling Act was amended to require that master plans account for "all legal users" of the transportation system within the municipality. The amended Act, in part, states that the Master Plan must include, "among other things, promotion of or adequate provision for 1 or more of the following: (i) A system of transportation to lessen congestion on streets and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users."

This Chapter of the Laketown Township Master Plan, Chapter 9 – Transportation, as well as other provisions throughout the plan regarding pathways, roadway improvements, and lessening roadway congestion, identify key means to implement complete streets. As a result, the township is compliant with this amendment.

Chapter Nine Transportation

Introduction

Transportation in Laketown Township is influenced by a number of agencies, from the township itself, to the Allegan County Road Commission, to the Michigan Department of Transportation (MDOT). Planning for transportation at the local level often falls to the Metropolitan Planning Organization (MPO) for the area. An MPO is the designated local decision-making body that is responsible for carrying out the metropolitan transportation planning process. As such, the MPO is federally mandated to administer transportation planning within its boundaries.

The Macatawa Area Coordinating Council (MACC) operates as the MPO for portions of Ottawa and Allegan Counties that includes Laketown Township. The MACC generates data on traffic and roadway conditions within its jurisdictional boundaries, including the Average Annual Daily Trip (AADT), which is a simple measurement of the business of a road. For the roadways in Laketown Township where MACC computed AADT in 2017, traffic volumes ranged from 230 trips (138th Street at 60th Street) to 3,186 trips (64th Street at the Blue Star Highway). Compared to neighboring municipalities, the City of Holland and Fillmore Township, traffic volume in Laketown Township was relatively low. This was reflected in the Master Plan public workshops held in 2018, as very few participants emphasized traffic as one of the primary weaknesses or threats to Laketown Township.

The Macatawa Area Coordinating Council is also tasked with rating the condition of Federal Aid roads within their jurisdiction to help identify and prioritize future road resurfacing projects. In 2018, MACC rated 25% of the roads in Allegan and Ottawa Counties as poor, 25% of the roads as good, and 50% of the roads as fair. MACC published a report that includes a map color-coding which roads received specific rankings. There were roadways in Laketown Township that received poor, fair, and good rankings.

Existing Roadways

The two purposes of roadways within the township are to move traffic and to provide access to adjacent property. Each road within the township serves both of these purposes to a varying degree. ~~Roadways are categorized based on their primary function or purpose and then placed in one of the functional classification categories.~~ The roads in Laketown Township are classified into four roadway functional classifications. This classification system assists the ACRC and the MDOT in determining the order in which improvement projects should be completed. The township can also use this classification system to assist in the determination of appropriate land uses along each roadway. **(Moved from 1991 Master Plan, page 44.)**

Expressways

This category includes major highways, often under county or state jurisdiction, which serves

trips between communities and other major activity centers throughout a region. Roadways of this type are designed to provide the highest level of traffic mobility, usually traveling at speeds ranging from ~~55 to 65~~ **to 75** miles per hour (mph). Since the primary function of the expressway is to provide mobility, access to adjacent land uses is limited in order to optimize capacity along the roadway. Both I-196 and U.S. 31 within the township are classified by the ACRC as Federal and State routes. **The Blue Star Highway is categorized as an inter-county highway route. (Moved from 1991 Master Plan, page 45.)**

County Primary Roads (Paved)

County Primary Roads are those which serve longer trips within an urban area, sometimes extending beyond municipal boundaries to connect to adjacent population centers or larger arterials. County Primaries are designed for moderate to large traffic volumes and speeds of ~~35~~ **45** to 55 mph. Some access to adjacent development may be permitted from roadways of this type, but on-street parking and curb cuts are regulated to preserve capacity of the street.

The ACRC classifies the following roadways **within the township** as County Primaries:

- 60th Street
- 64th Street
- 66th Street (north of 146th Avenue)
- 136th Avenue (east of 64th Street)
- **140th Avenue (east of 64th Street)**
- **146th Avenue (east of 66th Street)**
- Washington Avenue (Blue Star Highway)

(Moved from 1991 Master Plan, page 45.)

County Local Roads (Paved)

These roads collect and distribute traffic to and from the higher classified systems. These roads tend to accommodate slightly shorter trips and are generally designed for moderate traffic volumes and speeds of ~~30 to 35~~ **to 45** mph. Traffic mobility is often sacrificed through additional curb cuts to provide more access to adjacent property.

County Local roads within the township, as classified by the ACRC, include:

- 32nd **Street Avenue**
- 61st Street (~~north of 141st Avenue~~)
- 62nd Street (~~between I-196 and 140th Avenue~~)
- 63rd Street
- 65th Street
- 66th Street (between 146th and **140th 144th** Avenues)
- 138th **Avenue**
- 139th **Avenue**

- 140th Avenue (west of 64th Street)
 - 141st Avenue
 - 142nd Avenue
 - 143rd Avenue
 - 144th Avenue
 - 145th Avenue
 - 147th Avenue
 - Bee Line Road
 - Island Lake Road
- (Moved from 1991 Master Plan, pages 45-46.)

County Local Roads (Unpaved)

The remainder of the county roads within the township provide access to individual properties, with limited continuity and mobility. These roads are designed for low volumes and speeds of 25 35 mph or less. These streets are linked by other paved County Local roadways to other land uses or County Primary roads.

Unpaved County Local roads within the township include:

- ~~139th Avenue~~
 - ~~66th Street (between 144th and 142nd Avenues)~~
 - ~~61st Street (between 138th and 140th Avenues)~~
 - 142nd Avenue (limited portion east of 62nd Street and west of I-196)
 - 62nd Street (limited portion south of 142nd Avenue and west of I-196)
 - 61st Street (north side of 138th Avenue)
- (Moved from 1991 Master Plan, page 46.)

Other Roads

The remainder of the roads in the township are classified as subdivision streets or private roads.
(Moved from 1991 Master Plan, page 46.)

Multi-modal Transportation

While roadways are the predominant method of transportation throughout Laketown Township, it is necessary to emphasize alternative methods of transportation as well. The prevalence of bicycling and walking continues to increase as alternative modes of transportation, with positive impacts for both the environment and health of township residents and visitors. It is important to ensure that travelers that are not in vehicles have safe routes throughout the township as well, connecting places of residence, business, recreation, and education. The maintenance and expansion of pathways for bicycles and pedestrians is emphasized in the Residential, Recreational and Community Facilities, Blue Star Highway, and Environment Chapters.

As a result of various planning meetings, and coupled with modern planning principles, we have concluded that the following goals are paramount for planning for effective modes of transportation in Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations, and Strategies

Goals

- An emphasis on interconnected drives and streets should be promoted so that internal ~~sub-area~~ trips can be made without compelling drivers to ~~go out~~ exit and enter multiple times onto the Blue Star Highway. **(Moved from 2008 Blue Star Sub-Area, page 16.)**
- A system of integrated shared use paths should be promoted for all new developments to provide safe walking routes to surrounding stores and uses **(Moved from 2008 Blue Star Sub-Area, page 16.)**
- Establish adequate transportation routes to ensure the safety and well-being of Township residents

Recommendations

- Developers should work with the Allegan County Road Commission and the Allegan County Sheriff's Department to improve traffic safety (sight distance, sign visibility) and coordination of improvements when preparing Site Improvement Plans and Plats **(Reworded from 1991 Master Plan, page 5.)**
- Interconnect service drives to improve traffic distribution and to promote access management along Blue Star Highway. **(Moved from 2008 Blue Star Sub-Area, page 9.)**
- Provide all land uses with adequate access to the road system
- Strive to minimize traffic disruptions on thoroughfares, while keeping through traffic off of the local residential streets
- Strive to create a multi-modal transportation system, encompassing bicycles, pedestrian, and automobile traffic

Strategies

- Require the layout of new residential developments to be extensions of existing neighborhoods, where possible. This should apply to roadway extensions, to ensure interconnected neighborhoods.
- Consider adopting Access Management Regulations to the Zoning Ordinance, in particular along the Blue Star Highway
- Establish site plan review procedures to consider shared driveways in heavily traveled corridors
- Modify the Zoning Ordinance to require pedestrian pathways in new developments

Complete Streets Plan

In 2010, the Michigan Planning Enabling Act was amended to require that master plans account for “all legal users” of the transportation system within the municipality. The amended Act, in part, states that the Master Plan must include, “among other things, promotion of or adequate provision for 1 or more of the following: (i) A system of transportation to lessen congestion on streets and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users.”

This Chapter of the Laketown Township Master Plan, Chapter 9 – Transportation, as well as other provisions throughout the plan regarding pathways, roadway improvements, and lessening roadway congestion, identify key means to implement complete streets. As a result, the township is compliant with this amendment.

Chapter Ten Environment

Introduction

Laketown Township's natural features have played a significant role in the development of the township. Many residents live in Laketown Township due to its woodlands, Lake Michigan shoreline, sand dunes, wetlands, and other natural features. It is these features that provide the rural character so valued by township residents. In fact, during the public input workshops held in 2018, approximately 45% of attendees responded that the rural character is what attracted them to live in Laketown. Lake Michigan yielded the second highest response rate to the question at 26%.

Natural features and open space contribute to the township's outstanding quality of life. Some of the general benefits of protecting and conserving these features include economic opportunities in areas such as agriculture, tourism, and recreation; protecting the supply for municipal and private water systems; providing habitats for wildlife; flood control; pollution protection; aesthetics; as well as educational opportunities, among others. As such, accommodating growth while maintaining rural character is a challenge faced by many growing communities. It is important to consider the preservation of rural character when making development decisions.

The township contains state protected, sensitive dune formations, federally protected floodplains, and an abundance of sandy soil types. Active use of these features, whether for resort and year-round homes on the Lake Michigan shoreline, or extraction of mineral resources, has been the practice throughout the development of the township. As knowledge of the value of these resources has increased, more controls over their use have been implemented by federal, state and local laws. The reasonable application of these laws should ensure that the resources so valued by the township will be present for future generations to enjoy.

The following description of natural features and their associated regulations assists in establishing the character of the natural environment for the analysis of suitable land uses, and helps in evaluating the development potential of the land within the township. This evaluation is necessary to determine potential environmental constraints to development and to assist in determining the ability to integrate these natural features into development proposals.

Sand Dunes

The dunes along Lake Michigan form the longest stretch of fresh water dunes in the world. In addition to their scenic values, dunes serve as a natural barrier to water and wind storm damage. However, the lakefront setting of the dunes has made dune areas highly desirable sites for residential development. A large portion of the existing exposed sand dunes, which are extremely sensitive to any development impacts, is protected in the Saugatuck

Dunes State Park.

Legislative efforts have been made to assure an adequate balance between preservation and development of these environmentally sensitive areas. Critical dune areas are currently regulated by Part 353, Sand Dunes Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended, through the Michigan Department of Environmental Quality (MDEQ). This statute was most recently amended in August, 2012. Presently, the Act requires a permit for those activities which significantly alter the physical characteristics of a critical dune area or for a contour change in a critical dune area. Permit applications are typically required for the construction of a house or garage, building a road or driveway, installing a septic system, installing retaining walls, and sand removal.

Floodplains

In 1980, the Federal Emergency Management Agency (FEMA) determined the 100- year floodplain boundaries within Laketown Township and issued a Federal Insurance Rate Map (FIRM). The FIRM is used to determine the applicability of flood insurance for properties within the designated floodplain area. Floodplains are protected by the MDEQ and state permits are required for most types of development within the floodplain.

Wetlands

Wetlands are defined by the MDEQ as, "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh." The MDEQ has identified wetlands throughout Michigan through interpretation of aerial photography, topographic data, as well as soil inventories. The MDEQ makes wetland inventory maps available to assist property owners with identifying the location of any wetlands on their property and whether the wetlands are regulated.

While wetlands can represent a limitation to development, they may also be a valuable development site amenity. Rather than viewing natural features such as wetlands as preventing development, they should be valued for their opportunity to provide innovative site and building integration that use existing site features as building amenities.

Significant wetlands in Michigan are protected through Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, as amended. The MDEQ has certified that all county wetland inventories required by Part 303 were complete as of January 2007. This has ensured that all non-contiguous wetlands over five (5) acres in size are regulated regardless of county population, making permit requirements uniform in all counties. The MDEQ is responsible for reviewing development

plans and requests for permits in wetland areas and performing site determinations.

Waterways

Waterways include the lakes, ponds, rivers, streams, and in some cases, wetlands of Laketown Township. The land surrounding the township's waterways is often the most sought after property due to the environmental, aesthetic and recreational benefits that are associated with local waterways. Lake Michigan property that lies vacant is more often viewed as a financial residential investment than either for conservation easements or low impact development, such as parks or public access points. These areas, if not currently developed, will need continued attention as ownership or land development intentions change.

Through careful site analysis and site planning, quality development that preserves the natural environment can be realized. The result is cost effective development that allows preservation of natural features and systems, creating long term benefits for the environment and the community. As a result of the public workshops coupled with modern planning principles, we have concluded that the following goals are paramount for carefully considering the natural environment in planning for the future of Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations, and Strategies

Goals

- Protect environmental resources, such as wetlands, tree lined streets, and other natural features, from the negative impacts of new development
- Land use shall preserve rural character
- Provide adequate protection of groundwater sources
- Incorporate natural features into site development, to allow new uses of land that do not irreversibly damage natural site features and attributes
- Protect environmental resources, such as wetlands, tree lines streets, and other natural features, from the negative impacts of new development
- Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value
- Concentrate the density of residential land uses to protect rural character and open spaces
- Provide and maintain a park, trail, and open space system including access to Lake Michigan that is responsive to the needs and priorities of the township residents
- Ensure that future park sites (local and centralized) are identified and preserved

Recommendations

- Require applicants to identify natural resources or sensitive areas of the township during the site plan review process to ensure compliance with the goals of the master plan
- Establish greenbelts around natural resources to preserve and ensure public access
- Encourage developers of raw land to provide park sites, trails, or open spaces as an integral part of development planning
- A compatible balance of protection of natural assets and reasonable residential land use should be achieved between low density residential development and the preservation of the township's unique critical dune areas
- Require clustering of housing and the utilization of natural features into the design of new residential development
- Require the preservation of existing trees between the public street and dwellings

Strategies

- The township should use appropriate ordinances to implement the goal of preserving natural features and determine other methods of maintaining and enhancing the unique natural features of the township
- Development or strengthening of regulations applicable to groundwater protection are necessary. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.
- Conduct a groundwater aquifer quality study, if existing evidence reveals water quality concerns
- Provide adequate protection of groundwater sources
- Establish density standards that are consistent with the natural capacity of soils to handle on-site septic systems and which promote the preservation of the rural character of the township
- Require development to utilize open space preservation techniques, clustered housing techniques, and other amenities and features to preserve rural character and protect the environment
- Investigate a millage or alternative township program for land acquisition to provide for the preservation of rural character and/or open space in perpetuity
- Establish or strengthen educational programs for Laketown Township youth regarding the unique natural features in their community, and how to preserve them for future generations
- Update natural resource identifications on a specified interval, so as ownership and/or land development intentions change, valuable resources may remain protected

- Acquire and otherwise protect open space in developing areas to maintain the rural character of the township

Chapter Ten Environment

Introduction

Laketown Township's natural features have played a significant role in the development of the township. Many residents live in Laketown Township due to its woodlands, Lake Michigan shoreline, sand dunes, wetlands, and other natural features. It is these features that provide the rural character so valued by township residents. **In fact, during the public input workshops held in 2018, approximately 45% of attendees responded that the rural character is what attracted them to live in Laketown. Lake Michigan yielded the second highest response rate to the question at 26%. (Moved from 1991 Master Plan, page 8.)**

Natural features and open space contribute to the township's outstanding quality of life. Some of the general benefits of protecting and conserving these features include economic opportunities in areas such as ~~farming~~ **agriculture, tourism, and recreation**; ~~pure supplies~~ **of protecting the supply for** municipal and private water systems; **providing habitats for** wildlife ~~habitat~~; ~~groundwater recharge and purification~~, flood control; pollution protection ~~and the support of unique plant and animal life~~; ~~recreational opportunities~~; aesthetics (view, serenity, rural nature, etc.); **as well as** educational opportunities, **among others. As such, accommodating growth while maintaining rural character is a challenge faced by many growing communities. It is important to consider the preservation of rural character when making development decisions. (Moved from 1996 Master Plan, page 5.)**

The township contains state protected, sensitive dune formations, federally protected floodplains, and an abundance of sandy soil types. Active use of these features, whether for resort and year-round homes on the Lake Michigan shoreline, or extraction of mineral resources, has been the practice throughout the development of the township. As knowledge of the value of these resources has increased, more controls over their use have been implemented by federal, state and local laws. The reasonable application of these laws should ensure that the resources so valued by the township will be present for future generations to enjoy. **(Moved from 1991 Master Plan, page 8.)**

The following description of natural features **and their associated regulations assists in establishing** ~~will help establish~~ the character of the natural environment for the analysis of suitable land uses, and ~~helps will help evaluate~~ **in evaluating** the development potential of the land within the township. This evaluation is necessary to determine potential **environmental** constraints to development ~~which the environment presents~~ and to **assist in determining** ~~help determine~~ the ability to integrate these **natural** features into development proposals. **(Moved from 1991 Master Plan, page 9.)**

Sand Dunes

The dunes along Lake Michigan form the longest stretch of fresh water dunes in the world. In addition to their scenic values, dunes serve as a natural barrier to water and wind storm damage. However, the lakefront setting of the dunes has made dune areas highly desirable sites for residential development. **A large portion of the existing exposed sand dunes, which are extremely sensitive to any development impacts, is protected in the Saugatuck Dunes State Park. (Moved from 1991 Master Plan, page 10.)**

Legislative efforts have been made to assure an adequate balance between preservation and development of these environmentally sensitive areas. ~~In July, 1989, the state legislature passed two bills which amended Public Act 222 of 1976, to provide increased protection to areas identified as "critical dune areas" by the Michigan Department of Natural Resources (MDNR). These critical dune areas are shown on the Development Constraints Map.~~ Critical dune areas are currently regulated by Part 353, Sand Dunes Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended, through the Michigan Department of Environmental Quality (MDEQ). This statute was most recently amended in August, 2012. Presently, the Act requires a permit for those activities which significantly alter the physical characteristics of a critical dune area or for a contour change in a critical dune area. Permit applications are typically required for the construction of a house or garage, building a road or driveway, installing a septic system, installing retaining walls, and sand removal. (Moved from 1991 Master Plan, page 10.)

Floodplains

In 1980, the Federal Emergency Management Agency (FEMA) determined the 100- year floodplain boundaries within Laketown Township and issued a Federal Insurance Rate Map (FIRM). ~~The 100-year floodplain areas are shown on the Development Constraints Map.~~ The FIRM is used to determine the applicability of flood insurance for properties within the designated floodplain area. Floodplains are protected by the MDEQ and state permits are required for most types of development within the floodplain. (Moved from 1991 Master Plan, page 10.)

Wetlands

Wetlands are defined by the ~~MDNR as "land sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life."~~ The MDNR has identified wetlands throughout Michigan through interpretation of aerial photography. ~~These wetlands are identified on the Development Constraints Map.~~ MDEQ as, "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh." The MDEQ has identified wetlands

throughout Michigan through interpretation of aerial photography, topographic data, as well as soil inventories. The MDEQ makes wetland inventory maps available to assist property owners with identifying the location of any wetlands on their property and whether the wetlands are regulated. (Moved from 1991 Master Plan, page 14.)

While wetlands can represent a limitation to development, they may also be a valuable development site amenity. Rather than viewing natural features such as wetlands as preventing development, they should be ~~valued~~ ~~viewed~~ for their opportunity to provide innovative site and building integration that use existing site features as building amenities. ~~Among the qualities that wetlands can add to development are:~~ (Moved from 1991 Master Plan, page 14.)

Significant wetlands in Michigan are protected through Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, as amended. The MDEQ has certified that all county wetland inventories required by Part 303 were complete as of January 2007. This has ensured that all non-contiguous wetlands over five (5) acres in size are regulated regardless of county population, making permit requirements uniform in all counties. The MDEQ is responsible for reviewing development plans and requests for permits in wetland areas and performing site determinations.

Waterways

Waterways include the lakes, ponds, rivers, streams, and in some cases, wetlands **of Laketown Township**. The land surrounding the township's waterways is often the most sought after property due to the environmental, aesthetic and recreational benefits that are associated with local waterways. Lake Michigan property that lies vacant is more often viewed as a financial residential investment than either for conservation easements or low impact development, such as parks or public access points. These areas, if not currently developed, ~~such as is the case directly north of the Saugatuck Dunes State Park,~~ will need continued attention as ownership or land development intentions change. (Moved from 2005 Master Plan Amendment, page 11.)

Through careful site analysis and site planning, quality development **that preserves the natural environment** can be realized. ~~The objective of incorporating natural features into site development is to allow new uses of land that do not irreversibly damage natural site features and attributes.~~ The result is cost effective development that allows preservation of natural features and systems, creating long term benefits for the environment and the community. **As a result of the public workshops coupled with modern planning principles, we have concluded that the following goals are paramount for carefully considering the natural environment in planning for the future of Laketown Township. In addition, recommendations regarding these goals as well as strategies to achieve success are provided below.** (Moved from 1991 Master Plan, Appendix B.)

Goals, Recommendations, and Strategies

Goals

- ~~The Township should strive to~~ Protect its environmental resources, such as **wetlands, tree lines streets, sand dunes** and other natural features, from the negative impacts of new development **(Moved from 1991 Master Plan, page 4)**
- Land use ~~should protect~~ **shall preserve** the rural ~~character~~ **nature** of the township **(Moved from 1991 Master Plan, page 5)**
- ~~With so many township residents dependent on well water services, groundwater protection is a concern. Provide adequate~~ protection of the groundwater sources ~~is critical to the long term usefulness of a well system. To this end, consideration of a groundwater protection program for the township would be beneficial. The following steps may be followed to develop such a program.~~ **(Moved from 1991 Master Plan, page 15)**
- Incorporate natural features into site development, to allow new uses of land that do not irreversibly damage natural site features and attributes
- ~~The Township should strive to~~ Protect its environmental resources, such as **wetlands, tree lines streets, sand dunes** and other natural features, from the negative impacts of new development **(Moved from 1991 Master Plan, page 4)**
- Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value **(Reworded and expanded from 1996 Master Plan Amendment, page 5)**
- Concentrate the density of residential land uses to protect rural character and open spaces **(Copied over from Residential Chapter.)**
- Provide and maintain a park, trail, and open space system including access to Lake Michigan that is responsive to the needs and priorities of the township residents
- Ensure that future park sites (local and centralized) are identified and preserved

Recommendations

- **Require applicants to identify** ~~The natural resources or sensitive areas~~ of the township **during the site plan review process to ensure compliance with the goals of the master plan should be identified and classified as to their importance** **(Reworded from 1991 Master Plan, page 4.)**
- Establish greenbelts around natural resources to preserve and ensure public access
- Encourage developers of raw land to provide park sites, trails, or open spaces as an integral part of development planning
- A compatible balance of **protection of natural assets and reasonable residential land use** should be achieved between low density residential development and the preservation of the township's unique critical dune areas **(Moved from 1991 Master Plan, page 4.)**
- Require clustering of housing and the utilization of natural features into the design of new residential development **(Copied over from Residential Chapter.)**

- Require the preservation of existing trees between the public street and dwellings **(Copied over from Residential Chapter.)**

Strategies

- The township should use appropriate ordinances to implement the goal of preserving natural features and determine other methods of maintaining and enhancing the unique natural features of the township **(Moved from 1991 Master Plan, page 4.)**
- ~~Finally, development~~ **or strengthening** of regulations applicable to groundwater protection are necessary. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials **(Moved from 1991 Master Plan, page 15.)**
- **Conduct a groundwater aquifer quality study, if existing evidence reveals water quality concerns**
- ~~With so many township residents dependent on well water services, groundwater protection is a concern. Provide adequate protection of the groundwater sources is critical to the long term usefulness of a well system. To this end, consideration of a groundwater protection program for the township would be beneficial. The following steps may be followed to develop such a program.~~ **(Moved from 1991 Master Plan, page 15.)**
- Establish density standards that are consistent with the natural capacity of soils to handle on-site septic systems and which promote the preservation of the rural character of the township **(Copied over from Residential Chapter.)**
- Require development to utilize open space preservation techniques, clustered housing techniques, and other amenities and features to preserve rural character and protect the environment **(Copied over from Residential Chapter.)**
- Investigate a millage or alternative township program for land acquisition to provide for the preservation of rural character and/or open space in perpetuity **(Copied over from Agriculture Chapter.)**
- Establish or strengthen educational programs for Laketown Township youth regarding the unique natural features in their community, and how to preserve them for future generations
- Update natural resource identifications on a specified interval, so as ownership and/or land development intentions change, valuable resources may remain protected
- Acquire and otherwise protect open space in developing areas to maintain the rural character of the township

Chapter Three

Residential Uses

Introduction

Housing within the township is in sound condition, with only occasional homes found in disrepair. Homes of high quality can be found throughout the township, though the most expensive and elaborate home sites are built along or near the Lake Michigan shoreline. Development of homes in this area is being affected by the critical dunes designation established by the Michigan Department of Natural Resources.

Given that the dune areas possess some of the most sought after properties for residential development, the township will likely continue to feel pressure for development in these sensitive areas. Much of the development that has already occurred does not conform to the current regulations. The township must continue to work with property owners and developers to preserve these valuable natural resources.

Coupled with these shoreline area properties, the northern portion of the township faces increasing residential development pressure as a result of available public utilities, proximity to neighboring Park Township and the City of Holland. Given this, and while Laketown Township is generally a rural community and residential uses comprise a relatively small percentage of the total land area, the township recognizes the need to accommodate residential development concurrently with the preservation and protection of its rural heritage.

As a result of the Northern Laketown public workshop, various planning meetings, and coupled with modern planning principles, we have concluded that the following goals are paramount for residential uses. In addition, recommendations regarding these goals as well as strategies, accompanied by an illustration example, to achieve success are provided below.

Goals, Recommendations and Strategies

Goals

- Protect environmental resources, such as sand dunes and other natural features, from the negative impacts of new development
- Land use shall preserve rural character
- Provide adequate protection of groundwater sources
- Concentrate the density of residential land uses to protect rural character and open spaces
- Provide more pedestrian pathway connections between residential uses
- Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value

- Realize strong neighborhoods with a predominantly single-family residential and rural open space character while conscientiously integrating developments into the landscape of existing neighborhoods

Recommendations

- Require clustering of housing
- Utilize the incorporation of existing vegetation, topography, and other natural features into the design of new residential developments
- Require new residential developments to be sited in a manner that protects the rural character and scenic views by maintaining proper setbacks and providing landscaping screening as appropriate
- Require new residential developments to incorporate a pedestrian pathway system that ultimately connects with abutting developments to produce a walkable and connected community
- Require the preservation of trees between the public street and dwellings
- A compatible balance of protection of natural assets and reasonable residential land use should be achieved between low density residential development and the preservation of the township's unique critical dune areas.
- **Rezoning** **Developments containing** ~~for~~ LDR or MDR density ~~projects~~ should not be permitted until public water and sanitary sewer is provided
- Consideration should be given to delaying LDR or MDR density rezonings unless such proposed changes are contiguous to or nearly contiguous to developments of similar density to reduce the potential conflict of uses

Strategies

- Adopt or enhance appropriate ordinances to preserve natural features
- Improve ordinance controls for hazardous material storage and outdoor uses that could negatively impact groundwater
- Conduct a groundwater aquifer quality study, if existing evidence reveals water quality concerns
- Establish density standards that are consistent with the natural capacity of soils to handle on-site septic systems and which promote the preservation of the rural character of the Township
- Require development to utilize open space preservation techniques, clustered housing techniques, and other amenities and features to preserve rural character and protect the environment
- Require the layout of new residential developments to be extensions of existing neighborhoods, where possible. This should minimally apply to lot layout, road extensions, and open space plans

Chapter Four Blue Star Highway

Introduction

While the Blue Star Highway is the only area of the township planned for high-intensity commercial uses, the Planning Commission concluded in 2008 and again during this 2019 Master Plan amendment process that additional analyses and a detailed planning assessment of the corridor were necessary to address future development requests. While planned for future commercial development, little change has occurred at this time and therefore, the corridor can best be characterized as a blend of low intensity uses.

Blue Star is an important transportation corridor that provides access for local through-traffic and is served by an I-196 interchange to the popular tourist destinations of Saugatuck and Douglas. Several unique businesses establishments (such as the Belvedere Inn, the Red Barn Playhouse and the Laketown Golf and Conference Center) are located to the east of the expressway in Laketown Township and help give the corridor a unique character that distinguishes itself from Saugatuck Township. The planning process and land use recommendations for Blue Star Highway provide a sound foundation on which to base future decisions, while at the same time providing effective implementation measures that accurately reflect community desires.

The Blue Star Corridor provides a progressive mix of commercial, light industrial/service commercial, and residential land uses along the highway with service to local residents and recreational travelers. Recommended land use concepts carefully consider relationships to existing development and related densities, the architectural and design character found in many well-known establishments, and existing natural features, such as area wetlands. The Blue Star Corridor also proposes a number of capital improvements necessary to support, in measure, the proposed intensity of development and land uses, in order to enhance the Blue Star Corridor, provide needed services and promote township- wide goals.

Vision Statement

Discussions in 2008 with the Planning Commission triggered a “fresh look” that enhanced Laketown Township’s overall character. Throughout that process the Planning Commission discussed the strengths and weaknesses of the Blue Star Highway that must be acknowledged when considering future land uses. Many of the corridor’s positive attributes include the low intensity of current land uses, as well as unique business establishments and their architectural character, such as the Belvedere Inn. Development constraints include the lack of utilities, a poorly configured highway interchange, and drainage issues.

While existing conditions and development constraints have played a major role in helping to guide future corridor land uses, an important consideration has been the definition of “highway commercial” and what it means for the township. The term “highway commercial” evolved

during the 2008 planning process to mean those land uses that cater to the recreational traveler and area residents living along the southern boundary of Laketown Township. As a result, the following Vision Statement for the Blue Star Highway was created.

Vision Statement

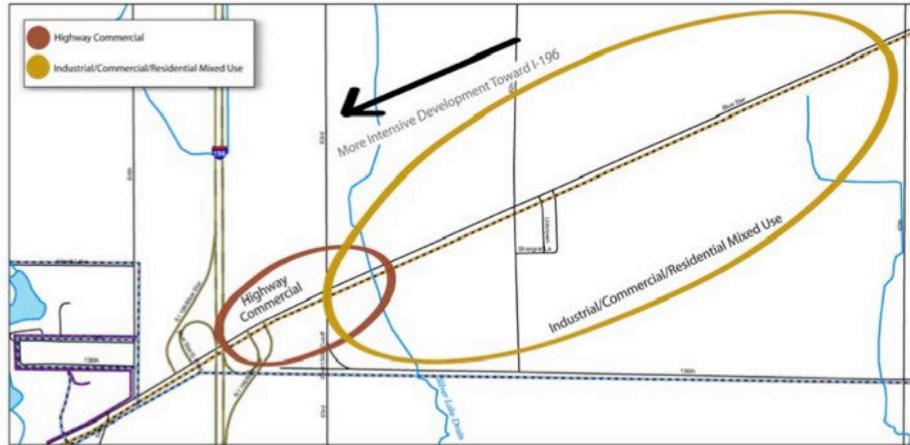
The Blue Star Highway is characterized by a pattern of ~~high-quality~~ commercial development adjacent to I-196 and mixed-use development along the length of the corridor that is ~~interspersed~~ **characterized** with woods and open space. New development emphasizes a high-quality design standard that enriches the eclectic mix of architecture that exists along the corridor. Interconnected by shared-use paths with the rest of the community and the lakeshore, it also provides services to recreational travelers seeking a convenient, safe, tree-lined, and walkable temporary escape from the nearby interstate.

As a result of the 2018 Blue Star Highway public workshop, the 2008 findings of the Planning Commission, the Vision Statement, and various planning meetings, we have concluded that the following goals are paramount for Blue Star Highway uses. In addition, through the use of modern planning principles, where applicable, recommendations regarding these goals as well as strategies, accompanied by illustration examples, to achieve success are provided below. Further, a number of the goals, recommendations, and strategies are based on the following concepts.

Conceptual Basis

Property near the immediate interchange has great commercial potential because of its visibility and access; however area infrastructure and traffic flow must also be considered. In order to guide future growth in this area, three important factors were used to help formulate the concepts:

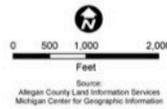
1. To recognize the importance of the corridor ~~as it relates to Saugatuck and Douglas~~
2. To establish future land uses that are compatible with the character of the area, its aesthetics and the intensity of existing land uses
3. To evaluate the appropriate scale of development based in part on the type and level of the traffic it generates, the length of stay by business patrons, and the hours of business operation



Conceptual Master Plan

Blue Star Highway Subarea
Laketown Township
Allegan County, Michigan

12" Water Main
Fiber Optic Line
Municipal Sewer



The land use concept for Blue Star Highway promotes a high quality development pattern that will provide a consistent streetscape through site design and landscaping. The broad ‘Olympic ring’ areas proposed for the Blue Star Highway Corridor have been planned to capture general territories of use, which are further described below. These areas are designed as “zones of influence” for future land uses based on land capability and area character. While the type of use is important, the overall design and scale of the development has been emphasized. For example, site plan review should carefully consider the “fit” of new development with the surrounding landscape judging whether it meets landscaping and building character requirements described for that planned area. Other considerations should be site design, infrastructure capacity, stormwater management, street design, lighting, public spaces and signs.



Highway Commercial

The area immediately east of the I-196 interchange along Blue Star Highway to the Silver Lake drain is proposed for Highway Commercial uses. It is critical that this commercial area be well designed since it serves as the gateway for the commercial establishments on Blue Star and provides the first impression of Laketown Township and nearby communities for area travelers.

Its development potential is also influenced by the current design and capacity of the highway bridge crossing and access ramps. The development capacity of this corridor is clearly affected by a safe and adequate interface with I-196.

Industrial/Commercial/Residential Mixed Use Area

Land use intensity should decline moving away from the I-196 interchange into this area. This planning area begins east of 63rd and is envisioned as a transition area between relatively high intensity uses on the west to lower intensity uses to the east. Given the current configuration of long and narrow parcels along the highway, commercial and industrial uses should locate nearer the roadway and residential uses should locate towards the rear of any parcel. Actual property dimensions should allow sufficient room to accommodate a well-designed setting for development and also provide adequate separation from existing and future residential neighborhoods.

Goals, Recommendations and Strategies

Goals

- Protect environmental resources, such as wetlands, tree lined streets, and other natural features, from the negative impacts of new development
- New commercial and industrial development should be directed to selected areas which have utility services or are planned to receive them. **In particular, new industrial development should be primarily located east of 62nd Street.**
- ~~• Promote a unified streetscape plan to maintain a consistent aesthetic theme along the highway~~
- Locate more intense commercial land uses that generate higher traffic volumes near the I-196 interchange and transition to less intense land uses with lower traffic volumes away from the interchange
- Land use proposals should reflect the eclectic character of existing commercial development located adjacent to the corridor, ~~such as the Belvedere Inn and the Laketown Golf Center~~
- Commercial uses within this area should be well integrated with surrounding development **through appropriate landscaping, greenbelts, façade design, adequate access, parking, and pedestrian pathways**
- Discourage strip commercial development that is typically characterized by utilitarian buildings with no architectural character or relationship to surrounding buildings. These frequently have minimally sized windows, large expanses of blank walls, flat roofs, and their facades have no articulation, such as offsets or shadow lines.
- Residential mixed uses, in the form of single family dwellings, as well as within mixed-use buildings or as part of a multi-use development are encouraged, however commercial land uses should emphasize low intensity
- An emphasis on interconnected drives and streets should be promoted so that internal trips can be made without compelling drivers to exit and enter multiple times onto the Blue Star Highway

- A system of integrated shared use paths should be promoted for all new developments to provide safe walking routes to surrounding stores and uses
- Emphasize a more ~~manicured~~ **maintained** landscape and onsite tree preservation
- Land use shall preserve rural character
- Provide adequate protection of groundwater sources
- Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value

Recommendations

- Architectural design shall include varying roof lines, building materials, ample windows and their placement, limit large expanses of parking and emphasize landscaping treatments, reduce the size of signs, especially free standing (rather, promoting signs that are attached to buildings), and reduce light levels and mounting heights for light fixtures

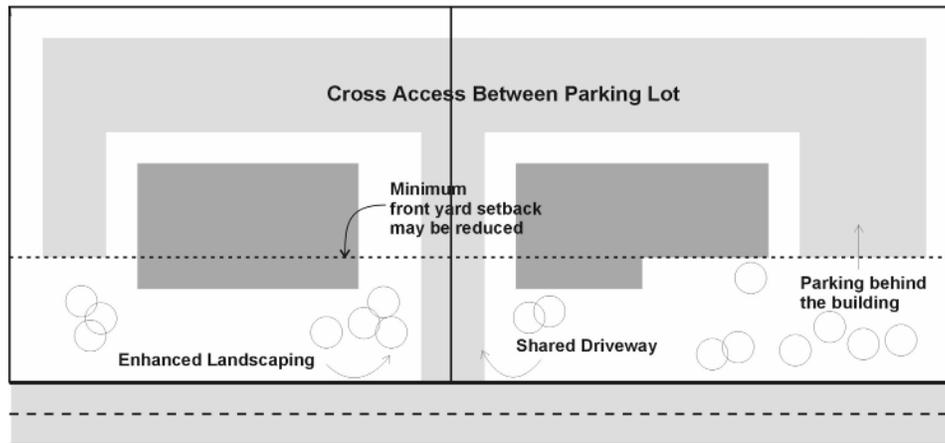


- Parking should be set back from the highway and buffered by landscaping. While uses may change along the highway, the consistent application of parking and landscaping will provide a theme of 'rural roadside' character.



- Provide pedestrian access within a site and between sites
- Provide shielded lighting that does not overpower or over-illuminate

- Uses should include innovative storm water management techniques (such as green roofs and permeable pavement)
- Promote and expand tree planting along Blue Star Highway.
- Interconnect service drives to improve traffic distribution and to promote access management along Blue Star Highway
 - Interconnected service drives and properly spaced driveways are crucial to safe and efficient development along Blue Star Highway given its status as a county primary highway. Any new access has the potential to create traffic safety problems if not properly planned and sited given the close proximity of the interchange. Current access management standards for this area recommend very limited primary access on Blue Star Highway with secondary access from side streets. Within the Highway Commercial area, this is especially important. New internal streets and drives should line up with existing intersections, such as along 63rd Street.



- Highway commercial development should cater to the recreational traveler and local residents and provide convenient commercial facilities in a safe and walkable environment
- A shared use path should be established along the entire corridor to provide safe routes to surrounding stores, the broader community, and regional destinations



- Site development shall be screened from roadway views and hide parking lots, through a combination of trees, shrubs, and berms or other rural character or open space elements



- Prior to considering major development an extended public utility system or individual private systems must be evaluated based on their ability to adequately service the existing and future needs along the corridor in a cost efficient and coordinated manner
- Innovative storm water management techniques, such as rain gardens and porous pavement should be utilized to mitigate parking lot runoff into area wetlands and drains
- Adjacent residential neighborhoods and uses must be protected from the potential negative impacts of employment areas such as the scale of development and buildings, noise, odors, air quality, traffic, and objectionable views
- Integrate commercial development with access to adjacent residential neighborhoods, where conflicts do not exist
- Maintain a natural screen along the corridor for new development
- Signs, architecture, and site features such as fences, should be compatible with rural character and reflect a rural vernacular character
- Mixed-use buildings should be constructed with an emphasis on architectural character; for example rooflines, window details, high quality building materials and buildings that orient to the street
- Residential development should cluster homes on smaller lots leaving open space to serve as neighborhood parks. Parks should be clearly visible, front on residential streets and be well integrated with surrounding homes.
- New utility lines should be buried and existing poles should be removed, where practicable

Strategies

- Adopt or enhance appropriate ordinances to preserve natural features

- ~~Coordinate with appropriate regulatory agencies to development or strengthening of regulations applicable to groundwater protection are necessary, where practicable. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.~~
- ~~These include~~ **Strengthen zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.**
- Permit possible development bonuses and allow increases in the amount of commercial land area if significant amounts of residential uses have been accommodated within a development
- Require creative architectural design solutions (such as vertically integrated mixed uses and two to three story commercial buildings); and use of quality building materials, design details and finishes (such as brick, stone and metal)
- Operations and activities such as loading and unloading should be limited after dark
- Promote the development of mixed land uses, including residential, office, commercial, and possible light industrial by employing a PUD ordinance that permits flexibility
- Requirements for building and site design should be developed and address such things as: minimum parcel depth; building materials; window openings as a percentage of a building facade; articulation of facades to avoid large expanses of blank walls; location and design of refuse storage areas; location and screening of service and delivery areas; storm water management; parking lot design; lighting; landscaping; grading and screening; signs; and site access

Chapter Five Commercial Uses

Introduction

While the majority of commercial land use area within the township is located along the Blue Star Highway, minimal commercial area exists within the northern area of the township. These areas are recognized as neighborhood commercial areas and are established for the purpose of allowing small convenience commercial businesses designed for the use of neighborhood residents. Although some areas of neighborhood commercial may be added in future revisions of the Master Plan as population and development increases the demand for such services, commercial land use in Laketown Township is intended to be limited to the Blue Star Highway.

As a result of various planning meetings we have concluded that the following goals are paramount for commercial uses outside of the Blue Star Highway. In addition, through the use of modern planning principles, where applicable, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations and Strategies

Goals

- Discourage strip commercial development to minimize traffic problems and unsightly development
- **Coordinate with appropriate regulatory agencies to develop or strengthen regulations applicable to** ~~Protection of groundwater protection sources is critical to the long term usefulness of a well system~~
- Protect environmental resources, such as wetlands, tree lined streets, and other natural features, from the negative impacts of new development **and to protect their aesthetic and scenic value**
- New commercial development should be directed to selected areas which have utility services or are planned to receive them
- Land use shall preserve rural character
- Provide adequate protection of groundwater sources
- Commercial uses should be well integrated with surrounding development through appropriate landscaping, greenbelts, façade design, adequate access, parking, and pedestrian pathways
- ~~Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value~~

Recommendations

- Potential environmental and economic impacts of commercial development should be considered to reduce or eliminate conflict from noise, traffic, odors, drainage, delivery of services, and prevent groundwater pollution
- New utility lines should be buried

- Parking should be set back and buffered by landscaping. While uses may change the consistent application of parking and landscaping standards will provide a theme of 'rural roadside' character
- Provide pedestrian access within a site and between sites
- Provide shielded lighting that does not overpower or over-illuminate
- Interconnect service drives to improve traffic distribution and to promote access management along Blue Star Highway
- A shared pedestrian use path should be established along the development frontage to provide safe routes to surrounding stores, the broader community, and regional destinations
- Site development shall be screened from roadway views and hide parking lots, through a combination of trees, shrubs, and berms or other rural character or open space elements
- Signs, architecture, and site features such as fences, should be compatible with rural character and reflect a rural vernacular character

Strategies

- Requirements for building and site design should be developed and address such things as: minimum parcel depth; building materials; window openings as a percentage of a building facade; articulation of facades to avoid large expanses of blank walls; location and design of refuse storage areas; location and screening of service and delivery areas; storm water management; parking lot design; lighting; landscaping; grading and screening; signs; and site access
- Adopt or enhance appropriate ordinances to preserve natural features
- Development or strengthening of regulations applicable to groundwater protection are necessary. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.
- Develop a groundwater protection program

Chapter Six Industrial Uses

Introduction

The lack of utility services in appropriate locations limits the designation of industrial land uses with the township to the area between the Michigan Department of Transportation rights-of-way in Section 13 and along the Blue Star Highway ½ mile east of 62nd Street. The properties designated along the Blue Star Highway are intended for low intensity industrial uses, which would not require extensive utilities, large volumes of well water services, or create excessive traffic, noise, or other negative effects. Given this, industrial uses outside of the Blue Star Highway are not intended to be extended beyond existing locations shown on the Master Plan map and the zoning map.

As a result of various planning meetings we have concluded that the following goals are paramount for industrial uses outside of the Blue Star Highway. In addition, through the use of modern planning principles, where applicable, recommendations regarding these goals as well as strategies to achieve success are provided below.

Goals, Recommendations and Strategies

Goals

- Discourage strip commercial/industrial development to minimize traffic problems and unsightly development
- **Coordinate with appropriate regulatory agencies to develop or strengthen regulations applicable to** ~~Protection of groundwater protection sources is critical to the long term usefulness of a well system~~
- Protect environmental resources, such as wetlands, tree lined streets, and other natural features, from the negative impacts of new development **and to protect their aesthetic and scenic value**
- New industrial development should be directed to selected areas which have utility services or are planned to receive them
- Land use shall preserve rural character
- Provide adequate protection of groundwater sources
- Industrial uses should be well integrated with surrounding development through appropriate landscaping, greenbelts, façade design, adequate access, and parking
- ~~Preserve woodlands and wetlands which are useful as water retention and ground water discharge areas and which have important aesthetic and scenic value~~

Recommendations

- Potential environmental and economic impacts of industrial development should be considered to reduce or eliminate conflict from noise, traffic, odors, drainage, delivery of services, and prevent groundwater pollution
- New utility lines should be buried
- Parking **and outdoor storage** should be set back and buffered by landscaping. While uses may change the consistent application of parking and landscaping standards will provide a theme of 'rural roadside' character.
- Provide shielded lighting that does not overpower or over-illuminate
- Interconnect service drives to improve traffic distribution and to promote access management along Blue Star Highway
- Site development shall be screened from roadway views and hide parking lots, through a combination of trees, shrubs, and berms or other rural character or open space elements
- Signs, architecture, and site features such as fences, should ~~be compatible with rural character and~~ reflect a rural **vernacular character**

Strategies

- Requirements for building and site design should be developed and address such things as: minimum parcel depth; building materials; window openings as a percentage of a building facade; articulation of facades to avoid large expanses of blank walls; location and design of refuse storage areas; location and screening of service and delivery areas; storm water management; parking lot design; lighting; landscaping; grading and screening; signs; and site access
- Adopt or enhance appropriate ordinances to preserve natural features
- Development or strengthening of regulations applicable to groundwater protection are necessary. These include zoning requirements for site plan review, secondary containment of storage areas for potentially hazardous materials, and specific provisions for the storage of hazardous materials.
- Develop a groundwater protection program