

# Master Plan

City of Bad Axe, Michigan

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# **MASTER PLAN**

## **City Of Bad Axe, Michigan**

Draft  
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## I. THE PLANNING PROCESS

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The City of Bad Axe epitomizes the small town character of the midwest. Recognizing the value of this character, and the potentially negative impact conventional development practices could have on the community, the City has engaged in a planning process that has resulted in an innovative plan that will preserve and enhance the character of the community well into the twenty-first century.

### *Inventory*

The initial step in the planning process was the gathering of base information to create a "community profile". An existing land use survey was conducted which provided the current land use for all parcels within the community. Photographs were taken of key sites representing important issues in the community. All relevant information was gathered, including aerial photos, traffic counts, environmental inventory (which included wetlands, woodlands and topography), soil classifications, existing utilities and all related plans and ordinances. The above information was then analyzed to determine the existing opportunities and constraints that exist within the community. Based on the inventory conducted in the initial step, several issues were identified as having the potential for significant impacts on the future character of the community. Opportunities and constraints were identified for each of these issues.

### *Visioning*

To ensure the success of the Master Plan the participation of elected and appointed officials, other community business leaders and residents is essential. A Visioning Workshop with City officials, community stakeholders (persons owning property, operating businesses or involved in some way with the community) and other interested parties from the public at large was held in the winter of 1998. Over 50 participants generated ideas and suggestions for what they wanted the community to look like and how they wanted it to function. Each participant was then asked to vote (three votes each) on the issues they felt were most important for the successful future development of the community. From this workshop a shared vision concerning the vital characteristics of a successful future community, desired future land uses, positive and negative site locations for potential uses and the need to preserve existing natural features was obtained (Appendix A).



## ***Goals and Objectives***

Based on the existing characteristics of the community, opportunities and constraints, and the comments of the stakeholders from the Visioning Workshop, Goals and Objectives were established for the Master Plan. Goals are general in nature and, as related to planning, are statements of ideals toward which the City wishes to strive. Objectives are more specific and are intended to present a means to attain the stated goals.

## ***Master Plan***

The goals and objectives are the base from which the Plan is built. The Master Plan specifies future land use patterns, the extent of environmental protection and enhancement, and transportation designs and improvements.

The general purpose stated in the introduction was used throughout the planning process as the guiding force for the plan. During all aspects of the process, the purpose was referenced to ensure the plan would stay focused on the issues that were of the greatest concern to the City. This ensured that the plan would be created in an efficient and thorough manner.

## II. DEVELOPING A SUSTAINABLE COMMUNITY

### *Preservation of Town Character*

The Bad Axe Master Plan is intended to guide the future growth and development for the City of Bad Axe over the next twenty years. The basis for the development of this new master plan is the City's desire to allow the community to continue to evolve while maintaining its small town character. The key to achieving this balance is to encourage *sustainable development*. Many conventional planning and zoning philosophies have resulted in an undesirable pattern of development consisting of isolated residential developments and strip shopping areas along major thoroughfares. The separation and isolation of these uses has perpetuated our reliance on the automobile for even the most basic daily activities and diminished any sense of community identity.

Sustainable development encourages the integration of uses into compact areas or neighborhoods. The City of Bad Axe already has the framework for sustainable development. The commercial and residential areas of Bad Axe, particularly those close to the intersection of Huron Avenue and Port Crescent Avenue, have attributes which can best be defined as small town character. Single family homes with small setbacks from the road, a fully grown tree canopy in the residential neighborhoods and a downtown with various neighborhood services are some of the characteristics that define the town character of Bad Axe. with a traditional grid system of blocks and a compact downtown area with commercial and civic uses. However, increasing traffic on the M-53 and M-142 have put pressure on these corridors for commercial development that is out of scale and inconsistent with the small town character of the Bad Axe. Through the orderly expansion of infrastructure, traffic and circulation design, and efficient land use arrangement, the City can accommodate development well into the twenty-first century and continue to enjoy the small town character of Bad Axe.

### *Regional Development*

Bad Axe's location in the center of Huron County, Michigan, and its existing infrastructure are some of the characteristics which make the Bad Axe community very attractive to new development within the County. The continued development of Bad Axe directly affects neighboring communities and development within these communities places pressure on Bad Axe to provide services and land uses for these communities.

## City of Bad Axe, Michigan



Map 1 - Bad Axe Regional Setting

Baseemap Source: ESRI

0 MI. 3 MI. 6 MI.



9/10/1999



Within Huron County, Bad Axe is not only the center of County government but is the primary focus of development as well. The City's proximity to Lake Huron to the north and east and Saginaw Bay to the west in addition to its status as the crossroads for the County's two major roadways, M-142 and M-53, makes Bad Axe an attractive location for new commercial and industrial development (See Map 1). Bad Axe's status as the regional center for the County attracts regional-type uses including major institutional uses such as hospitals. Recently, as the result of increasing traffic on M-142 and M-53, large scale regional commercial uses have begun to locate in the community along Van Dyke Road, north of the central business district (CBD). Industrial land uses, seldom seen through most of the County, are located to the south of the CBD along the rail lines and in close proximity to the regional airport.

The City of Bad Axe recognizes the importance of its role as the civic and commercial center of the County and wishes to take advantage of this role. The City also wishes to maintain the historic town character of Bad Axe by controlling the scale and character of uses and integrating these uses into the town's existing fabric.

### ***Traffic Flow and Accessibility***

The crossroad of the two major roadways of Huron County, M-142 and M-53, is located in the center of Bad Axe. This presents both an asset and a liability. Properly addressed, safe and efficient circulation will bring tens of thousands of residents, employees, and customers into the City where they can work at the businesses in the community shop at the stores and eat at the restaurants. Improperly addressed, traffic congestion and uninviting strip development will make Bad Axe a bad experience for many of the commuters on these regional arterials. The Master Plan will provide ways to efficiently arrange uses and control traffic flow and accessibility to facilitate future development to occur in a way that is consistent with the character of Bad Axe.

### ***Community Service Area***

The jurisdictional boundary between Bad Axe and the adjacent townships is the result of evaluating one individual request for annexation after another without a mutually agreed upon policy (Map 2). The inability to distinguish between two communities can lead to various problems. Areas in close proximity to each other but controlled by separate communities can be planned and zoned for uses that are incompatible with each other. Even if these areas are compatibly planned and zoned, design and site standards may be different, causing some uses to look drastically different than the same use in the neighboring community. Municipal boundaries which create isolated areas or pockets also can make it difficult to deliver services and infrastructure to those areas.

Orderly and sustainable development does not begin or end at the edge of a municipality. Regional influences (roads), availability of infrastructure, development limitations, and codes and ordinances all influence where and how development occurs. The Townships and City should work closely

together to develop a strategy for providing services and promoting orderly development that encourages sustainable development. A comprehensive strategy of infrastructure extensions, revenue sharing, joint boundary agreements, and the transferring of development rights between the municipal jurisdictions should be developed as soon as possible. This Plan includes areas within the adjacent Townships which will be most directly affected by future development within the City. These areas should be considered as the boundaries for a Community Service Area.

## II. COMMUNITY CHARACTER

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### *Existing Land Use*

Bad Axe is the center of Huron County, an agriculturally oriented region. Civic uses, including the Huron County offices, are located at the core of the City where commercial areas have also evolved at the regional crossroads from before the turn of the century. Impressive homes line the approach into Bad Axe and equally impressive residential neighborhoods have been established north of Huron Avenue.

The natural features in Bad Axe are limited. There are two significant woodland areas located in the northwest quadrant of the City. There is a ring around the City of soil that is in the Bad Axe and Bellville Series. These soils have severe limitations for septic systems and lagoon systems. They also require special consideration for substantial construction projects. There are no major water bodies, rivers or streams running through or adjacent to the City. However, the City is only 16 to 20 miles from either Saginaw Bay or Lake Huron. The topography of the area is relatively flat. These characteristics are also reflected in the fact that the vast majority of land around Bad Axe has been used for farming. Existing pockets of natural vegetation, small wetland areas, open spaces and lack of intensive uses all add to a distinct rural character for the community. This rural character compliments the town character of the community as a whole.

Over the past ten years the central location and increased traffic on M-142 and M-53, especially where the join along North Van Dyke Road, has brought pressure for regional scale shopping centers. Sam's Club, K-Mart, Farmer Jack, along with hotels, have begun to develop along this stretch of the community. These regionally oriented, auto dependent uses have been designed and site planned in a manner that is inconsistent with the pedestrian scale and rural character of the City. This Plan addresses how these and future large scale uses can be developed in a way that is more in keeping with the character of Bad Axe.

### **Land Use Classifications**

The following section outlines in more detail the location of particular land uses and their characteristics within Bad Axe. All existing land uses were divided into 12 different categories in order to analyze the existing pattern of development. This analysis will help to define which characteristics the City would like to perpetuate and those which they would like to prevent from



occurring in other sections of the community. Table 1 indicates the acreage covered by each land use category and the corresponding percentage of the land uses within Bad Axe.

*Vacant Land.* For the purposes of this land use analysis, vacant land is defined as any land with no visible structures or uses. This includes the land located behind single family residences that is not visibly being used. The most notable examples of this are those parcels located south of South St, west of Port Crescent. While the frontages of the parcels are classified as single family residential, the back 600 feet of the parcels has no visible use and is classified as vacant. This classification system indicates an estimated 420 acres of vacant land, approximately 31% of the land in the City.

<b>Table 1: Bad Axe Existing Land Use Distribution, 1999</b>		
<i>Land Use</i>	<i>Acreage</i>	<i>% of Total Acreage</i>
Single Family Residential	313.07	23.2%
Multiple Family Residential	28.30	2.1%
Mobile Home Park	5.87	0.4%
General Commercial	51.52	3.8%
Heavy Commercial	84.25	6.2%
Office/Service	6.53	0.5%
Public	120.28	8.9%
Quasi-Public	21.43	1.6%
Recreation	11.30	0.8%
Industrial	83.37	6.2%
Vacant	420.35	31.1%
Right-Of-Way	205.28	15.2%
Total	1351.55	100.0%



# City of Bad Axe, Michigan

- Single Family Residential
- Multiple Family
- Mobile Home Park
- General Commercial
- Heavy Commercial
- Office/Service
- Public
- Quasi-Public
- Recreation
- Industrial
- Vacant
- City Boundary

Basemap Source: Osminski & Associates, Inc.  
Data Source: McKenna Associates, Inc. 8/1998



**Map 2 - Existing Land Use**

0 Ft. 1500 Ft.  
750 Ft.



9/10/1999



While these numbers indicate there is a large amount of land available for development, the location of the land is a slight development constraint. A large amount of land available for development is located in the southern section of the City adjacent to existing industrial uses. The southwest corner of the city has a large amount of vacant land accessible by either Cook Drive or Bannick Street and adjacent to single family residential land uses. The other two large areas of vacant land are located in the northeast and northwest corners of the City and while currently the rights-of-way are established, no roads have been constructed. The remaining vacant land is located behind existing uses. Development of these areas should be encouraged through land consolidation and infrastructure improvements.

*Single Family Residential.* Occupying 23.2%, or 313 acres, single family residential is the predominant land use of Bad Axe. The majority of single family residences are located north of Huron Avenue in addition to the area west of Port Crescent Avenue. The lots north of Huron Avenue average 9,500 square feet in area with an average lot width of approximately 65 feet. The age of the neighborhoods is reflected in the traditional midwestern architectural styles of the homes and the tall street trees. The large tree canopies and narrow street widths give the area a very classic Midwestern style. The vast majority of the homes are diligently maintained adding to the appearance of a well established community.

The homes located south of South Street are similar in appearance to those located north of Huron Avenue. However, they are located on lots averaging 34,000 square feet in area. As mentioned in the previous section, the possibility does exist for parcel consolidation and creation of additional single family homes. The other large single family residential area is located in the southwest corner of the City along Silver Street. These homes tend to be a mix of older styles and newer ranch style homes. New development has occurred along Beech Street and the potential for new development exists north of these homes.

*Multiple Family Residential.* Multiple family residential uses occupy only 28.3 acres, approximately 2.1% of the City. Located on the north and east side of the City are apartment complexes of typical modern design. To the west are ranch style duplexes.

*Mobile Home Park Residential.* There is one mobile home park located on the far west side of the city south of Huron Avenue, occupying 0.4% of the City. There is another mobile home park located just outside of the City limits on the east side of North Van Dyke Avenue north of the railroad. The existence of these parks indicates that a wide price range of housing is available to the residents of the community.

*General Commercial.* Those commercial land uses which serve the daily needs of the residents of the community and whose customer base is the immediate area are classified as General Commercial uses. Approximately 3.8%, or 51.52 acres, of the City area is occupied by these uses. These types of uses are concentrated in the downtown area, north and south of Huron Avenue at the intersection of Port Crescent Avenue. These businesses are located in structures with multiple stories and no



setback from the street. They are within a ten minute walk of a large residential customer base. This concentration of businesses is a substantial contributor to the style and character of the City. Ensuring the continued use and existence of businesses within the downtown area will be a major element in preserving the town character of Bad Axe.

The other concentration of general uses is located along Port Crescent/Van Dyke Road north of the downtown area. These uses address the day-to-day needs of the residents of Bad Axe and the surrounding Townships and they differ significantly in character. They are set back from the street substantially, have no relation to any existing residential neighborhoods and are geared towards serving the automobile customer. While the very nature of some of these businesses cater to automobile customers, the majority simply have designed themselves away from the pedestrian and oriented towards the automobile. This orientation has created various problems along the road, such as increased traffic flow and many curb cuts which cause access conflicts. This has become a concern that must be addressed through more focused design guidelines for new and redeveloped site plans.

*Heavy Commercial.* Commercial uses which serve a large customer base from a wide radius and have a large number of customers on site are classified as Heavy Commercial uses. Occupying 84.25 acres, or 6.2% of the City, heavy commercial uses have large parking lots, deep setbacks and nondescript buildings. These uses are concentrated on the east side of Van Dyke Road (M-53/M-142) both north and south of Buschlen Road. They have a large customer draw which contributes to traffic flow problems and conflicts at access points to the sites.

The other concentration of heavy commercial uses is located near the intersection of East Street and Sand Beach Road. These uses are of a more intense nature because they sell large ticket items such as farm equipment and automobiles. While they do not typically have a large number of customers on site at one peak time, the nature of their business in most other communities requires a large amount of screening along the rights-of-way. This screening can improve the appearance of a site, thus improving the business as well.

*Office/Service.* Businesses which provide services in an office setting, such as real estate or medical services, have been classified as office/service. These uses only occupy 6.53 acres, 0.5% of the City, and are not concentrated in one area. Small offices exist in various locations within the downtown area. On the west side of the City along Westland Drive is a small concentration of office buildings. All offices in the area are typically smaller structures with one tenant. No large office complex or large buildings with multiple tenants currently exists.

*Public.* Any use that is owned and designated to provide services to the citizens of the community are classified as public uses. The two largest public land uses in the City are the public school complex and the county fairgrounds. The school complex on the west side of the city is the location of the junior and senior high schools and recreation facilities for the schools including baseball and softball diamonds, football stadium and soccer fields. The county fairgrounds are located in the

southwest corner of the City along Soper Road.

Public uses also include the Road Commission facilities along Hanselman Street, the county and city buildings downtown and other public facilities throughout the City. The concentration of these public services in the City adds to the regional draw of Bad Axe. Continued use and development of these uses will require the City to address the infrastructure requirements and other needs including their relationship to existing and future residential neighborhoods. Their use of nearly 9% of City land makes public uses the third most active land use, behind only single family residential and road rights-of-way.

*Quasi-Public.* Uses that serve the general public but are owned and maintained by a private or semi-public organization are quasi-public uses. The City has 21.43 acres devoted to these uses. This would include all churches, utilities and medical facilities within Bad Axe. The community college on the west side of Nugent Street is an example of a use serving the public but owned by an entity other than the public. These uses are spread out throughout the City and the surrounding immediate area.

*Recreation.* Land uses which provide areas and facilities for citizens to recreate are classified as recreation uses. The park located south of South Street and east of Bad Axe Road is the major City recreation facility. The 11.3 acre site provides both softball fields, play equipment and an historic park for all citizens. Other uses, most notably the facilities located at the junior and senior high schools, do have recreation facilities but public citizens are not their primary users. Wilcox Park on Whitelem Street north of the railroad tracks offers additional recreational opportunities, including the potential expansion to the north.

As growth occurs, the City should ensure that the recreational needs of the residents are addressed. Additional needs based on the draw of County citizens from the region should also be factored in addressing the potential for attracting people to the City of Bad Axe.

*Industrial.* Manufacturing, storage and distribution uses have been classified as industrial uses. Currently occupying 83.37 acres, industrial uses utilize 6.2% of City land. Concentrated on the south side of Bad Axe, north and south of Soper Road and east of Bad Axe Road, these uses conduct various levels of manufacturing. This area is adjacent to a large amount of vacant land which can be used for further industrial development. While many industrial uses are well maintained, industrial characteristics such as outside storage, loud voice levels and increased truck traffic were evident. This type of impact can be screened from the other uses which do not complement industrial uses. How this growth will impact the adjacent residential neighborhoods must be addressed to ensure that the residential uses do not lose any value and are not adversely impacted.



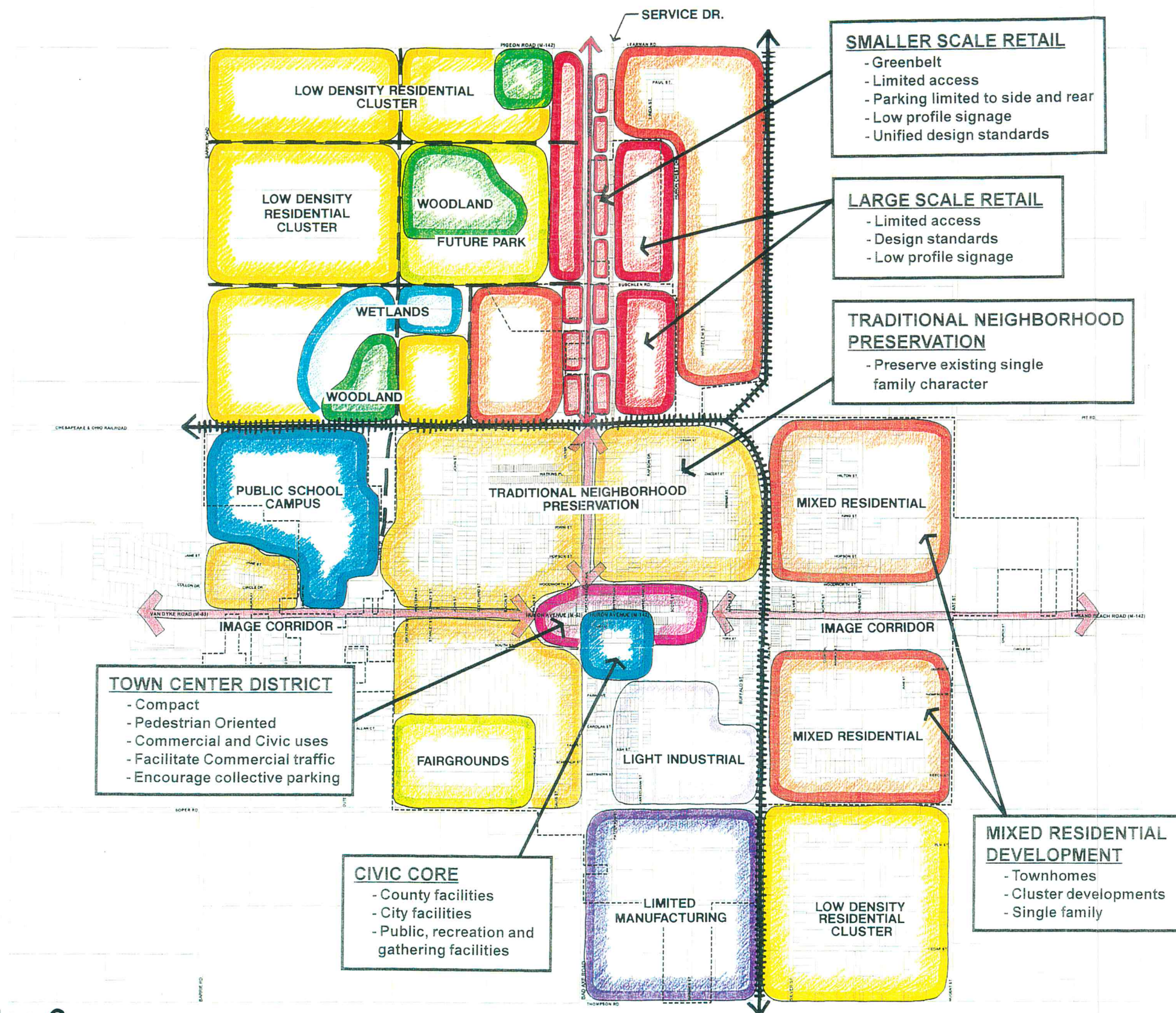
## Land Use Findings

The classification of land uses in the City have provided an opportunity to look at similar uses not only in one area but throughout the community. This provides an opportunity to find any issues that are common throughout the City. While some issues might be the concern in one area, this analysis shows which issues are facing particular land use categories in all parts of the City. The following section outlines the major characteristics and issues associated with several land use categories.

- The density of the single family neighborhoods, approximately 4.6 units per acre, is one of the major factors contributing to the character of the community. These well-established neighborhoods add a sense of place to Bad Axe that is unique from other communities within Huron County. The existing neighborhoods characteristics must be preserved while any new development should compliment them.
- The large parking lots and setbacks of the existing apartment complexes are indicative of auto-oriented developments rather than of pedestrian-type developments with no setbacks and street parking. These existing characteristics are examples of design elements which move away from the existing conditions of the downtown area. They do not perpetuate preservation of the existing town character.
- Ensuring that new commercial uses complement rather than compete with downtown uses is the primary factor in preserving the town character of Bad Axe.
- Individual, heavy commercial uses with uncontrolled access cause increased traffic flow and points of conflict along roadways. In addition, intensive commercial uses necessitate screening to improve the appearance of the existing businesses.
- Future industrial growth may adversely impact the adjacent residential neighborhoods. Characteristics such as outside storage, high decibel noise levels and increased truck traffic can cause adjacent residential neighborhoods to become undesirable places to live if these areas are not properly planned.
- Recreational facilities must address the needs of residents and any visitors from the community region. While school facilities can provide some services, the ability to serve the public at-large must be the primary focus of the community, recognizing the potential benefits of attracting additional people to the City of Bad Axe.
- The needs of public uses must be addressed to ensure that all citizens are adequately served throughout the region.



## City of Bad Axe, Michigan



### Map 3

#### Opportunities and Constraints



## Demographics

Demographic statistics, including the number of people, age, and income levels, are essential for understanding current and future development trends and how they could impact a community. For the purpose of evaluating the impact future growth will have on the City of Bad Axe, demographic analysis were prepared for the City of Bad Axe and the Bad Axe area which includes all of census tract 9510. Although these statistics are important, it is equally important to understand that this Master Plan will define how the ultimate development of the City will occur, the demographic trends generally explain the timing of the development.

### General Demographic Trends

Table 2: 1980 - 1990 Population Changes			
<i>Municipal Jurisdiction</i>	<i>1980</i>	<i>1990</i>	<i>% Change</i>
Huron County	36,459	34,951	-4.1%
Lapeer County	70,038	74,768	6.7%
St. Clair County	138,802	145,607	4.9%
Sanilac County	40,789	39,928	-2.1%
Verona Township	1,122	1,196	6.6%
Colfax Township	1,907	1,936	1.5%
City of Bad Axe	3,184	3,484	9.4%
State of Michigan	9,262,078	9,295,297	0.3%

Source: U.S. Census of Population, 1980-1990

Huron County has not experienced the same population pressure that other nearby counties such as Lapeer and St. Clair counties have. Its relative isolation has allowed Huron County to, for the time being, avoid the rapid residential growth that has occurred just to the south. The fact that the City of Bad Axe saw a 9.4% (300 persons) increase during the decade between 1980 and 1990 is largely due to county residents moving from rural areas to the city for greater employment and housing opportunities.

Estimates of the current population for the City suggest that the population has decreased slightly from the 1990 census from 3,484 to 3,410. This minor change can be attributed primarily to the

national trend toward smaller household sizes.

Population projections vary somewhat from source to source, with most showing a slow but steady increase through the year 2010. According to the Huron County Master Plan, the population of Bad Axe is expected to reach 3,760 by the year 2010. That represents an 8.0% increase over the next 10 years.

The U.S. Census of Population, Michigan Department of Management and Budget, projects the population of Bad Axe to reach 3,963 by the year 2005. This represents a nearly 14% increase over the next 5 years.

<b>Table 3:</b> <b>City of Bad Axe Population Projections</b>			
Source	1990	2005	2010
U.S. Census: Michigan Department of Management	3,484	3,963	----
Huron County Master Plan	3,484	3,730	3,760

Source: U.S. Census: Michigan Department of Management and Budget  
1993 Huron County Master Plan

<b>Table 4:</b> <b>Household Distribution</b>				
Municipal Jurisdiction	No. of Households 1980	No. of Households 1990	No. of People per Household	Median Household Income
Michigan	---	---	2.7	\$31,030
Huron County	---	13,311	2.6	\$21,852
Verona Township	---	441	2.7	\$24,861
Colfax Township	---	622	2.8	\$27,500
City of Bad Axe	1,230	1,359	2.4	\$23,473



## **Household Distribution**

Household statistics are a more influential factor when considering current and future development trends. The number of households, number of persons per household, and household income greatly influence the character of the community. According to National Decisions Systems, which is based on information provided by the U.S. Census Bureau, the number of households in the City has increased between 1980 and 1990 but the size of the households has decreased. One of the most telling statistics is that the City of Bad Axe and surrounding communities have a significantly higher median household income than the County overall.

## **Age Description**

The age of the population in Bad Axe provides a further indication of the type of people living in the communities, what type of community services or facilities they may require. It also indicates whether the community is attracting families. The City has a higher percentage of younger residents in the 0 to 11 year range (19.1%) than the state (17.9%) The City also has a higher percentage of residents in the middle age range of 35 to 44. This suggests that the new school facilities and safe, small town atmosphere of City is attracting families with school age children.

## ***Housing Inventory***

### **Home Values**

Median home values of the City and surrounding communities is also a revealing statistic. Table 5 presents the median home value and median rent for Bad Axe and the surrounding communities. The City saw the a significant increase in median home values between 1980 and 1990 from \$33,000 to \$45,400. However, both Colfax and Verona Township saw greater increases and now have median home values that are approximately 20% higher than that of Bad Axe.

<b>Table 5:</b> <b>1980 - 1990 Median Home Values and Rents</b>						
Municipal Jurisdiction	Median Value 1980	Median Value 1990	Percent Change 1980-1990	Median Rent 1980	Median Rent 1990	Percent Change
Huron County	\$31,200	\$44,500	43%	\$149	\$229	54%
Colfax Township	\$39,400	\$53,100	35%	\$166	\$247	49%
Verona Township	\$35,900	\$56,800	58%	\$132	\$245	85%
City of Bad Axe	\$33,000	\$45,400	38%	\$163	\$247	51%

This trend reflects the fact that new housing is being built in the surrounding townships. New houses with higher values are inflating the median home values of the surrounding communities. The City of Bad Axe has a wider range of homes most of which are older homes demonstrated by the fact that 86% of the existing homes were built prior to 1970. These older homes include the elegant homes along M-53 and the beautiful homes that make up the neighborhoods surrounding the downtown.

### ***Economic Influences***

The economy of Bad Axe is influenced by a number of factors. Most notably is its central location within the thumb region and direct access to the two major regional highways, M-142 and M-53. This location will guarantee that Bad Axe will continue to be the preferred location for commercial and industrial uses. Availability of water and sewer facilities also makes Bad Axe a prime area for economic development.

The major industries in Huron County include: tourism, agriculture, and auto-oriented industries. The City has, and continues to take advantage of, the tourism industry by promoting such unique attractions as the log cabin village. Continued promotion of Downtown Bad Axe as a dining and entertainment destination will contribute to the City's role in the regional tourism industry.

Huron County is primarily an agricultural community. Agricultural land uses continue to dominate the region. However, although the land use dominates, the amount of revenues generated from these uses is on the decline. As is the case in other communities experiencing residential growth pressure, the demand for services is outpacing the development of tax revenue to pay for these services. In order to sustain agriculture as a viable industry, a regional approach has to be taken. Industries that



add value to farm produce locally should be aggressively targeted. In addition, the pressure must be taken off of farmland for residential development through innovative programs such as transfer of development rights. The transfer of development rights allows a farmer to sell his development rights, or the number of residential units he may reasonably be able to develop on his land, to a developer who is located in an identified development area where services are available. The farmer is then able to continue to farm his land and the developer receives a density bonus which, in turn, increases the value of his property.

Finally, the City has an industrial park established on the south end of town which is presently 40 to 50% occupied. The City should continue to pursue industries to locate within the park to provide a broad economic base and to provide the residents of Bad Axe with viable employment opportunities. Joint efforts with the townships should be explored to ensure adequate infrastructure, including roads, water, and sewer, are provided at shared costs and that the resulting revenues generated from an expanded industrial center are also shared.

Along with the industrial park, the City has access to the County airport, which is a definite resource for many industries. Although the City has good regional access, it does not have access to interstate roadways. As a result, industries that are security sensitive should be targeted. High-tech research and development firms tend to choose locations that are not regionally accessible, but that are located in communities that will attract high quality employees with recreational, educational, and housing opportunities. The small town character of Bad Axe and the recreational opportunities of Huron County will be very attractive to potential industrial businesses.

### ***Transportation and Circulation Characteristics***

The City of Bad Axe is located at the crossroads of the two major regional state highways, M-53 and M-142. As a result the City experiences a tremendous amount of through traffic (18,000 average daily trips on M-53/M-142). This is a tremendous asset and a burden.

As the center of the region, everybody goes through Bad Axe. Every effort should be made to enhance the experience of drivers going through the City of Bad Axe. In cooperation with the City, the State has recently installed traffic signals with dedicated left turn signals that will help alleviate some of the congestion in the downtown area. In addition, the City has physically enhanced the downtown area through the establishment of a Downtown Development Authority that has raised the money to install pedestrian and landscape amenities in the downtown to encourage the use of the downtown.

Traffic heading north or south ultimately travel along the stretch of M-53/M-142 that is north of the railroad tracks and south of Pigeon Road. This stretch of road is experiencing tremendous growing pains. As commercial development continues with virtually unlimited access, the driving conditions on this stretch of road is becoming hazardous. Alternative configurations of this stretch of road need



to be considered along with strict access and development standards that will make it a safer and more desirable environment.

Although the large number of vehicles traveling through Bad Axe is a commercial plumb, it can be a major detraction for the residents trying to get from their home on the north side of town to the City Park, or High School. A more complete network of local roads needs to be developed with alternative north/south and east/west routes. These local roads should be designed to carry local traffic, no trucks and slow speeds. These roads, along with the sidewalks that will be on either side of them, will also allow people to walk from one neighborhood to the next in a pleasant environment. Children will be able to walk to school without going out onto M-53 or M-142.

All roads lead to and through Bad Axe. This means trucks. In order to preserve the character of the City and the conditions of the roads, special class A truck routes need to be established and maintained. The cost of these improvements needs to be spread between all of those benefitting, the users, the Township, and the City.

### ***Community Facilities Inventory***

As the center of the region and the county seat, the City of Bad Axe has a tremendous number and quality of community facilities that serve both the residents of the City as well as of Huron County.

#### **Civic Resources**

Downtown Bad Axe is home to both the City Hall and the County Building. These two major civic institutions provide an significant amount of vitality to Downtown which serves as the government center of the entire region. The City Hall is located in a storefront at 300 E. Huron Street providing outstanding access to the residents of the City. The police department is located directly south of the City Hall and creates a well-defined municipal complex.

Also in the core of the City is the Huron County Building. One of the largest employers in the City, the County also occupies a prominent building in Downtown Bad Axe where it serves the needs of residents and business people from the entire County.

Bad Axe public library is conveniently located on the corner of East South Street and Hanselman Street, immediately adjacent to City Park and in close proximity to other important civic institutions within the City.

#### **Parks**

Bad Axe City Park contains over 10 acres and is located at the center of the City. City Park provides several recreational facilities including two little league fields, four softball fields, four tennis courts, a pavilion, children's play area, picnic area, restrooms, concessions and two multi-purpose courts.

The park also accommodates ice skating in the winter months and has an historic set of log cabins which provide a look at life in the founding days of the City. The City has recently purchased additional land to the east of City Park and is contemplating the expansion of the park.

Wilcox Park is a smaller park consisting of five acres located east of Whitelem Street North of the railroad tracks also provides a number of recreational opportunities. Although the site is mostly natural areas located along the drain, it also includes active recreational facilities including basketball goal, volleyball court, horseshoe pits, playground, picnic area, and an activity center. Wilcox Park is surrounded on three sides by Verona Township. However, there is a tremendous opportunity to expand the park to the north to include a large hill that could be used by both communities as a sledding hill if property designed.

The majority of the City's park facilities are contained in large centralized parks. There are also a number of opportunities to provide additional public park facilities ranging from neighborhood parks to small pocket parks that have a small service area and contain minimal facilities such as play equipment. However, these smaller parks provide an essential function for the integration and socialization of residents within neighborhoods.

### **Public School Facilities**

One of the critical location factors for families and businesses is the quality and accessibility of the school system. The Bad Axe School District has assembled a concentration of schools in a campus setting consisting of over 50 acres on the north side of North Van Dyke and on the east side of Barrie Road. The following schools are included in this campus.

Bad Axe high school is a modern facility with state of the art equipment and a stable enrollment of approximately 518. Constructed in 1996, the school includes outdoor recreational facilities including; lighted football field and track, baseball diamond, softball diamond, and four tennis courts.

Bad Axe Junior High School serves grades 6 through 8 and has a current enrollment of 319, down 50 from the 1995-1996 enrollment. This school was constructed in 1950 and has received numerous improvements over the years to make it a quality school.

Adjacent to the High School/Junior High School facility is the Bad Axe Intermediate School and George E. Greene Elementary School. Bad Axe Intermediate School serves grades 3 through 5 and has a current enrollment of 317. Greene Elementary School serves K through 2 grades and has a current enrollment of approximately 318. The two schools share outdoor facilities including playgrounds with age appropriate sports facilities.



## **Other Important Community Facilities**

The City of Bad Axe also contains other important community facilities and institutions. It is the home of the Huron Community Fairgrounds located at the south end of town and host of many County-wide events. In a recent windshield survey, there were at least 11 active churches in the community. Many of the churches were integrated into residential neighborhoods in the older part of the City. These institutions can provide many benefits to the neighborhoods including recreational open spaces and social activities.

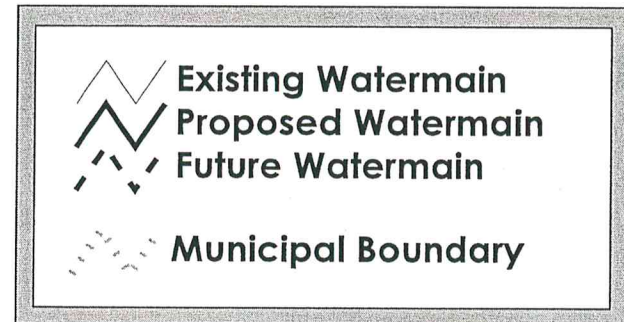
County Road Commission and the City's public works facilities are primarily clustered on the south end of Henselman street, near the City's industrial area.

## ***Utilities and Infrastructure***

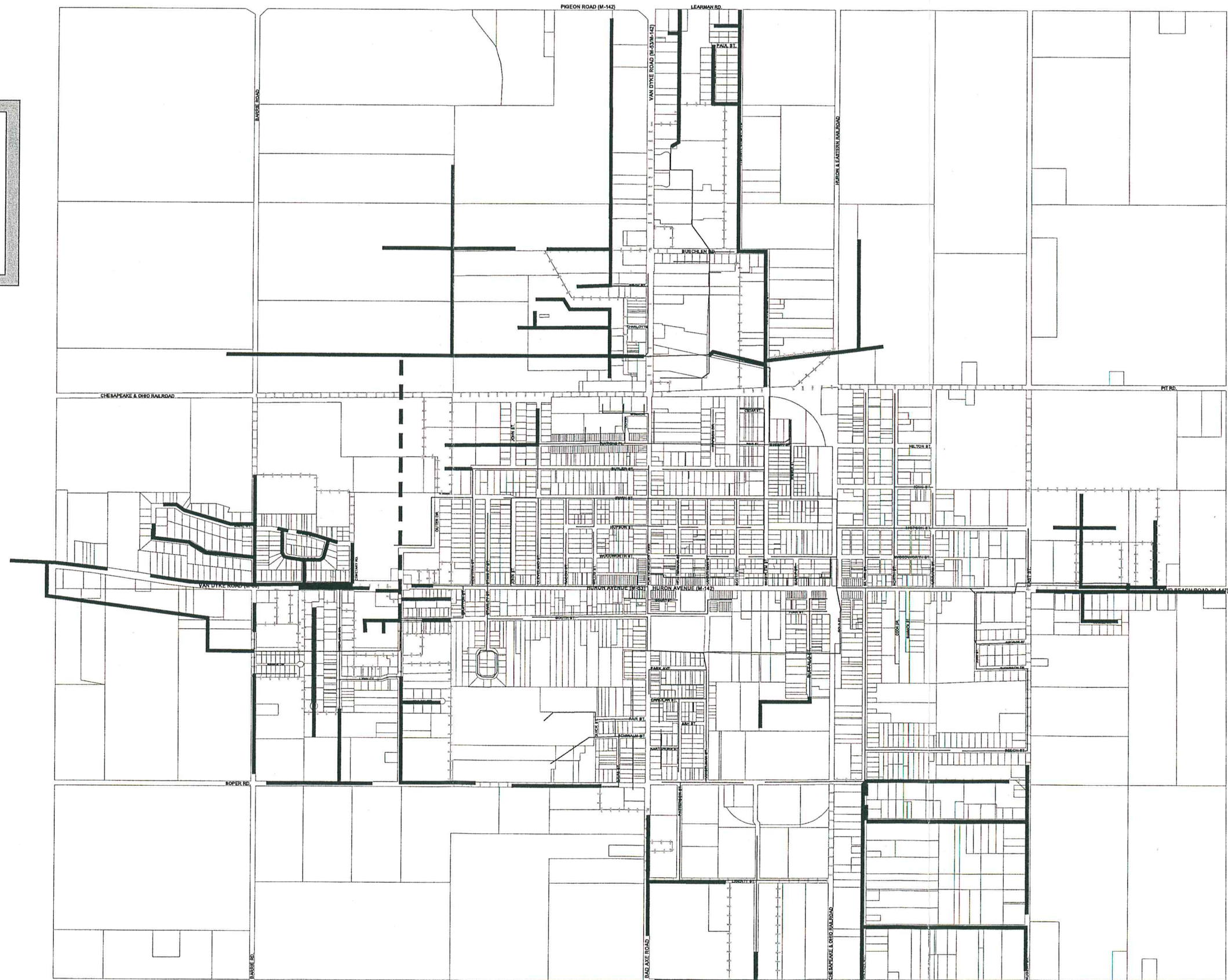
One of the greatest tools the City has in controlling the pace and form of development is the provision of utilities and infrastructure. The City has taken a significant step in controlling growth beyond its borders by entering into an intergovernmental water authority with Port Austin and Port Austin Township. By controlling access to water, the City can shape regional development by encouraging it to occur in clusters close to pre-determined service areas.

Map 4 illustrates the existing Water Distribution System Master Plan and Map 5 illustrates the Sanitary Sewer System Master Plan. Both of these plans should be reevaluated in cooperation with the adjacent communities to ensure that services are provided in a manner that encourages development to occur in a logical and orderly manner in accordance with the future development plan.





Basemap Source: Osminski & Associates, Inc.  
Data Source: Osminski & Associates, Inc. 3/10/1999



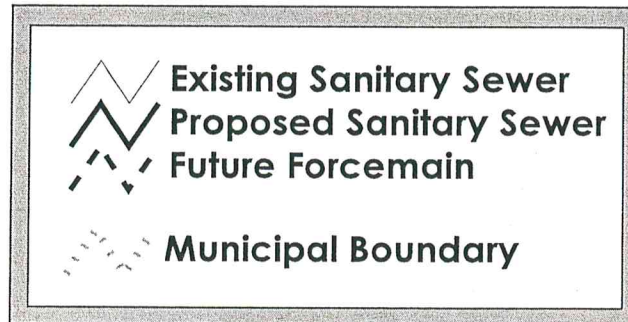
**Map 4 - Water Distribution  
System Master Plan**

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750 Ft.



9/10/1999





Basemap Source: Osminski & Associates, Inc.  
Data Source: Osminski & Associates, Inc. 2/23/1998

Proposed 500,000 gallon  
elevated water storage tank

Existing 300,000  
gallon water tower

**Map 5 - Sanitary Sewer  
System Master Plan**

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9/10/1999



## IV. MASTER PLAN GOALS AND OBJECTIVES

### *General Goals and Objectives*

Based on the information gathered in the existing land use and the comments from the citizens that attended the community visioning workshop, goals and objectives for the Master Plan have been established.

Goals are general in nature and are statements of ideals toward which the City wishes to strive. They represent the ultimate purpose of an effort in a way that is broad. Goals also express a consensus of community direction of public and private agencies, groups and individuals.

Objectives are more specific and are intended to present a means to attain the stated goals. Objectives take the form of more measurable standards, or the general way in which the goals can be attained. In some instances, they are specific statements which can be readily translated into detailed design proposals or action recommendations.

Together, the following goals and objectives provide the foundation of the Bad Axe Master Plan and a framework for future implementation strategies.

### *Residential Development*

Goal: The City of Bad Axe will continue to provide a high quality residential environment with a range of housing options and the services necessary to support strong neighborhoods.

1. Encourage the construction of new residential development that is consistent in scale and character with the existing residential neighborhoods in the City.
2. Promote a residential environment designed to fulfill basic needs with special attention focused on creating sustainable mixed use residential neighborhoods.
3. Require residential development to be visually attractive, and environmentally acceptable.
4. Allow for a variety of dwelling unit types and sizes for ownership and rental by all age groups and income levels.



5. Encourage appropriate transitions between incompatible non-residential uses and residential neighborhoods.
6. Discourage uses that would increase traffic on residential streets beyond that which the street was designed or intended to carry.

### ***Commercial Development, Retention and Revitalization***

Goal: The City of Bad Axe will continue to provide a conducive environment for commercial development that serves its residents as well as other users from beyond the City's boundaries. Commercial development will be channeled in ways that are consistent with the physical characteristics of a neighborhood based small town.

1. Encourage the retention of a viable central business district with adequate parking which serves the convenience needs of the population within the trade area.
2. Encourage owners of businesses and structures within the business district to improve and maintain their properties in a manner which promotes the aesthetic appearance of the district.
3. Provide ***limited*** areas within the City for commercial development outside the central business district for those types of commercial uses serving the regional market
4. Encourage existing and future commercial development outside of the Central Business District to conform and contribute to the fabric of the existing and future neighborhoods surrounding them.
5. Maintain and improve the public infrastructure within the central business district such as sidewalks, lighting, municipal parking, and other amenities.
6. Encourage a concentration of smaller, specialty type retail shops in the central business district.
7. Encourage service type businesses to locate on the fringe of the central business district.

### ***Recreation***

Goal: The City is committed to providing a variety of recreational opportunities for its residents as well as others from adjacent communities. A wide range of recreational opportunities will be available from neighborhood pocket parks to semi-public commercial recreational facilities.

1. Provide public and private sites for recreation together with a variety of facilities to

- accommodate City residents.
2. Provide for the development, utilization, and conservation of natural resources in the City including structures and land having historical, archaeological, architectural, scenic or similar significance.
  3. Promote the development of recreational and/or tourist facilities that will attract tourists, taking advantage of the Thumb area's drawing power.

### ***Community Facilities***

Goal: The City of Bad Axe will continue to develop a complete network of community facilities that meet the needs of residents of the City and throughout the County. Community facilities will be developed in a manner that is consistent with their service area whether it is within a neighborhood

1. Provide a system of community facilities designed around education, recreation, health-care, police-fire protection, and located so as to balance convenience to users, cost efficiency, and compatibility with surrounding areas.
2. Provide for those who will be a part of the population composition in the future and ensure that adequate facilities will be provided and maintained.

### ***Industrial Development***

Goal: The City of Bad Axe will continue to enhance its position as the regional employment center by providing expansion opportunities and other incentives for high quality light industrial and distribution facilities.

1. Recognizing the importance of the agricultural industry, promote related industry that adds value within the County to products grown in the County.
2. Provide a stable and diversified economy emphasizing and industrial mix minimally affected by fluctuations.
3. Provide manufacturing and services capable of serving the needs of the residents and businesses in the area.
4. Make available cost-effective, adequately sized, industrial sites that are compatible with the surrounding area.
5. Provide adequate roads, utilities and transportation facilities to service existing and planned



industrial areas.

6. Provide adequate buffering of industrial uses from adjacent residential uses and improve development standards for industrial developments.
7. Require future industrial developments to provide adequate on-site off-street parking facilities.
8. Ensure that future industrial development does not emit excessive amounts of noise, fumes, smoke, or other pollutants.

### ***Infrastructure***

Goal: Infrastructure including roads, water, and sewer will only be expanded in a way that promotes compact and orderly development.

1. Develop an infrastructure and utility plan that encourages compact growth within the existing service boundary.
2. Improve roads that can provide truck access to the identified industrial areas and around residential areas and principal shopping districts.
3. Develop an agreement with the adjacent communities to share in the cost for providing water and sewer in exchange for sharing in the revenues associated with development.

### ***Planning***

1. Update the City Master Plan on a regular basis.
2. Adopt a revised and up-to-date zoning ordinance and zoning map consistent with the Master Plan.
3. Provide for strict zoning administration and compliance with site plan review standards.
4. Cooperation with Colfax and Verona townships through the exchange of information on development and redevelopment issues, such as community facilities, zoning, utilities, development standards, and other shared interests.

## V. FUTURE LAND USE PLAN

### *Future Land Use Plan*

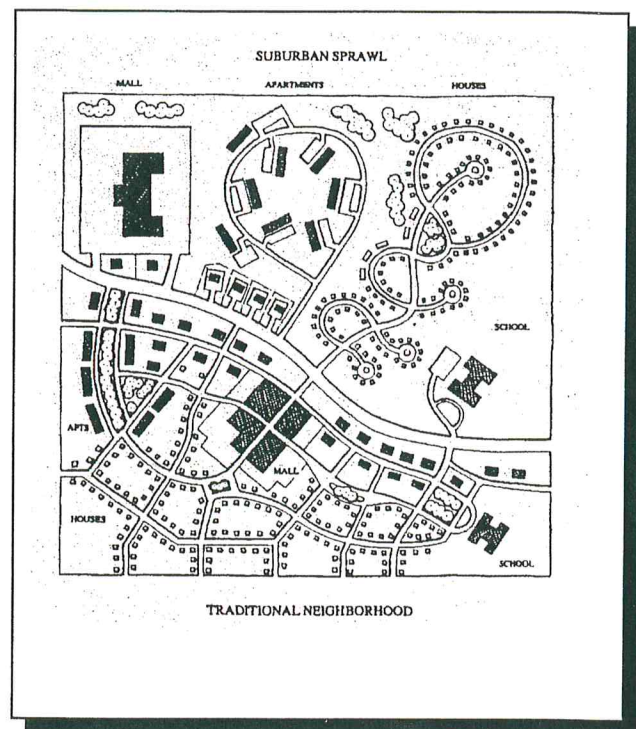
This Master Plan is based on the vision of Bad Axe to maintain its desirable small rural town character in the face of increasing commercial development pressure that is out of scale and context with the traditional character of Bad Axe.

### **Future Land Use Concept**

In order to develop an effective plan for maintaining the desirable small town rural character of the community, it is essential to understand how and why Bad Axe has developed the way it has. It is the center of a primarily agrarian region. Throughout the history of the region, Bad Axe has provided farmers in the surrounding area with commercial, civic, and institutional facilities. The agricultural areas typically had few services and were primarily self sufficient. All access was by dirt roads.

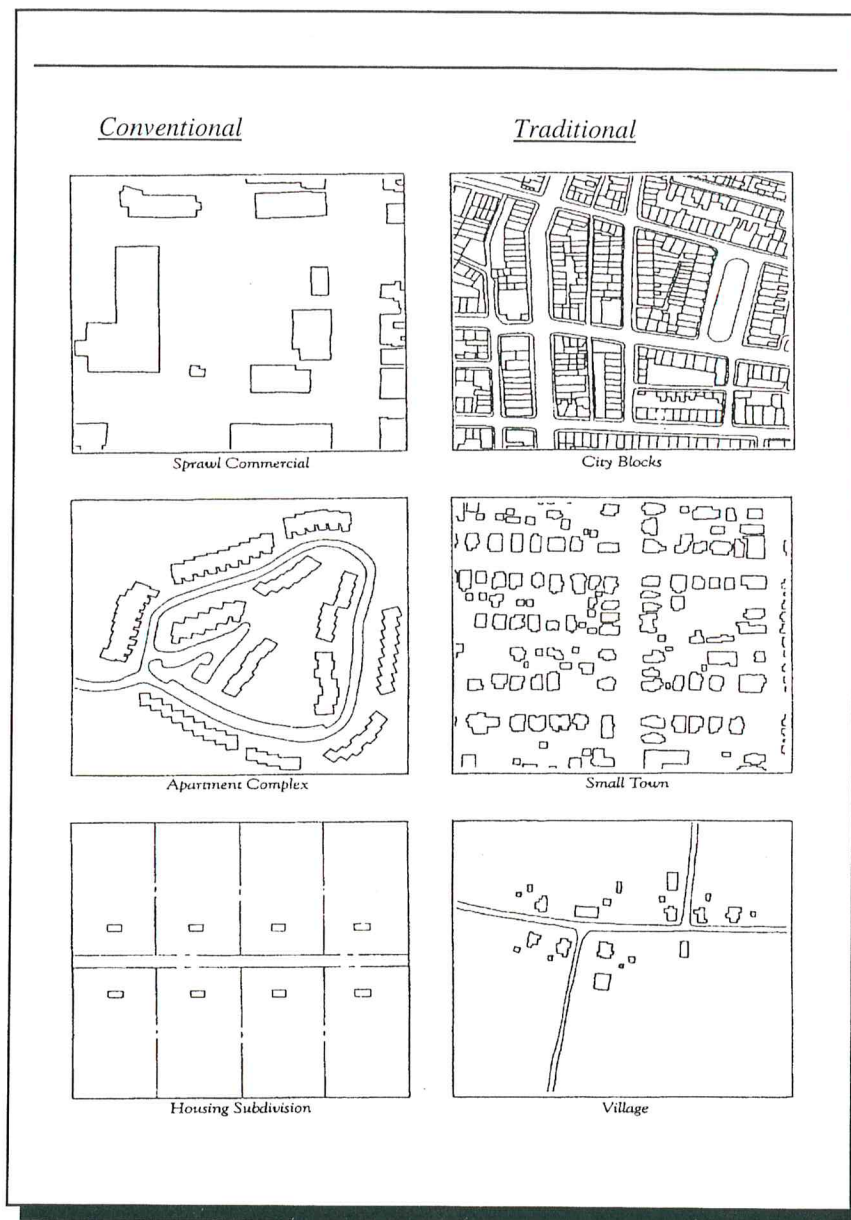
The compact pattern of development in the City itself comes from the fact that the people who ran the business in the City or that worked for the County needed to live close to work because of the lack of transportation. As a result, the City is made up of a grid pattern of streets containing blocks with lots that average 1/4 of an acre. This compact form of development necessitated the development of "urban" services such as public water and sewer. This provided the opportunity to develop a wide range of housing types within a walkable neighborhood pattern.

A great deal of research has been conducted over the past 10 to 20 years to fully understand the form and systems of a small town including a book by Peter Katz called: "The New



**Figure 1: Suburban Sprawl/Traditional Neighborhoods**





**Figure 2: Alternative Forms of Development**

villages, small towns, and cities.

The Bad Axe Master Plan emphasizes the physical arrangement of uses and stresses the importance of creating a sense of place for the residents of Bad Axe. It is broken down into the three basic elements of the community: the neighborhood, the district and the corridor. Each of these elements plays a role in the identity of the community and the quality of life for residents of the community.

Urbanism, Toward an Architecture of Community". This book along with others by noted architects and planners conclude that the physical arrangement of uses is as important, if not more important, than the actual mix of uses that defines the character of a community. In other words two communities can have the same number of dwelling units, the same amount of commercial, office, industrial, and civic uses, and one community could look like a traditional small town and the other like a conventional suburb. Figure 1 demonstrates the difference between the physical form of a traditional neighborhood and conventional suburban sprawl. Figure 2 illustrates the physical differences between single use suburban forms of development including commercial shopping areas, apartment complexes, and single family areas and more traditional mixed use forms of development that include

According to the principles of traditional neighborhood development a neighborhood consists of the following key components:

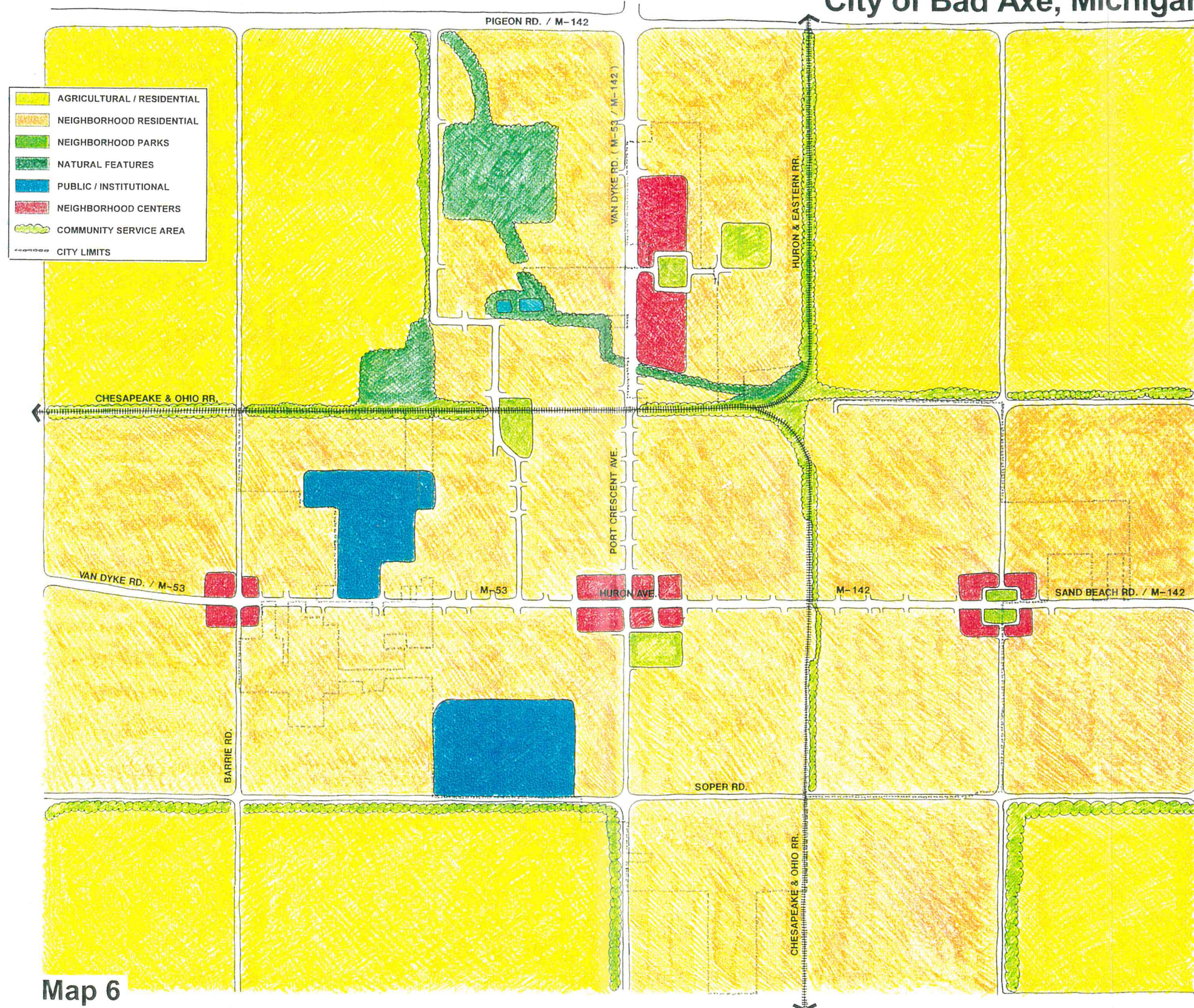
- ☐ There is a definitive center and edge to the neighborhood;
- ☐ A neighborhood is walkable, a maximum distance of 1/4 mile from the center to the edge;
- ☐ There is a balanced mix of uses including: residential, commercial, civic (church/school), and recreation. Employment opportunities should also be encouraged within the neighborhood;
- ☐ The neighborhood uses are arranged, and traffic is routed through a fine network of interconnecting streets; and,
- ☐ Priority is given to the location of public spaces (neighborhood parks and plazas) and civic buildings (schools, churches, etc.).



Figure 3: Neighborhood Prototype



# City of Bad Axe, Michigan



**Map 6**  
**Future Land Use - Concept**

Basemap Source: City of Bad Axe

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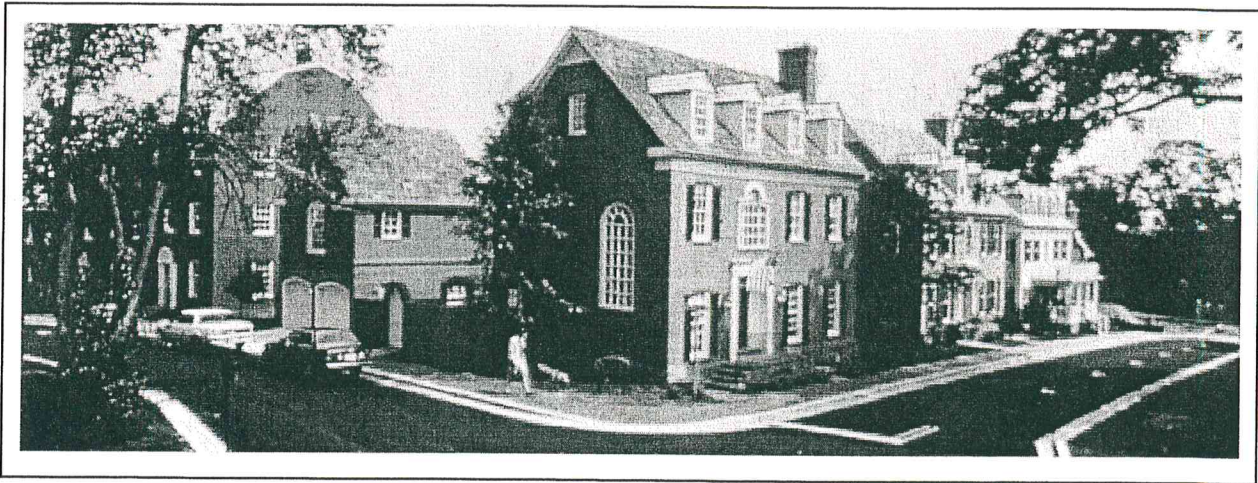


Figure 3 illustrates the elements of the neighborhood and how they should be arranged to create a definitive sense of place. Each of these criteria were carefully considered when determining the most appropriate location for the four neighborhood centers. Map 6, Land Use Concept, illustrates four neighborhoods that measure approximately 1/4 mile in diameter. At the center of these neighborhoods are commercial, residential, civic, and recreational uses. Surrounding each of these nodes are the primarily single family component of the neighborhoods with densities that range from 3 to 10 dwelling units per acre. Land uses within the neighborhood as well as other major land use districts within the City are also shown on the Concept Plan and include the following:

### Future Land Use Categories

*Single Family Residential* Residential dwelling types and densities should be integrated within each neighborhood to provide a mix of housing opportunities for single adults, young families, growing families, "empty-nesters", and seniors so that they can all enjoy the amenities of a neighborhood.

Similar types of residential units should be located along each side of a particular block face to provide compatibility. Residential uses with different densities should be located along opposite sides of the same block to provide for a suitable transition.



*Figure 4: Mixed Residential Units*

Figure 4 shows three different housing types and densities. On the corner and down the street to the right are high end single family homes. Directly behind the homes are carriage houses or accessory apartments. Along the street to the left are attached single family townhomes.

The predominant single family lots in the older neighborhoods in Bad Axe are 75 feet wide and 150 feet deep. Single family homes should be located on lots no larger than 100 feet wide and no less than 50 feet wide.



### *Moderate Density Residential.*

Approximately 20 to 50 percent of the gross area of a neighborhood should be devoted to moderate density residential development. Moderate density residential shall consist of rowhouses or similar types of residential structures with individual access. Moderate density residential development should be encourage at approximately 10 dwelling units to the acre.

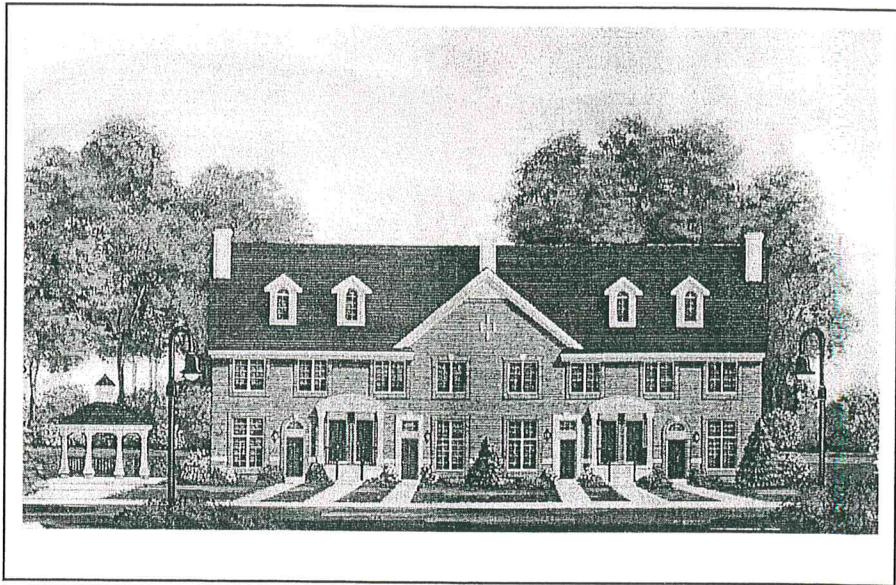


Figure 5: Moderate Density Residential

*Commercial.* General commercial uses will continue to seek locations that have accessibility and visibility primarily along M-53 and M-142. To ensure that these commercial buildings are developed at a scale that is consistent with the character of the surrounding uses, maximum building sizes should be established such as a maximum of 300 feet, the width of an average block.

Commercial uses should be required to locate all parking in the rear of the use and locate the building near the sidewalk or with a minimal front yard setback for landscaping. Commercial developments shall be pedestrian-oriented with their main entrances located adjacent to the primary roads. Secondary entrances serving joint parking facilities shall be designed with similar scale and details as the front of the building.

*Parks, squares, and public spaces.* Approximately five percent of the neighborhood should be allocated for open space such as parks, square, or other public spaces. At least one central neighborhood park should be located near the center of the neighborhood and contain between one and two acres. Other smaller parks could be located throughout the neighborhood.

*Civic Uses.* Each neighborhood should be encouraged to have a civic use such as a church, day care facility, police sub-station, meeting hall, or service club. These uses provide a centralized gathering place for the neighborhood.

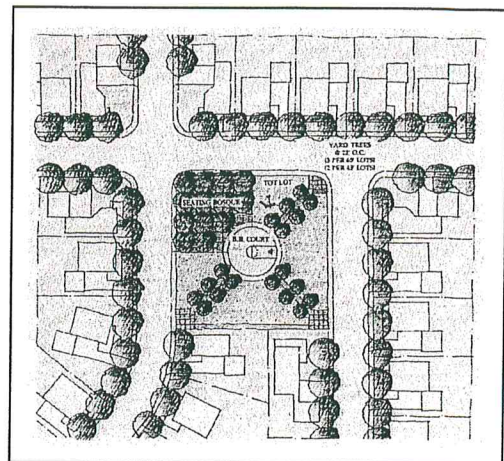


Figure 6: Neighborhood Parks

*Single Purpose Districts.* Districts such as the industrial district located south of Soper Road west of the C&O railroad corridor are specialized districts that are composed of one dominant use. These districts also allow for and encourage other uses that will support the primary use. Site plan standards are essential to integrating these districts into the surrounding neighborhoods. Screening of outdoor storage is essential, but also other design standards that allow these uses to coexist alongside single family residential areas.

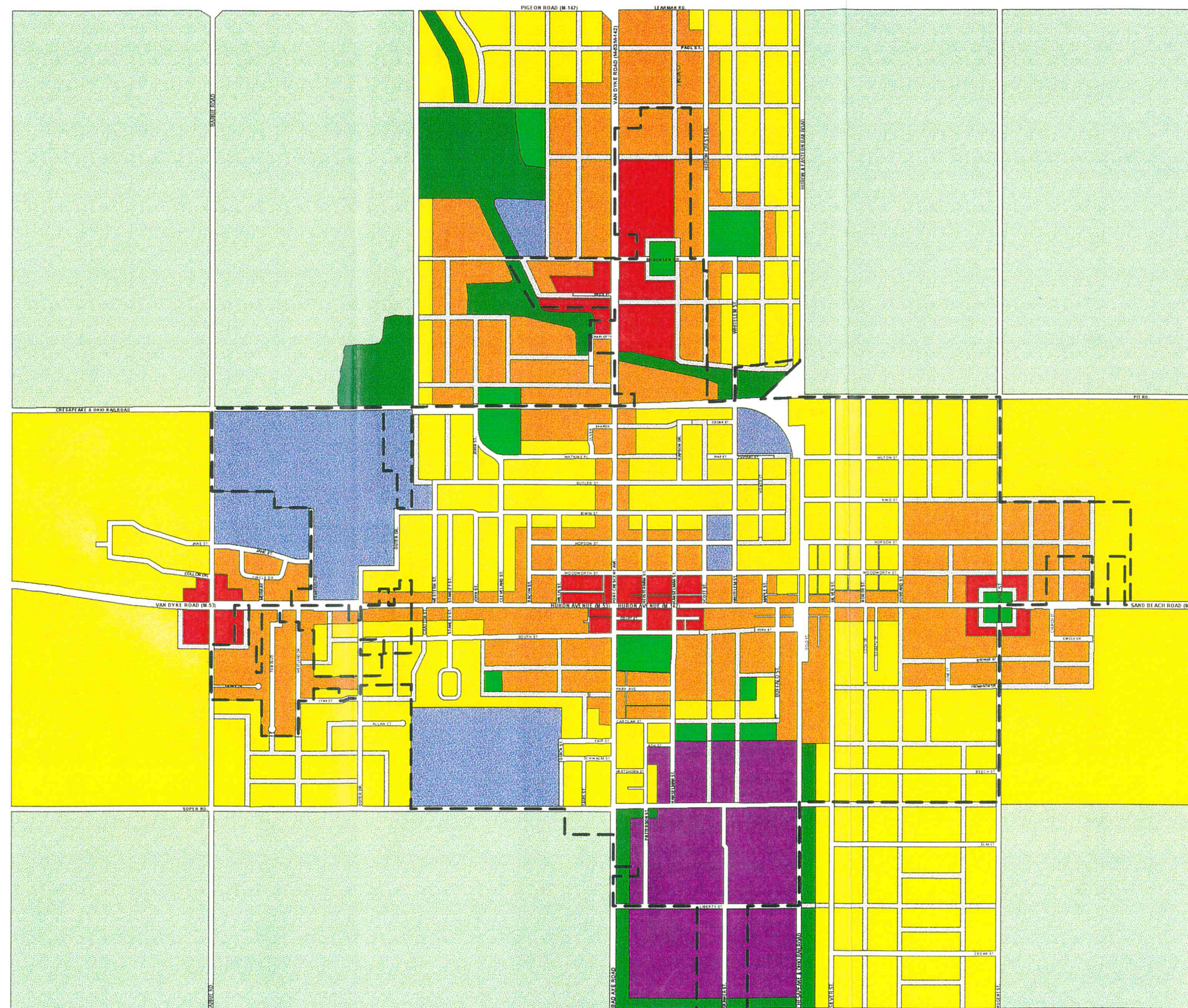
These neighborhoods and districts extend well beyond the City boundaries in several cases. The fabric of the neighborhood should be maintained regardless of the jurisdictional boundaries. This will require significant cooperation between the City and surrounding townships for the provision of necessary services to support the neighborhoods.

Beyond the edges of the neighborhood are areas that are intended to be preserved as agricultural areas or rural residential areas with densities no greater than one unit for every 10 acres. In order to preserve these areas, incentives such as density transfers will have to be utilized. Transferring development rights requires the establishment of receiving and sending zones. Sending zones would be the agricultural/rural residential areas. Receiving zones would be the area within the community service area. Zoning standards would be developed, working jointly with the surrounding townships, where conventional single family development in the sending zone would be limited to 1 unit per 10 acres of land. However, development within the receiving zone would be eligible for a density bonus of up to 1 unit per acre for the acquisition and dedication of agricultural land located in the sending zone. This raises the market value of the rural areas without the development pressure.



- Agricultural
- Neighborhood Medium Density
- Neighborhood High Density
- Neighborhood Parks
- Neighborhood Centers
- Industrial
- Public/Institutional
- Natural Features
- City Boundary

Basemap Source: Osminski & Associates, Inc.  
Data Source: McKenna Associates, Inc. 8/1999



Map 7 - Future Land Use

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9/10/1999



## ***Circulation Plan***

One of the most important principles of traditional neighborhood development is the development of a fine network of interconnecting streets. This principle runs contrary to conventional planning and development which has advocated the construction of fewer roads that are larger and can handle greater volumes of traffic and eliminating the hierarchy of the road network. The result of this philosophy has been less than desirable. Businesses are located along major thoroughfares where direct access, if allowed at all, can be treacherous. Huge residential developments have one access into the development dumping hundreds of vehicles out during peak times creating congestion in the development and dangerous conditions on the surrounding road network.

Function, efficiency and safety of circulation and access into and throughout the City can be enhanced through the establishment of a distinct classification of roads and planning and designing these facilities for their specific purpose. A functional system or hierarchy of roads provides for movement of traffic as well as access to specific sites. This hierarchy will range from M-53, which primarily serves local and regional movement, to local streets which serve to access individual uses within the neighborhoods.

The function classification system has a four element hierarchy in Bad Axe:

- Major Arterial (M-53/M-142)
- Arterial (Barrie Rd., Nugent St., Buschlen Rd., Soper Rd, Thompson Rd.)
- Collector
- Local

This system defines the roles of each street, in terms of operational requirements; which is in turn translated into planning, management and physical design features.

### **Major Arterials**

The M-53 Corridor is the major arterial that provides north/south access through the region from Detroit to Port Austin. The lack of alternative north/south routes has led to a road system that funnels virtually all longer distance travel to M-53.

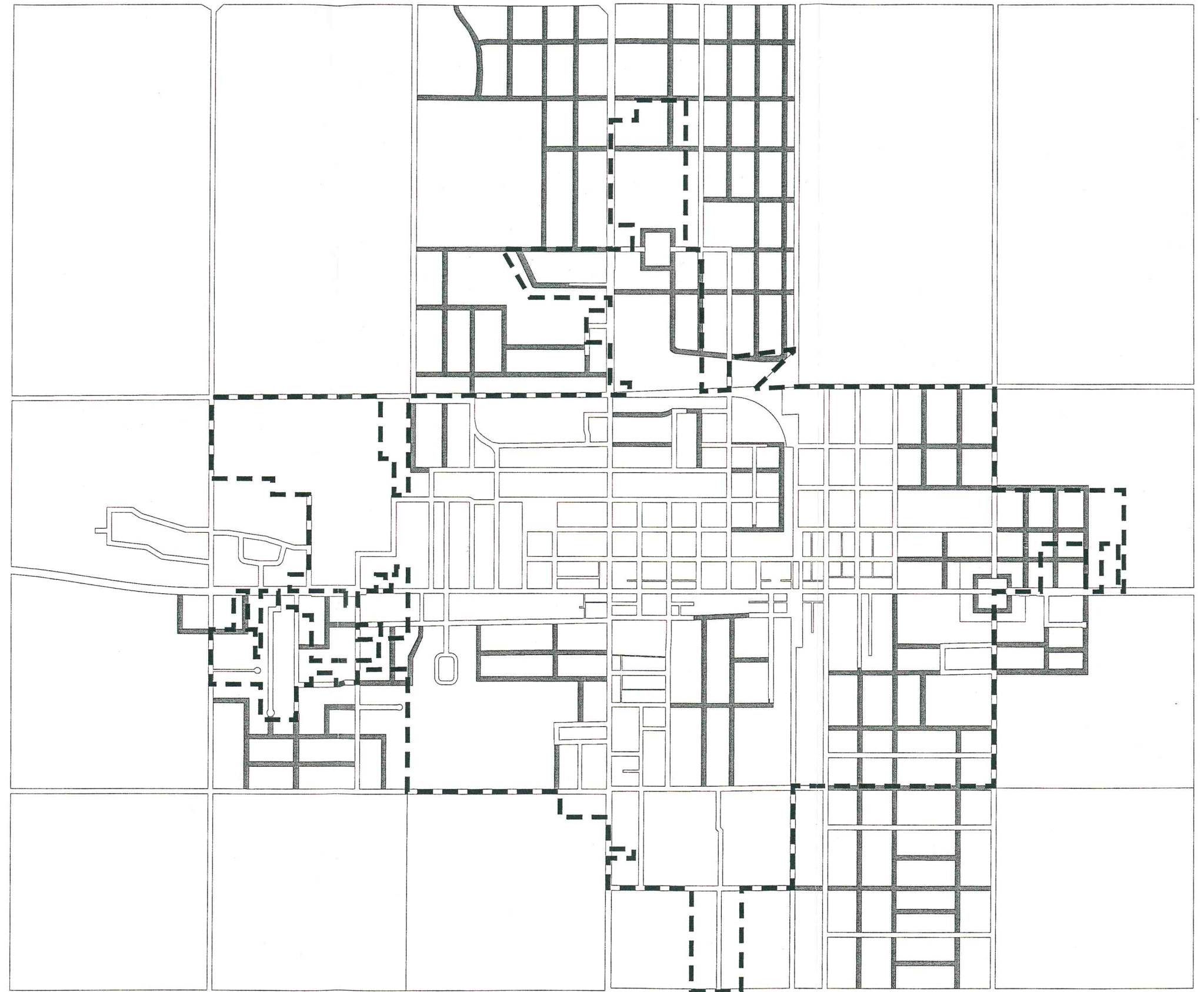
M-142 is the major east/west major arterial that provides access through the region from Harbor Beach to Saginaw Bay. M-142 is the only continuous east/west major arterial.

Through the City of Bad Axe, these two major arterials join in a north/south corridor. This joint highway serves as the principal route for regional traffic to the civic center of the region. It also provides access to and from the various recreational areas around the lakes. The latest traffic counts on this stretch of the highway indicate an average daily traffic count of over 18,000 vehicles. This means that, on an average day, there are over 18,000 trips in both directions on M-53/M-142 between Huron Avenue and Pigeon Road.





Basemap Source: Osminski & Associates, Inc.  
Data Source: Osminski & Associates, Inc. 3/10/1999



**Map 8 - Circulation Plan**

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9/10/1999



This highway plays a vital role in the image and character of the City. Because of the limited alternative access routes, and the high volume of traffic, it has attracted a significant amount of regional scale commercial development. It is essential that the role of this corridor as a major arterial and a major commercial center be balanced in a way that is consistent with the scale and character of the City of Bad Axe. This involves working with MDOT to develop specific design standards that will allow safe and efficient access to uses along the corridor in a pedestrian friendly environment.

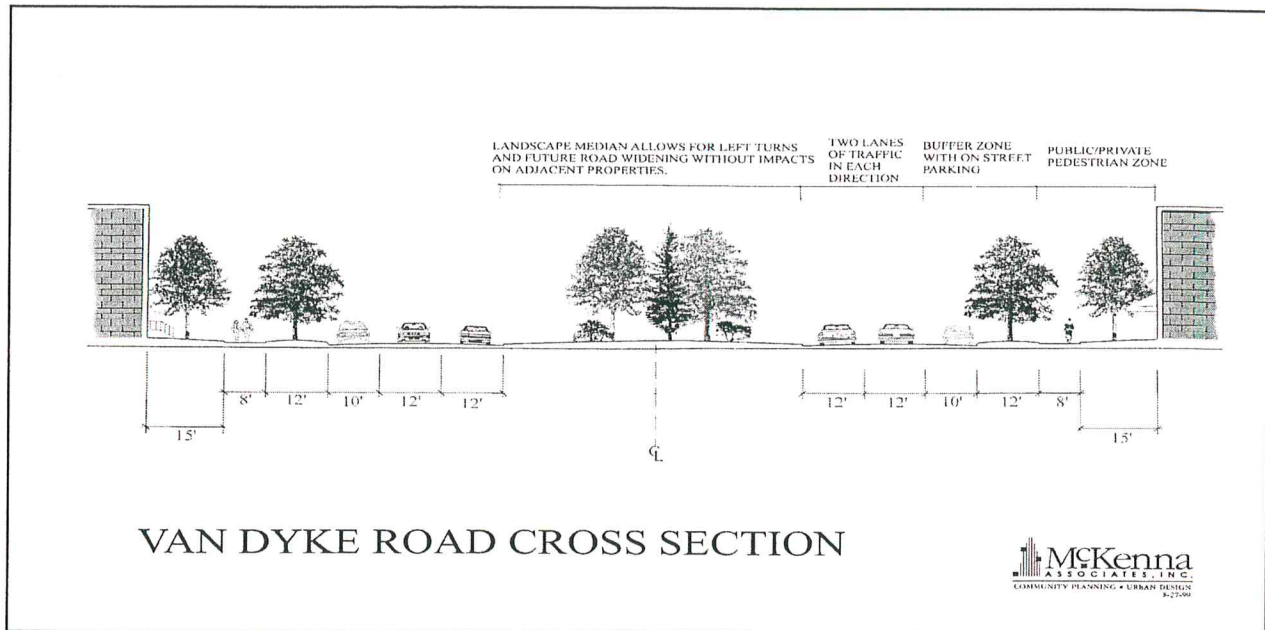


Figure 7: Van Dyke Cross Section Prototype

Figure 7 illustrates a potential cross section for the stretch of M-53/M-142 that runs between the C&O Railroad, and Pigeon Road. It would allow a generous public pedestrian zone where people could walk between residential and commercial uses along the corridor. Pedestrians would be buffered by a combination of street trees and other landscaping along with on street parking. This buffer creates a more secure sense of space for the pedestrian along this corridor and minimizes the demand for private off-street parking in front of the individual uses.

Traffic would be accommodated by two free flowing lanes in each direction. The four lanes would be separated by a generous center median that would allow for left turn and a substantial amount of landscaping, further adding to the overall character and image of the corridor. The wide center median also allows for the future addition of lanes without impacting adjacent uses.

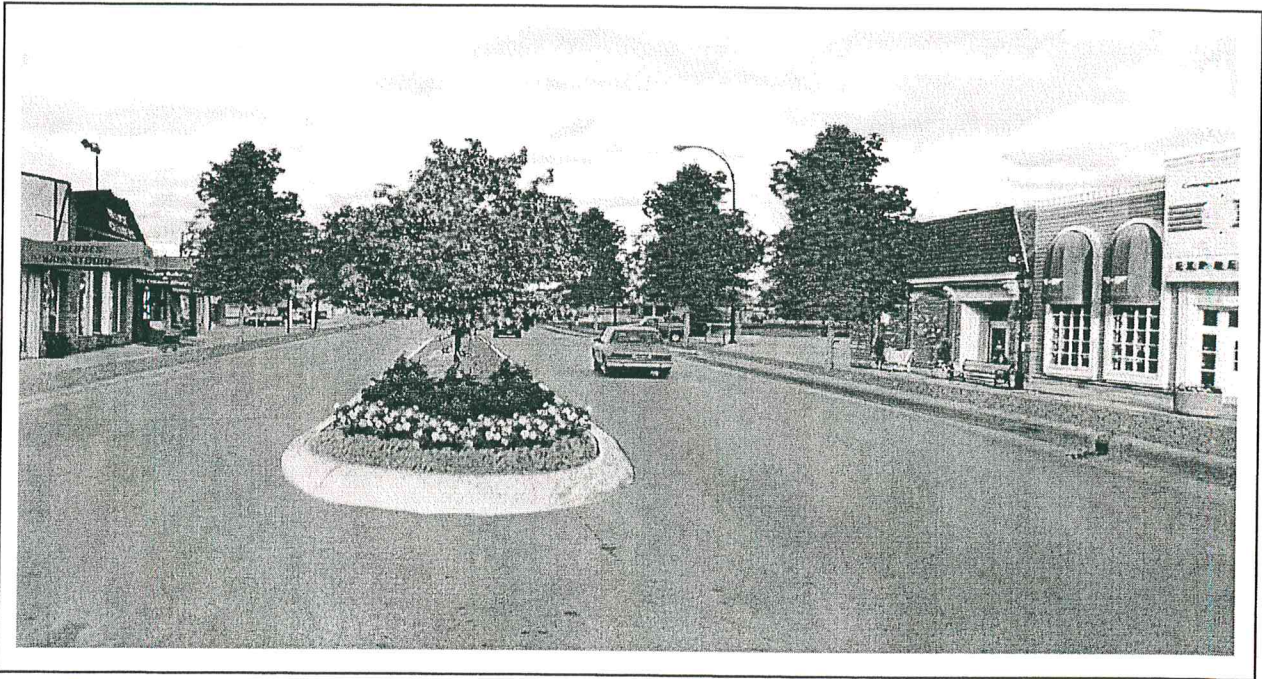
The proposed cross section could be accommodated with minimal disruption to existing buildings. Only one or two automobile service stations may be impacted. Existing parking should be relocated to the rear of buildings in shared parking lots that could be developed through a merchants' association or special assessment district.



The following graphics illustrate the existing conditions along M-53/M-142 and the possible future conditions with the proposed median.



*Figure 8: Existing Conditions - M-53/M-142*



*Figure 9: Proposed Cross Section with Landscaped Median*

## **Arterials**

There are very few other continuous north-south or east-west roadways which move traffic throughout the City. However, there are a number of opportunities for extending these roadways to improve access and to create additional development opportunities.

These roadways serve for longer trips within the City and adjacent communities. The primary function of these roads is to move traffic through the community and to provide access to the collector roads. As the network of arterials is completed and alternative routes become available, traffic pressure will be diminished on each leg of the arterial system resulting in less congestion overall.

## **Collectors**

The collectors serve to assemble traffic from the streets of residential neighborhoods and deliver it to the arterial. Collectors will also serve to provide access to abutting properties. Each neighborhood will contain one or more collector streets which funnel traffic from the local streets and connects with adjacent neighborhoods.

## **Local Streets**

Local streets serve primarily to provide access to property and homes. These roadways are generally short and discontinuous, and generally only provide connection to one or two collector streets.

Map 2, Future Land Use and Circulation illustrates the hierarchy of roads that is necessary to safely and efficiently provide circulation.

## ***Community Services Area***


One of the recurring themes throughout this Master Plan is that in order to maintain the small town character and scale, future development has to be compact. In order to ensure that development proceeds in a logical and compact manner, a growth or service area has been established.


The service area represents an area where services such as water, sewer, and roads can be provided to accommodate development in a physical form that is consistent with the existing development pattern in the City. The service area includes portions of the City as well as portions of the surrounding townships, Verona and Colfax (Map 8). In order for the service area to be successful, these communities will have to work together to develop a system where the costs of extending services can be shared and the benefits of development can also be shared.

One of the critical elements of the service area is going to be establishing common development standards. One set of standards regarding permitted uses, building location and design, signage, and access should be established through a joint effort between the participating communities. Communities not electing to participate will not be offered access to water, sewer, and other services.

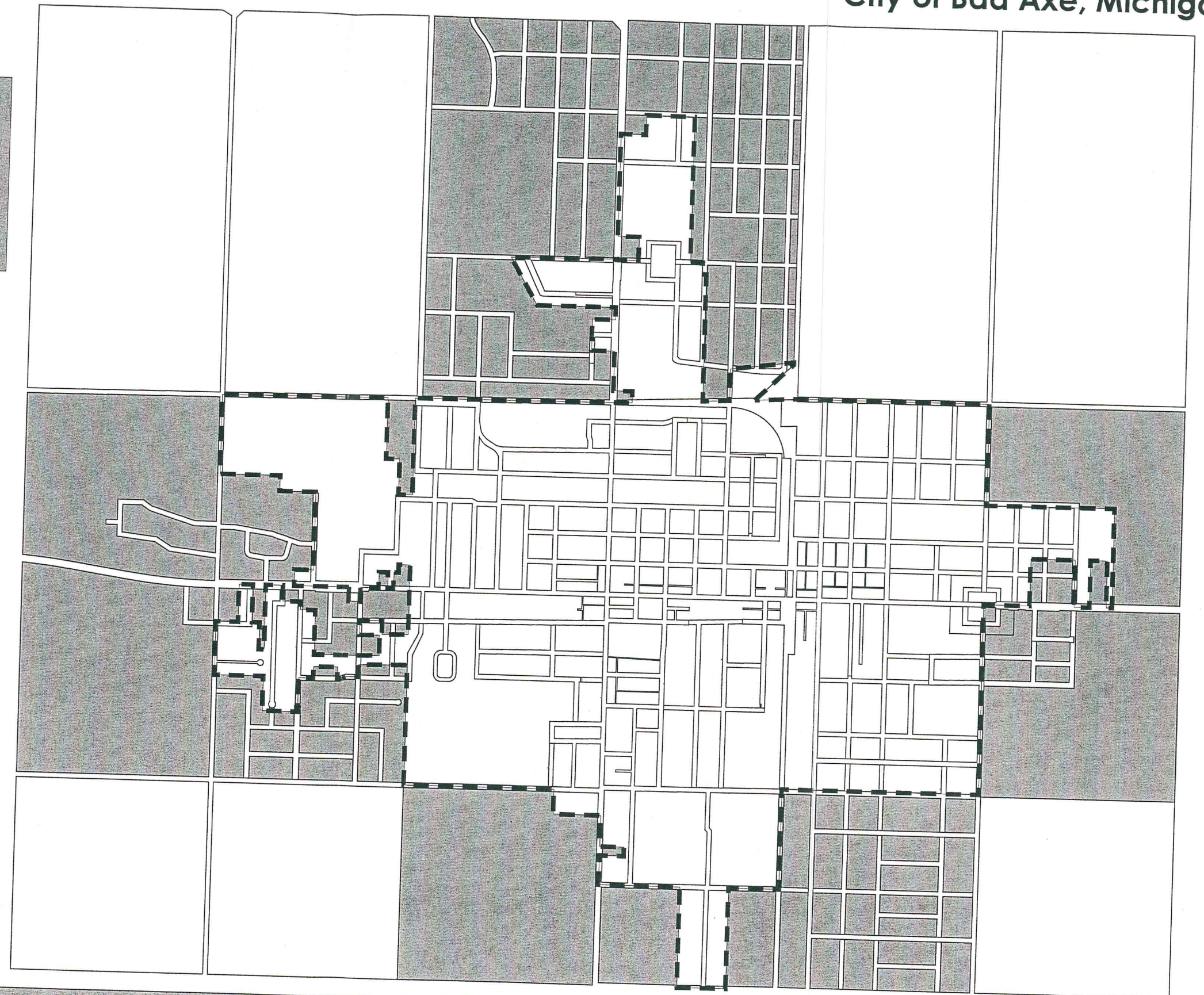


# City of Bad Axe, Michigan

 Areas outside of City within the Community Service Area

 City Boundary

Basemap Source: Osminski & Associates, Inc.  
Data Source: Osminski & Associates, Inc. 3/10/1999



**Map 9 -  
Community Service Area**

0 Ft. 750 Ft. 1500 Ft.



9/10/1999



## **VI. IMPLEMENTATION**

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Implementation strategies are a key component of any community master plan. They determine how the plan's guidelines and recommendations become reality. A community's Master Plan should never be viewed as a finished product. As events or needs of the community demand, various adjustments or additions will be required. It is not anticipated that the Plan's major goals and objectives will require change. Rather, as the plan is interpreted and implemented, certain aspects will require periodic adjustment. Economic circumstances in the region, state and nation can also influence the viability of the City's Master Plan. As circumstances change, the Master Plan must be reevaluated to assure the best interests of the community's residents and businesses are served.

### ***Growth Strategies***

Growth within the service area must be controlled through strict development codes and limited access to utilities and services. Cooperation with adjacent communities through Act 425 agreements or other contractual arrangements should be pursued.

Additional, more creative measures that provide enhanced value to all property should also be pursued. Programs such as transfer of development rights should be explored to allow growth to occur within the service area and take the pressure off of outlying areas without denying the land owners the ability to profit from the value of their land.

### ***Subdivision Standards***

Like zoning, land division regulation, under the Michigan Land Division Act (P.A. 288 of 1967, as amended through P.A. 591 of 1996) is a tool for the implementation of this Plan. While zoning deals with land use on a site-by-site basis and activities in selected areas, land division standards are concerned with the process of dividing land and maintaining the quality of individual developments.

Subdivision standards, as permitted to be established under the Land Division Act, can be created in a Subdivision Control Ordinance to protect the needs of residents by providing both site design controls and improvement standards. Design controls provide for the arrangement and location of streets, configuration of lots, the provision of open space, and the sufficiency of easements for utility installations. Improvement standards ensure adequate roads and other physical improvements.

All other land divisions in the City and surrounding communities are also regulated by the Land Division Act. The act permits the City to establish a Land Division Ordinance to establish local authority and responsibility for the legal approval of land divisions. When land is divided outside of subdivisions, the ordinance can assure the resulting lots are created consistent with the



requirements of the Zoning Ordinance minimum requirements. It can also require the lots to maintain minimum access standards to assure availability of public or private roads for the lots.

All the land division regulations described in this section were recently modified by the Michigan legislature and governor. The Planning Commission must remain alert to changes in this area of regulation to assure the City standards and requirements are consistent with the authorizing legislation.

During the past 15 years, Michigan condominium regulations have been modified to permit the ownership of land by a co-owners association. The Michigan Condominium Act was significantly modified in 1982 to permit condominium ownership of land. Since that time, many developers have created site condominiums as a substitute for land subdivisions. Site condominium development can be attractive because the approval process can be much shorter than as compared to subdivision development. The Condominium Act requires condominiums to comply with local ordinances. The Planning Commission should consider establishing standards to regulate site condominium development of land in the City.

### ***Zoning Ordinance and Zoning Map***

The City's Zoning Ordinance is a primary tool in achievement of the Plan's goals. Although the plan map is not a zoning map, it should be used as a guide to zoning amendment decisions, whether the amendments are initiated by the Planning Commission or by petitioners. The timing of changes to the zoning map is key to implementing the Plan. Further, the map's proposals should be viewed as flexible when considering the zoning of specific sites, especially if no pattern has yet been established. The Plan does not follow property lines and, with the exception of environmental concerns and existing and potential land use conflicts, whether a zoning pattern is established on the east or west side of a thoroughfare is often not the critical issue — the *pattern* of land utilization is the critical issue.

Depending on the rate of developmental change and requests for change is the zoning map, an annual appraisal of the zoning map should be prepared. It is generally accepted practice to provide zoning on the basis of a five-year land use projection, whereas the Plan is a fifteen to twenty year projection tool.

The zoning ordinance should be reviewed to ensure that the environmental, land use and circulation proposals of this plan are reflected in the ordinance, particularly under site plan review and special land use approval standards. The current zoning ordinance reflects regulations that have resulted in the type of suburban sprawl that the City is attempting to avoid. New creative standards have to be established in the zoning ordinance and implemented in order to achieve the vision expressed by the stakeholders of Bad Axe.

### ***Capital Improvement Program***

As part of implementing the service area, the City will have to develop a Capital Improvement Program (CIP). Typically, a CIP includes planned improvements to the physical infrastructure of a community including water, sewer, roads, and the capital investments necessary to protect and

maintain these improvements. The City should develop a plan for improving its existing infrastructure to promote development within the City. In addition, the City should work with surrounding communities on a joint CIP that would identify where and under what conditions additional infrastructure improvements would be made within the community service area.

The CIP is a short-term planning tool. Projected improvements are forecasted out five years and the plan is updated and revised every year to ensure that planned improvements are keeping pace with available resources.

### ***Public Understanding and Support***

The necessity of citizen participation and understanding of the planning process and the Plan cannot be over-emphasized. A carefully organized public education program is needed to organize and identify public support in any community development plan. The lack of citizen understanding and support can seriously limit implementation of the planning proposals. The failure to support needed bond issues, failure to elect progressive officials, and litigation concerning taxation, special assessments, zoning, and public improvements are some of the results of public misunderstanding of long-range plans.

In order to organize public support most effectively, the City must emphasize the reasons for the planning program and encourage citizen participation in the adoption of the Plan and the continued planning process. Public education can be achieved through an informational program involving talks, newsletter articles, and preparation of simple summary statements on plans for distribution. participation by residents in various civic groups is evidence of community involvement.

### ***Continuous Planning***

A role of the Planning Commission is to provide planning recommendations to the City Council. This planning function is a continuous process which does not terminate with the completion of this plan. Rural-residential areas are in constant change, and planning is an ongoing process of identification, adjustment, and resolution of problems. In order to sustain the planning process and generate positive results, maintain momentum, and respond to change, the Plan should be reviewed and updated every three to five years.



## **APPENDIX A**

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### ***Community Visioning Workshop***

On August 19, 1998, the City of Bad Axe held a community visioning workshop at the City Hall. All residents of Bad Axe and representatives from Colfax and Verona Townships were invited to attend. Over 20 people participated in discussions regarding various master plan related issues.

A community visioning workshop is designed to gather as much input as possible from residents concerning the current conditions within the City and what they would like to see their City become in the future. A community profile presentation was made to the group outlining various master plan issues. These included the regional context of Bad Axe, existing mix of uses and activities, community facilities, traffic and circulation, population and housing and economic development opportunities. The purpose of the presentation is to point out to the group issues they might miss in their day-to-day observations.

Following the presentation, the group discussed briefly the opportunities and constraints facing the community. This section helps everyone begin to voice their opinions concerning not only the issues presented but other issues as well. Some people felt that the airport south of the City is a potential opportunity for increased business in the area. Other issues discussed were improvements to existing infrastructure, more activity-driven recreation and the creation of a regional corridor. Some felt that the lack of moderately priced residences, and the condition of some neighborhoods were a constraint to attracting more development. The belief that a majority of the land in the townships are enrolled in the PA 116 state program for farmland preservation could severely hamper any further development in the townships. This discussion directly leads into the next step in the process, small group discussions.

The participants were divided into three groups and given an outline of questions concerning four important master plan related issues. Each group discussed a topic for approximately ten minutes. The group then wrote down what they felt were the three most important issues related to each topic. Topics discussed included the physical characteristics of the community, desired future land uses, traffic and circulation throughout Bad Axe and necessary public and private improvements. Finally, each group created a vision statement. The vision statement is a brief description summarizing what the group feels best describes their vision for the future of Bad Axe.

The participants were then brought back together and each group presented the three top issues regarding each topic in addition to presenting their vision statement. Finally each person was given the opportunity to vote for the issues they felt were the most important facing the community. Participants also voted for the vision statement the felt best represented their vision for the future. Appendix A is a record of the issues discussed by each group, their top three choices and how everyone voted.



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**NOTES:**