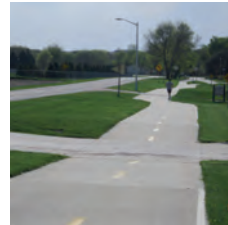


Comprehensive Plan 2013



Menville, Iowa

June 19, 2013

ACKNOWLEDGEMENTS

The comprehensive planning process was started mid February 2013. Since then, the Movable community has participated in town meetings and held public hearings to review and provide input for the Comprehensive Plan. The following is a list of participants who assisted in the development of the 2013 Comprehensive Plan for the City of Movable:

Mayor:

James Fisher

City Council Members:

George Allan
Russ Spotts
Al Wingert
Nate Bauer
Kirk Lubbers

Planning Commission Members:

Dakin Schultz
Marvin Wycoff
Dr. EE Maxwell
Robert Jensen
Russ Walker
Dale Schreiner

City Staff:

Jackie Stender, City Clerk
Jodi Peterson, Deputy Clerk
Mike Weaver, Public Works Director

Planning Consultants:

David Dostad, I&S Group
Bill Goldy, I&S Group
Brad Potter, I&S Group

MOVILLE COMPREHENSIVE PLAN

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CHAPTER 1.

INTRODUCTION & PLANNING FRAMEWORK

1.1 PURPOSE

The primary purpose of this Comprehensive Plan is to help identify local assets, potential opportunities, and goals which are unique to the City of Menville. The City of Menville Comprehensive Plan is a planning tool intended to provide the essential foundation to achieve goals of the City.

1.2 SCOPE

The Comprehensive Plan is organized into the following sections:

Chapter 1. Introduction & Planning Framework

Identifies the purpose of the plan, the scope, and how the plan was developed. This includes the planning framework that outlines the process for the Plan.

Chapter 2. Demographic Characteristics & Trends

(people, house, trends/recommendations)

Includes the historic and projected population characteristics and trends by incorporating the 2010 census data and population projections for the City of Menville.

Chapter 3. Housing

This chapter reviews information regarding the community's existing housing regarding age, value, and condition. In addition, an estimate of new housing starts is forecasted based upon the projected population.

Chapter 4. Parks & Recreation

This chapter includes an inventory and assessment of the current parks, open space, recreational opportunities, and a review of the parks and consideration of future park areas.

Chapter 5. Economic Overview

This chapter examines the past and current economic conditions and activity within the City through demographic and economic data. It also identifies future economic development goals and recommendations.

Chapter 6. Land Use

This Chapter includes an inventory of the City's present zoning, existing land uses, and a land use plan which provides direction for future land uses.

Chapter 7. Community Resource and Community Marketing

This chapter documents the Community Resources present within the Community such as churches and civic organizations. In addition, this chapter provides recommendations regarding Community Image and Community Marketing which were identified as part of the Council discussion and a Community Meeting.

Chapter 8. Infrastructure & Utilities

This chapter provides an inventory of the current infrastructure and capacities for water supply, sanitary sewer, wastewater treatment, stormwater management, and transportation facilities.

1.3 PROCESS AND METHODOLOGY

The Comprehensive Plan is a product of reviewing historic information and data of the community, census data, existing infrastructure information, and discussions with the key stakeholders. The information, along with guiding planning principles, was used to guide the development of this Comprehensive Plan.

1.4 PLANNING FRAMEWORK

As part of the Comprehensive Plan process, the plan recognizes Iowa Smart Planning Legislation which was adopted in 2010. The following information addresses the Smart Planning Legislation.

1.5 COMMUNITY VISIONING

18B.1 Iowa Smart Planning Principles Legislation

State agencies, local governments, and other public entities shall consider and may apply the following principles during deliberation of all appropriate planning, zoning, development, and resource management decisions, except that nothing in this section shall be construed to expand the eminent domain authority of a state agency, local government, or other public entity beyond that which is authorized under Chapters 6A or 6B:

1. *Collaboration.* Governmental, community, and individual stakeholders, including those outside the jurisdiction of the entity, are encouraged to be involved and provide comment during deliberation of planning, zoning, development, and resource management decisions and during implementation of such decisions. The state agency, local government, or other public entity is encouraged to develop and implement a strategy to facilitate such participation.

The City continues to involve the community by encouraging participation in the comprehensive planning process through community meetings, open houses, and City Council Meetings. The City is continually exploring avenues for collaboration with other government entities in terms of delivering more effective and efficient services.

2. *Efficiency, transparency, and consistency.* Planning, zoning, development, and resource management should be undertaken to provide efficient, transparent, and consistent outcomes. Individuals, communities, regions, and governmental entities should share in the responsibility to promote the equitable distribution of development benefits and costs.

The City's planning and zoning policies provide for efficient use of land within the community. These policies and ordinances are developed and additional discussion occurs during the public hearing process.

3. *Clean, renewable, and efficient energy.* Planning, zoning, development, and resource management should be undertaken to promote clean and renewable energy use and increased energy efficiency.

The City continues to promote orderly growth of the community which results in providing efficiencies. The City will explore possible renewable energy and energy efficiency resources for its buildings. In addition, energy efficiency resources have been provided to the community as part of this plan.

4. *Occupational diversity.* Planning, zoning, development, and resource management should promote increased diversity of employment and business opportunities, promote access to education and training, expand entrepreneurial opportunities, and promote the establishment of businesses in locations near existing housing, infrastructure, and transportation.

The City continues to promote the retention and growth of businesses. In addition, the City is promoting business location within existing buildings and near existing infrastructure.

5. *Revitalization.* Planning, zoning, development, and resource management should facilitate the revitalization of established town centers and neighborhoods by promoting development that conserves land, protects historic resources, promotes pedestrian accessibility, and integrates different uses of property. Remediation and reuse of existing sites, structures, and infrastructures is preferred over new construction in undeveloped areas.

City policies and the Comprehensive Plan encourage the location of businesses within existing buildings and along the Main Street corridor. The City values its existing heritage and is continuously looking for ways to revitalize its downtown area. The City and its current zoning ordinance promote the use and expansion of trails and sidewalks in the community.

6. *Housing diversity.* Planning, zoning, development, and resource management should encourage diversity in the types of available housing, support the rehabilitation of existing housing, and promote the location of housing near public transportation and employment centers.

The City encourages all types of housing within the community that will meet the ongoing market needs of all ages, income levels, and consumer preferences.

7. *Community character.* Planning, zoning, development, and resource management should promote activities and development that are consistent with the character and architectural style of the community and should respond to local values regarding the physical character of the community.

The Comprehensive Plan and Zoning Ordinance promotes new development that is consistent with the past architecture of the community.

8. *Natural resources and agricultural protection.* Planning, zoning, development, and resource management should emphasize protection, preservation, and restoration of natural resources, agricultural land, and cultural and historic landscapes and should increase the availability of open spaces and recreational facilities.

The City values its natural resources, recreational facilities, and open spaces by continuing to improve the existing parks and expand park areas, trails, and sidewalks.

9. *Sustainable design.* Planning, zoning, development, and resource management should promote developments, buildings, and infrastructure that utilize sustainable design and construction standards and conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, air, and materials.

The City plans for the efficient use of land by developing land adjacent to City limits.

10. *Transportation diversity.* Planning, zoning, development, and resource management should promote expanded transportation options for residents of the community. Consideration should be given to transportation options that maximize mobility, reduce congestion, conserve fuel, and improve air quality.

The City provides a combination of a street network and sidewalk/trail network throughout the community.

Community Meetings

Iowa State University Extension Community Meeting – March 21, 2013

A community meeting was held at Woodbury Central School in conjunction with Iowa State University Extension and MCDAI. Priorities for the Community were developed during the meeting and include the following topics along with the number of votes for each item.



March 21, 2013 Meeting at Woodbury Central

Priorities for Merville Community Meeting - March 21, 2013

1. Create community marketing plan – identify strengths, housing, gaps; baseline to vision; positive marketing – web and print; marketing (29)
2. Renovate Main Street – theme for Main Street; more businesses; downtown appearance (25)
3. Make Merville attractive to new businesses (visually and economically) (18)
4. Focus on retention of families (activities, etc.) (11)
5. Have assisted living housing and/or nursing home (9)
6. Attract young families to Merville (housing) (6)
7. Expand the walking path (6)
8. Bring new business (4)
9. Satellite campus for WITT (or host classes) (2)
10. Sidewalk on Fair Street (2)
11. Time and money to support current assets (business expansion) (1)
12. Housing for elderly; senior housing (1)

Open House Meeting – May 22, 2013

An Open House meeting was held at the Meadows Country Club from 5-8 p.m. on May 22, 2013. Historically, the Meadow's has food catered into the venue. This was a good opportunity to speak with the public regarding the proposed Comprehensive Plan. Materials were provided to the public and approximately 20-30 people discussed the plan with I&S Group who was present at the meeting to discuss the plan.

Past Studies – 1998 Iowa State University Comprehensive Plan

In 1998, the Iowa State University Extension Office assisted the City in developing a Comprehensive Plan. Reviewing this document fifteen years later, proves valuable for recognizing past issues and current trends

It used 1990 census data as the primary resource of demographic information. However, it should be noted that census data is not organized in the same fashion.

Study Highlights

Population Projections

The study calculated fairly aggressive population growth predicting growth of 270 people per decade based upon 100 new housing units per decade and 2.7 persons per household. It should be noted that housing construction was not at this pace during the 2000s, and the average household size continues to decrease.

Table 1.1 - 1998 Comprehensive Plan Population Projections

Year	Forecasted Population 1998 Plan	Census Population	2013 Comp Plan Projections
2000	1,580	1,583	
2010	1,850	1,618	
2020	2,100	NA	1,728

Housing Conditions

Housing Conditions seem to be unchanged for the most part since the 1998 Comprehensive Plan was developed with a need called out for the rehabilitation of homes as well as the need for additional senior housing.

Parks and Trails

The plan also called out the need for connecting community facilities with a series of trails and sidewalks between facilities.

Downtown

A focus was made on the Downtown specifically regarding the rehabilitation of buildings and an increase in business activity.

Employment

The Study showed that those that resided in the community worked predominantly in the manufacturing and retail sectors. This evolved in 2010 to account for more educational and medical service.

Table 1.2 – Differences in Employment Trade 1990 vs 2010

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Community Meeting - Iowa State University held a community meeting to determine what the top ideas of the community where.

Top Ideas from Community Meeting

1. Community Center
2. Improve Main Street
3. Increase Programs for Youth

The success and main outcome of the study was the construction of the Community Center.

CHAPTER 2

DEMOGRAPHICS

2.1 OBJECTIVES

In order to plan effectively for the City of Menville's future needs, it is important to have a good understanding of demographic trends and to develop reasonable assumptions of the future demographics of the City. Put another way, in order to plan effectively, it helps to understand who you are planning for.

2.2 DEMOGRAPHIC TRENDS

Menville has continued to grow as shown in Table 2.1 from 1910 – 2010. This future population is also forecasted in a population projection based on the growth rate in the period from 1980 to 2010 using a "linear" projection method. The linear method forecasts the population using average growth rates based upon decennial census data.

It is good to note the projection is based upon historical trends and do take into account other factors that would influence population change such as zoning regulations, land available for development, current development projects, one-time events, employment and market trends, or any of the other countless factors that influence future population. The uncertainty of these projections increases with their distance in time from the most recent decennial census.

Table 2.1 – Population History and Projection for 2020 and 2030 – Linear Method

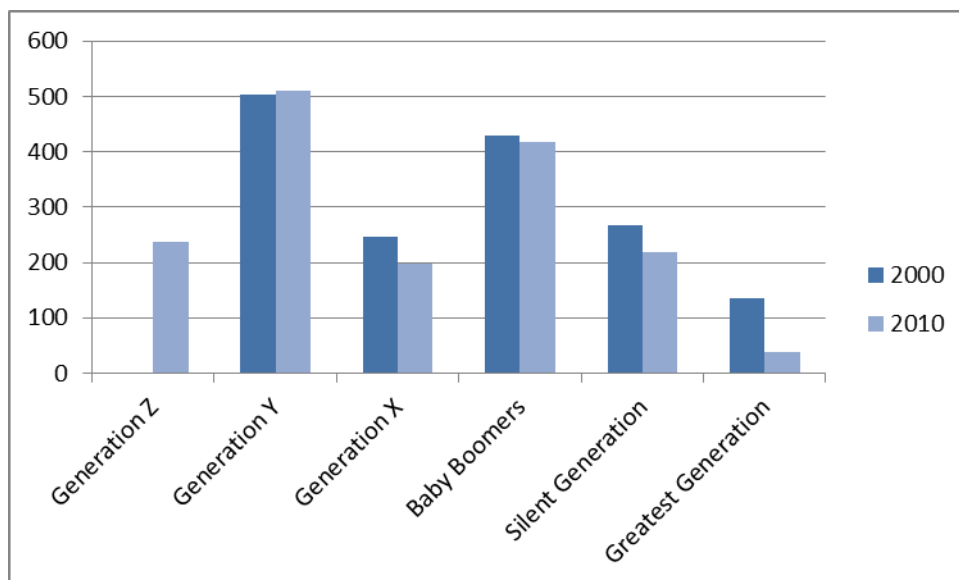
Year	Population
1910	552
1920	878
1930	911
1940	973
1950	964
1960	1,156
1970	1,198
1980	1,273
1990	1,306
2000	1,583
2010	1,618
2020	1,728**
2030	1,839**

Sources: U.S. Census Bureau, ** Linear Projection from 1980-2010 Data

Population by Age Group

The age of the City's population is also a crucial component in terms of estimating its growth patterns. Data from the 2000 Census and 2010 Census were compared. The trend in Graph 2.2 shows the trends for the community associated with different generations. The City reflects the national trend with a substantial amount of Baby Boomers and Generation Y among the community.

Graph 2.2 – 2000 and 2010 Census Age Groups



Sources: U.S. Census Bureau

Household Size

The average household size has continued to be stable at 2.52 which is higher than the state average as is shown in Table 2.3. The household size is typically declining across the nation.

Table 2.3 – Average Household Size

Year	2000	2010
Moville	2.55	2.52
Iowa	2.46	2.41

Sources: U.S. Census Bureau

2.3 INCOME AND EMPLOYMENT STATISTICS

The following Table 2.4 shows the 2010 Census Household Incomes for the community. There has been a growth in Income with the Median Household Income and Per Capita Income increasing among the community. However, if 2000 Median Income is adjusted for inflation, it is \$53,466 so Median Income grew at an inflationary rate.

Table 2.4 – Income and Benefits

Income and Benefits	2000	2010
Total households	624	636
Less than \$10,000	57	32
\$10,000 to \$14,999	40	67
\$15,000 to \$24,999	87	48
\$25,000 to \$34,999	89	75
\$35,000 to \$49,999	90	87
\$50,000 to \$74,999	185	89
\$75,000 to \$99,999	43	126
\$100,000 to \$149,999	19	91
\$150,000 to \$199,999	4	14
\$200,000 or more	10	7
Median household income (dollars)	\$42,222	\$53,382
Per Capita Income	\$19,578	\$23,989

Source: Census Bureau

Note: CPI Inflation Amount from the US Bureau of Labor Statistics has increased 30.61% from 2000 to 2011

Occupation Type

The Community's Work Force has slightly increased which coincides with the City's population growth. There has been an increase in Management and Business Occupations along with Service Occupation while decreases in Sales and Office Occupations.

Industry Employment

Table 2.5 shows the number of those employed and the industry of those occupations. Jobs in manufacturing, wholesale, and retail trade have decreased while education, healthcare, and government employment has increased.

Table 2.5 – Occupation Numbers and Industry Type

Occupation	2000	2010
Civilian employed population 16 years and over	820	836
Management, business, science, and arts occupations	260	304
Service occupations	105	184
Sales and office occupations	233	178
Natural resources, construction, and maintenance occupations	80	87
Production, transportation, and material moving occupations	142	83

Table 2.5 – Occupation Numbers and Industry Type (continued)

Industry	2000	2010
Civilian employed population 16 years and over	820	836
Agriculture, forestry, fishing and hunting, and mining	14	26
Construction	42	44
Manufacturing	144	84
Wholesale trade	24	30
Retail trade	128	102
Transportation, warehousing, and utilities	61	35
Information	30	15
Finance and insurance, real estate, rental, and leasing	46	47
Professional, scientific, management, administrative, and waste management services	40	73
Educational services, healthcare, and social assistance	194	210
Arts, entertainment, recreation, accommodation, and food services	31	63
Other services, except public administration	35	23
Public administration	31	84

Work Commute

The majority of the community works outside of Menville; however, the number of those working at home has since doubled from 23 to 49.

Table 2.6 – Work Commute Means and Time

Commuting To Work	2000	2010
Workers 16 years & over	804	841
Car, truck, or van - - drove alone	655	701
Car, truck, or van - - carpooled	80	38
Public transportation (including taxicab)	6	0
Walked	38	39
Other means	2	14
Worked at home	23	49
Mean travel time to work (minutes)	22.6	20.0

Employment Status

The majority of those in the Community are in the labor force and a low number (3%) of those in the labor force were unemployed in 2010.

Table 2.7 – Employment Status from 2000 to 2010

Employment Status	2000	2000	2010	2010
Population 16 years and over	1,171	1,171	1,221	1,221
In labor force	827	70.6%	887	72.6%
Civilian labor force	827	70.6%	873	71.5%
Employed	820	70%	836	68.5%
Unemployed	7	.6%	37	3.0%
Armed Forces	0	0%	14	1.1%
Not in labor force	344	29.4%	334	27.4%

2.4 CONCLUSIONS

- The City has seen a steady growth in population level, and this is projected to continue based upon past trends and housing starts.
- Household sizes have continued to decrease slightly, which is reflective of State and National Trends.
- The Community has a healthy balance of all various age groups, which demonstrates its vitality.
- Personal wealth continues to grow along with Household Income, which has risen in the community.
- The Community has a large share of Baby Boomers and Generation Y which comprise 47% of the City's population.

2.5 RECOMMENDATIONS

Within One Year

- The Community should consider services and programs that are geared toward an older population with activities at the Senior Center, Community Center, and Library as well as providing recreational activities for this age group.
- The City should continue its strong partnership with the School District and MYRA to continue providing youth activities in the community.

Ongoing

- The economics of maintaining City services will have to be monitored closely as the population increases, which is projected to continue. This could include Fire Services, Police Services, and Infrastructure (Sewer and Water).

CHAPTER 3

HOUSING

3.1 HOUSING AVAILABILITY

This Chapter will discuss the City's variety of housing, age of housing, housing conditions, housing values, and available lots for housing development.

Table 3.1 shows that there are 653 housing units as of the 2010 census. Approximately 85% of those units are single family dwellings. The remaining is a combination of apartment buildings and mobile home dwellings as shown in Table 3.1

Table 3.1 – Housing Unit Numbers 2010

Subject	Number	Percent
<i>Housing Occupancy</i>		
Total housing units	653	653
Occupied housing units	636	97.4%
Vacant housing units	17	2.6%
<i>Units in Structure</i>		
Total housing units	653	653
1-unit, detached	553	84.7%
1-unit, attached	0	0.0%
2 units	3	0.5%
3 or 4 units	12	1.8%
5 to 9 units	38	5.8%
Mobile home	47	7.2%

Source: U.S. Census Bureau

Of the Occupied Housing Units the majority (over 80%) are Owner Occupied Units as indicated in Table 3.2.

Table 3.2 – Owner Occupied vs Renter Occupied

Housing Tenure	2010	Percentage
Occupied housing units	636	636
Owner-occupied	510	80.2%
Renter-occupied	126	19.8%

Source: U.S. Census Bureau

3.2 STRUCTURE AGES

The age of the structures within the community is also identified in the 2010 Census. Pluralities of structures were constructed before 1939 and the community has experienced several housing “booms” in the 1970’s and 1990’s. This data does not specify which type of units were constructed i.e. apartments single family dwellings etc.

Table 3.3 – Year Structure Built

Year Structure Built	Units	Percentage
Total housing units	653	653
Built 2000 to 2009	39	6.0%
Built 1990 to 1999	98	15.0%
Built 1980 to 1989	59	9.0%
Built 1970 to 1979	114	17.5%
Built 1960 to 1969	31	4.7%
Built 1950 to 1959	73	11.2%
Built 1940 to 1949	39	6.0%
Built 1939 or earlier	200	30.6%

Sources: U.S. Census Bureau

This is also shown in Figure 3.1 located at the end of the Chapter, which shows the locations of housing ages in the community.

3.3 PROPERTY VALUES

Table 3.4 shows a comparison of Owner Occupied Units Property Values from 2000 to 2010. It should be noted that total inflationary from 2000 to 2010 has increased over 30%. Properties appear to increase in value from the \$50,000 to \$99,999 and higher with the large increase being in property values from \$150,000 to \$199,000.

Table 3.4 – Owner Occupied Units

Value	2000	2010	2010 %
Owner-occupied units	428	510	510
Less than \$50,000	74	79	15.5%
\$50,000 to \$99,999	208	147	28.8%
\$100,000 to \$149,999	94	118	23.1%
\$150,000 to \$199,999	40	133	26.1%
\$200,000 to \$299,999	10	30	5.9%
\$300,000 to \$499,999	0	3	0.6%
\$500,000 to \$999,999	0	0	0.0%
\$1,000,000 or more	2	0	0.0%
Median (dollars)	\$88,000	\$110,700	(X)

Sources: U.S. Census Bureau

3.4 HOUSING CONDITIONS

Housing Conditions were documented on most residential properties by Woodbury County Assessor's office. Their records show that the housing stock in the community is in good condition and this is illustrated in the Housing Condition Figure 3.2

3.5 HOUSING REHABILITATION

The City should encourage the ongoing maintenance and rehabilitation of residential properties. There are a number of programs that the community can make residents aware of and take advantage of within the community. These programs are listed in Table 3.5.

Table 3.5 – Housing Programs

Program	Opportunity	Responsible Party
MidAmerican Energy	Free home or online energy auditing to assist in the reduction of energy costs.	Citizens
Keep Iowa Beautiful	This grant provides free paint for homes and structures	City of Merville
Community Action Agency of Siouxland	This organization can assist with energy assistance as well as weatherization programs for homes.	Citizens
Siouxland Habitat for Humanity	The Siouxland Habitat for Humanity may be a resource for several families to construct new single family dwellings within the City.	City of Merville

3.6 HOUSING TYPES

When planning for housing, it is important to consider variations of life cycle housing that different segments of the population may require.

Housing Variations

Entry Level Housing – Entry Level Housing could be categorized as smaller dwellings with 1-3 bedrooms and a lower price point. Entry level homes could be for individuals or for younger couples. If these properties are single family dwellings, they may be in more established areas and could be with or without garages.

Family Housing – Family Housing could be categorized as homes that range from two bedrooms or more. These homes would have larger garage spaces and could be located in an established area or new area.

Empty Nest Housing – Empty Nest Housing includes the potential downsizing that would take place among a family once children have left the house. A family may want to choose a home or dwelling that is for the next phase in their life, which could be for later years in the work force and/or potentially retirement. This could involve moving into a one-story dwelling where all amenities are on one floor.

Senior Housing – There can be a variety of housing in which Seniors could desire outside of a typical single family dwelling or apartment setting. Some of the factors include the following:

- Downsizing and moving to a facility in which grounds maintenance is provided, finding a home that has access to all amenities on one floor and is accessible.
- In the current home there is the need for home health care services
- The desire to be a facility where there can be interaction with other people and health care services and cooking services are provided (Assisted Living)
- A facility that provides a high level of ongoing health care services and cooking services (Nursing Home).

3.7 CURRENT RESIDENTIAL ZONING

Currently, there are two residential zoning areas located within the City, the R-1 and R-2 Zoning Districts. These districts allow different residential land uses as illustrated in the following Table 3.6. Allowed residential uses are dependent upon the lot size and lot width.

Table 3.6 – Existing Residential Zoning Classifications

Zoning District	One Family Allowed	Two Family Dwelling Allowed	Multiple Family Allowed
R-1	Yes	10,000 Lot Area Required 90 foot Minimum Lot Width	No
R-2	Yes	7,500 Lot Area Required 60 Foot Minimum Lot Width	12,000 lot Area Required 80 Foot Minimum Lot Width

Under the R-1 designation, there are lots that are large enough to accommodate a two family dwelling including the new Ridge subdivision.

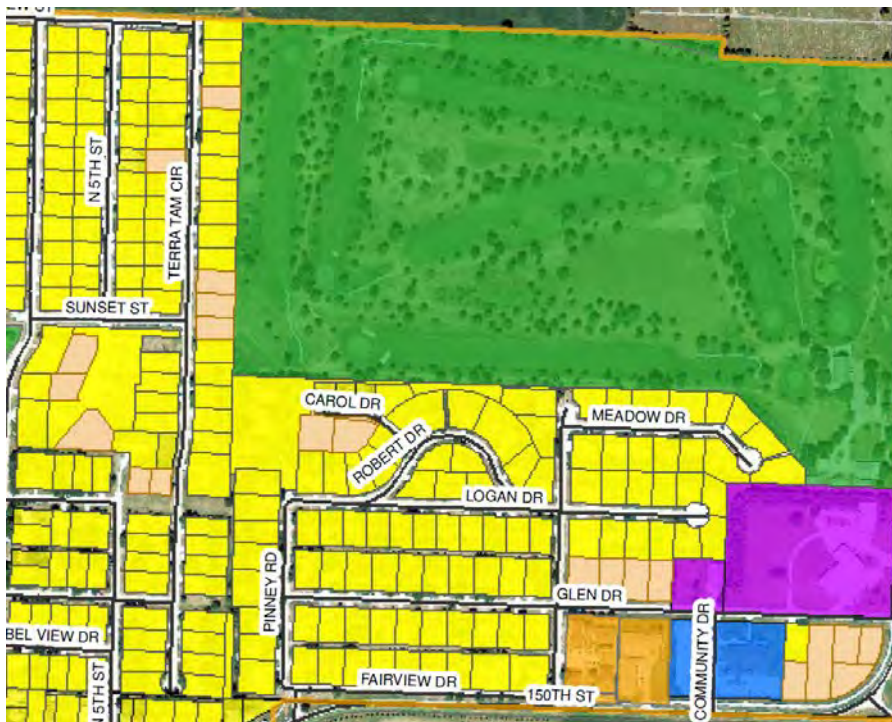
3.8 FUTURE HOUSING PROJECTIONS

The population projection for the community (in Chapter 2 for 2020) shows the community growing an additional 110 people from 2010 to 2013. The average household size is approximately 2.5 people. As a result, there will be approximately 44 new dwelling units required for the community.

It is estimated the majority of housing units will continue to be single family dwellings. These estimates should be reviewed every three to four years to make sure the City has an adequate lot inventory.

Future Housing Areas

Single Family Dwelling Areas – The City's proposed Land Use Plan shows future housing areas to be located predominantly on the north side of the community. This includes 15-20 vacant lots in the northeast section of the community.



Existing Vacant Lots Identified as Tan Lots

The new "Ridge" development that will be constructed later this year, which will contain 31 additional R-1 lots during the first phase of development and will be located north of Clearview Street as illustrated by the following graphic.



Location of the Ridge Subdivision

Medium Density Housing Areas – There are limited areas within the community that are zoned for Medium Density Housing. It seems to make the most sense to locate new multiple family buildings near the Library and Community Center as depicted in the following graphic which shows Medium Density Housing Areas in Orange.



Orange Areas Identified for Medium Density Housing

Other lots near the downtown could also be zoned to allow apartment buildings in the future. The CC District also allows multiple family dwellings which provides an opportunity to use existing downtown buildings for apartments.

3.9 CONCLUSIONS

- The City continues to grow in population and is consistently adding housing units.
- Overall, the condition of existing housing within the community seems to be in good condition.
- Development areas for multiple family dwellings (townhomes and apartments) should be pursued.
- Buildings in the downtown have apartment units. Additional apartments in second floor levels should be encouraged while keeping commercial building storefronts.

3.10 GOALS AND OBJECTIVES

- The City encourages all types of housing such as single family dwellings, townhomes, and multiple family dwellings.
- The City will promote and encourage the rehabilitation of existing residential properties.

- The City will work with the private sector in making sure there ample housing opportunities within the community.

3.11 RECOMMENDATIONS

Within One Year

- **Recognize and create sites for multiple family dwellings and townhomes.**
Currently, there are few sites for multiple family dwellings within the community. Different sites should be explored near the Community Center/Library Area.

There are a series of vacant single family lots throughout the community that could be suitable for twinhome development. This is allowed by zoning if the lots are large enough.

- **Promote housing rehabilitation programs.**
The City should continue to explore housing rehabilitation and explore programs such as the *Keep Iowa Beautiful Keep it Painted* program. This program provides paint for homes and structures to the State Community Development Block Grant which can provide rehabilitation for low to moderate income single family dwellings.
- **Promote available single family dwelling lots and other development parcels, and be aware of existing lot inventory.**
The proposed lots within the Ridge Subdivision and other available lots should be identified and marketed to the public. The City should monitor the number of available lots to make sure there is an ample supply.

Year 2-3

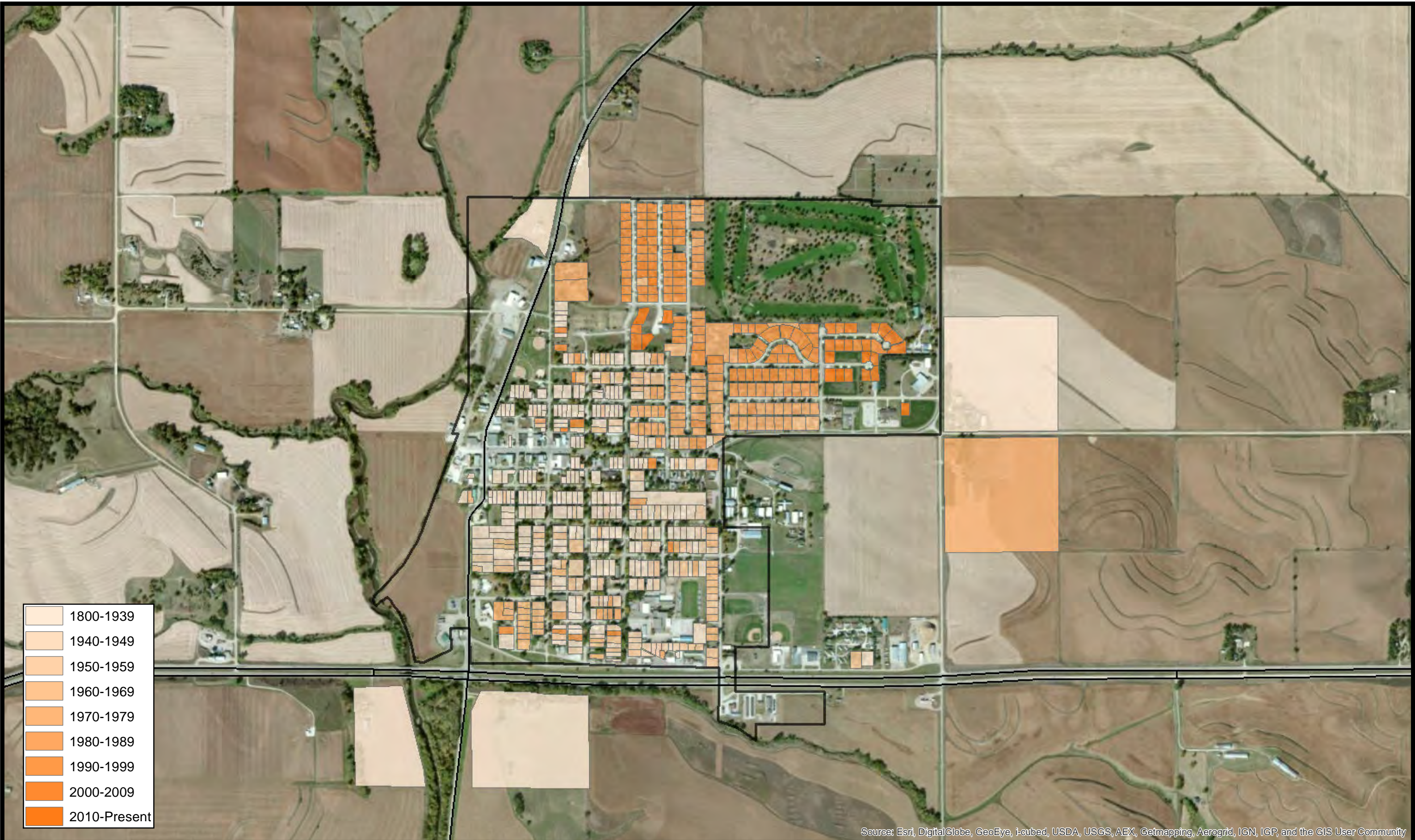
- **Monitor the need for senior housing.**
There has been discussion about the need for Senior Housing; however, this should be further studied in determining specific needs. For example, there could be a variety of housing options along with additional services. The City has a significant number of one-story homes which is shown in Figure 3.3. One-story homes provide all aspects of the residence on the same floor, which can at times address mobility issues. Some of the following factors could be considered:
 - Downsizing and moving to a facility in which grounds maintenance is provided.
 - The current home provides obstacles to free access and mobility.
 - In the current home, there is the need for home healthcare services.
 - The desire to be in a facility where there can be interaction with their peers and where healthcare and cooking services are provided.
 - A facility that provides a high level of ongoing healthcare services.
 - There are organizations such as the Siouxland Aging Services that may be able to assist seniors with their housing decisions.

- **Monitor the conversion of owner occupied single family dwellings into rental properties.**

The City does not currently limit or license the conversion of properties into rental properties from a land use standpoint. Older homes with a lower price point may at times be more economical to utilize as a rental property rather than constructing a new apartment building. This could result in a larger number of single family rental properties in the community.

- **Review the Zoning Ordinance.**

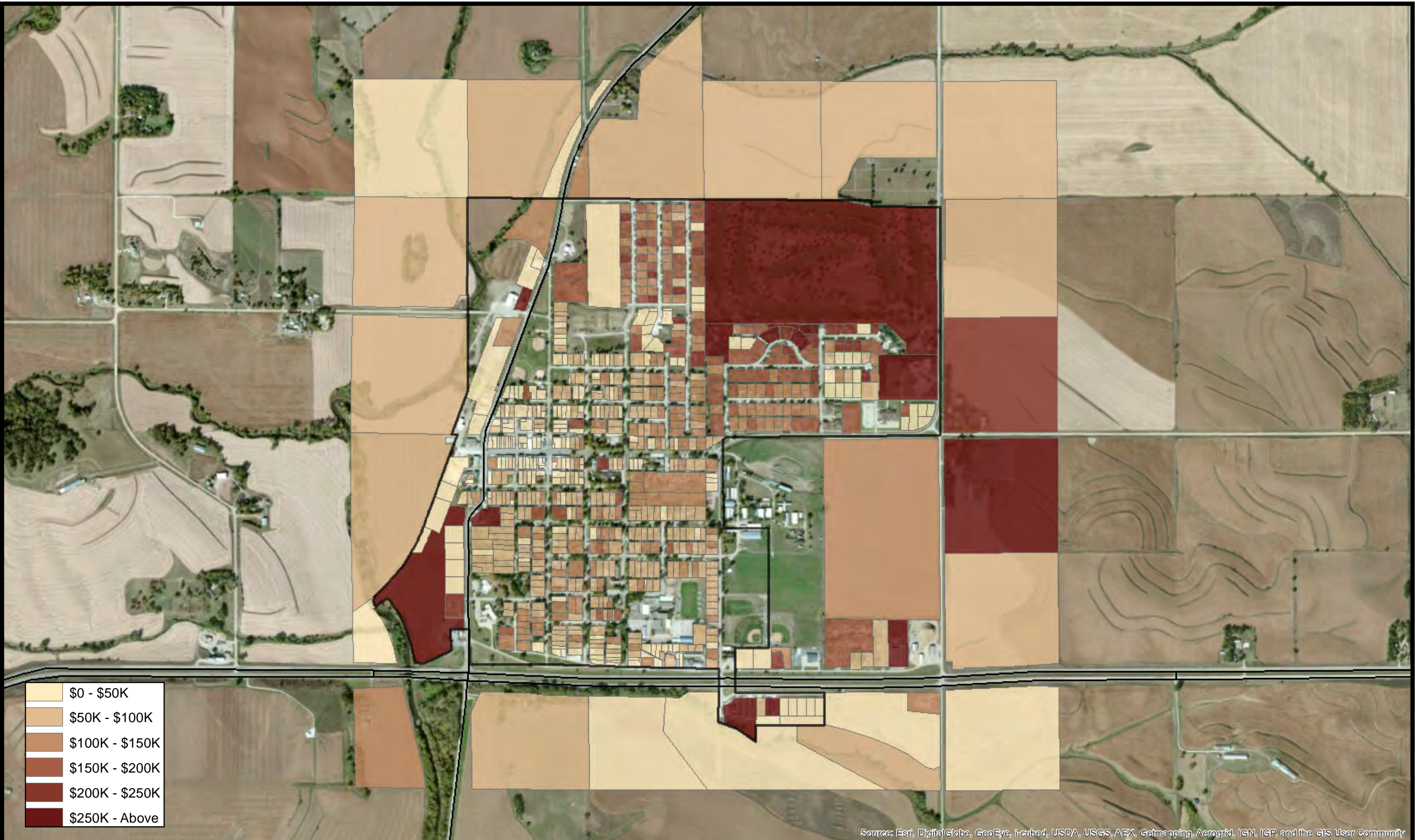
The Zoning Ordinance should be reviewed to ensure that property owners are allowed to develop their property in a reasonable manner.

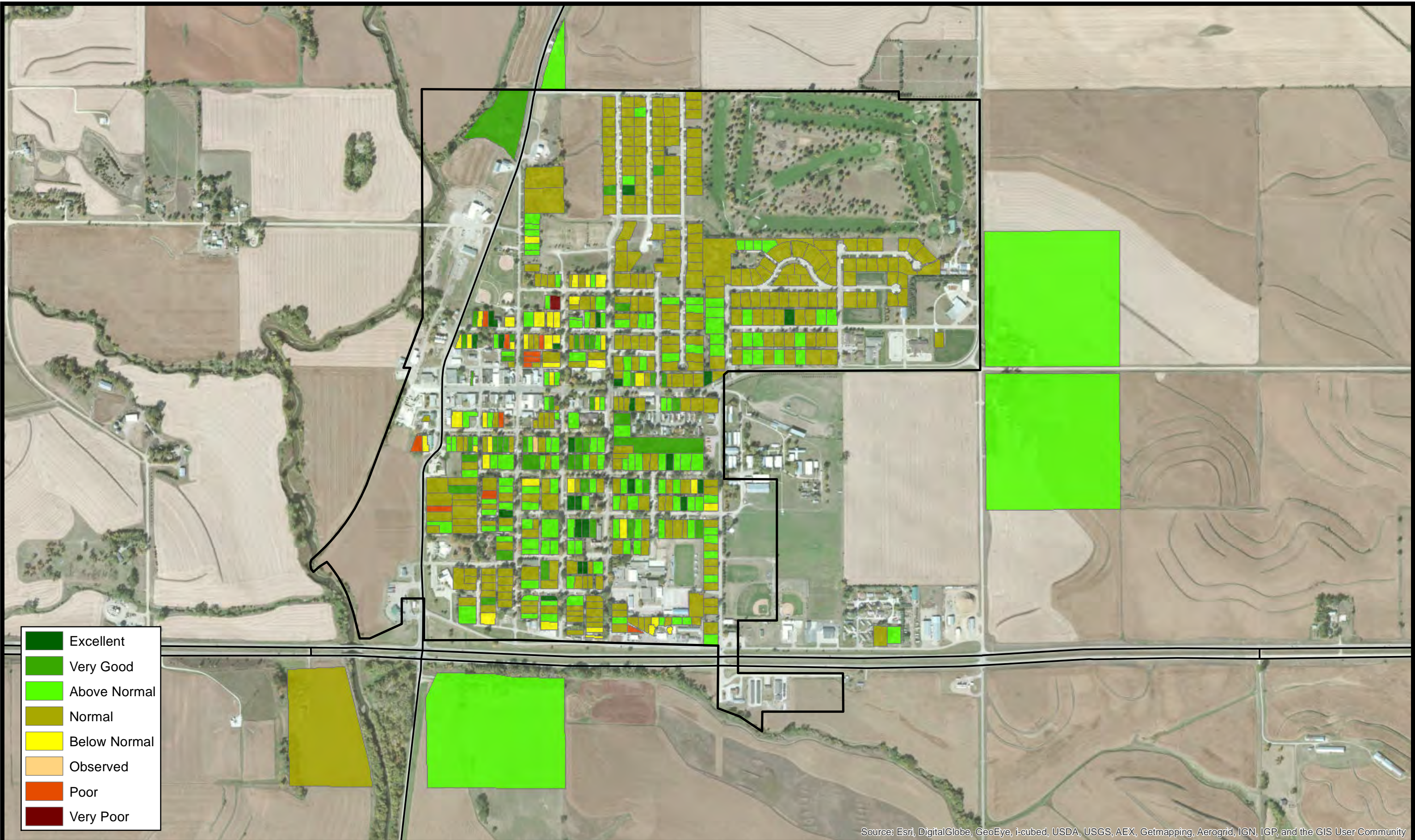


1800-1939
1940-1949
1950-1959
1960-1969
1970-1979
1980-1989
1990-1999
2000-2009
2010-Present

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



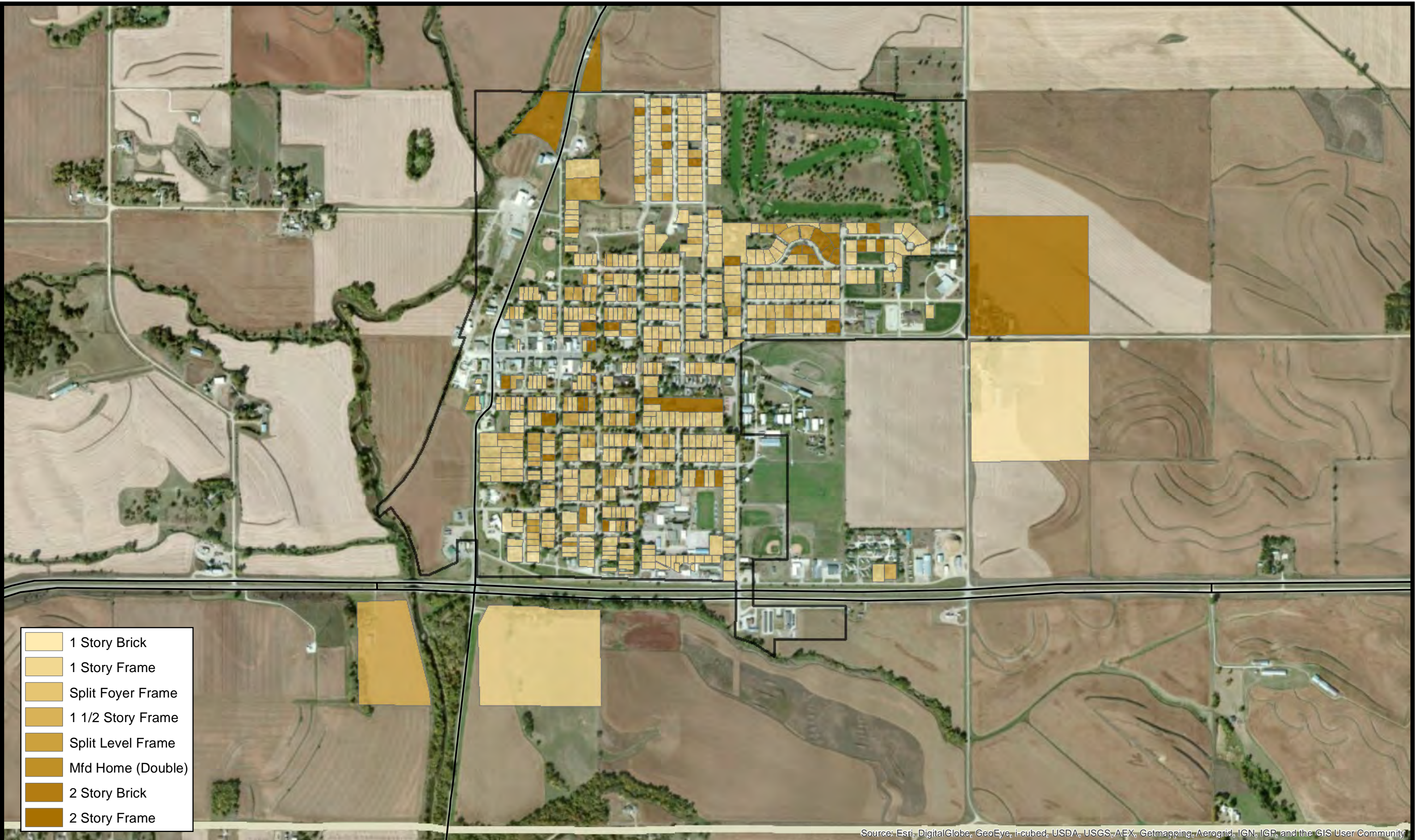




- Excellent
- Very Good
- Above Normal
- Normal
- Below Normal
- Observed
- Poor
- Very Poor

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community





Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



Mankato, MN
Faribault, MN
Algona, IA
Sac City, IA
Storm Lake, IA
La Crosse, WI

PN: 15269
Source: 2011 Orthophotograph

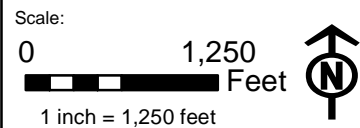


Figure 3.4

Parcels Number of Stories City of Merville Merville/Woodbury County/Iowa

CHAPTER 4.

PARKS AND RECREATION

This chapter includes an inventory and assessment of the current parks, open space, recreational opportunities, and natural resources available in the City of Menville.

4.1 OBJECTIVES

Providing quality recreational opportunities begins with proper planning. To assure adequacy and to maximize the usability of recreation areas and facilities, these areas need to be developed with regard to the needs of the people and the area they serve. Proper planning must take into consideration a number of factors, including but not limited to, location of existing recreational areas, adequacy of existing facilities, site planning for the location of future facilities, access to current and future facilities, provisions for recreational programs, and the financing, maintenance, and management of existing and proposed parks, trails, and recreational facilities.

4.2 CLASSIFICATIONS

The City of Menville features a number of existing parks and recreational facilities. Recreational facilities within the City can typically be described according to their type, size, intended service, population served, and location.

4.3 PARK COVERAGE AREA

The National Recreation and Park Association employs Local Park Standards which are provided in Table 4.1 on the following page.

Existing parks with active recreational opportunities were identified in Menville, and a ¼ mile radius from these park areas was applied. For the purpose of this exercise, active recreational opportunities are defined as playground equipment, ball courts, etc.

Table 4.1 shows that the majority of the community is covered by parks with these opportunities.

Table 4.1 – Recreation and Open Space Standards by the National Recreation and Park Association

Park Type	Use	Service Area
<i>Local or Close-to-Home Space, Minipark</i>	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens	Less than 1/4 mile radius
<i>Neighborhood Park/Playground</i>	Area for intense recreational activities such as field games, court games, crafts, skating, and picnicking; also for wading pool and playground apparatus areas	1/4 to 1/2 mile radius to serve a population up to 5,000 (a neighborhood)
<i>Community Park</i>	Area of diverse environmental quality; may include areas suited for intense recreational facilities such as athletic complexes and large swimming pools; may be an area of natural quality for outdoor recreation such as walking, viewing, sitting, or picnicking; may be any combination of the above, depending upon site suitability and community need	Several neighborhoods, 1 to 2 mile radius
<i>Linear Park</i>	Area developed for one or more varying modes of recreational travel such as hiking, biking, snowmobiling, horse-back riding, cross country skiing, canoeing, and pleasure driving; may also include active play areas. (Note: Any activities included for the preceding components may occur in the linear park.)	Not Applicable
<i>Conservancy</i>	Protection and management of the natural or cultural environment with recreational uses as a secondary objective	Not Applicable

4.4 EXISTING PARK AND RECREATION AREA INVENTORY

The following is an inventory of the City's existing parks:

Memorial Park and Haskell Swimming Pool

This park is located in the southwest portion of the community and is 4.33 acres in size. It was first developed in 1942 and has a park shelter, new playground equipment, and is adjacent to the swimming pool. The Haskell Swimming Pool was constructed in 1991 along the west side of the park.



Memorial Park



Haskell Swimming Pool

Main Street Park

This park is 1.04 acres and is the City's first park, which was created in 1898. It currently has playground equipment, tennis courts, basketball courts, and a recently constructed pavilion.



Main Street Park

Community Ballfields

The 3.6-acre park is home to several ballfields and is located along Highway 140. This park was improved in the 1970s and has experienced additional improvements in recent years.

Woodbury Central School

There is playground equipment located within this area that is for students during school hours; however, this area can also serve as another recreational opportunity for community youth.

Centennial Park

The park, located along Main Street, was part of the 1987 City Centennial. Amenities include a mural as well as a sitting area.



Centennial Park

Maxwell Remembrance Park

This .22-acre park, which was created in 2005, is in honor of Veterans and features a monument with two flag poles.

Bleil Recreation Area

This 7.67-acre park is used in the winter for snow tubing and sledding. In the summer this area is used for soccer fields. The City's well and water treatment building is also located within this park.



Bleil Recreation Area

Ridge Subdivision Park

Within the Ridge Subdivision, there will be a park which will be .14 acres in size. It is anticipated that this park will serve the residents of the Ridge Subdivision.

4.5 SIDEWALKS AND TRAILS

The City has a network of sidewalks predominantly located in the established area of the community south of Main Street. In recent years, and as a community project, a trail has been constructed along Main Street to the Community Center and past the Meadows Country Club.



Trail near Community Center

The City has discussed requiring sidewalks in new subdivisions and possibly constructing sidewalks in established areas of the community.

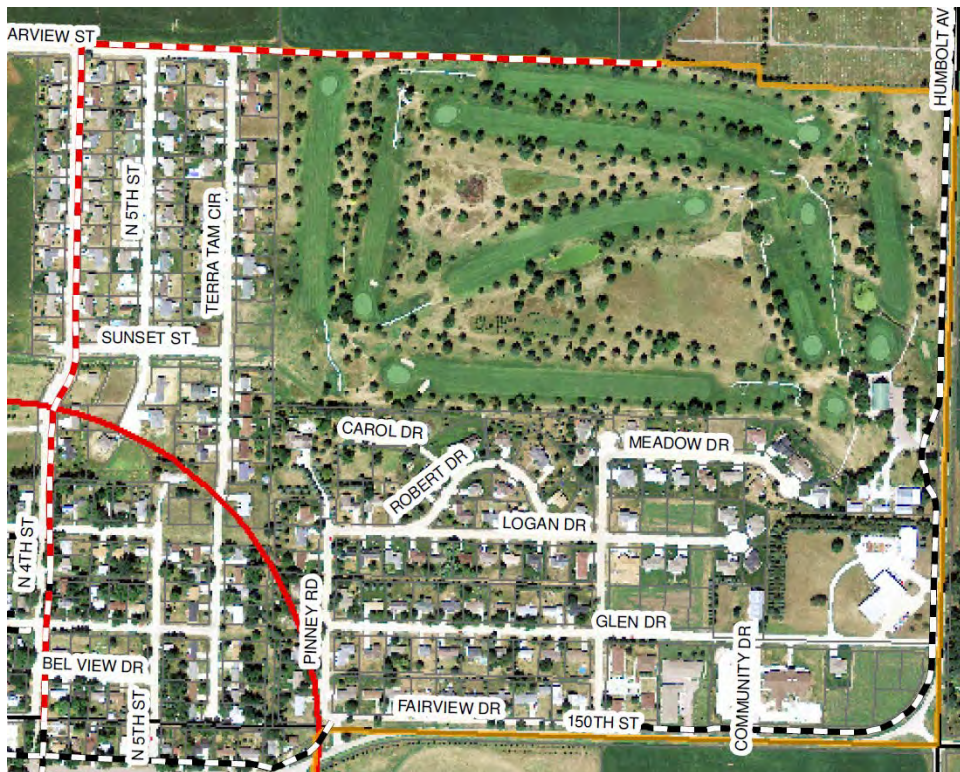
Sidewalks are especially important for connecting areas of the community affiliated with pedestrian activities which are generally established as the following four types of uses.

- Parks
- Library
- Downtown (Businesses, Post Office, and Senior Center)
- School

With this in mind, there are two trail sidewalk projects that City should consider.

Trail Extension

The trail currently ends near the Cemetery. A westerly connection should be made in or along the north side of the golf course to connect the trail to Terrtam Circle. This would provide a trail loop to Terrtam as shown on the following page.



Possible Sidewalks and Trail Connections (in red)

4th Street

A sidewalk should ultimately be located on North 4th Street because it would connect the Bleil Recreation Area, Main Street Park, and the school. North of Main Street, the sidewalk network along 4th Street is fragmented. A sidewalk needs to be constructed along one side. The extension of this trail or construction of other trails has been discussed in the community.

4.6 OTHER AREA RECREATIONAL AREAS

- Midway Park – This County Park is located 3.5 miles north of Merville along Highway 140 and is used for fishing and picnicking. Originally developed in 1955, the park converted a former gravel pit into a recreational area.
- Meadows Country Club – The Meadows Country Club is a 9-hole golf course located along the northeast section of the community. The Country Club was originally opened in 1969. Meadows Country Club recently won the 2012 Iowa Golf Association 9-hole Course of the Year.
- Woodbury Central Weight and Exercise Room – Community Members can purchase access to the facility for \$75 per year.

4.7 RECREATION ORGANIZATIONS

MYRA - Merville Youth Recreation Association

The Merville Youth Recreation Association is a voluntary organization that is actively involved providing youth sports activities including tee ball, baseball, softball, football, and soccer.

4.8 FUTURE PARK AREAS

A park concept was developed for land west of City Hall along the West Fork of the Little Sioux River which created a recreational area for the community. It would involve redirecting stormwater from the Main Street area and creating a ponding area and a recreational trail area. The City would most likely pursue grant funding for the land acquisition and pond construction.

4.9 NATURAL RESOURCES

West Fork of the Sioux River

The Community is located near the West Fork of the Sioux River. This river is used for some recreational activities such as canoeing and tubing. In order to bring the community closer to the river, it has been suggested to create a recreational area between the river and City Hall.

While the river is a recreational amenity, it can also be problematic at times due to periodic flooding. The area west of Highway 140 is within the 100-year floodplain; therefore, the development potential of parcels is limited and should be addressed on a case by case basis.

Floodplain maps for this area were amended by Federal Emergency Management Agency (FEMA) in September 2011 and have reduced the floodplain area within the community. A copy of the floodplain is shown in Figure 4.4.

The City works closely through Woodbury County which administers the Countywide Emergency Management Plan and Hazard Mitigation Plan.

4.10 CONCLUSIONS

- The City exceeds National Standards in terms of the number and size of park facilities.
- Overall park facilities (park buildings, trails, and playground equipment) are in good condition.

- The Community has come together for park projects such as the replacement of the playground in Memorial Park as well as the new pavilion in the Main Street Park area. The public has continually rallied around maintaining and improving the existing parks. The City should continue the relationship with these groups for other projects.

4.11 GOALS AND OBJECTIVES

- The City shall keep its Park Facilities well maintained and updated.
- The City shall offer a variety of recreational activities to the public.
- The City shall continue to maintain and improve its sidewalk and trail system.

4.12 RECOMMENDATIONS

Within One Year

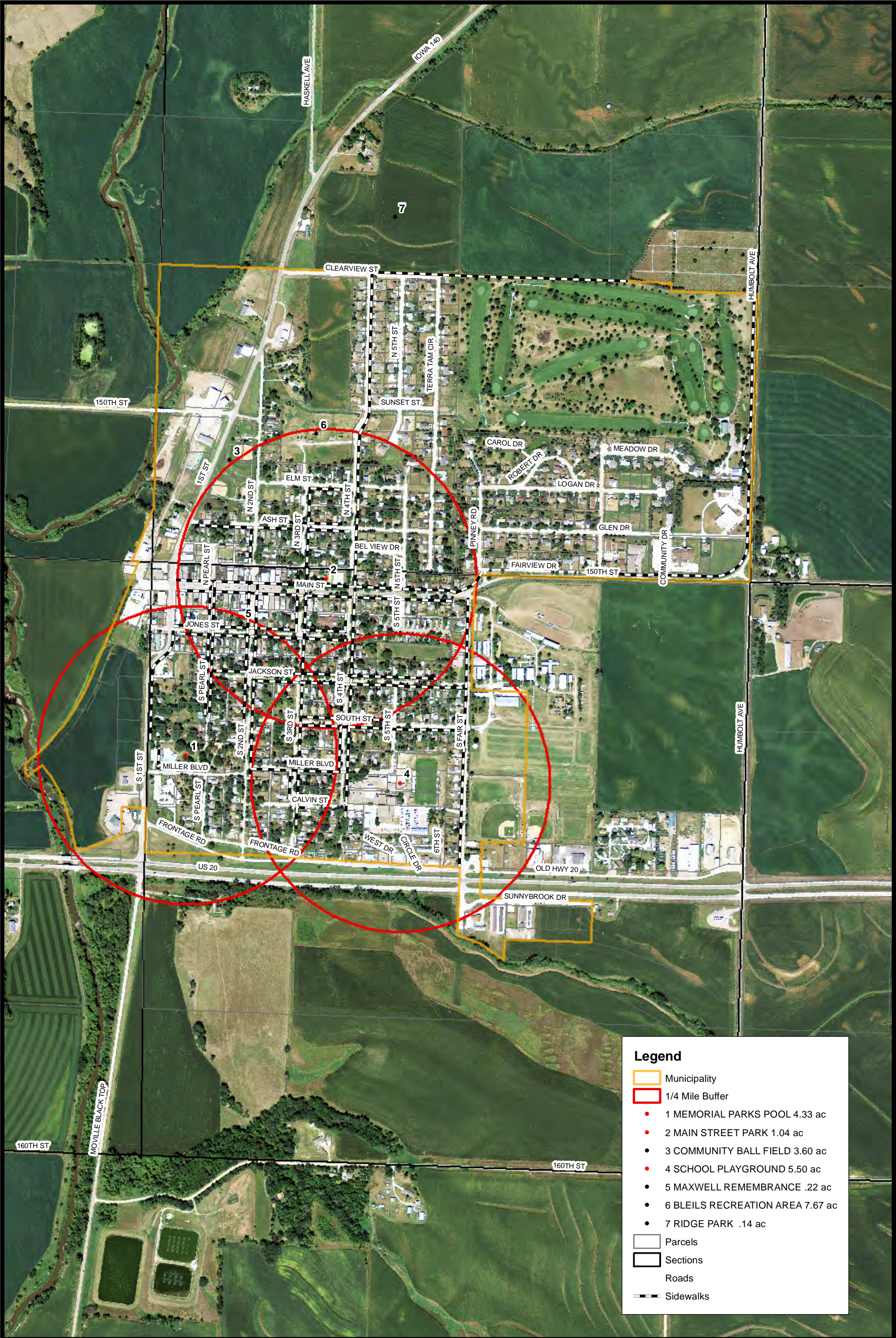
- The City should approve an official sidewalk and trail plan which should depict existing and future sidewalks. The continuation of the community near the Meadows Country Club to Terratam Circle Center should be the top priority.
- The City should include park buildings and park equipment as part of the Capital Improvement Plan.

Years 2-3

- The City should continue to pursue unique park programming elements such as a skate park and facilities that can accommodate all ages.
- The City should continue to plant trees within City parks and encourage additional boulevard trees.
- The City should examine long term improvements that may be needed to the community swimming pool.
- The City should continue to work with the community members in working to improve the park facilities.

Beyond 3 years

- The City should explore the development of a natural park area between City Hall and the West Fork of the Little Sioux River. This may be an opportune time to treat stormwater runoff from the Main Street area and provide a connection to the river area.







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PROJECT

**CITY OF MOVILLE
RIVER PARK**

MOVILLE

IOWA

Revision Schedule		
Mark	Date	Description

PROJECT NO.

FILE NAME 15269 RIVER PARK CONC01

DRAWN BY CWT

DESIGNED BY CWT

REVIEWED BY

ISSUE DATE 04-11-13

CLIENT PROJECT NO.




TITLE

**CONCEPT
PARK LAYOUT
FIGURE 4.3**

SHEET



Legend

- Roads
-  Floodplain
-  Parcels
-  Municipality



Mankato, MN
Faribault, MN
Algona, IA
Sac City, IA
Storm Lake, IA
La Crosse, WI

PN: xx-xxxxx
Source: 2011 Orthophotograph

Scale:
0 750
Feet
1 inch = 892 feet



Figure 4.4

Menville Floodplain
Menville, Woodbury County, IA

CHAPTER 5 ECONOMIC OVERVIEW

5.1 BACKGROUND

The City of Merville is located at the intersection of State Highways 140 and 20. In the early years, the railroad played a major role in the economic viability of the City.

Over the years the railroad declined and highways and automobiles became the preferred mode of transportation and movement of goods. This new mobility enabled City residents and those in the surrounding area to travel and pursue shopping opportunities in Sioux City; whereas in the past, they would have been more inclined to shop locally. At times the City has had a wide variety of businesses and industries. Although some of the diversity is gone, Merville still has a fairly wide range of goods and services available locally.

5.2 ECONOMIC TRENDS IN EDUCATION AND EMPLOYMENT

Examination of economic trends gives an indication of the economic health of the community. A measure of economic growth is the Median Household Income along with the Per Capita Income. Both of these items experienced growth from 2000 to 2010; however, they did not grow at the CPI inflationary amount over the ten year period.

Table 5.1 – Income and Benefits

Income and Benefits	2000	2010	Percentage Increase	Inflationary Increase
Total households	624	636	2%	NA
Median household income (dollars)	\$42,222	\$53,382	26.4%	30.61%
Per Capita Income	\$19,578	\$23,989	21.6%	30.61%

Source: Census Bureau

Note: CPI Inflation Amount from the US Bureau of Labor Statistics has increased 30.61% from 2000 to 2011

One of the many factors that affect the potential earnings of persons in the work force is their level of education. Table 5-2 presents an educational profile of Merville residents 25 years of age and older and illustrates how it has changed during the period from 2000 to 2010.

Generally, this information indicates that the overall level of education increased during that period. Also, in keeping with the aging of the population in general, the number of persons over the age of 25 also increased during that period.

Table 5.2 – Level of Education of Persons 25 and Older for Merville, MN

Level of Education	2000	2010
Less than 9th grade	28	21
9th to 12th grade, no diploma	62	41
High school graduate	378	371
Some college, no degree	259	207
Associate degree	89	136
Bachelor's degree	135	155
Graduate or professional degree	56	91
Total	1,007	1,022

Source: U.S. Census Bureau

Table 5.3 lists the major employers located in or near the City of Merville. This table does not take into account the City's largest employer which is Woodbury Central Schools which employs approximately 75 people.

Table 5.3 – Major Employers by Industry Code in the City of Merville, 2010

NAICS Industry Code Description	Number of Establishments by Employment-size class				
	Total Establishments	1-4	5-9	10-19	20-49
Total for all sectors	50	25	16	7	2
Mining, quarrying, and oil and gas extraction	1	0	1	0	0
Utilities	2	1	0	1	0
Construction	9	7	1	1	0
Manufacturing	3	1	1	0	1
Wholesale trade	1	0	0	1	0
Retail trade	7	2	3	1	1
Transportation and warehousing	4	3	1	0	0
Information	1	0	1	0	0
Finance and insurance	4	0	2	2	0
Professional, scientific, and technical services	3	2	0	1	0
Management of companies and enterprises	1	1	0	0	0
Health care and social assistance	5	3	2	0	0
Arts, entertainment, and recreation	1	1	0	0	0
Accommodation and food services	2	0	2	0	0
Other services (except public administration)	6	4	2	0	0

Source: US Census

Businesses by Services

The majority of businesses within the community along the Highway 20 and Highway 140 corridors in addition to the Downtown area and the following are a list of the some of the services that are providing in the community.

- Attorney
- Accountant
- Automobile Repair and Service
- Banks
- Car Wash
- Clothing Store
- Construction Companies
- Convenience Stores
- Grocery Store
- Greenhouse
- Insurance Sales
- Medical Clinic
- Newspaper
- Pharmacy
- Photographers
- Post Office
- Restaurants

Home Occupations/Telecommuting

The number of people that work from home had substantially increased from 2000 to 2010 as shown in Table 5.4. Home Occupations that do not negatively affect neighboring properties should be allowed to continue in the community. It promotes having people in the community during the day time. The City Code does allow professional service/office Home Occupations in Residential Districts. The community should continue to engage with those individuals that have Home Occupations to see if they wish to expand their business to a commercial site.

Table 5.4 – Number of People working at Home

Year	Number of Residents Working from Home
2000	23
2010	49

Iowa State University Extension Retail Analysis

ISU Extension completed a Retail Study showing that the amount of retail sales per capita is lowering more than other peer communities and surrounding communities. This data uses sales tax information that is not applicable to professional services; however, the City has a number of professional services.

Table 5.5 – 2011 Retail Sales per Person surrounding Communities

City	Retail Sales Per Person	Population	Total Retail Sales
Sioux City	\$16,590	82,680	\$1,371,661,200
LeMars	\$13,258	9,830	\$130,326,140
Lawton	\$9,852	910	\$8,965,320
Correctionville	\$9,281	820	\$7,610,420
Sergeant Bluff	\$7,058	4,230	\$29,855,340
Anthon	\$6,692	570	\$3,814,440
Kingsley	\$5,876	1,410	\$8,285,160
Merrill	\$5,109	760	\$3,882,840
Sloan	\$4,839	970	\$4,693,830
Hinton	\$4,731	930	\$4,399,830
Moville	\$4,567	1,620	\$7,398,540

Source: Iowa State University Extension

5.3 ECONOMIC DEVELOPMENT

Economic Development Groups

In addition to the City, the following groups also assist the community with Economic Development efforts.

MCDAI – Moville Community Development Association, Incorporated

MCDAI is a 501c3 organization that was founded in 1961 and has since supported the Moville Elderly Housing Project, youth sports, the recruitment of the medical clinic, and a new grocery store. MCDAI was also crucial in the construction of the Community Center and Woodbury Library.

Moville Chamber of Commerce

The Chamber of Commerce was established in 1955 and includes members from local businesses. The Chamber has over 70 members and has regular meetings on the second Tuesday of the month. The Chamber also assists with special projects.

SCORE - Sioux City

Score of Sioux City is a good resource that provides consulting information to existing businesses or perspective businesses. SCORE is a nonprofit association dedicated to educating entrepreneurs and helping small businesses start, grow, and succeed nationwide. SCORE is a resource partner with the U.S. Small Business Administration (SBA) and has been mentoring small business owners for more than forty years.

Economic Development Incentives

Tax Increment Financing – The City utilizes Tax Increment Financing as an incentive for development and is using this incentive for The Ridge Subdivision.

Available Commercial and Industrial Lots and Buildings

There are a number of properties that are available for new Industrial and Commercial properties.

Highway Commercial/Industrial – These properties include land located on Sunnybrook Drive and north of the car wash along Highway 140. The properties along Highway 140 are currently located in a floodplain, which may require additional analysis and permitting in order for development to occur.

There are properties along the Highway 20 Frontage Road between Fair Street and the grocery store that are outside of the City limits but that could be sites for commercial and industrial uses as well. However, the City should examine extending services to these properties and also analyze the annexation process and possible increase in property taxes.

Downtown

For the purposes of this study, the downtown is identified as those businesses along Main Street from Highway 140 to North 4th Street. The level of activity seems to be anchored the Main Street Park and Post Office along the east end and the Casey's Convenience Store on the west end.

The downtown has recently seen redevelopment with the new Western Iowa Telephone/Vision Center Building as well as the remodeled location of the First Trust and Savings Bank building. Additional businesses have also made investments and improvements in their businesses.

Business Retention – Retaining businesses is crucial, and existing businesses should be contacted by the City or MCDAI (or an outside party) to discuss how their business is operating and if they need any assistance.

Underutilized Buildings

There are a number of buildings in the downtown that are currently underutilized or unoccupied. This is not uncommon within downtown areas, and the challenge will remain to encourage reinvestment within the downtown.

Some of the following strategies could be applied to Underutilized Buildings.

Intentions of the Owner – With underutilized buildings the property owner should be contacted to see what their plans are with the building. Do they wish to sell the property? Do they want to pass it along to their children? Would they like to see a business locate in the building?

Building History – The City's 125th Celebration was a great opportunity to recognize and document the history of some of the downtown buildings. This could be continued with a local history research project in conjunction with Woodbury Central students and/or members at the Senior Center documenting additional history of the building. This will create a greater public appreciation and understanding of the existing buildings.

Vacant Building Tour – Webster City, Iowa recently took this process further by holding a Vacant Building Tour earlier this spring which provided a public open house of vacant buildings in the community to promote interest in these buildings. The City could do something similar.

Promote Economic Development Incentives – The City should continue to encourage local Economic Development incentives within the downtown such as Tax Increment Financing. In addition, the City should explore applying for a Downtown Revitalization CDBG Grant for building improvements

5.4 CONCLUSIONS

- Merville has held steady in the number of businesses from 2000 to 2010, with 47 businesses in 2000 and 50 businesses in 2010.
- Community members have experienced growth in personal income, yet it has not kept pace with inflation.
- There are a variety of retail and professional services provided within the community which provide essential services to residents.
- Merville's property tax rates are among the lowest of communities in the County, which makes it attractive to businesses.
- The City, Chamber, and MCDAI provide good local resources for existing and proposed businesses. The Community has shown resourcefulness with facilitating the development of the clinic, Library, Community Center, and grocery store projects.
- There appears to be a sufficient supply of industrial and commercial properties in the City, and the City does not have to develop any additional areas at this time.

5.5 GOALS AND OBJECTIVES

- The City should continue to support the activities of existing businesses and promote the community to new businesses.
- The City should continue to promote diversity of businesses.
- The City should provide the regulatory framework that would assist, promote, and accommodate the expansion of existing businesses.

5.6 RECOMMENDATIONS

Within One Year

- Capitalize on Highway 20 – The Community should focus its efforts on pulling traffic from Highway 20 for gas stations, restaurants, and lodging services. The Department of Transportation can provide directional signage along Highway 20. Signage one to two miles from the community along Highway 20 would be advantageous to provide information to travelers as they approach the City.

- Existing Business Retention and Expansion – Business Retention and Expansion Visits should be a key component to keep existing businesses thriving within the community and possibly considering expansion.
- Continue Buy Local Campaign – As part of increasing Retail Sales and Services among the community, there should be a continued campaign for residents to support local businesses. The City, MCDAI, and the Chamber of Commerce should all continue to partake in this campaign, and this could be accomplished by some of the following:

Awareness of Goods and Service – First and foremost, the public should have an awareness of the services available within their community.

Relationships – Business owners and the community need to build a relationship with each other to develop an understanding of services and products and the customers' concerns.

Convenience - Goods and services can be purchased and provided locally, and there is a value to being able to purchase within the community versus traveling 15-35 miles roundtrip to purchase these items.

Affordability – Often goods and services that are purchased locally are at a similar price as can be purchased elsewhere.

Hours of Operation – Many community members work outside of the community during day time hours. People who work outside may shop for goods near their place of work. The retail community along with civic entities such as the Library may want to examine their hours of operation for the general public. The Community could be surveyed regarding which hours of operation they would be most likely to frequent local businesses.

- Property owners of underutilized buildings should be contacted to see what their plans are with the building. Do they wish to sell the property? Do they want to pass it along to their children? Would they like to see a business locate in the building?
- Implement a local history research project in conjunction with Woodbury Central students and/or members at the Senior Center documenting additional history of downtown buildings. This will create a greater public appreciation and understanding for the existing buildings.

Years 2-3

- Prioritize Future Development Areas – There may be public infrastructure required for the development of property. The City should prioritize the capital investment in these properties based upon the return.
- Expand Property Tax Base and Keep Property Taxes Low – The Community should continue expanding the tax base of the community through additional growth of residential, commercial, and industrial land uses.

- Economic Development Incentives – Continue to use tax abatement or Tax Increment Financing to fund commercial and industrial projects.

Beyond 3 years

- Community Alumni – The City should try to stay in contact with people and families who grew up or resided in the community at one time. These people may stay, have an interest in the community, and be willing to help with funding for a community project.
- Business Incubator – The City and/or MCDAI should consider establishing “incubator space” for start-up businesses within the community.

CHAPTER 6 LAND USE

This chapter contains background information, goals, objectives, and recommended programs to guide the future development in Menville over the next 20 years. This information includes:

- Analysis of existing land uses by type
- Examination of parcels within existing development areas which provide an opportunity for land use redevelopment and/or infill
- Potential future land use areas

The chapter also provides maps that show existing zoning, land uses, and recommended future land uses for the City of Menville.

6.1 EXISTING ZONING AND LAND USE CATEGORIES

This plan has incorporated the current Menville Zoning Map (Figure 6.1), Existing Land Use Map (Figure 6.2), and City of Menville Land Use Plan (Figure 6.3). It is important to note that existing land use does not necessarily coincide with existing zoning.

The following table provides a description of each of the existing district classifications and the proposed additions:

Table 6.1 – Zoning District Descriptions

District	Description
A	The A District is intended and designed to provide for continued agricultural use of certain areas that are not expected to develop with urban uses in the immediate future.
R-1	The R-1 District is intended and designed to provide for certain low-density residential areas of the City now developed with one-family and two-family dwellings and areas where similar residential development seems likely to occur.
R-2	The R-2 District is intended and designed for certain medium density residential areas of the City now developed with multiple-family dwellings and areas where similar residential development seems likely to occur.
RHM	The RMH District is intended and designed to provide for certain medium density residential areas of the City for the development of mobile home parks, which by reason of their design and location will be compatible with nearby residential areas.
CC	The CC District is intended to provide for the convenience shopping of persons living in Menville and the surrounding rural areas. The CC district is designed to include the Central Business District Area. Uses permitted are similar to the CG district; however, bulk regulations are not required, due to the density of existing development.

Table 6.1 – Zoning District Descriptions (Continued)

- CG** The CG District is intended to provide for general commercial areas outside of the existing business district. These districts include much of the commercial property existing along the major streets of the City. The uses permitted are intended to accommodate both the local retail consumer and the automobile traveling consumer.
- ML** ML District is intended and designed to provide areas of the City suitable for activities and uses of a light industrial nature. It is not intended that any new residential development be permitted in the ML district.
- MH** The MH District is intended and designed to provide areas of the City for activities and uses of a heavy industrial character. Since this is the least restrictive of any district, almost any use is permissible, with the exception of a small number of uses, which by reason of certain undesirable characteristics require approval by the Board of Adjustment. In addition, no residential uses are permitted.
- FP** The FP District is intended to include certain areas of the City which are subject to flood hazards. This district is created in order to protect the public health and welfare, to lessen the burdens imposed upon the community by rescue and relief efforts occasioned by the occupancy of areas subject to flooding, and to minimize the danger to life and property which results from development undertaken without full realization of such danger.

Source: Menville 1973 Zoning Ordinance

6.2 EXISTING LAND USE PATTERNS

Existing Land Uses were documented within the City. The Existing Land Uses were classified into the categories depicted by Figure 6.6 below.

Graph 6.2 – Land Use Classifications

Legend

Land Use

-  Commercial 42 Acres
-  Industrial 35 Acres
-  Institutional 34 Acres
-  Low Density Residential 185 Acres
-  Medium Density Residential 11 Acres
-  Recreation 106 Acres
-  Vacant Lots
-  Municipality
-  Roads

Residential Uses

The City of Merville contains predominately single-family residential areas. Most of the older single-family homes are on relatively small lots located south of Main Street. Eventually, the City expanded to the north and east with additional residential development occurring over previous decades. This expansion will continue with the new Ridge Subdivision located on the north side of the community.

Commercial and Industrial Uses

The largest commercial corridor of businesses located along Main Street with a number of service and retail businesses occur along this corridor. There are a number of businesses located along Highway 140 that runs north/south through the community. In addition, there are commercial land uses along the Highway 20 corridor and are predominantly located along the north side of Highway 20.

Public/Semi Public Uses

The City of Merville has a large amount of public/semipublic uses: Woodbury Central K-12 School, numerous churches, City Hall, the Library, the Community Center, and the Woodbury County Fairgrounds.

The City should continue to work with the Woodbury Central School and with the Woodbury County Fairgrounds in terms of developing a master plan for this area of the community.

6.3 GENERAL LAND USE PATTERNS

The following section provides the overall vision for Merville's land use. The City has several different factors that impact its development patterns.

West Fork of Little Sioux River – To the west of the community is the West Fork of Little Sioux River. The river's floodplain area prohibits development west of Highway 140 and will only allow passive recreational areas and open space. There are platted lots north of the car wash that could be developed with the proper permitting.

Highway 20 – Highway 20 and the topography of the land limit the development of the area south of Highway 20. There are several successful buildings in the Sunnybrook Drive area and additional lots are available to the west along Sunnybrook; however, developing further to the south becomes a challenge due to the lack of public infrastructure (water and sewer).

With these factors in mind, future development areas for the community will be focused toward the north and east of the community.

Revitalization Areas

Revitalization of existing developed areas is essential for the future of Merville. Revitalization serves multiple community goals: community character enhancement, economic development, and efficient use of infrastructure connections.

Expansion Areas

The City should emphasize the use of currently available sites within the utility service areas prior to the development of new sites for commercial, industrial, and residential properties. The development of sites within the service area will assist in the prevention of unneeded pressure on the current infrastructure and ensure maximum cost effectiveness for community residents.

6.4 GOALS AND OBJECTIVES

- Maintain and promote cost effective and orderly development and redevelopment patterns throughout the City.
- Prevent and eliminate blight and resist deterioration of the developed areas of the City.
- Identify redevelopment areas within the existing city limits for commercial, industrial, and residential use.
- Identify the current municipal service area that provides for development of both redevelopable and vacant acreages for future development.
- Promote new development in and around areas of existing development that utilize existing infrastructure and utilities wherever practical.
- Reserve adequate, contiguous space for future industrial, business, and neighborhood development.

6.5 LAND USE RECOMMENDATIONS

Within One Year

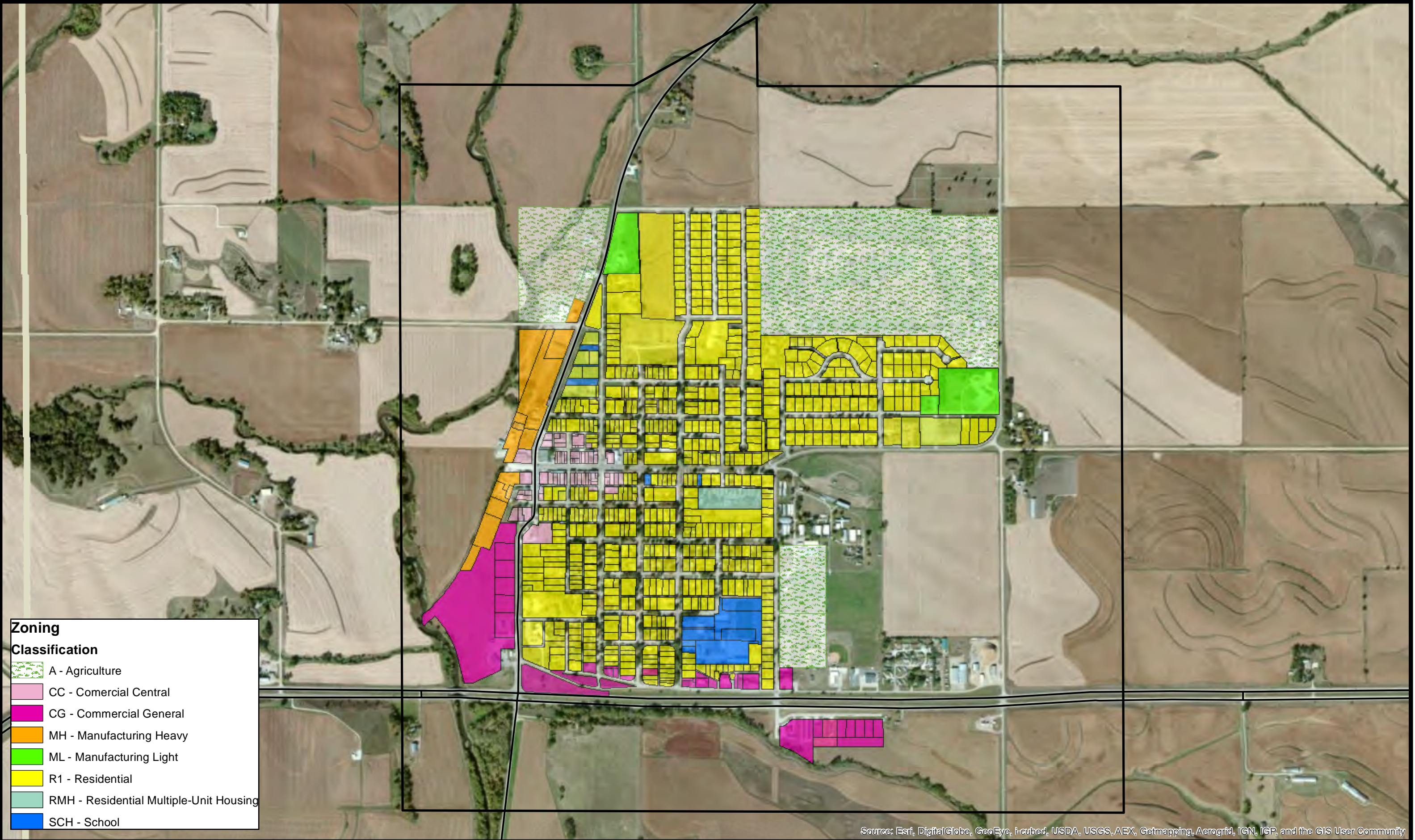
- Review and update Zoning Ordinance sections as they pertain to current development. Revisions should address items such as front yard setbacks as well as building heights.
- Master Plan - The City should continue to work with the Woodbury Central School and with the Woodbury County Fairgrounds in terms of developing a master plan for this area of the community. There are advantages to completing this with the possible Expo Center as well as the school's close proximity to the Fairgrounds.

Years 2-3

- Encourage the removal of existing buildings that have exceeded their useful life and do not add to the historic character of the town, and promote the redevelopment of the site.

Beyond 3 Years

- The Land Use Plan should be flexible enough to accommodate changes in future uses of public and semi-public structures such as schools and churches.
- Promote revitalization and redevelopment of the downtown areas along Main Street.
- Maintain consistency between zoning and land use maps and update when necessary.



Zoning Classification

- A - Agriculture
- CC - Commercial Central
- CG - Commercial General
- MH - Manufacturing Heavy
- ML - Manufacturing Light
- R1 - Residential
- RMH - Residential Multiple-Unit Housing
- SCH - School

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



Mankato, MN
Faribault, MN
Algona, IA
Sac City, IA
Storm Lake, IA
La Crosse, WI

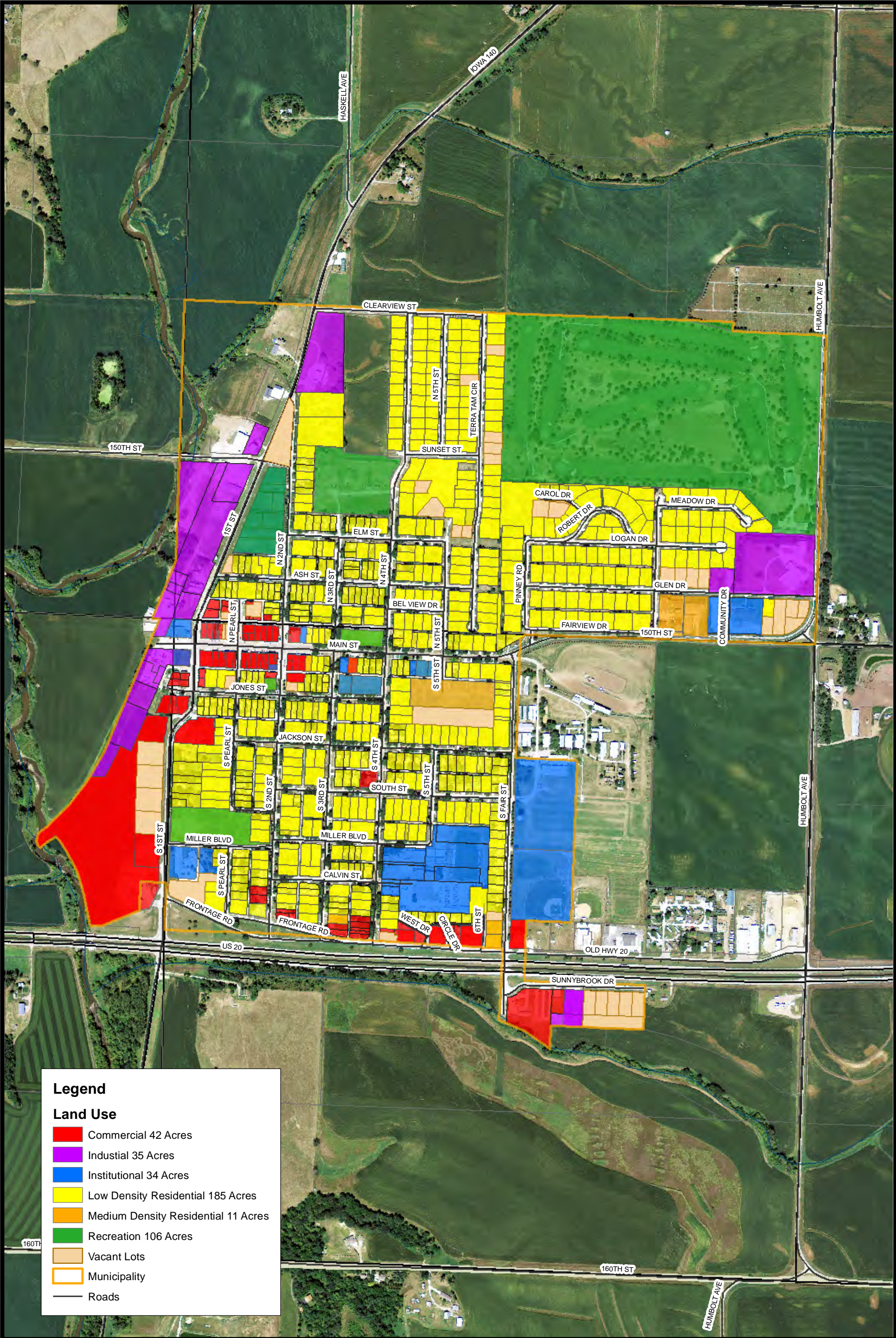
PN: 15269
Source: 2011 Orthophotograph

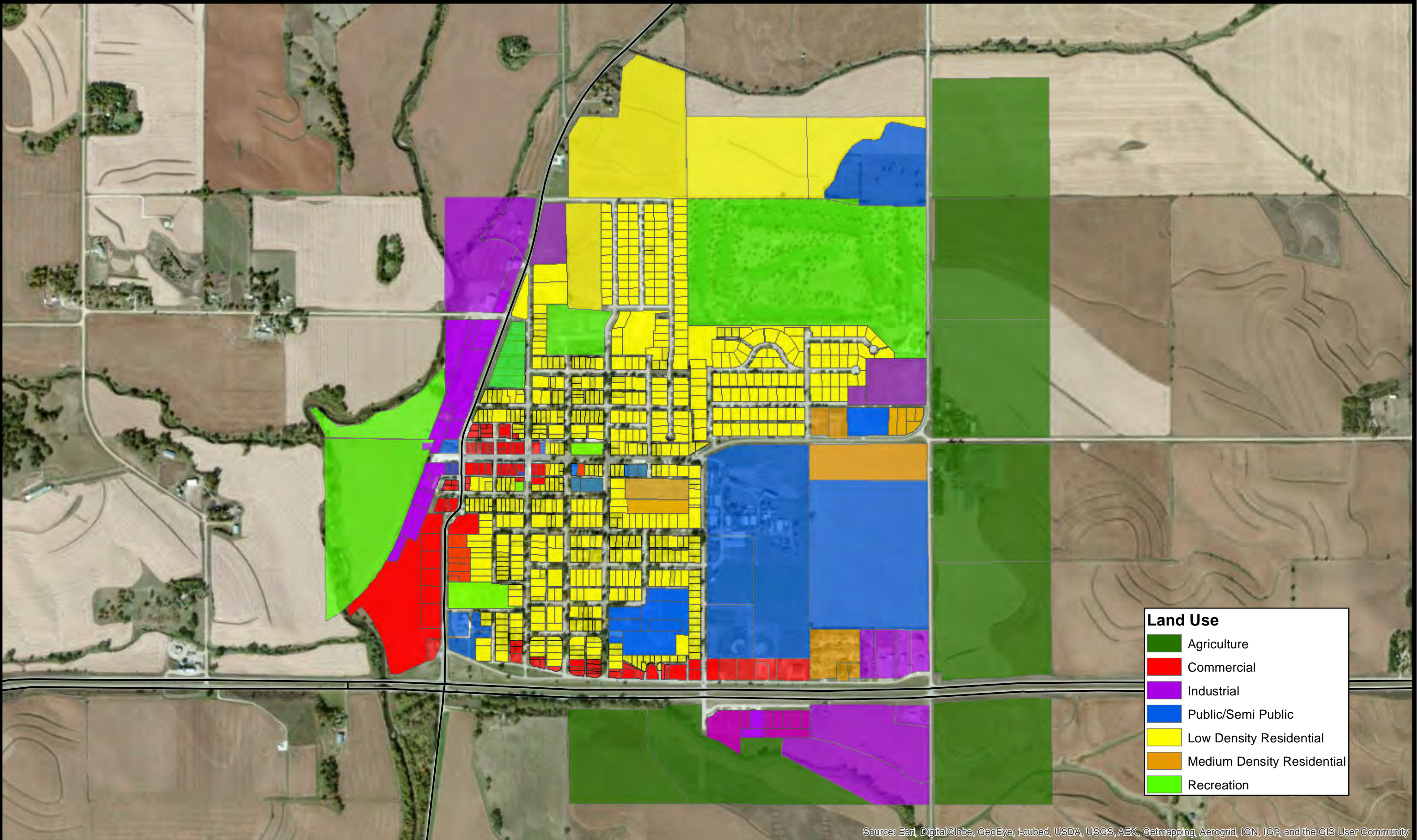
Scale:
0 1,270 Feet
1 inch = 1,270 feet



Figure 6.1

Zoning Areas
City of Merville
Merville/Woodbury County/Iowa





Land Use

- Agriculture
- Commercial
- Industrial
- Public/Semi Public
- Low Density Residential
- Medium Density Residential
- Recreation

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

CHAPTER 7

COMMUNITY RESOURCES AND COMMUNITY MARKETING

This chapter discusses Community Resources and Community Imaging.

7.1 COMMUNITY RESOURCES

Moville provides a diverse supply of social organizations, events, relationships, and networks that serve as assets and facilitate collective action in the community. These activities and groups form an important social fabric within the community and create a unique sense of place through distinct experiences with the people.

Community Facilities

- Woodbury Central School – The Woodbury Central School is a K-12 School which is within the southern portion of the community. Having all grades within the school is an advantageous and the school seems to attract and retain families to the community.
- Community Center – The Community Center was constructed in 1999, and it hosts a number of community events
- Woodbury County Library
- Senior Center
- City Parks
- Woodbury County Fairgrounds

Churches

- Immaculate Conception Church
- Trinity Lutheran Church
- United Evangelical Church
- United Methodist Church

Community Festivals

- Moville Days Celebration – Moville Days are celebrated in the first week in June and have a variety of events including a parade.
- Woodbury County Fair – The Woodbury County Fair is celebrated Wednesday through Sunday approximately the first week of August each year. The event features grandstand performances, free stage acts, open class and 4H competitions, and other exhibits and is attended by families throughout the County.

7.2 COMMUNITY IMAGE

Strengths Weaknesses Opportunities and Threats Exercise

During the March 6, 2013 Strengths Weaknesses Opportunities and Threats (SWOT) exercise with the City Council, Community Imaging was discussed in great detail. The following narrative summarizes key comments of the discussion:

- Entrance/Property Appearance – There were discussions regarding the Community appearance along Highway 140 and Highway 20 as well as properties within the Downtown area.
- Community Website – There was discussion regarding a Community Website (not just City) that could be used to promote the community.

Iowa State University Community Meeting

Similar points were illustrated again at the Iowa State University Extension Community Meeting on March 21, 2013, with the top rated priority for the meeting being a marketing plan for the community.

Community Image Marketing Plan

The image of the community is crucial and should be considered as part of this plan. For the purpose of the plan, Community Image can be defined as two items:

- Physical Appearance of the Community
- Outside Perception

7.3 PHYSICAL APPEARANCE OF COMMUNITY

The physical appearance is the day to day environment that those that live in the community as well as those who visit or pass through will see. First impressions are crucial, and it is important that the City has a clean and well-kept appearance.

To the citizens within Merville and to visitors (even momentary visitors) from outside the community, communicate what values you hold. Is this a clean, safe, well-organized place to live? Is beauty valued? Are visitors welcomed?

In addition, the impression that develops within the seconds and minutes that an individual experiences the City of Merville could play an important role in the City's future development. A family may consider moving to town, or a business owner may consider relocating to Merville. These individuals are unlikely to consider this, however, if their initial impressions are negative.

Physical Appearance – Current Efforts

City Code – The City has enforced property appearance codes to make sure properties are free from unsightly items, and this has worked well.

Spring Cleanup – In addition, the community offers a Spring Cleanup for residents, which is a good avenue for residents to dispose of unsightly and unwanted items.

Personal Pride – The majority of those in the community appear to have personal pride in maintaining and enhancing their properties.

These three items have worked well in the majority of the community by creating a positive image for the community.

However, some of the more established commercial uses in the community struggle with creating a positive image. This seems to occur predominantly along the Highway 20 and Highway 140 Corridor.

Highway 20/140 Corridor

The frontage along Highway 20 and Highway 140 acts as the front door for the City. Almost all arrivals to the City will be from these roads. The entire experience with Menville for many people will be while traveling on one of these two roadways. Recognizing this, it is clear that one of the most efficient paths to strengthening the perception of this community is by carefully manipulating the elements along these corridors to elicit a positive impression.

The frontages along Highways 20/140 need to address the following:

1. The frontage should indicate what is in the community. What resources would be worth noting?
2. The frontage should be indicative of the community values. Make a great impression for those that experience the highway frontage

Community Imaging Suggestions – Making a Great Impression

The following items can be applied to properties communitywide. There are many issues that City Ordinances address; however, many of the suggested standards are common sense, low-cost solutions.

- Clean it – As simple as collecting litter and street sweeping (particularly after the spring melt). Anything that could use a washing, wash it. Provide trash receptacles where people congregate.
- Mow it – If an area is meant to be mowed (a lawn), make sure to keep it mowed during the growing season. Note that not every piece of ground necessarily needs to be mowed as long as its use is obvious and cared for.
- Show it – If there is an amenity or business worth looking at, make sure to highlight it.
- Block it – If there is an area that is unsightly, put in a blocking element such a fence, berm, or plantings.
- Paint it – If a building or fence is less than fresh, a coat of paint or new siding can make a definite difference. If there is graffiti, have it removed or covered up as soon as possible.
- Fix it – If it is broken, get it fixed. Nothing gives a worse impression than seeing broken windows or a missing board in a fence.
- Plant it – There is a primal instinct inside each human that appreciates natural elements such as plants and animals, a body of water, or a forest canopy. When we introduce a rich variety of these things into our daily experience, we benefit from the positive impression

generated about the community while also improving the living standard of those within the community. Key areas may also benefit with the addition of irrigation.

- Establish sharp edges in the landscape – Sharp edges convey order and care. Along streets, add curb and limit driveway access to only what is necessary. Avoid extremely wide drive accesses. Trim landscaping at transitions, particularly on the ground plane. Keep the first three to five feet along the edges of the street mowed for a cleaner look.
- Control the dirt – If there is an adjoining use which is introducing dust or dirt into public spaces, develop a plan to lessen or eliminate the impact. This may mean adding plantings or pavement or restricting some access points. In regard to controlling dirt and gravel, the City Zoning Code currently states the following requirement for off-street parking surfaces:

All required off-street parking areas, shall be surfaced with an asphaltic or portland cement binder pavement or similar surface, so as to provide a durable and dustless surface; they shall be graded and drained to dispose of all surface water accumulation within the area, and shall be arranged and marked to provide for orderly and safe loading or unloading and parking and storage of self-propelled vehicles;

7.4 OUTSIDE PERCEPTION AND COMMUNICATION RECOMMENDATIONS

Outside Perception can be categorized as the perception of those who have not been to the community, but who have gained a perception through media such as the Internet. These first impressions via internet can be as important as someone who is driving through the community for the first time.

The City's website www.visitmoville.com, which is maintained by the City, does a good job in providing information to the Community. However this has been done by City staff, who has a limited amount of time to update the website.

Communication Recommendations

Promote Successes – Successes should be promoted. From the City receiving grant awards to success at the High School and new businesses opening within the community, emphasizing successes bolsters both community pride and positive outside perceptions.

Branding – The City's motto is "The Western Gateway to Eastern Hospitality". This motto was developed several decades ago for the community, and the community may want review its relevance for today. The City also may want to consider a logo for the City and examine if the motto should remain at the time. The City logo could be put on the website, social media outlets, letterhead, envelopes, etc. Branding reinforces the community identity.

Pictures – Take photos of places that new potential residents would want to see: picture of the school(s), churches, healthcare facilities, library, etc. Photos can include both exterior and interior photos of the buildings, depending on what is more attractive or appealing. The City should encourage submission of photos from the public.

Website Updates – Update rotating photos on the homepage. Include photos with people, family, and kids. Portray that families/people live there using photos from county fair, parades, baseball games and spectators, picnics, and families sledding for example.

Facebook – Continue to post on a regular basis and include photos when possible. Consider creating a Facebook group for past/current Movable residents. This could highlight improvement projects and potential fundraising opportunities for individuals to help fund the costs associated with them.

Community Newsletter – The City should gauge how many residents value the Community Newsletter since it may be replicating information on the website or Facebook.

7.5 GOALS AND OBJECTIVES

- The City will continue to enforce ordinances that require properties to be maintained in an orderly manner.
- The City will encourage property owners to maintain the appearance of their properties.
- The City will continue to use all forms of media (newsletter, website, and Facebook) to communicate with the public.

7.6 RECOMMENDATIONS

Property Appearance Recommendations

Within One Year

- The City should review its current Ordinances to ensure it can adequately enforce property appearance matters such as tall grass, noxious weeds, and junk.
- The City should review its Ordinance as it pertains to the hardsurfacing of parking and driving surfaces. While concrete or asphalt surfaces are ideal, some of the existing businesses have substantial gravel surfaces that result in significant costs. A possible solution could be to focus on the edging and screening of parking areas rather than hardsurfacing.

Years 2-3

- The City should consider the promotion of those properties that exemplify property appearance by developing a Yard of the Month or an annual landscaping contest for residential and commercial properties.

Marketing Recommendations

Within One Year

- Incorporating new elements into the City's website and Facebook take time. The City should seek additional assistance through partnerships with local organizations such as the Chamber of Commerce, MCDAI, and Woodbury Central. Students from Western Iowa Tech Community College may be another resource willing to assist as part of their major of study.
- As part of the requests from the public regarding general City questions posted on Facebook, the City could have a number of "City Concierges" who know the community well and would be willing to volunteer to answer questions.

- The community has several photography businesses. The City could work with the photographers and the general public to obtain photographs of the community for its website.

Years 2-3

- The City should create a City logo that could be included on City letterhead, envelopes, the City website, and various other communications.
- Business/Organization of Month – A business/organization of the month narrative could be provided to people via social media and the newsletter which would describe the business, its history, ownership, and purpose. This could be a project in conjunction with Woodbury Central High School students who could interview businesses and/or the Menville Record. This will allow the public to become more educated about community businesses and organizations and encourage residents to take advantage of opportunities within their community.

CHAPTER 8 INFRASTRUCTURE

This chapter provides an inventory of Menville's current infrastructure for sanitary sewer collection and wastewater treatment, water supply and distribution, stormwater management, and transportation. It also provides a review of the capacity of the existing systems and their capacities to accommodate future expansion within the City and adjacent areas identified as possible expansion areas.

8.1 SANITARY SEWER TREATMENT SYSTEM

Collection System

Menville's sanitary sewer collection system consists of sanitary sewer piping (trunks and laterals), manholes, lift stations, forcemains, and sewer services. The City's sanitary sewer system is shown on the attached Sanitary System Drawing. There are approximately 160 manholes and 8.5 miles of gravity lines in the system. The various elements of the sanitary collection system are summarized in Tables 8.1 and 8.2.

Table 8.1 – Sanitary Sewer Pipe

Pipe Size (in.)	Approximate Total Length (ft.)	% of Total Length
8-inch	40,140	89.6%
10-inch	2,360	5.3%
12-inch	2,220	4.9%
15-inch	80	0.2%
Total	44,800	100%

Table 8.2 – Sanitary Forcemain

Pipe Size (in.)	Approximate Total Length (ft.)	Service Area
4-inch	1,310	North lift station to gravity sewer
8-inch	4,970	Main lift station to lagoon

The system was constructed over the years as the City grew, and as such, the system components vary in age. According to City records, much of the gravity system was installed prior to 1919. Smaller portions were added as various areas were developed. The majority of the pipe in the City is vitreous clay pipe (VCP).

With the age and type of pipe, the infiltration and inflow (I/I) in many similar systems becomes an issue. I/I is clear water that enters the sanitary sewer system via leaky pipes or manholes or illicit discharges such as sump pumps connected to the sanitary sewer. Table 8.3 on the following page presents a comparison of monthly flow data at the treatment facility with water sales and rainfall data for the years of 2011 and 2012.

Table 8.3 – Comparison of Sanitary Sewer Flows, Water Use, and Rainfall

Month	Total Flow at WWTP (MG) ¹	Total Water Sold (MG) ²	Precipitation (in.) ³	COLUMN 2 - COLUMN 3 (MGD) (assumed I&I) ⁴
Jan-11	3.242	2.668	1.0	-0.063
Feb-11	3.447	2.839	0.8	0.500
Mar-11	3.206	2.638	0.4	-0.045
Apr-11	3.088	3.047	2.6	-0.487
May-11	3.308	2.875	6.3	-0.983
Jun-11	3.022	3.963	7.3	-1.188
Jul-11	3.093	3.678	0.0	-3.130
Aug-11	3.257	5.206	0.0	-2.859
Sep-11	3.014	6.524	0.2	-1.970
Oct-11	3.142	4.240	0.2	-1.965
Nov-11	2.965	4.617	0.0	-0.296
Dec-11	3.148	3.867	0.0	-0.208
Jan-12	3.128	2.867	0.0	-0.071
Feb-12	3.143	3.263	2.8	0.277
Mar-12	3.127	3.867	1.2	-0.286
Apr-12	3.122	2.833	4.3	-1.165
May-12	3.271	4.334	6.1	-1.773
Jun-12	3.200	4.283	1.6	-2.197
Jul-12	3.194	4.223	0.0	-5.645
Aug-12	3.327	8.037	1.3	-3.874
Sep-12	2.881	6.796	0.0	-3.434
Oct-12	3.073	5.306	1.3	-1.149
Nov-12	3.231	5.577	0.0	0.194
Dec-12	3.440	2.581	0.0	0.250
TOTALS	76.069	100.129	37.4	-24.1

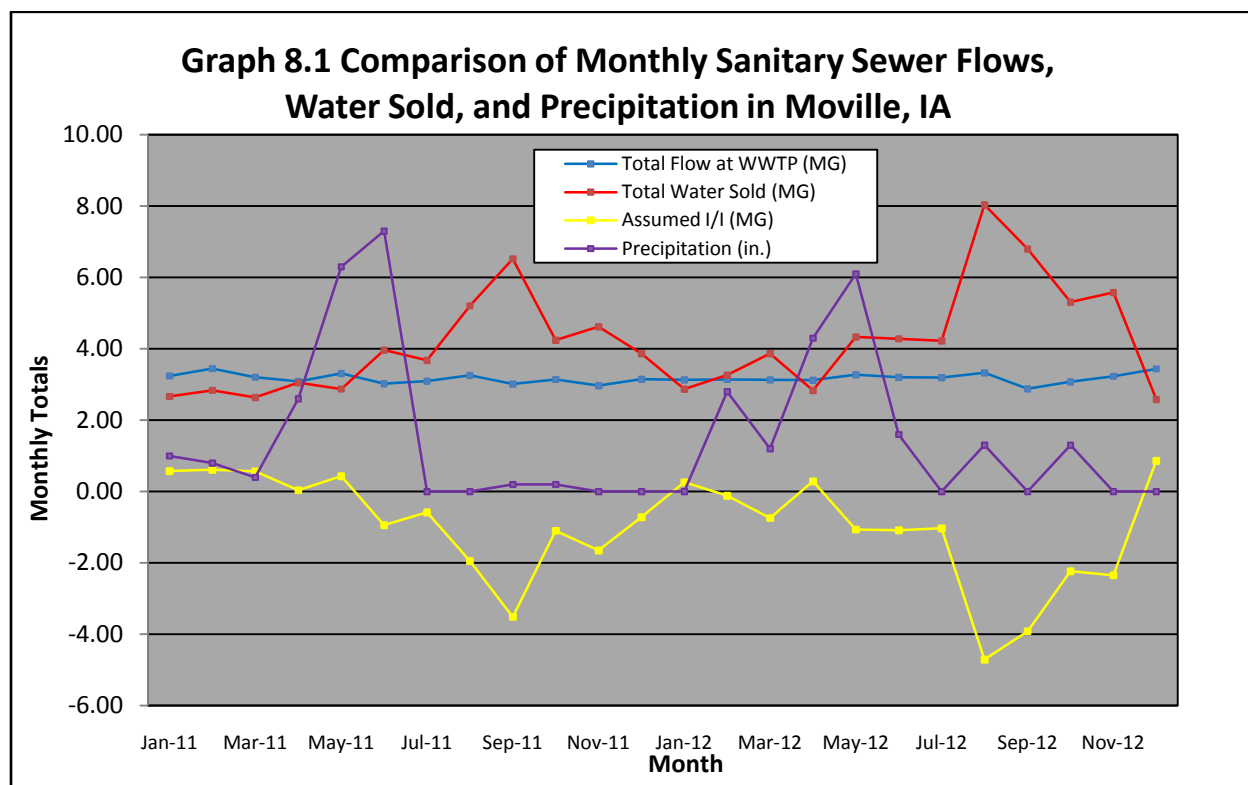
¹ Monthly flows compiled from daily readings provided by the City of Menville.

² Water sales information provided by the City of Menville.

³ Precipitation data from the National Oceanic and Atmospheric Administration (NOAA) at www.noaa.gov.

⁴ Assumes flows in excess of water sold are attributable to I/I.

The data presented in Table 8.3 is shown graphically in Graph 8.1. Even with the last two years being abnormally dry, if significant I/I were taking place, sanitary sewer flows at the City's treatment facility would show peaks at the same time as peaks in precipitation and during the spring snowmelt. The lack of spikes in treatment facility readings is a good indicator that I/I are rather low in this collection system.



Similarly, average values for sanitary sewer and water use for the two-year period, based on a population of approximately 1,600 and typical per capita values for sanitary sewer presented in Table 8.5, also indicate low amounts of I/I. The data actually looks odd because the water sold is greater than the total flow recorded at the waste water treatment plant for many of the recorded months.

Table 8.5 – Daily Average Sanitary Sewer and Water Use per Capita

	Gallons (per Capita)
Average Water Use ¹	85
Typical Water Use ²	70-120
Average Sanitary Sewer Use ³	64 (85)
Typical Sanitary Sewer Use ⁴	70-120

¹ Average daily per capita usage based on water sold.

² Typical residential per capita water use range.

³ Average daily per capita use based on flows at existing treatment facility. Number in parenthesis is average daily water use. Before allowances for I/I, water sold should approximate sewer flows.

⁴ Typical residential per capita sanitary sewer use range.

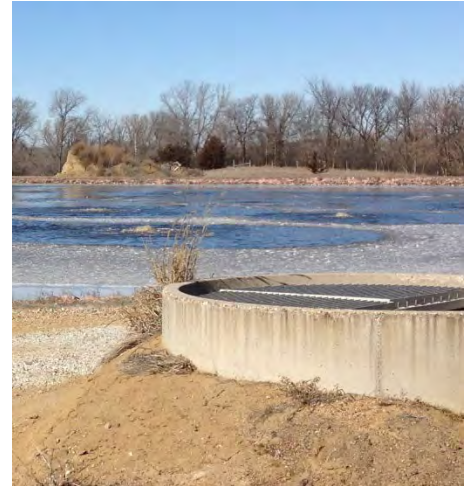
Sanitary Treatment Facility

Moville's sewage treatment facility consists of a three-cell aerated lagoon system located south of US Highway 20 and just east of County Road K64. The three cell configuration consists of two smaller aerated cells and one larger quiescent cell. Untreated waste from the City's collection system is pumped from the main lift station, located north of the 4 Way Stop Shop, through an 8-inch forcemain to the lagoons. The forcemain outlets to the splitter structure, at which time the flow is directed to the north aerated cell. At this time the aerated lagoon system is being operated in series, with the raw wastewater entering the north aerated cell, then spilling over into the south aerated cell, and eventually spilling over to the west in the quiescent cell. From the quiescent cell, the wastewater is discharged to the West Fork of the Little Sioux River.

This system was constructed in 2001, at which time the original lagoon cell was split to form the two aerated cells of the lagoon system. As a part of this same project, the large quiescent cell was constructed to the west. The system is sized to treat an average dry weather (ADW) flow of 0.310 million gallons per day (MGD), an average wet weather (AWW) flow of 0.370 million gallons per day (MGD), and a maximum wet weather (MWW) flow of 0.380 million gallons per day (MGD). The 5-day biochemical oxygen demand (BOD5) load is 375 lbs/day.

The facility is permitted by the Iowa Department of Natural Resources (IDNR) under the National Pollutant Discharge Elimination System (NPDES) permit number 9753001.

Originally issued June 6, 2002, the permit expired June 9, 2007. Similar to other communities, a new NPDES permit has not been issued at this time. A copy of the City's current NPDES discharge permit is attached in the Appendix.



Existing System Capability and Capacity to Support Future Development

An analysis of the capacity of the existing collection system indicates that the sanitary sewer collection system has sufficient pipe capacity to accommodate expansion of the city as outlined in the land use section of this report.

Furthermore, the terminal end of the system that will need to be extended to provide gravity collection for the first phase of the proposed development is sufficient in depth to accommodate the service lines. Additional phases of this development will require the installation of a deeper main from the north lift station to the northwest end of the proposed development and possibly an additional lift station.

There are two existing lift stations in the City of Moville. A lift station serving the north portion of the City is located just east of North 2nd Street and north of 150th Street. This is a Duplex Lift Station which pumps into a 4" forcemain back into the gravity system paralleling 1st Street. The main lift station serving all of Moville is located just north of the 4 Way Stop Shop. This is also a Duplex Lift Station which pumps into an 8" forcemain south to the splitter structure at the treatment plant.

Recently, both lift stations have had extensive maintenance and equipment upgrades. The pumps were replaced two years ago in the north lift station and five years ago in the main lift station. The two lift stations are equipped with automatic dialers to notify the operator of any alarms. The

north lift station operates an average of five hours per day, and the main lift station operates approximately six hours per day.

Neither lift station is equipped with backup power generation. Plans should be made to provide a source of emergency power capable of operating the lift station pumps. The lift station flow data is calculated using hour meters on the pumps to record run time. The pump reading is calibrated approximately once per year. The installation of a wastewater flow meter would be beneficial to obtain more accurate flow readings.

Based on the current flow readings, Merville appears to have sufficient treatment capability to support significant future development. The system is sized to treat an average dry weather (ADW) flow of 0.310 million gallons per day (MGD). Over the past two years, the city treatment facility has treated 0.104 million gallons per day (MGD).

8.2 WATER SUPPLY AND DISTRIBUTION

Merville's water system consists of two municipal wells, one treatment facility, one elevated storage tower, watermains (trunks and laterals), hydrants, and services. Merville's water supply and distribution system is illustrated on Figure 8.2 Water System Drawing.

Water Supply, Treatment, and Storage

Over the years Merville has drilled six wells. Three have been abandoned, and one was only a test well. Currently, two municipal wells are active: Well No. 5 and Well No. 6. Both wells are located near the water treatment facility on Sunset Street between 1st and 4th Streets. Well No. 5 is a shallow well, drawing water from the Dakota Aquifer. Well No. 6 is a deep well, drawing its water from the Pleistocene Aquifer. Information on the municipal wells is presented in Table 8.6.

Table 8.6 – Merville Municipal Wells⁽¹⁾

City Well No.	Unique ID	Depth (feet) (well/casing)	Static Water Level	Drawdown	Diameter (inches)	Pumping Capacity	Year Built	Pump Type	Aquifer
1	40916	36	20	--	--	--	1924	--	Alluvial
2	40917	49	25	9	--	275	1934	--	Alluvial
3	40917	185	68	--	--	500	1956	Test Well	Alluvial
4	40918	172	68	26	12	500	1975	--	Pleistocene
5	51614	244	30	26	8	435	1999	Submersible	Pleistocene
6	51615	137	29	38	8	440	1999	Submersible	Dakota

¹ Source: Iowa Department of Natural Resources, Iowa Geological Survey.

The Iowa Department of Natural Resources requires any user withdrawing more than 25,000 gallons in a 24-hour period during any calendar year to obtain a Water Use Permit. The City of Merville's permit (#3753), attached in the Appendix, allows it to pump up to 150 million gallons per year (MGY). The actual water being pumped from the municipal wells is approximately 55 million gallons per year (MGY), or roughly a third of the permitted Water Use Permit. Using the 435 gallon per minute (GPM) capacity of the existing wells to meet the actual water being pumped during the year, the wells would need to run approximately 6 hours per day. These wells look to be sufficient to accommodate the anticipated additional users.

Moville's water treatment consists of the injection of three chemicals into the raw water.

Ortho/polyphosphate and caustic soda are both added for corrosion control in the distribution system. Hypochlorination is also added for the disinfection of the raw water. The water system turns both submersible well pumps on when the storage tank pressure calls for water. At which time, well No. 5 is run at a lower rate than well No. 6. The well water is blended to mix the raw water of Well No. 5 and Well No. 6. This decreases the amount of nitrates which are higher in Well No. 5 and decreases the level of radium which is higher in Well No. 6.



Water Distribution

The City has one elevated storage tank to provide storage and pressure to the distribution system. The tower is located just south of the Woodbury County Fairgrounds. The elevated storage tank has a storage capacity of 300,000 gallons. It was repainted in 2005, and the City has a contract for regular inspection and maintenance.

Water is distributed throughout the City in a system of pipes, valves, and hydrants. The system is comprised of numerous valves and approximately 85 hydrants. The City's water distribution system is summarized in Table 8.7.

Table 8.7 – Watermain

Pipe Size (in.)	Approximate Total Length (ft.)	% of Total Length
2-inch	1,540	3%
4-inch	19,640	36%
6-inch	32,240	58%
8-inch	1,670	3%
Total	55,090	100%

Water Use

Based on billing records for the two-year period from 2011 to 2012 the average monthly use by Moville water customers is 4.172 million gallons (MG). A summary of water use for the two-year period by types of customers and number of accounts is shown in Table 8.8.

Table 8.8 – Water Use Data by Account Type *(Time Period 2011 to 2012)*

Account Type	Average Number of Accounts	Average Monthly Usage (MG)	Maximum Month Usage (MG)	Minimum Month Usage (MG)
Residential	624	3.444	6.867	2.189
Commercial	72	0.492	1.297	0.161
Government	-	0.236	0.936	0.000
Total	696	4.172	NA	NA

Based on the water sales data presented in the table above, commercial customers purchase 12% of the water sold by the City on average. The maximum monthly water sold over the period of 2011 to 2012 is 8.037 million gallons (MG), and the minimum monthly water sold over that time period is 2.581 million gallons (MG).

Existing System Capability and Capacity to Support Future Development

According to the Recommended Standards for Water Works (2003 Edition, Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers), a city's water supply capacity should equal or exceed the maximum day demand with its largest producing well out of service. This is referred to as "firm capacity". Menville's firm capacity, assuming one of their two wells pumping at 435 gallons per minute for 20 hours per day, is about 522,000 gallons per day. This exceeds the peak design day demand of 325,000 gallons per day.

Menville has sufficient production capability to support significant future development. However, depending on where the development takes place, upgrades to the system may be necessary. The City's storage and distribution system has pressure issues in elevated areas of town. If additional development of elevated areas is being considered, the city may require a booster station to satisfy fire flow requirements.

The water distribution system should also be examined in connection with any future street improvement projects to determine if additional looping within the system would be advantageous. Currently, there are "dead end" lines that should be looped whenever feasible.

As shown by Table 8.7, approximately 39% of the entire distribution system is below the DNR minimum 6" watermain size. This minimum watermain size has been established to provide adequate fire flow requirements. The replacement of these 2" and 4" water lines should be planned.

8.3 STORMWATER SYSTEM

Conveyance System

Menville's stormwater system consists of intakes, manholes, piping, culverts, and ditches. All of the stormwater eventually outlets to the West Fork of the Little Sioux River. Figure 8.3 shows Menville's stormwater system. The system contains approximately 3.6 miles of storm sewer piping, 24 manholes, and 98 intakes. The pipe sizes for the storm sewer system have not been recorded at this time.

There are currently multiple outlets to the West Fork of the Little Sioux River, and all are on the west side of the city. The topography of Menville provides natural drainage, which has led to little need for major storm sewer piping improvements.

Storm Water Treatment

Currently, there is no stormwater pond or other treatment facility serving the City of Menville. The stormwater is instead able to flow directly to the West Fork of the Little Sioux River. This method of routing stormwater directly to conveyance systems, with no detention, is a major contributor to flooding. This method also provides no treatment for stormwater.

Existing System Capability and Capacity to Support Future Development

The capacity of the current system to serve additional development will be largely dependent on what type of development occurs, the location, and the size of storm sewer available. If the development results in large increases of impervious area, it is likely that ponds should be constructed for water quality and detention.

As areas within the City develop, or redevelop, the City should consider adopting a policy for providing stormwater treatment and storage. Information on a wide variety of best management practices (BMPs) can be found in the Iowa Stormwater Management Manual which can be found on the Iowa DNR website at:

<http://www.iowadnr.gov/Portals/idnr/uploads/water/stormwater/manual/stormwatermanual.pdf>.

8.4 TRANSPORTATION

Existing Roadway System

Within the City of Merville, the transportation system is made up of a U.S. Highway, a State Highway, and local streets. The State of Iowa has jurisdiction over U.S. Highway 20 (principal arterial) and Highway 140 (minor arterial). All other roads within the City are considered local streets and are under the jurisdiction of the City.

Attached in the Appendix is the 2011 AADT for the roads in the City of Merville's local transportation system. The data presented is provided by IDOT's Division of Planning and Programming. As was the case for the regional transportation system, the local road system saw only minor changes in the average annual daily traffic during the period from 2007 to 2011.

Table 8.9 presents a tabulation of the mileage of the streets in the City of Merville's local transportation system by functional classification. There are approximately 11.2 miles of local streets that the City is responsible for maintaining.

Table 8.9 – Tabulation of Mileage by Functional Classification

Functional Classification	Mileage	% of Total Mileage
Principle Arterial	1.1	8%
Minor Arterial	1.0	8%
Local Road System	11.2	84%
Total	13.3	100%

Existing System Capability and Capacity to Support Future Development

The State of Iowa has plans to finish U.S. Highway 20 improvements in 2016. The improvements consist of upgrading from a two-lane to four-lane highway from the Storm Lake/Early exit to just east of Merville. Presently, the intersection of U.S. Highway 20 and Highway 140 is a four-way stop. After the construction is finished, IDOT plans to remove the stop signs for U.S. Highway 20. Exactly what type of intersection this will become is yet to be determined.

There are 1.85 miles of red granite street located on the south side of town, which was constructed in the 1920s. The Portland Cement Concrete (PCC) curb and gutter system was installed at a later time. This is approximately 14.3% of the City's overall roadway system. The surface of these red granite roads has worn over the years due to traffic and weathering. The concrete has deteriorated exposing the red granite aggregate, which results in a rough driving surface. Although the streets are structurally sound, the City will need to resurface these in the near future.



The City of Menville has plans for adding housing developments on the north side of town. A street extension adjoining to a new roadway will need to be constructed to incorporate these developments into the City. A typical residential Portland Cement Concrete (PCC) road section is 31' wide from back of curb to back of curb and comprised of a 6" thick concrete slab and 6" subbase. A typical commercial PCC road section has the same parameters except it has an 8" thick concrete slab due to heavier traffic loads. The City could adopt this or similar road section criteria as a City Standard for new roads that are constructed.

8.5 INFRASTRUCTURE GOALS AND OBJECTIVES

- Provide reliable and economical municipal water, sanitary sewer, and transportation.
- Protect the City's sizeable investment in infrastructure by adequately maintaining, improving, or reconstructing them as necessary.
- Encourage and promote the accessibility from Highway 20 and other areas of the community to the downtown.
- Provide infrastructure to serve new development within, or contiguous to, the current City boundaries.
- Encourage and promote the implementation of stormwater best management practices in order to improve water quality.

8.6 RECOMMENDATIONS

Within One Year

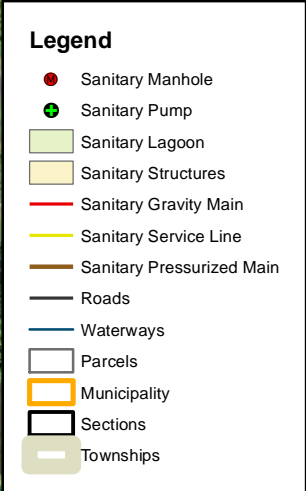
- Establish a Capital Improvements Plan to maintain the City's current infrastructure in good operating condition.
- Review current utility rates, and adjust them to adequately fund future maintenance and expansion of the system(s).
- Establish a plan to provide backup power to both lift stations.

Years 2-3

- Consider establishing a storm sewer utility to fund future drainage improvements.
- Consider adopting a City policy on stormwater best management practices.
- Consider instituting a pavement management system to rate the conditions of all local streets within the City with a focus on the roadways constructed with red granite.
- Consider instituting a City Standard Typical Road Section for new residential and commercial roadways.

Beyond 3 Years

- Review the current condition of sanitary collection lines under roadways being considered for resurfacing.
- Establish a plan for replacement of all watermain less than 4 inches in diameter and the looping of all dead ends.
- Review the current condition of water distribution lines under roadways being considered for resurfacing.







Legend

- Catch Basin
- Manhole
- storm_sewer_line
- Waterways
- Parcels
- Municipality
- Townships

Mankato, MN
Faribault, MN
Algona, IA
Sac City, IA
Storm Lake, IA
La Crosse, WI

PN: 15269
Source: 2011 Orthophotograph

Scale:
0 650
Feet
1 inch = 650 feet



Figure 8.3

Storm Sewer System
Moville, Woodbury Couty, IA

Appendices

Appendix 1-1 NPDES Permit

Appendix 1-2 Water Use Permit

Appendix 1-3 2011 AADT Menville

IOWA DEPARTMENT OF NATURAL RESOURCES
National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

CITY OF MOVILLE
CITY CLERK, CITY HALL
326 MAIN STREET BOX N
MOVILLE, IA 51039 - 0000

FACILITY NAME AND ADDRESS

MOVILLE CITY OF STP
CORNER OF HWY 140 AND 160TH STREET
SOUTH OF TOWN
MOVILLE, IA 51039 - 0000

Section 3, T 88N, R 44W
WOODBURY County

IOWA NPDES PERMIT NUMBER: 9753001

YOU ARE REQUIRED TO FILE FOR

RENEWAL OF THIS PERMIT BY: 12/11/2006

DATE OF ISSUANCE: 6/10/2002

DATE OF EXPIRATION: 6/9/2007

EPA NUMBER: IA0042943

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C 1342(b)), Iowa Code section 455B.174, and rule 567--64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of this department within 30 days of your receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By 

Courtney Cswercko
NPDES Section
ENVIRONMENTAL SERVICES DIVISION

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

**Outfall
Number**

Outfall Description

001 DISCHARGE FROM A THREE CELL LAGOON WITH AERATION IN THE FIRST TWO CELLS

Receiving Stream: WEST FORK LITTLE SIOUX RIVER

Route of Flow:

Class B(LR) waters are limited resource warm waters in which flow or other physical characteristics limit the ability of the water body to maintain a balanced warm water community. Such waters support only populations composed of species able to survive and reproduce in a wide range of physical and chemical conditions, and are not generally harvested for human consumption.

002 LIFT STATION OVERFLOW

Receiving Stream: WEST FORK LITTLE SIOUX RIVER

Route of Flow:

Class B(LR) waters are limited resource warm waters in which flow or other physical characteristics limit the ability of the water body to maintain a balanced warm water community. Such waters support only populations composed of species able to survive and reproduce in a wide range of physical and chemical conditions, and are not generally harvested for human consumption.

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

Effluent Limitations

Outfall No.: 001 DISCHARGE FROM A THREE CELL LAGOON WITH AERATION IN THE FIRST TWO CELLS

Interim Limits Start: 06/10/2002 Interim Limits End: 11/30/2002

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

Wastewater Parameter	Season	Type of Limit	% Removal	EFFLUENT LIMITATIONS							
				Concentration				Mass			
				7 Day Average/Min	30 Day Average	Daily Maximum	Units	7 Day Average	30 Day Average	Daily Maximum	Units
CBOD5	YEARLY	FINAL	85	40.0	25.0		MG/L	123.0	77.0		LBS/DAY
TOTAL SUSPENDED SOLIDS	YEARLY	FINAL		120.0	80.0		MG/L	370.0	247.0		LBS/DAY
AMMONIA NITROGEN (N)	JAN	FINAL			24.6	42.7	MG/L		66.0	121.0	LBS/DAY
AMMONIA NITROGEN (N)	FEB	FINAL			28.0	35.1	MG/L		75.0	95.0	LBS/DAY
AMMONIA NITROGEN (N)	MAR	FINAL			21.4	22.4	MG/L		58.0	60.0	LBS/DAY
AMMONIA NITROGEN (N)	APR	FINAL			8.8	16.9	MG/L		24.0	46.0	LBS/DAY
AMMONIA NITROGEN (N)	MAY	FINAL			7.4	15.5	MG/L		20.0	42.0	LBS/DAY
AMMONIA NITROGEN (N)	JUN	FINAL			4.9	15.5	MG/L		13.0	42.0	LBS/DAY
AMMONIA NITROGEN (N)	JUL	FINAL			5.6	16.4	MG/L		15.0	44.0	LBS/DAY
AMMONIA NITROGEN (N)	AUG	FINAL			5.1	13.5	MG/L		14.0	36.0	LBS/DAY
AMMONIA NITROGEN (N)	SEP	FINAL			5.6	17.9	MG/L		15.0	48.0	LBS/DAY
AMMONIA NITROGEN (N)	OCT	FINAL			12.4	17.9	MG/L		34.0	48.0	LBS/DAY
AMMONIA NITROGEN (N)	NOV	FINAL			15.0	15.0	MG/L		40.0	40.0	LBS/DAY
AMMONIA NITROGEN (N)	DEC	FINAL			18.3	19.0	MG/L		49.0	51.0	LBS/DAY
PH (MINIMUM - MAXIMUM)	YEARLY	FINAL		6.0		9.0	STD UNITS				

Note: If seasonal limits apply, summer is from March 15 through November 15, and winter is from November 16 through March 14.

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

Monitoring and Reporting Requirements

- (a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.
- (b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized.
- (c) Chapter 63 of the Iowa Administrative Code provides you with further explanation of your monitoring requirements.
- (d) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. Also, flow data shall be reported in million gallons per day (MGD).
- (e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the department by the fifteenth day following the close of the reporting period. Your reporting period is on a monthly basis, ending on the last day of each reporting period.

Outfall Number	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	CBOD5	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	TOTAL SUSPENDED SOLIDS	1 EVERY MONTH	24 HOUR COMPOSITE	RAW WASTE
001	PH (MINIMUM - MAXIMUM)	1 TIME PER WEEK	GRAB	RAW WASTE
001	TEMPERATURE	1 TIME PER WEEK	GRAB	RAW WASTE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	FINAL EFFLUENT
001	CBOD5	1 TIME PER WEEK	GRAB	FINAL EFFLUENT
001	TOTAL SUSPENDED SOLIDS	1 EVERY MONTH	GRAB	FINAL EFFLUENT
001	AMMONIA NITROGEN (N)	1 TIME PER WEEK	GRAB	FINAL EFFLUENT
001	PH (MINIMUM - MAXIMUM)	1 TIME PER WEEK	GRAB	FINAL EFFLUENT
001	SETTLEABLE SOLIDS	2 TIMES PER WEEK	GRAB	FINAL EFFLUENT
001	TEMPERATURE	1 TIME PER WEEK	GRAB	FINAL EFFLUENT
001	DISSOLVED OXYGEN	1 TIME PER WEEK	GRAB	AERATED CELL 2 CONTENTS
001	DISSOLVED OXYGEN	1 TIME PER WEEK	GRAB	AERATED CELL 1 CONTENTS

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

Design Capacity

Outfall Number: 001

The design capacity for the treatment works is specified in Construction Permit Number 2002-194-S, issued April 3 , 2002. The treatment plant is designed to treat an average dry weather (ADW) flow of 0.3100 million gallons per day (MGD), an average wet weather (AWW) flow of 0.3700 MGD, and a maximum wet weather (MWW) flow of 0.3800 MGD. The design 5-day biochemical oxygen demand (BOD5) load is 375 lbs./day. The design Total Kjeldahl Nitrogen (TKN) load is 0 lbs/day.

Operator Certification Type/Grade: WL/I

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by rule IAC 567-62.1(7).

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.
2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.
3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567--67.1 through 67.11 (455B).

Facility Name: MOVILLE CITY OF STP

Permit Number: 9753001

**MAJOR CONTRIBUTING INDUSTRIES
LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS**

1. You are required to notify the department, in writing, of any of the following:

(a) 180 days prior to the introduction of pollutants to your facility from a major contributing industry. A major contributing industry means an industrial user of a treatment works that:

(1) Has a flow of 50,000 gallons or more per average work day;

(2) Has a flow greater than five percent (5%) of the flow carried by the treatment works receiving the waste;

(3) Has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307 (a) of the Clean Water Act and adopted by reference in Rule 62.5(455B); or

(4) Is found by the department in connection with the issuance of an NPDES permit to have a significant impact, either alone or in combination with other contributing industries, on the treatment works or on the quality of effluent from the treatment works.

(b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.

(c) 10 days prior to any commitment by you to accept waste from any new major contributing industry.

Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).

2. You shall require all users of your facility to comply with Sections 204(b), 307 and 308 of the Clean Water Act.

Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.

3. You shall limit and monitor pollutants for each major contributing industry as required elsewhere in this permit, and submit sample results to the department monthly.

Your report shall be submitted by the fifteenth day of the following month.

Revised: August 18, 1993 cwf

STANDARD CONDITIONS

1. DEFINITIONS

(a) 7 day average means the sum of the total daily discharges by mass, volume or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.

(b) 30 day average means the sum of the total daily discharges by mass, volume or concentration during a calendar month, divided by the total number of days during the month that measurements were made.

(c) daily maximum means the total discharge by mass, volume or concentration during a twenty-four hour period.

2. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility.

{See 40 CFR 122.41(a) and 567-64.7(4)(e) IAC}

3. DUTY TO REAPPLY

If you wish to continue to discharge after the expiration date of this permit you must file an application for reissuance at least 180 days prior to the expiration date of this permit.

{See 567-64.8(1) IAC}

4. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

{See 40 CFR 122.41(c) and 567-64.7(5)(j) IAC}

5. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

{See 40 CFR 122.41(d) and 567-64.7(5)(i) IAC}

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privileges.

7. TRANSFER OF TITLE

If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit.

{See 567-64.14 IAC}

You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer

8. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit.

{See 40 CFR 122.41(e) and 567 64.7(5)(f) IAC}

9. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

10. MAINTENANCE OF RECORDS

You are required to maintain records of your operation in accordance with 567-63.2 IAC.

11. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

(a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567-64.3(11) IAC.

(b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits.

{See 567-64.3(11) IAC}

(c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards.

{See 40 CFR 122.62(a)(6) and 567-64.7(5)(g) IAC}

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

12. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

STANDARD CONDITIONS

13. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized personnel to:

- (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- (c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit.
- (d) Sample or monitor, at reasonable times, for the purpose of assuring compliance or as otherwise authorized by the Clean Water Act.

14. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. The following instances of noncompliance must be reported within 24 hours of occurrence:

- (a) Any unanticipated bypass which exceeds any effluent limitation in the permit.
{See 40 CFR 122.41(l)(5)(ii)(A)}
- (b) Any upset which exceeds any effluent limitation in the permit.
{See 40 CFR 122.41(l)(5)(ii)(B)}
- (c) Any violation of a maximum daily discharge limit for any of the pollutants listed by the Director in the permit to be reported within 24 hours.
{See 40 CFR 122.41(l)(5)(ii)(C)}

15. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under Condition #14 at the time monitoring reports are submitted.

16. ADMINISTRATIVE RULES

Rules of this Department which govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65 and 121. Reference to the term "rule" in this permit means the designated provision of Part 567 of the Iowa Administrative Code.

17. NOTICE OF CHANGED CONDITIONS

You are required to report any changes in existing conditions or information on which this permit is based:

- (a) Facility expansions, production increases or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit.

{See 567-64.7(5)(a) IAC}

- (b) If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department.

{See 567-64.2 IAC}

- (c) If your facility is a publicly owned treatment works or otherwise may accept waste for treatment from industrial contributors see 567-64.3(5) IAC for further notice requirements.

- (d) You shall notify the Director as soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit.

{See 40 CFR 122.42(a)}

- (e) No construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for "Storm water discharge associated with construction activity".

You must also notify the Director if you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application

18. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report, you must promptly submit such facts or information.

STANDARD CONDITIONS

19. UPSET PROVISION

- (a) Definition - "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph "c" of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An upset occurred and that the permittee can identify the cause(s) of the upset.
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset to the Department in accordance with 40 CFR 122.41(l)(6)(ii)(B).
 - (4) The permittee complied with any remedial measures required by Item #5 of the Standard Conditions of this permit.
- (d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

20. FAILURE TO SUBMIT FEES

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due.

21. BYPASSES

- (a) Definition - Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (b) Prohibition of bypass, Bypass is prohibited and the department may take enforcement action against a permittee for bypass unless:

BYPASSES (Continued)

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance;
 - (3) The permittee submitted notices as required by paragraph "d" of this section.
- (c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above.
- (d) Reporting bypasses. Bypasses shall be reported in accordance with 567-63.6 IAC.

22. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified as required by 567-64.3(8) IAC.

23. USE OF CERTIFIED LABORATORIES

Effective October 1, 1996, analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567-63.3(4) are excluded from this requirement.

24. LEGAL AND FINANCIAL LIABILITY WAIVER

No legal or financial responsibility arising from the operation or maintenance of any disposal system or part thereof installed by the permittee to achieve compliance with this permit shall attach to the State of Iowa or the Iowa Department of Natural Resources.

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IOWA DEPARTMENT OF NATURAL RESOURCES
NATURAL RESOURCES

IOWA DEPARTMENT OF NATURAL RESOURCES

WATER USE PERMIT

Permit issued to:

City of Merville
Attn: Mike Weaver, Public Works Supt.
PO Box N
Merville, IA 51039

Permit Number:

3753-RM4

Effective:

9/9/2003

Expires:

9/8/2013

The Permittee is authorized to:

withdraw water from two existing alluvial wells, approximately 137 to 174 feet deep, and one existing Dakota sandstone well, approximately 244 feet deep, located on land generally described as the S ½ of the SW ¼ of Section 29, T89N, R44W, Woodbury County, Iowa, in the maximum quantity of 150 million gallons per year at a maximum rate of 750 gallons per minute throughout each year for municipal purposes within and without its corporate limits consistent with its municipal distribution system and other provisions of law.

This authorization to withdraw water has been granted pursuant to the provisions of Part 4 of Division III of Chapter 455B, Code of Iowa, and Chapters 50, 51, and 52 of Part 567, Iowa Administrative Code, and is further subject to the general permit conditions within this permit.

Conditions of this permit may be appealed as provided in rule 567--50.9, Iowa Administrative Code. Appeal must be in writing and must be received at the Iowa Department of Natural Resources, EPD/Water Supply Section, 401 SW 7th Street, Suite M, Des Moines, Iowa 50309-4611 within thirty days of the date of the certification of the mailing of the permit.

FOR THE DIRECTOR:

By:

Michael H. Anderson, P.E.

Date Executed:

4/7/2004

cc: Field Office No. 3 - Spencer

Permit File #3753

CERTIFICATE OF MAILING

On the date shown below, a copy of the foregoing permit was mailed to the Permittee and to each person entitled to receive a copy as provided by rule 567--50.8(2), Iowa Administrative Code.

NO 12 8-11-04

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GENERAL PERMIT CONDITIONS

1. Permittee shall maintain accurate and up-to-date records of water use from said sources by means of water meters and submit them annually to the department. Additional records on pumping rates from said sources, water levels in said wells, and other data related to the regulation of this use of water shall be maintained and submitted as directed by the department.
2. Permittee shall be responsible for compliance with all applicable provisions of state law and the rules and regulations of this department and of federal and local health and water pollution control agencies in the operation of its water supply facilities and in the disposal of its wastes.
3. Permittee is responsible for securing such other permits or approvals as may be required by this department, federal, or local governmental agencies for the operation of said water supply facility or the discharge of water or other materials due to this operation.
4. Permittee shall construct, maintain, and monitor observation wells, as directed by the department to define the effects of perimeter's water withdrawals on groundwater resources or on other water users who might be affected by the withdrawals authorized herein.
5. Once each spring prior to March 31, the Permittee shall be responsible for accurately measuring the distance to water (static water level) from the access port in all permitted wells. The distance to water shall be submitted to the department annually as part of the records of water use.
6. If the Department, after consultation with the Geological Survey Bureau, determines that withdrawals from the Dakota formation of the cretaceous system within a designated geographical area are causing water level declines which constitute a significant threat to the public interest in the availability of water for sustained beneficial use of the aquifer, renewal of this permit shall be denied, and the permit shall be modified or canceled in accordance with the procedures specified in Iowa Code Section 455B.271, as necessary to protect the aquifer for sustained use.
7. Permittee shall cooperate with representatives of the department to determine that the authorized withdrawals do not violate the withdrawal restriction imposed herein.
8. Existing wells shall not be replaced without notifying the Iowa Department of Natural Resources. Changes to the location, depth, source aquifer, or other physical features of said wells may require that this permit be modified to accommodate the changes.
9. With respect to each proposed or replacement well authorized as a source of water in this permit, withdrawals of water may be made only after the Permittee has made the following information available to the Geological Survey Bureau: well location, well log, casing and grouting schedule, results of yield tests, and cutting samples.

10. Each proposed or replacement well authorized as a source of water in this permit must be equipped with an access port having a minimum diameter of three-fourths inch. The access port must be equipped with a threaded cap or plug. The access port must be located to allow insertion of a steel tape or electric probe into the well casing for measurement of water levels.
11. Permittee shall submit to the department within 90 days of being notified by the department, or no later than the expiration date of this permit, whichever first occurs, a plan for implementing routine day-to-day water conservation measures and for implementing emergency water conservation measures during periods of water shortage. Until such a plan has been submitted to and approved by the department, Permittee shall implement those emergency water conservation measures determined to be necessary by the department pursuant to Iowa Code Sections 455B.265 and 455B.266.
12. This permit supersedes Water Use Permit No. 3753-MR3.

CAVEAT

Permittee is advised that pursuant to Section 455B.271, Code of Iowa, the authority to withdraw water provided by this permit may be modified, canceled or suspended in case of any breach of the terms or conditions herein, in case of any violation of state law pertaining to the permit, or if found necessary to prevent substantial injury to private or public interests.

TRAFFIC FLOW MAP OF
MOVILLE
WOODBURY COUNTY
2011 ANNUAL AVERAGE DAILY TRAFFIC

