



Mound 2030 Comprehensive Plan

Adopted March 9, 2010



Hoisington Koegler Group Inc.

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INTRODUCTION

Mound's 2030 Comprehensive Plan is the guide for future growth, redevelopment and improvement of the community. It provides the blueprint, goals and policies to ensure the community continues to be a place where people want to live, work, shop and play. The Comprehensive Plan consists of several elements and is organized into the following chapters:

- *Introduction* provides a brief overview of the city's comprehensive planning process and state/metropolitan comprehensive planning requirements.
- *Community Context* briefly describes Mound's existing conditions and history and provides the context in which the 2030 Comprehensive Plan was updated.
- *Future Vision for the Community* summarizes the community's desires for the future and serves as the basis for the development of the remainder of the Plan. It includes the community's vision, goals and policies.
- *Land Use Plan* describes the future land use plan, areas of focus for future redevelopment and the community's housing plan.
- *Park, Open Space and Recreation Plan* articulates the city's goals and policies, summarizes the community's needs and makes recommendations for the future.
- *Transportation Plan* identifies the network for movement in the community, including roads, trails and transit.
- *Infrastructure* articulates how the community will ensure adequate infrastructure to meet the needs of existing and future residents, businesses and visitors, including water, sewer and stormwater systems.
- *Strategic Initiatives* identifies how the Plan is to be implemented to achieve the community's Vision by posing recommendations for public and private actions.

COMPREHENSIVE PLANNING OVERVIEW

A comprehensive plan is an official city tool used to guide future physical and socio-economic growth and change within the community. It is intended to be broad in scope by establishing general goals and policies regarding key element of the community, including land use, transportation, public infrastructure, parks/trails/open spaces, housing and natural resources. The comprehensive plan differs from the more commonly known zoning ordinance in that the comprehensive plan is visionary, general and policy-oriented, whereas the zoning ordinance is regulatory and detailed. The zoning ordinance must be consistent with the comprehensive plan and is a primary tool to implement the comprehensive plan. Following any changes to the comprehensive plan, the zoning ordinance must be amended to reflect the vision, goals and policies set out by the plan. The primary users of the comprehensive plan are the City Council, Planning Commission and City Staff who must use the plan to guide the ongoing decisions of local government. However, the comprehensive plan is also important for others, such as property owners and developers, as it provides general guidance for all properties within the city.

The 2030 Comprehensive Plan addresses the following:

- Future vision for the community

- Future land use plan
- Protection of sensitive natural resources
- Expanding the range of housing types to meet lifecycle housing needs
- Location and improvement of parks, open space and recreational facilities
- Transportation system needs and enhancements
- Municipal infrastructure facilities

WHY IS THE COMPREHENSIVE PLAN IMPORTANT?

As the guide for future community growth and development, the 2030 Comprehensive Plan influences many other community decisions and tools, including the following:

- Establishes the need for potential modifications of the zoning ordinance and other land use controls
- Influences the location, form, and pace of new development and redevelopment
- Promotes the maintenance and enhancement of existing neighborhoods and commercial districts
- Determines approaches for protecting natural resources and open spaces
- Guides City investments in roads, utilities and parks
- Determines the need for City roles in economic development, redevelopment and housing

AUTHORITY AND REQUIREMENT TO PLAN

The power to create and employ a comprehensive plan comes from State Law. Minnesota Statutes, Sections 462.351 to 462.364 contain the planning powers granted to Minnesota cities. Specifically, M.S. Section 462.353, Subd. 1 authorizes the City to “carry on comprehensive municipal planning activities for guiding the future development and improvement of the municipality and may prepare, adopt and amend a comprehensive municipal plan and implement such plan by ordinance or other office measure.”

The City of Mound is required to complete and keep updated a Comprehensive Plan under the Metropolitan Land Planning Act of 1976 and all subsequent amendments to that act. The Metropolitan Land Planning Act (MLPA) addresses the interdependence of local units of government within the Twin Cities Metropolitan Area and requires the adoption of coordinated plans and programs. In preparing the plan, the planning body is required to work with other City agencies, adjacent communities, school districts and counties in order to ensure coordinated regional planning. The MLPA also requires the Metropolitan Council to prepare a comprehensive development guide for the metropolitan area. The Metropolitan Council’s *2030 Regional Development Framework*, which was completed in 2004, fulfills this requirement and provides local units of government with direction on how to plan for land use, development, transportation, water resources management and parks. Local governments within the seven-county metropolitan area are required to amend their local comprehensive plans so that they are consistent with the goals and policies established in the *2030 Regional Development Framework*. Updated local comprehensive plans are due required to be submitted by December 2008 to the Metropolitan Council for their review and acceptance.

PREVIOUS PLANNING EFFORTS

This updated Comprehensive Plan represents the fifth major planning effort for the City of Mound. This plan represents an update to the 2000 Comprehensive Plan to comply with the *2030 Regional Development Framework* and new community issues. The original City Comprehensive Plan was prepared in 1961 and was updated with the 1979, 1990 and 2000 plans.

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COMMUNITY CONTEXT

This portion of the 2030 Comprehensive Plan summarizes the large amount of information reviewed and analyzed as part of the comprehensive planning process. The data was gathered from a variety of sources, including existing plans and studies, websites and discussions with City Staff.

REGIONAL SETTING

The City of Mound is located on the western shores of Lake Minnetonka and its numerous bays. Located in southwestern Hennepin County, it is approximately 25 miles west of downtown Minneapolis. Highway access into Mound is provided by County Roads 15 from the east and west, 110 from the north and west, and 44 from the south. As shown in Figure 2.1, neighboring Lake Minnetonka communities include Minnetrista, Shorewood, Spring Park, and Orono. Mound is physically separated by water from every community except Minnetrista, who also shares the largest border with Mound.

HISTORICAL DEVELOPMENT

Original incorporation of the Village of Mound was in 1912. The City of Mound is the result of the consolidation of what was once the Village of Mound and Island Park in 1955. Mound is part of a rich history of early Lake Minnetonka settlements. The City's name originated from the existence of Indian burial mounds located within the community. The current land use pattern is a result of summer lakeshore cabin developments platted on small lots, many with park commons along the lakeshore. In addition to Lake Minnetonka, Lake Langdon and a portion of Dutch Lake are also located within the city. In comparison to its sister lake communities, Mound has a relatively dense development pattern.

REGIONAL PLANNING AREA DESIGNATION

As shown in Figure 2.2, the City of Mound is designated by the Metropolitan Council as a developed community. Developed communities are those cities where over 85% of the land was developed in 2000 and public infrastructure is well established. The regional planning area designation identifies the Metropolitan Council's expectations for the community's growth levels and standards including: maintenance of current public infrastructure; renewing and improving infrastructure, buildings and land to provide for additional growth, particularly at centers along transit corridors; accommodating growth through reinvestment at appropriate densities, and supporting developments that integrate land uses.

NATURAL RESOURCES

Mound has a large amount and variety of natural features, including numerous lakes, wetlands, rolling topography and mature tree cover that lend character to the community. Although the historical development of much of the community is typical of urban single family densities, the many natural features provide a sense of openness that provides relief from the community's urban form. Lake Minnetonka and its many bays, Lake Langdon, Dutch Lake and recently reclaimed Lost Lake are Mound's most defining natural resource features and have significantly influenced the community's development and street patterns. The entire city is located within the Minnehaha Creek Watershed District, which means that the community's surface water drains to

Lake Minnetonka, which then empties into Minnehaha Creek and ultimately drains into the Mississippi River in Minneapolis.

A Natural Resources Inventory (NRI) was recently completed for the City of Mound in March 2006 by the Hennepin County Department of Environmental Services (HCDES). The study was conducted in cooperation with the City of Mound, with funding assistance from the Minnesota Department of Natural Resources and the Metropolitan Council. The purpose of the NRI study was to classify existing land cover (natural and developed) for the entire city and to assess the relative ecological quality of the City's remaining natural areas, including wetlands, soil types, high quality natural community remnants, and rare plant and animal species. The study found that the original land survey notes from 1853 to 1856 for the state indicate that the City of Mound pre-settlement vegetation was dominated mostly by Upland Deciduous Forest as part of the historic Big Woods landscape that covered a large part of south-central Minnesota.

The NRI identifies a number of individual natural community remnants within the city, including oak forest, maple basswood forest, lowland hardwood forest, floodplain forest, mixed hardwood swamp, willow swamp, poor fen shrub, birch bog, cattail marsh, wet meadow and water lily open marsh areas. The study also recommends some conceptual greenway/open space corridor areas that the city is encouraged to use as a foundation for planning and preserving natural areas. The NRI provides the City with additional recommendations, including establishing a natural areas/open spaces planning process, forming an open space committee, conducting additional rare plant and animal surveys, enhancements to ordinances that protect natural resources, use of the NRI in the development review process, and partnering with conservation agencies to work with interested landowners.

Lakes and Floodplains

The NRI shows that lakes account for approximately 45% of the community's land cover. Lake Minnetonka and its many bays surround the community to the north, east and west. In fact, the southeast portion of Mound, commonly known as "the island" neighborhood, is actually an island within Lake Minnetonka and the Three Points neighborhood is a long peninsula that juts out into Lake Minnetonka. Lake Langdon is located in the western portion of the community and Dutch Lake is in the northwest corner of the community. Finally, Lost Lake was recently reclaimed in the very center of the community abutting the south edge of downtown Mound. The floodplains associated with these lakes are defined as the areas where surface flooding has the statistical likelihood of occurring once every 100 years. The floodplain can be divided into two areas: the floodway and flood fringe. The floodway is the area where absolutely no development should take place. The flood fringe is suitable for development if proper filling and flood proofing is conducted as part of construction. As shown in Figure 2.3, most of the floodplain areas border the lakes and are directly linked to fluctuating lake levels. The Federal Regional Elevation establishes floodplain elevations for the three major lake systems in the community. The 100 year lake elevations are as follows: Lake Minnetonka = 931.0; Dutch Lake = 940.0; Langdon Lake = 935.0. Structures are required to be elevated above these 100 year flood elevations to protect their integrity and occupants in a flood event. The Regulatory Flood Protection Elevation for each lake is as follows: Lake Minnetonka = 933.0; Dutch Lake = 942.0; Langdon Lake = 937.0.

Wetlands

Wetlands usually consist of peat and mucky soils covered with marshy vegetation. These areas experience a seasonal to permanent wetness with the water table lying within two feet of the surface. Wetlands serve as natural components of the overall storm water management system by holding water during heavy rains until evaporation or percolation occurs. Wetlands also serve as natural filters by removing impurities as the water

passes through them prior to entering the underground water table. Wetlands also serve as a valuable habitat for wildlife, providing food and cover.

Many of these areas are presently used as public open space. As shown in Figure 2.4, the most intensive wetland networks lie in the Lake Langdon, Emerald Lake and Lost Lake areas. The city has established a set of wetland management requirements to ensure the continued functional and aesthetic preservation of these areas.

Slopes

Slopes can pose limitations on development. Severely sloped land more easily erodes, creating potential foundation problems. The steep slope map designates areas where slopes pose moderate to severe limitations on development. Land with slopes of up to 18% pose moderate limitations, however, they can be developed utilizing proper construction techniques. Land with slopes greater than 18% pose more severe development limitations and require proper management techniques. Those areas in Mound where slopes are likely to be greater than 18% are shown in Figure 2.5. Additional slope protection is provided for in the Shoreland Management regulations for all areas within 1,000 feet of lake shorelines. The regulations prohibit structures on the most severe slopes in the City and also require proper management of vegetation to reduce the potential for soil erosion.

High Water Table

A high water table elevation also poses developmental limitations within a community. A water table that lies within two (2) feet of the surface can cause structural damage. Areas where the water table lies within one (1) to two (2) feet of the surface coincide with wetland areas. Moderate development limitations result from water lying three (3) to four (4) feet below the surface. Generally when the water table exceeds five (5) feet in depth, slight to moderate limitations are encountered. Most of Mound has a water table that exceeds five (5) feet in depth.

CULTURAL RESOURCES

The Lake Minnetonka area has many cultural and historical resources that play an important role in the area's rich heritage. Prior to modern settlement, the Lake Minnetonka area was inhabited by Dakota and Ojibwa Indians. Evidence of cultural practices is indicated by earthwork mounds and "burial mounds" that existed through the late 1800's and early 1900's. Although most of these mounds have been heavily disturbed by human settlement and modern construction activity, a few are still intact. The Historical Society of Minnesota, now called the Minnesota Historical Society, recognized in the late 1800's the importance of documenting the mounds that were believed to have been created by early aboriginal peoples. A state-wide study was commissioned and performed by Alfred J. Hill and later by Theodore H. Lewis with assistance from Jacob V. Brower. The findings of this survey are published in the book, "The Aborigines of Minnesota" by N. H. Winchell, 1911. Excerpts from this book on documented sites in Mound follow.

Within the City of Mound, the Hill & Lewis book contains 103 burial mounds that were surveyed a century ago (a copy of diagrams from this book is available at City Hall). Not all of the "burial mounds" contained human remains so it is not wholly accurate to describe them as such. The State Archaeologist Office officially terms them as "earthwork mounds" for this reason. Pre-1900 when there was little development in the area, most of the sites were untouched. As Minneapolis and St. Paul grew, Lake Minnetonka became a popular place for recreation and excursions. Intrigued by this lore, people sought out artifacts from these Indian

cultures. As settlement from Minneapolis pushed further west, development overran most of the shoreline areas where mounds were surveyed. Most of these mounds have been severely impacted by development activity over the years.

Nonetheless, the mounds do receive protection by the State of Minnesota. The Minnesota Private Cemeteries Act, State Statute 307.08 affords all human remains and burials older than 50 years, and located outside of platted, recorded or identified cemeteries, protection from unauthorized disturbance. Any party that knowingly disturbs a site where artifacts are present is subject to felony charges by the State. Public education is then an important role in protecting and preserving any remaining sites.

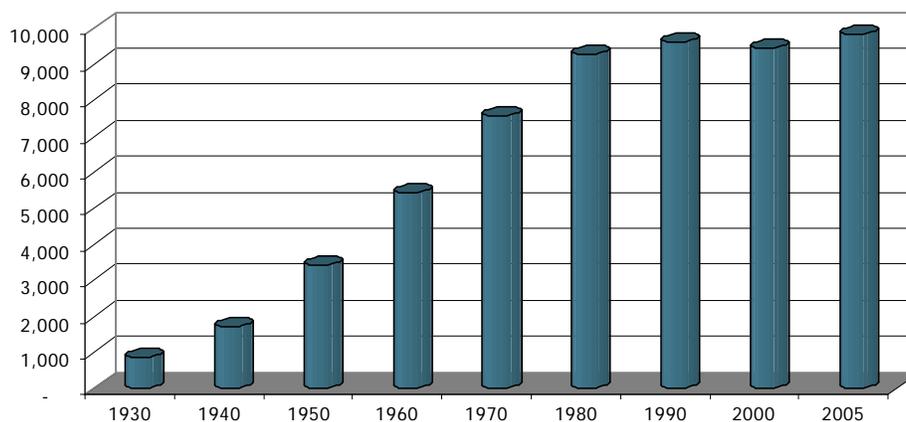
DEMOGRAPHICS

An examination of population and housing characteristics provides information useful for planning for city services and anticipating changing population needs. Data was primarily gathered from the United States Census, the Metropolitan Council, Hennepin County and the City of Mound.

Population

The population in Mound dropped about 2% from 9,634 people in 1990 to 9,435 people in 2000. The Metropolitan Council estimates that population in Mound recovered by 2006 to 9,800. Historical population figures show a large population increase during the community's growth years from 1930 to 1980. After the early 1980's, the population has leveled off with only slight increases each decade until 1990. While the population in Mound dipped between 1990 and 2000, it has risen since then again to 9,800.

City Population 1930 - 2005



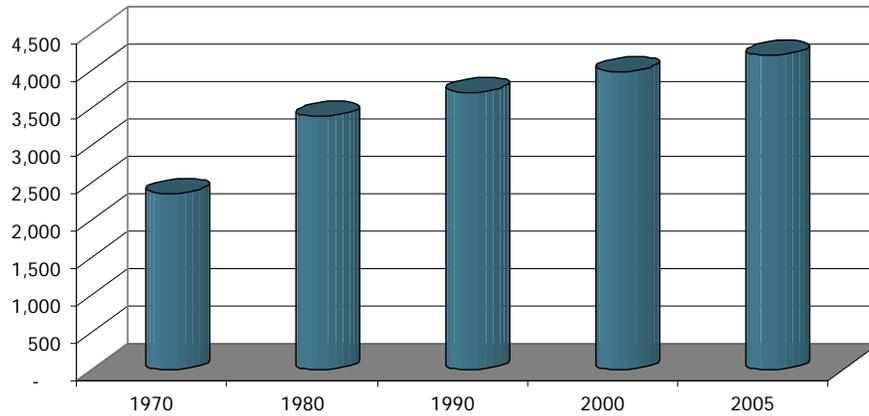
On a regional level, both Hennepin County and the Metropolitan Area are expected to see population increases. It is estimated that the Twin Cities Metropolitan Area will add about 1 million people by 2030.

Households

Over the last decade, the number of households in Mound increased by 7%, or 272 households, while the number residents decreased by 2%. This happened as a result of the continued decrease in the number of people per household. In Mound, the number of people per household dropped from 3.13 in 1990 to 2.37

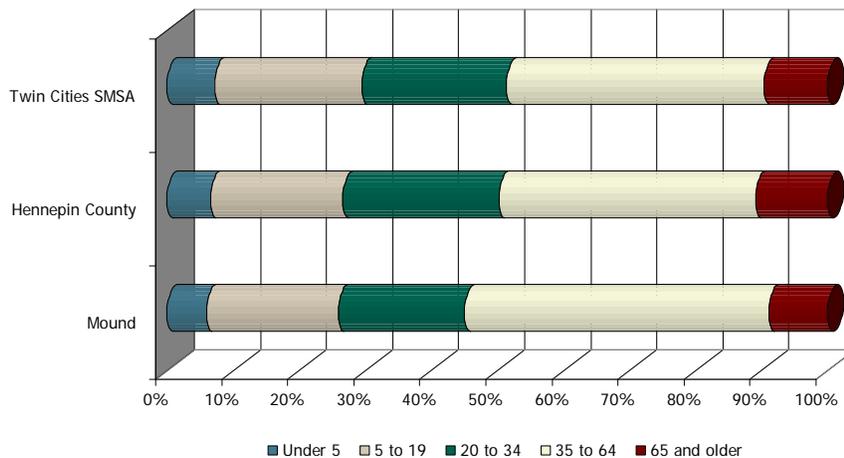
people in 2000. This trend is often attributed to the fact that adults are waiting longer to get married and have children; families are having fewer children; the aging of the baby boom generation who are becoming empty-nester households; and the continued increase in life-spans.

Number of Households 1970 - 2005



The age distribution in the City of Mound is slightly different than the rest of Hennepin County and the Twin Cities Metropolitan Area. Over one-third of the population in Mound is between 35 and 64 years of age, with the median age being 37.5 years.

Age Distribution of Population in 2000

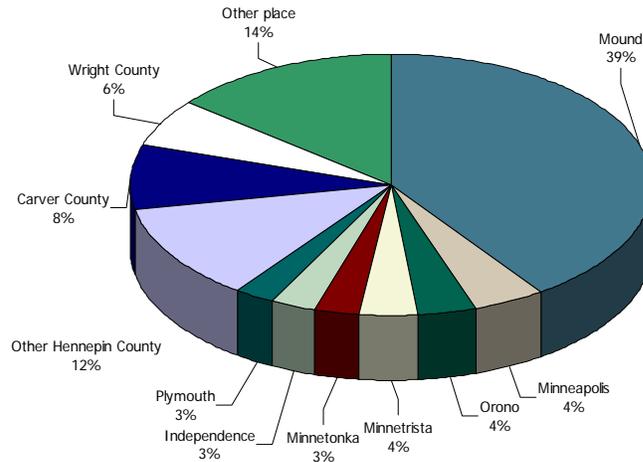


ECONOMIC CLIMATE

While the City of Mound is primarily a residential community, there is a desire to have a stable base of employment to provide opportunities for residents to live and work in the community. According to the 2000 Census, Mound has approximately 1,800 jobs. Approximately 39% of the people working in Mound reside within the community with employees who commute into Mound living in nearby communities, including

Orono, Independence, Minnetrista, Minnetonka, Plymouth and Minneapolis. There are also a number of employees who travel from Carver and Wright Counties.

Residence of Mound Employees



Since the closure of the Tonka Toys plant in 1984 with a loss of 814 jobs, the City has found it difficult to get back to its 1980 employment number. The Balboa Business Center, created on the former Tonka Toys site, has attracted business tenants to occupy most of the space. Businesses include a variety of manufacturing, warehousing and service businesses.

The Metropolitan Council estimates that additional employment growth will occur in Mound. The growth rate is estimated to be modest business expansion in the service and retail sectors. Development forecasts anticipate employment will grow to 2,100 by 2030. The redevelopment of Downtown Mound should assist with the development of additional employment opportunities.

Approximately 80% of those over 16 years of age are in the labor force with about 33% in management or professional occupations and 29% in sales and office occupations. More than half of Mound residents commute more than 30 minutes for their job, which is greater than the rate for Hennepin County and the Twin Cities Metropolitan Area. About 13% of Mound residents work in Mound, other places of employment include Minneapolis, Minnetonka, Eden Prairie, and Plymouth. According to the 2000 Census, the median household income in Mound was \$54,304. This is slightly higher than Hennepin County’s median household income of \$51,711 but lower than \$60, 671 for the Twin Cities region.

FORECASTS

The 2030 Regional Development Framework includes forecasts for households, population and employment for the years 2010, 2020, and 2030. These forecasts were developed with input from the City of Mound and

are updated periodically. Forecasts are based on historic trends, 2000 Census data, current demographic data, annual monitoring of building permits, employment data and comprehensive plans.

Table 2.1 Mound Forecasts

	Revised Development Framework				
	1990	2000	2010	2020	2030
Population	9,634	9,435	10,400	11,000	11,400
Households	3,710	3,982	4,350	4,600	4,800
Employment	1,849	1,709	1,860	2,020	2,170

EDUCATIONAL SYSTEM

Mound is part of the Westonka Public School District #277, which was consolidated in 1917. It serves the cities of Mound, Minnetrista, Orono, Navarre, Spring Park, Shorewood, Independence, and Lyndale. The District offers a number of community education and service programs including:

- Early Childhood Family Education (ECFE)
- Westonka Adventure Club
- Youth development programs
- Recreation and enrichment classes
- Adult Basic Education GED
- Programs for disabled adults
- Senior Citizen Programs

The Westonka School system has 2,300 students in kindergarten through grade 12, served by 175 teachers and 100 support staff. The school district has four schools, two of which are in Mound. The Grandview Middle School for 5th, 6th, and 7th grades is located at 1881 Commerce Blvd. Shirley Hills Elementary School serves students in pre-kindergarten to grade 4 and is located at 2450 Wilshire Blvd.

In addition to the two public schools, Our Lady of the Lake School at 2411 Commerce Boulevard offers private schooling for preschool through eighth grade.

COMMUNITY FACILITIES AND SERVICES

City Hall

City Hall is centrally located in Mound at 5341 Maywood Road. An addition to the building was completed in 1990 to meet operational needs. There are no plans for expansion of City Hall at this time.

Police and Fire Services

The Mound Police and Fire Departments operate from the Public Safety Facility located at the corner of Maywood Road and Wilshire Boulevard which was opened in 2003.

The Mound Police Department operates with a staff of 13 full-time persons. Services are provided within the City limits 24 hours per day. Approximately 20,000 calls are handled each year. The Department offers a number of community services, programs, and in-house training. Programs include:

- D.A.R.E.
- Citizens Academy
- Summer Safety
- Bicycle Patrol
- Juvenile Citizens Academy
- Crime Free Multi-housing
- Crime Prevention
- Juvenile Conferencing
- Offensive Behavior
- In-house training for defense tactics to officers

The Department is also part of the Southwest Drug Task Force, which is a joint effort of 10 communities and Hennepin County.

The Mound Fire Department is a 40 member volunteer staff with a full-time chief that has been in existence since 1923. Fire and rescue services are provided to Mound and the surrounding communities of Minnetrista, Spring Park, Shorewood and Minnetonka Beach.

Library

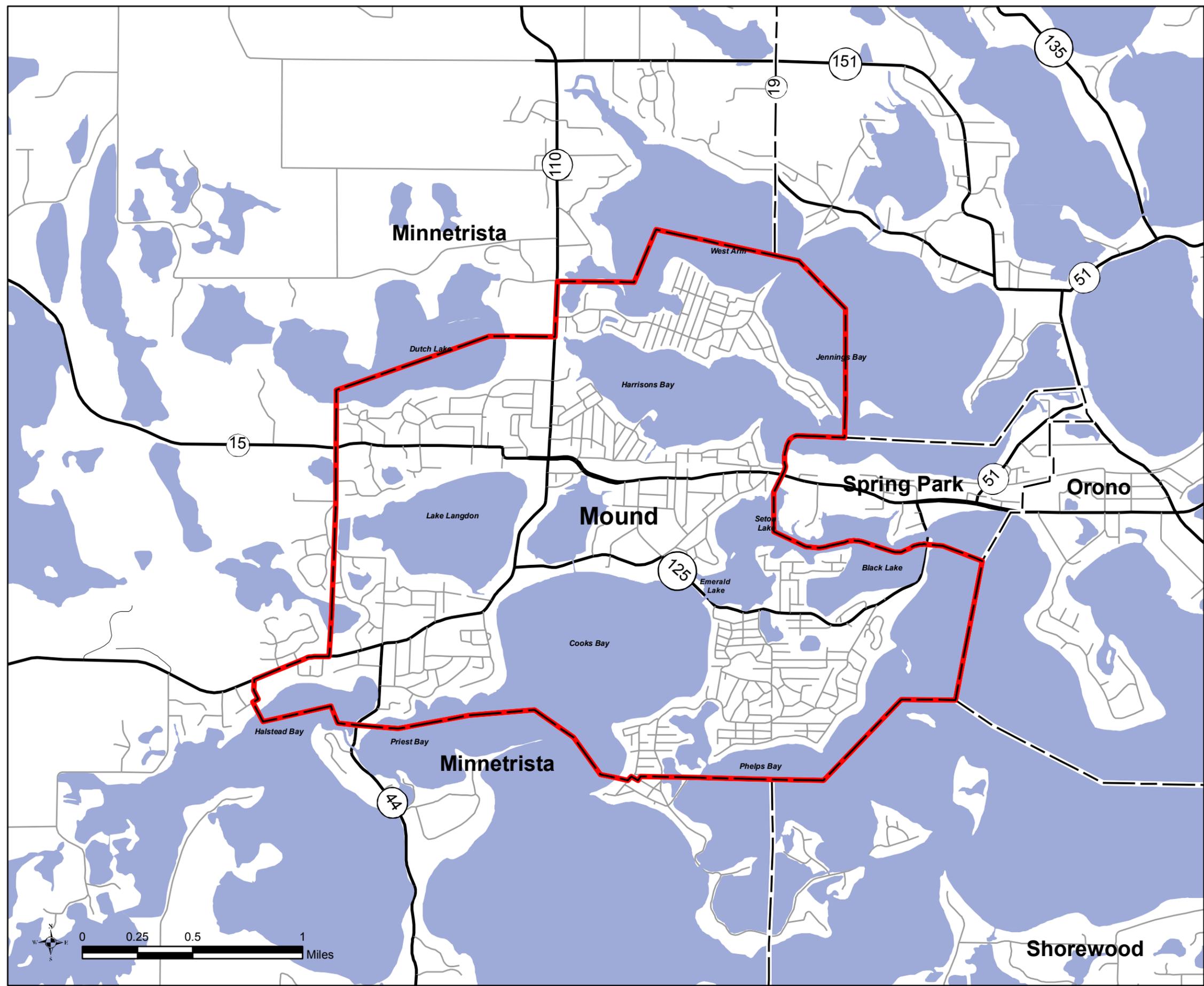
The Hennepin County Library System's Westonka Branch is located at 2079 Commerce Blvd. The branch is one of the County's 23 community libraries.



Comprehensive Plan

Legend

-  Mound
-  Municipal Boundaries



Regional Setting
Figure 2.1

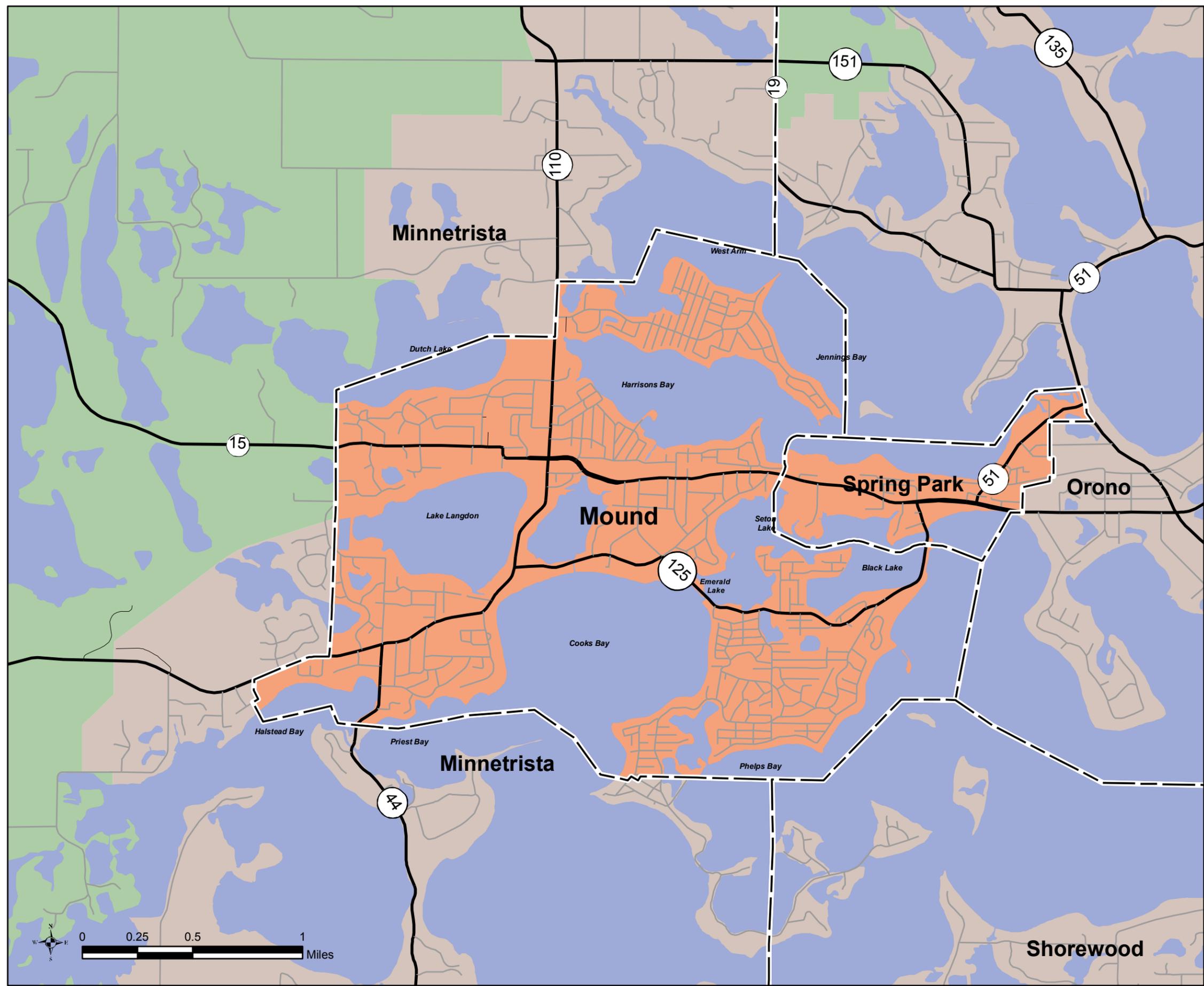
February 20, 2007
Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR



Comprehensive Plan

Legend

- Developed Area
- Developing Area
- Rural Center
- Rural Residential
- Diversified Rural
- Agricultural Area
- Jurisdictional Boundary
- Public Waters Inventory

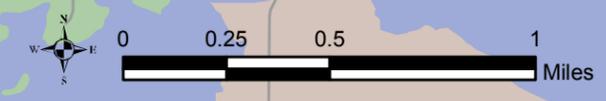


Metropolitan Council Regional Development Framework Designations

Figure 2.2

February 20, 2007

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

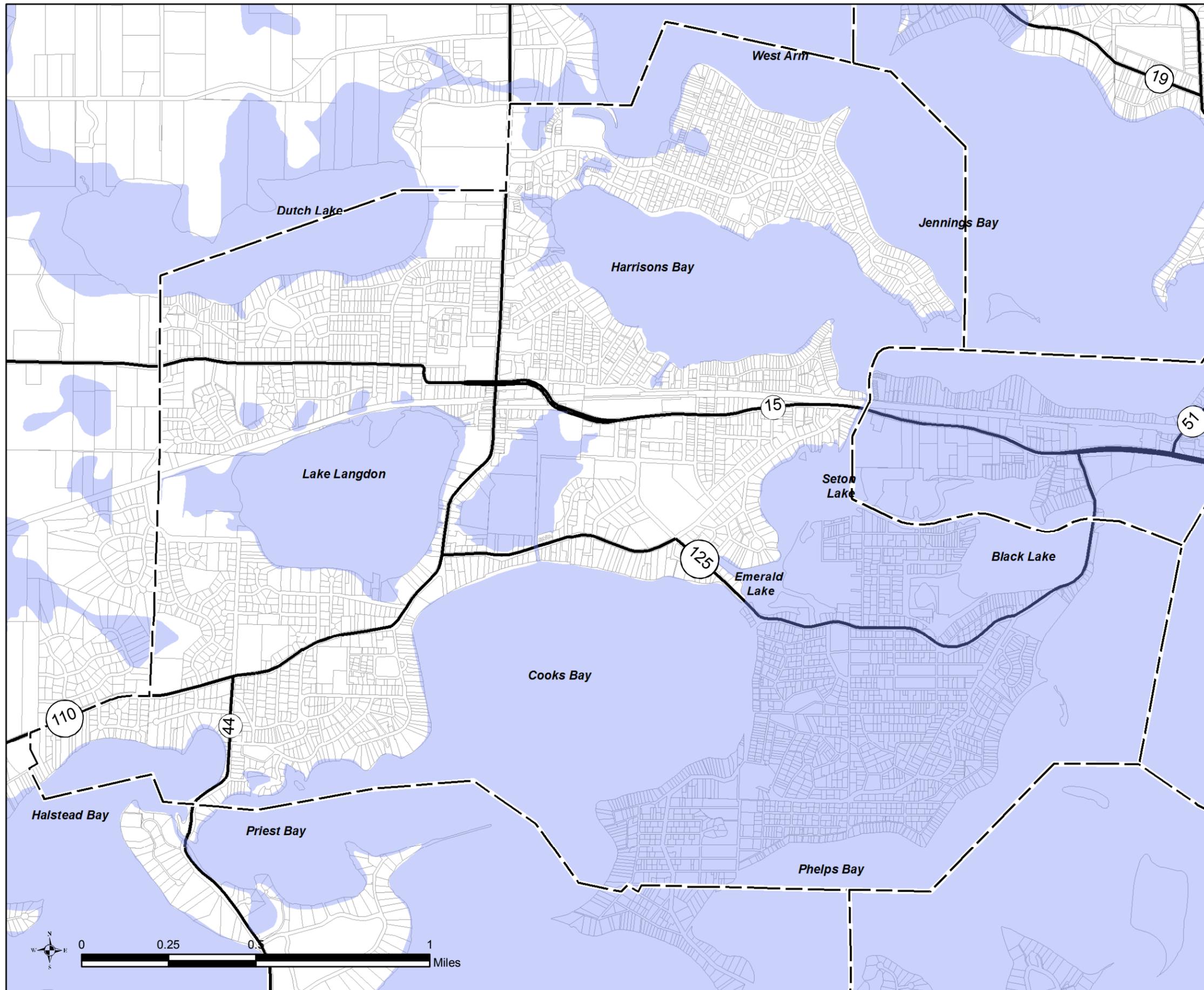




Comprehensive Plan

Legend

-  100 Year Floodplain
-  Parcels
-  Jurisdictional Boundary



Floodplain

Figure 2.3

February 20, 2007

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

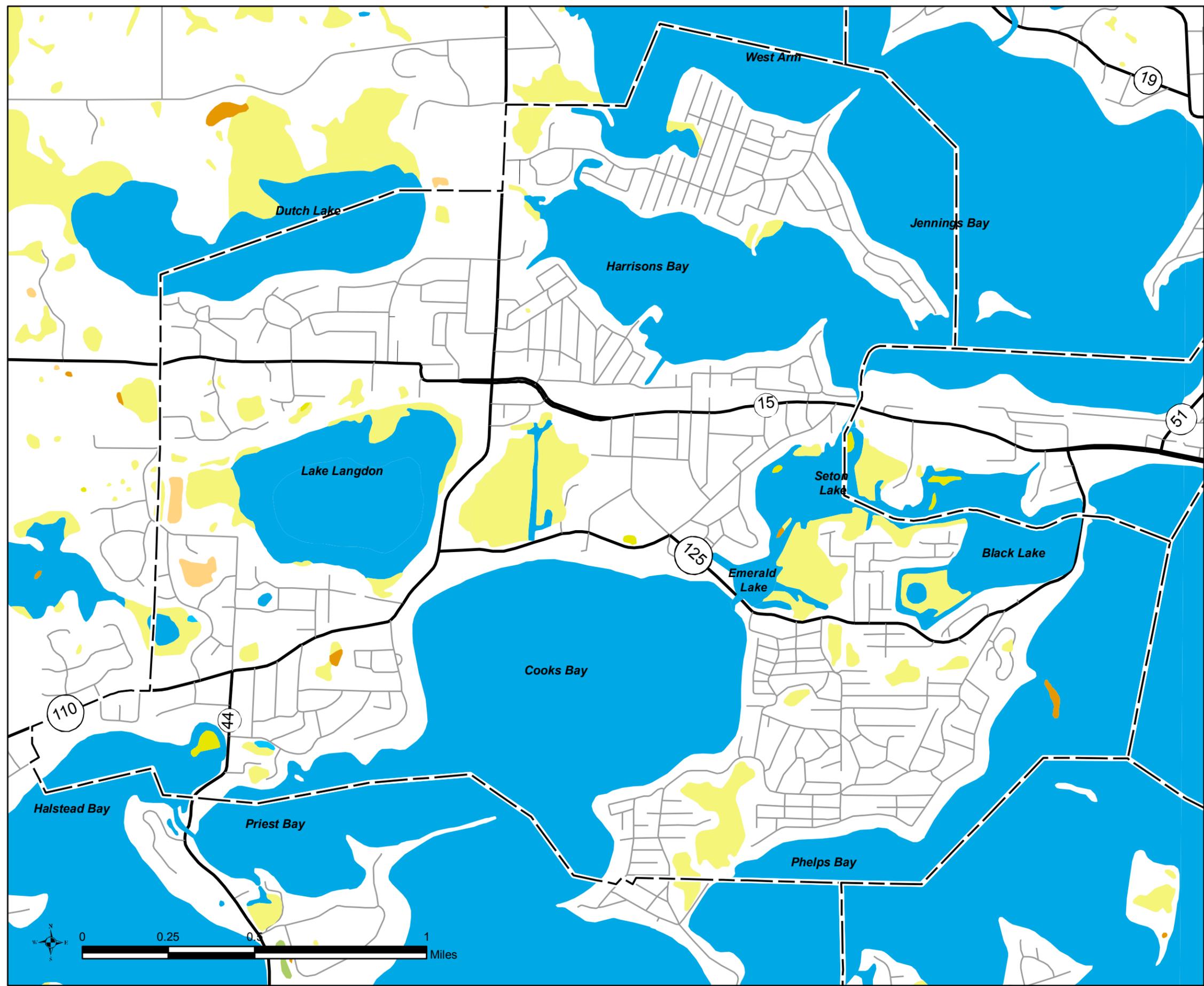
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CONSULTING ENGINEERS & ARCHITECTS



Comprehensive Plan

Plan



Legend

- Shallow marsh
- Deep marsh
- Shrub swamp
- Wooded swamp
- Wet meadow
- Riverine
- Seasonally flooded basin or flat
- Shallow open water
- Jurisdictional Boundary



Wetlands

Figure 2.4

February 20, 2007
Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

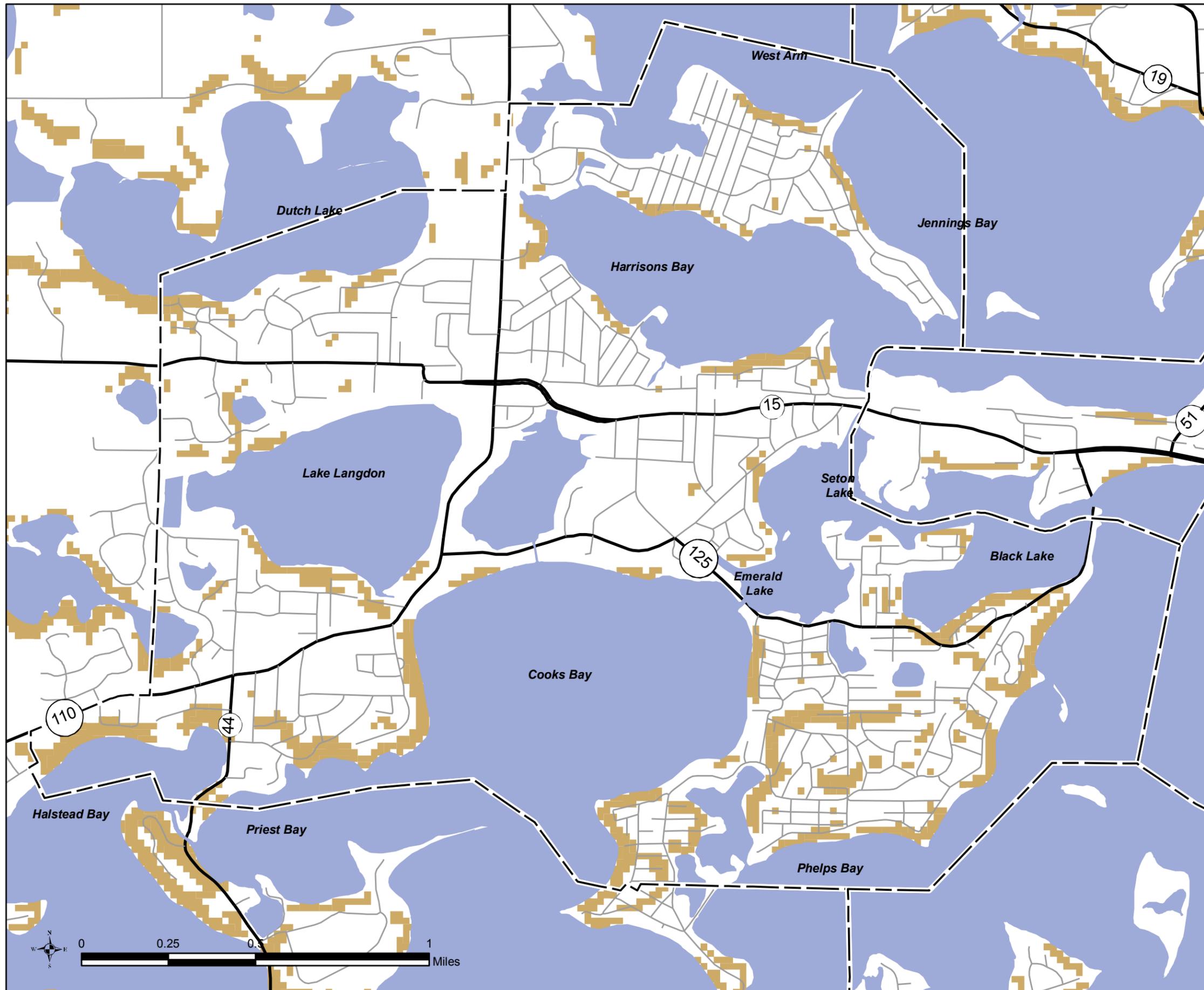


Comprehensive Plan

Legend

 Slopes Greater than 18%

 Jurisdictional Boundary



Steep Slopes

Figure 2.5

February 20, 2007

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

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CONSULTING ENGINEERS & ARCHITECTS

VISION FOR THE FUTURE

In order to effectively plan, a community must define its aspirations for the future. A community's "Vision" statement captures those aspirations and provides a basis from which the plan and strategic initiatives can be identified. Mound's Vision Statement was formed based on previous Comprehensive Plans and on discussions with the Planning Commission; Parks, Open Space and Docks Advisory Commission; and City Council. The Vision Mound defines for its future is:

Located on the western shores of Lake Minnetonka, Mound is a full-service community that recognizes and appreciates its unique setting. Its strong neighborhoods, quality schools, walkability and lake access make it a desirable place for residents of all ages. In the heart of the community, Downtown is easily accessible with places for people to live, shop, work and gather. Our commitment to preserving the natural environment ensures everyone can enjoy the community's four lakes and numerous wetlands, varied topography, open spaces and parks.

A set of goals and policies was identified to provide additional clarity for the Vision. These goals and policies highlight the elements most important to the community and are critical to the achievement of the community's Vision. The goals articulate Mound's broad vision for each element of the 2030 Comprehensive Plan; whereas the policies provide more specific directions the community will follow in order to attain the goal. These goals and policies are repeated as appropriate within other chapters of the Comprehensive Plan.

In addition to serving as the basis for the development of this plan, the Vision and Goals can be used to evaluate ideas and proposals that may not have been addressed or may be the result of changes not anticipated by the Plan. To ensure that the vision, goals and policies still capture the community's aspirations for the future, the community may want to review its Comprehensive Plan every few years.

Land Use

Goal: Create a land development pattern which fulfills social and economic needs while enhancing and preserving natural resources.

Policies:

1. Establish appropriate residential land use densities to accommodate changing household sizes & types, development patterns, housing types and aesthetic values.
2. Promote land use pattern changes that are compatible and transitional with existing development patterns.
3. Encourage improvement and redevelopment of existing commercial areas to enhance available services, provide employment opportunities and expand the tax base.
4. Support the redevelopment of older business areas through close coordination with the business community and by undertaking public action when feasible, including but not limited to, HRA activities, tax increment financing and the provision of public improvements.
5. Promote a mix of downtown businesses including retail, offices, entertainment and services. Maintain the downtown and its periphery as the focus of Mound's commercial activity.
6. Support the continued operation and enhancement of the community's employment centers but discourage the expansion of these areas into adjacent residential neighborhoods.

7. The City Council, Planning Commission and Park, Open Space, and Docks Advisory Commission shall review and analyze publicly owned land to ensure that it is needed for public purposes. Parcels that are deemed to serve no current or future public purpose should be considered for removal from the City inventory and returned to the tax rolls.
8. Monitor and enforce ordinances, standards and programs that affect land use to ensure that they are reflective of community policy.
9. Support the development of mixed use areas with housing, retail, office, entertainment and institutional uses which can take advantage of regional investments in transportation such as major roadways, transit and trails.
10. Promote wise shoreland management practices consistent with Minnesota Department of Natural Resources regulations and reflective of Mound's existing land use patterns.
11. Preserve, through public, private and/or partnerships with the State Historic Preservation Office and Westonka Historical Society, buildings and archaeological sites that are deemed to be historically significant.
12. Continue to require City Staff analysis of all new site plans and other development proposals in order to identify any impacts to the community's remaining natural resources and to identify potential mitigation actions.
13. Ensure that the design of new development and redevelopment projects protect any significant natural, cultural, historic and/or archaeological features.
14. Ensure that new development and redevelopment projects on sites with sensitive natural features, such as poor soils, high ground water, poor drainage, or steep slopes, are properly managed to prevent potential hazards to the site and/or adjacent properties.

Housing

Goal: Promote and encourage the provision of life-cycle housing opportunities for all residents, supporting creative multi-family housing while emphasizing the construction and maintenance of high quality, single family dwelling units.

Policies:

1. Encourage a mixture of life-cycle housing types to provide for all stages of life while maintaining a predominately single family housing base throughout the city.
2. Recognize unique historical platting practices in certain areas by allowing some flexibility in the application of current bulk/area regulations. Flexibility may be considered when it can be demonstrated that the integrity and intent of the comprehensive plan is not compromised.
3. Promote ongoing maintenance and orderly appearance of residential structures and surrounding yard areas.
4. Monitor and enforce ordinances and policies that affect housing to ensure that they are reflective of community policy.
5. Ensure infill and redevelopment of housing areas are designed appropriately to integrate into the surrounding neighborhood.
6. Promote and support the development of new affordable housing units to meet the community's share of the regional affordable housing needs as well as the community's affordable housing goals.

Park, Open Space and Recreation

Goal: Provide a variety of active and passive recreational opportunities to enhance all residents' quality of life.

Policies:

1. Provide a park, open space and recreation system that is accessible and available for use by all Mound residents.
2. Coordinate the expenditure of local funds for park, open space and recreation facilities with the provision and development of other municipal services.
3. Support cooperative efforts between the City and the Westonka Public Schools District and the Three Rivers Park District in the development and usage of recreational lands and facilities.
4. Ensure development of the park, open space and recreation system is consistent with the future land use plan for Mound.
5. Continue to seek assistance from community groups in the planning, design and development of recreational facilities.
6. Promote a balanced park and open space system which includes neighborhood parks/playgrounds, community parks, community playfields, lakeview parks, public natural open spaces, special use facilities, school parks and private open spaces.
7. Support continued neighborhood and public access to Lake Minnetonka for Mound residents through public lake access points, public lakeview parks, and the Mound Docks & Commons Program.
8. Monitor and enforce ordinances and programs that affect parks, open spaces and recreation facilities to ensure that they are reflective of the community's goals and policies.
9. Create a connected Mound pathways system that supports walking and biking, including additional recreational trails, bikeways and sidewalks where feasible, to enable convenient connections between important community facilities, including parks, open spaces, city buildings, schools and commercial areas.
10. Continue to integrate the preservation and celebration of the community's natural and historic resources into the park, open space and recreation system where feasible.

Transportation

Goal: Ensure the development of a transportation system that provides convenient and effective multi-modal connections within Mound and to adjacent municipalities, the remainder of the Twin Cities Metropolitan Area and greater Minnesota.

Policies:

1. Comprehensive Transportation Planning – Approach transportation in a comprehensive manner by giving attention to all travel modes and related facilities, linking transit with appropriate land uses and densities, and by mixing or clustering compatible land use activities to reduce the need for and costs of future expansion of the transportation system.
2. Transportation Improvement – Improve the existing transportation system to provide a safe, cost effective, efficient and multi-modal future transportation system that supports car, transit, pedestrian, bicycle, and truck transportation for the movement of people and goods and services in the community.

3. Existing Infrastructure Preservation & Maintenance – Preserve and maintain the existing transportation infrastructure to protect the existing significant investment, to increase its efficiency, and delay the need for major system improvements or expansions, using the Capital Improvement Plan as a key planning & investment tool.
4. Transit/Alternative Modes of Transportation – To prevent and reduce congestion on roadways, the City should promote expansion of alternate and/or integrated transportation methods, including transit, park & ride facilities, carpooling, biking and walking.
5. Transportation & Economic Development Link – Promote a transportation system that contributes to the economic vitality of the community by connecting people to work, shopping, schools, and other activity generators/attractions and supports growth of commercial and industrial uses.
6. Regional Transportation Planning – Cooperate on a regional level in the planning and development of the future metro transportation system, including future transit services, by coordinating efforts with multiple jurisdictions, public and private transit providers and agencies at all government levels to ensure that services meet the functional needs of all.
7. Regional Traffic Management – Cooperate at the local, state, and regional levels to reduce traffic congestion and safety concerns on regional transportation corridors.
8. County Capital Improvement Plan – The City should continue to work with the County’s elected and appointed officials to include County road reconstruction projects on the County’s Capital Improvement Plan to address needed reconstruction and potential trails along the roadways when improved.
9. Regional Transportation Funding – Encourage a balanced approach to regional financing of transportation and other community needs at the local level based on current availability of services and facilities and maintenance of existing infrastructure.
10. Multi-jurisdictional Coordination of Roadway Projects – Continue to coordinate future road construction and reconstruction projects with all utility service providers and Hennepin County to ensure efficient repair/replacement and avoid duplicate costs.
11. Capital Improvement Plan – Maintain a Capital Improvement Plan that contains elements for reconstruction of the roadway system, with scheduled maintenance included in annual budgets. Street maintenance should include routine patching, crack filling, and storm sewer cleaning. Implement a schedule for roadway maintenance and reconstruction (e.g. seal coating every 4 to 5 years, complete reconstruction or mill/overlay every 15 to 20 years), street widening/realignment, etc.
12. Zoning and Subdivision Ordinance Update – Update the Zoning and Subdivision Ordinances to be consistent with the Transportation Plan.
13. Right-of-Way Dedication – Require right-of-way dedication along county and local roads to meet future roadway capacity needs as redevelopment is proposed and platted. Dedication requirements for county roads should be consistent with the future roadway typical section as agreed to between the City of Mound and Hennepin County.
14. Development Driven Improvements – Collaborate with developers to construct needed transportation improvements prior to development. Utilize developer agreements as a tool to ensure improvements are constructed as agreed upon in the platting or development process. In addition, when Tax Increment Financing (TIF) money is used, adjacent roadways and intersections that are to be impacted by the development should be included as part of the TIF Improvement District.

15. Non-Development Driven Improvements – Non-development driven transportation improvements should be prioritized and programmed in the Capital Improvement Plan.
16. Assessment Policy – Establish an assessment standard for Major Collector and Minor Arterial roadways to establish expectations and ensure consistent application.
17. Traffic Impact Study Policy – Establish a standard in the City’s ordinances outlining when a traffic impact study should be conducted, including acceptable information to be contained within the study.

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LAND USE

A community's land use patterns are typically one of the most significant defining physical elements in its landscape. The mix, location, form and relationship of adjacent and nearby land uses greatly affect the community's physical environment and social interaction. Typical of a Lake Minnetonka community, Mound's land use patterns and mix are dominated by residential uses. The existing development pattern is the result of its historical development as a lakeshore cabin community of small residential lake lots, narrow street rights-of-way, and substantial areas of park commons. This established pattern results in future land use and redevelopment issues that are unique to Mound and generally not found in other suburban communities.

The Land Use Plan provides a general concept for land use types, intensities and locations through the year 2030. Every parcel within the City's limit is placed into a specific land use category. The Land Use Plan seeks to reinforce desirable land use patterns, identify places where change is needed and guide the form and location for future land use changes. The Land Use Plan consists of the following components:

- The *Goal and Policies* section summarizes the community's related goals and policies established regarding Land Use.
- *Land Use Planning Background* summarizes the analysis of existing land use, the previous Comprehensive Plan's future land use and the forecasts that were used in this planning effort.
- *Future Land Use Plan* provides a general description of all land use categories and the Official Land Use Map which shows the land uses assigned to each parcel of land.
- *Staging of Development and Redevelopment* section summarizes the timing through the year 2030.
- *Housing* analyzes the community's existing housing stock, summarizes issues, and identifies goals and policies.
- *Resource Protection* describes the city's policies for the protection of solar access, historic preservation, aggregate resources and designated critical areas.

GOAL AND POLICIES

As land use decisions of property owners can be ever-changing, the plan should be dynamic enough to respond to the needs of the community. This is not to say that the plan should accommodate every request. The goals and policies of the Land Use Plan should be used to ensure that as requests for Comprehensive Plan changes are considered, the community's overall vision is not compromised.

Land Use Goal

Create a land development pattern which fulfills social and economic needs while enhancing and preserving natural resources.

Policies:

1. Establish appropriate residential land use densities to accommodate changing household sizes & types, development patterns, housing types and aesthetic values.

2. Promote land use pattern changes that are compatible and transitional with existing development patterns.
3. Encourage improvement and redevelopment of existing commercial areas to enhance available services, provide employment opportunities and expand the tax base.
4. Support the redevelopment of older business areas through close coordination with the business community and by undertaking public action when feasible, including but not limited to, HRA activities, tax increment financing and the provision of public improvements.
5. Promote a mix of downtown businesses including retail, offices, entertainment and services. Maintain the downtown and its periphery as the focus of Mound's commercial activity.
6. Support the continued operation and enhancement of the community's employment centers but discourage the expansion of these areas into adjacent residential neighborhoods.
7. The City Council, Planning Commission and Park, Open Space, and Docks Advisory Commission shall review and analyze publicly owned land to ensure that it is needed for public purposes. Parcels that are deemed to serve no current or future public purpose should be considered for removal from the City inventory and returned to the tax rolls.
8. Monitor and enforce ordinances, standards and programs that affect land use to ensure that they are reflective of community policy.
9. Support the development of mixed use areas with housing, retail, office, entertainment and institutional uses which can take advantage of regional investments in transportation such as major roadways, transit and trails.
10. Promote wise shoreland management practices consistent with Minnesota Department of Natural Resources regulations and reflective of Mound's existing land use patterns.
11. Preserve, through public, private and/or partnerships with the State Historic Preservation Office and Westonka Historical Society, buildings and archaeological sites that are deemed to be historically significant.
12. Continue to require City Staff analysis of all new site plans and other development proposals in order to identify any impacts to the community's remaining natural resources and to identify potential mitigation actions.
13. Ensure that the design of new development and redevelopment projects protect any significant natural, cultural, historic and/or archaeological features.
14. Ensure that new development and redevelopment projects on sites with sensitive natural features, such as poor soils, high ground water, poor drainage, or steep slopes, are properly managed to prevent potential hazards to the site and/or adjacent properties.

LAND USE PLANNING BACKGROUND

Land use planning for the City of Mound is focused primarily on redevelopment within the community as there is very little undeveloped land remaining. For this reason, Mound is designated as a Developed Community in the Metropolitan Council's 2030 Regional Development Framework.

Existing Land Use

Existing land use, depicted in Figure 4.1, was developed based on the analysis from the Metropolitan Council, information from Hennepin County's parcel database, reviews of aerial photography, and field surveying by

staff. A number of land use categories were established to aggregate similar land use types. Table 4.1 below identifies the existing land use, amount of acres in that land use and what percent of the total it represents. Please note that all acreages are “net” where arterial rights-of-way, water bodies, wetlands and public parks have already been removed.

Table 4.1 Existing Land Use

Land Use		Acres	Percent of Total
Low Density Residential	Primarily single-family attached and detached housing with a density of 1 to 6 units per acre.	1,017	67.1%
Medium Density Residential	Multi-unit townhomes, four-plexes and smaller scale apartments at a density of 7 to 12 units per acre.	7	0.5%
High Density Residential	Multi-building apartment complexes with a density more than 12 units per acre.	29	1.9%
Neighborhood Commercial	Retail commercial and office uses with a neighborhood scale.	8	0.5%
Pedestrian District	Mixed use area in downtown core with retail, office and attached residential housing, and public uses.	9	0.6%
Destination District	Mixed use area on edges of pedestrian district which are primarily retail, office or service oriented but that can include medium or high density residential.	24	1.6%
Linear District	Mixed use area along south of downtown along Commerce Boulevard which has mix of medium density residential, institutional and office uses.	22	1.5%
Industrial	Manufacturing or processing of products and warehousing facilities.	14	0.9 %
Public/ Institutional	Comprises governmental, educational, healthcare or religious facilities.	88	5.8 %
Park	Areas used for active recreation areas, including playgrounds, ball fields, and public lake access	64	4.2% %
Open Space	Areas used for resource protection or buffer; unorganized public recreational activities such as trails; or the preservation of unaltered land in its natural state for environmental or aesthetic purposes.	40	2.6 %
Public Water or Wetlands	Permanently flooded open water, river and streams and wetlands included in the National Wetland Inventory (NWI).	121	8.0 %
Undeveloped	Land not currently used for any purpose and lying idle.	74	4.9 %
Total		1517	100.0 %

Forecasted Growth

The 2030 Regional Development Framework includes forecasts for households, population and employment for the years 2010, 2020, and 2030. These forecasts were developed with input from the City of Mound and are updated periodically. Forecasts are based on historic trends, 2000 Census data, current demographic data, annual monitoring of building permits, employment data and comprehensive plans. The Land Use Plan proposed in Figure 4.2 was developed to accommodate these forecasts.

Table 4.2 Mound Forecasts

			2006	Regional Development Framework		
	1990	2000	Estimate	2010	2020	2030
Population	9,634	9,435	9,800	10,400	11,000	11,400
Households	3,710	3,982	4,218	4,350	4,600	4,800
Employment	1,849	1,709	1,691	1,860	2,020	2,170

FUTURE LAND USE PLAN

The future land use plan, shown in Figure 4.2, builds on the community’s previous planning efforts. The community continues to be focused on maintaining a predominantly single-family residential character while encouraging multi-family housing, commercial services, and mixed use areas in downtown, along major corridors and at major nodes.

The land use categories used in this Comprehensive Plan are very similar to the previous plan. Minor changes include changing “General Commercial” to “Neighborhood Commercial” to better describe the character of commercial being sought in those areas. This land use plan also further clarifies the previous “Park” and “Conservation” categories into “Park,” “Open Space,” and “Public Waters or Wetlands” categories, thereby more closely aligning with the Metropolitan Council’s land use categories. Table 4.3 below identifies the future land use categories, the amount of acres in each category and what percent of the total it represents. Please note that all acreages are “net” where arterial rights-of-way, water bodies, wetlands and public parks have already been removed.

Table 4.3 Future Land Use

Category	Description	Acres	Percent of Total
Low Density Residential	Density range from 1 to 6 units per acres. This category accounts for the larger percentage of the housing in Mound and most of the land use. Typical housing types include single family attached and detached when within the density range.	1,038	68.5 %
Medium Density Residential	Density range from 7 to 12 units per acre. Typical housing stock includes multi-unit townhomes, four-plexes, and smaller scale apartment and assisted living facilities. To minimize the potential impacts of these medium density uses to single family	45	3.0 %

Category	Description	Acres	Percent of Total
	neighborhoods, these uses are generally located along arterials and collector streets.		
High Density Residential	Density range in excess of 12 units per acre and accommodates multi-building apartment and assisted living facilities. These are intensive residential uses that are appropriate along arterials and collector streets.	29	1.9 %
Neighborhood Commercial	Provides a variety of retail commercial and office uses that have a neighborhood scale. They are located along collector and arterial roadways to minimize the impact on the adjacent residential neighborhoods.	17	1.1 %
Pedestrian District	A mixed use area at the core of downtown. It is an intense downtown area with a mix of retail, office, and attached residential housing uses. Other buildings with a pedestrian orientation include public, multi-unit residential, entertainment, retail commercial and office. Residential development is intended to be medium to high density. The pedestrian district incorporates traditional downtown planning techniques to encourage a higher standard for development.	18	1.2 %
Destination District	Comprises commercial areas which are on the edges of the pedestrian district. This district gains its strength from convenient auto access off of County Roads 15 and 110. The types of uses in the destination district are primarily retail, office or service oriented. Portions of the district off of CSAH 15 may be include medium or high density residential development.	25	1.6 %
Linear District	Stretches along Commerce Blvd. from the south side of the pedestrian district to Mound Bay Park. This district provides for a mix of medium density residential, institutional, and office uses.	29	1.9 %
Industrial	Limited to the Balboa Business Center and adjacent lands for business, assembly, manufacturing, wholesale, and storage uses.	14	0.9 %
Public/ Institutional	Includes city, school, church, and other public and quasi-public facilities and land.	77	5.0 %
Park	Areas used for active recreation areas, including playgrounds, ball fields, and public lake access	64	4.2 %
Open Space	Areas used for resource protection or buffer; unorganized public recreational activities such as trails; or the preservation of unaltered land in its natural state for environmental or aesthetic purposes.	40	2.7 %
Public Waters/	Permanently flooded open water, river and streams and wetlands	121	8.0 %

Category	Description	Acres	Percent of Total
Wetlands	included in the National Wetland Inventory (NWI).		
Total		1,517	100.0 %

STAGING OF DEVELOPMENT AND REDEVELOPMENT

As a developed community, Mound will most likely experience only a limited amount of growth through the year 2030. Most of the growth will occur through redevelopment as few of the 74 undeveloped acres are developable due to site conditions. Table 4.4 below summarizes the anticipated household growth due to new development and redevelopment. As this table shows, the overall net density for the City of Mound will be between four and nine units per acre. The amount of redevelopment is difficult to predict as it is hard to know the timing of the private sector. Most of the new housing units will be constructed in redevelopment projects as there are a limited number of low and medium density undeveloped parcels. Additional information about each of the potential redevelopment areas is further described below.

Table 4.4 Anticipated Household Growth

Land Use District	Developable/ Redevelopable Acres*	Percent Residential	Units Per Acre			New Units by 2030		
			Low	Mid	High	Low	Mid	High
Low Density Residential	21	100%	1	3.5	6	21	73	126
Medium Density Residential	20	100%	7	9	12	140	180	240
Pedestrian	18	50%	7	12	20	63	108	180
Destination	12	50%	7	12	20	42	72	120
Linear	10	60%	7	9	12	42	54	72
Total	81					308	487	738

* Please note that all acreages are “net” where arterial rights-of-way, water bodies, wetlands and public parks have already been removed.

Pedestrian District

The primary focus of the City’s redevelopment effort is currently focused on the Pedestrian District. This redevelopment is currently underway in a development proposed by Mound Harbor Renaissance (MHR). This development is proposed to occur in multiple phases between 2005 and 2010. The development plan proposed by MHR consists of condo/apartment units, townhome units, retail, office, service, and a farmers market. Residential development in the Pedestrian District is intended to be medium to high density.

The redevelopment of this area is being guided by an effort called “Mound Visions.” Mound Visions began in 1991 when the City began to explore ways to strengthen its downtown business community. For some time, the downtown has struggled to realize its full potential, not because of the efforts of private businesses, but

largely due to the lack of image, connectivity, and pedestrian appeal. Early efforts focused on general beautification, façade improvements, and limited streetscape improvements. Through this exercise, the community learned it needed much more than aesthetics for a successful downtown. Mound Visions incorporates a comprehensive approach of planning, design and implementation projects that will involve both public and private entities. Up front public investment plays a key role to stimulate the private redevelopment efforts. The Mound Visions Plan identified four major public projects to spur redevelopment which have been completed: the dredging of Lost Lake Canal, relocation of Auditors Road and County Road 15, relocation of the post office and the creation of the Lost Lake Greenway.

The Mound Visions plan establishes five basic themes for redevelopment to ensure a connected fabric:

- *Urban Form* - Downtown will have an urban environment that celebrates the pedestrian and accommodates the automobile. Human-scale street, sidewalk, and parking spaces will be created to be functional, interesting, dynamic and lasting.
- *Concentrated Development* - Downtown development will grow-up not out. Multi-level buildings with structured parking will house uninterrupted retail on the ground level with office and living above, creating an environment that is walkable, lively and dynamic.
- *Multi-faceted* - Downtown will be a multi-faceted destination including retail, office, housing and civic uses woven into the context of transit, recreation and environmental integrity.
- *Linkages* - Pedestrian, bike, boat and bus linkages will be created or strengthened within downtown and between downtown and surrounding neighborhoods and the broader region.
- *Place Appropriate* - Downtown is situated in a rich and beautiful natural environment. Future development will be creatively integrated with it to give people a holistic appreciation of the downtown and improve the integrity of ecological systems.

Figure 4.3 Mound Visions Downtown Master Plan



Linear District

The Linear District is located along Commerce Boulevard (CSAH 110) connecting the Pedestrian District to Mound Bay Park. It is an important corridor because it serves as an entrance to Downtown Mound from the south and west. The Linear District currently has a mixture of uses, including various types of residential, commercial, and institutional. The area is squeezed between Lake Langdon, Lost Lake and Cooks Bay and contains some lots that are shallow in depth.

It is anticipated that the Linear District will redevelop with small projects at various times rather than one large redevelopment effort. Redevelopment as a single project would likely be challenging as there are a number of existing uses that are likely to remain which separate other properties that have the potential for redevelopment.

It is intended that the Linear District continue to contain a mixture of residential, commercial and institutional uses. The residential uses are intended to be primarily medium density residential. Commercial development in this area is intended to be more office-oriented to take advantage of its attractive setting or retail establishments related to the nearby lake access and Mound Bay Park, such as bait or gift shops. Community scale, automobile oriented uses, are intended to be in the Destination District.

Rather than the specific uses in the Linear District, it is the character of the redevelopment that is more of a concern. Development plans in the Linear District should consider the area's location on important natural resources, its proximity to Downtown, and its connection to Mound Bay Park. Redevelopment is envisioned to be smaller in scale and mass, have a lower profile and with architecture more residential in character. Principles which should be considered as redevelopment occurs include:

- Enhance the walkability along Commerce Boulevard through walkways and pedestrian scale design, such as placing buildings closer to the roadway with parking in back or on the side of the building.
- Protect the natural resources, including wetlands and shoreline, through design such as innovative storm water treatment methods.
- Consider allowing views and connections between buildings to the adjacent natural resources.
- Incorporate medium density or live/work housing to accommodate a wide range of lifestyle and household types.
- Avoid large expanses of parking by creating smaller, scattered parking, structured parking and adding landscaping.

Destination and Industrial Districts

The Destination District is located along Shoreline Drive (CSAH 15) and Commerce Boulevard (CSAH 110). The Destination District is currently comprised of commercial land uses such as retail and offices, as well as some limited housing. The Destination District is more automobile-oriented than the Pedestrian District with buildings being set back further from the street with parking in front and automobile conveniences such as drive-thrus. Recognizing the recent redevelopment that has already taken place along Commerce Boulevard, it is anticipated that redevelopment in the Destination District will likely occur along Shoreline Drive, east of the Pedestrian District.

Another area anticipated for redevelopment over the long term is the Industrial District. The Industrial District encompasses the Balboa Business Center and adjacent lands for industrial uses. It is anticipated that the

redevelopment of the Industrial District will take longer than the adjacent Destination District because of the costs of removing the existing facilities and the potential for environmental issues as it is a former manufacturing site.

The hope is that the success of the Pedestrian District will spur redevelopment over the long-term in the Destination and Industrial Districts to create a stronger entrance into Downtown Mound and enhance the walkability of the area. Recognizing that the automobile will likely continue to be the primary mode of transportation over the long-term, the Destination District will continue to be the location of choice for uses which are overwhelmingly automobile-oriented.

As most redevelopment efforts in the next 10 years will be focused on Downtown Mound in the Pedestrian District, this Comprehensive Plan supports the continuation of existing land uses in the Destination and Industrial Districts until redevelopment is more imminent. Prior to significant changes taking place, such as the assembly and redevelopment of multiple parcels, a master plan should be completed. If smaller redevelopment projects occur, consideration should be given to how to make the redevelopment compatible with the existing area while incorporating design components to enhance walkability, complement the Pedestrian District, and ensure its long-term compatibility with future redevelopment of the area. Principles which should be considered as redevelopment occurs include:

- Enhance the walkability through pedestrian walkways and pedestrian scale design.
- Locate buildings along Shoreline Drive closer to the road with parking in back.
- Incorporate a variety of medium and high density housing types to provide a wide range of living opportunities.
- Avoid large expanses of parking by creating smaller, scattered parking and structured parking.
- Create well landscaped parking lots and public spaces.
- Create connections to the Lost Lake Greenway and the Dakota Rail Trail.
- Incorporate innovative storm water treatment methods.
- Protect natural resources, including wetlands and shoreline.
- Consider locations for parks and open spaces to serve the increased residential densities in the area.

Redevelopment of Public/ Institutional Uses

The 2030 Comprehensive Plan specifically identifies public/institutional uses, such as city-owned facilities and schools, as separate land uses. While there are no specific plans at this time for the redevelopment of any institutional sites, there is the potential over the next 30 years for one or more of these sites to be redeveloped in an effort to serve the public in the most efficient and effective manner possible. While a Comprehensive Plan Amendment will be needed for the redevelopment of any of these sites into other uses, redevelopment of institutional sites to other uses will require an analysis of the land uses and character of the surrounding neighborhood as part of a Comprehensive Plan Amendment.

HOUSING

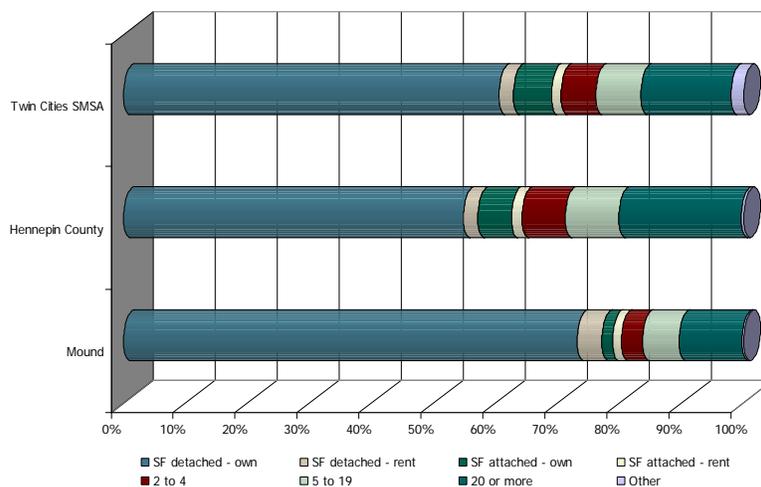
Housing has always been the most significant component of Mound’s land use. In the 1920s and 1930s, Mound was primarily a lake cabin community with a seasonal population. Historically, platted lots were small reflecting land use patterns of that time period and the predominance of small seasonal lakeshore cabins. Over the years, the community increasingly became a location for year-round residences and today, very few seasonal homes remain. The legacy of seasonal cottages, however, has left an imprint that still significantly impacts the city’s land use pattern and housing stock.

In most communities, the primary role of the municipality is to serve as a place to reside. In Mound, 70% of all the land area in the City is currently used for housing. Of privately owned, developed land, housing accounts for over 90% of the development. Housing is a dominant component of the community and, therefore, continues to be an important part of the community’s planning efforts.

Existing Housing Stock

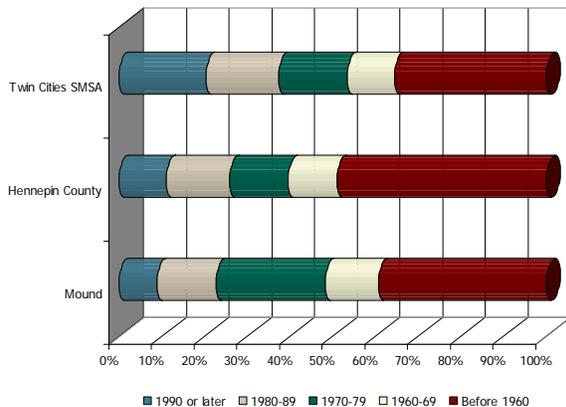
In 2006, there were an estimated 4,218 housing units in Mound. Over 75% of Mound’s housing stock is comprised of single-family detached homes, significantly higher than the rest of Hennepin County and the Twin Cities Metropolitan Area. The next largest proportion is apartments with 20 or more housing units, comprising about 11%.

Current Mix of Housing Types

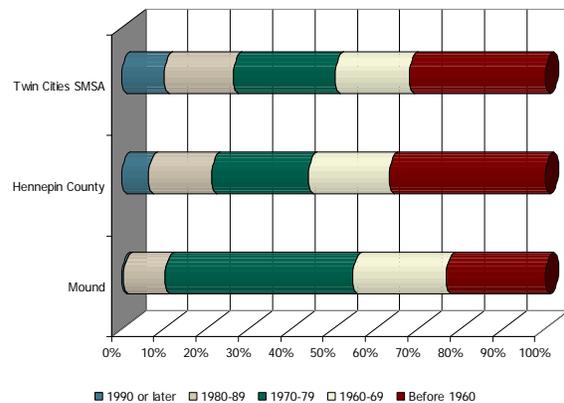


As may be expected in a fully developed community, most of Mound’s owner housing stock is over 25 years old. The community has started to see some replacement of older homes, especially along the lakeshore. The rental units in Mound are also older, with only four rental buildings built in the last fifteen years.

Age of Owner Occupied Housing



Age of Renter Occupied Housing



In 2000, approximately 80% of all residential units were owner-occupied reflecting the largely single-family residential housing stock in the community. The rate of home ownership is higher than in the rest of Hennepin County (66%) and the Twin Cities Metropolitan Area (72%).

The demand for new housing in Mound is controlled by three primary factors: market conditions, zoning and land availability. Limited land availability and existing zoning have resulted in most of the new construction occurring as single-family detached units. Over the last 10 years the City has averaged 28 units of new residential construction per year. A detailed breakdown occurs as follows:

Table 4.5 New Residential Construction Activity from 1996-2005

Year	Number of	
	Permits	Value (\$)
1996	41	6,554,625
1997	25	4,185,466
1998	14	2,619,437
1999	19	3,080,397
2000	7	977,166
2001	17	3,494,105
2002	48	10,344,168
2003	59	10,488,030
2004	32	8,368,941
2005	23	6,973,689

Year	Number of Permits	Value (\$)
Totals	285	57,086,024
Average	28	5,708,602

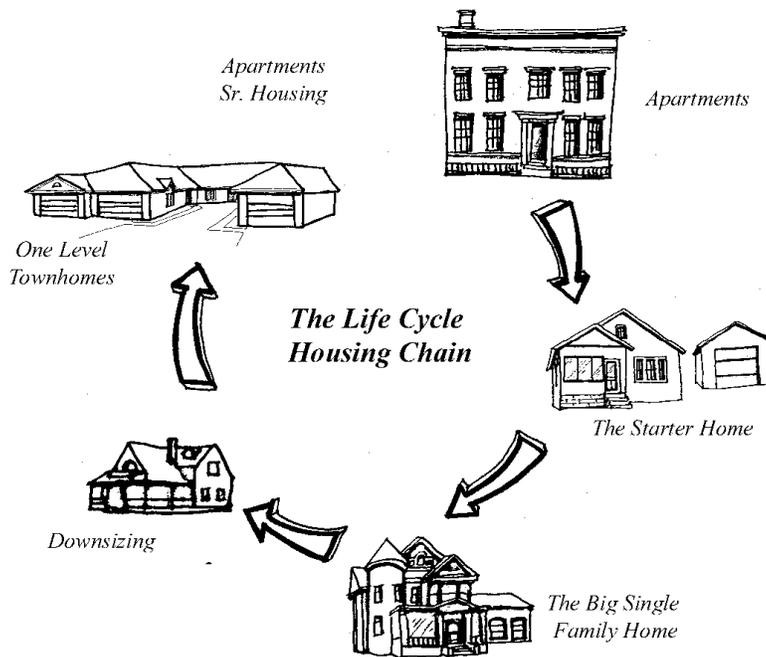
Source: City of Mound

Housing Issues

Life-Cycle Housing

Life-cycle housing, which is a common term to describe the provision of housing types for all stages of life, is one of Mound’s housing policies. Life-cycle housing is based on the premise that as people go through life, their housing needs change. A young person getting out of school and just starting out usually can not afford a home, so often begins by renting. As a person grows older, they often establish a family and buy their first home, usually a townhouse or a small starter house. Then as a family’s household income grows and children enter the picture, they may move up to their largest home. Once the children leave and a family’s size decreases, parents often move back to a smaller home with fewer maintenance needs or into a home with an association that takes care of home and property maintenance. Eventually, as a person ages there is often a need for an assisted living or nursing home facility. This represents the life-cycle housing chain as illustrated in the following figure.

Figure 4.4 The Life-Cycle Housing Chain



Mound currently has some supply of housing for every stage with the exception of senior assisted living and nursing homes. However, it is difficult to assess whether the community is in balance with its mixture of housing types. The redevelopment that has and will be occurring continues to add to the mix of housing types. The *Village by the Bay* development which is near completion, for example, added townhouses and “great

home” units just north of Downtown Mound. Mound Harbor Renaissance’s development in Downtown Mound will add townhomes, renter-occupied apartments and owner-occupied condominiums to the mix over the next few years. These new housing units are helpful to provide options for those who are looking for maintenance-free alternatives; however, additional supply may be necessary.

Rental housing is another component of life-cycle housing that needs to be monitored over time. Rental housing is a critical component as it provides more housing options for both the beginning and end of the life-cycle chain. It also fulfills the needs of several segments of the population including commercial and retail service employees; single-income families and individuals; senior citizens living on fixed incomes; young people moving out of homes and into the workforce; and economically disadvantaged households. While the apartments in the Mound Harbor Renaissance Development will add new housing units, overall the rental housing stock in the City of Mound is aging and is in need of ongoing maintenance. The City needs to use rental housing maintenance regulations, licensing programs and rehabilitation funding programs to ensure that the existing rental housing supply is maintained in good condition.

Affordable Housing

A portion of Mound’s residents, which is typical of most communities, will have a critical need for affordable housing over the next 20 years. With the increase in housing costs, the focus on affordable housing is to ensure that ordinary, contributing members of our community, such as teachers, police officers or retail clerks, can afford to live in the community where they work. According to the Metropolitan Council, housing is considered affordable if it is priced at or below 30% of gross income of a household earning 60% of the Twin Cities median family income. In 2005, the Twin Cities median family income was \$77,000, so housing is considered affordable if the family’s housing costs are at or below 30% of \$46,200.

In January 2006, the Metropolitan Council released a summary report “Determining the Affordable Housing Need in the Twin Cities 2011-2020.” This report not only forecasts the regional need by 2020 for newly-constructed, sewerred, affordable housing, but allocates each community’s share of that regional need for the Comprehensive Planning Process. The total need for newly-constructed affordable housing in the Twin Cities is estimated to be 51,000 between 2011 and 2020.

The allocation of regional needs for affordable housing to communities is based on a number of factors. All cities start with the same base allocation that 30.6% of their new housing units should be affordable. These allocations are then adjusted by the following factors:

- Low-wage job proximity – communities, such as Mound, with more low-wage jobs than local low-wage working residents have their share increased by a proportional amount.
- Affordable housing stock – communities, such as Mound, where the percentage of affordable housing stock is currently below 30% have their share proportionally increased.
- Transit service – communities, such as Mound, with little current transit service, do not have their allocations adjusted.

The Metropolitan Council has allocated a need of 68 affordable housing units for Mound between now and the year 2020 based on this methodology. In order to ensure that this need can be met, the City of Mound’s Land Use Plan has designated sufficient land for new medium and high density residential. As is noted in the Land Use Plan, most of the new units of housing will come through redevelopment efforts. While it is difficult to

predict the timing of redevelopment projects as they are primarily market driven, it is estimated that there will be redevelopment in the Pedestrian, Linear and Destination Districts prior to 2020. All of these districts are intended to be guided for medium to high density mixed-use developments. These redevelopment efforts will provide the opportunity for at least 159 new low and moderate income housing units.

In addition to ensuring there is sufficient land designated that has the potential to provide affordable housing opportunities, the City of Mound is committed to participating in the Metropolitan Livable Community Program. As a participant since 1997, the City of Mound supports the following principles for providing housing within the community:

- A balanced housing supply, with housing available for people at all income levels.
- The accommodation of all racial and ethnic groups in the purchase, sale, rental, and location of housing within the community.
- A variety of housing types for people in all stages of the life-cycle.
- A community of well-maintained housing and neighborhoods, including ownership and rental housing.
- Housing development that respects the natural environment of the community while striving to accommodate the need for a variety of housing types and costs.
- The availability of a full range of services and facilities for its residents, and the improvement of access to and linkage between housing and employment.

Housing Quality

There is limited vacant land to add more housing units. Because of limited growth potential and the age of much of the existing housing stock, maintenance of the existing housing stock is an important future planning and policy issue. If the community is going to continue to be an attractive place to live, existing housing will demand significant maintenance and reinvestment.

Maintenance of housing usually takes one of two forms, either voluntary or regulatory. Most municipalities rely on both approaches. Ideally, Mound residents will continue to maintain their property in a safe, sound and attractive condition. Realistically, a certain percentage of the homes will not be adequately maintained because of economic hardship or owners' neglect. In these cases, governmental agencies and regulatory tools need to be employed.

Since its last Comprehensive Plan the City of Mound adopted the *International Property Maintenance Code* for both owner- and renter-occupied housing units. These provisions require adequate housing maintenance to preserve public health, safety and welfare. The City is also considering the adoption of a rental ordinance which would require the licensing and formal inspection of rental properties. This program would be a cooperative effort of the City's police, fire and building inspection departments.

The City of Mound does recognize that economic conditions frequently result in poorly maintained housing. In these circumstances, programs offered by local, county, state and federal agencies should be employed. While many of these programs are more limited than they were in the past, the City of Mound will continue to monitor federal and state programs for opportunities to assist Mound residents with housing maintenance issues.

Housing Goal and Policies

Housing Goal

Promote and encourage the provision of life-cycle housing opportunities for all residents, supporting creative multi-family housing while emphasizing the construction and maintenance of high quality, single family dwelling units.

Policies:

1. Encourage a mixture of life-cycle housing types to provide for all stages of life while maintaining a predominately single family housing base throughout the city.
2. Recognize unique historical platting practices in certain areas by allowing some flexibility in the application of current bulk/area regulations. Flexibility may be considered when it can be demonstrated that the integrity and intent of the comprehensive plan is not compromised.
3. Promote ongoing maintenance and orderly appearance of residential structures and surrounding yard areas.
4. Monitor and enforce ordinances and policies that affect housing to ensure that they are reflective of community policy.
5. Ensure infill and redevelopment of housing areas are designed appropriately to integrate into the surrounding neighborhood.
6. Promote and support the development of new affordable housing units to meet the community's share of the regional affordable housing needs as well as the community's affordable housing goals.

RESOURCE PROTECTION

Solar Access

State legislation enacted in 1978 requires local comprehensive plans to address solar access protection. The law requires that communities make efforts to ensure that direct sunlight access to solar panels is not subjected to shading from nearby trees, buildings or other structures. In the 1980's, energy prices and potential fuel shortages focused attention on both passive and active solar collection systems. Since that time, however, lower energy prices have diminished interest in active solar energy collection systems. While solar energy issues are seldom discussed during building permit or subdivision reviews today, it is possible that conditions will change in the future. The fact that Mound is nearly a fully developed community suggests that consideration of solar access will occur during redevelopment efforts and on an individual basis. Accordingly, the City will take the following measures to ensure protection of solar access where appropriate:

1. Encourage access to direct sunlight for areas that will undergo redevelopment.
2. The City should consider making information available pertaining to design criteria for solar access.
3. Encourage the design of new subdivisions in a manner that allows the maximum number of new buildings to receive sunlight sufficient for solar energy systems. The City will encourage the placement of buildings and vegetation in a manner that allows unobstructed sunlight to reach the south sides of structures between the hours of 10:00 a.m. and 2:00 p.m.
4. Examine the existing Zoning and Subdivision Ordinances to ensure that they adequately include solar energy protection measures.

Historic Preservation

The Metropolitan Land Planning Act (Minnesota Statutes 473.859, Subd. 2) requires that local comprehensive plans include a section on historic preservation. Historic assets promote community pride and create a sense of community. As noted in Chapter Two (Community Context), the primary known cultural or historic resources in Mound are Dakota and Ojibwa Indian burial and earthwork mounds. There are no historic buildings designated on the National Register for Historic Places.

As a developed community, it is unlikely that there are many intact archaeological resources within the community. However, as the community is committed to protecting its resources, it has and will continue to include assessments of historical and cultural resources as required for redevelopment projects, such as what was completed for the Mound Visions Alternative Urban Areawide Review (AUAR) in 2005.

Aggregate Resources

The City of Mound does not have any aggregate resources which need to be protected.

Critical Area Protection

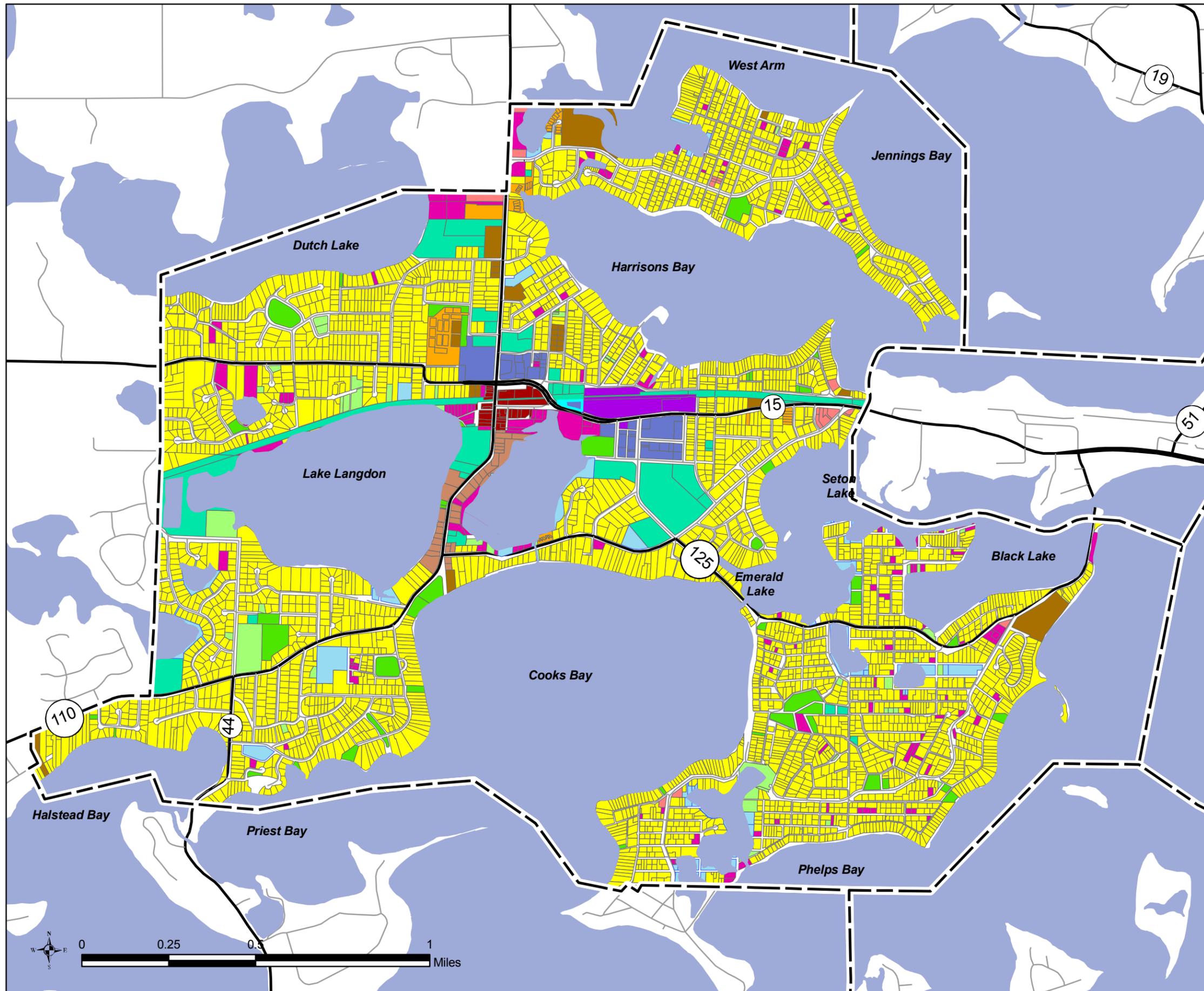
The City of Mound does not have any areas which are part of a designated Critical Area that need to be protected.



Comprehensive Plan

Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Neighborhood Commercial
- Pedestrian District
- Destination District
- Linear District
- Industrial
- Public or Institutional
- Park
- Open Space
- Public Water or Wetlands
- Undeveloped



Existing Land Use

Figure 4.1

February 10, 2009

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

 Hoisington Koegler Group, Inc.

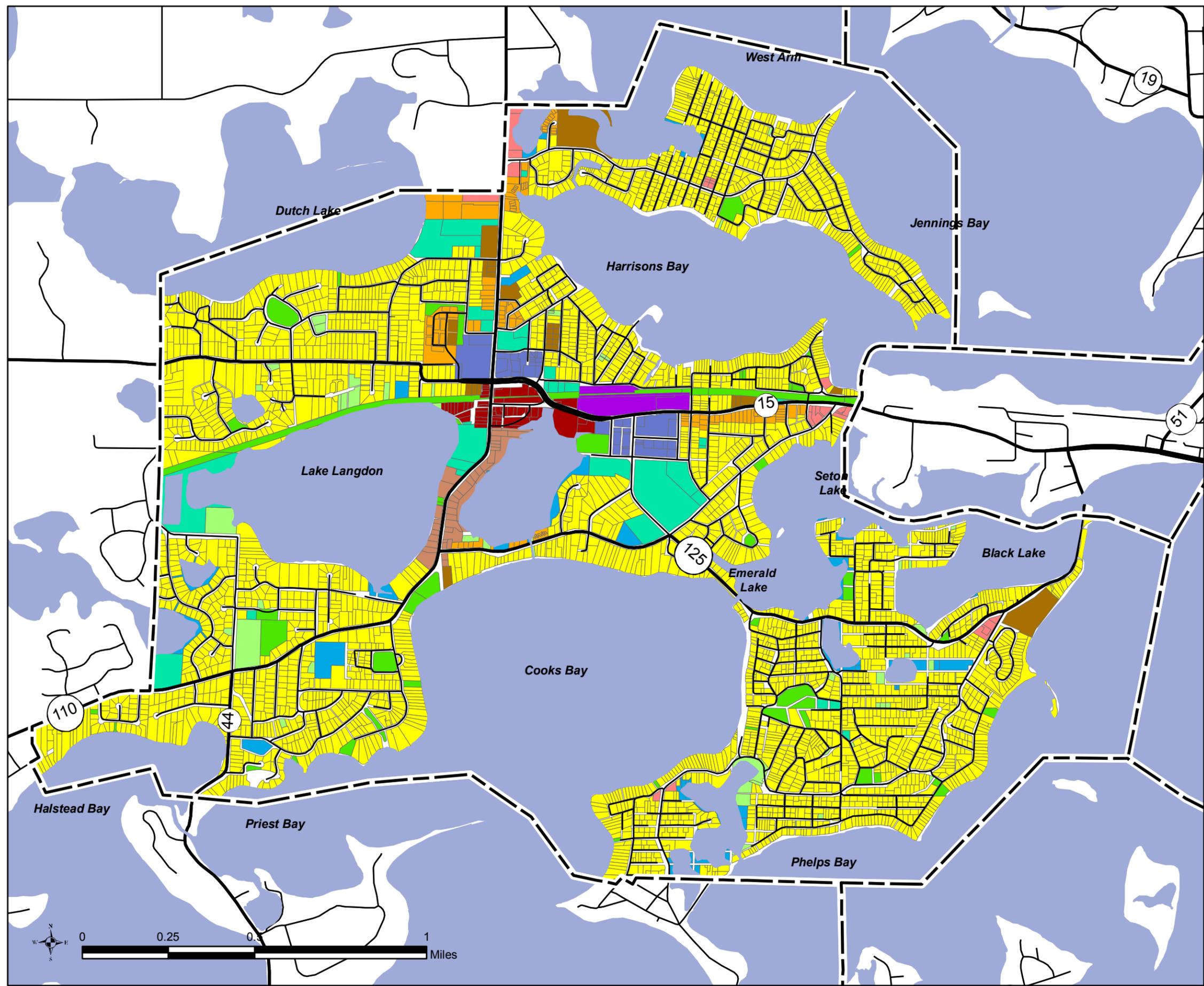
 BOLTON & MENK, INC.
Consulting Engineers & Surveyors



Comprehensive Plan

Legend

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Neighborhood Commercial
- Pedestrian District
- Destination District
- Linear District
- Industrial District
- Public or Institutional
- Park
- Open Space
- Public Water or Wetlands
- Undeveloped
- Utility



Future Land Use
Figure 4.2

December 11, 2008
 Source: Hennepin County, Metropolitan Council,
 The Lawrence Group, MnDNR

PARK, OPEN SPACE AND RECREATION

Park, open space and recreation areas play a critical role in the physical, social and natural environment of a community. Mound's park, open space and recreation system consists of a wide variety of neighborhood parks/playgrounds, lakeview parks, community parks, community playfields, natural open spaces, special use facilities, trails, bikeways, sidewalks, public lake access points, and the Mound Docks & Commons areas. Due to the city's location on the western shores of Lake Minnetonka, Mound possesses a variety of natural resources ideal for parks and public open spaces. Lakes, wetlands, rolling topography, and mature tree cover are key features that enhance the recreational setting in Mound. These areas can also support the protection of natural and historic resources.

GOAL AND POLICIES

The goal of Mound's park, open space and recreation system is to provide a variety of active and passive recreational opportunities to enhance all residents' quality of life. It is also important that this system assist in protecting the natural and historic resources of the community in a manner which leaves them unimpaired for future generations. The community contains a population that is diverse in age structure, interests and activities. Meeting the needs of all age groups and providing year-round recreational opportunities is the central goal of the park, open space and recreation plan.

The City of Mound has identified the following policies to guide the planning and development of park, open space and recreation areas that meet the community's goal:

1. Provide a park, open space and recreation system that is accessible and available for use by all Mound residents.
2. Coordinate the expenditure of local funds for park, open space and recreation facilities with the provision and development of other municipal services.
3. Support cooperative efforts between the City and the Westonka Public Schools District and the Three Rivers Park District in the development and usage of recreational lands and facilities.
4. Ensure development of the park, open space and recreation system is consistent with the future land use plan for Mound.
5. Continue to seek assistance from community groups in the planning, design and development of recreational facilities.
6. Promote a balanced park and open space system which includes neighborhood parks/playgrounds, community parks, community playfields, lakeview parks, public natural open spaces, special use facilities, school parks and private open spaces.
7. Support continued neighborhood and public access to Lake Minnetonka for Mound residents through public lake access points, public lakeview parks, and the Mound Docks & Commons Program.
8. Monitor and enforce ordinances and programs that affect parks, open spaces and recreation facilities to ensure that they are reflective of the community's goals and policies.

9. Create a connected Mound pathways system that supports walking and biking, including additional recreational trails, bikeways and sidewalks where feasible, to enable convenient connections between important community facilities, including parks, open spaces, city buildings, schools and commercial areas.
10. Continue to integrate the preservation and celebration of the community's natural and historic resources into the park, open space and recreation system where feasible.

PARK, OPEN SPACE AND RECREATION SYSTEM

Local Recreation Areas

Parks, open spaces and recreation areas in Mound can be grouped into four types: active areas, passive areas, special use facilities, and pathways. Active recreational facilities, which accommodate more physical recreational activities, include ball fields, playground equipment, tennis courts, swimming beaches, skating rinks and sledding hills. Passive recreational facilities are oriented toward more leisurely activities such as picnicking, wildlife observation, visitation of cultural and historical sites, etc. Special use facilities provide recreational opportunities generally not found in other park components, such as the Zero Gravity Skate Park and the Pond Sports Center. In order to fully meet the community's needs, Mound's system needs to contain facilities of each type. The pathways system, which includes bikeways, sidewalks and trails, provides non-motorized public routes within the community and access to the community's parks, open spaces, recreation facilities and other major destinations.

Active Recreation Areas

In order to effectively assess the supply of active recreational facilities, it is helpful to establish a classification system. The classification system proposed is based, in part, on the previous two comprehensive plans and Table 2 of the Metropolitan Council Regional Parks Policy Plan. The classification system identifies four types of parks: neighborhood park/playground, lakeview park; community playfield and community park. These categories are defined as follows:

- **Neighborhood Park/Playground** - Areas typically accommodating unsupervised sports, play equipment, paved areas, turf areas and minimal auto parking. Users are predominately from surrounding residential areas. Service area – ½ mile.
- **Lakeview Park** – Areas fronting a lake which are primarily focused on facilities related to the lake, including beaches, docks, fishing piers, and picnic areas. Service area – ½ mile.
- **Community Playfield** - Areas accommodating football, softball, tennis and other active athletic events. Some facilities may be lighted for night use and substantial auto parking is typically required. Service area - 1 mile.
- **Community Park** - Active athletic areas similar to community playfields with more emphasis on picnicking, hiking, water sports etc. Community parks typically require substantial off-street parking and can contain internal road systems. Service area - 1 mile.

The classification of Mound's parks can be found in Table 5.1. It should be noted this Comprehensive Plan more carefully defines neighborhood parks/playgrounds than in previous plans. Neighborhood parks/playgrounds are limited to those areas which have play equipment and open areas for unsupervised play,

while a new term, lakeview parks, is added to describe those parks that primarily focus on facilities related to enjoyment of the adjacent lake.

As Table 5.1 and Figure 5.1 show, Mound has 16 acres in 14 neighborhood parks/playgrounds; 10 acres in 14 lakeview parks; and 3.5 acres in one community park. These parks range in size from 0.1 to 3.7 acres in size. While the existing park system provides a large number of parks, the system's wide distribution of small parks also increases park maintenance costs. The City of Mound does not currently own or manage any community playfields.

Non-City Owned Active Recreation Areas

Within the City of Mound, there are active recreational areas that are owned or managed by other organizations. Westonka Public Schools provides active recreational opportunities at Shirley Hills Elementary School and Grandview Middle School. These two facilities provide approximately 20 acres of community playfield facilities for the community. The City of Mound also has a long-term lease arrangement for the operation of the Wolner Little League Fields, a 3.4 acre community playfield with ballfields, benches, restrooms and a parking area.

Passive Natural Areas

The City of Mound has passive natural areas throughout the community, including four (4) Nature Conservancy Areas (NCA) encompassing 10 acres: Indian Mound, Rustic Place, Diamond Lake and Drummond Road. NCA areas were established to protect the natural resources of each site. The qualities of each site vary from wooded wetland swamps to heavily timbered higher ground ranging in size from 0.15 to 4.6 acres. Two of the NCAs, Indian Mound, and Rustic Place, are representative of the native landscape that existed prior to the physical development of the area. These areas are all identified on Figure 5.1.

Special Use Areas

In addition to public active and passive areas, Mound has a number of special use areas that provide unique recreational opportunities for neighborhood and community residents. Most of the special use areas exist in two forms: Commons land and public lake access points. In addition, there is also the indoor ice rink at the Pond Sports Center; a skateboard park at Zero Gravity Skate Park; and a public wildlife area at the end of Three Points Boulevard.

Mound Docks & Commons Areas

Approximately 26 acres of land classified as Mound Commons currently exists in the community. These parcels comprise nearly 4.5 miles or roughly 10 percent of the total Lake Minnetonka shoreline in the community. Substantial diversity characterizes the commons areas. Some areas are relatively flat and are easily accessible to the general public while some parcels consist of steep slopes that are virtually inaccessible, even to abutting property owners. Some commons areas are deep and provide ample space for numerous public uses. Some are narrow and offer little more than a walkway or access to dockage. Other areas are so narrow that even access becomes difficult and can narrow to nothing at all.

Commons areas provide a valuable recreational resource to neighborhood residents and the general public. In many cases, the commons areas function as access points to Lake Minnetonka. Each commons area has its own dedication language for the properties it is intended to serve. Commons areas are generally not capable of

providing community-wide boat launching or parking facilities. However, depending on the specific site or commons area, boat launching facilities, limited parking, swimming and fishing can be accommodated.

Commons areas are categorized as one of five general types shown in Figure 5.2. They consist of:

Type	Description
A	Traversable on upland only. Need stairway to access shoreline. Accessible from public right-of-way. No docks.
B	Traversable only along the shoreline. Access point is available to traversable shoreline. Regular guidelines apply.
C	Not traversable. Stairway needed to access shoreline. Not accessible from public right-of-way. Access granted to abutting property owners only.
D	Traversable on upland and along the shoreline. Accessible from public right-of-way. Regular guidelines apply
E	Wetlands, wildlife areas, beaches, boat landings and transient docks. No leased dock sites.

Lake Access Points

There are a number of year-round and seasonal lake access points that provide public access to Lake Minnetonka and Dutch Lake. These lake access points are located throughout the community affording convenient lake access to residents without lakefront property or commons use. Year-round access points are located on Dutch Lake, West Arm, Jennings Bay, Harrisons Bay, Phelps Bay, and Cooks Bay in Mound Bay Park. They accommodate winter snowmobiling and ice fishing access as well as seasonal boat access. Seasonal lake access areas are located at Canary Beach on the West Arm, Centerview Beach on Harrisons Bay, Wychwood Beach on Cooks Bay, and Pembroke Park on Phelps Bay.

Mound Pathways System

Walkways and bikeways are important infrastructure elements for providing convenient access to park, open space and recreation opportunities for Mound residents. Trails, sidewalks and bikeways can be used for purely recreational purposes; however, they also provide an increasingly important alternative transportation option. Increased opportunities for walking and bicycling within the community can support healthy lifestyles, increase recreational access for kids, help reduce traffic congestion, and improve air quality.

As shown in Figure 5.2, most existing bikeways in Mound are in the form of on-street, multi-use shoulders rather than separated trail corridors. They are typically not marked on the pavement or with signage. These multi-use shoulders can also be used for bus stops, postal deliveries, garbage pick-up, disable vehicle parking, etc. In areas of constrained right-of-way multi-use shoulders provides flexibility.

Existing bikeway routes and their on-street design are primarily a result of how the community developed over time, which also presents some challenges for future expansion. Commerce Boulevard/Bartlett Boulevard (CSAH 110), Shoreline Drive (CSAH 15) east of CSAH 110, and Bartlett Boulevard/Wilshire Boulevard (CSAH 125) currently have on-street multi-use shoulders. There are also a number of sidewalks

located throughout the community, such as along Shoreline Boulevard, Commerce Boulevard, Wilshire Boulevard, Tuxedo Boulevard and Three Points Boulevard. Existing sidewalks are primarily located on both sides of the two major County roads, CSAH 15 (Shoreline Drive) and CSAH 110 (Commerce Boulevard/Bartlett Boulevard), as well as on one side of some collector streets, such as Three Points Boulevard, Tuxedo Boulevard, Wilshire Boulevard, Cypress Lane/Maywood Road and Lynwood Boulevard. Existing multi-use trails include short trail links in or near downtown Mound, such as the Lost Lake Greenway trail and Village by the Bay trail, and the Dakota Rail Regional Trail.

Mound's future walkways and bikeways system, which is graphically depicted in the Future Walkways & Bikeways Plan (Figure 5.8), is envisioned as a system of multi-use trails, sidewalks and bikeways that will continue to evolve over time as land redevelopment and street reconstruction opportunities occur. In general, the future walkways and bikeways system is oriented toward downtown Mound, the Linear District, civic & school destinations, Mound Bay Park and the Dakota Rail Regional Trail, with walkways and bikeways radiating out from downtown along future arterial and collector streets to connect all neighborhoods to downtown Mound and other community destinations.

Most of the system is intended to have multi-use trails to serve both biking and walking. As shown in Figure 5.8, sidewalks are primarily concentrated along CSAH 15 and CSAH 110 in downtown Mound. Bicyclists using multi-use trails entering downtown will be directed away from the sidewalks onto either the parallel multi-use trails or the roadway. Wayfinding will be needed to assist walkers and bikers to select the appropriate trail.

The particular design of individual routes within the system would be determined based on the particular right-of-way width of each street, existing walkways/bikeways, and development patterns. On-street, marked multi-use shoulders for bikes with a sidewalk on one side of the street may be appropriate for some streets, whereas, a ten (10) foot multi-use bituminous trail may be appropriate for other streets. Figures 6.2, 6.3A and 6.3B in Chapter 6, Transportation, provide recommended geometric design standards for major and minor collector streets, including the provision of walkways and bikeways.

Regional Recreation Facilities

In addition to the city's park, open space and recreation areas, Mound residents also benefit from nearby regional open space and recreation facilities. According to the Metropolitan Council's 2030 Regional Parks Policy Plan, in 2004 the metropolitan regional parks system encompassed approximately 50,000 acres of park land including 35 regional parks, 11 park reserves, 6 special recreation features and 22 regional trails.

Regional Parks

There are no regional parks located within Mound. The closest regional park is Gale Woods Farm, which is located in Minnetrista. Gale Woods Farm is a 410-acre park located on Whaletail Lake. It features a working educational farm, 3.5 miles of walking/biking/ski trails, cross-country running trails, canoeing, fishing and a four-season picnic pavilion.

Regional Trails

The Dakota Rail Regional Trail is a 13.5-mile multi-use trail located in the former Dakota Rail railroad corridor constructed and managed by the Three Rivers Park District. From east to west, the trail links the cities of Wayzata, Orono, Minnetonka Beach, Spring Park, Mound, Minnetrista and St. Bonifacius in western

Hennepin County. West of Hennepin County, the trail is intended to extend another 31.5 miles through Carver and McLeod counties, ending in Hutchinson. The corridor right-of-way is owned by the Hennepin County Regional Rail Authority (HCRRA) who intends to preserve the corridor for a potential future transit line. Based on the typical lengthy time period required for transit development and the Park District's successes in using other HCRRA rights-of-way for trails as interim uses, the Parks District has a 20-year lease on the portion of the corridor (16 foot wide rail bed) needed for the regional trail. This regional trail, constructed in 2007 and 2008, provides the primary east-west walking and biking connection through the City and runs through the center of Downtown Mound.

NEEDS ANALYSIS

The needs for and provision of active recreation facilities is unique for each community. There is not one set of standards that can be used to evaluate a community's park, open space and recreation system and determine conclusively what is needed. The needs analysis examines both park distribution and population ratios in a manner that acknowledges Mound's unique characteristics.

Distribution Analysis

The first method of needs analysis examines whether the community's parks are sufficiently distributed to provide active recreational facilities within an appropriate distance for all residents. As noted previously, it is assumed that the desired service area of neighborhood parks/playgrounds is ½ mile. The size of this service area is based on the theory that people are willing to walk a short distance, about 10 to 15 minutes.

Figure 5.3 shows the service areas of the 14 neighborhood parks/playgrounds. As the analysis map shows, existing neighborhood parks are distributed relatively equally throughout the community. However, it is important to note that the service areas that extend across major roadways, such as CSAH 15 or 110, are a concern as people would have difficulty crossing these busy roads. There are only a few smaller areas that do not have a neighborhood park/playground within a ½ mile or a short walk of their home, such as the western and eastern ends of the Three Points neighborhood and the residential area on the western side of Halstead Bay.

The community also places a high priority on providing public lake access and views to its residents. Thus, lakeview parks also need to be considered as part of the active park system. If the distribution analysis includes neighborhood and lakeview parks (as shown in Figure 5.4), almost all residents are within ½ mile or a short walk from an existing park.

It is also important to consider the distribution of community parks and playfields as they provide different amenities than neighborhood parks. Figure 5.5 shows the service area of Mound Bay Park and the community playfields at Wolner Little League Fields, Grandview Middle School and Shirley Hills Elementary School. The service area for each of these parks is approximately 1 mile. As the analysis map shows, there are a number of areas which are not adequately served by a community park or community playfield. The distribution of these types of parks could be further hampered in the future if any of these parks are redeveloped into another type of land use and the existing community playfields are not preserved or replaced.

Population Ratio Analysis

A second method of analyzing a community's park and recreation system is to examine whether there is sufficient active park land based on the community's total population. This method was used in the previous two Comprehensive Plans. While this type of analysis can be helpful, it is not as commonly used today as park analysis has evolved to recognize that each community's needs can be substantially different.

Recognizing that population ratio analysis can be helpful, when combined with distribution analysis, it is included as part of the needs analysis for this Comprehensive Plan update. Population ratio analysis recommendations are simply figures expressed in terms of a number of acres of park land per one thousand (1,000) residents. The ratios used in this plan are based on previous Comprehensive Plans and National Recreation and Park Association (NRPA) recommendations, which generally examine only those park areas with active park components such as playgrounds and athletic fields. The population ratio analysis recommendations from the previous Comprehensive Plan are:

- Neighborhood Park/Playground - 2.0 Acres per 1,000 people
- Community Playfield - 1.5 Acres per 1,000 people
- Community Park - 3.5 Acres per 1,000 people

Note: The NRPA suggests that a park system, at a minimum, be comprised of a "core" system of parklands, with a total of 6.25 to 10.5 acres of developed open space per 1,000 population. The NRPA acknowledges the size and amount of parkland will vary from community to community but must be taken in to account when considering a total, well-rounded system of parks and recreation areas.

As the Community Context chapter of this Plan states, the City of Mound is expected to have 10,400 people by 2010; 11,000 residents by 2020; and 11,400 people by 2030. The following table provides an analysis of whether Mound's park system will be able to meet the needs of the projected population with the City's existing parks.

Table 5.2 Distribution Analysis for Existing City Owned Parks

Park Type	Existing Acres	Recommended minimum	2010		2020		2030	
			Acres Needed	Surplus/Deficiency	Acres Needed	Surplus/Deficiency	Acres Needed	Surplus/Deficiency
Neighborhood Park/Playground & Lakeview Parks	27.1	2.0 ac	20.8	6.3	22.0	5.1	22.8	4.3
Community Playfield	3.4	1.5 ac	15.6	-12.2	16.5	-13.1	17.1	-13.7
Community Park	3.5	3.5 ac	36.4	-32.9	38.5	-35.0	39.9	-36.4
Total System	34.0	7.0 ac	72.8	-38.8	77	-43.0	79.8	-45.8

This analysis shows that the City should have adequate Neighborhood Parks/Playgrounds and Lakeview Parks, in terms of acreage, to accommodate the community’s planned population growth. However, the City is lacking in the number of acres of Community Playfields and Community Parks.

As previously noted, there are facilities within the community that are not owned and managed by the City but that provide recreational opportunities for Mound residents. The two largest are Grandview Middle School and Shirley Hills Elementary School, which are both classified as community playfields and owned by the Westonka Public Schools District. If these recreation areas are included in the population ratio analysis, the City’s shortage of community playfields would decrease as the analysis on the next page shows.

Table 5.3 Distribution Analysis for City and School District Owned Parks

Park Type	Existing Acres	Recommended minimum	2010		2020		2030	
			Acres Needed	Surplus/ Deficiency	Acres Needed	Surplus/ Deficiency	Acres Needed	Surplus/ Deficiency
Neighborhood Park/Playground & Lakeview Park	27.1	2.0 ac	20.8	6.3	22.0	5.1	22.8	4.3
Community Playfield	23.9	1.5 ac	15.6	8.3	16.5	7.4	17.1	6.8
Community Park	3.5	3.5 ac	36.4	-32.9	38.5	-35.0	39.9	-36.4
Total System	54.5	7.0 ac	72.8	-18.3	77.0	-22.5	79.8	-25.3

Conclusions

The population ratio analysis shows that the City likely has enough neighborhood parks/playgrounds and lakeview parks to serve existing and future residential needs. It is important to note that the forecasted 15% population increase by 2030 will place additional pressure on the system, so improvements to existing parks may be needed. While the distribution analysis shows that existing residential areas are generally well served, much of the new population is anticipated in central Mound where there are not a lot of active park facilities. To ensure the redevelopment areas of the Pedestrian, Destination, Industrial and Linear Districts are adequately served; the community will need to explore the incorporation of additional park facilities and/or the expansion of trail facilities to connect residents to other areas of the community as part of these future redevelopment projects.

The community is not as adequately served by community parks or community playfields, especially since two of the community playfields are not under the control of the City. As the City is almost fully developed, it will be difficult for the community to significantly increase the number and types of these facilities. Thus, it will continue to be important for the City to work with the Westonka School District to ensure the existing community playfields are available as much as possible for Mound residents and that the need for community playfields is considered in any future development or redevelopment projects.

As noted previously, there has been a national and regional shift in park and recreation planning away from standardized analysis to specific consideration of the needs and wants of the community. While the distribution and population ratio analysis may show that there are adequate neighborhood park/playground facilities in the community, it does not assess whether those parks are serving the needs of the surrounding residents and whether any improvements are warranted. Additional analysis is needed to determine whether the parks have the appropriate amenities, sufficient park maintenance, and needed programming. This can best be done by surveying residents and conducting individual neighborhood park master planning.

RECOMMENDED ACTIONS FOR THE FUTURE

The City of Mound has established a diverse park, open space and recreation system plan that will provide a variety of recreational opportunities to meet residents' needs. The following recommended actions are intended to build upon the existing system so that the community is in a position to meet the needs of all residents in the year 2030. Mound's Future Park, Recreation and Open Space System Plan are shown in Figures 5.7 and 5.8.

1. A community park, open space and recreation system survey should be conducted to understand residents' changing recreation needs and support for system improvements.
2. A strategic assessment of the community's investment in the park, open space and recreation system should be conducted, ensuring that continued funding is available to meet the community's needs, including staffing, programming, capital investment and maintenance.
3. The Park, Open Space and Dock Advisory Commission should reach out into the community for the development of master plans for the community's park, open space and recreation areas. These master plans should ensure parks are meeting the needs of surrounding residents and/or the community, identify planting plans that use native plants to provide environmental and aesthetic benefits, and sensitively integrate recreational facilities into the natural environment of the site.
4. Park dedication ordinances should be reviewed regularly to ensure new development contributes its fair share to the expansion and/or improvements of the park, open space and recreation system needed to serve the growing population.
5. The City should continue to work with the Westonka Public Schools District to explore cooperative opportunities to provide for the needs of residents, including availability of facilities at school sites, programming and lake safety.
6. Expansion of the community's bikeways, trails and sidewalks should occur whenever possible, such as through redevelopment, road improvements and park system expansions.
7. Development of a trail around Lost Lake should be explored to link it to the Dakota Rail Regional Trail and Downtown Mound. A loop trail around Lost Lake may be able to accommodate a multi-use trail

depending on soil conditions, amount of available land, and environmental impacts. Securing property through acquisition or easements will be needed to complete a loop trail.

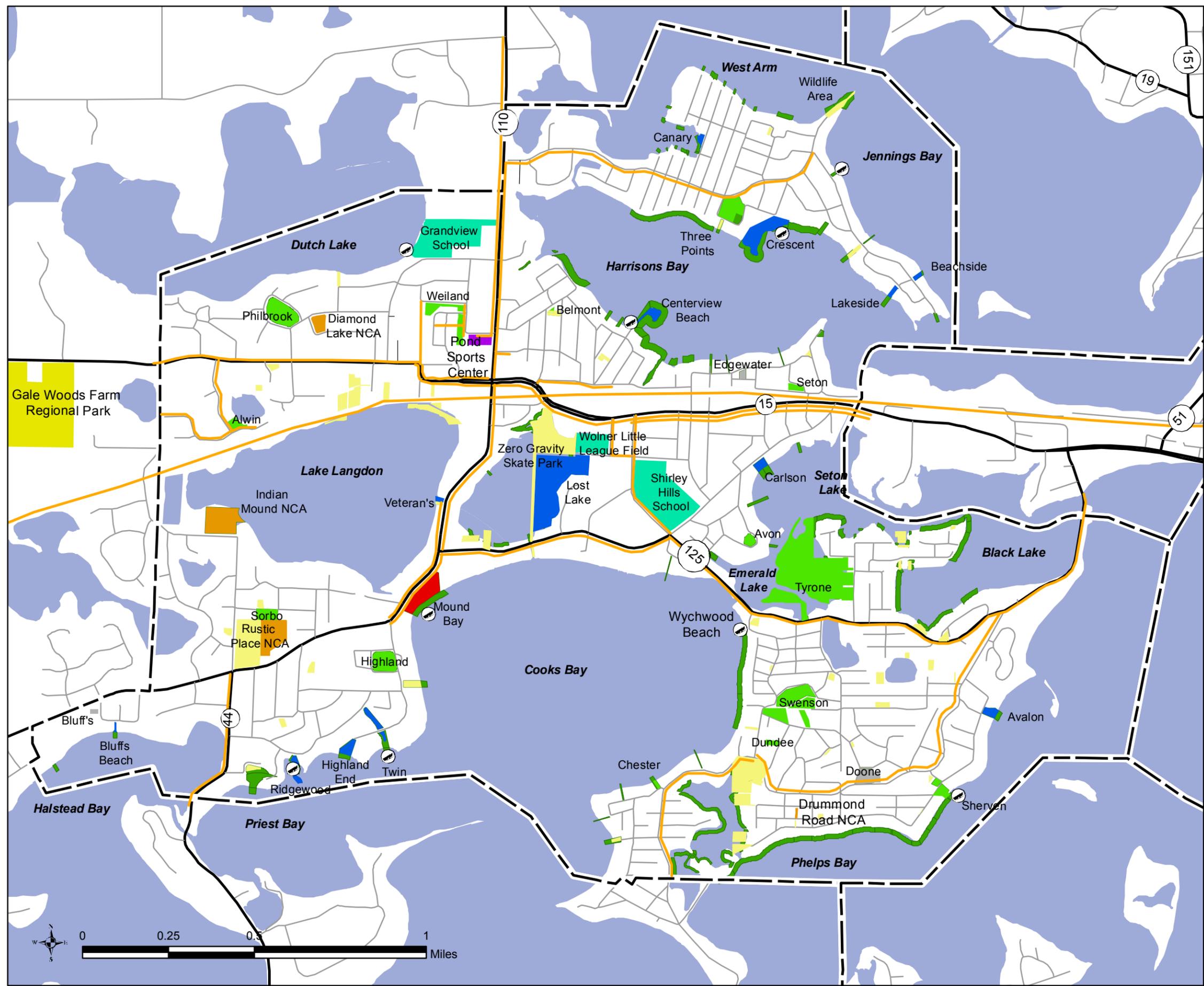
8. Mound should consider expanding its role in facilitating preservation and protection of significant community natural areas and open spaces, including Nature Conservancy Areas. Future lands could be secured through a number of mechanisms including outright purchase, conservation easements, land registry programs, retaining tax forfeited land or other means.
9. The City should explore seasonal use of wetland areas. During the winter months, wetlands offer interesting opportunities for hiking and cross country skiing.
10. Exploration should be conducted on whether commons properties could have expanded public use and/or connections to public walkways and bikeways. Type A, B, D, and E facilities may be able to support trail systems depending on existing development configurations and the impact to adjacent residential areas.
11. Maintenance and upkeep of park facilities should be prioritized to improve their image and safety in neighborhoods.
12. A system of uniform park, open space and recreation system signs should be established and implemented that designate the locations and features of parks and recreation areas. Information such as the facility name, date of establishment and any other pertinent historical data may be included. Signage should be used to identify all lake access points. A signage system would aid users in identifying various areas.
13. Signage and pavement marking of walkways and bikeways, particularly on-street bike lanes, should be provided to communicate their existence with users and motorists. Signs should be placed at intersections, crossings, where there are changes in direction, and other points where attention is needed.
14. The potential for creating a neighborhood parks program to better link neighborhood parks with the unique character and needs of residents in each neighborhood should be explored. The large number of neighborhood parks in the community makes them a cornerstone of the park system and a prime source of neighborhood identity.



Comprehensive Plan

Legend

- Lake Access Point
- Existing Pathways
- Neighborhood Park/Playground
- Lakeview Park
- Community Playfield
- Community Park
- Special Use Park
- Undeveloped Park
- Nature Conservancy Area
- Open Spaces
- Regional Parks
- Mound Docks & Commons



Existing Park, Open Space & Recreation System

Figure 5.1

October 21, 2008

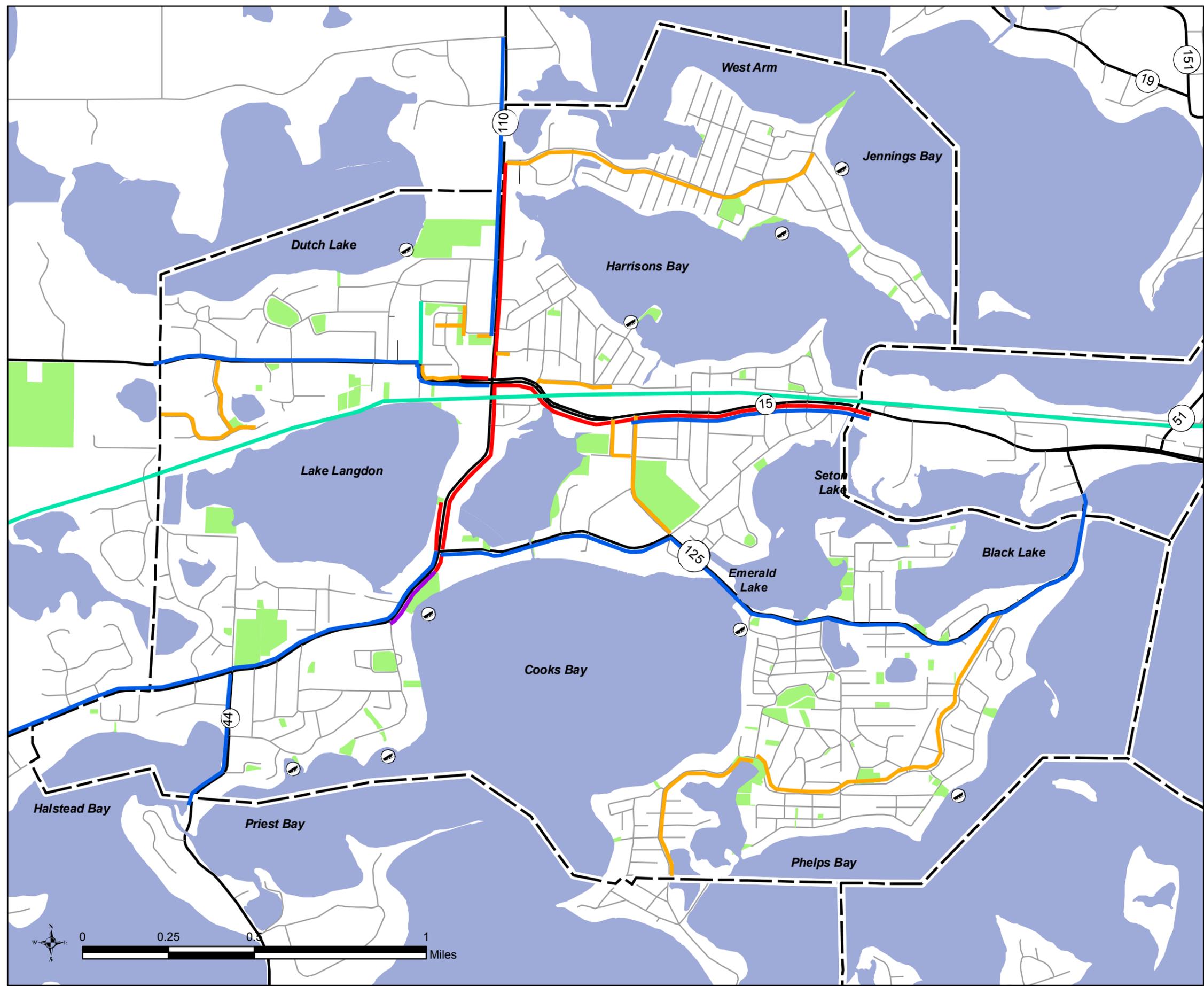
Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR



Comprehensive Plan

Legend

-  Sidewalk - One Side of Street
-  Sidewalk - Both Sides of Street
-  Bikeway - Both Sides of Street
-  Multi-Use Trail
-  Multi-Use Trail - Both Sides of Street
-  Parks and Open Spaces
-  Lake Access Point



Existing Pathways System
Figure 5.2

July 17, 2007

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

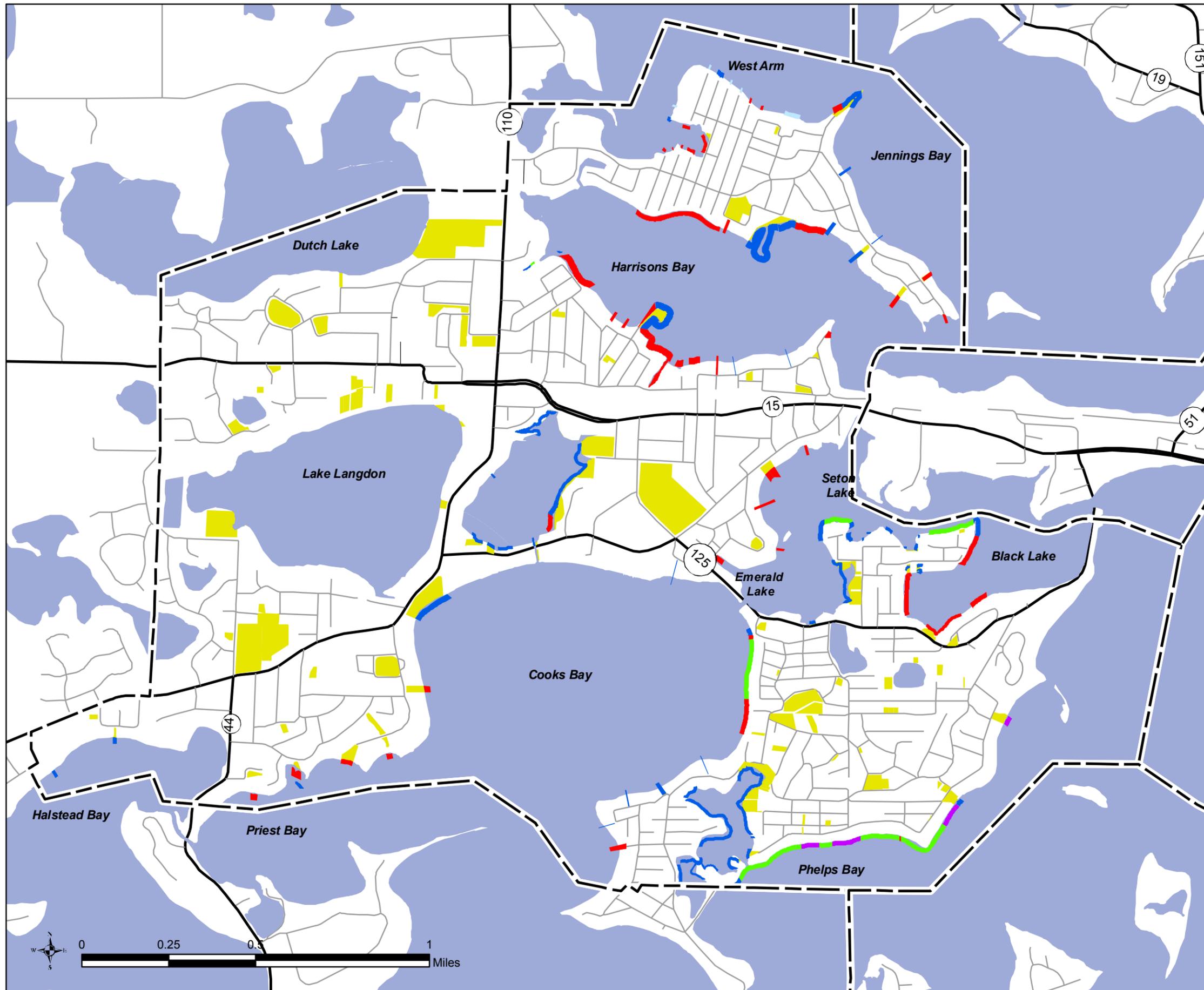




Comprehensive Plan

Legend

-  Type A: Shoreline that is traversable only on top. Need stairway to shoreline, accessible by public right-of-way.
-  Type B: Shoreline traversable along the waters edge. Access point available to traversable shoreline.
-  Type C: Shoreline with no traversable space. Stairs needed to shoreline. Not accessible by public right-of-way. (Abutting property owners only).
-  Type D: Shoreline that is traversable on the top and traversable along the waters edge. Accessible by public right-of-way.
-  Type E: Shoreline such as wetlands, wildlife area, beaches, boat landings and transient docks. No leased dock sites.
-  Parks & Open Space



Shoreline Types

Figure 5.3

July 17, 2007

Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR

 Hoisington Koegler Group, Inc.

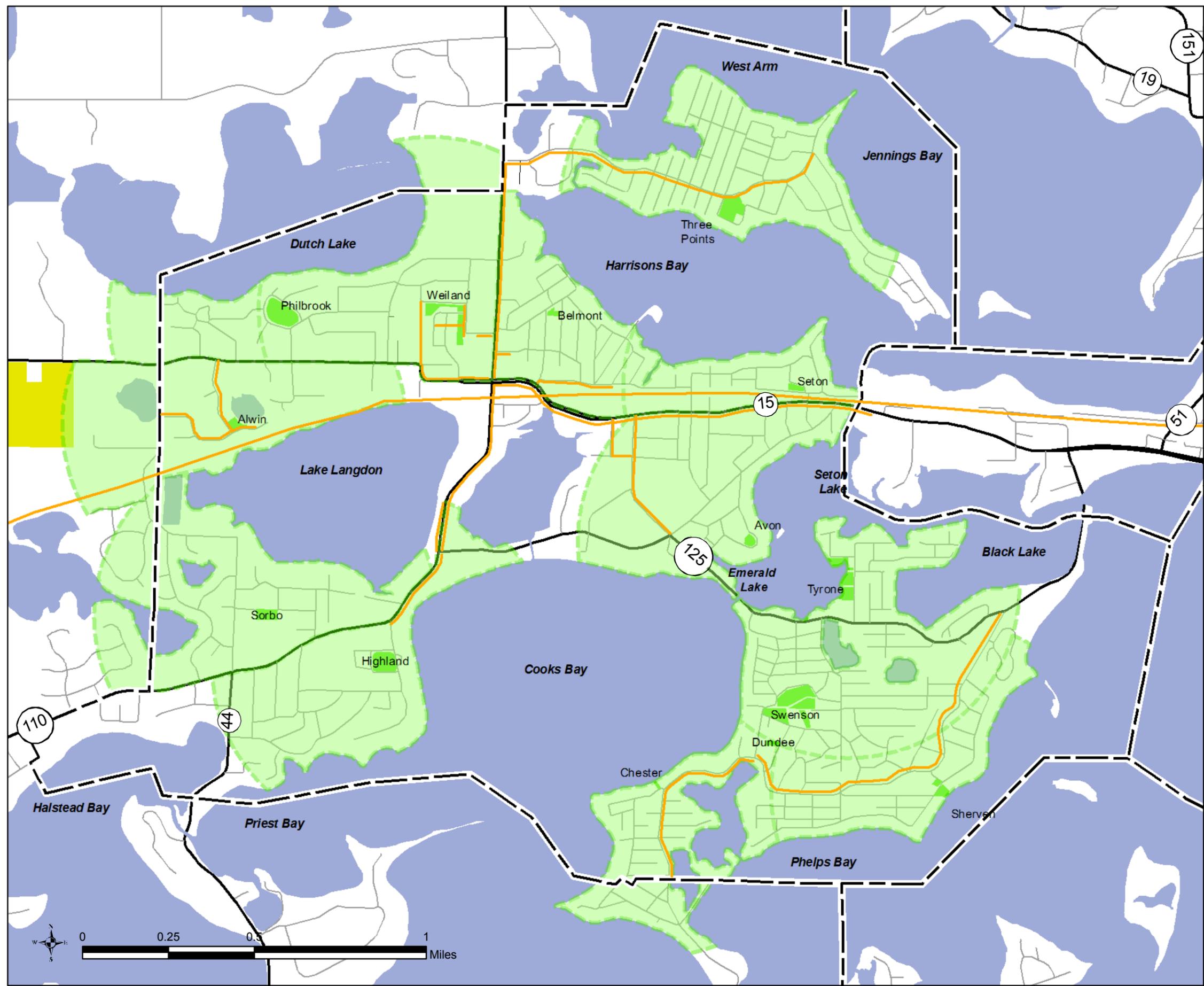
 BOLTON & MENK, INC.
consulting landscape architects



Comprehensive Plan

Legend

-  Neighborhood Park/Playground Service Areas
-  Neighborhood Park/Playground
-  Existing Walking Pathway System



Neighborhood Parks/Playgrounds One-Half Mile Service Areas

Figure 5.4

July 17, 2007

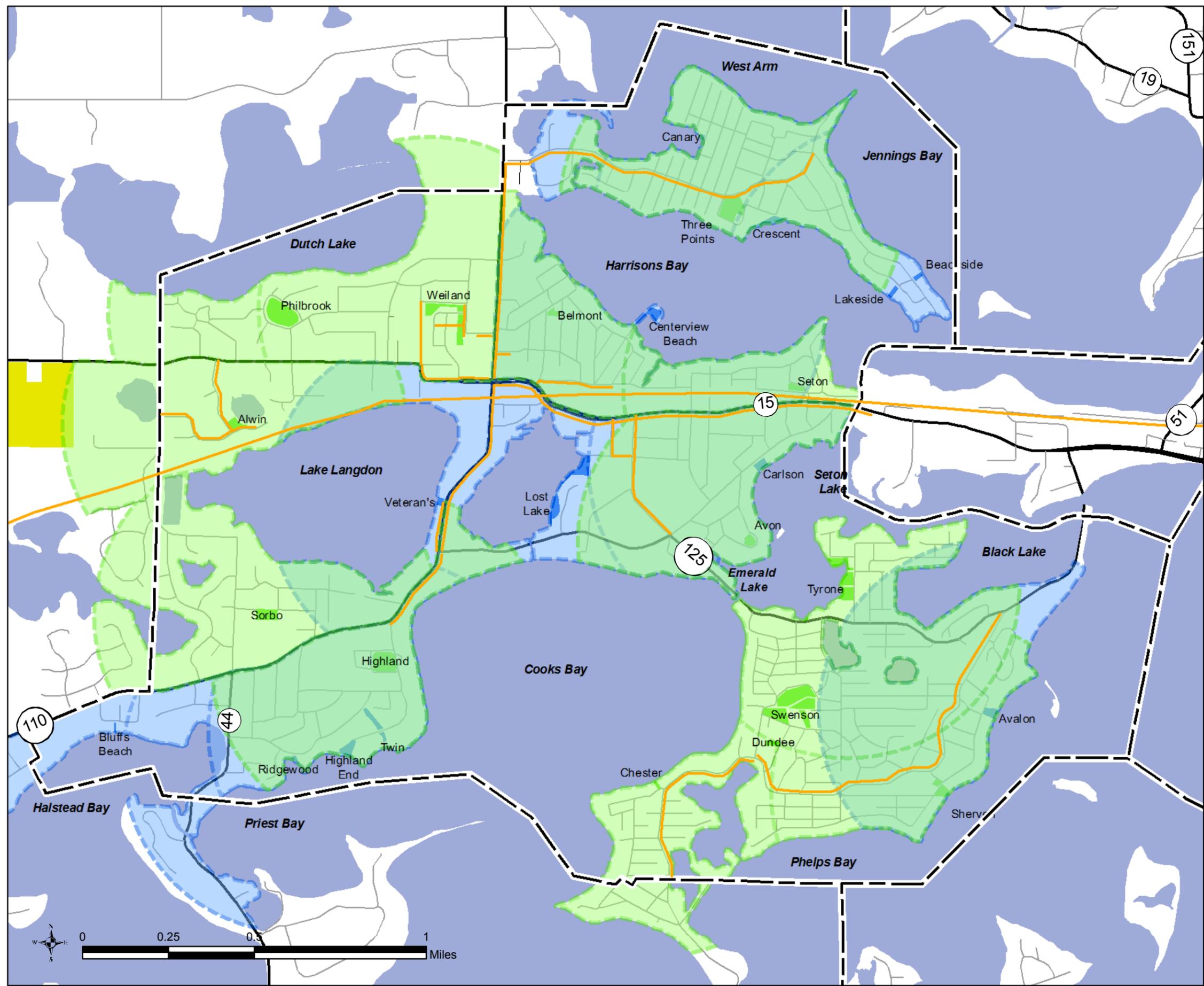
Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR



Comprehensive Plan

Legend

-  Neighborhood Park Service Areas
-  Lakeview Park Service Area
-  Neighborhood Park
-  Lakeview Park
-  Existing Walking Pathway System



Neighborhood Parks/Playgrounds & Lakeview Parks One-Half Mile Service Areas

Figure 5.5

July 17, 2007

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR

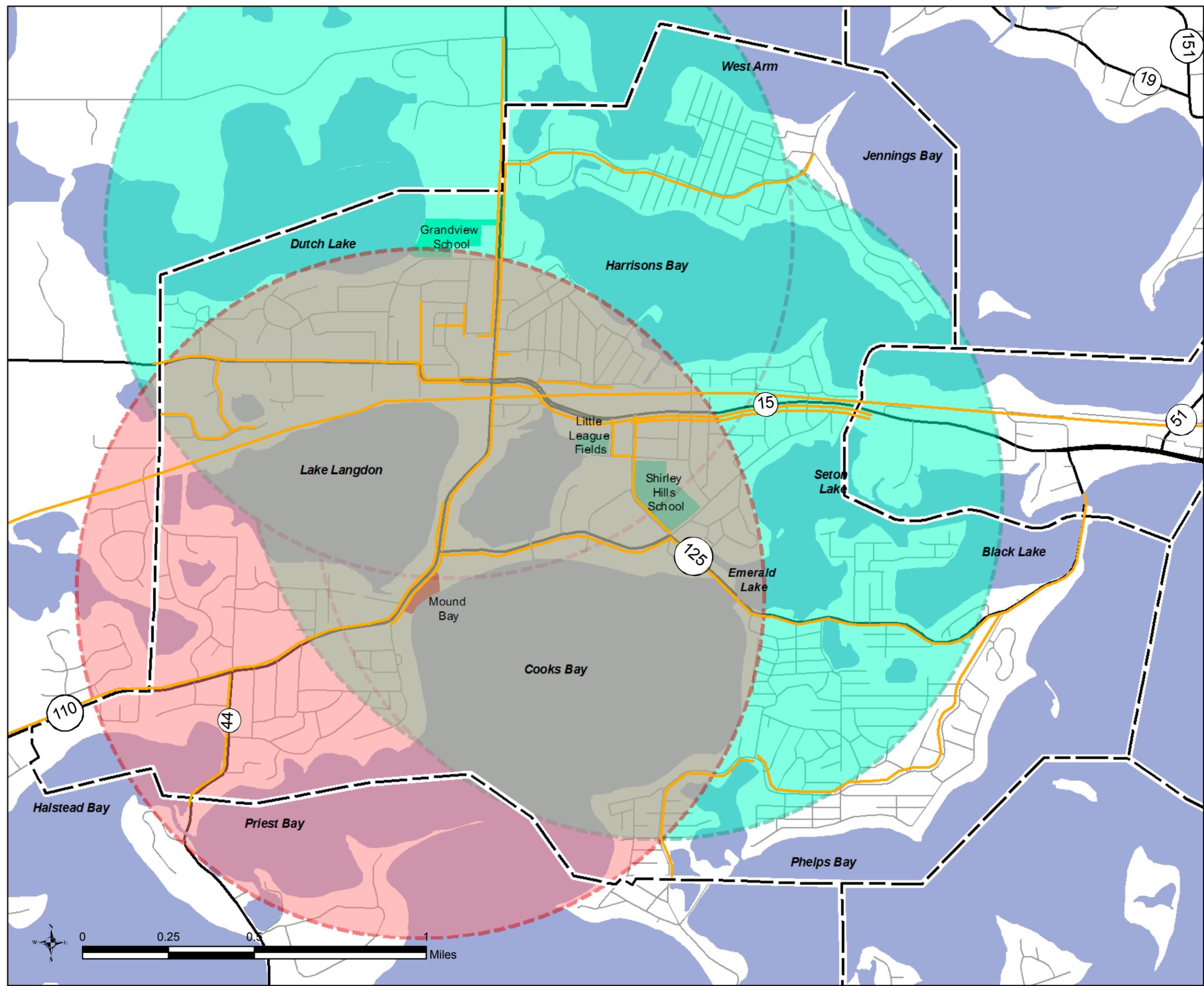




Comprehensive Plan

Legend

-  Community Park Service Area
-  Community Playfield Service Area
-  Community Playfield
-  Community Park
-  Existing Walking & Biking Pathway System



Community Playfields & Community Parks One Mile Service Areas

Figure 5.6

July 17, 2007

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR

 Hoisington Koegler Group, Inc.

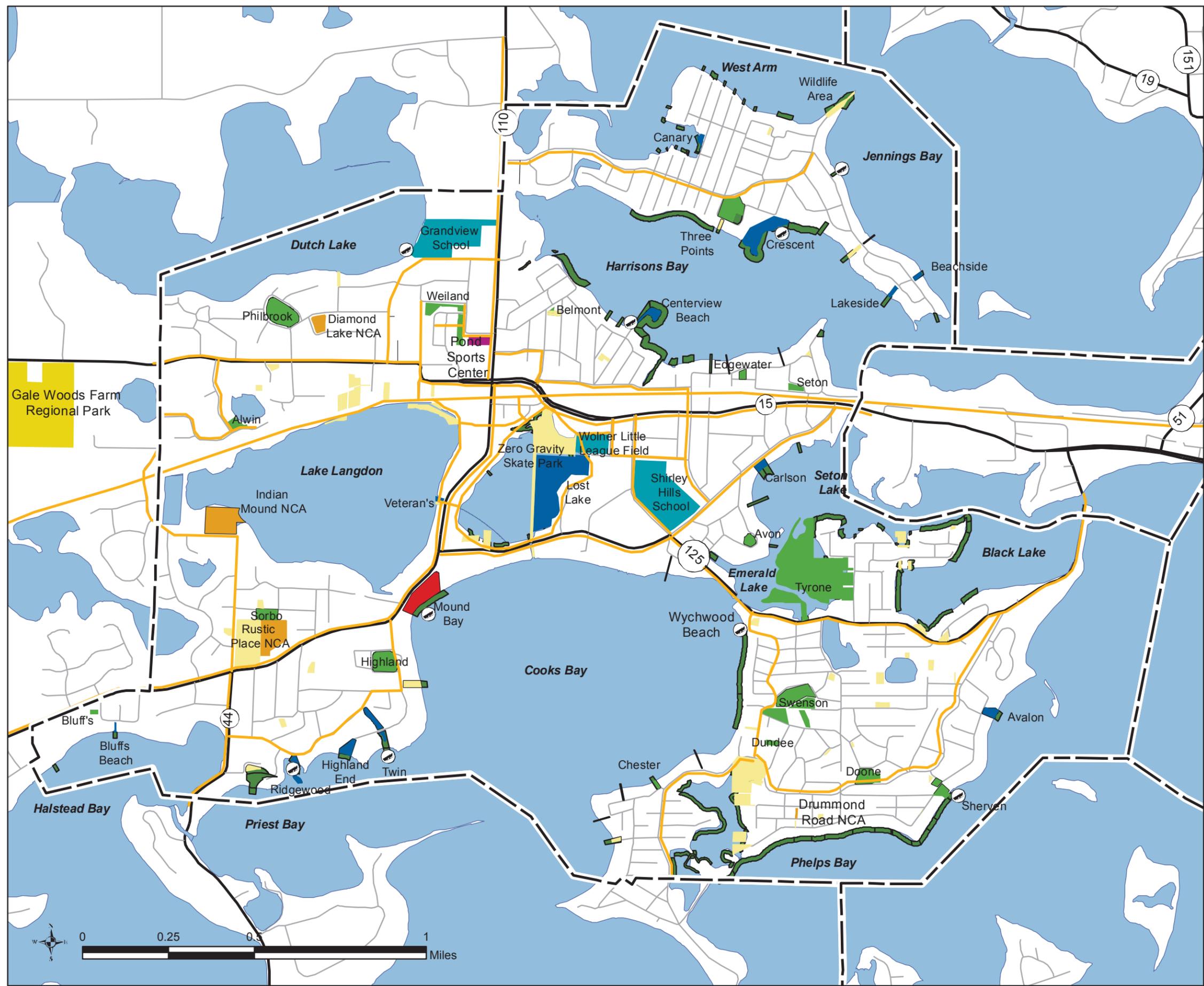
 BOLTON & MENK, INC.
consulting landscape architects



Comprehensive Plan

Legend

- Lake Access Point
- Future Pathway System
- Neighborhood Park/Playground
- Lakeview Park
- Community Playfield
- Community Park
- Special Use Park
- Nature Conservancy Area
- Open Spaces
- Regional Parks
- Mound Docks & Commons



Future Park, Open Space & Recreation System

Figure 5.7

July 17, 2007

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR

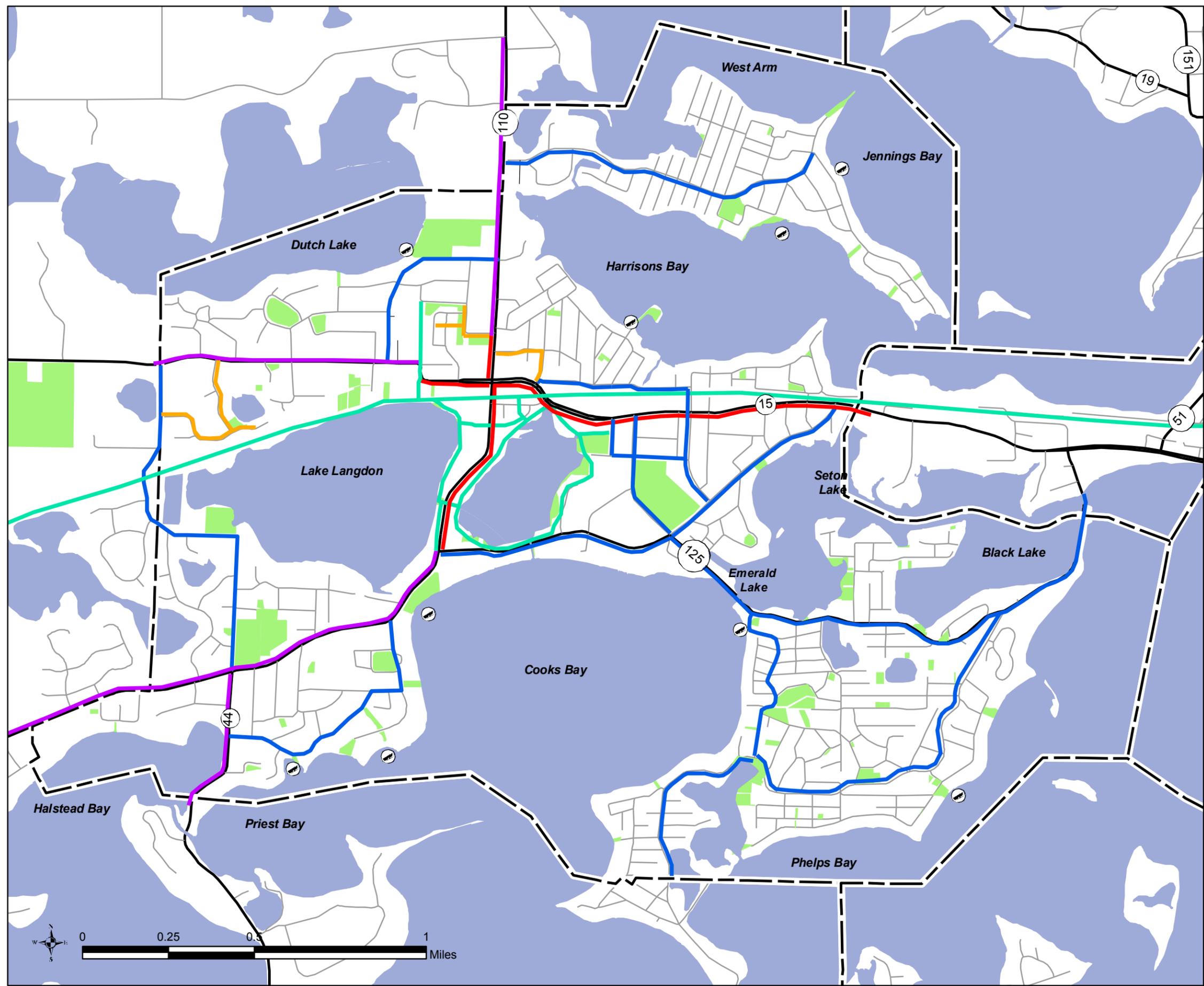




Comprehensive Plan

Legend

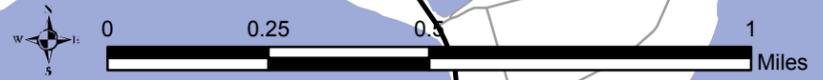
- Sidewalk - One Side of Street
- Sidewalk - Both Sides of Street
- Multi-Use Trail
- Collector Street Pathways
- Arterial Street Pathways
-  Lake Access Point
- Parks and Open Space System



Future Pathways System
Figure 5.8

July 17, 2007

Source: Hennepin County, Metropolitan Council,
 The Lawrence Group, MnDNR



TRANSPORTATION

INTRODUCTION

Since the City of Mound is nearly fully developed, the transportation network is established and not likely to see major changes in the next 10 to 20 years. The fact that the network is established, however, does not diminish the importance of continually monitoring the system to ensure that it performs adequately. As such, whether an existing roadway is proposed for upgrading or a land use change is proposed on a property, this plan provides the framework for decisions regarding the nature of roadway infrastructure improvements necessary to achieve safety, adequate access, mobility, and performance of the existing and future roadway system. This plan includes established local goals, policies, standards, and guidelines to implement the future roadway network and transit vision that is coordinated with respect to county, regional, and state plans in such a way that the transportation system enhances quality economic and residential development within the City of Mound.

The transportation system in Mound includes the roadway system that accommodates a variety of vehicles including cars, trucks, and public transit. Transportation also includes pedestrian movement and bicycles, which is also discussed in Chapter 5 (Park, Open Space & Recreation) of this plan.

TRANSPORTATION SYSTEM PRINCIPLES AND STANDARDS

The transportation system principles and standards included in this Plan create the foundation for improving the transportation system, evaluating its effectiveness, determining future system needs, and implementing strategies to fulfill the goals and policies identified. It should be noted there are no highways in Mound designated as a metropolitan highway/principal arterial by the Metropolitan Council.

Functional Classification

It is recognized that individual roads and streets do not operate independently in any major way. Most travel involves movement through a network of roadways. It becomes necessary to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a roadway network. Functional classification is the process by which streets and highways are grouped into classes according to the character of service they are intended to provide. Functional classification involves determining what functions each roadway should perform prior to determining its design features, such as street widths, speed, and intersection control. The functional classification system typically consists of five major classes of roadways: Principal Arterials, Minor Arterials, Major Collectors, Minor Collectors, and Local roadways. The existing roadways are described below and illustrated in Figure 6.1 – Existing Roadway Functional Classification.

Principal Arterials

Roadways of this classification typically connect large urban areas to other large urban areas or they connect metro centers to regional business concentrations via a continuous roadway without stub connections. They are designed to accommodate the longest trips. Their emphasis is focused on mobility rather than access, and as such private access should not be allowed. They connect only with other Principal Arterials, interstate freeways, and select Minor Arterials and Collector Streets. There are no roadways within the City of Mound designated as a Principal Arterial. The closest Principal Arterials to Mound are Trunk Highway (TH) 7 to the south, TH 12/Interstate (I) 394 to the north, and I-494 to the east.

Minor Arterials

Roadways of this classification typically link urban areas and rural Principal Arterials to larger towns and other major traffic generators capable of attracting trips over similarly long distances. Minor Arterials service medium length trips, and their emphasis is on mobility as opposed to access in urban areas. They connect with Principal Arterials, other Minor Arterials, and Collector Streets. Connections to Local Streets should be avoided if possible, and private access should not be allowed. Minor Arterials are responsible for accommodating thru-trips, as well as trips beginning or ending outside the Mound area. Minor Arterial roadways are typically spaced approximately 1 – 2 miles apart in developed communities similar to Mound. Within Mound County State Aid Highway (CSAH) 15 and CSAH 110 are identified as Minor Arterials.

In the Twin Cities Metropolitan Area, there is a further breakdown of Minor Arterial roadways to establish federal funding priorities, “A–Minor” and “B–Minor.” The A Minor Arterial classifications include Relievers, Expanders, Connectors, and Augmenters. As defined by the Twin Cities Metropolitan Council, Relievers provide ‘open up’ capacity for traffic on Metropolitan Highway Principal Arterials. Augmenters supplement the Principal Arterials within the beltway. Expanders provide connection between developing areas outside the beltway, and connect Principal Arterials. Connectors provide links between rural town centers in the urban reserve and rural area. B–Minor Arterials have a lower priority than A–Minor Arterials and are not eligible for federal funding.

County State Aid Highway 15 is known as Lynwood Boulevard west of CSAH 110 and Shoreline Drive to the east. This roadway provides the primary route for east-west through the center of Mound. This A–Minor Arterial links Mound with Minnetrista to the west where it becomes Carver County CSAH 24 and extends to the City of Watertown. To the east, the roadway extends to TH 12 in Wayzata and I-394. Within Mound, the roadway is designated as an A–Minor Arterial Expander.

County State Aid Highway 110 is known as Bartlett Boulevard south of CSAH 125 and Commerce Boulevard to the north. This corridor provides general north/south continuity through the City of Mound. The roadway provides continuity between CSAH 92 north of the City of St. Bonifacius to CSAH 6 south of the City of Maple Plain. Between Westedge Boulevard and CSAH 15, CSAH 110 is an A Minor Arterial Expander. West of Westedge Boulevard, CSAH 110 is an A Minor Arterial Connector.

Major Collectors

Roadways of this classification typically link neighborhoods together within a city or they link neighborhoods to business concentrations. In highly urban areas, they also provide connectivity between major traffic generators. A trip length of less than 5 miles is most common for Major Collector roadways.

A balance between mobility and access is desired. Major Collector street connections are predominately to Minor Arterials, but they can be connected to any of the other four roadway functional classes. Local access to Major Collectors should be provided via public streets and individual property access should be avoided. Major Collector streets are predominantly responsible for providing circulation within a city, however, due to the abundance of water in the City of Mound and lack of roadway continuity, there are a limited roadways functioning as Major Collectors.

CSAH 44 (Westedge Boulevard) is a Major Collector and provides continuity between CSAH 110 and TH 7 to the south. CSAH 125 (Bartlett Boulevard) is also identified as a Major Collector and provides continuity between CSAH 110 on the west and CSAH 15 in the City of Spring Park on the east.

Minor Collector Streets

Roadways of this classification facilitate the collection of local traffic and convey it to Major Collectors and Minor Arterials. Minor Collector streets serve short trips at relatively low speeds. Their emphasis is focused on access rather than mobility. Minor Collectors are responsible for providing connections between neighborhoods and the Major Collector/Minor Arterial roadways. According to the Metropolitan Council, there are no roadways formally designated as Minor Collector roadways in the City of Mound. However, city roadways such as Three Points Boulevard, Grand View Boulevard, Westedge Boulevard, Ridgewood Boulevard, Highland Boulevard, Lynwood Boulevard, Fairview Lane, Wilshire Boulevard between CSAH 15 and CSAH 125, Brighton Boulevard, and Tuxedo Boulevard currently function as Minor Collector streets in Mound.

Local Streets

Roadways of this classification typically include city streets that facilitate the collection of local traffic and convey it to collectors and Minor Arterials. Their emphasis is to provide direct property access.

Roadway Capacity

Capacities of roadway systems vary based on roadway functional classifications, roadway design (number of lanes, divided or undivided), and system connectivity. A two lane divided arterial roadway has a daily capacity of 12,000 to 18,000 vehicles per day, a four-lane divided arterial street has a daily capacity of 28,000 to 40,000 vehicles per day, and a four-lane freeway has a daily capacity of approximately 70,000 vehicles per day. The variability in capacities are directly related to many roadway characteristics including access spacing, traffic control, adjacent land uses, as well as traffic flow characteristics, such as percentage of trucks and number of turning vehicles. Therefore, it is important that the peak hour conditions are reviewed to determine the actual volume-to-capacity on roadway segments with average daily traffic volumes approaching these capacity values.

Major Collector and Minor Collector streets have physical capacities similar to those of a two-lane arterial street; however the acceptable level of traffic on a residential street is typically significantly less than the street's physical capacity. The acceptable level of traffic volumes on Major Collectors and Minor Collector streets vary based on available right-of-way width, housing densities and setbacks, locations of parks and schools, and overall resident perceptions. Typically, traffic levels on Major Collector streets in residential/educational areas are acceptable when they are at or below 50% of the roadway's physical capacity, resulting in an acceptable capacity of 6,000 to 9,000 vehicles per day. In most communities, acceptable traffic levels on Minor Collector streets are considerably less. Typically, a daily traffic volume of 1,000 to 1,500 vehicles per day is acceptable on Minor Collector streets in residential areas.

In the City of Mound, there are several roadways that function as collector roadways and currently carry more than 1,000 to 1,500 vehicles per day with minimal complaints or issues. As such, the volumes on these roadways are considered to generally be accepted and roadways are interpreted as operating at or below their capacity. For purposes of analysis of future conditions, the capacity of these roadways is assumed to be 20% higher than their existing average daily traffic volume.

Estimated Daily Capacities

Table 6.1 – Roadway Types and Capacities in Mound, identifies various roadway types and the estimated daily capacities that the given roadway in the City of Mound can accommodate.

A capacity deficiency exists when traffic volumes approach or exceed the capacity of the roadway.

Table 6.1 – Roadway Types and Capacities in Mound

Roadway Type	Daily Capacities
Minor Collector Street	1,000 – 6,000
Urban 2-Lane	7,500 – 12,000
Urban 3-Lane or 2-Lane Divided	12,000 – 18,000
Urban 4-Lane Undivided	Up to 20,000
Urban 4-Lane Divided	28,000 to 40,000
4-Lane Freeway	Up to 70,000

Level of Service

Roadway Level of Service (LOS) is used to assign a value to the level of congestion and efficiency of the roadway. The LOS is determined by the ratio of the actual roadway volume to the established capacity. In general, the higher the volume, the lower the LOS. There are six (6) LOS, depending on the extent of congestion and service on the roadway. The LOS are defined in Table 6.2 – Roadway Level of Service as follows:

Table 6.2 Roadway Level of Service

Level of Service	Volume to Capacity Ratio (v/c)
A	0.00 to 0.35
B	0.35 to 0.49
C	0.50 to 0.74
D	0.75 to 0.89
E	0.90 to 0.99
F	> 1.00

Source: Based on Highway Capacity Manual

Generally, the City of Mound should consider capacity improvements on roadways with a LOS D or worse and

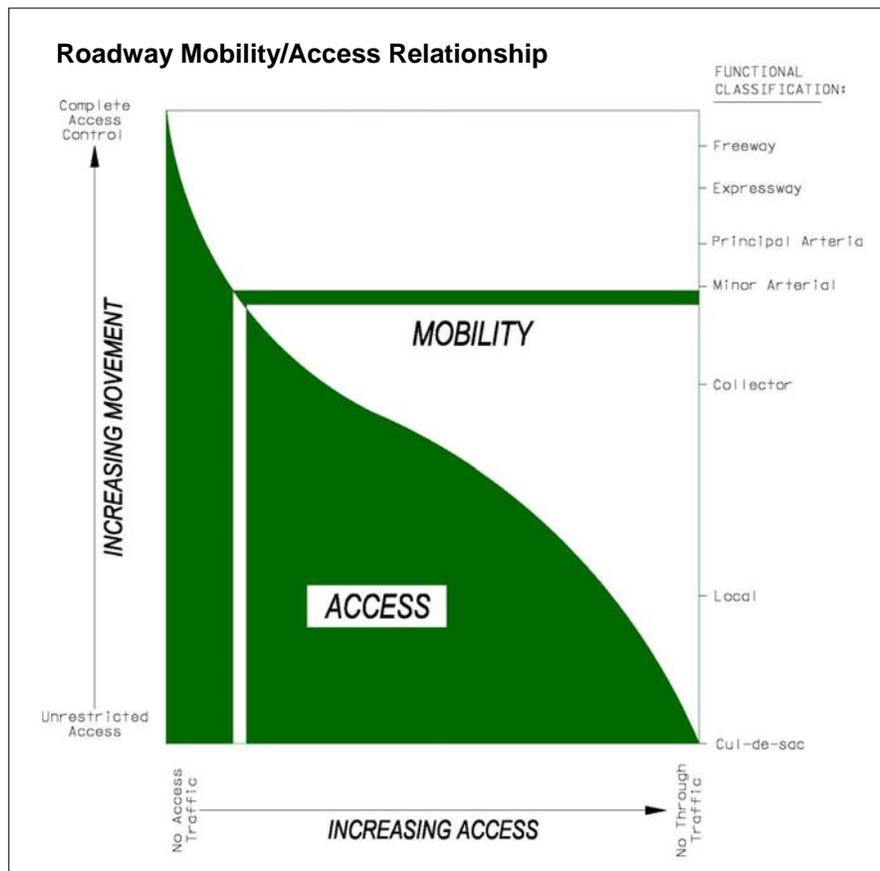
volume-to-capacity ratios over 0.75 during the peak hours.

Access Management Guidelines

Access management guidelines are developed to maintain traffic flow on the network so each roadway can provide its functional duties, while providing adequate access for private properties to the transportation network. This harmonization of access and mobility is the keystone to effective access management.

Mobility, as defined for this Transportation Plan, is the ability to move people, goods, and services via a transportation system component from one place to another. The degree of mobility depends on a number of factors, including the ability of the roadway system to perform its functional duty, the capacity of the roadway, and the operational level of service on the roadway system.

Access, as applied to the roadway system in Mound, is the relationship between local land use and the transportation system. There is an inverse relationship between the amount of access provided and the ability to move through-traffic on a roadway. As higher levels of access are provided, the ability to move traffic is reduced. The graphic below illustrates the relationship between access and mobility.



Each access location (i.e. driveway and/or intersection) creates a potential point of conflict between vehicles moving through an area and vehicles entering and exiting the roadway. These conflicts can result from the slowing effects of merging and weaving that takes place as vehicles accelerate from a stop turning

onto the roadway, or deceleration to make a turn to leave the roadway. At signalized intersections, the potential for conflicts between vehicles is increased, because through-vehicles are required to stop at the signals. If the amount of traffic moving through an area on the roadway is high and/or the speed of traffic on the roadway is high, the number and nature of vehicle conflicts are also increased.

Accordingly, the safe speed of a road, the ability to move traffic on that road, and safe access to cross streets and properties adjacent to the roadway all diminish as the number of access points increase along a specific segment of roadway. Because of these effects, there must be a balance between the level of access provided and the desired function of the roadway.

In Mound, access standards and spacing guidelines are recommended as a strategy to effectively manage existing ingress/egress onto City streets and to provide access controls for new development and redevelopment. The proposed access standards (driveway dimensions) are based on Minnesota Department of Transportation (Mn/DOT) State-Aid design standards. It should be noted that the City of Mound has access authority for those roadways under their jurisdiction. Likewise, Hennepin County has access authority for roadways under their jurisdiction. To further the relationship of access and mobility throughout Mound, the City supports managing access consistent with the roadway mobility and access relationship figure above and supports the access spacing guidelines of the County. Tables 6.3 and 6.4 below present the proposed access standards and access spacing for the Mound roadway network. Please refer to Hennepin County’s minimum access spacing guidelines identified in their current Transportation Plan.

Table 6.3 Roadway Access Standards

Driveway Dimensions	Residential	Commercial or Industrial
Driveway Access Width	11' – 22', 16' desired	16' – 32' 32' desired
Minimum Distance Between Driveways	20'	20'
Minimum Corner Clearance from a Collector Street	60'	80' ⁽¹⁾

⁽¹⁾ At the discretion of the City Engineer, 80' minimum.

Table 6.4 Access Spacing Guidelines for Collector Roadways in Mound ⁽¹⁾

Type of Access	Major Collector ⁽²⁾	Minor Collector ⁽³⁾
Private Residential	Not Permitted	As Needed
Private Commercial/Industrial	Not Permitted	As Needed
Minimum Corner Clearance from a Collector Street	660'	300'

⁽¹⁾ These guidelines apply to City streets only. Hennepin County has access authority for roadways under their jurisdiction. Please refer to Hennepin County's minimum access spacing guidelines identified in their current Transportation Plan.

⁽²⁾ Access to Major Collectors shall be reserved for public street access. Steps should be taken to redirect private accesses on Major Collectors to other local streets. New private access to Major Collectors shall not be permitted unless deemed necessary by the City Engineer.

⁽³⁾ Private access to Minor Collectors shall be at the discretion of the City Engineer. Whenever possible, residential access should be directed to non-continuous streets rather than Minor Collector roadways. Commercial/Industrial properties shall provide common accesses with adjacent properties when access is located on the Minor Collector system. Cross-traffic between adjacent compatible properties is encouraged whenever feasible.

Geometric Design Standards

Geometric design standards are directly related to a roadway's functional classification, design speed, amount of traffic that the roadway is designed to carry, and width of the roadway's right-of-way. For the City of Mound, geometric design standards were developed based on Mn/DOT State-Aid standards. The proposed geometric design standards for Major and Minor Collector roadways are illustrated in Figures 6.2 and 6.3 A and B respectively. These design standards were developed to achieve adequate capacity within the roadway network, as well as a level of acceptance by adjacent land uses, given the constraints associated with the existing development pattern and existing right-of-way width. Each component identified in the typical sections is essential to a particular roadway's ability to perform its function in the roadway network.

County Roadways

Geometric design standards for Hennepin County roadways are generally based on the standards as specified by the State Aid Office. It should be noted that there are a number of roadway sections that could be chosen for county roadways. These roadways, which typically have a range of 15-18,000 ADT, can operate with 3-Lanes, 4-Lanes undivided, and 4-Lanes divided. Hennepin County and the City of Mound will work collaboratively to determine what is most appropriate for each section. Along CSAH 110 and CSAH 15 a bituminous trail is recommended on both sides of the roadway. Similar to the type of travel on the adjacent roadway, the trail will accommodate higher volumes and longer pedestrian and bicycle trips. A 10' width is preferable because it would better accommodate two-way travel safely. On CSAH 125 and CSAH 44, 6' wide on-street bikeways are recommended, and when possible a 5' walk on at least one side.

Roadway Width

Roadway and travel lane widths are directly associated with a roadway's ability to carry vehicular traffic. On Major Collector roadways and Minor Collector streets, a 12' lane is required for each direction of travel. The 24' total travel width is needed to accommodate anticipated two-way traffic volumes without delay. In addition to the travel width, minimum shoulder/parking lane widths are also required to accommodate parked or stalled vehicles. Roadway widths not meeting the Geometric Design Standards will result in decreased performance of the particular roadway and additional travel demand on the adjacent roadway network components. For example, a sub-standard Major Collector roadway may result in additional travel demand on an adjacent Minor Collector street resulting in an overburden for adjacent landowners. Similarly, additional local circulation may result on an adjacent Minor Arterial resulting in reduced mobility for regional trips. Due to the varying right-of-way widths present in Mound, Figure 6.3A and 6.3B identify four different typical sections for Minor Collector roadways to be considered as reconstruction is pursued.

Bikeways, Sidewalks and Trails

Bikeways, sidewalks and/or multi-use trails are recommended to be adjacent to Minor Arterial, Major Collector and Minor Collector roadways within Mound to accommodate pedestrian, bicycle, and other non-motorized travel in a safe and comfortable manner. These roadways carry a considerable amount of vehicular traffic and separation of vehicular and non-vehicular travel modes is recommended. At the discretion of the City, in commercial and industrial areas, the requirements for trails and sidewalks may vary to accommodate additional pedestrian and bicycle traffic to provide connectivity as illustrated in Figure 5.8 – Future Pathways System of this Plan.

Along CSAH 110 and CSAH 15 a bituminous trail is recommended on both sides of the roadway. Similar to the type of travel on the adjacent roadway, the trail will accommodate higher volumes and longer pedestrian and bicycle trips. A 10' width is preferable because it would better accommodate two-way travel safely. On CSAH 125 and CSAH 44, 6' wide on-street bikeways are recommended, and when possible a 5' walk on at least one side.

Along Major Collectors, 6' wide on-street bikeways are recommended, and when possible a 5' sidewalk on at least one side. On Minor Collectors, due to varying right-of-way widths and existing limitations, two 6' wide on-street bikeways are recommended with a 36' wide road in a 50' right-of-way. In 60' of right-of-way an 8' wide off-street bituminous trail is recommended with a 28' wide road and 6' wide boulevard. In a 66' right-of-way, two 6' wide on-street bikeways and a 5' sidewalk is recommended with a 36' wide road and varied boulevard width to accommodate local pedestrian and bicycle travel. When possible, pedestrian facilities on both sides of Major Collector roadways are recommended to allow for pedestrian travel within the corridor without introducing excessive crossing demand. With the vehicular volumes anticipated on Minor Collector streets, pedestrians can safely cross the roadway; however, pedestrian travel along the roadway may become less comfortable as traffic levels increase. An off-street sidewalk or trail will accommodate pedestrian travel along the corridor as well as provide a safe, comfortable link between lower volume residential streets and the other pedestrian facilities within the community.

Design Speed

The design speed of a roadway is directly related to the roadway's function in the roadway system. The focus of Minor Arterial roadways is mobility; therefore these roadways should be designed to accommodate higher travel speeds. Likewise, Minor Collector roadways are more focused on accessibility and should be designed to accommodate lower travel speeds. The function of Major Collectors is balanced between mobility and accessibility; therefore these roadways should be designed accordingly. Table 6.5 below presents the recommended design speed for the Mound roadway network:

Table 6.5 Roadway Design Speed Guidelines

Functional Classification	Design Speed ⁽¹⁾
Minor Collector Street	30 mph
Major Collector Roadway	35 – 40 mph
Minor Arterial Roadway	45 – 55 mph

⁽¹⁾ At the discretion of the City Engineer for City roadways, with approval by the City Council.

Right-of-Way Width

Right-of-way width is directly related to the roadway's width and its ability to carry vehicular and pedestrian traffic in a safe and efficient manner. The roadway right-of-way widths identified in Figures 6.2 and 6.3 A and B are the minimum required for Major and Minor Collector streets, respectively. For Minor Collector streets in residential areas, a minimum right-of-way width of 66' is necessary for the added roadway width, as well as to provide added setback distance between the roadway and homes along the roadway. Right-of-way widths greater than 66' may be required on Major Collector roadways within commercial areas to accommodate the potential for higher traffic volumes and the need for additional through or turning lanes. All right-of-way requirements may be increased at the discretion of the City Engineer, with approval by the City Council. Please refer to Hennepin County's right-of-way requirements for county roads in their current Transportation Plan. The City should obtain identified local and county right-of-way through any proposed redevelopment process to accommodate long-term roadway and sidewalk/trail needs. Dedication requirements for county roads should be consistent with the future roadway typical section as agreed to between the City and the County.

Roadway Jurisdiction

Roadway jurisdiction directly relates to functional classification of roadways. Generally, roadways with higher mobility functions (such as arterials) should fall under the jurisdiction of a regional level of government. In recognizing these roadways serve greater areas resulting in longer trips and higher volumes, jurisdiction of Principal Arterial and Minor Arterial roadways should fall under the jurisdiction of the state and county, respectively. Similarly, roadways with more emphasis on local circulation and access (such as collectors) should fall under the jurisdiction of the local government unit. These roadways serve more localized areas and result in shorter trip lengths and lower volumes. Major Collector and Minor Collector roadways should fall under the jurisdiction of the City of Mound. As roadway segments are considered for turn-back to the City, efforts will be taken to evaluate the roadway features for conformance

to current standards, structural integrity, and safety. This effort will help the City develop short and long-range programs to assume the responsibilities of jurisdictional authority. In the City of Mound, only two jurisdictions have responsibility for the overall road network. Hennepin County is responsible for routes 110, 15, 44 and 125. The City of Mound is responsible for all remaining roadways.

EXISTING TRANSPORTATION SYSTEM EVALUATION

The existing transportation system within the City of Mound currently provides sufficient transportation service to the City.

Existing Traffic Volumes and Capacity Issues

The existing traffic volumes within the area, which were collected by Mn/DOT and Hennepin County, are represented in Figure 6.4 – 2005 and 2006 Average Daily Traffic Volumes. Volume to capacity analysis of the average daily traffic volumes indicates several roadway segments within the City of Mound are currently operating at a periodically congested, near congested or congested level.

Level of Service C – Periodically Congested

- CSAH 15 from CSAH 110 to Wilshire Blvd.
- CSAH 110 from CSAH 44 to CSAH 125
- CSAH 110 from CSAH 125 to CSAH 15
- CSAH 110 from Grandview Boulevard to the north City limits
- Grandview Boulevard from CSAH 15 to Sunset Road

Level of Service D & E – Near Congested

- CSAH 15 from Wilshire Boulevard to the east City limits
- CSAH 110 from CSAH 15 to Grandview Boulevard
- Highland Boulevard from Idlewood Road to CSAH 110
- Grandview Boulevard from Sunset Road to CSAH 110
- Three Points Boulevard from CSAH 110 to Gull Lane
- Lynwood Boulevard from CSAH 15 to Fairview Lane
- Wilshire Boulevard from Bartlett Boulevard to CSAH 15
- Brighton Boulevard from Tuxedo Boulevard to CSAH 125
- Tuxedo Boulevard from south City limits to CSAH 125

Safety and Mobility

A planning-level analysis of the existing transportation system in Mound was completed and included evaluating crash records for accident trends, the types of accidents most commonly occurring, and where accident trends may exist. In the five-year time period from January 1, 2001 through December 31, 2005 there were 283 crashes on the roadways within the City of Mound. Locations with the highest accident frequency were at the intersection of CSAH 15 and CSAH 110, at or near the intersection of CSAH 15 and Wilshire Boulevard, and the intersection of CSAH 110 and CSAH 44/Westedge Boulevard. Of the 283 crashes, 38 included injuries, 26 had possible injuries, and 219 involved property damage only. Rear end crashes represented 28% of the crashes, and 12% were right angle crashes. In 2001 and 2002 there were a

total of 78 and 76 crashes respectively. The average number of crashes from 2003 to 2005 dropped to 43.

Accident trends should be considered in planning for future roadways. Hennepin County, for example, has found that its 4-Lane undivided roadways have roughly twice the crash rate of 4-Lane divided roadways. This appears to be due in part to the lack of turn lanes, close access spacing, and high level of weaving maneuvers on the 4-Lane undivided roads. While as a developed City it will be difficult for all county roadways to be divided roadways, it should be considered whenever possible.

The recently completed transportation improvements associated with the realignment of CSAH 15 have improved the safety and mobility of this Minor Arterial corridor. Due to the fully developed nature of the City of Mound, together with the community's predominant pattern of water features and steep slopes, there are many existing non-continuous roadways. Due to these existing limitations, roadway continuity improvements are not anticipated.

Jurisdictional Issues

CSAH 125 is a Major Collector roadway primarily providing local circulation. It is identified in Hennepin County's 2020 Transportation Plan as a potential jurisdictional transfer route (turn-back route) from Hennepin County to the City of Mound. Potential future discussions regarding a change in jurisdiction for CSAH 125 would also require coordination with Spring Park.

Relevant Area Transportation Studies

Two studies have been completed in recent years to provide direction relative to the development of the City of Mound's transportation system.

Mound Visions Alternative Urban Areawide Review

The Alternative Urban Areawide Review (AUAR) analyzed two similar development scenarios for compact, mixed-use downtown development. The scenarios differed in intensity of uses and location throughout the project area and the proposed dredge and docks in the Mound Harbor Renaissance (MHR) plan. The study concluded there were only minor differences in the traffic analysis between the two scenarios. With the realignment of the CSAH 15 and CSAH 110 intersection and the installation of a signal and protected left turn lanes for the east and west approaches the intersection was identified to operate at an acceptable level. The only intersection to operate at a less than desirable level of service was CSAH 15/Belmont Avenue. Due to the high volumes of vehicles turning left onto CSAH 15, long delays for left-turning movements are expected. All other intersections were identified to operate at acceptable levels of service for the peak periods. The mitigation plan stated the north and south approaches of Belmont Avenue at CSAH 15 are stop controlled and offer one shared left turn/through/right turn lane. Hennepin County's design provided a 32' roadway section, which was identified in the AUAR as being less than desirable for the addition of a right turn lane. Traffic operations at this intersection were identified for monitoring to determine if a right turn lane is needed in the future. The AUAR also noted the City will work with Hennepin County to periodically monitor traffic generated from the development within the project area to evaluate its impacts on newly realigned CSAH 15 in terms of roadway function and safety for vehicles and pedestrians.

City of Mound Parking Study

The City of Mound parking study discusses the redevelopment of the Mound Harbor Renaissance Project

and the number of parking spaces necessary to serve the area. The study analyzed the parking demand for the area to the parking supply planned for the development, compared those findings to the current City code, and completed conceptual parking structure concepts. The study determined that a minimum of 150 spaces should be constructed in the new municipal ramp, with 50 spaces reserved for the park and ride facility for Metro Transit users. The study also recognized use of the abandoned rail corridor to be used as a regional biking and walking trail with the park and ride facility serving as a trailhead. This corridor could be a future light rail transit line. Conceptual drawings indicated that 126 spaces is the most efficient number of spaces that can be constructed. Expansion of 56 spaces per full level could be constructed as parking demand is warranted.

Multimodal Transportation Opportunities

It is recognized that various methods of travel impact the economic vitality of a city, county, or broader region.

Transit Service

Mound's transit system is classified in the Metropolitan Council's 2030 Transportation Policy Plan as part of Transit Market Area III. Transit Market Area III has the following characteristics:

- **Land Use Pattern:** Generally lower concentrations with intermittent pockets of moderate concentrations (pockets would receive highest service levels)
- **Service Options:** Peak-only express, small vehicle dial-a-ride, midday circulators, special needs paratransit (ADA, seniors, etc.) ridesharing
- **Service Characteristics:**
 - **Frequencies:** Peak-period-only expresses, 1-2 hour midday frequencies, dial-a-ride advance registration
 - **Span of Service:** 10-14 hours per day, weekdays and limited weekends
 - **Access:** Services tied to park-and-ride lots and hubs

Figure 6.5 – Existing Transit Opportunities displays the current service available, including route and bus stop locations, in and around the City of Mound. An existing park and ride lot is located at the Mound Transit Center on CSAH 15 near Belmont Lane. Regular route service in the City as currently provided is described below:

- Mound has bus service Monday-Friday, no weekend service.
- Route 675 is an express bus route operated by Metro Transit. This route provides connectivity to downtown Minneapolis, and serves Mound, Spring Park, Wayzata, Minnetonka, Golden Valley, St. Louis Park, and downtown Minneapolis. It operates peak and midday hours every 30 to 60 minutes.
- Route 677 an express bus route operated by Metro Transit. It serves Mound, Spring Park, Orono (Navarre) and Minneapolis with four trips in the AM to Minneapolis and three trips in the PM to Mound. Route 677, which serves Three Points Boulevard, has been recently changed to stop at the Mound Transit Center. Westbound buses now stop at Mound Transit Center before using Auditors Road to get to Commerce Boulevard to go north to Three Points Boulevard.
- Route 678 is a totally a dial-a-ride that is timed to connect with both Route 675 and 677 at the

Mound Transit Center.

Dial-a-ride service is also provided by Westonka Rides and will take a rider anywhere in Mound, Spring Park, and Navarre from the Mound Transit Center.

Aviation Plans/Facilities

There are no existing or planned aviation facilities within Mound. However, the City of Mound is required to include standards for airspace protection in its Comprehensive Plan and local controls.

Railway

Rail service is no longer provided on the Dakota Rail line. In recent years the Hennepin County Regional Railroad Authority authorized the purchase of the line in Hennepin County. Together with Carver County and McLeod County Regional Railroad Authorities, the line provides connectivity from Wayzata to Hutchinson. Although the line was acquired for future transportation needs, a regional recreational trail master plan has been completed and the Dakota Rail Regional Trail is funded for construction in 2007 and 2008 as a long-term interim use.

Bikeways, Sidewalks and Trails

Chapter 5 – Park, Open Space and Recreation System discusses existing bikeway, sidewalk and trail locations, which are illustrated in Figure 5.8 – Future Pathways System. As noted above, the Dakota Rail Regional Trail is funded for construction of a recreational trail in 2007 and 2008.

FUTURE TRANSPORTATION SYSTEM PLAN

The transportation system in Mound is generally considered developed, and improvements are anticipated as reconstruction of aging infrastructure is pursued. As reconstruction occurs, it will be important for the City to improve the roadway system consistent with the recommended Transportation System Principles and Standards (pages 6-1 through 6-9) to the extent possible.

Forecasted Traffic Volumes & Capacity Needs

In the City of Mound there are a number of roadways that function as collector roadways even though they have not been officially designated as such. Generally, these roadways serve areas that are fully developed and land use patterns are not expected to significantly change. Increases in through-traffic on these corridors are not expected due to the community's predominant pattern of water features and steep slopes that have shaped the non-continuous nature of these roadways. The existing pattern of narrow rights-of-way and reduced development setbacks present challenges for significantly improving the existing level of service through roadway capacity improvements. For purposes of analyzing traffic volumes on local roadways, existing traffic volumes were projected to increase 10% by the year 2030. This 10% increase accounts for changes in travel behavior associated with increased annual vehicle miles traveled.

Hoisington Koegler Group, Inc. developed household, population, and employment projections for the future land use plan illustrated in Figure 4.2 – Future Land Use. Appendix A includes the household, population, and employment projections for the year 2030 by Metropolitan Council traffic analysis zone. The Metropolitan Council forecasted 2030 average annual daily traffic volumes for some segments of CSAH

15, CSAH 110, CSAH 125, CSAH 44 and Bartlett Boulevard. Future traffic volumes are illustrated in Figure 6.7 – 2030 Forecasted Average Daily Traffic Volumes.

The forecasted average annual daily travel demands approach or exceed daily capacities on several corridors. Based on 2030 traffic projections, the following roadways are anticipated to be periodically congested, near congested, or congested:

Level of Service C – Periodically Congested

- CSAH 110 from the south City limits to CSAH 44
- CSAH 44 from the south City limits to CSAH 110
- CSAH 125 from CSAH 110 to the east City limits
- Bartlett Boulevard from Wilshire Boulevard to CSAH 15
- Grandview Boulevard from CSAH 15 to Sunset Road

Level of Service D & E – Near Congested

- CSAH 15 from the west City limits to the east City limits
- Highland Boulevard from Idlewood Road to CSAH 110
- Grandview Boulevard from Sunset Road to CSAH 110
- Three Points Boulevard from CSAH 110 to Gull Lane
- Lynwood Boulevard from CSAH 15 to Fairview Lane
- Wilshire Boulevard from Bartlett Boulevard to CSAH 15
- Brighton Boulevard from Tuxedo Boulevard to CSAH 125
- Tuxedo Boulevard from the south City limits to CSAH 125

Level of Service F – Congested

- CSAH 110 from CSAH 44 to the north City limits

Generally, the recommended Geometric Design Standards and associated right-of-way width requirements illustrated in the Geometric Design Standards will maintain the corridor's capacity to accommodate the forecasted traffic volumes on the City's roadways. Table 6.1 – Roadway Types and Capacities identifies various roadway types and the daily capacities that the given roadway can accommodate.

Capacity improvements are recommended on any roadway with a future level of service of D, E, or F, as defined in the roadway capacity discussion within the Transportation System Principals and Standards section. Roadways identified above as near congested (having a volume to capacity ratio between 0.75 and 1) or congested (having a volume to capacity ratio greater than 1) are recommended to be monitored and programmed for capacity improvements when necessary. Roadways that are periodically congested (having a volume to capacity ratio between 0.5 and 0.75) are generally identified as providing an acceptable level of service.

Roadway Safety & Mobility Needs

Minor Collector roadways carrying greater than 1,500 vehicles per day have volumes that tend to create potential conflicts between vehicles and pedestrians. It is recommended that the City monitor pedestrian

crashes, near misses, and complaints, and prioritize roadway improvements with pavement rehabilitation needs identified in the City's Street Reconstruction and Rehabilitation Plan. Hennepin County has recently re-striped CSAH 110 north of CSAH 15 to a 3-lane roadway. As maintenance is done to the south, extension of the 3-lane section could improve the safety and mobility of the corridor. Additional strategies to improve safety and mobility would be to consider adding turn lanes when possible to City collector roadways intersecting with County roadways. To accommodate necessary turn lanes, additional right-of-way may be required at the intersection. As reconstruction of aging infrastructure is pursued on City collector streets the recommended geometric design standards should assist in improving safety and mobility.

Additionally, as traffic volumes approaching an intersection increase an intersection, control evaluation may be necessary. Triggers for an evaluation may include an increase in correctable crashes or an unacceptable traffic back up. Higher volume roadways that could show traffic signal benefits are under the jurisdiction of the County. As the jurisdictional authority, the County would make decisions on appropriate traffic control. The intersection control evaluation would identify the traffic control option (e.g. all way stop, roundabout, possible signalization) and capacity improvements (e.g. turn lanes) necessary to accommodate the traffic volumes in a safe and efficient manner. Future reconstruction may require modifications of existing access to include strategies such as access consolidation, right-in, right-out access only, or the development of a frontage road to improve the safety and mobility of the corridor. Right-of-way should be acquired as properties in the area develop or redevelop.

Functional Classification Needs

Figure 6.6 – Future Roadway Functional Classification identifies the long-term vision for the classification of roadways based on the function they serve within the City of Mound. Bartlett Boulevard east of Wilshire Boulevard is recommended to be designated from a local road to a Major Collector due its potential to be used as an alternative route to CSAH 110/CSAH 15 intersection by vehicles originating/destined from the southwest part of the city moving to or from the city's eastern boundary. Several local roadways are also recommended to be designated from Local roads to Minor Collectors. These designations are recommended to reflect the importance of the role these roadways are currently playing in the roadway network, as well as to recognize their priority over Local roadways.

Multimodal Transportation Opportunities

It is important for the community to plan for the ability to accommodate multimodal activities (i.e. transit, pedestrian, and bicycle) on all non-local roadways to provide other opportunities to move about the City and beyond.

Transit Service

Significant changes to the existing transit opportunities are not anticipated based on the level of growth forecasted by the year 2030. The City should evaluate the need for a future park and ride opportunity along with any redevelopment proposal near the intersection of CSAH 125 and Tuxedo Boulevard. As the City's population ages, the City should work with Metro Transit and Senior Community Services to ensure needs are being met. The City should be an active participant in any studies related to the potential future Dakota Rail Line light rail transit.

Aviation Plans/Facilities

As noted in the discussion of the existing transportation system, the City of Mound is required to include standards for airspace protection in its Comprehensive Plan and local controls.

Federal Regulation Title 14, Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for evaluating the effect of the construction or alteration on operating procedures, determining the potential hazardous effect of the proposed construction on air navigation, identifying mitigation measures to enhance safe air navigation, and charting of new objects. Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance, thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace.

Title 14, Part 77.13 requires any person/organization who intends to sponsor any of the following construction or alterations to notify the Administrator of the FAA when:

- Any construction or alteration exceeding 200 feet above ground level;
- Any construction or alteration:
 - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet
 - Within 10,000 feet of a public use or military airport which exceeds 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet
 - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards;
- When requested by FAA; and,
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

Persons/organizations intending to sponsor construction/alterations which require notification to the FAA under Title 14, Part 77.13 shall notify the FAA using FAA form 7460–1 as may be amended.

The City's Zoning Ordinance shall be amended to require persons/organizations intending to sponsor construction/alterations which require notification to the FAA under Title 14, Part 77.13 to notify the FAA using FAA form 7460–1 as may be amended.

Bikeways, Sidewalks and Trails

Chapter 5 – Park, Open Space and Recreation System discusses future bikeway, sidewalk and multi-use trail locations, which are illustrated in Figure 5.8 – Future Pathways System. As noted in the multimodal discussion within the Evaluation of the Existing System section, the Dakota Rail Regional Trail is programmed for construction in 2007 and 2008. Future bikeway, sidewalk and multi-use trail locations are also discussed in the geometric design standards section of this chapter to be pursued along most collector roadways. For each of the County highways within Mound, a 10' bituminous trail is recommended on both sides of the roadway to accommodate pedestrian, bicycle, and other non-motorized travel.

The City should consider reviewing walking and biking facilities and school routes to determine their

adequacy as traffic conditions change. Bikeways, sidewalks and trails, providing pedestrians a route to future controlled intersections, should be incorporated into road projects and land redevelopments to safely accommodate pedestrian and traffic growth in the City. In addition, as roadway improvement projects are considered, the City should work to incorporate trail crossings strategies and standards which make the trail users as safe as possible. The City should work cooperatively with Three Rivers Park District on roadway improvements which may impact the Dakota Rail Regional Trail.

TRANSPORTATION GOAL & POLICIES

The following goal and policies outline the City of Mound's plan for ensuring adequate transportation infrastructure is available to support the planned land uses through 2030, as well as identifying potential funding sources for completing necessary improvements.

Transportation Goal

Ensure the development of a transportation system that provides convenient and effective multi-modal connections within Mound and to adjacent municipalities, the remainder of the Twin Cities Metropolitan Area and greater Minnesota.

Policies:

The following policies have been developed to guide future needs, changes and improvements to the community's transportation system through the year 2030:

1. Comprehensive Transportation Planning – Approach transportation in a comprehensive manner by giving attention to all travel modes and related facilities, linking transit with appropriate land uses and densities, and by mixing or clustering compatible land use activities to reduce the need for and costs of future expansion of the transportation system.
2. Transportation Improvement – Improve the existing transportation system to provide a safe, cost effective, efficient and multi-modal future transportation system that supports car, transit, pedestrian, bicycle, and truck transportation for the movement of people and goods and services in the community.
3. Existing Infrastructure Preservation & Maintenance – Preserve and maintain the existing transportation infrastructure to protect the existing significant investment, to increase its efficiency, and delay the need for major system improvements or expansions, using the Capital Improvement Plan as a key planning & investment tool.
4. Transit/Alternative Modes of Transportation – To prevent and reduce congestion on roadways, the City should promote expansion of alternate and/or integrated transportation methods, including transit, park & ride facilities, carpooling, biking and walking.
5. Transportation & Economic Development Link – Promote a transportation system that contributes to the economic vitality of the community by connecting people to work, shopping, schools, and other activity generators/attractions and supports growth of commercial and industrial uses.
6. Regional Transportation Planning – Cooperate on a regional level in the planning and development of the future metro transportation system, including future transit services, by coordinating efforts with multiple jurisdictions, public and private transit providers and agencies at all government levels to ensure that services meet the functional needs of all.

7. Regional Traffic Management – Cooperate at the local, state, and regional levels to reduce traffic congestion and safety concerns on regional transportation corridors.
8. County Capital Improvement Plan – The City should continue to work with the County’s elected and appointed officials to include County road reconstruction projects on the County’s Capital Improvement Plan to address needed reconstruction and potential trails along the roadways when improved.
9. Regional Transportation Funding – Encourage a balanced approach to regional financing of transportation and other community needs at the local level based on current availability of services and facilities and maintenance of existing infrastructure.
10. Multi-jurisdictional Coordination of Roadway Projects – Continue to coordinate future road construction and reconstruction projects with all utility service providers and Hennepin County to ensure efficient repair/replacement and avoid duplicate costs.
11. Capital Improvement Plan – Maintain a Capital Improvement Plan that contains elements for reconstruction of the roadway system, with scheduled maintenance included in annual budgets. Street maintenance should include routine patching, crack filling, and storm sewer cleaning. Implement a schedule for roadway maintenance and reconstruction (e.g. seal coating every 4 to 5 years, complete reconstruction or mill/overlay every 15 to 20 years), street widening/realignment, etc.
12. Zoning and Subdivision Ordinance Update – Update the Zoning and Subdivision Ordinances to be consistent with the Transportation Plan.
13. Right-of-Way Dedication – Require right-of-way dedication along county and local roads to meet future roadway capacity needs as redevelopment is proposed and platted. Dedication requirements for county roads should be consistent with the future roadway typical section as agreed to between the City of Mound and Hennepin County.
14. Development Driven Improvements – Collaborate with developers to construct needed transportation improvements prior to development. Utilize developer agreements as a tool to ensure improvements are constructed as agreed upon in the platting or development process. In addition, when Tax Increment Financing (TIF) money is used, adjacent roadways and intersections that are to be impacted by the development should be included as part of the TIF Improvement District.
15. Non-Development Driven Improvements – Non-development driven transportation improvements should be prioritized and programmed in the Capital Improvement Plan.
16. Assessment Policy – Establish an assessment standard for Major Collector and Minor Arterial roadways to establish expectations and ensure consistent application.
17. Traffic Impact Study Policy – Establish a standard in the City’s ordinances outlining when a traffic impact study should be conducted, including acceptable information to be contained within the study.



Comprehensive Plan

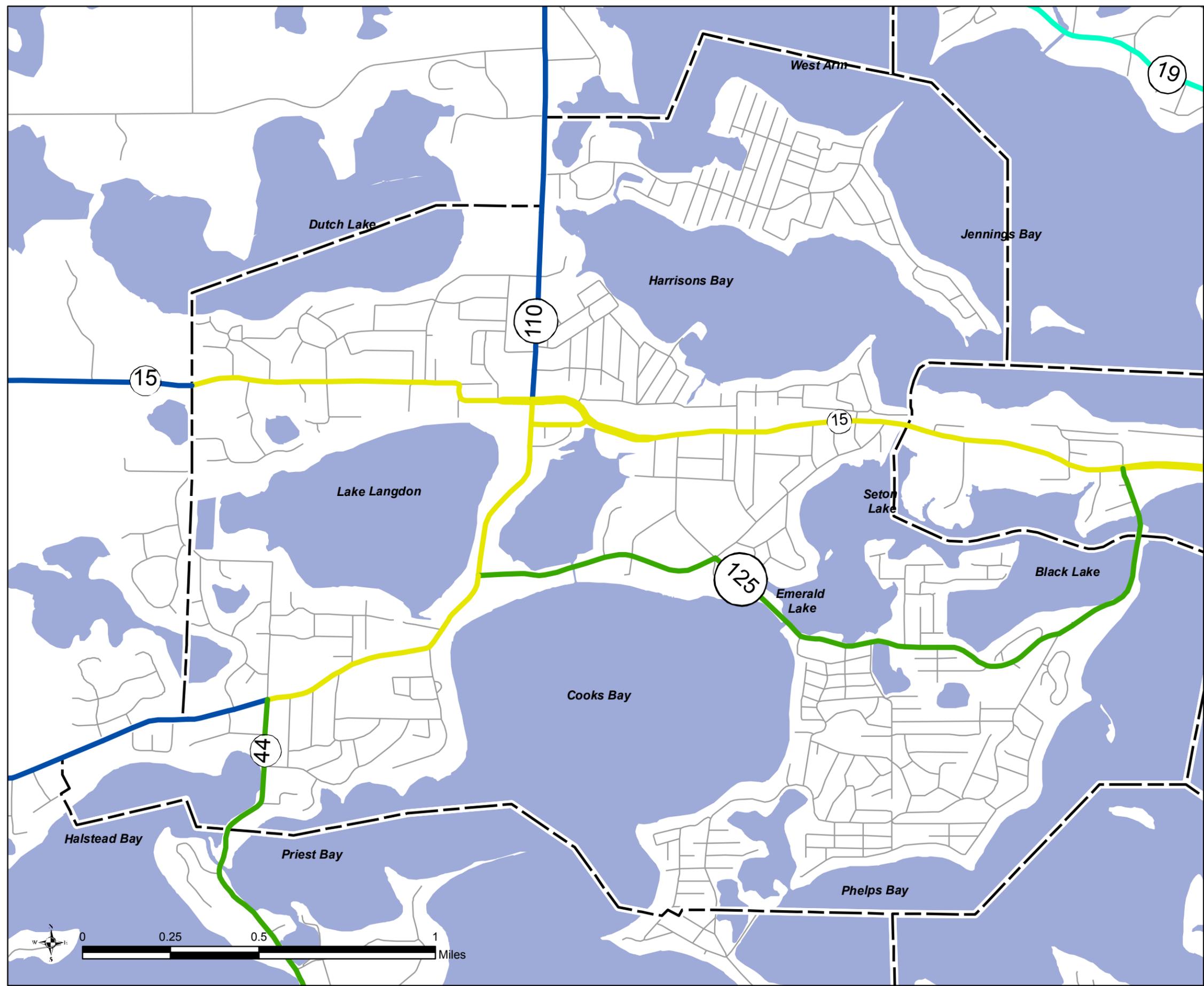
Legend

Existing Roadway Functional Classification

-  A Minor Arterial-Expander
-  A Minor Arterial-Connector
-  B Minor Arterial
-  Major Collector

Roads

-  City Streets

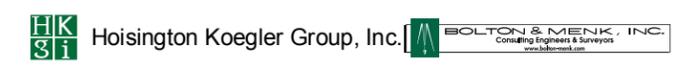


Existing Roadway Functional Classification

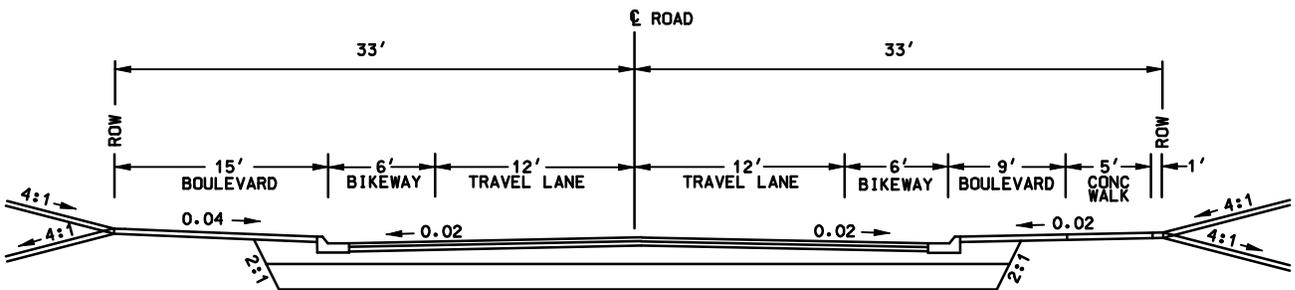
Figure 6.1

September 2008

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR



TYPICAL SECTION 36' ROAD W/66' ROW, ON-STREET BIKEWAY & SIDEWALK



1. Design standards apply to roadways under the City of Mound's jurisdiction only.
2. Additional ROW will be needed at intersections to accommodate turn lanes, at the discretion of the City Engineer.

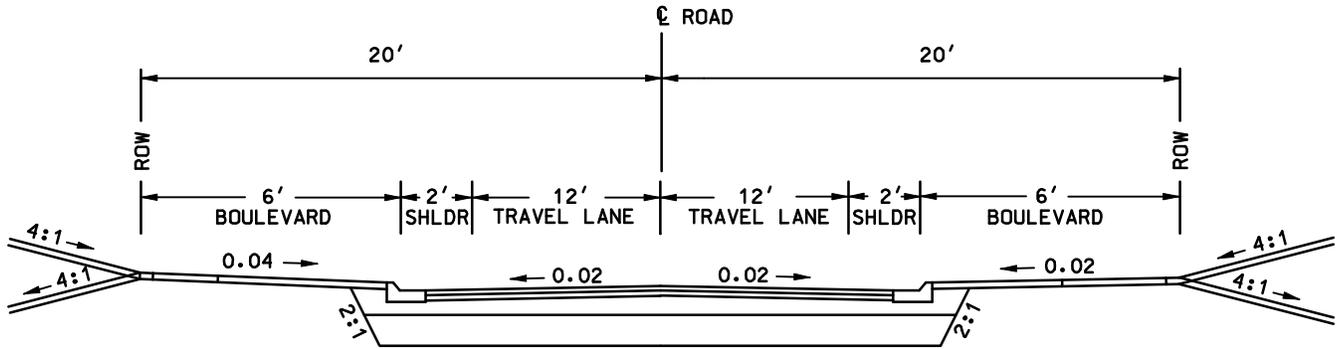
FIGURE 6.2

GEOMETRIC DESIGN STANDARDS FOR MAJOR COLLECTORS



BOLTON & MENK, INC.
Consulting Engineers & Surveyors

TYPICAL SECTION
28' ROAD W/40' OF ROW



TYPICAL SECTION
36' ROAD W/50' OF ROW & ON-STREET BIKEWAY

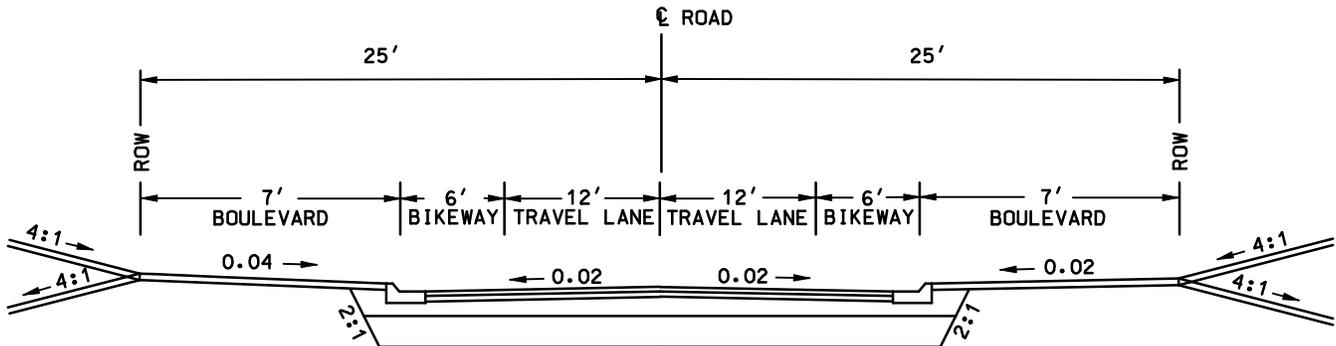


FIGURE 6.3A

**GEOMETRIC DESIGN STANDARDS FOR
 MINOR COLLECTORS**



BOLTON & MENK, INC.
 Consulting Engineers & Surveyors

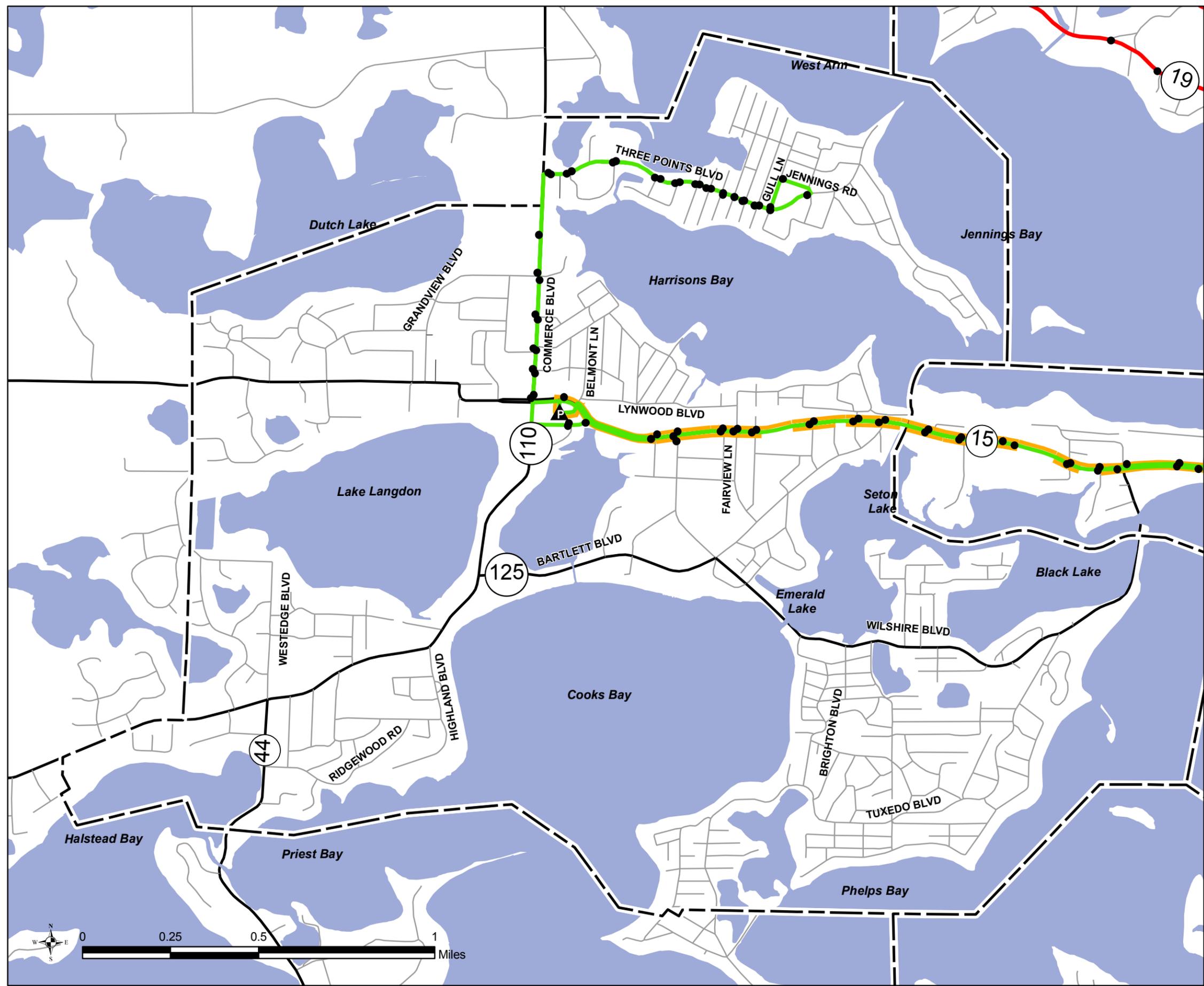


Comprehensive Plan

Legend

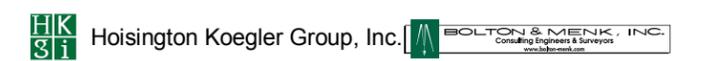
- Bus Stops
- ▲ Park and Ride
- Bus Routes**
- Express Route 674
- Express Route 675
- Express Route 677
- ⬮ Mound City Boundary
- Public Waters Inventory

Route 678 is a dial-a-ride that connects with Routes 675 and 677 at the Mound Transit Center. In Spring 2010 this route will become a standard dial-a-ride service.



Existing Transit Opportunities
Figure 6.5

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR





Comprehensive Plan

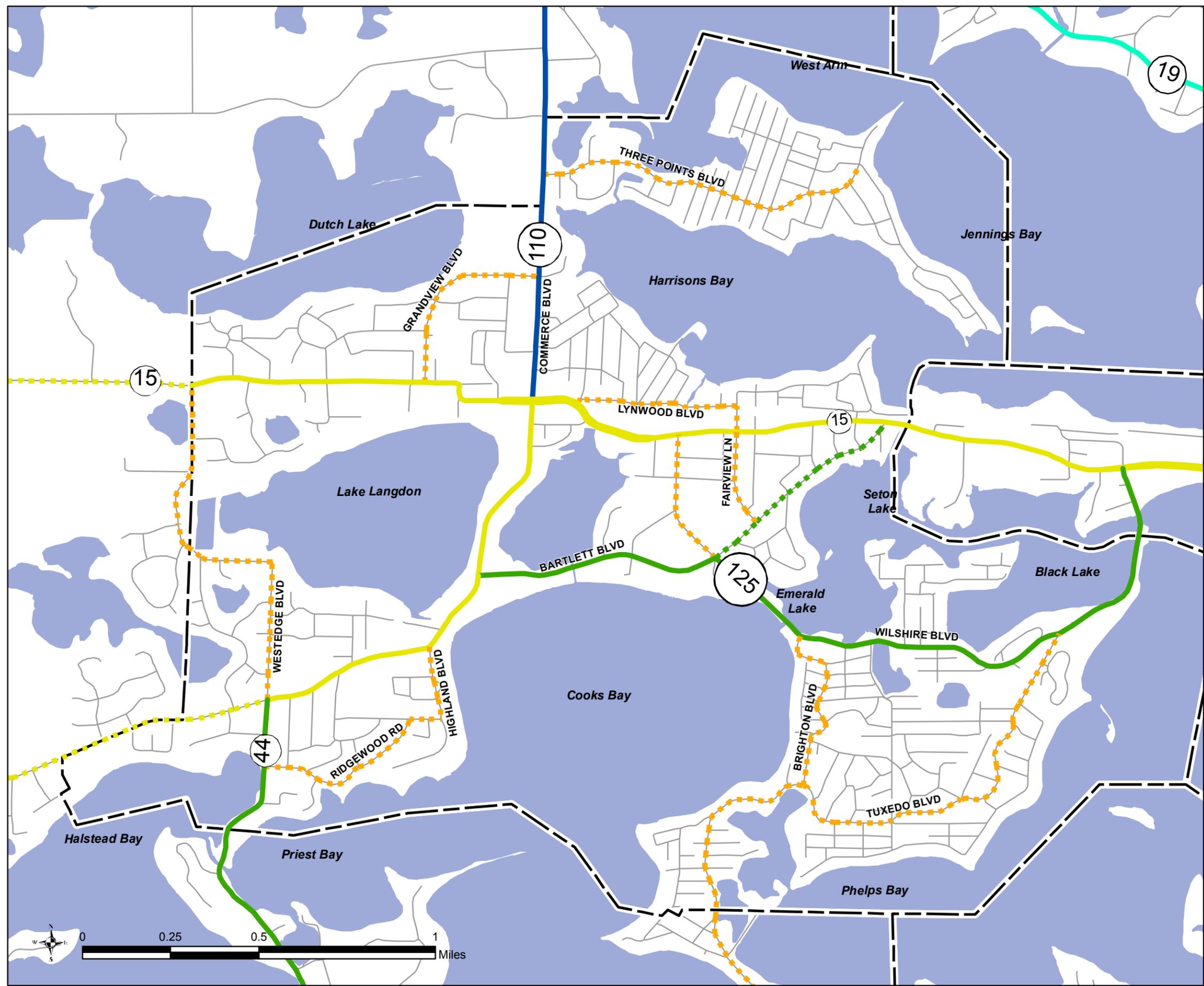
Legend

Future Roadway Functional Classification

- Future A Minor Arterial-Expander
- A Minor Arterial-Expander
- A Minor Arterial-Connector
- B Minor Arterial
- Future Major Collector
- Major Collector
- Future Minor Collector

Roads

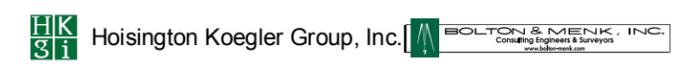
- City Streets



Future Roadway Functional Classification
Figure 6.6

September 2008

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR





Comprehensive Plan

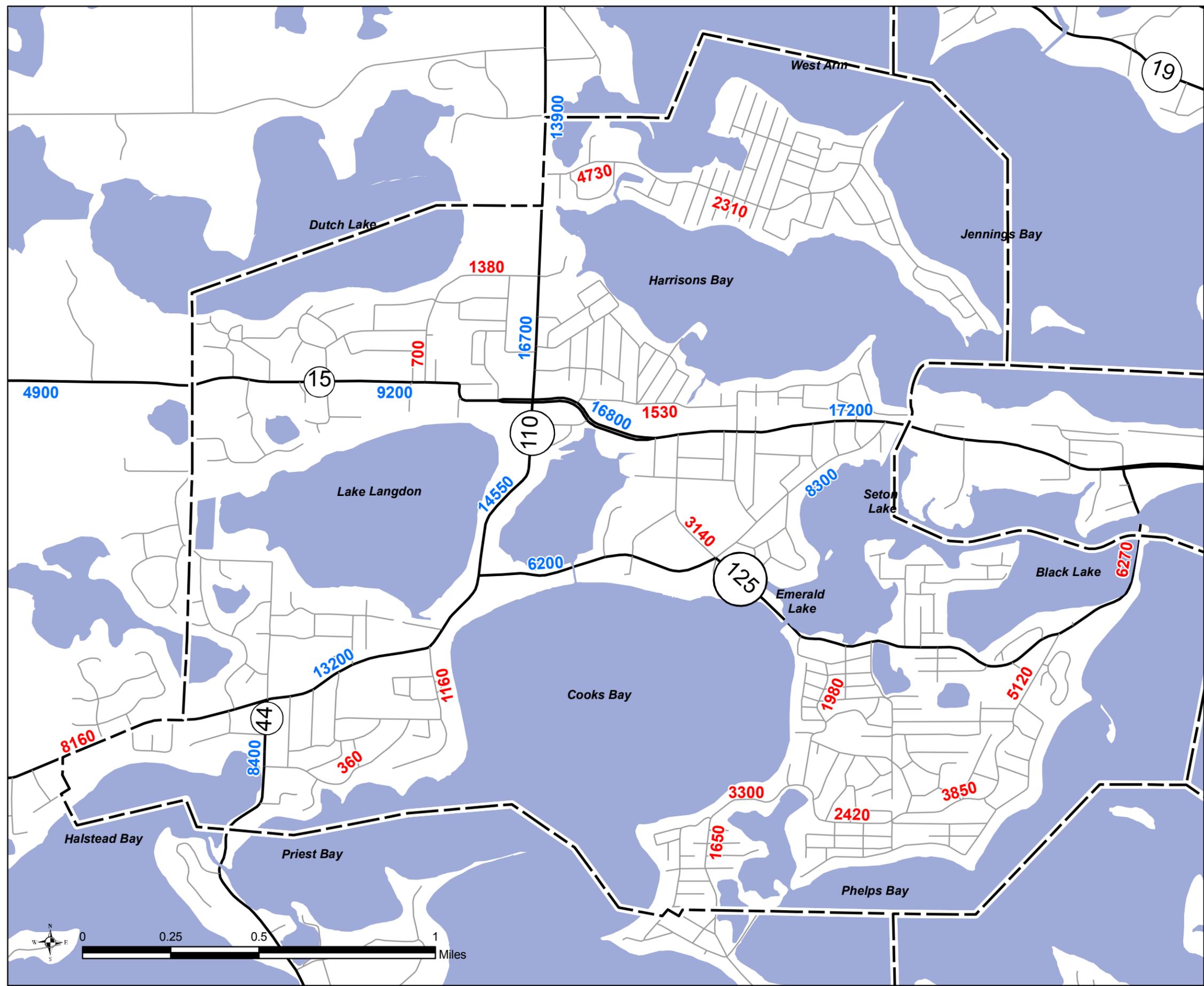
Legend

Roads

- County Roads
- City Streets

- 9200** 2030 Forecasted Daily Traffic Volumes (Met Council)
- 9200** 2030 Forecasted Daily Traffic Volumes (BMI)

Note: 2030 projected volumes assume a 10% increase in the existing volume by 2030, rounded to the nearest 10. Segment of CSAH 110 west of CSAH 44 projected at a rate consistent with the segment between CSAH 44 and CSAH 125.

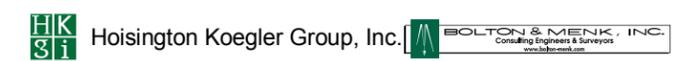


2030 Forecasted Traffic Volumes

Figure 6.7

March, 2007

Source: Hennepin County, Metropolitan Council, The Lawrence Group, MnDNR



WATER SYSTEM

WATER SUPPLY REQUIREMENTS

State law requires every municipality with a public water supply to complete a water supply plan. Communities serving more than 1,000 people are also required to submit the emergency and conservation plan to the Department of Natural Resources (DNR). The City has prepared an emergency and conservation plan which also serves as its water supply plan. The content for this section is drawn from this document. The plan is available for review from the City of Mound.

MOUND WATER SUPPLY PLAN

The City of Mound completed a *Water Supply Plan* in the fall of 1995. The plan identifies strategies for supply and distribution facility improvements in the City, infrastructure costs and water conservation techniques.

Since new guidelines for water supply plan updates were released in 2005, an updated plan has been prepared and submitted in mid-October 2006 to the DNR, Metropolitan Council and Hennepin County Department of Environmental Services for review and approval. The revised *Water Emergency and Conservation Plan* is available from the City of Mound. After the DNR has reviewed and commented on the Plan, necessary revisions will be made and by reference, become a part of the Water System Plan.

EXISTING FACILITIES

The existing water supply and distribution system provides service to nearly all community residents and businesses. Historically the distribution system has met Mound's water demands. Improvements have been performed as required to maintain the system and continue to meet Mound's current and anticipated future water demands. A layout of the current system is shown in Figure 7.1.

The *Water Emergency and Conservation Plan* illustrates average and peak day usage and includes analysis of the impact of forecast growth on the water supply system. In addition the *Water Emergency and Conservation Plan* describes high-volume water users and analyzes groundwater and surface water sources.

Wells

Public wells within the City are identified in ascending numerical order in the order they were constructed. During 2006 Mound obtained its raw water supply from four wells, Wells #3, #7, and #8 with #1 as a backup.

All public water supply wells are frequently tested in accordance with State Statutes and the Federal Safe Drinking Water Act to assure clean, safe water is available to the public. These tests include an analysis of various contaminant level concentrations including arsenic. In January 2006, the U.S. Environmental

Protection Agency revised its maximum contaminant level (MCL) for arsenic, decreasing it from 50 parts per billion (ppb) to 10 ppb. In November 2006, the City received notification from the Department of Health that the average annual level of arsenic in Well #7 was 10.8 ppb which exceeded the MCL of 10.0 ppb. Since the City's existing and future water demand needs can be adequately met by the recently upgraded Wells #3 and #8, Well #7 will now only be used as an emergency/ backup well. This allows the City to meet all State and Federal safe drinking water standards.

Well #1 will be abandoned when the downtown Transit District is developed. As stated above, Wells #3 and #8 will be able to meet the demands of the City without Well #1.

Additional information on the capacity of existing well is included in the *Water Emergency and Conservation Plan*.

Water Treatment

City water is treated by an in-situ well treatment. Fluoridation and chlorination are used in this treatment. Additional information on water treatment is included in the *Water Emergency and Conservation Plan*.

Water Storage

The city has two elevated storage facilities. The first tower has a capacity of 400,000 gallons and is located at 2335 Chateau Lane while the second tower has a 300,000-gallon capacity and is located at 6139 Evergreen Road. Mound also has a standpipe with a 265,000-gallon capacity located in the northeast quadrant of Devon Lane/Donald Drive intersection. Additional information on the capacity of existing water storage facilities is included in the *Water Emergency and Conservation Plan*.

Distribution System

Mound's water distribution system consists of a series of mains throughout the City. Additional information on the existing distribution system is included in the *Water Emergency and Conservation Plan*.

Water Conservation

An important component of the *Water Emergency and Conservation Plan* and a goal of the Minnesota Department of Natural Resources is to reduce the demand on the underlying aquifers that serve the metropolitan area. While the average residential water use in Mound at 68 gallons per day is below the metropolitan average of 75 gallons per day, conservation by Mound residents is still important.

Some water conservation measures currently used by the City include: monitoring the amount of water pumped from city wells but not accounted for in total amount sold. This includes city maintenance activities such as flushing hydrants and watermain breaks but also unknown or unapproved use of city water. In Mound the amount of unaccounted water use is 5.43% over the past five years, well below the maximum industry standard of 10% when corrective measures are necessary. It is also important to check water meters for correct readings. The City has hired a company that is currently installing a city wide radio read meter system and meters are being checked as part of this program. In addition, Federal and State laws require water efficient plumbing fixtures and rainfall sensors on landscape irrigation systems. The City also offers its residents educational information on the importance of water conservation and emergency water use reduction via its web site, the annual Consumer Confidence Report of the City's water supply system and community newsletters.

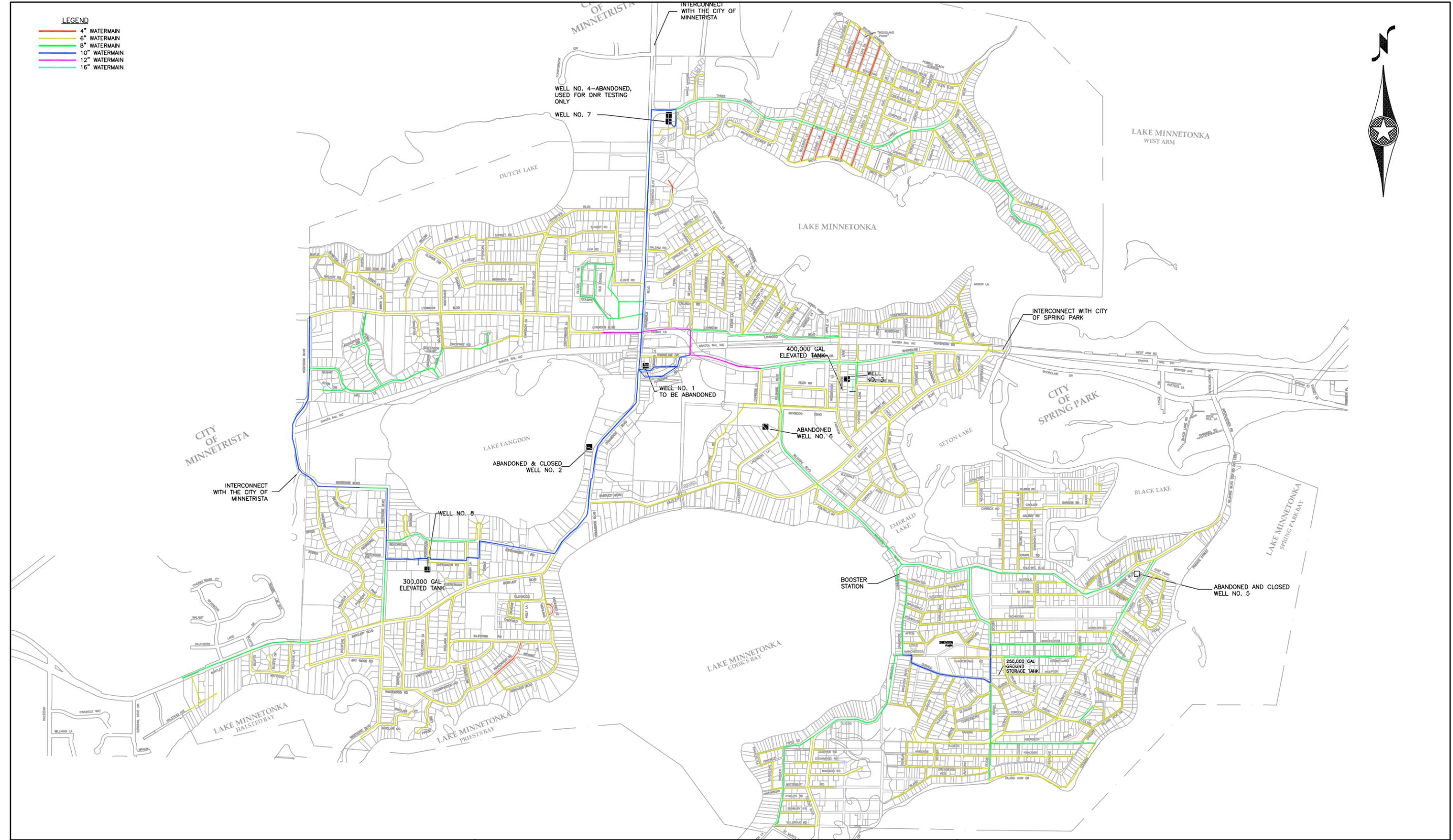
FUTURE FACILITIES/PLANS

The City has recently completed major improvements to its water supply and storage system which will meet the anticipated needs of the City's projected 2030 population. This includes a new water tower and new well pump houses, backup generators and pumps at City Wells #8 and #3, mentioned above. In addition, the standpipe storage facility, on the City's "island", was repainted and rehabilitated in 2006 which will provide for its continued use well into the future as necessary.

The one area of future improvement still needed to adequately address water pressure and fire flow needs, is the City's water distribution system. This will involve the upsizing of some watermain lines, mostly trunk mains, to an 8-inch diameter or larger, as well as making strategic system connections to provide a looped system where possible. One example of this is the City project which constructed a 10-inch watermain under Harrison Bay in 2007 to connect the dead ends at Arbor Lane and the Three Points Area. Additional watermain improvements will be made as part of the City's annual Street Reconstruction Improvement projects. Specific capital improvements are identified in the Implementation Chapter of the Comprehensive Plan.

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- LEGEND**
- 4" WATERMAIN
 - 6" WATERMAIN
 - 8" WATERMAIN
 - 10" WATERMAIN
 - 12" WATERMAIN
 - 16" WATERMAIN



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MOUND, MINNESOTA
EXISTING WATERMAIN SYSTEM
COMPREHENSIVE WATERMAIN PLAN

JANUARY, 2007

FIGURE NO. 7.1

SANITARY SEWER

The purpose of the Sanitary Sewer Plan is to provide an inventory of Mound's current sewer system and assure that any necessary expansion and upgrading is properly planned to accommodate future growth.

While the City's existing trunk sewer system serves the entire community, certain segments may need minor upsizing if significant redevelopment occurs. With the availability of public sewer to all properties within the City, City Code requires all property owners to hook up their waste facilities to the public system. No new Individual Sewage Treatment Systems (ISTS) are allowed. Maintenance and repair of the existing public system will be the primary area of emphasis necessary now and in the future.

SUMMARY OF EXISTING FACILITIES

The City of Mound is within the Metropolitan Urban Service Area; therefore all wastewater is treated at the Metropolitan Council Environmental Service's Blue Lake Wastewater Treatment Plant in Shakopee, MN. This plant provides primary and secondary wastewater treatment before discharging into the Minnesota River. The secondary treatment provides chlorination/dechlorination. On average this plant treats 26 million gallons of wastewater per day from 27 different communities. The total capacity of the Blue Lake WWTP is 38 million gallons of wastewater per day.

The City of Mound is currently generating approximately 368,650,000 gallons of wastewater per year with a current population of 9,838 and 3,545 sanitary sewer connections. Five of these connections are currently located in the City of Minnetrista around the intersection of County Road 15 and Westedge Blvd. Each property is billed by Mound directly for their sanitary sewer connection. Future sanitary connections or extensions are unlikely to occur in this area since the City of Minnetrista has designated it for large lot rural development.

The current sanitary sewer system is a combination of City lines, lift stations, and forcemains along with Metropolitan Council Environmental Services (MCES) lines, lift stations and forcemains. The gravity system contains pipe ranging in size from 8-inch to 24-inch and the forcemain system contains pipe ranging in size from 4-inch to 24-inch. The system also contains 33 lift stations and one pumping station, four of which are part of the MCES system. A layout of the current system is shown in Figure 8.1.

PROJECTED SANITARY SEWER FLOWS

Table 8.1 shows projected average sewer flows anticipated based on the projected land use for 2030.

Table 8.1 Sanitary Sewer Flow Summary

Year	Employment	Population	Households	Average Daily Flow (mgd)	Peak Factor
2006	1,608	9,838	4,218	1.010	2.96
2010	1,860	10,400	4,350	1.068	2.94
2015	1,940	10,700	4,475	1.098	2.93

Year	Employment	Population	Households	Average Daily Flow (mgd)	Peak Factor
2020	2,020	11,000	4,600	1.129	2.91
2025	2,095	11,200	4,700	1.150	2.91
2030	2,170	11,400	4,800	1.170	2.90

Average Daily sanitary sewer flows were projected using the Metropolitan Council Environmental Services method for “high flows.” The assumptions made using this method are 85 gallons/day per resident, and 30 gallons/day per employee. The Peak Factor is an indication of how much the average daily flow could increase for very short durations. The City anticipates a further reduction in the Peak Factors than that shown in the table, as recommended system improvements are made.

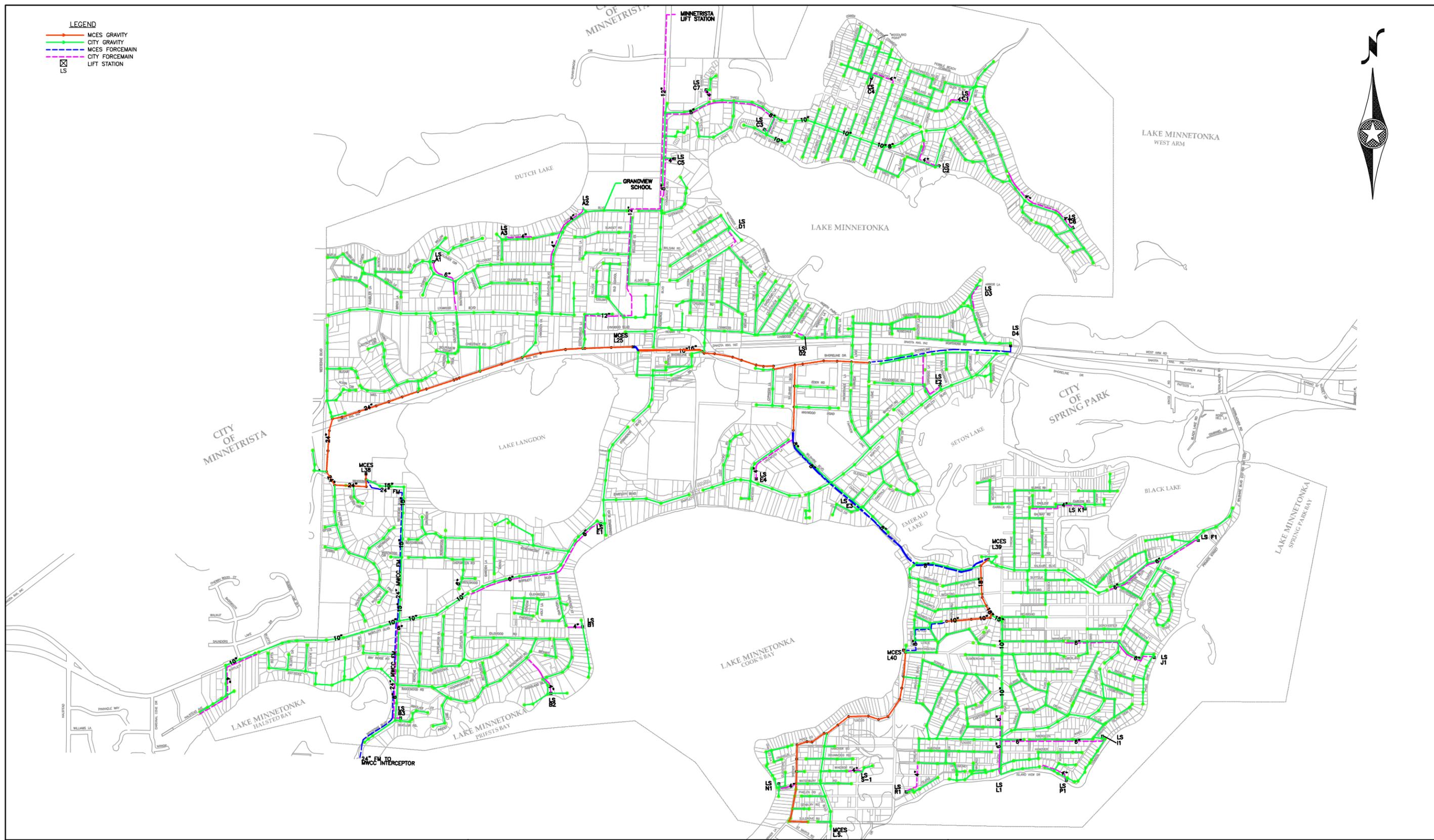
It was determined that the existing system is adequately sized for the projected flows and at this time, no improvements are needed. The future sanitary sewer system is shown in Figure 8.2.

INFLOW & INFILTRATION STUDY AND REDUCTION PLAN

In the past, the City has completed spot sewer repair and sewer pipe lining in portions of the City’s annual street reconstruction project areas, which began in 2003. In June of 2007, the Inflow/Infiltration Reduction and Lift Station Reconstruction Plan was received by the City Council and has subsequently been used to implement system wide improvements. It includes a 10-year improvement plan consisting of a combination of sewer pipe lining and lift station replacement.

Sewer pipe lining is now being done in a more systematic method and the City’s lift stations are programmed for replacement. The replacement of three lift stations, D-3, C-3 and B-3 is nearly complete and two additional lift stations, E-1 and E-4 are under contract for replacement. The City is also aware of likely private sewer service line inflow and infiltration (I/I) which will also be addressed in the future. All of these efforts are directed toward the elimination of the unnecessary treatment of clean water as well as sewer backups caused by heavy inflow during large rain events.

- LEGEND**
- MCES GRAVITY
 - CITY GRAVITY
 - MCES FORCEMAIN
 - CITY FORCEMAIN
 - ☒ LS LIFT STATION



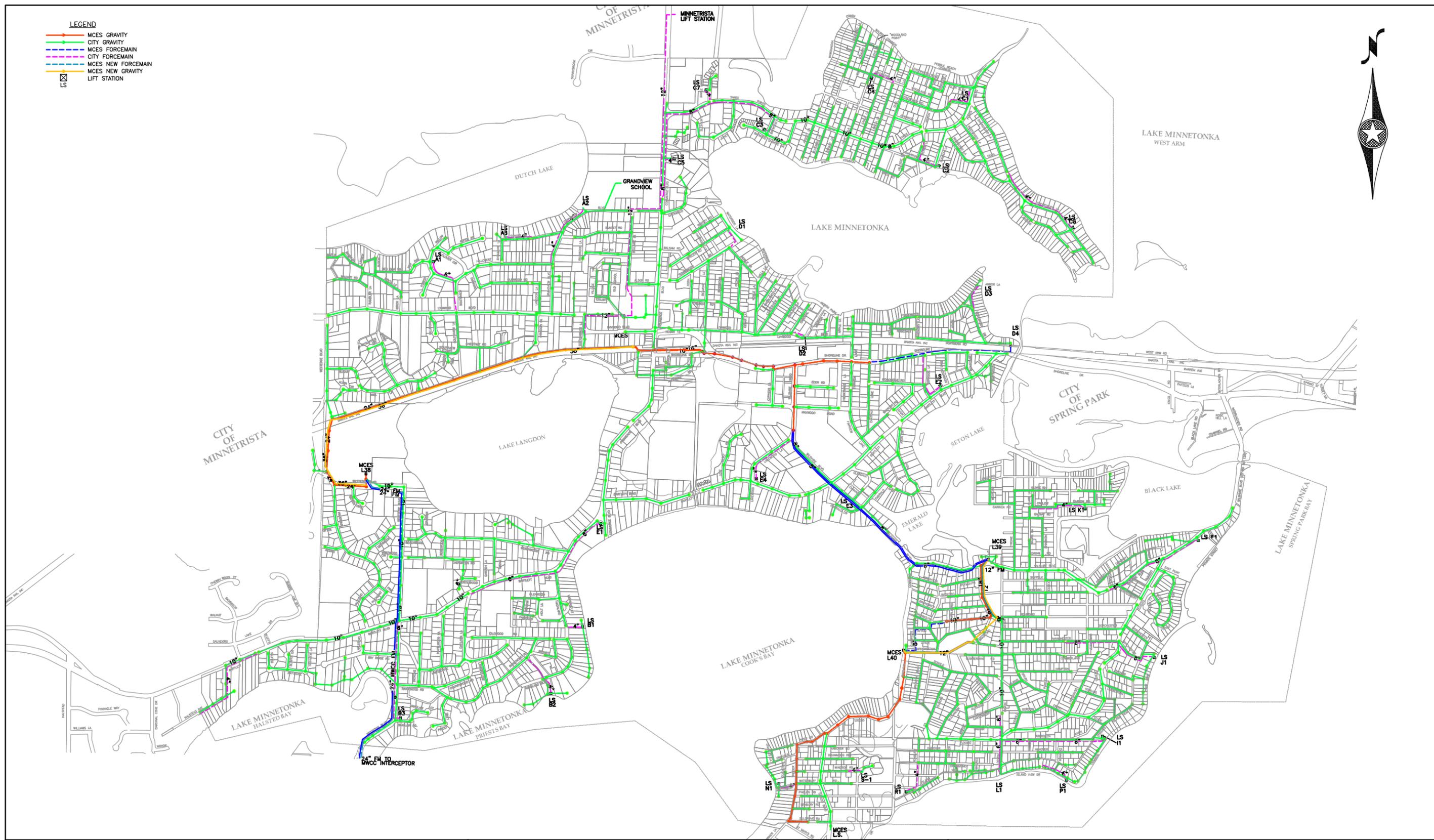
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EXISTING SANITARY SEWER LAYOUT
 COMPREHENSIVE SANITARY SEWER PLAN
 CITY OF MOUND, MN

JANUARY, 2007 FIGURE NO. 8.1

- LEGEND**
- MCES GRAVITY
 - CITY GRAVITY
 - MCES FORCEMAIN
 - CITY FORCEMAIN
 - MCES NEW GRAVITY
 - MCES NEW GRAVITY
 - LS LIFT STATION



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FUTURE SANITARY SEWER SYSTEM
 (WITH MCES PROPOSED IMPROVEMENTS)
 COMPREHENSIVE SANITARY SEWER PLAN
 CITY OF MOUND, MN

JANUARY, 2007

FIGURE NO. 8.2

SURFACE WATER MANAGEMENT

The City of Mound's Local Surface Water Management Plan (SWMP) has been developed to meet the surface water related needs of the community and address the management planning requirements of the Metropolitan Surface Water Management Act. The SWMP has been prepared in general accordance with Minnesota State Statute 103B.235 and Minnesota Rules Chapter 8410 and follows the plan outline identified in the rules. The goal of the plan is to maintain and improve surface water quality in and around the City through agreement with the Minnehaha Creek Watershed District (MCWD) Plan, as well as appropriate policy development and enforcement, and capital improvement projects. The City's entire Surface Water Management Plan (SWMP) is available at the City of Mound. The following summarizes key sections in the plan.

LAND AND WATER RESOURCES INVENTORY

This section includes a detailed summary of the land and water resources within and adjacent to the City. New to the section are the wetland management classifications as developed by the MCWD through their Functional Assessment of Wetlands (FAW-2003) that have been included for future wetland management regulations. The section describes the need for additional hydrologic verification through combination of the modeling done previously for the City's SWMP and the MCWD's Hydrologic, Hydraulic and Pollutant Loading Study (HHPLS), which has recently been provided to the City through agreement with the District.

ESTABLISHMENT OF GOALS AND POLICIES

This section outlines goals and policies addressing water resource management needs of the City and their relationship with Regional, State, and Federal goals and programs. Goals and policies relating to the following issues are presented:

- Water quality
- Water quantity
- Erosion and sedimentation
- Wetlands
- Public ditch systems
- Groundwater
- Recreation and ecological integrity
- Enhancement of public participation, information and education
- Monitoring and enforcement
- Low impact development, natural area preservation and water resource protection
- Municipal housekeeping

Generally, the City will work to ensure erosion control and surface water quality standards are met through enforcement of the City's permitting requirements and the Best Management Practices (BMPs) outlined in the City's Storm Water Pollution Prevention Plan (SWPPP). The City will ensure compliance with the National

Pollutant Discharge Elimination System (NPDES) Phase II permit for construction activity greater than 1 acre, as well as the requirements of the MCWD Rules for construction activity meeting the associated sizing criteria. The section identifies relevant items in the adopted (2007) MCWD Subwatershed Plans, including the goals of citywide phosphorus reduction, wetland management and protection of Key Conservation Areas. It is likely that City ordinances will require revision after completion of MCWD Rule revisions based on the newly adopted plan.

ASSESSMENT OF ISSUE AND CORRECTIVE ACTIONS

This section contains an assessment of existing and potential water resource related issues presently known within the City, as well as a description of structural, non-structural, or programmatic solutions that are proposed to address or correct the issues. The section includes mention of any City waters on the State's 303(d) Impaired Waters list, along with the status of any known Total Maximum Daily Loads (TMDLs) established for the waters.

IMPLEMENTATION PRIORITIZATION & FINANCIAL CONSIDERATIONS

This section includes a prioritized ranking of the general regulatory controls and corrective action items identified in the previous section of the plan. City cooperation with the MCWD Rulemaking Task Force in the coming years will be key to maintaining the relevance of the City's SWMP. Additionally, the section includes a Capital Improvement Program identifying specific projects, associated costs and potential funding sources.

AMENDMENT PROCEDURES

It is the City's intention to have the SWMP reviewed and approved by the Minnehaha Creek Watershed District (MCWD) in accordance with Minnesota Statute 103B.235 and the requirements for acceptance of this Comprehensive Plan. The plan will be revised as necessary in the future to ensure compliance with any updates to the MCWD Rules.

STRATEGIC INITIATIVES/IMPLEMENTATION

INTRODUCTION

Mound's Comprehensive Plan provides guidance for making decisions about the community's future growth, redevelopment and infrastructure improvements. The narrative sections and supporting graphics within this plan provide direction for solving existing problems and dealing with future change. Implementation of the Comprehensive Plan involves the conversion of the established goals and policies into official municipal controls and programs. The Implementation section, like the plan itself, is a flexible tool and should be amended or adjusted as conditions warrant.

The Mound Comprehensive Plan will be implemented in a number of ways. Actual implementation of the plan is accomplished on a daily basis by City personnel and on a regular basis by the decisions that are made by the various advisory commissions and the City Council. Implementation will involve the application and enforcement of existing ordinances, modifications to existing ordinances, adoption of new ordinances, use of a capital improvement program, maintaining and enhancing a housing program, use of public fiscal tools, directives from the City Council, and administrative procedures.

IMPLEMENTATION ROLES AND RESPONSIBILITIES

The City of Mound, like many communities, has defined the community's key planning elements and processes, and established advisory commissions to specifically focus on each planning element. Each of these commissions has a role in the implementation of the comprehensive plan. Ultimately, these commissions are advisory to the City Council who has final decision-making and policy-establishing authority. It is important that the efforts of each of the commissions coincide with the policy direction that is established by the City Council.

City Council

The City Council is the final authority in the implementation process. The Council has official approval of all municipal plans, ordinances and programs, the authority to earmark funds and the ability to execute funding agreements with state and federal agencies.

The City Council needs to work closely with all of the advisory commissions in implementing the recommendations found within the Comprehensive Plan. The council members and the mayor have frequent contacts with residents and business people in the community and can contribute to continued public support of adopted policies, ordinances and programs.

Planning Commission

The Planning Commission plays a key role in all new development and redevelopment decisions. It is important that the Commission's role be closely coordinated with the City Council to assure continuity between policies and what they strive to achieve and what is actually allowed by the City's ordinances and programs.

The Planning Commission is the entity with primary responsibility for the preparation of the Comprehensive Plan. After adoption of the plan, two areas of emphasis remain. First, it is the role of the Commission to ensure that the City's ordinances are in conformance with the goals and policies of the plan. Conformance may require periodic updates of the Zoning Ordinance and other sections of the City Code. Secondly, on an ongoing basis, it will remain the charge of the Commission to review all new development and redevelopment proposals, including but not limited to site plans, subdivisions, lot splits, rezonings and variances, for their conformance with the Comprehensive Plan.

Housing and Redevelopment Authority

Mound's Housing and Redevelopment Authority (HRA) has primarily been involved in two types of projects: senior citizen housing development and commercial redevelopment. In order to achieve some of the recommendations found in this plan, involvement by the HRA may be necessary. The HRA's involvement may be especially critical in financing redevelopment efforts where building and property constraints may preclude development solely by the private sector.

Economic Development Commission

In 1989, Mound formed an economic development commission to coordinate business development efforts. The Economic Development Commission (EDC) has the key role in the Mound Visions Project. The EDC's continued involvement with downtown redevelopment will be key to its success.

Park, Open Space & Docks Commission

All decisions pertaining to the development of municipal parks, open space and docks within the City of Mound are reviewed by the Park, Open Space & Docks (POSD) Commission. The POSD Commission has the lead role in implementing the park, open space and recreation goals and policies found within the Comprehensive Plan. Since the POSD Commission's recommendations are formally approved by the City Council, it is important that the two groups work together closely to attain identified objectives.

OFFICIAL CONTROLS

The City's official controls include ordinances, fiscal devices and public programs that are established to carry out the Comprehensive Plan's land use, transportation, housing, parks and natural resources goals and policies.

Ordinances

The City's Ordinances, as established in the City Code, are the primary tools for implementing the Comprehensive Plan's goals and policies and include the following ordinances:

- Zoning Ordinance (Section 350), which includes wetland, shoreland and bluff ordinances
- Platting & Subdivision Ordinance (Section 330), which includes park dedication ordinance
- Floodplain Management Ordinance (Section 300.16)
- Grading, Soil Erosion, Sedimentation Control & Stormwater Management (Section 375)
- Public Lands (Section 320)
- Signs (Section 365)
- International Property Maintenance Code (Section 319)

- Dock Licenses (Section 437)
- Wells & Sewage Disposal – Private Systems (Section 305)
- Nuisances (Section 1000)
- Sanitary Sewer (Section 600)
- Water Department (Section 610)
- Right-of-Way Management (Section 655)

Within the Zoning Ordinance, Mound’s current zoning districts are established, including minimum lot size requirements are shown below in Table 10.1.

Table 10.1 Existing Zoning Districts

Zoning District	Minimum Lot Size
R-1 Single Family Residential	10,000 sq ft
R-1A Single Family Residential	6,000 sq ft non-riparian 10,000 sq ft riparian
R-2 Two Family Residential	6,000 sq ft (single-family detached dwellings, non-riparian) 10,000 sq ft (single-family detached dwellings, riparian) 14,000 sq ft (two-family & twinhome dwellings)
R-3 Multiple Family Residential	22,000 sq ft
B-1 Central Business	7,500 sq ft
B-2 General Business	20,000 sq ft
B-3 Neighborhood Business	10,000 sq ft
I-1 Light Industrial	30,000 sq ft
PED-PUD Pedestrian Planned Unit Development	None
DEST-PUD Destination Planned Unit Development	None
L-PUD Linear Planned Unit Development	None

Mound’s zoning districts regulate allowable density/intensity through minimum lot size, minimum lot widths and maximum building heights rather than maximum number of dwelling units per acre.

Figure 10.1 shows the City's current Zoning Districts Map.

Potential Ordinance Changes: Over the years, numerous amendments to the City's ordinances have been enacted in response to changes in demographic and development trends. All municipal ordinances should be continually monitored and updated as needed. Immediately following adoption of this Comprehensive Plan Update, the City of Mound will conduct a thorough review of all ordinances potentially impacted by the updates to the Comprehensive Plan. All changes in response to the Comprehensive Plan will be completed and submitted to the Metropolitan Council within 9 months of the Comprehensive Plan's final adoption. Potential modifications of relevant ordinances will be considered to further encourage implementation of the plan, including the following:

- Multiple Family Residential, Pedestrian-PUD and Linear-PUD zoning districts should be evaluated for alignment with residential densities established in residential and mixed-use land use categories in the Comprehensive Plan;
- Zoning map should be reviewed for any necessary updates to align with Future Land Use Plan map;
- Environmental ordinances should be evaluated for alignment with natural resources goals in the Comprehensive Plan, such as innovative stormwater management techniques, protection of sensitive environmental features, etc;
- Park dedication ordinance should be evaluated for any necessary modifications to reflect new development types, particularly related to downtown redevelopment needs.

Development Review Process: The City of Mound has a major role in future development decisions. The decisions that are made pertaining to new residential, commercial and industrial development projects have a lasting effect on the appearance and function of the community. Development projects are regulated by the City's ordinances, which are structured to ensure that minimum requirements are met. In addition to the regulatory structure, the review process itself is also important. During project reviews, the City and the developer conduct a critique of project details that typically results in a final product that exceeds minimum requirements. Because of the role of the review process, it is important that it is fully understood by the decision makers, the development community and the citizens of Mound.

In most development decisions, an advisory public hearing is required by the Planning Commission prior to a public hearing by the City Council. The advisory public hearing is held at a regular meeting of the Planning Commission. Ten days prior to the hearing, a notice is published in the official newspaper and all residents within 350 feet are notified of the time and date of the hearing. Public hearings are required for the following:

1. Platting
2. Conditional Use Permits
3. Variances
4. Zoning Amendments
5. Planned Development Areas (PDA)
6. Planned Industrial Areas (PIA)
7. Wetland Permit

In addition to the items noted above, the issuance of an Operation Permit requires review by the City Council but does not require a public hearing. The City Council has the option of calling a public hearing if it is deemed to be necessary. Detailed application requirements and procedures for all development review items are available from the City of Mound.

Other Policy Plans

The Comprehensive Plan refers to other policy plans that Mound uses to guide municipal systems, actions and investments. These plans include the Water Emergency and Conservation Plan, Inflow and Infiltration (I/I) Reduction and Lift Station Reconstruction Plan, and Local Surface Water Management Plan. These plans serve as ongoing tools for implementing the plans, goals and policies in the Comprehensive Plan. These plans may be updated and modified without updating the Comprehensive Plan.

Fiscal Devices

The City has established various fiscal tools that support implementation of the Comprehensive Plan goals and policies, including tax increment financing (TIF) districts, special assessments, development review fees, park dedication fees, write-down of publicly-owned land for redevelopment purposes, public funding of contaminated land cleanup and provision of a public parking structure/transit facility in downtown.

Public Programs

Mound Visions: This three-phase downtown redevelopment program is guided by the Mound Visions Master Plan and began in 1991. The redevelopment program uses a comprehensive approach to planning, design and implementation of the downtown area involving public and private partnerships. Phase I has been completed, which focused on major public projects, including the relocation of CSAH 15 and Auditors' Road, relocation of the post office, dredging of Lost Lake Canal, and the creation of the Lost Lake Greenway. Phase II is well underway and Phase III is anticipated to be completed by 2010. The Mound Visions Master Plan was adopted as part of the Comprehensive Plan and new downtown zoning districts have been established to regulate downtown redevelopment.

Park, Open Space & Recreation: Mound's unique Docks and Commons Program consists of publicly owned shoreline areas or linear parkway commons and docks that provide an incredible level of public access to Lake Minnetonka. The City should continue to enhance this program, including expansion of the program in conjunction with redevelopment projects and exploration of the potential for increasing links between the trail system and the public commons/docks. The City requires licenses for all docks as part of this program.

Since most of the community playfields within Mound are owned and operated by the Westonka School District, the City should continue to collaborate with the School District on establishing programs/partnerships for sharing playfield facilities and considering community playfield needs in any potential future redevelopment of School District property.

The City should also consider a Park Master Plan study that would address the community's shortage of community park space, assess residents' needs for neighborhood parks/playgrounds, park programming needs, and park amenities/design, particularly as the community redevelops and grows.

The development of the Dakota Rail Regional Trail creates a regional connection for Mound. The City should work cooperatively with the Hennepin County Railroad Authority and the Three Rivers Park District Board of Commissioners on local trail connections.

Water Conservation: The City has established water conservation programs to better monitor water usage, including monitoring of unaccounted for water use and installation of a citywide radio-read meter system.

CAPITAL IMPROVEMENT PROGRAM

Capital improvement programming is the multi-year scheduling and funding of public infrastructure improvements for the community. Improvements to the City's streets, sanitary sewer, storm sewer, water supply, parks & pathways systems are projected over a five-year period with more detailed items being projected as part of the annual capital budget. Since Mound's transit services are provided by Metro Transit, future transit improvements are not a component of the City's Capital Improvement Program (CIP). In order to be effective, the CIP should be updated annually.

The Capital Improvement Program should not be confused with the annual municipal budget. Capital improvement budgeting identifies those items that are funded during the following fiscal year. Capital improvement programming, as mentioned previously, refers to long-term programming over a five-year period. The one-year budget is typically used by a municipality in making daily expenditure decisions. The CIP is used for longer range, planning decisions. Capital improvements should not include expenditures for equipment and services that are operating budget items. Such items should be financed out of current revenues.

The City has developed a CIP which establishes priorities on the basis of which improvements will have the greatest impact on achieving the City's goals. The CIP is established for the years of 2009 through the year 2013 and summarized in Tables 10.2 – 10.5 and Figures 10.2 – 10.5, which are located at the end of this chapter. The current five-year CIP does not project any capital improvements to the City's parks. Capital improvements to the pathways system are planned to occur in conjunction with street reconstruction projects, where feasible, therefore these improvements are a component of the street improvement projects identified in Table 10.2 and Figure 10.2. The City reserves the right to change its CIP to accommodate infrastructure repair and reconstruction as determined by the Public Works Director, City Engineer, and City Council.

HOUSING IMPLEMENTATION PROGRAM

As a developed community, Mound's housing implementation program is primarily focused on three priority areas:

- Promoting and supporting property owners' capacities to reinvest in and maintain the community's existing housing stock in a safe, sound and attractive condition;
- Optimizing opportunities to add new housing types in redevelopment areas, particularly in future downtown mixed-use districts, to meet a broader range of lifecycle and affordability needs;
- Ensuring that housing infill and redevelopment projects are reviewed by the City using a flexible and contextual approach.

Mound's housing implementation program employs a multi-jurisdictional approach for supporting reinvestment and maintenance of existing housing units. Working with partners at the county, state/metro and federal levels, the City of Mound will promote and support programs that provide housing rehabilitation loans, grants and services. These programs include Community Development Block Grant (CDBG) and Home Investment Partnership (HOME) funds allocated through Hennepin County, the Minnesota Fix-Up

Fund through MHFA, and Community Action Partnership of Suburban Hennepin (CAPSH). At the local level, the City has adopted housing maintenance ordinances as tools in upgrading substandard housing, including adoption of the International Property Maintenance Code for both owner and renter occupied housing units (City Code Section 319) and Nuisances (Section 1000). In 2001, the City started the Operation Clean Sweep program to address abandoned properties and properties in violation of the City's standards for storage, noxious weeds, sanitary conditions, and inoperable vehicles. The City is also considering the adoption of a Rental Housing Regulations & Licensing Program ordinance, which would require the licensing and formal inspection of rental properties on a regular basis.

The City plans to continue its participation in the Metropolitan Livable Communities Program, which it has participated in since 1997. Mound is committed to supporting the development of new affordable housing units to meet the community's share of the regional affordable housing needs projected for 2020. Mound's current Livable Communities Action Plan will expire in 2010 and the City intends to establish a new action plan with the Metropolitan Council for the 2010-2020 time period. The City will continue to cooperate with the Metro and County HRAs to provide affordable rental and ownership housing units.

The City should consider becoming more active in promoting housing related ordinances and programs. The City's quarterly newsletter and website should be used as a forum to disseminate information on the availability of housing rehabilitation programs, ordinance requirements and affordable housing opportunities.

CITIZEN PARTICIPATION

Citizen participation in the local planning process is a key element in the continued implementation of the comprehensive plan. Open communication should characterize the relationship between city government and local citizens. The expression of public opinion and its subsequent consideration in decision making are essential ingredients in implementing all public policy issues including comprehensive plans.

Citizen participation was a component of the preparation and adoption of this comprehensive plan. In addition to the input of the volunteer commissions that contributed to this planning effort, public comments were continually sought at a public information meeting and at formal public hearings.

The implementation of a comprehensive plan requires an even stronger citizen participation effort. The community will need to continually re-evaluate the comprehensive plan to ensure that it accurately portrays public opinion. If the people of Mound are familiar with the plan and endorse its recommendations, the implementation effort will be more effective. The City of Mound should use the quarterly newsletter, other mailings, and its website to portray the concepts found in this plan and to apprise the public on progress toward meeting identified goals.

Table 10.2
5-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP): 2009-2013
STREETS
ANNUAL STREET & RETAINING WALL RECONSTRUCTION PROJECTS

LOCATION	FUNDING SOURCE	2009	2010	2011	2012	2013
West Tonkawood Neighborhood	Special Assessments	\$1,027,000				
	City, Bonds	\$540,000				
Island View Drive	Special Assessments	\$715,000				
	City, Bonds	\$352,000				
SW Island Park Area	Special Assessments		\$1,267,000			
	City, Bonds		\$633,000			
Ridgewood Rd./Idlewood Rd./Highland Blvd.	Special Assessments		\$467,000			
	MSA Fund		\$233,000			
N. Island Park Area	Special Assessments			\$1,200,000		
	City, Bonds			\$600,000		
Lynwood Blvd./Fairview Ln./Grandview Blvd.	Special Assessments			\$667,000		
	MSA Fund			\$333,000		
SE Island Park Area	Special Assessments				\$1,067,000	
	City, Bonds				\$533,000	
Three Points Blvd.	Special Assessments				\$667,000	
	MSA Fund				\$333,000	
Wilshire Blvd./Bartlett Blvd. Retaining Wall Replacement	Special Assessments					\$1,000,000
	MSA Fund					\$500,000
TOTALS	City, Bonds	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
		\$2,934,000	\$2,900,000	\$3,100,000	\$2,900,000	\$1,800,000

Table 10.3
5-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP): 2009-2013
SANITARY SEWER
ANNUAL LIFT STATION(S) REPLACEMENT PROGRAM; CURED IN PLACE PIPE (CIPP); MANHOLE CHIMNEY SEALING

LOCATION	FUNDING SOURCE	2009	2010	2011	2012	2013
LS D-1 (Spruce Rd. & Waterside Ln.)	Sewer Fund	\$175,000				
LS L-1 (Island View Dr. & Devon Ln.)	Sewer Fund	\$250,000				
LS I-1 (Island View Dr. & Aberdeen Rd.)	Sewer Fund	\$200,000				
LS C-4 (Woodland Rd. & Dove Ln.)	Sewer Fund		\$225,000			
LS C-6 (Shorewood Ln. & Beachside Rd.)	Sewer Fund		\$175,000			
LS N-1 (Waterbury Rd. & Gladstone Ln.)	Sewer Fund		\$225,000			
LS C-2 (Sumach Ln. & Sparrow Rd.)	Sewer Fund			\$200,000		
LS C-5 (Commerce Blvd. S. of Three Pts. Blvd.)	Sewer Fund			\$225,000		
LS D-4 (Northern Rd. E. of Edgewater Dr.)	Sewer Fund			\$250,000		
LS B-2 (Highland Blvd. S. of Idlewood Rd.)	Sewer Fund				\$175,000	
LS C-1 (Three Pts. Blvd. & Glen Elyn Rd.)	Sewer Fund				\$225,000	
LS E-3 (Emerald Dr. & Wilshire Blvd.)	Sewer Fund				\$250,000	
LS A-1 (Clover Circle & Red Oak Rd.)	Sewer Fund					\$200,000
LS A-2 (Grandview Blvd. W. of Commerce Blvd.)	Sewer Fund					\$200,000
LS E-2 (Bartlett Blvd. & Northwood Ln.)	Sewer Fund					\$300,000
Chimney Seals & CIPP & Repair	Sewer Fund	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
TOTALS		\$775,000	\$775,000	\$825,000	\$800,000	\$850,000

Table 10.4
5-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP): 2009-2013
WATERMAIN
ANNUAL REPLACEMENT AS NEEDED WITH ANNUAL STREET RECONSTRUCTION PROJECT

LOCATION	FUNDING SOURCE	2009	2010	2011	2012	2013
West Tonkawood Neighborhood	Water Fund	\$735,000				
Island View Drive	Water Fund	\$45,000				
SW Island Park Area	Water Fund		\$200,000			
Ridgewood Rd./Idelwood Rd./Highland Blvd.	Water Fund		\$100,000			
N. Island Park Area	Water Fund			\$200,000		
Lynwood Blvd./Fairview Ln./Grandview Blvd.	Water Fund			\$100,000		
SE Island Park Area	Water Fund				\$200,000	
Three Points Blvd.	Water Fund				\$100,000	
Mishire Blvd./Bartlett Blvd.	Water Fund					\$300,000
TOTALS		\$780,000	\$300,000	\$300,000	\$300,000	\$300,000

Table 10.5
5-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP): 2009-2013
STORM SEWER
STORM SEWER, DRAINAGE & WATER QUALITY IMPROVEMENTS

LOCATION	FUNDING SOURCE	2009	2010	2011	2012	2013
Treatment Pond at Commerce S. of Sherwood Dr.	Storm Water Utility Fund	\$50,000				
Rain Garden at Overland Ln. & Noble Ln.	Storm Water Utility Fund	\$8,000				
Sandfilter at Overland Ln. & Pike Rd.	Storm Water Utility Fund	\$5,000				
Bioretention Area at Waterside Ln. & Tonkawood Rd.	Storm Water Utility Fund		\$10,000			
Bioretention Area at Basswood Ln. & Tonkawood Rd.	Storm Water Utility Fund		\$30,000			
Bioretention Area at Ashland Ln. & Pike Rd.	Storm Water Utility Fund		\$15,000			
Storm Water Treatment Unit at Beachwood Rd. W. of Commerce Blvd.	Storm Water Utility Fund		\$50,000			
Drainage Improvements, Swenson Park at Tuxedo Blvd. & Brighton Blvd.	Storm Water Utility Fund			\$30,000		
Bioretention Area, Philbrook Park at Clover Circle	Storm Water Utility Fund			\$25,000		
Bioretention Area at Grandview Blvd. W. of Commerce Blvd.	Storm Water Utility Fund			\$20,000		
Treatment Pond at Hillcrest Rd. & Diamond Ln.	Storm Water Utility Fund			\$30,000		
Bioretention Area at Westedge Blvd. N. of Beachwood Rd.	Storm Water Utility Fund				\$25,000	
Bioretention Area at Lynwood Blvd. & Cottonwood Ln.	Storm Water Utility Fund				\$40,000	
Bioretention Area at Evergreen Water Tower Site	Storm Water Utility Fund				\$40,000	
Bioretention Area at Tuxedo Blvd. & Clyde Rd.	Storm Water Utility Fund					\$50,000
Bioretention Area at Clyde Rd. & Island View Dr.	Storm Water Utility Fund					\$25,000
Bioretention Area at W. end of Island View Dr.	Storm Water Utility Fund					\$20,000
Bioretention Area, Mound Bay Park at Bartlett Blvd.	Storm Water Utility Fund					\$25,000
Repairs & New Storm Sewer with Annual Street Project	Storm Water Utility Fund	\$237,000	\$195,000	\$195,000	\$195,000	\$180,000
Annual Outlet Cleaning - 10 Locations	Storm Water Utility Fund	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Annual Repairs & Pond Cleaning	Storm Water Utility Fund	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
TOTALS		\$350,000	\$350,000	\$350,000	\$350,000	\$350,000

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City of Mound Zoning Map

Residential Districts	Business and Industrial Districts
R-1 Single Family Residential	B-1 Central Business
R-1A Single Family Residential	B-2 General Business
R-2 Two Family Residential	B-3 Neighborhood Business
R-3 Multiple Family Residential	Destination
Properties with specific development standards approved as a Planned Development Area (PDA)	I-1 Light Industrial

Amendments:

- 1-2-83
- 8-25-83
- 1-2-87
- 5-12-87
- 8-11-87
- 5-9-89
- 4-9-90
- 1-14-91
- 3-15-93
- Res. 94-136
- Res. 94-65 (5-10-94)
- Res. 97-70 (7-22-97)
- Ord. 83-1997
- Res. 98-54
- Ord. 106-2000
- Ord. 107-2000
- Res. 00-124 (12-27-00)
- Ord. 04-2003

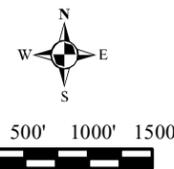
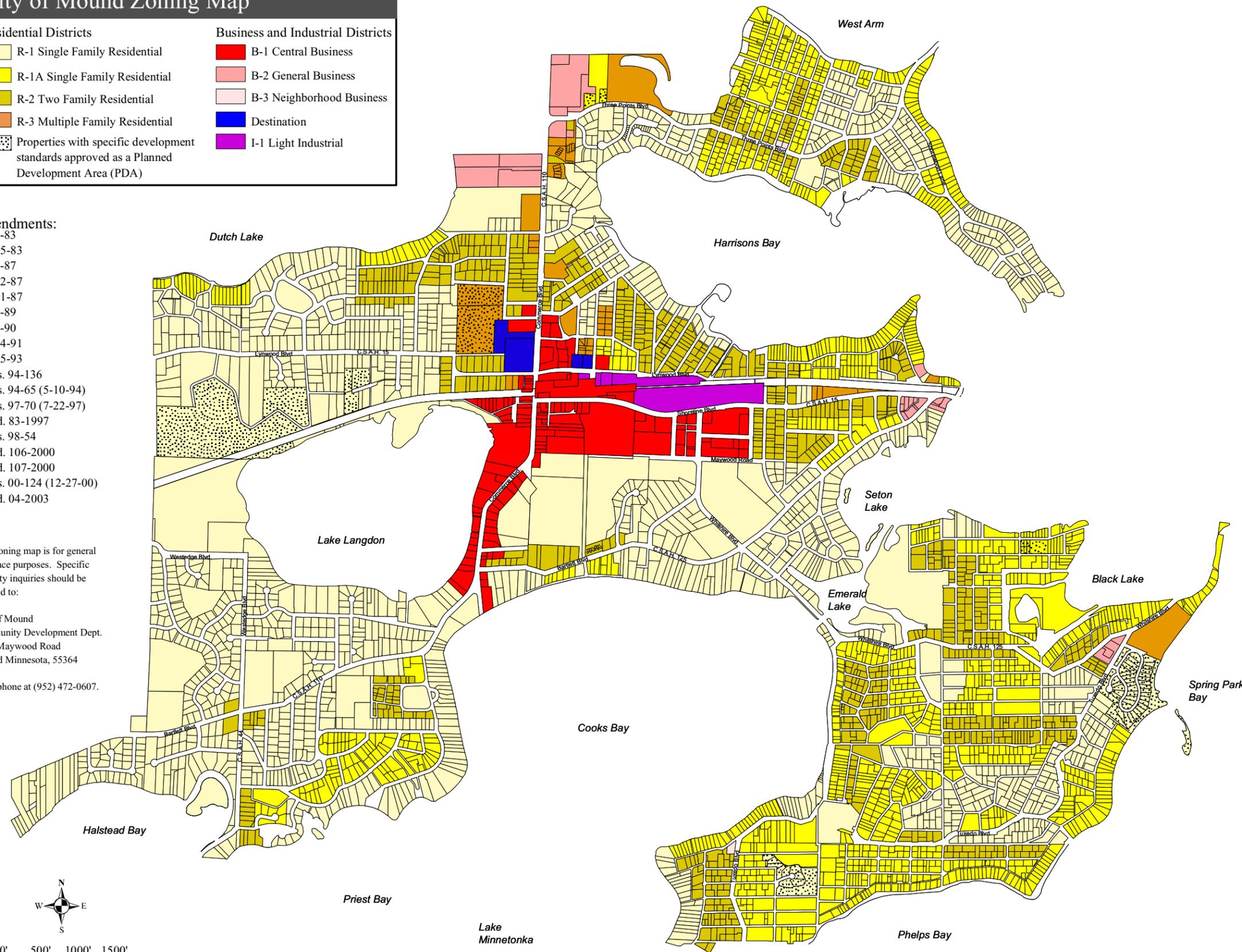
This zoning map is for general reference purposes. Specific property inquiries should be directed to:

City of Mound
Community Development Dept.
5341 Maywood Road
Mound Minnesota, 55364

or by phone at (952) 472-0607.



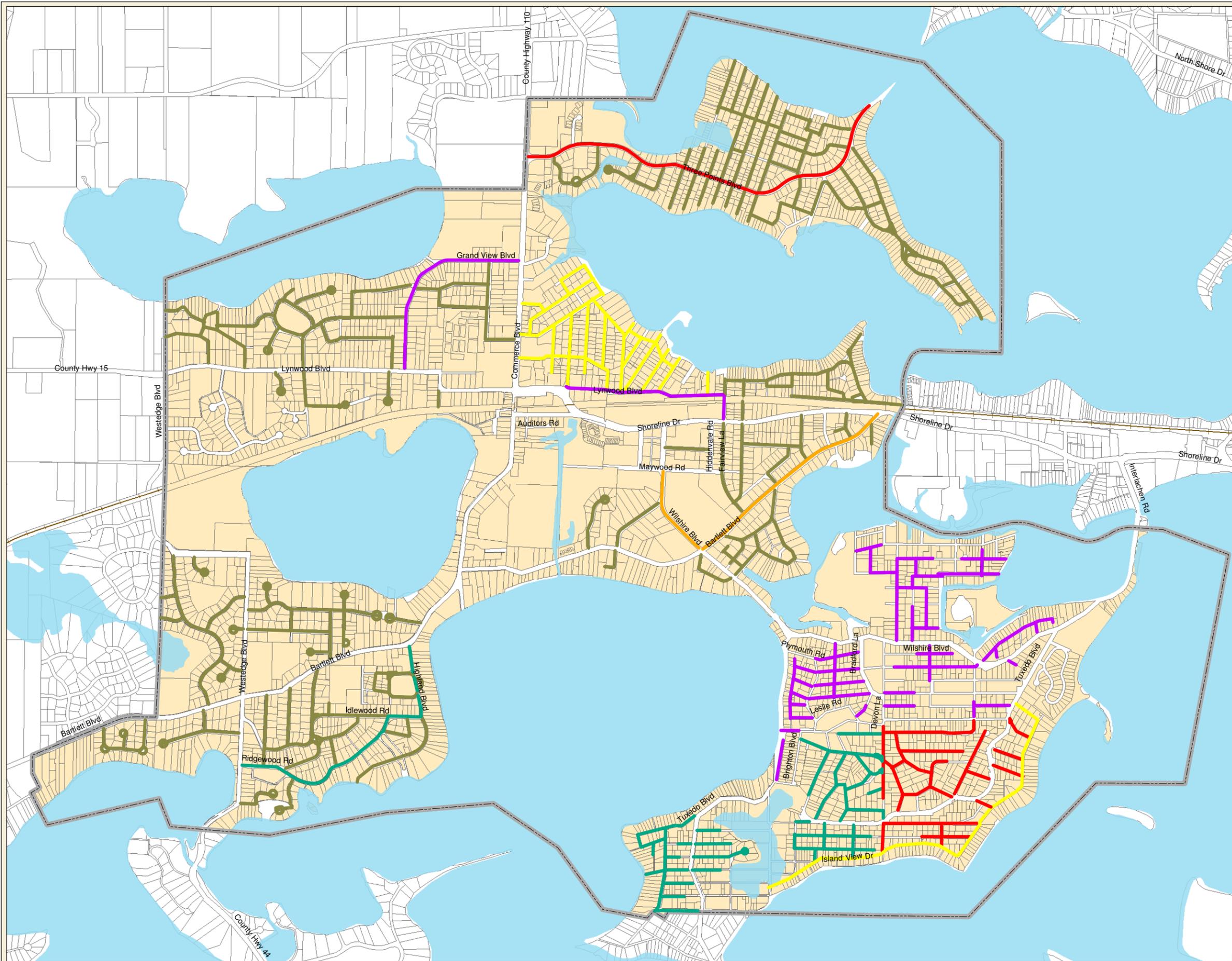
Comprehensive Plan



Existing Zoning Map

Figure 10.1

October 21, 2008
Source: Hennepin County, Metropolitan Council,
The Lawrence Group, MnDNR



**5 - YEAR
CAPITAL
IMPROVEMENT
PROJECTS**

Legend

- Annual Street Reconstruction Project**
- Previous Projects
 - 2009
 - 2010
 - 2011
 - 2012
 - 2013

- Street Reconstruction**
- Annual Reconstruction Project
- Retaining Walls**
- Additions & Repair with Annual Reconstruction Project

Source: City of Mound, Hennepin County



0 1,000
Feet

**Annual Reconstruction
Projects - Streets
& Retaining Walls**

Figure 10.2

August, 2009





**5 - YEAR
CAPITAL
IMPROVEMENT
PROJECTS**

Legend

Annual Street Reconstruction Project Area and Lift Station Replacement Locations

- 2009
- 2010
- 2011
- 2012
- 2013
- Replaced Lift Stations '07 & '08
- Existing Lift Stations
- Previously Rehabilitated Sanitary
- Existing Sanitary Sewer

Sanitary Sewer
• Replace 3 Lift Stations per Year

• Install Manhole Chimney Seals with Annual Reconstruction Project

• Rehabilitation by Installing CIPP lining with Annual Reconstruction Project where needed

Source: City of Mound, Hennepin County



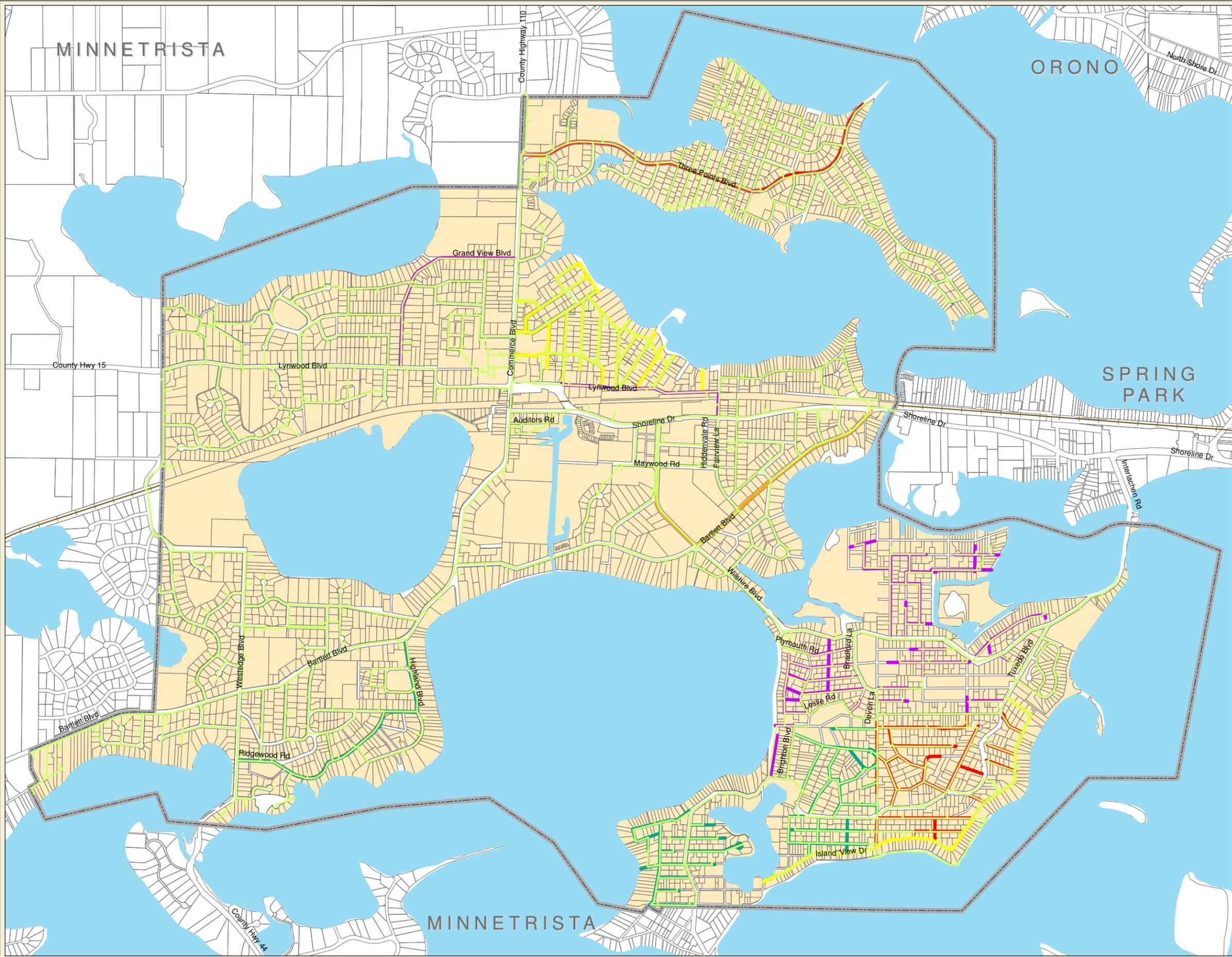
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Feet

**Annual Reconstruction
Projects -
Sanitary Sewer
& Lift Stations**

Figure 10.3

August, 2009





**5 - YEAR
CAPITAL
IMPROVEMENT
PROJECTS**

Legend

Annual Street Reconstruction Project Area

-  2009
-  2010
-  2011
-  2012
-  2013
-  Existing Watermain

Watermain
• Add & Replace
as needed with
Annual
Reconstruction Project

Source: City of Mound, Hennepin County



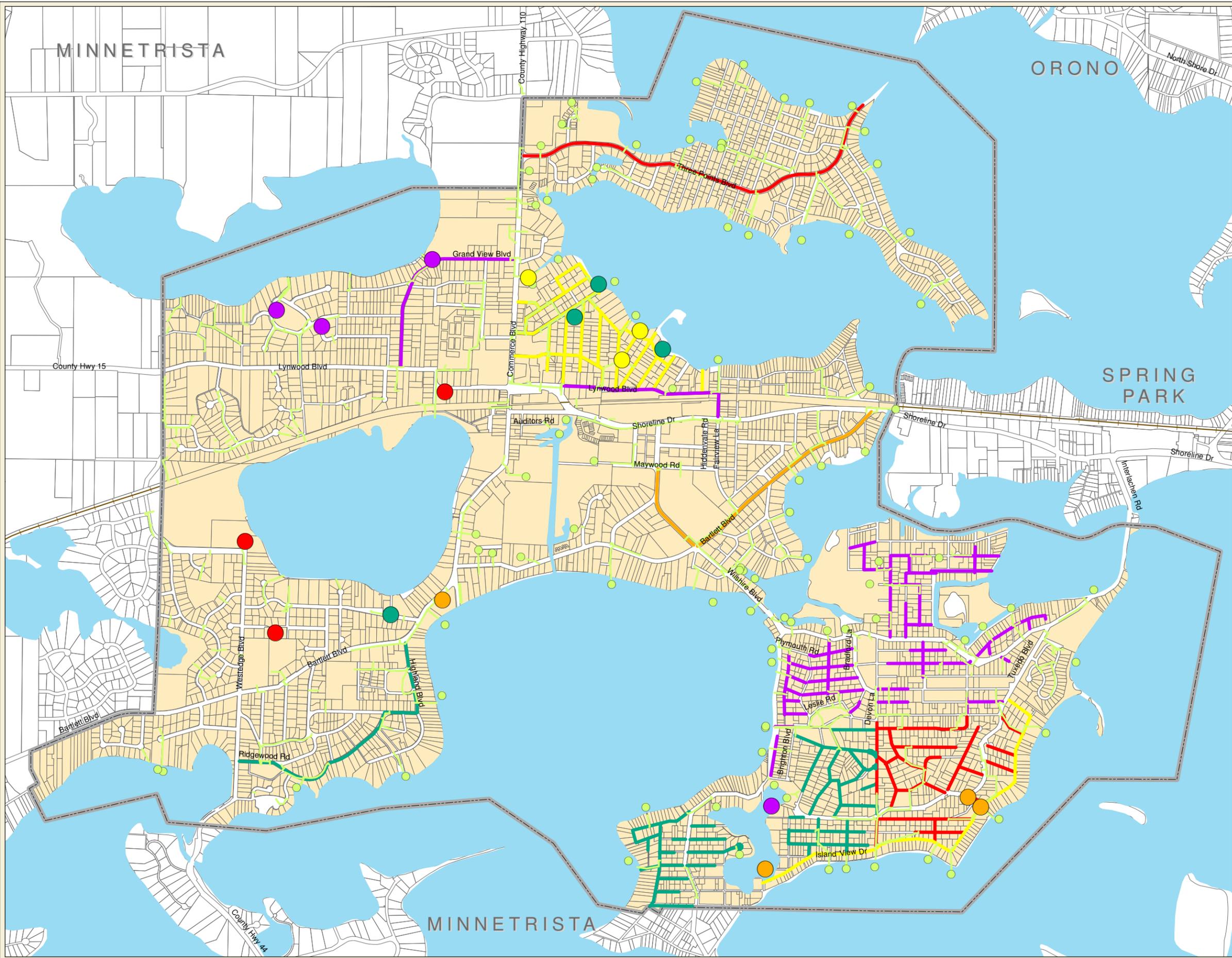
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**Annual Reconstruction
Projects -
Watermain**

Figure 10.4

August, 2009





**5 - YEAR
CAPITAL
IMPROVEMENT
PROJECTS**

Legend

Annual Street Reconstruction Project Areas and Drainage Improvement Locations

- 2009
- 2010
- 2011
- 2012
- 2013
- Outfall Locations
- Existing Storm Sewer

- Storm Sewer**
- Additions & Repair with Annual Reconstruction Project
 - Clean 10 Lake Minnetonka Outfalls per year

Source: City of Mound, Hennepin County



0 1,000 Feet

**Annual Reconstruction
Projects -
Storm Sewer**

Figure 10.5

August, 2009



**Appendix A
Land Use Table in 5-Year Stages**

Existing and Planned Land Use Table (in acres)

Within Urban Service Area	Allowed Density Range Housing Units/Acre		Existing (2006)	2010	2015	2020	2025	2030	Change 2000-2030
	Minimum	Maximum							
Residential Land Uses									
Low Density Residential	1	6	1,017	1,020	1,025	1,030	1,038	1,038	21
Medium Density Residential	7	12	7	16	20	40	45	45	38
High Density Residential	12		29	29	29	29	29	29	0
C/I Land Uses									
	Est. Employees/Acre								
Neighborhood Commercial	134		8	11	17	17	17	17	9
Pedestrian District**	139		9	13	18	18	18	18	9
Destination District***	139		24	25	25	25	25	25	1
Linear District****	139		22	23	23	23	29	29	7
Industrial	44		14	14	14	14	14	14	0
Public/Semi Public Land Uses									
Public/Institutional	--	--	88	88	80	77	77	77	-11
Parks	--	--	64	64	64	64	64	64	0
Open Space	--	--	40	40	40	40	40	40	0
Subtotal Sewered			1,322	1,343	1,355	1,377	1,396	1,396	74
Undeveloped									
Public Waters/Wetlands	--	--	121	121	121	121	121	121	0
Undeveloped	--	--	74	53	41	19	0	0	-74
Total			1,517	1,517	1,517	1,517	1,517	1,517	0

* Acres provided are "net" acres where arterial right-of-ways, water bodies, wetlands and public parks have already been removed.

** The Pedestrian District is mixed use. Approximately 50% of the development is medium to high density residential.

*** The Destination District is mixed use. Approximately 50% of the areas located off of CSAH 15 are intended to be medium to high density residential.

**** The Linear District is mixed use. Approximately 60% of the development is medium density residential.

Appendix B
Projections by Traffic Analysis Zones (TAZs)

Transportation Analysis Zone (TAZ)	Population			Households		
	2010	2020	2030	2010	2020	2030
632	3,024	3,197	3,320	1,278	1,351	1,410
633	857	907	910	334	353	368
634	1,235	1,305	1,360	502	531	554
635	2,686	2,844	2,950	1,154	1,221	1,274
636	1,162	1,228	1,280	499	527	550
637	1,436	1,519	1,580	583	617	644
Total	10,400	11,000	11,400	4,350	4,600	4,800

Transportation Analysis Zone (TAZ)	Total Employment			Retail Employment			Non-Retail Employment		
	2010	2020	2030	2010	2020	2030	2010	2020	2030
632	205	225	240	0	0	0	205	225	240
633	95	105	115	0	0	0	95	105	115
634	500	545	585	150	160	170	350	385	415
635	410	440	475	80	80	80	330	360	395
636	485	525	565	20	20	20	465	505	545
637	165	180	190	70	70	70	95	110	120
Total	1,860	2,020	2,170	320	330	340	1,540	1,690	1,830

Source: Metropolitan Council