

City of Lake Elmo

651/777-5510

3800 Laverne Avenue North / Lake Elmo, MN 55042

City of Lake Elmo
City Council Workshop
3800 Laverne Avenue North
Lake Elmo, MN 55042

Wednesday, June 23, 2010

6:30 p.m. – 8:30 p.m.

1. Agenda
2. Consider process for Updating & Implementing Village Area Master Plan and Undertaking Planning for the 10th St. N/I-94 Corridor Area
3. Adjourn



printed on recycled paper



MAYOR & COUNCIL WORKSHOP

DATE: 6/23/2010
WORKSHOP
ITEM #: 1
DISCUSSION

AGENDA ITEM: Consider Process for Updating & Implementing Village Area Master Plan and Undertaking Planning for the 10th St. N/I-94 Corridor Area

SUBMITTED BY: Mayor and City Council

THROUGH: Bruce A. Messelt, City Administrator *BAM*

REVIEWED BY: Kyle Klatt, Planning Director
Dave Snyder, City Attorney

SUMMARY AND ACTION REQUESTED: This item has been scheduled in order to allow the City Council to follow up on suggestions for moving forward with updating and implementing the Village Area Master Plan and undertaking a planning effort for the 10th St. N/I-94 Corridor Area. At the request of the City Council, involved City Staff are present at tonight's Workshop to assist the City Council in its deliberations.

BACKGROUND INFORMATION: In February, 2010, the City Council discussed as part of its Strategic Planning effort the need to move forward with updating and implementing the Village Area Master Plan and proceeding with a similar planning effort for the 10th St. N/I-94 Corridor Area.

In addition, discussion took place recently by the City Council regarding the need to update the planning for these areas. Both of these items are listed in the draft 2010 Workplan for the City Council and its staff.

STAFF REPORT: City staff recommends the City Council discuss the desired process, timeline and outcome for updating the Village Area Master Plan and proceeding with certain necessary actions to implement this planning effort.

Similarly, Council discussion is suggested on the desired process, timeline and outcome for undertaking a more thorough planning process for the 10th St. N/I-94 Corridor Area.

RECOMMENDATION: It is recommended the City Council address tonight's discussion topics. No specific action or direction is requested at this time. However, the City Council may elect to provide staff specific direction or direct certain additional action be taken with respect to this topic.

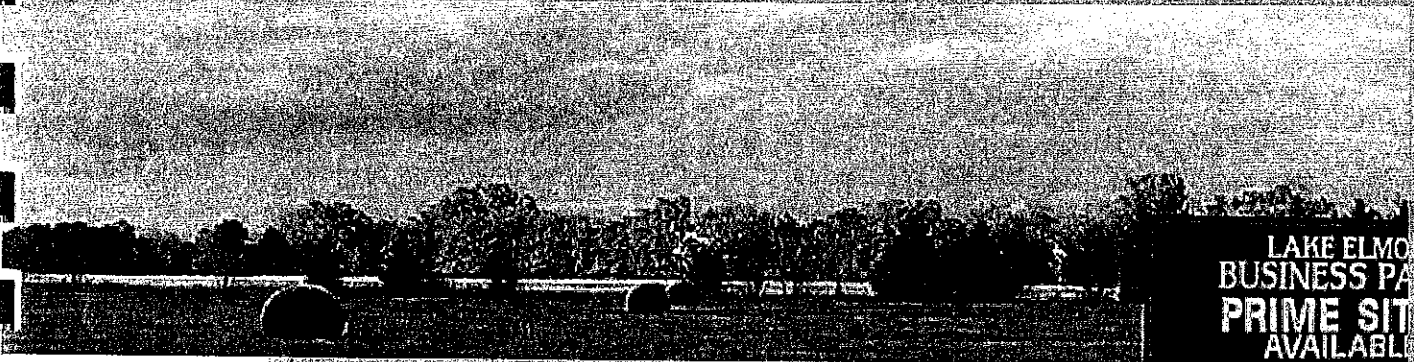
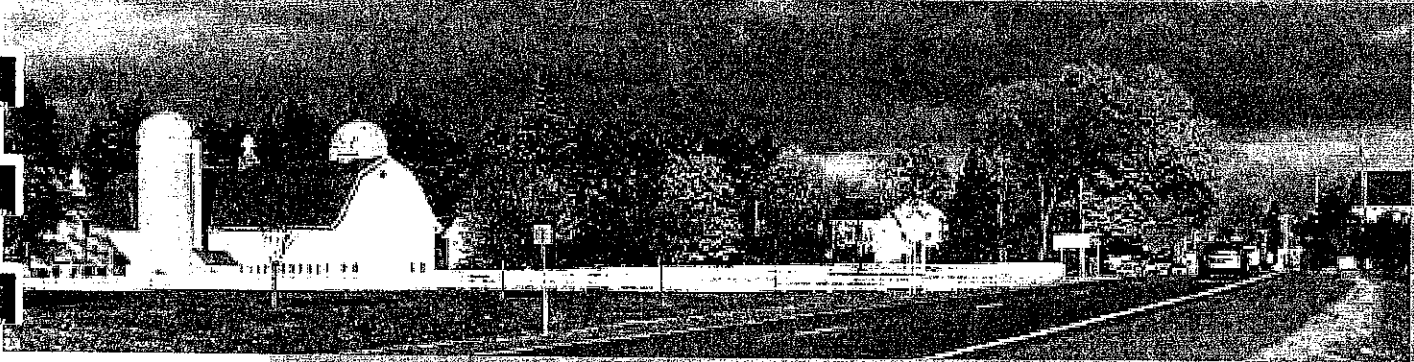
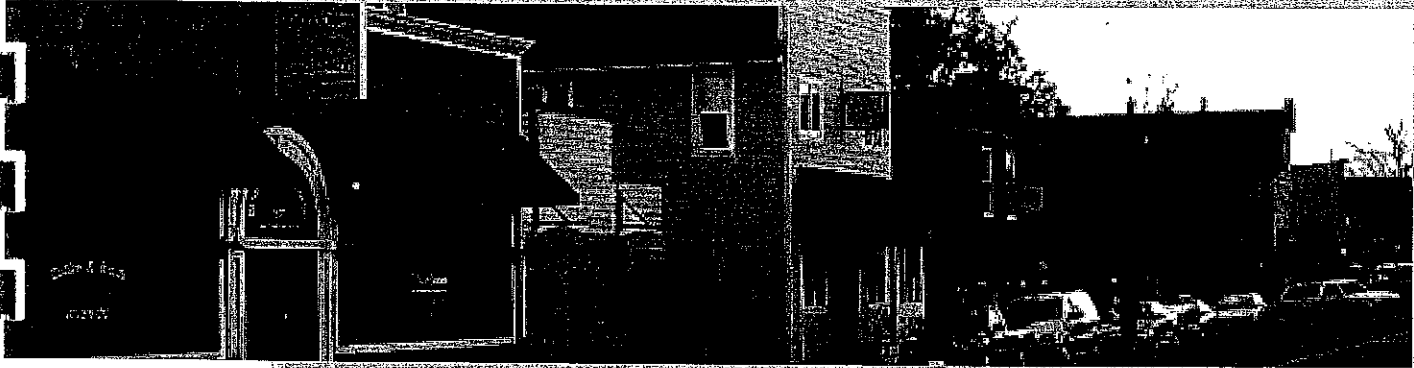
ATTACHMENTS: (Storyboards will be utilized at tonight's meeting).

1. Draft Village Area Plan
2. Excerpts, Comprehensive Plan Sections Relating to I-94 Corridor

SUGGESTED ORDER OF BUSINESS:

- Introduction of Item City Administrator
- Brief Review of Previous Planning EffortsCity Planner
- Questions from Council to Staff.....Mayor Facilitates
- Public Input, if AppropriateMayor Facilitates
- Discussion..... Mayor & City Council
- Direction to StaffMayor Facilitates

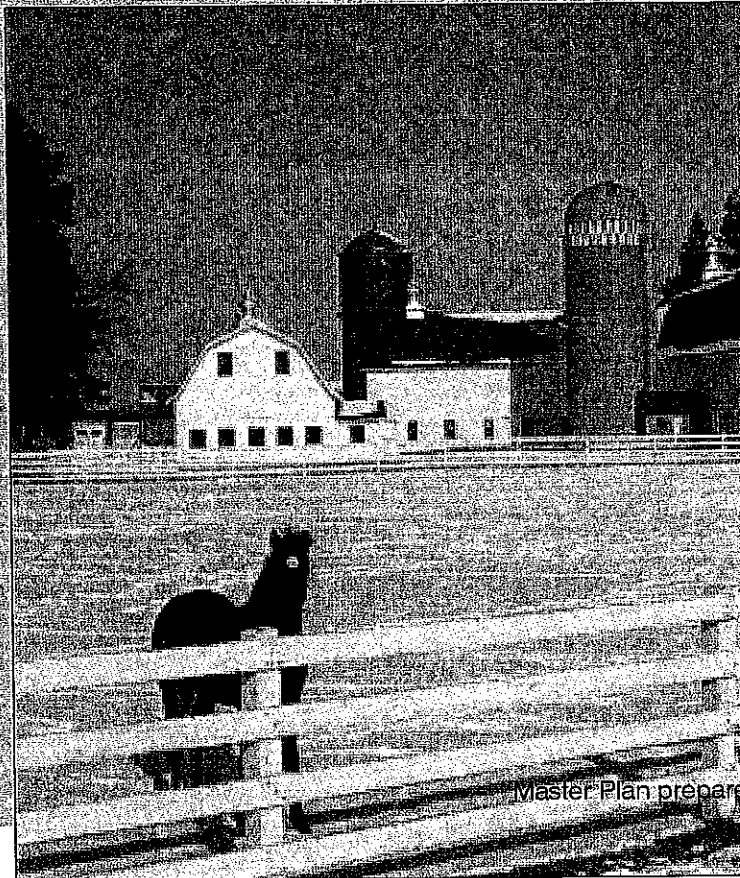
draft 4.05.07



Lake Elmo Village Area Master Plan

Acknowledgements

The Village Area Planning Team wishes to thank the following for their thoughtful contributions, encouragement and leadership throughout the planning process:



Mayor
Dean Johnston

City Council
Rita Conlin
Steve DeLapp
Liz Johnson
Anne Smith
Nicole Park

Lake Elmo City Staff
Planning Commission
Parks Commission

City Consultants
TKDA
Ehler Associates, Inc.

Master Plan prepared by the Village Area Planning Team:
Robert Engstrom Companies
Close Landscape Architecture
Design Forum



Lake Elmo Village Area Master Plan

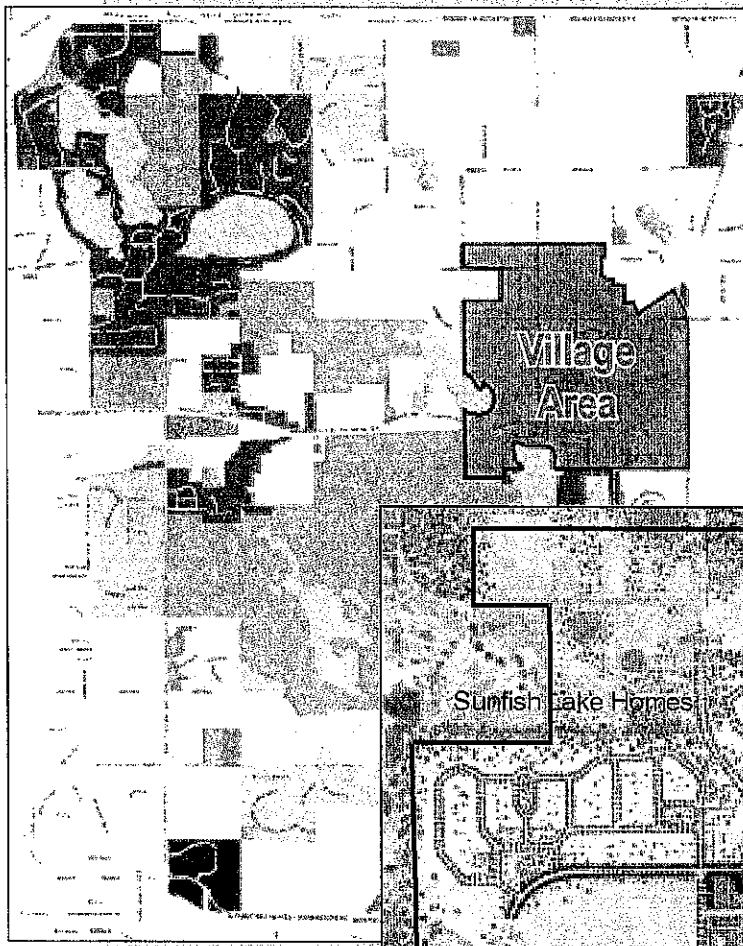
April 2007

Executive Summary

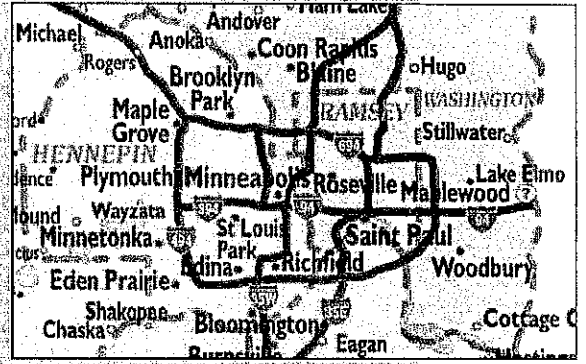


Lake Elmo Village Area Master Plan

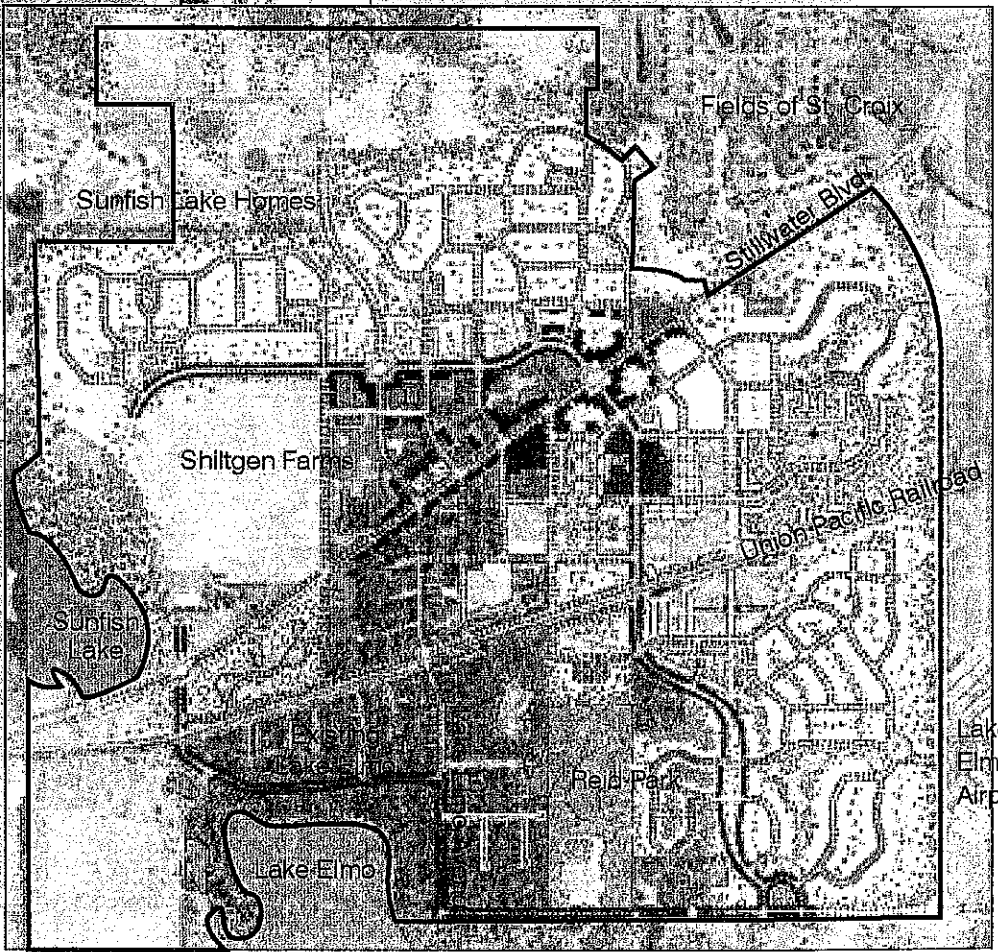
Three Scales to Consider ...



City



Regional



Village Area

Executive Summary

In the summer of 2005, the City of Lake Elmo began a planning process that would define a vision for anticipated development in and around the historic Old Village. In response to the Metropolitan Council Regional Development Plan, Lake Elmo agreed to shoulder some of the demand for growth in the region. While this agreement represented a mandate for more housing within the community, the Mayor and City Council also set City priorities including three primary directives:

- preserve the Old Village rural character
- maintain the Old Village as the perceived and functional center of the City
- create a greenbelt buffer surrounding the Old Village

The resulting Village Area Master Plan provides a framework, and the steps to begin implementation, for both landowner (private development) and the City (public improvements). The Master Plan, along with the Comprehensive Plan, new zoning and subdivision regulations, development guidelines, infrastructure design and other planning tools will guide future growth within the Village Area.

The Master Plan characterizes this community as a safe, vibrant, connected, pedestrian scale, innovatively designed village with the following features:

- an active, mixed-use Main Street
- a celebrated and protected historic district
- a network of public parks, trails and open space connected with local and regional amenities
- a system of ponds and streams integrating storm water as part of park design
- a multi-purpose 'green street' loop that links adjacent neighborhoods with Village destinations and attractions
- a mix of housing types, styles and prices including senior and special needs

The plan also includes new civic facilities (City Hall and Community Campus), strategically placed to serve both existing and new families within the Old Village, as well as those who live in the broader community. New retail, restaurant and office uses along Route 5 (Stillwater Boulevard) and within the historic core attract residents and visitors to a modest but inviting Main Street – augmenting but not overwhelming the community's small-town charm.

Beginning in 2007, construction of sewer, water and stormwater management systems will lead the way. Plans continue to evolve for a mix of housing, commercial venues, new parks and trails, and a variety of other uses outlined in this document.

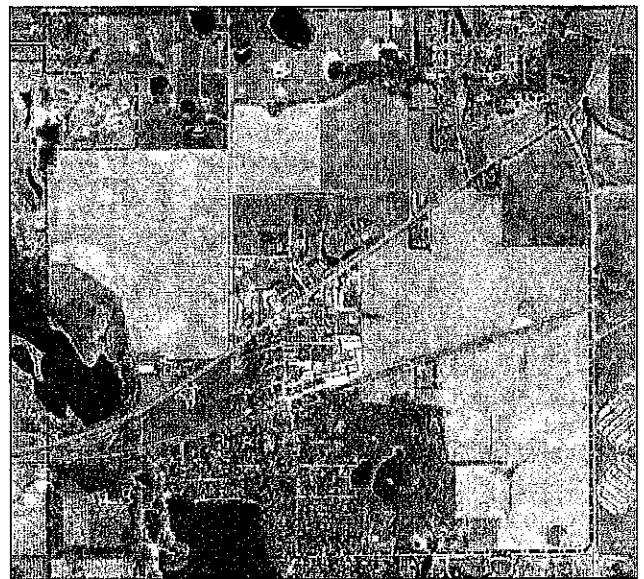


Table of Contents

Chapter 1 – Background

- Introduction
- Guiding Principles
- Setting the Framework

Chapter 2 – The Master Plan

- The Village Area Vision
- Building the Layers
- Existing Conditions
- City Parks and Trails Planning
- Green and Blue / Streets and Blocks / Land Use
- Recommended Housing Types
- Parcel Plan and Districts Diagram

Chapter 3 – Master Plan Components

- Introduction
- Route 5 Main Street
- Lake Elmo Avenue Extension and Old Main Street
- The Community Campus
- City Hall
- City Parks, Trails and the Greenbelt Buffer
- Existing Homes and Businesses
- New Residential Neighborhoods

Chapter 4 – Village Character Case Studies

- Introduction
- Small Towns (Villages) With 5000 Population
- Summary Observations

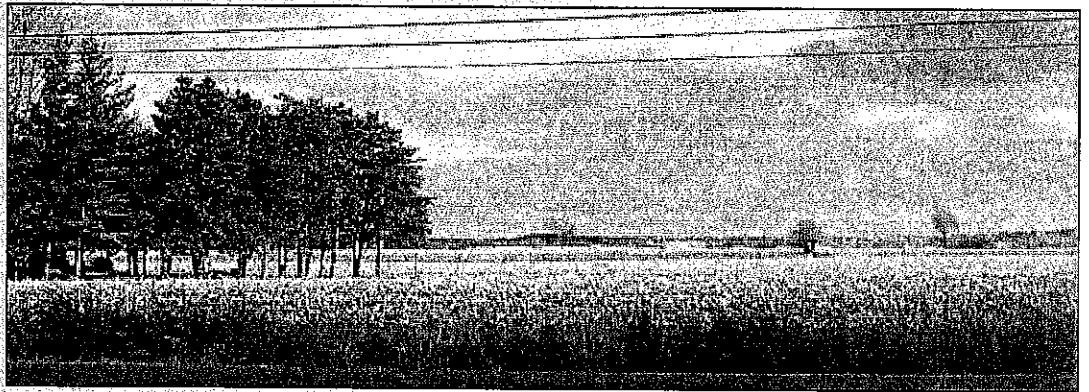
Chapter 5 – Utilities and other Infrastructure

- Overview
- Sanitary Sewer
- Municipal Water
- Stormwater Management
- Streets

Chapter 6 – Planning Process and Planning Tools

- Overview
- Adopt Master Plan
- Comprehensive Plan Amendment
- The Alternative Urban Areawide Review (AUAR)
- Zoning Code and Subdivision Regulations
- Development Guidelines
- Design Review Board and Review Criteria
- Funding Sources and Financial Strategies

Chapter 1
Background

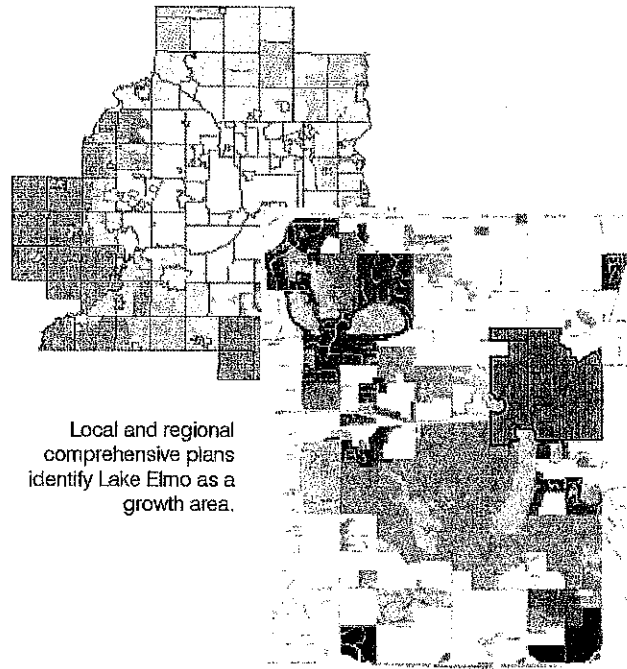


Lake Elmo Village Area
Master Plan

Introduction

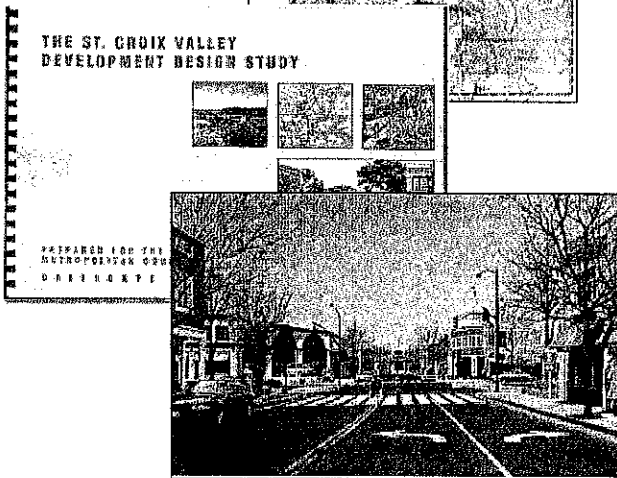
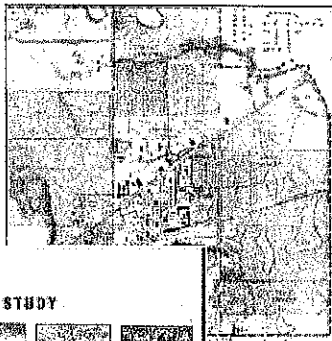
Years of planning study, town meetings and intense debate yielded two primary conclusions: First, that sooner or later the City of Lake Elmo would grow . . . and second, the City would need a variety of planning tools to guide when, where and how development should occur.

Central to this discussion is The Metropolitan Council's 2030 Regional Development Plan, which projects an additional million residents in the seven county area over the next few years. The Met Council Plan requires that each suburban community shoulder a portion of this predicted housing need. An agreement was struck between Lake Elmo and the Met Council that included, among other things, a commitment to extend sanitary sewer service into the Old Village, with a defined minimum number of housing units to be built once sewer arrived.



Local and regional comprehensive plans identify Lake Elmo as a growth area.

Previous studies forward similar recommendations, emphasizing mixed-use, compact and connected development.



It became apparent that the amount of land poised for new development could, if done poorly, dramatically alter the character of the Old Village, forever compromising its unique scale and charm. The City of Lake Elmo has maintained firm resolve, consistently placing highest value on retaining their rural, small-town feel, yet accepting the challenge to grow using a responsible, innovative and feasible approach that would stand the test of time.

In the summer of 2005, the City of Lake Elmo retained a team of planning consultants, now called the 'Village Area Planning Team,' who were directed to create a realistic, yet forward-thinking vision for this small rural town. The Mayor and City Council voiced a strong mandate . . . the Master Plan must be compatible with City objectives and priorities, respond to the Met Council agreement and, to the extent possible, include input from property owners, builders and developers.

In parallel with the city planning process, a group of landowners, representing the majority of undeveloped acreage within the Old Village, began planning studies of their own. Multiple meetings with these landowners, the Village Area Planning Team, Mayor, City Council, City Staff and other stakeholders laid the groundwork for the Master Plan. The emerging vision for growth and development within the Village Area set realistic parameters, outlined control mechanisms and pushed design creativity as the basic strategy for success.

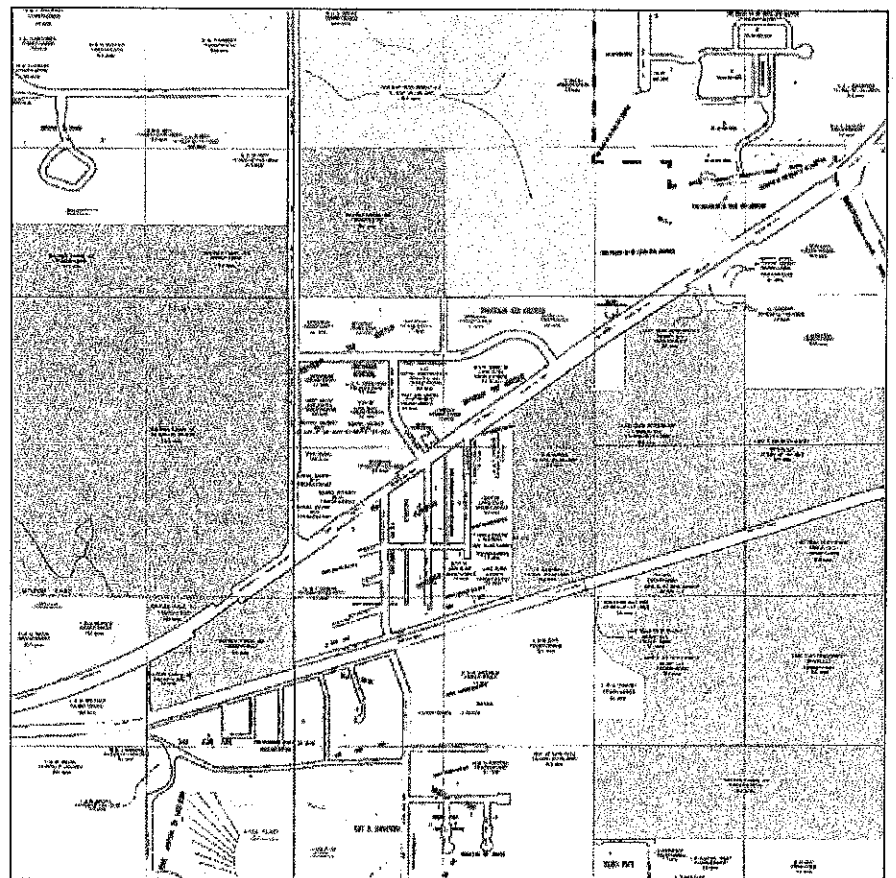
Toward that end, the Master Plan will:

- preserve the Old Village rural character
- preserve existing 'Main Street' (Lake Elmo Avenue)
- maintain the Old Village as the perceived and functional center of the City
- provide life-cycle housing (mixed types, prices, senior, special needs)
- expand opportunities for additional local goods and services
- expand the existing public park and trail system
- create a greenbelt buffer surrounding the Old Village
- seek opportunities for expanded civic, office and institutional uses

The chapters within this Master Plan document, together with additional sections (under separate cover) provide further explanation and detailed description of plan components, proposed infrastructure improvements, potential funding/financing options and recommended implementation steps and strategies.



The Village Area includes hundreds of acres of vacant land.



Property Ownership Map

Guiding Principles

Early in the process, a number of planning and design ideas began to emerge as a consistent, comparative benchmark for measuring the intent and relative value of various master plan components being studied. Ultimately, these ideas were refined into the following Guiding Principles . . . a sort of charter that clearly defines City priorities and the overall basis for the Village Area Master Plan.



Principle #1

Evoke a sense of place . . .

Build on existing assets to preserve the small town, rural character of Lake Elmo, maintaining the Old Village as the heart of the city.

For example: the words 'small-town America' still bring forth almost iconic images of 'place,'; images that represent a way of life steeped in civic pride, knowing your neighbor and celebrating tradition. The Master Plan seeks to build on this idea, not detract from it.

Principle #2

Balance natural and built systems . . .

Integrate development within a green framework of parks, trails and the open space greenbelt.

For example: the Master Plan is based on the inseparable relationship between various systems working together to create the 'whole-cloth' of community. The idea of a village within a park is an attainable vision . . . with new development, infrastructure improvements and other plan components carefully conceived and constructed as if to appear part of the original settlement.



Principle #3

Broaden the mix of local goods and services . . .

Support existing, and encourage new opportunities for retail shops, restaurants, office, civic and institutional uses, particularly along Lake Elmo Avenue and the proposed Route 5 Main Street.

For example: having a variety of visible, inviting, high quality purveyors nearby that meet the daily needs of Lake Elmo residents is a hallmark of small town life. Rather than displacement, the Master Plan seeks to enhance the climate for commercial development (including existing businesses), while creating an active Main Street and signature destination centerpiece for the Village.



Principle #4

Provide a variety of housing choices . . .

Make life-cycle housing a top priority, specifically targeting a growing and increasingly diverse population.

For example: some existing residents would like to live in Lake Elmo long after they've left the family homestead; children born and raised in the area would like to find 'first-time-buyer' housing they can afford; new residents attracted to the Village should be able to pick from a mix of high quality, reasonably priced options for families, active living, low maintenance and special needs housing close to Main Street and in nearby neighborhoods.

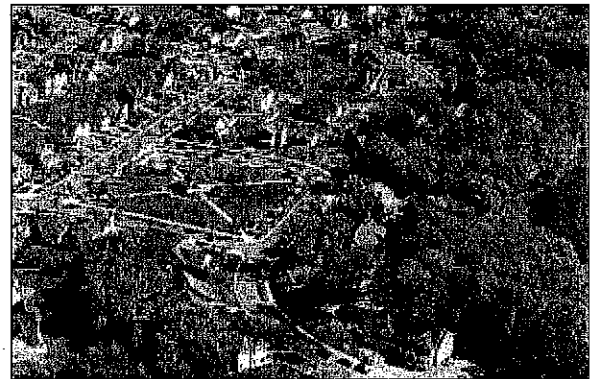


Principle #5

Invest in quality public space . . .

Construct signature parks and a destination main street as the centerpiece for community events with increased recreational opportunities and improved amenities throughout the Old Village.

For example: some of our most memorable and celebrated places are our parks . . . from the traditional town square to the world renowned Grand Rounds in Minneapolis, the contribution of these special places to our quality of life is beyond measure. The Master Plan seeks to create a network of public parks and trails available for active recreational users, casual spontaneous visits or simply an element of the Village fabric you might pass by as part of your daily routine.



Principle #6

Preserve and enhance natural and cultural resources . . .

Develop strategies to insure long term protection of the qualities that make the Old Village unique.

For example: Lake Elmo seems to have sort of a quiet history represented by only a few visible reminders of bygone days, yet the Master Plan seeks to interpret this cultural legacy in a very public expression of meaning and place. And although much of what was once natural in the Village Area is mostly gone . . . we still have a responsibility to preserve and protect what remains, seek to restore what's missing and connect with regional systems where natural areas still flourish.



Principle #7

Improve connectivity . . .

Provide a balanced network for movement that links local neighborhoods and Village Area attractions with city-wide and regional systems, paying equal attention to cars, bicycles, pedestrians and transit.

For example: the Master Plan is not anti-car . . . but it also does not emphasize traffic management and car convenience as the primary drivers of Village design. Instead, the Plan seeks to create a safe, functional and aesthetically pleasing experience for everyone, while encouraging increased pedestrian and bicycle trips with a decreased dependency on the automobile.



Principle #8

Build partnerships . . .

Leverage investment through public/private partnerships including expanded relationships with builder/developers, corporate, institutional, county, state and national organizations with shared interest in specific elements of the plan.

For example: you can't do this alone . . . each and every component of the Master Plan requires the knowledge and active participation of a variety of potential partners. Their success helps ensure your success, and a positive, engaging and respectful experience should be the outcome for everyone doing business with Lake Elmo.

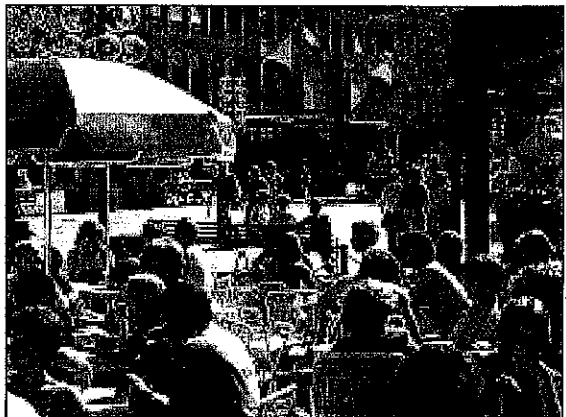


Principle #9

Foster public safety . . .

Create a vital and inviting Village center that encourages activity throughout the day.

For example: safe streets, safe parks, safe neighborhoods . . . much of the world we live in is 'self-policing.' The proposed mix and location of uses and amenities intentionally promotes casual surveillance (eyes-on-the-street) with easy monitoring and access by emergency services when needed.



Principle #10

Forward a vision that can be implemented . . .

Balance economic realities and technical constraints with a mandate for quality and livability.

For example: the Master Plan becomes meaningless if it can't be built . . . implementation of the Plan must include reasonable cost in a reasonable time frame, with built-in flexibility that responds to market shifts, political reprioritization, technological advances and potential outside influences (oil prices, war, transit).

Principle #11

Become a great model . . .

Encourage other communities to 'raise the bar' by demonstrating low impact development, best practices and sustainability.

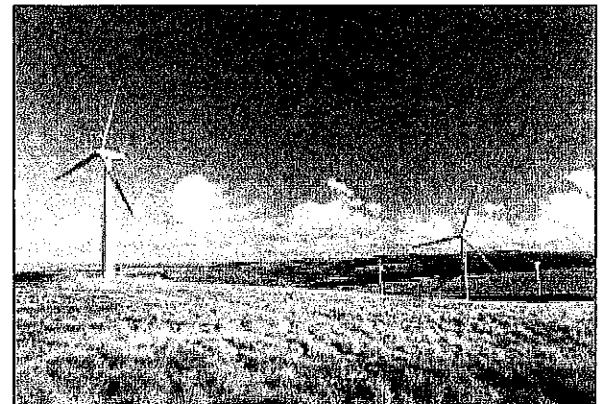
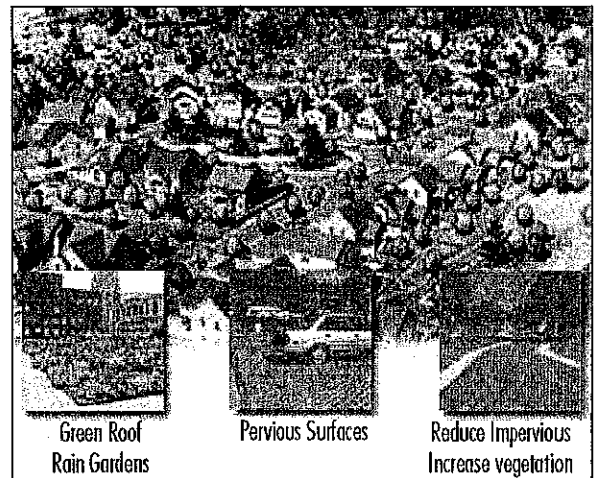
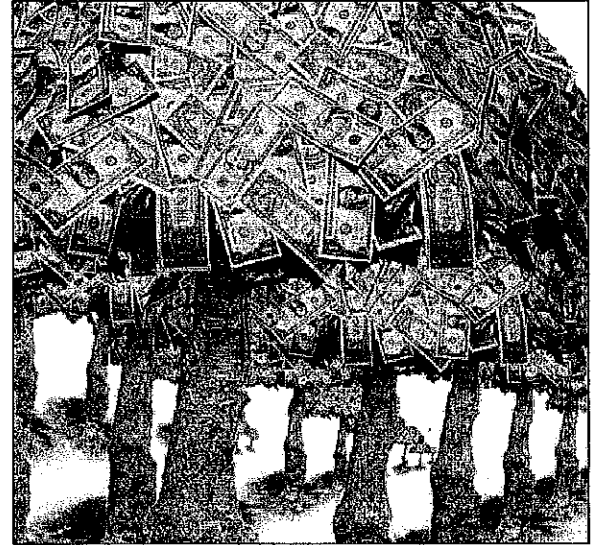
For example: there is a growing responsibility and broader perspective that suggests that status quo is not an option. The Master Plan actively pursues opportunities to not only explore, but put into practice, a variety of methods and approaches that reduce the negative impacts of development, minimize intrusions on our natural systems, conserve energy where possible and leave a lasting legacy for others to follow.

Principle #12

Lead by design . . .

Creative and innovative thinking locally should also be part of the regional, national and global collaboration of problem solvers.

For example: there is a wealth of information and real-world examples to help small towns like Lake Elmo respond to the complex challenges of growth, development, finance, preservation and health. The Master Plan seeks to build from this knowledge base, benefit from the experience of others and participate in meaningful problem solving for this rapidly changing world.

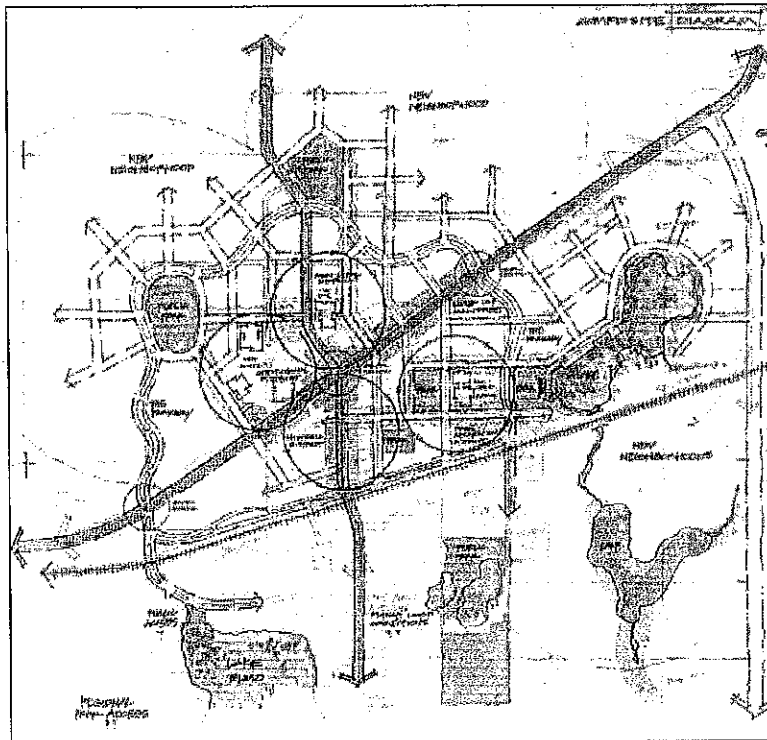
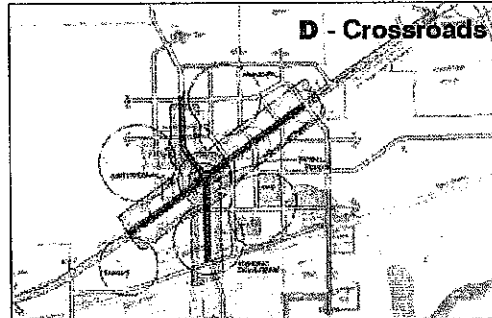
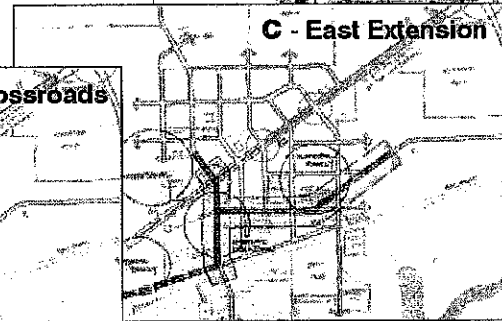
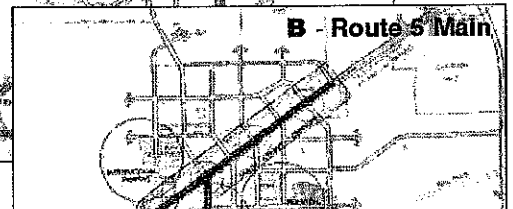


Principle 13

Minimize the negative impact on neighboring residences and businesses.

Sketch Plan Alternatives

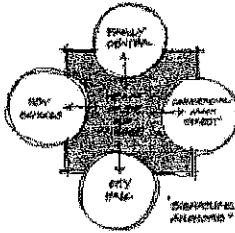
The Village Area Planning Team explored various options for street layout, mix and location of uses, network of parks and trails, and other Village components. Sketch Plan Alternatives were presented in workshop sessions with Mayor, City Council and other stakeholders to gather input, identify issues and continue to refine the plan.



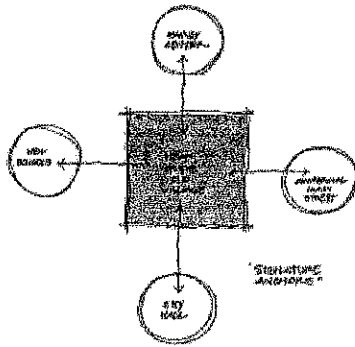
Preliminary Concept Plan

Preferred options and ideas taken from each alternative were combined to create the Preliminary Concept Plan shown here. This emerging concept provided the framework for further detailed study and recommendations for future Village improvements.

Setting the Framework



Consolidated

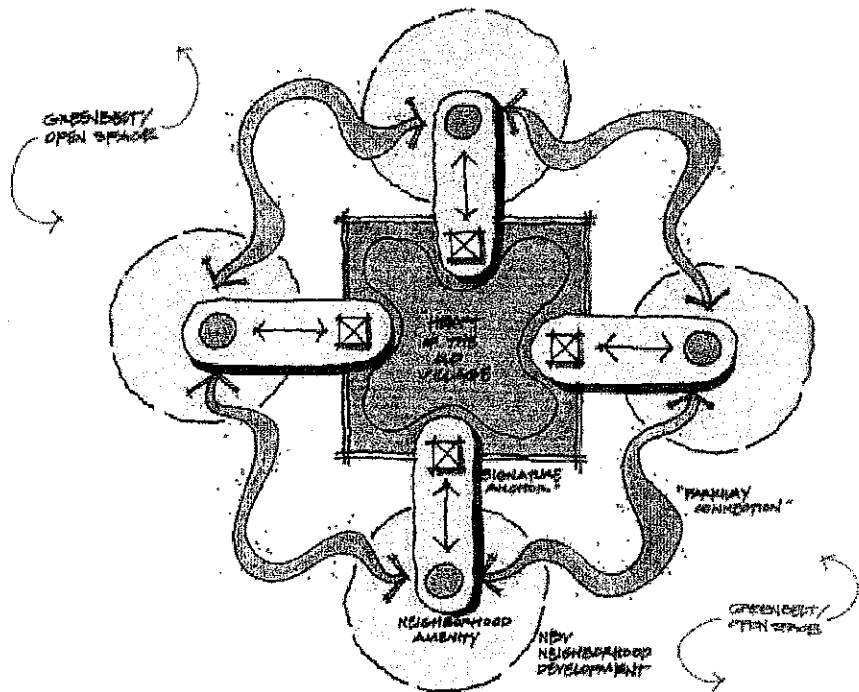


Dispersed

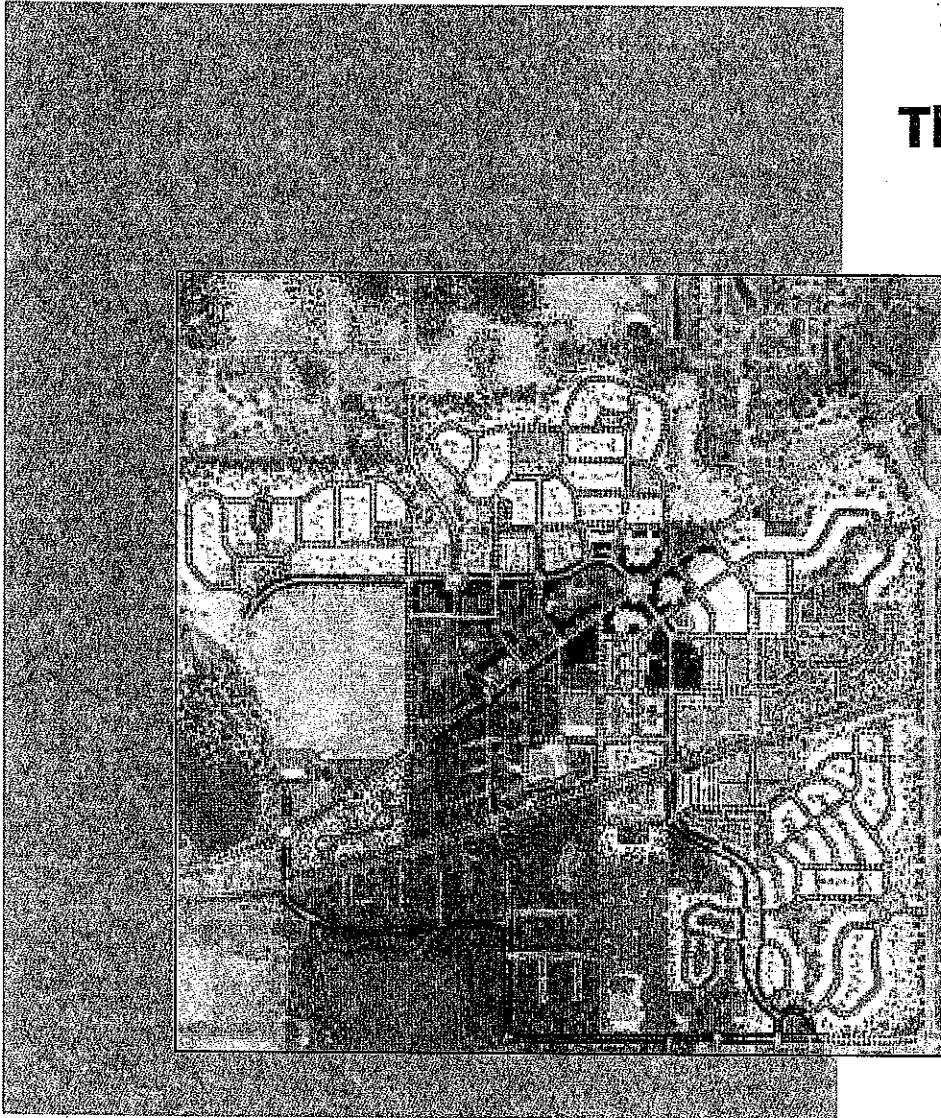
In concert with the Guiding Principles and overall planning objectives, early discussions with Mayor and City Council, City Staff and other stakeholders also suggested an exciting opportunity to include a number of 'signature anchors' as key elements in the master plan. Desire for an active commercial main street, a new city hall, potential to attract a regional community family center and perhaps at least one additional school to the Village provided the basis for these early study diagrams.

Consolidate or Disperse – should these anchor uses be pulled into the 'heart of the Old Village' or located within the neighborhoods? Should we create one center with the anchors close together, or look at several, perhaps smaller activity areas that surround the core?

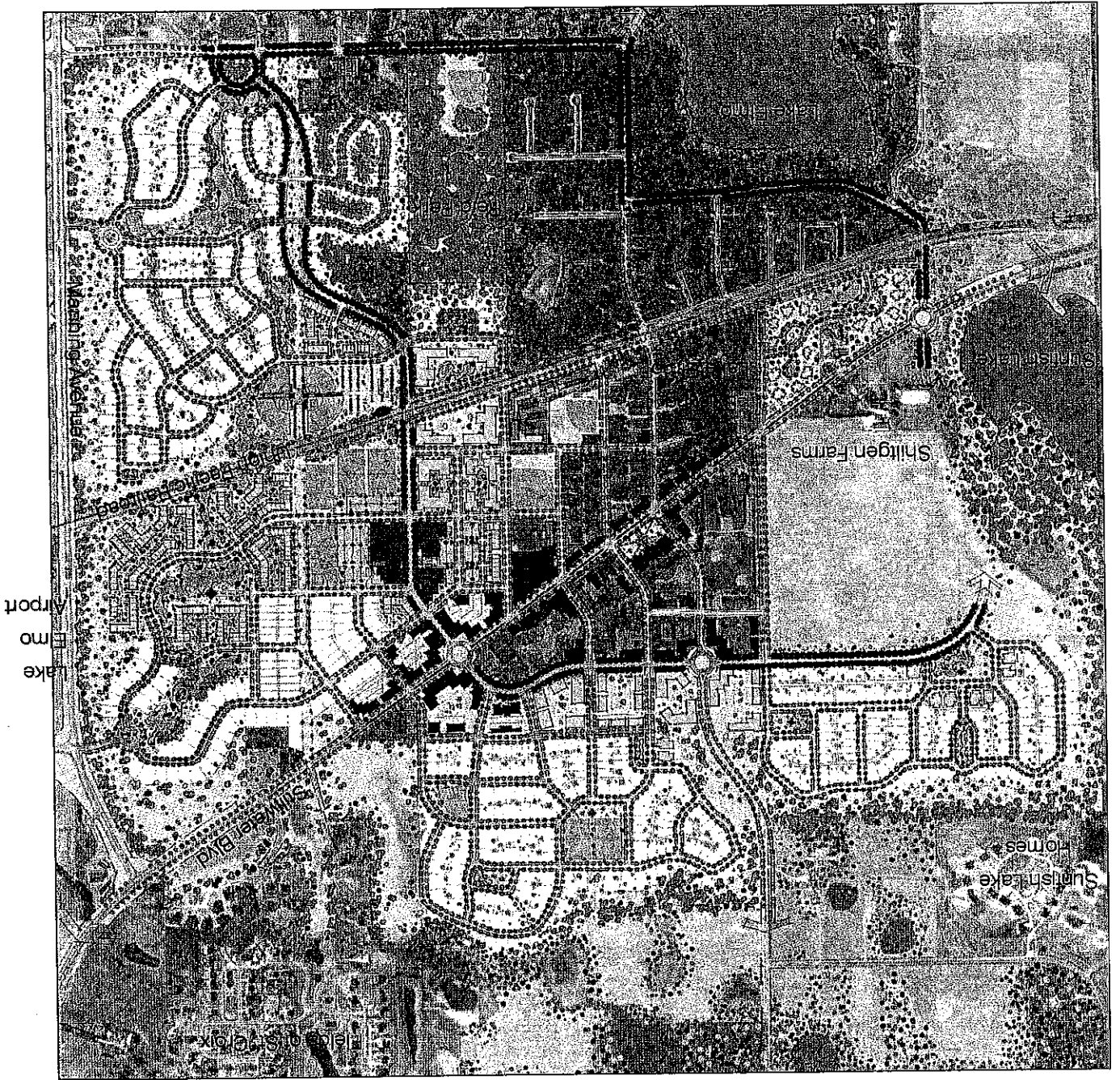
Again, Mayor and City Council, City Staff and others provided consensus direction that these potential anchors must be located within the heart, activating the core of the Village as the place to be – to gather, to eat, to shop and to play. The framework diagram illustrates the relationship between anchor uses (the yellow squares), strong links to neighborhood amenities (potential parks shown as blue circles), all stitched together via a looped parkway (wiggly green arrow) that invites car, pedestrian and bicycle access to existing and future destinations.



Chapter 2
The Master Plan



Lake Elmo Village Area
Master Plan



The Village Area Vision

Even though Lake Elmo is only a short commute from the Twin Cities and is bisected by several major travel routes, it has remained surprisingly rural. Like many small American towns, the edges of the Village Area are clearly defined; one can literally walk into a cornfield from the outfield of the local ball diamond – a real-life example from Field of Dreams, and a highly unusual model in the suburban metropolitan area. As a defining benchmark for decision making, it is understood that Lake Elmo will continue to preserve and protect its unique heritage and rural character. But, along with the planned extension of regional sewer service and increasing pressure to grow comes a strong mandate and implied responsibility to provide a thoughtful vision for the future of the Village Area. With strong community and political support, together with the additional tools (zoning, guidelines, etc.) needed to give ‘teeth’ to the Plan, new development need not overwhelm, but instead should strengthen various aspects of small town living.

In recent years, City planning studies and policy initiatives identified the historic ‘Old Village,’ now including several hundred acres of surrounding farm fields, as the recognized center of town . . . hopefully it will remain so for many years to come. The small existing historic Main Street – not glamorous, but containing several lovely buildings with an intimate pedestrian scale, sets the tone for additional, compatible commercial development suggested in the Master Plan. A number of existing lakes and associated parklands support both programmed and spontaneous activities and are an obvious asset for the Village and the region. Lake Elmo

Regional Park, Sunfish Lake Park and Reid Park are beautiful amenities and an important part of the expanding network of proposed City and neighborhood parks and trails system.

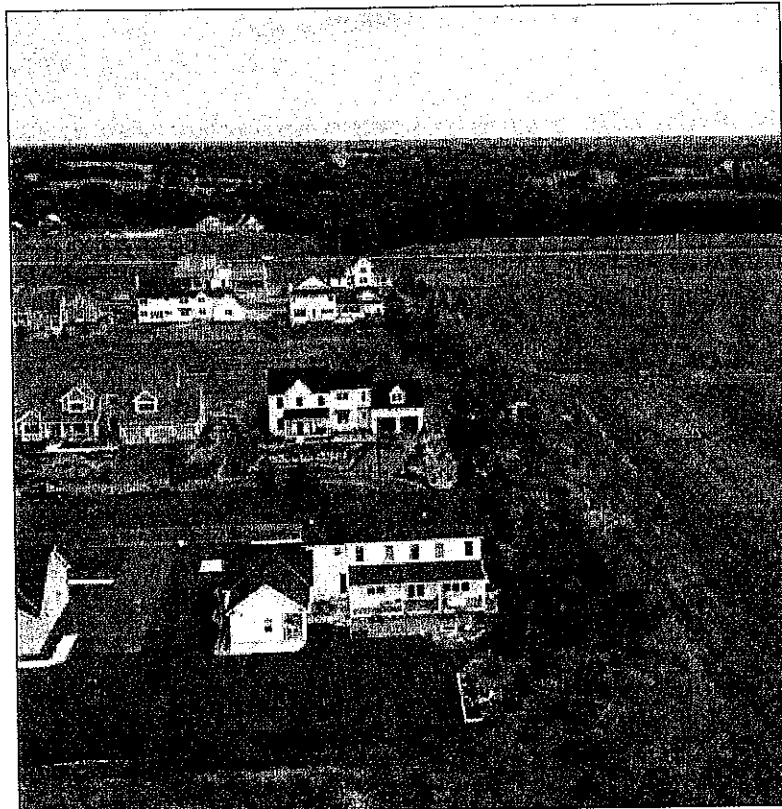
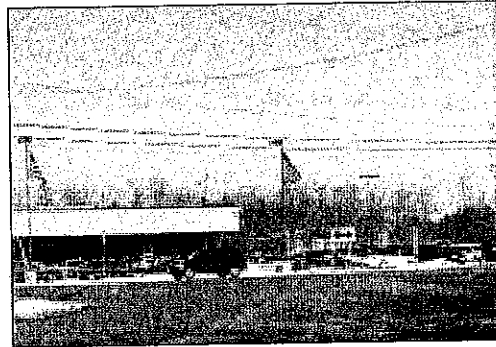
The Village Area Master Plan builds on these existing strengths – including the compact assemblage of streets and blocks, a distinct edge with greenbelt buffer, an historic main street and good access to parks and open space – providing the foundation for recommended improvements. These qualities also extend into proposed new neighborhoods surrounding the Village core. Shared or separate green corridors for cars, pedestrians and bicycles connect home to workplace, shopping, entertainment, recreation and other amenities.

Detailed design and construction of the Master Plan won’t happen overnight. True ‘city-building’ takes time, perhaps decades to implement . . . in many ways the process never ends. While it’s true that some things remain constant (as they should), other components within the Village will undergo periodic upgrade, expansion or redefinition. This too is part of a healthy approach that insures long-term vitality, economic stability and improved quality of life for Village residents.

This chapter provides a general description of the ‘city-building layers,’ along with additional issues and informants that helped shape the Plan. Chapter 3 gives a brief written and graphic explanation of plan components and proposed signature projects within the Village Area.

Building the Layers

The Village Area Master Plan is based on detailed understanding and evaluation of several systems (or layers) that together define the physical form and aesthetic quality of our cities. The inseparable interaction between these layers suggests that every component should work in concert, not in isolation. Although the Master Plan is underpinned by a technical understanding of water, movement, utilities, green space, land use and other elements . . . there is also an artistic side to this Plan that lies in less easily-measured ideals and outcomes. For example, the beauty of parks framed by interesting architecture, street alignments that promote views to civic buildings such as city hall, and the mix of uses and activities woven together in overlapping districts and neighborhoods also make an important contribution to the whole.



Existing Conditions

This first layer provides the setting and context for all the other layers. The Village Area boundary contains approximately 1000 acres, including existing 'Old Village' residential neighborhoods, local and regional parks, a modest mix of commercial uses, a working farm and a significant area of open land either actively farmed or unused. Other major components include:

A State Highway 5 (Stillwater Boulevard), is the primary east-west travel route through the village. There are no signalized intersections or stop signs on Highway 5 in the Old Village, crossing during rush hours can be extremely difficult.

B County Road 17, Lake Elmo Avenue, runs north-south through the heart of the Old Village (it is the historic Main Street). The road jogs to the east at Highway 5, which is both confusing and – during rush hours – hard to negotiate.

C County Road 15, Manning Trail, runs north-south on the east side of the Old Village. This is a preferred route for many commuters connecting with I-94.

D A number of lakes and parks are located within or adjacent to the Village Area. Lake Elmo Regional Park, Sunfish Lake, Reid Park and Lyons Park are beautiful amenities for community residents and other visitors.

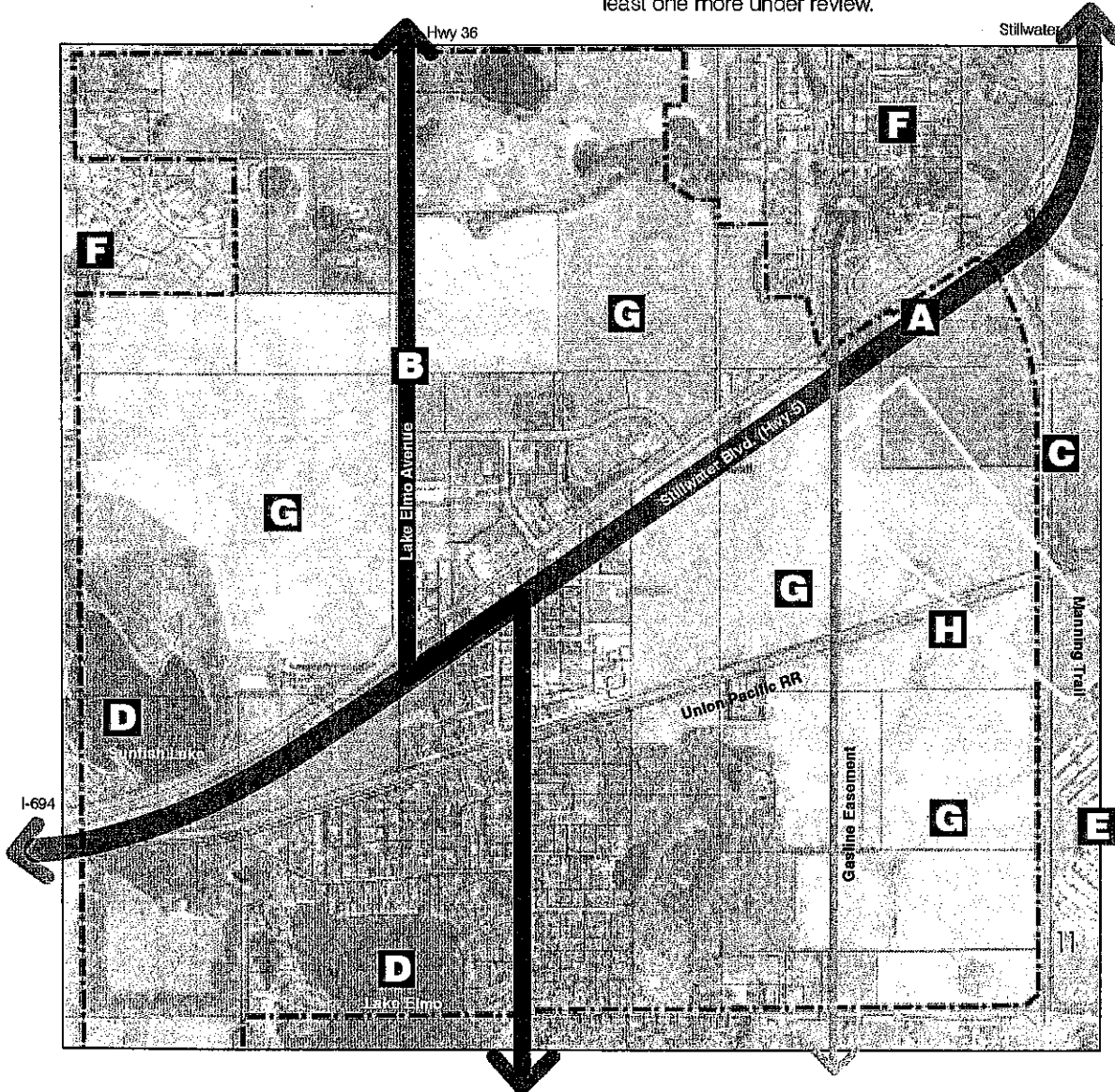
E The Lake Elmo airport is immediately east of the Village along Manning Trail. It is primarily a recreational facility with flight paths over properties on the east side of town. Safety concerns, specifically

related to location and design of stormwater management facilities need to be considered.

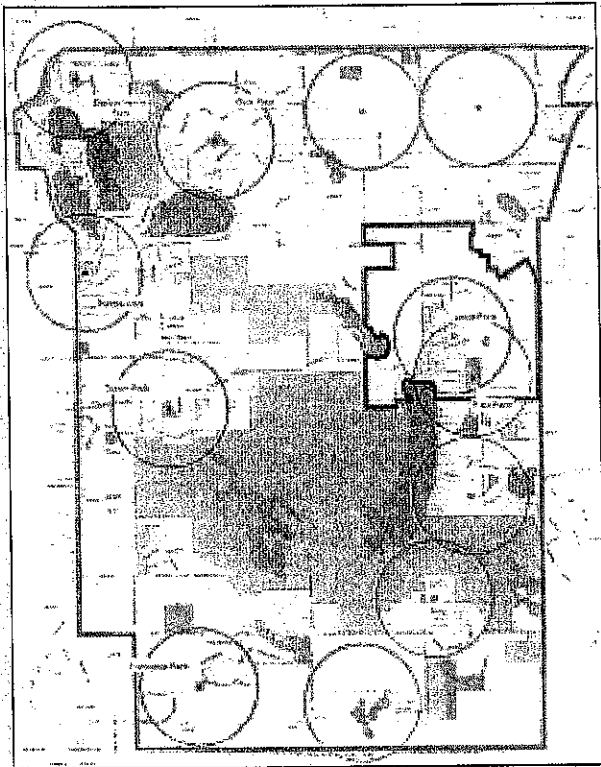
F New residential developments have sprung up immediately adjacent to the Village Area. Greenbelt buffers and proposed trail systems will connect these neighborhoods with planned Village amenities and destinations.

G Large parcels of farmland are currently owned by several major property owners.

H The Union Pacific Railroad may have potential as a future commuter rail line. There are several existing street crossings with plans for at least one more under review.



City Parks and Trails Planning - A Significant Work in Progress



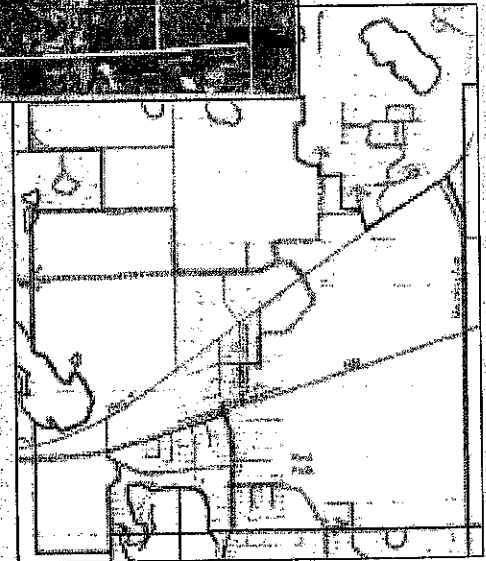
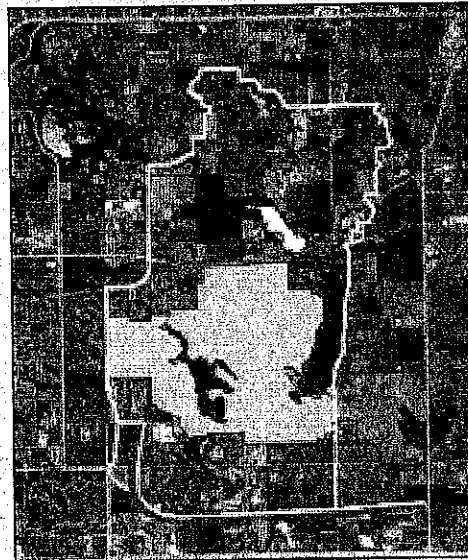
Proposed Parks and Service Areas Map (TKDA, August 2005)

"Recreational needs and desires are constantly changing. New interests create a demand for attention, and sometimes require new facilities that will satisfy the needs of the community. The challenge of this Park Plan and future amendments is to provide a system which satisfies a broad range of both passive and active recreation needs for all age participants."

The Village Area Master Plan forwards a similar view related to the significance of city parks and trails. The Master Plan seeks to include not only proposed facilities as part of the expanding system, but also to integrate Comprehensive Plan goals, Park and Recreation standards and policies as a shared approach that will link local and regional park and trail initiatives.

This description is taken from the Lake Elmo Park Plan where it states - "Park and recreation planning needs to be integrated with City planning. Park planning will enhance the quality of life in our Community, will help to protect the City's natural environment and will serve to meet the recreation needs of Lake Elmo citizens.

"The Lake Elmo Park Plan is intended to provide a guide towards all future aspects of a parks and recreation program including: park acquisition, development, maintenance and operation. The Plan also includes an inventory of the existing parkland system and facilities, and concludes with a guide for future facilities and parkland acquisition needs.



Proposed Trail System Plan

Green and Blue System

Public Space as the Framework for Village Form

From the outset, City leaders, the Village Area Planning Team, property owners and other stakeholders agreed that parks, trails and open space should be a primary determinant for the final layout and design of the Master Plan. Lake Elmo is already blessed with an array of recreational opportunities, including Lake Elmo Regional Park, Sunfish Lake Park and a system of trails. The Master Plan builds on these assets with proposed new City and Neighborhood parks, a greenbelt buffer around the Village and additional trails that link it together. Water will be directed, treated, 'harvested' or stored on site using a variety of innovative approaches that promote infiltration, cleansing and potential reuse before it moves off-site. The result is a plan that considers the integration of hydrology, stormwater management, public green space and habitat as the primary template for urban form.

Streets and Blocks Pattern

Connections, Porosity and Choice

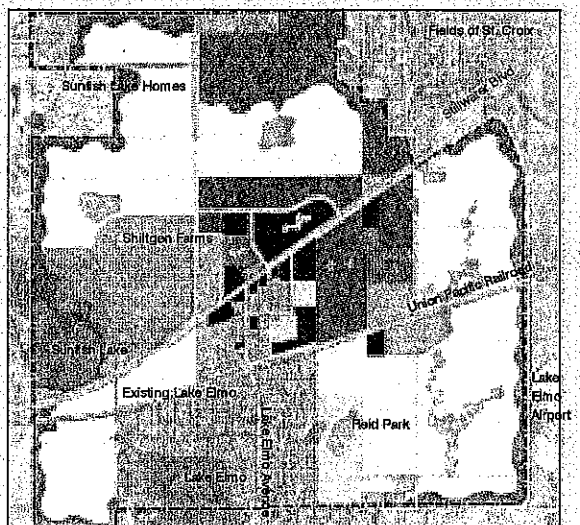
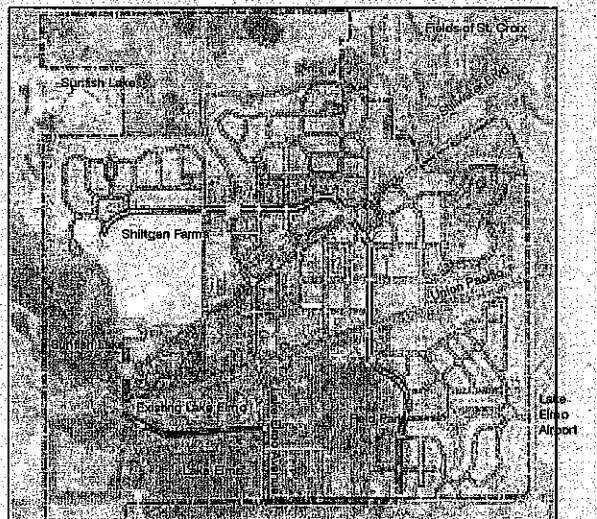
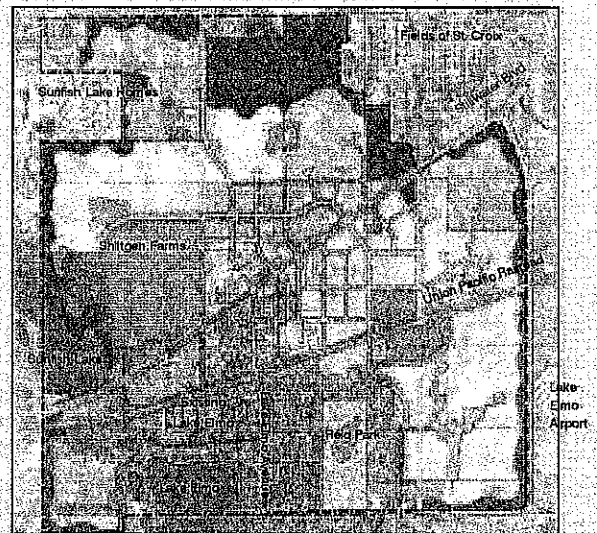
Urbanist Jane Jacobs defined the street as the 'heart of the community'. The Master Plan embraces this idea, encouraging pedestrian and bicycle use, while accommodating the car in a 'calmed' environment. Design of the streets and blocks system suggests a hierarchy of major and minor streets that create recognizable access and circulation patterns linking destinations and amenities with the Village while connecting to the broader community. The Master Plan recommends extending the existing compact fabric of Village streets and blocks outward to proposed new neighborhoods promoting a freedom of movement that easily accommodates internal trips, yet supports traffic generators like the Community Campus and Main Street.

Land Use Mix

Local Convenience, Variety and Village Scale

The mix and location of various uses also supports the way people go about their daily activities. Residential neighborhoods are located close to both convenience shopping (grocery, bank, hardware) and the various signature amenities (parks, restaurants, Community Campus) that make the Village Area unique and memorable. Mixing uses within neighborhoods, blocks and individual buildings not only adds variety and interest, but also responds to the growing demand for housing choices, life without the automobile and a desire to be close to daily needs and activity centers. Residential neighborhoods will include mix of housing, with more compact development patterns in the Village core.

Note: Additional layers that inform planning decisions - infrastructure, street design, policy and funding/financing implications - will be described in more detail in subsequent chapters of the Master Plan.



Recommended Housing Types

Providing 'life-cycle' housing is one of the primary objectives, and Guiding Principles, for the Village Area Master Plan. Life-cycle housing, for the purposes of this document, is defined as the mix of housing types, styles, locations and prices that will offer both opportunity and choice for a range of potential buyers and renters. This includes market-rate and affordable, singles and families, first home and 'move up,' senior and special needs, traditional and low maintenance, small studio and luxury condo – with emphasis on character, quality, scale and fit. The housing market is changing, showing a strong preference for smaller lot size over the large mansion, estate style development seen in recent years. The following list describes the general type and location of various housing categories. Please note . . . specific definition of style, character, materials and other architectural elements will be addressed in the Development Guidelines. Recommended housing types include:

Large Lot Single Family (LSF)

Lot Dimension: 100 – 110' width

Typical Density (net): 1.5 units per acre

General Description: although the biggest of the single family categories, 'large lot' is still recommended to be less than an acre in size – preferably 1/2 to 2/3 acres for the typical lot. Generally this lot size would be part of the housing mix for the properties furthest away from the Village Center and Main Street.

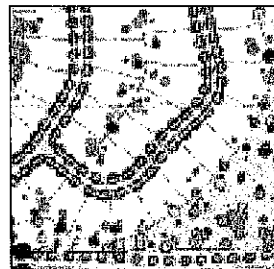


Medium Lot Single Family (MSF)

Lot Dimension: 75 – 85' width

Typical Density (net): 2.5 units per acre

General Description: lot sizes begin to get smaller as you get closer to the Village Center. Yet, with ample opportunity to incorporate greenspace and neighborhood amenities, the 'medium lot' still provides breathing room and a sense that you're not right on top of your neighbor.

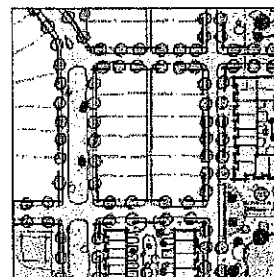


Small Lot Single Family (SSF)

Lot Dimension: 55 – 65' width

Typical Density (net): 4 units per acre

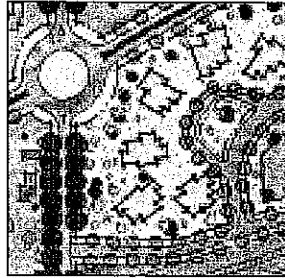
General Description: similar to lots in the existing 'Old Village' neighborhoods, the 'small lot' is typical of traditional street grid settlement patterns, especially in or near the Village Center. Compact and predictable blocks with a consistent rhythm of front yards and front porches define the distinctive character of many small towns.



Twin Home (TW)

Typical Density (net): 5 units per acre

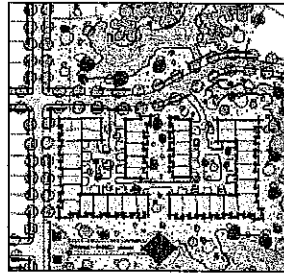
General Description: typically located adjacent to neighborhood parks or other amenities, the 'twin home' offers slightly more density, yet is similar in scale, character and appearance to traditional detached single family homes. There are a variety of options and configurations for twin home/cluster style development often including common greenspace, consistent building style and color to create distinct, but connected neighborhoods.



Townhouse (TH)

Typical Density (net): 8 units per acre

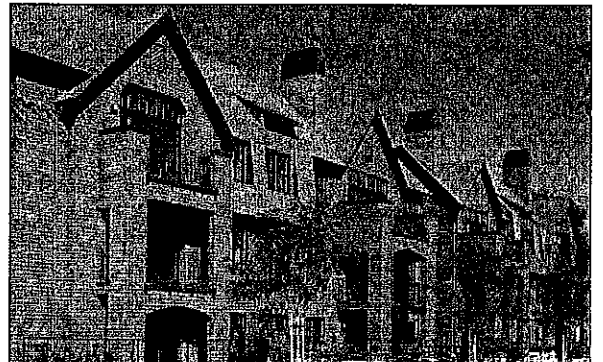
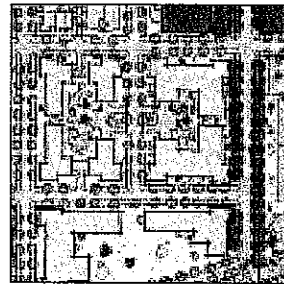
General Description: there is increasing variety within or adjacent to the Village Center. Townhouse (or rowhouse), still a very traditional model in many parts of the country, offers more affordable, often lower maintenance housing choices close to village destinations and attractions. Again, unit style and size may vary, but consistency in materials, scale and character will assure fit with other village elements.



Apartment / Condominium (A/O)

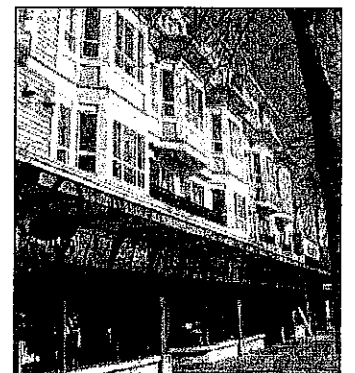
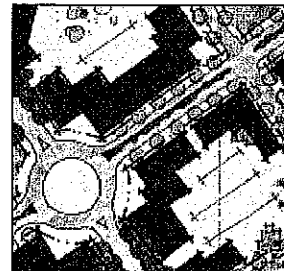
Typical Density (net): varies

General Description: the highest density options for the Village Area include rental apartments and for-sale condominiums. This housing type can meet growing housing demands from increasingly diverse populations including seniors, special needs, work force, immigrants and other potential village residents.



Housing Above Retail (HAR)

General Description: as the Route 5 Main Street project becomes a reality, the Master Plan (and the housing market) suggests that there is opportunity to locate some rental apartment units above store-front retail in this district. Also, in recent years design and construction of ancillary housing, including carriage house and 'granny flat', have gained popularity and should be considered here as well.



Definition of a Development Unit

Overview

For the purposes of this Master Plan, the term 'development unit' does not mean 'one front door' in the traditional sense. Instead, a 'development unit' represents the opportunity to build some type of housing on a piece of property within the Village Area. This also suggests that all recommended housing types are not equal when considering their comparative economic value and the expressed desire to provide the variety of housing choices described in the plan.

The intent is to discourage development of just one type of housing, particularly large lot 3-story walkouts, and encourage housing types that more closely match existing size and scale of lots and houses within the Village Area. The challenge is to define an equitable 'multiplier' that can be used to calculate an acceptable number of 'development units per acre' that still meet the Metropolitan Council growth requirements, the vision described in this Master Plan and stated objectives to maintain the rural character of the Village.

A simplified example:

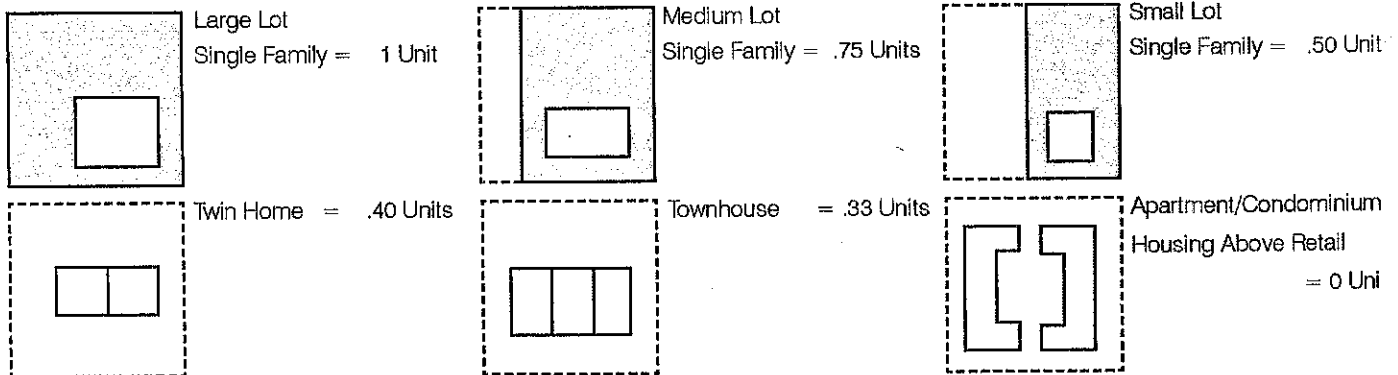
If we were to use '1 development unit per acre' and we had 600 acres of ground available for new housing (net acres – less roads, parks etc.), then we would have 600 'development units' available. If we applied some of the various unit values shown below to this example we might end up with a scenario that looked like this . . . 200 of the 600 development units might be large lot single family (worth 1 unit each = 200 front doors); 100 of the 600 development units might be medium lot single family (worth .75 units each = 134 front doors); 100 of the 600 development units might be small lot single family (worth .5 units each = 200 front doors); 100 of the 600 development units might be twin homes (worth .4 units each = 250 front doors); 100 of the 600 development units might be townhouses (worth .33 units each = 303 front doors). This example adds up to 1087 front doors . . . this does not include apartment/condominium housing in the mix.

Of course there are many variations in play here, but the basic math illustrated in this example provides the foundation for further detailed discussion and study related to unit value, unit count and unit distribution.

We Need A Formula

The 'formula' ultimately used to determine the number and distribution of housing units within the Village Area must also address the following:

- The same rules will apply to all property owners within the Village – both large and small alike – no preference given to anyone for any reason.
- Transfer of Development Rights (TDR) or similar approaches may be considered for property owners not interested in future development of their properties.
- Additional unit incentives may be available to encourage land owners to upgrade, or expand public amenities, provide locations for public infrastructure and civic/community uses, build a variety of housing types and include 'quality enhancements' above the normal requirements defined in City planning, zoning, subdivision and other codes and regulations.



Balance These Things...

The primary rationale behind exploring options for unit count and unit distribution within the Village Area does not focus on just one single issue – i.e. limit the number of units. Instead, the Master Plan seeks balance and thoughtful consideration of many integrated, innovative and responsive ideas and objectives that together provide solid information on which to base decisions and direction for the future of this small town, including:

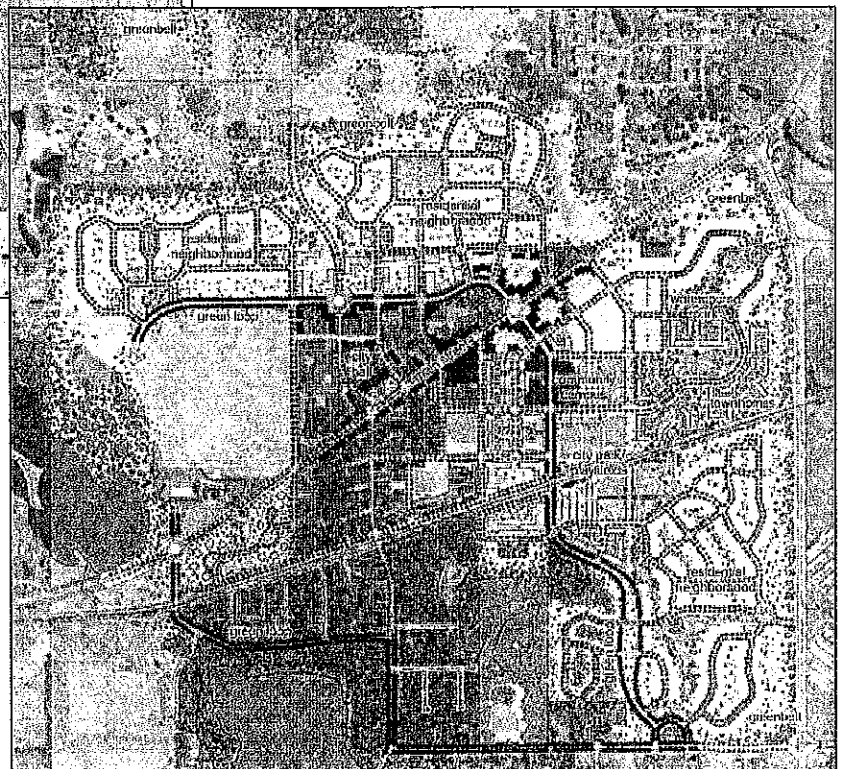
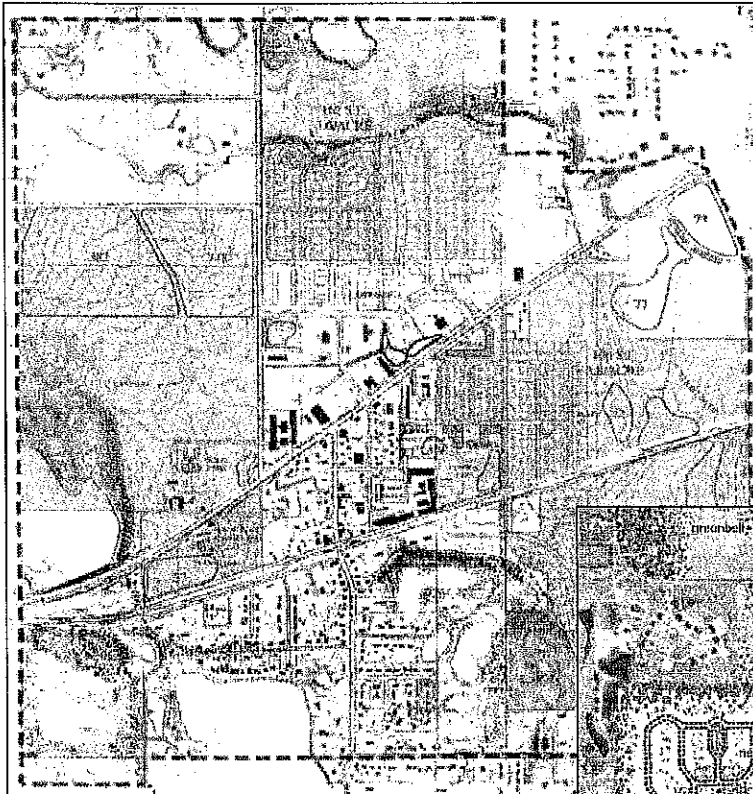
Vision ... define what you want and how to ensure success; quality, character, components, goals and guiding principles.

Response to the "growth mandate" ... responsibility and capacity; determine how much is enough, what types, where, when.

This is the center of your city ... destination for whom; protected or connected; 'Little House on the Prairie' and what defines community.

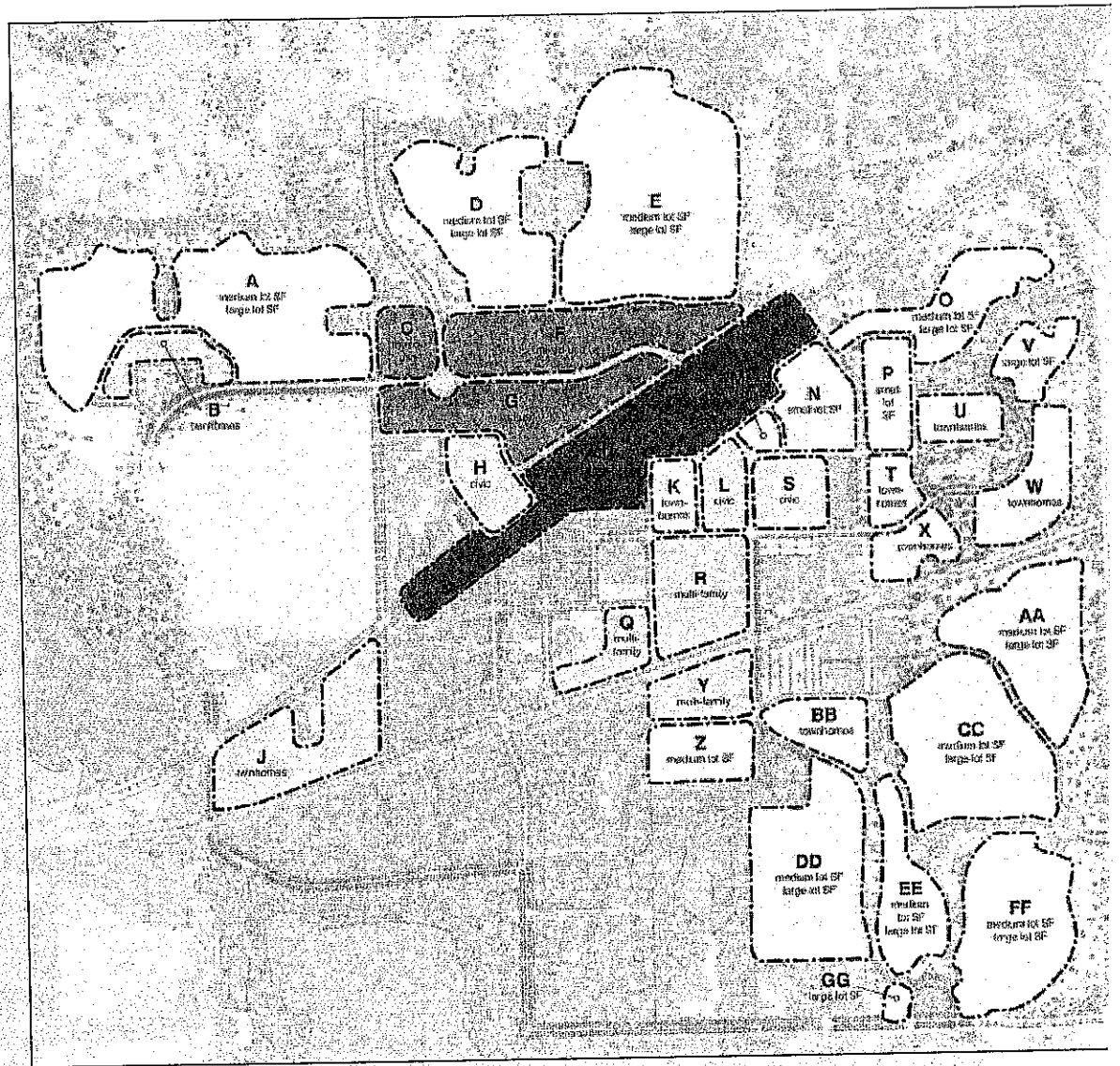
It needs to be economically sustainable ... paying for basic services, amenities and desired improvements; responsible to future generations.

Create an environment that attracts quality ... active commercial district, mix of high quality housing, good place to do business



Parcel Plan

Based on the Illustrative Master Plan, the Parcel Plan shown below offers two levels of additional information; First, it shows the relationship between proposed development area and preserved or enhanced greenspace (including new and existing parks, trails and greenbelt buffer) And second, it describes the recommended land use and/or housing type for each area (or parcel) within the Plan. It is important to note that the Parcel Plan can be considered the precursor to the future Village Area Zoning Map. Parcels on this plan depict relative size, approximate location and general land use category – all important information to be included in more detailed mapping, revised City code and regulations, development guidelines and other planning tools needed to further define and monitor Master Plan implementation.



Unit Tabulation

Parcel	Unit Type	Range
A	Large SF & Medium SF	90-100
B	Twinhome	15-20
C	-	-
D	Large SF & Medium SF	50-65
E	Large SF & Medium SF	100-130
F	Apt/Condo	(80)
G	Apt/Condo	(80)
H	-	-
I	Housing over Retail	25-40
J	Twinhome	30-40
K	Townhouse	42-56
L	-	-
M	Townhouse	18-24
N	Small SF	45-60
O	Medium SF & Large SF	30-48
P	Small SF	32-40
Q	Apt/Condo	(80)
R	Apt/Condo	(120)
S	-	-
T	Townhouse	30-40
U	Townhouse	30-40
V	Large SF	10-15
W	Townhouse	72-94
X	Townhouse	36-48
Y	Apt/Condo	(80)
Z	Medium SF	12-15
AA	Medium SF & Large SF	30-60
BB	Townhouse	30-40
CC	Medium SF & Large SF	45-90
DD	Medium SF & Large SF	27-54
EE	Medium SF & Large SF	12-24
FF	Medium SF & Large SF	27-54
Total (given as a range)		800-1200
		+ 360

The unit tabulation chart is intended to show a general range for expected unit count represented by the Village Area Master Plan and on the Parcel Plan from the previous page. It does not specifically define the exact number of units per development parcel, nor does it seek to define the specific type or mix of units for each parcel.

A detailed unit count/distribution plan will be prepared as part of ongoing discussion that includes project infrastructure costs, financing options, schedule and other factors that ultimately will determine final recommendations. Again, it is important to note that from the outset, the Village Area Planning Process did not begin with a preconceived notion related to overall unit count, except to meet the terms of the Metropolitan Council agreement and to provide a comprehensive look at viable options.

The Guiding Principles and the basic framework of the Master Plan have a strong influence on the type and location of housing. And, it is increasingly evident that the Village Area can accommodate reasonable growth and development without losing its rural character. Ultimately the strength of the Master Plan relies on a built-in flexibility to accept a number of different future scenarios as possibilities – all leading to similar outcomes that emphasize place-making, health and livability, fiscal responsibility and permanence.

Note:

This chart lists potential Apartment/Condominium housing (indicated in parenthesis), but does not include these units in the total. Additional study, including the AUAR, will provide a better understanding of site capacity and market demand for this unit type.

Chapter 3

Master Plan Components



Lake Elmo Village Area Master Plan

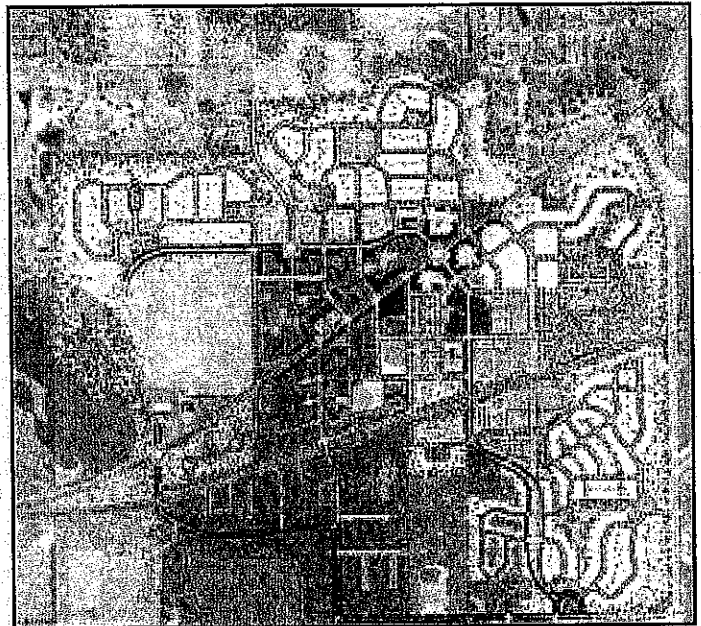
Introduction

The Village Area Master Plan forwards an overall vision that thoughtfully places new development within a green framework of parks, trails and open space. Balancing growth with the preservation of rural small town living will rely on creative design and careful implementation of various components of the Plan.

This chapter highlights several specific projects that truly define the character and unique qualities of Lake Elmo. These projects fall into three general categories including:

- Town Destinations
- Great Public Realm
- Civic and Community Buildings

Description of infrastructure projects including utilities, stormwater management and street design, is provided in Chapter 5.



Town Destinations

Mixed use Main Street invites daily activity and promotes special events round-the-clock and throughout the year.

Great Public Realm

Public realm is defined as the combination of parks and trail corridors, together with great streets that provide inviting, memorable places for active recreation or just strolling through the neighborhood.

Civic and Community Buildings

City Hall, Civic Square Park and the Community Campus expand available programs, activities and civic presence . . . reaching a wide audience of residents, young and old, from all walks of life.

Route 5 Main Street Stillwater Boulevard

Overview

State Highway 5 is the primary east-west travel route through the Village. Because of existing high speed limits and traffic volumes, it is often a barrier (or at least a significant inconvenience) to pedestrian and vehicular movement. Its current design, sometimes called a 'rural section', includes ditches, culverts and wide setbacks for buildings along the right of way.

The City has expressed interest, and has begun conversations, to consider having the roadway 'turned back' from State to Washington County ownership. The main objective for this move is to provide maximum design flexibility, perhaps including reduced speed limits, lane narrowing and other features that would encourage future Main Street that emphasizes pedestrian character, traffic calming and mix of uses described in the Master Plan.

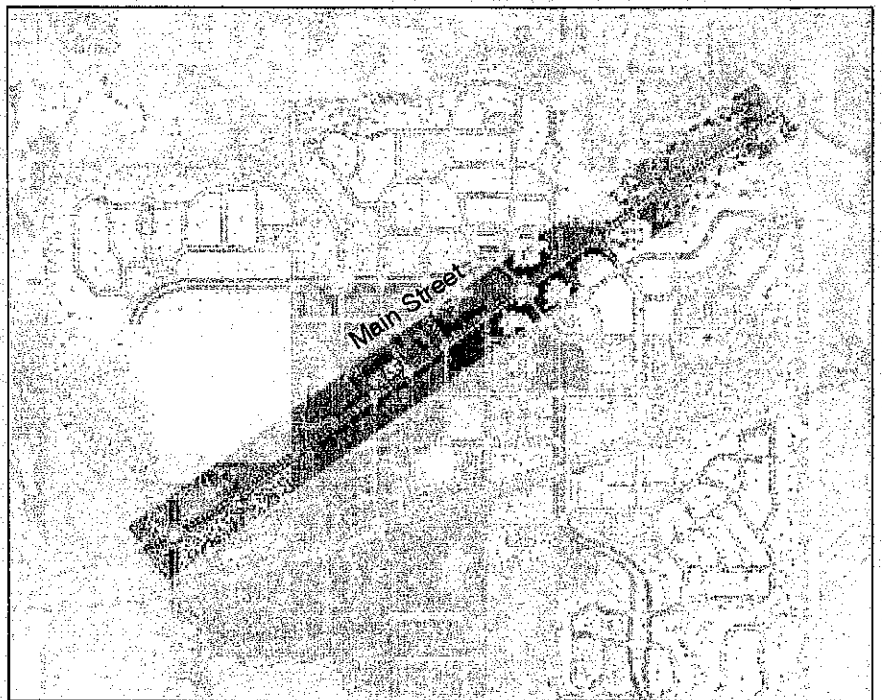
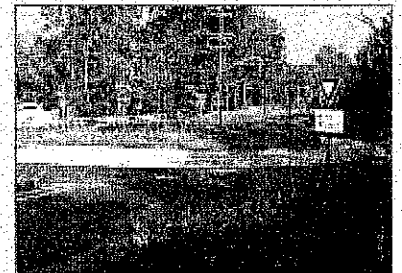
Recommendations

Roundabouts at the east and west ends of Stillwater Boulevard will slow traffic and mark the edges of "downtown". The redesigned road segment in between will transition from the existing rural section to a traditional Main Street design that includes:

- Curb and gutter with associated storm sewer
- Wider sidewalks with pedestrian scale amenities (benches, lights, street trees)
- Narrower lanes perhaps with planted medians and center turn lanes
- Curb-side parking if feasible, with additional parking located between or behind Main Street buildings

Signalized intersections, one at Lake Elmo Avenue and one at 39th Street, will provide safe crossings, slow traffic and pull the Village together as one piece – not two halves.

Stillwater Boulevard and Lake Elmo Avenue will continue to be the primary commercial streets in the Village, promoting existing businesses, while encouraging new and expanded opportunities for local goods and services. Buildings will be located at (or near) the right of way, with generous walkways for pedestrian movement and 'spill-out' activities, such as sidewalk café, coffee shop or other uses.

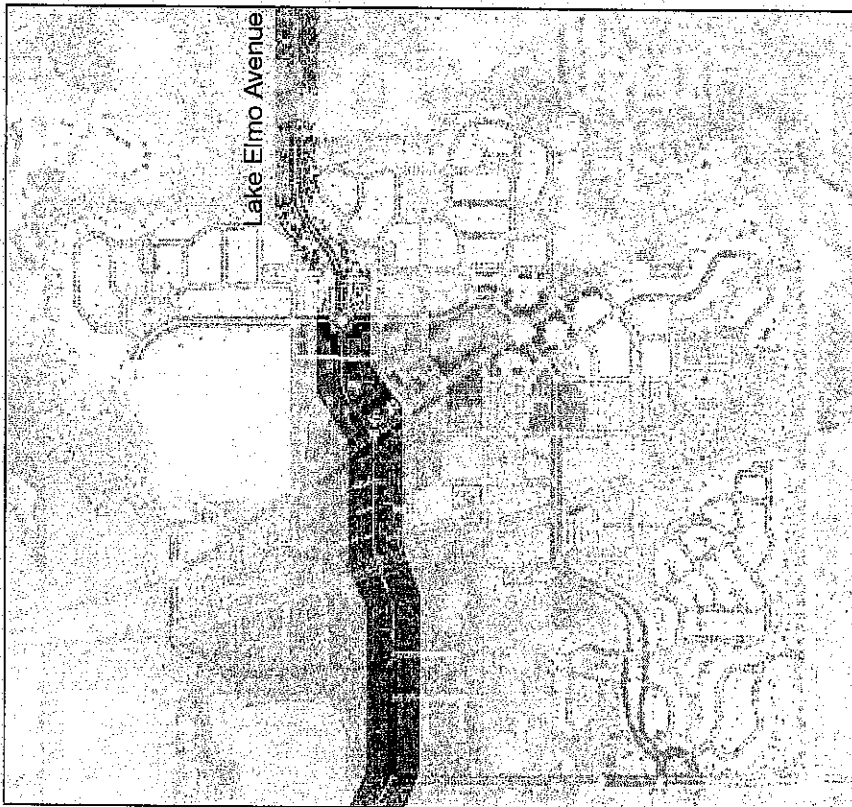


Lake Elmo Avenue Extension and Old Main Street

Overview

Lake Elmo Avenue, specifically south of Highway 5, is the recognized existing Old Village Main Street. The 'T' intersection terminus and jog along State Highway 5 to connect with Lake Elmo Avenue to the north is inconvenient, unsafe and perhaps as important, disconnects this important crossroads as a future town gathering center.

The existing car dealership, while a successful business and good neighbor, is unfortunately sited in line with a potential extension of the Avenue. Various past studies and the Village Area Master Plan agree that this realignment would be an asset both in terms of place-making and also access and circulation.



Recommendations

By extending this "T" intersection north (and slightly west) in a meander that rejoins its current alignment north of the downtown core, a much stronger north-south corridor is created. The new intersection, especially if it is signalized, reduces the dominance and divisive quality of Highway 5. The four corners created by the new intersection become a prime location for a mix of uses and activities – with the opportunity to create a defined 'heart of the village' destination.

Community Campus

Overview

Based on a year-long study that evaluated several potential sites in the St. Croix Valley, Lake Elmo was selected as the preferred location for a multi-purpose community services facility. In parallel with this selection process, the Master Plan also envisioned a 'Community Campus' in the heart of the Village Area. The preliminary concept for this campus includes a Family Services Center, Wellness Center, Arts Center and Library. The primary objective of the Campus (taken from 'Integrated Program Plan') is "to meet the educational, recreational and wellness needs of families and individuals in the greater (St. Croix Valley area), serving the whole child, whole family and whole community."

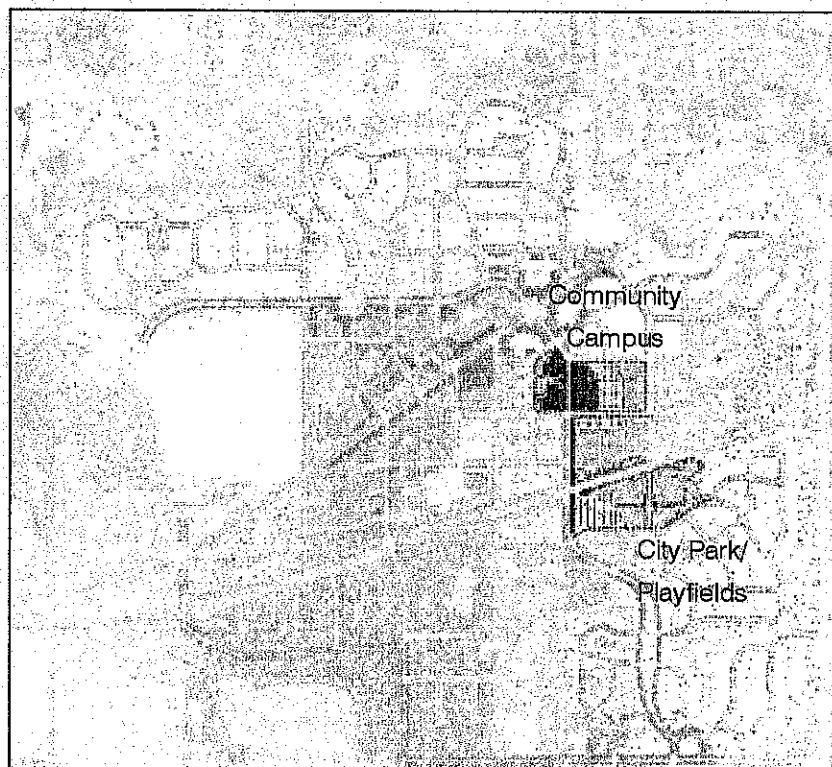
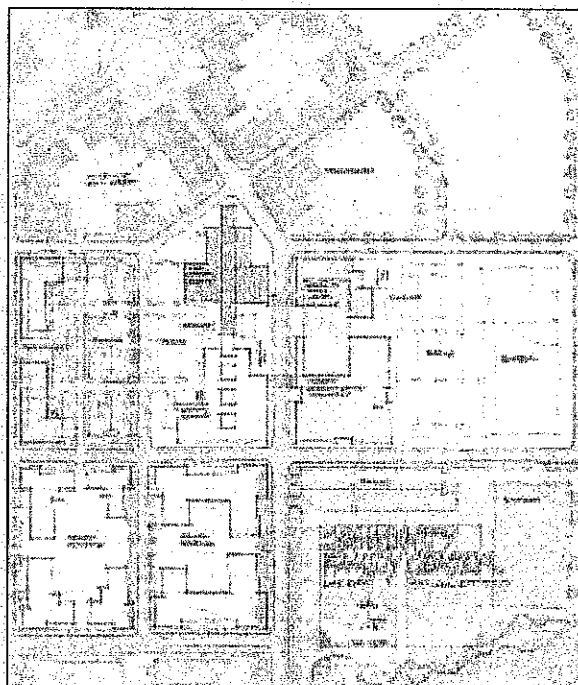
This campus could include a variety of buildings that contain classrooms, meeting rooms, indoor fitness areas, senior and small children spaces and other facilities for programs, services, activities, special events and other needs. Outdoor recreation and motor activity are also essential elements of day-to-day routine; some on-site playground and playfield space will be provided, with additional or expanded programs accommodated on adjacent city park and trail amenities.

Recommendations

Continue to meet with and support the Integrated Planning Team to work through specific details, design components and implementation steps to make this project a reality.

The Community Campus will have a significant positive influence on properties immediately adjacent to the proposed site, and serve as a major anchor in the heart of the Village. The Master Plan should respond to various development possibilities including nearby senior and special needs housing, links to city and regional green space and a strong connection with the future Route 5 Main Street.

As with many of the major projects in the Village, this will require significant energy and commitment from both public and private partners. Lake Elmo should continue to facilitate, and in some cases lead the process to insure continuity and success.

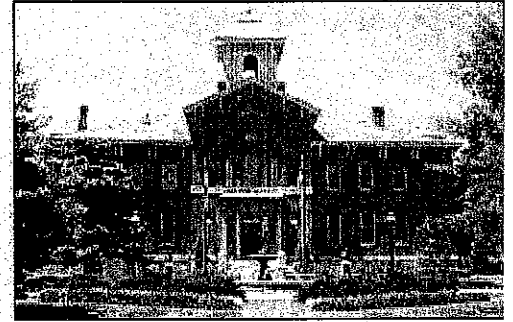
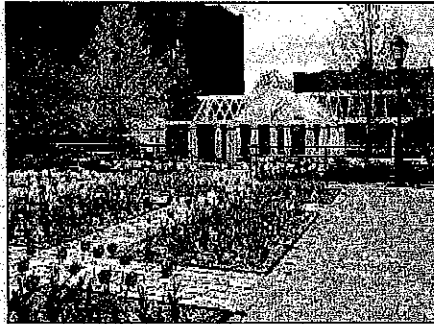


New City Hall

Overview

The City of Lake Elmo has been exploring building design and alternative site options for a new city hall for a number of years. Directly related to the Lake Elmo Avenue extension project, the property at the crossroads with State Highway 5 is the preferred location. While various other sites continue to be evaluated, this site offers the visibility and the traditional small town signature of City Hall on Main Street, placing municipal services at the core of the community.

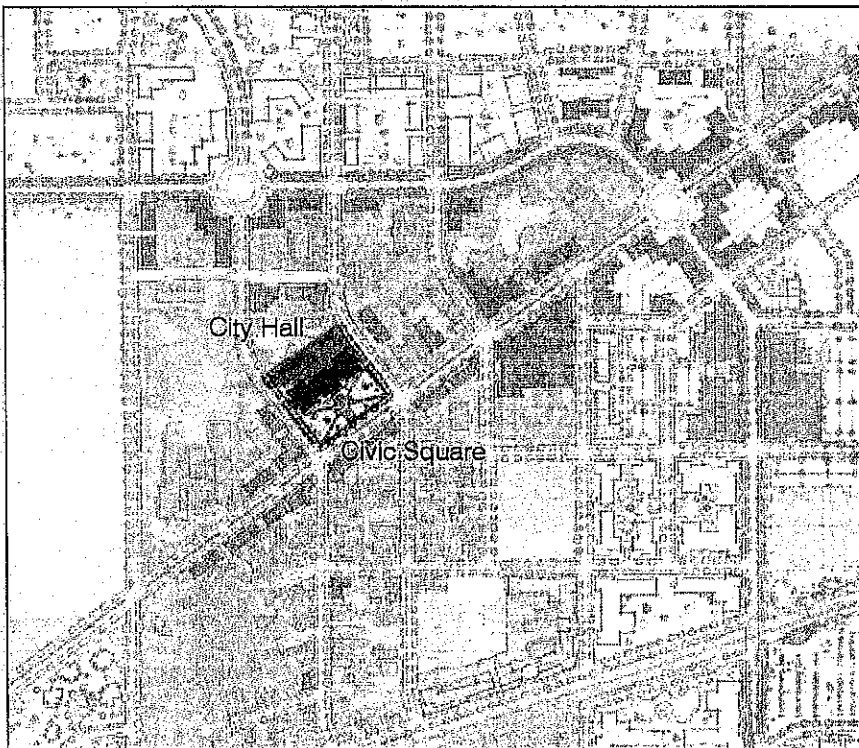
The challenges of this project are somewhat obvious and multi-layered – existing, viable business, relocation or adaptive reuse of existing building, realignment of the street just to name a few. It won't happen overnight . . . yet thoughtful response to each issue, creative planning and design, and of course attention to schedule and budget realities may yield the desired outcome.



Recommendations

Relocation of the car dealership and realignment of Lake Elmo Avenue would pave the way for a new City Hall and Civic Square Park at this important crossroads. The combination of this civic building and a mix of retail, restaurants and housing will make this a primary gateway and destination for village residents and visitors.

Other components of this project include the creation of a village commons in front of City Hall – the Civic Square Park. The scale of the building and associated green space should be similar in scale and charm to other small town squares in older American communities. Containing the edges of these major streets with buildings and green space rather than parking lots is an important consideration to create the desired Main Street character.



City Parks, Trails and Greenbelt Buffer



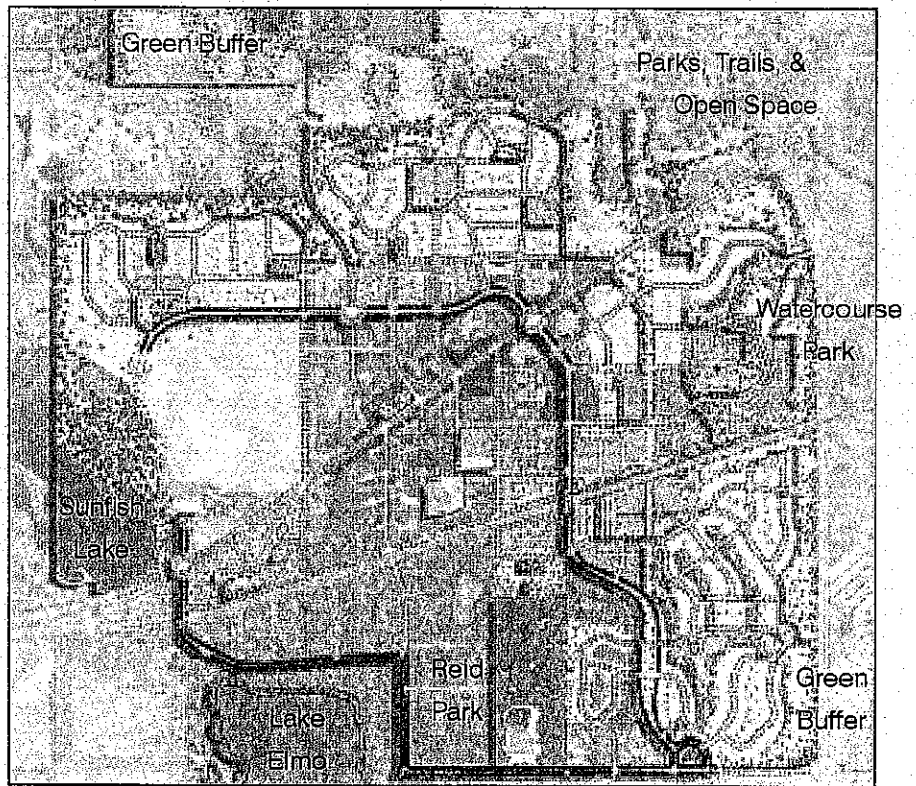
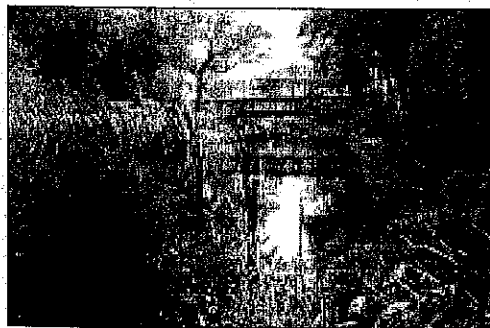
Overview

Much has already been written about the importance of a high quality, connected system of parks, trails and open space. There is no doubt that public spaces make a huge contribution to quality of life, wellness and the pattern of daily routine. In addition, the integration of water, both aesthetic and related to stormwater management, within parks and along trail corridors will provide some of the most inviting and memorable amenities in the Village.

The proposed greenbelt buffer has been a primary objective and key design component of the Master Plan from the outset. Specific details related to design, character, habitat, maintenance, schedule and cost of this unique element will continue to be addressed as plan implementation proceeds.

Recommendations

Work with a variety of public and private partners to coordinate the design and construction of individual elements of the parks plan. Again, this will take time for the entire system to be built, with valuable contributions from city departments, property owners, builder/developers, state and federal agencies and other resources needed to make it happen.



Existing Homes and Businesses

Overview

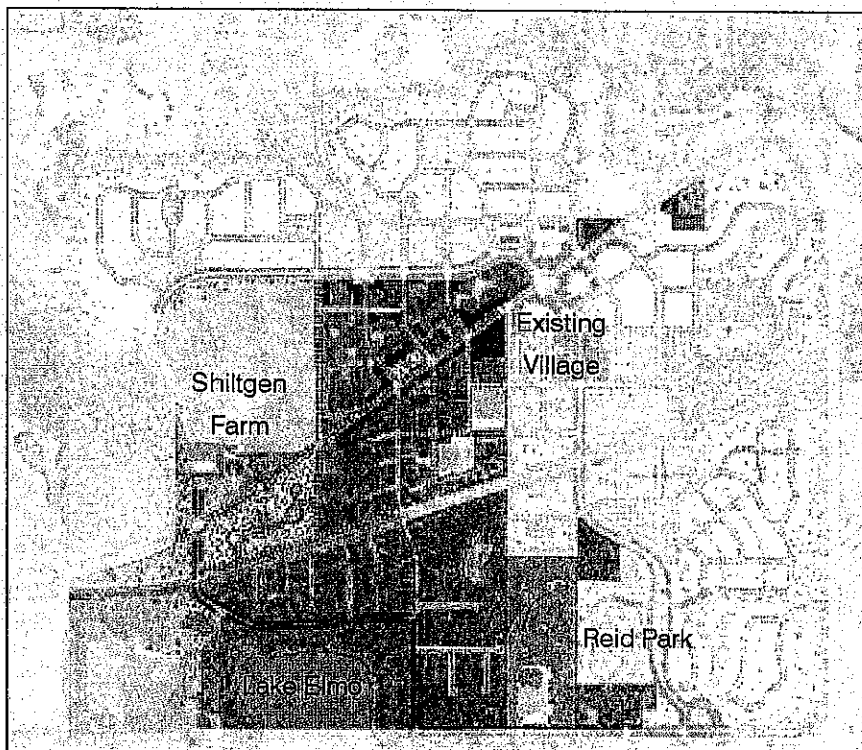
To fully understand the significance of this component of the Master Plan, we need to re-emphasize the primary directives provided by Mayor and City Council at the outset of this planning effort. They include:

Preserve the Old Village rural character and . . .

Maintain the Old Village as the perceived and functional center of the City.

The Guiding Principles also speak to this point, suggesting an approach to new development that acknowledges existing homes and businesses as crucial community elements that need to stay, to thrive, and in many ways, to help inform future planning and design decisions.

Sometimes referred to as the "New-Old Village Master Plan", it is clear that the overall intent of this document is to provide reasonable strategies and recommendations that accommodate growth, yet respect the 450 plus residents and the many businesses that have been in the Village Area for years. The Master Plan seeks to support, not displace; integrate, not overwhelm; encourage, not disengage; balance ideas, not be single-issue driven . . . all within a framework that promotes sustainable, small-town living.



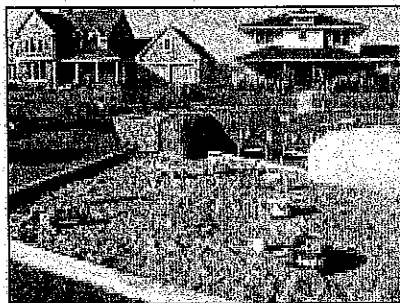
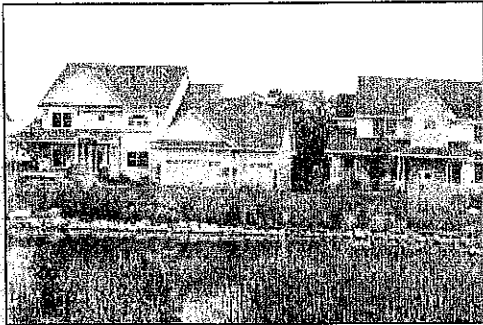
Recommendations

Ongoing communication and providing enough 'teeth' in various planning tools are two essential ingredients to help insure success as plan implementation moves forward.

Communication, in terms of meetings, issues identification and citizen input provides an ongoing forum for public presentation, debate, resolution and direction for each element of the Master Plan. Existing residents and business owners have had a strong voice in this planning process . . . continued dialogue will bring further refinements to the plan.

Planning tools will include this Master Plan and Comprehensive Plan Amendment, updated Zoning Code and Subdivision Regulations, Development Guidelines and other criteria formally adopted by Mayor and City Council as part of the 'kit of parts' required for anyone interested in

New Residential Neighborhoods



Overview

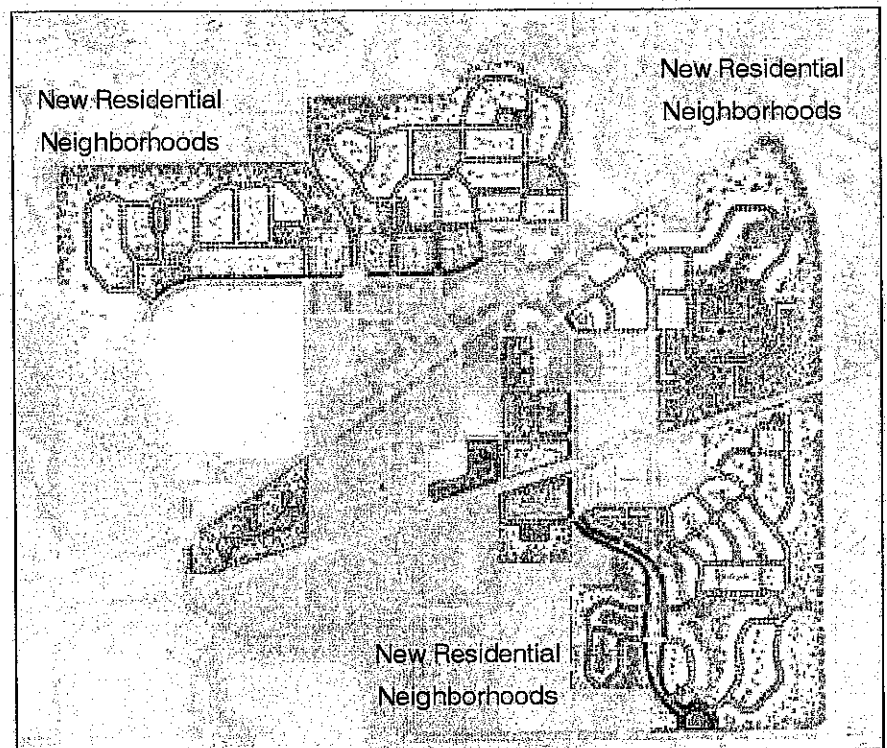
The Village Area contains approximately 1000 acres. A significant portion of this land area includes agricultural (active farming) and currently unused acreage now being considered for development. The Master Plan describes a dense, mixed-use core district along, and adjacent to, the proposed Route 5 Main Street. Properties surrounding this core district have great potential to provide a mix of housing types within new residential neighborhoods with decreasing density and increasing green/open space as you get further from the village center.

Only a five or ten minute walk from Main Street destinations, these neighborhoods will be characterized by new signature public parks, including City Playfield Park and Watercourse Park, and easy walkway/trail connections to civic and community facilities such as City Hall and the Community Campus. The intent to immerse new housing within a network of public park space and the greenbelt buffer drives the vision while providing specific strategies and incentives to make the 'village within a park' idea a reality.

Recommendations

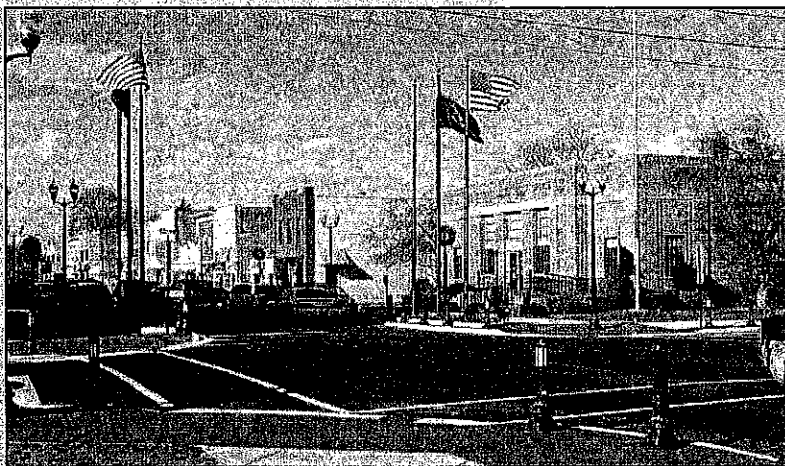
Quality, variety, character, scale and fit should be the benchmarks for new housing development throughout the Village Area. City codes, development guidelines, the plan submittal/review process and other criteria need to clearly define expectations and preferred outcomes for everyone involved in housing design and construction.

Delivering a mix of housing types is also a major component of the Master Plan and a key objective in terms of buyer preference and market flexibility. These new residential neighborhoods must include a variety of single family and multi-family options responding to an increasingly diverse population of buyers and renters.



Chapter 4

Village Character - Case Studies



Lake Elmo Village Area Master Plan

Introduction

The primary purpose of this chapter is to communicate the idea that many cities with populations around five to ten thousand people have successfully retained their rural small town character and overall perception of 'green'. The common themes for each of the following examples include a compact, but easily identified 'downtown' district, at least one signature city park amenity with connections to local and regional green systems, civic/community buildings at primary locations, major highways or collector streets that bisect town and a mix of housing types and styles within neighborhoods located close to the town core.

While the total future population for the City of Lake Elmo is projected to be around 24 to 25,000 people, the following examples do not include cities of that size – the focus here is only on the Village Area. Also, there has been no direct correlation related to land area (total number of acres shown in the examples) compared with the approximately 1000 acres described in the Master Plan.

Assumptions specifically related to the Village Area in Lake Elmo:

Existing Village Area Population	approximately 500 residents
Potential New Housing Units in the Village Area	approximately 1,500 units (assumes the high end of the range)
Number of People per Unit	3 People per Unit (Census data – again at the high end)
Number of New Residents in the Village Area	approximately 4,500 people

Total Number of Residents in the Village Area approximately 5,000 people
(based on the Village Area Master Plan)

City of Lake Elmo

Village Area

Similar Towns of 5000 ± Population

What Can We Learn?

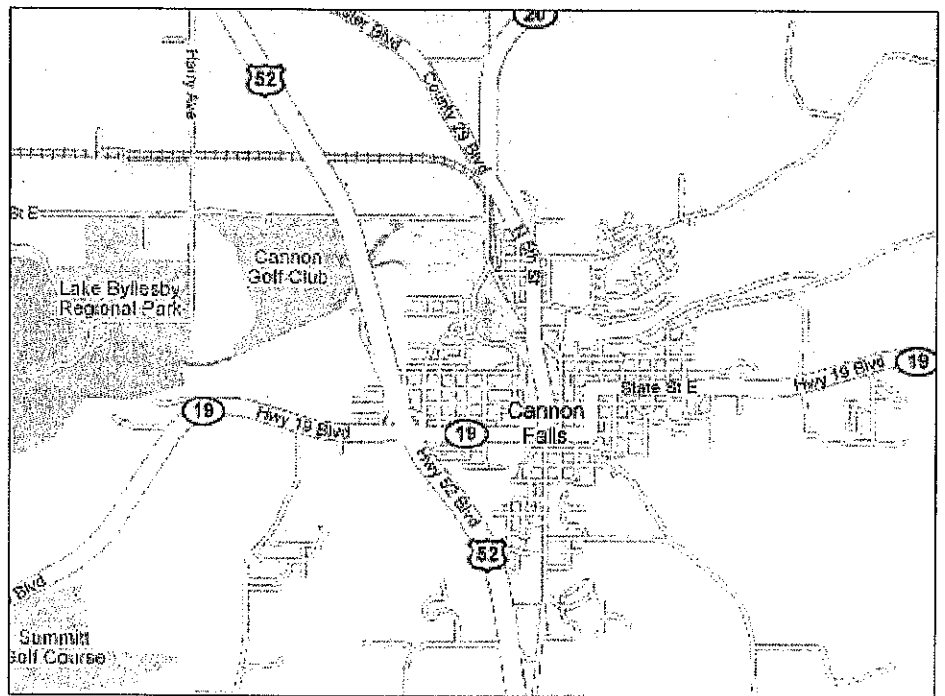
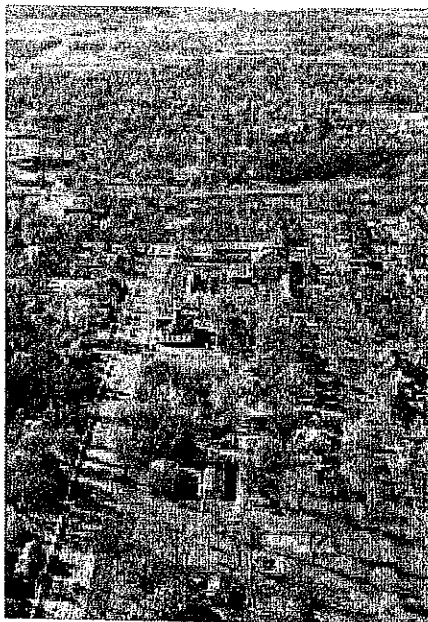
Cannon Falls, MN

population approximately 4000

Cannon Falls is one of the fastest growing communities in Southeastern Minnesota. Strategically located on Highway 52 about 40 minutes from both Rochester to the south and Minneapolis/Saint Paul to the north, Cannon Falls offers the advantages of small town country living with access to urban amenities here and in neighboring metropolitan areas. Canoeing on the Cannon River or bicycling on the Cannon Valley Trail are but two examples of recreational opportunities afforded Cannon Falls residents and visitors.

The Cannon Falls Commercial Historic District, added to the National Register of Historic Places in 2000, is the heart of the City. This four block area comprises 22 historically significant structures with a variety of dining, shopping and service amenities.

City officials, staff and property owners work closely to assure the vibrancy of the downtown district is maintained. These community leaders also strive to insure that growth is managed in such a way that our small town flavor is not lost with the expansion of housing, commercial and industrial sectors. (source: the Cannon Falls web site)



Cedarburg, WI

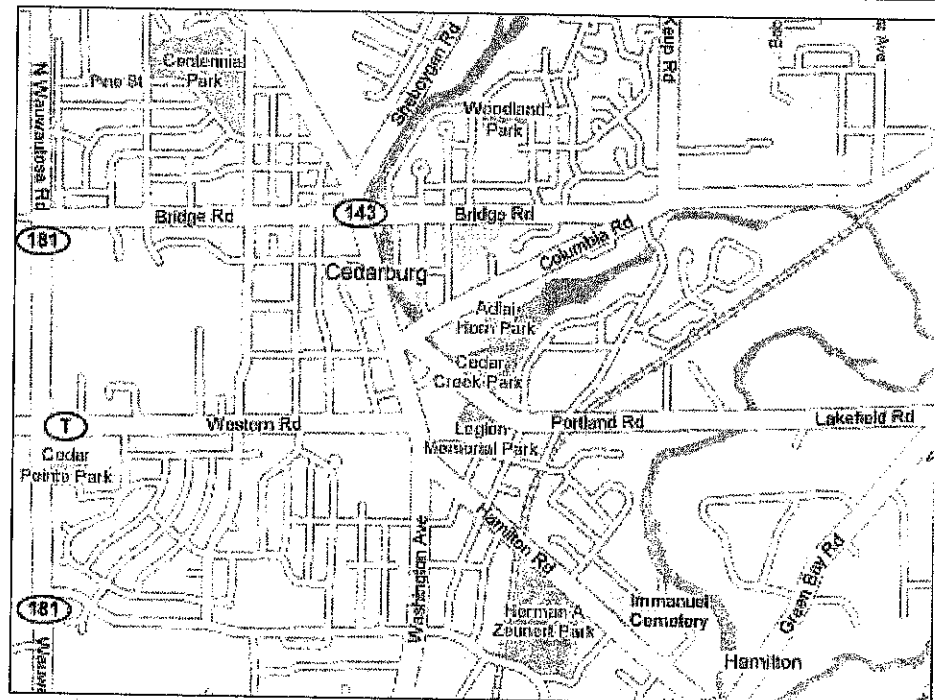
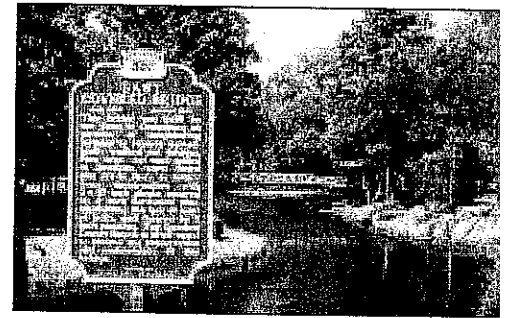
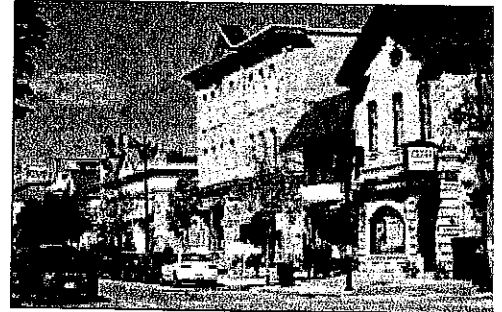
population approximately 5,744

The City of Cedarburg is located approximately 20 minutes north of Milwaukee, Wisconsin. This city boasts:

- A main street listed on the National Register of Historic Places
- A thriving business and industrial base
- Municipally owned water, light and wastewater systems
- 31 beautiful, well kept city parks and designated park lands
- A top-notch volunteer fire department and,
- Award winning public and private schools

Community pride and citizen volunteerism contribute to the quality of life enjoyed by Cedarburg residents.

The City of Cedarburg seeks to preserve its historic, small town atmosphere and quality of life while balancing the desires of our community by delivering high-quality programs and services in a fiscally responsible manner. (source: the Cedarburg web site)

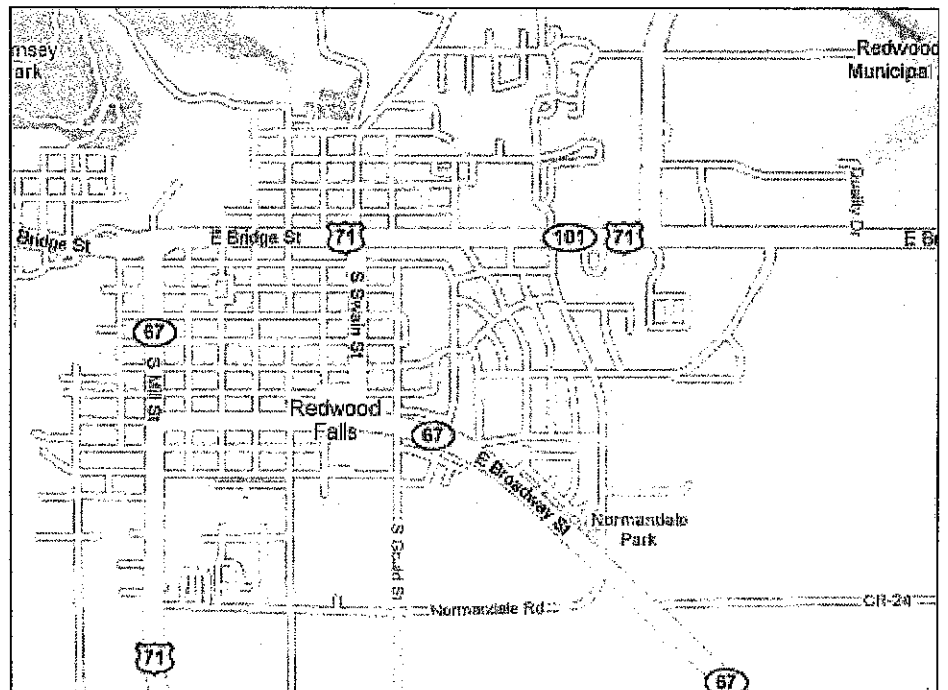
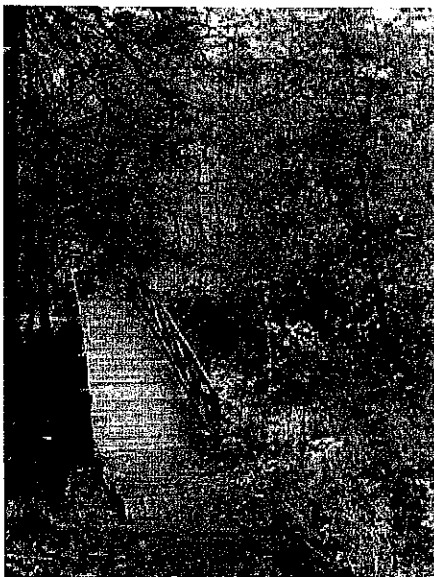
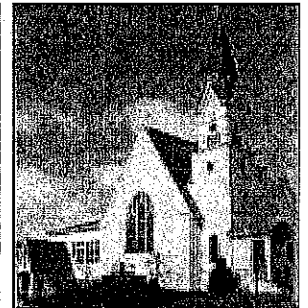
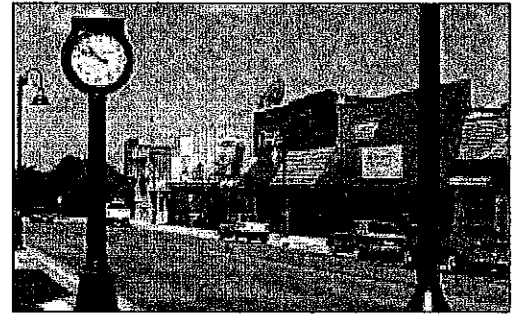


Redwood Falls, MN

population approximately 5,200

The city of Redwood Falls, Minnesota is nestled along the fertile and picturesque Minnesota River Valley in northern Redwood County. It is approximately 110 miles west of the Twin Cities. Although surrounded by prairie lands of wonderful fertility, Redwood Falls is possessed of much rugged scenic beauty, the Redwood River running through wooded cliffs and unique geologic formations. It is the county seat of Redwood County and serves as a sub-regional economic hub for the surrounding area.

Redwood Falls has a growing and diverse economic base consisting including a strong commercial, retail and service trade. In addition to a healthy economy, Redwood Falls' quality of life can also be found in the community's social fabric, such as the many civic and service oriented organizations, community events and celebrations, award-winning school district, excellent park and recreation amenities and top quality health care providers. Redwood Falls also has housing opportunities for every lifestyle. (source: Redwood Falls web site)

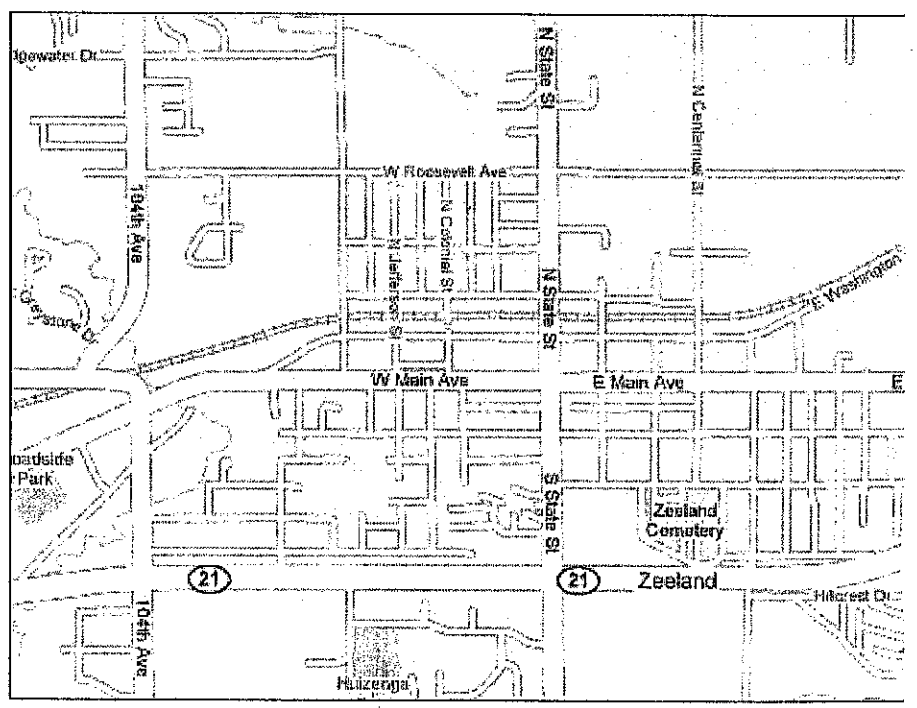
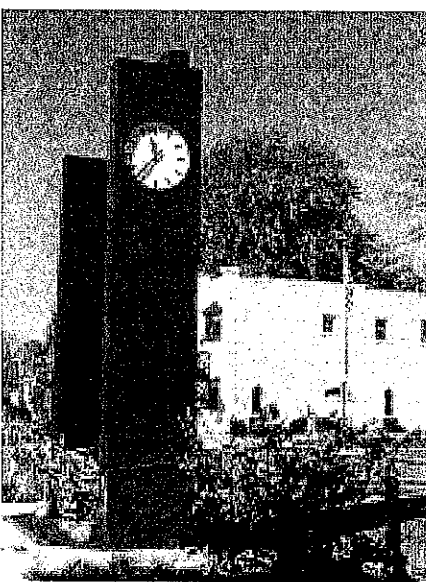
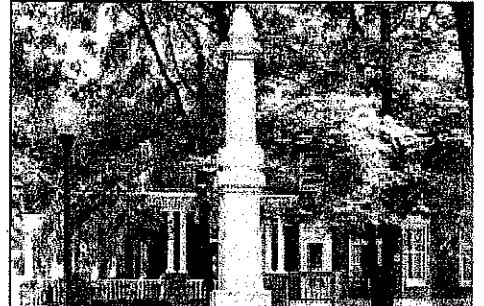


Zeeland, MI

population approximately 6,000

Zeeland is a beautiful area that shows pride in its historical background and its strong religious heritage. The city, named after the Province of Zeeland in the Netherlands, was settled in 1847 by a group of courageous settlers who were seeking religious and political freedom. Now, with the development of many businesses with a global scope, the diversity of the area is expanding in a positive way.

Noted for excellent schools, churches and a warm family environment, the Zeeland area strives to demonstrate a sense of growth through cooperative efforts with adjacent municipalities. Local units of government and regional planning organizations are actively working on building services and infrastructure to maintain an excellent quality of life while meeting the needs of a growing area. The location of this community allows for easy access to both local and regional recreational, intellectual and cultural opportunities. (source: Zeeland web site)

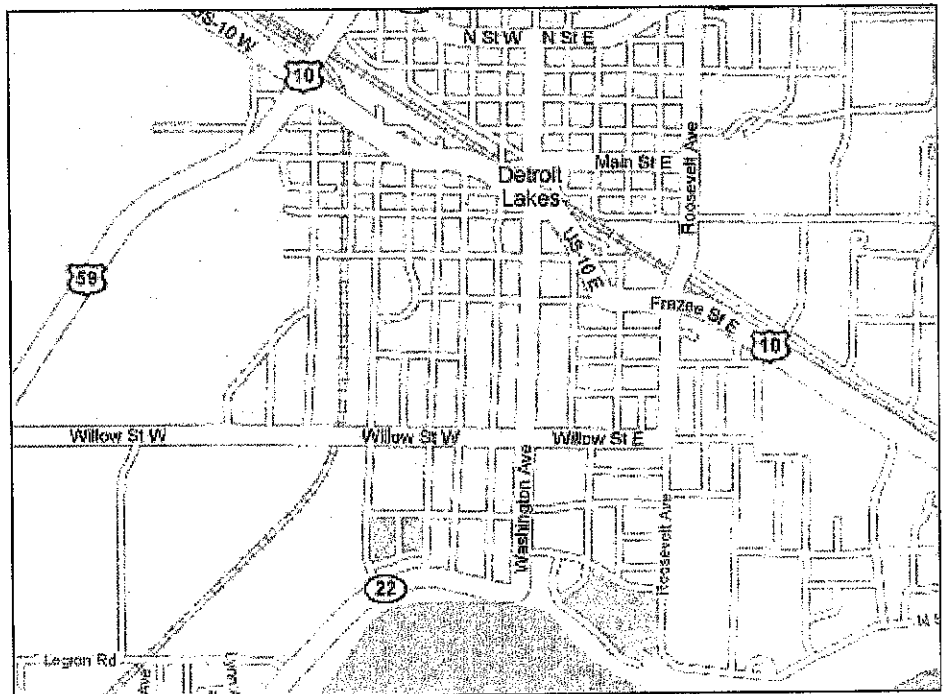
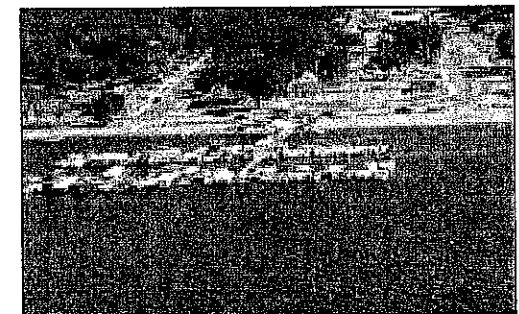
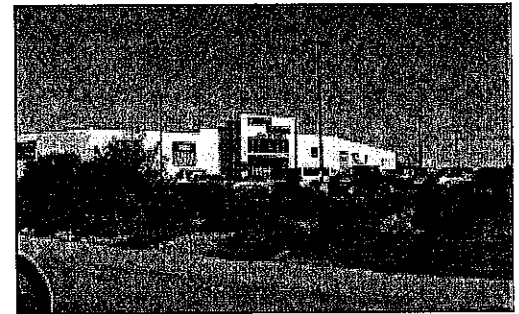


Detroit Lakes, MN

population approximately 7,500

Detroit Lakes is located in the gently rolling hills of west-central Minnesota's lake country. With 412 lakes within 25 miles, the area offers a quality of life which cannot be duplicated. Along with our ideal setting, we have a top rated school system, excellent parks and recreation facilities, and economic development organizations to meet the needs of this growing community.

The City's downtown is compact and features a wide variety of goods and services. Businesses include department stores, specialty shops, insurance and financial services, banks, grocery stores, restaurants and theaters. Detroit Lakes provides a wide variety of housing alternatives to its residents. (source: Detroit Lakes web site)



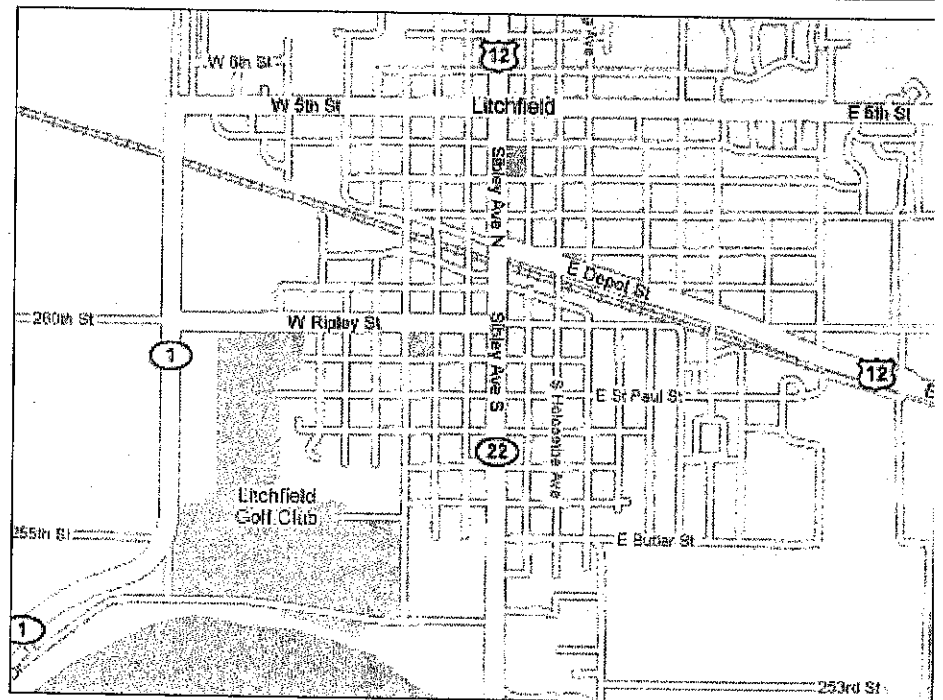
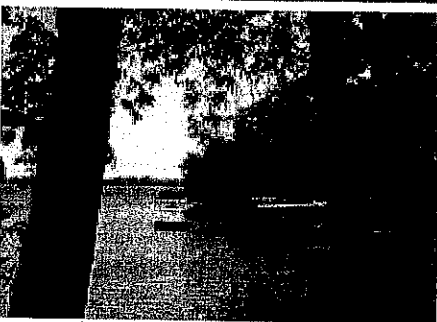
Litchfield, MN

population approximately 6,500

Litchfield is the Meeker County seat and is located just 60 miles west of the Twin Cities on U.S. Highway 12. Litchfield's residents live in a growing community boasting a strong education system, fiscally responsible government, and employment in high tech manufacturing companies.

While visiting Litchfield, you can enjoy a walk around beautiful Lake Ripley, playing our 18 hole golf course, fine dining, maybe take in a Blues baseball game, or participating in one of our many festivals and events. Shopping in Litchfield's historic downtown will take you back in time with a number of antique and coffee shops to visit.

Along with our historic charm and small town flavor comes a community dedicated to assisting those companies looking for a new home. Litchfield is committing the resources necessary for businesses to thrive. (source: Litchfield web site)



Lake Elmo - Village Area

population to be determined

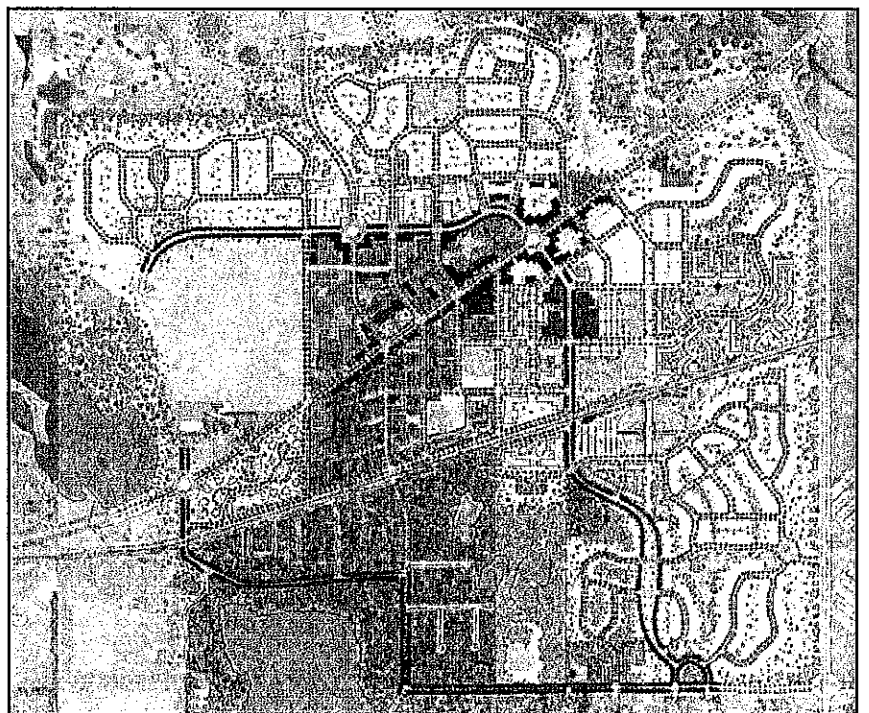
Summary Conclusions

Lake Elmo has the opportunity to create an inviting and functional 'heart of the city' that would provide many of the community amenities and attractions illustrated on previous pages. The Village Area Master Plan shown below describes an exciting vision and realistic framework that promotes similar features including:

- An active, mixed-use Main Street
- A celebrated and protected Historic District
- A network of public parks, trails and open space connected with local and regional amenities
- A new City Hall
- A new Community Campus (Family Services, Wellness Center, Arts Center and Library)
- Public infrastructure improvements (municipal sewer, water and stormwater systems)
- A mix of housing types, styles and prices

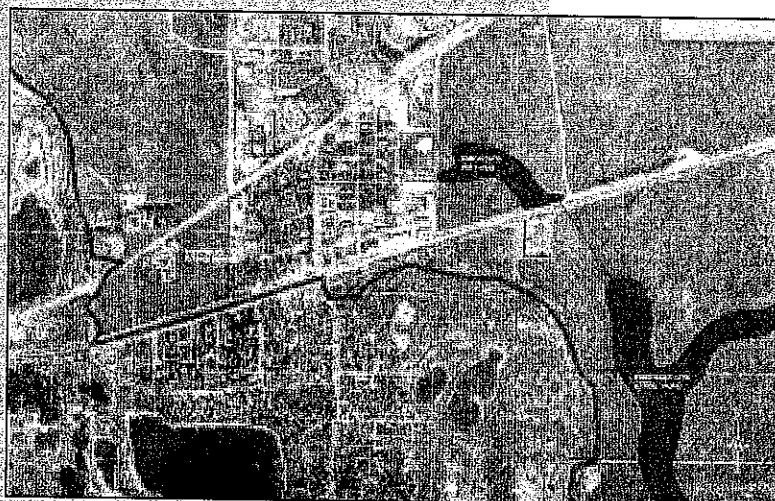
The challenge is to accomplish these things, create and sustain a strong local economy, emphasize health, safety and quality of life, all within the context of maintaining the rural qualities that attracted people to Lake Elmo.

It's interesting to note that the way people describe each of these communities, either verbally or in print (web sites), is exactly the same way city leaders, city staff and the citizens of Lake Elmo describe their ideas and desires for the future of the Village....working together, it can be done!



Chapter 5

Utilities and Other Infrastructure

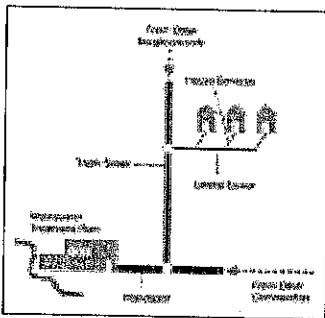


Lake Elmo Village Area Master Plan

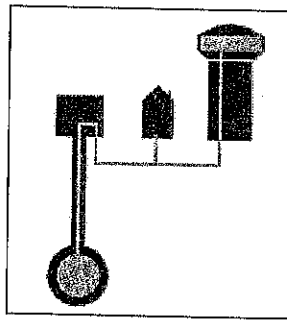
Utilities and Other Infrastructure

Overview

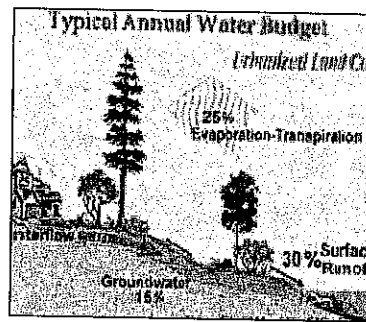
The Master Plan, together with a variety of detailed engineering plans and studies, begins to define a network of utilities and other infrastructure projects needed to support future development within the Village Area. Sanitary sewer, municipal water, stormwater management and street systems are the primary components, with expansion of cable, fiber optic, electric, telephone and other minor utilities also considered in the overall planning process.



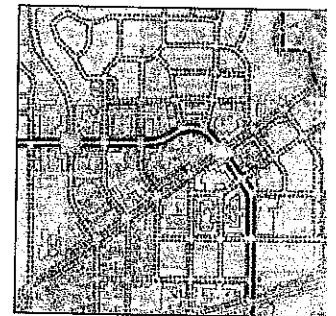
Sanitary Sewer



Municipal Water



Stormwater Management



Streets

Proper design and construction of infrastructure improvements includes a balance of customer service, adequate capacity and cost, along with the less easily measured issues related to aesthetics, maintenance and environmental health. New development projects, including utility work and road construction, have an increasing responsibility to use best practices in an effort to reduce, or eliminate, potential pollution sources.

Managing stormwater can no longer be defined by drainage ditches, big pipes and isolated ponds surrounded by chain link fence. Instead, the Master Plan suggests that 'harvesting' rainwater for irrigation and integrating surface water within public parks and open space are important components of a sustainable, systems-based approach for low impact development.

This chapter of the Master Plan offers a basic 'infrastructure primer' and is not intended to provide specific project details such as schedule, costs, alignment and other technical information. The primary purpose is to highlight various utility and other infrastructure plans, both current and future, that may affect physical design outcomes and decision making for the Village Area. (primary source material: TKDA 'Infrastructure Behind the Village Plan' presentation)

Sanitary Sewer System

System Design Requirements

Sanitary sewer system design is based on both existing conditions and potential future development. The combination of a comprehensive site analysis and further detailed study provides detailed information and specific recommendations for the following:

- Define the service area for the Village Area
- Define the projected flow through the pipe over time
- Provide comparative evaluation of alternative pipe alignments and lift station locations

The specific route and components of the sanitary sewer system are based on:

- Property ownership (right-of-way and easements)
- Lower existing elevations = lower costs (minimize excavation depths)
- Obstructions (forests, lakes, wetlands, buildings, etc.)
- Soil type (soft soils are more costly)
- High water table (may require dewatering costs)
- Underground conflicts (City and private utilities)

Ultimately the City Council must decide on the alignment of the sewer line and the location of other sewer components.

Major Components

The proposed sanitary sewer system for the Village Area includes three primary components (see maps below):

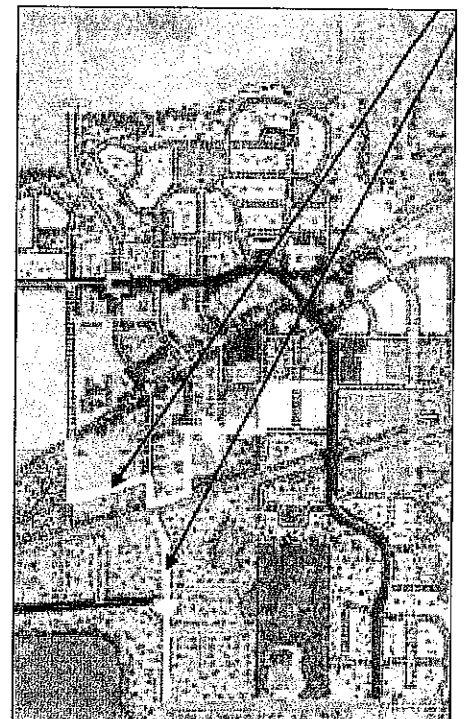
- A – Trunk Sewer from MCES Interceptor to Reid Park
 - Connect to MCES manhole at meter station
 - Construct force main along Lake Elmo Boulevard to 20th Street
 - Construct lift station at southeast corner of Lake Elmo Boulevard and 20th Street
 - Construct gravity sewer from 20th Street to Reid Park
- B – Trunk Sewer from Reid Park to Highway 17
 - Construct gravity sewer from Reid Park to Highway 17
- C – Trunk Sewer to Serve Existing Old Village
 - Not related to new development, but to serve the existing village in the future
 - Two trunk gravity sewers will provide the major connections
 - Lateral sewer service system will bring service to individual homes and businesses



A Trunk Sewer to Reid Park



B Trunk Sewer from Reid Park to Highway 17



C Trunk Sewer into Old Village

Municipal Water System

System Design Requirements

Similar to sanitary sewer, the municipal water system design is based on both existing conditions and potential future development. Typically, water lines will follow the same alignments as the sanitary sewer, but water systems design must also respond to the following design criteria:

Areas with similar elevations are separated into pressure zones

- This provides customers with adequate water pressure
- The pressure provided to a property is a function of the water tower elevation and the elevation of the property

The location of water facilities is determined

- Proposed and anticipated land use must be considered
- Population and demand determine where the system is needed

Rate of consumption is determined

- 75 gallons/person/day is assumed for existing and anticipated population growth
- This sets the number of wells required for the City

Storage requirements are determined (water tower sizing)

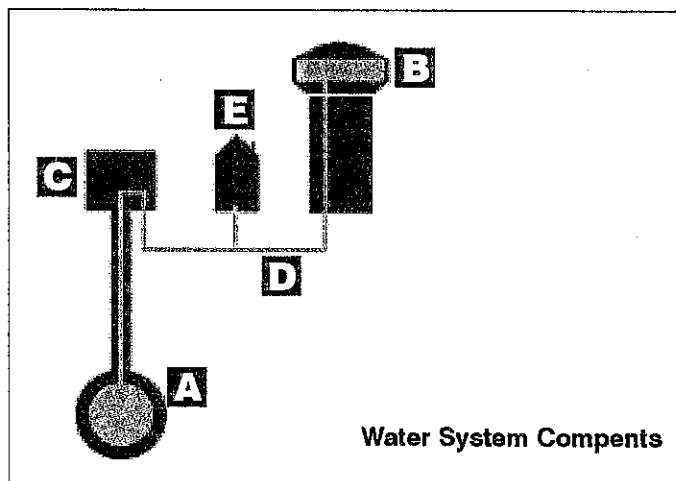
- Projected peak day use and fire reserve determine the storage requirements

Entire network is connected by watermains

- Looping is necessary for system redundancy and to prevent stagnant water

Pressure zones to be linked are identified

- Booster station(s) and pressure reducing valves located as needed



Major Components

The proposed municipal water system for the Village Area will include the following components (see images below):

A – Well

- Bored hole where ground water is pumped from an aquifer

B- Elevated Water Tower

- Provides storage for high demand (sprinkling and fire protection)
- Maintains system pressure
- Provides smooth pumping operations

C – Booster Station

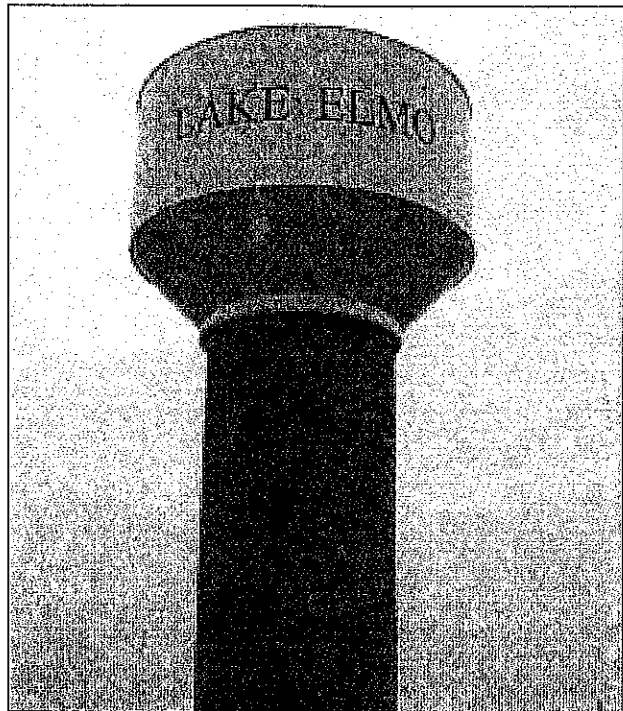
- Pumps that transfer water from a lower to a higher elevation

D – Watermains

- Network of pipes that connect entire system
- Minimum of 8 feet deep
- Valves and hydrants

E – Water Services

- Homes and businesses
- Irrigation



Stormwater Management System

System Design Requirements

Managing surface and storm water is a critical component of the Village Area planning process. Yearly flooding creates a significant nuisance even without major rain events – the photographs below from spring 2007 (with snow melt the contributing water source) illustrate the magnitude of the problem. Anticipated growth and development within the Village demands a comprehensive evaluation of existing conditions and detailed design recommendations that respond to the following:

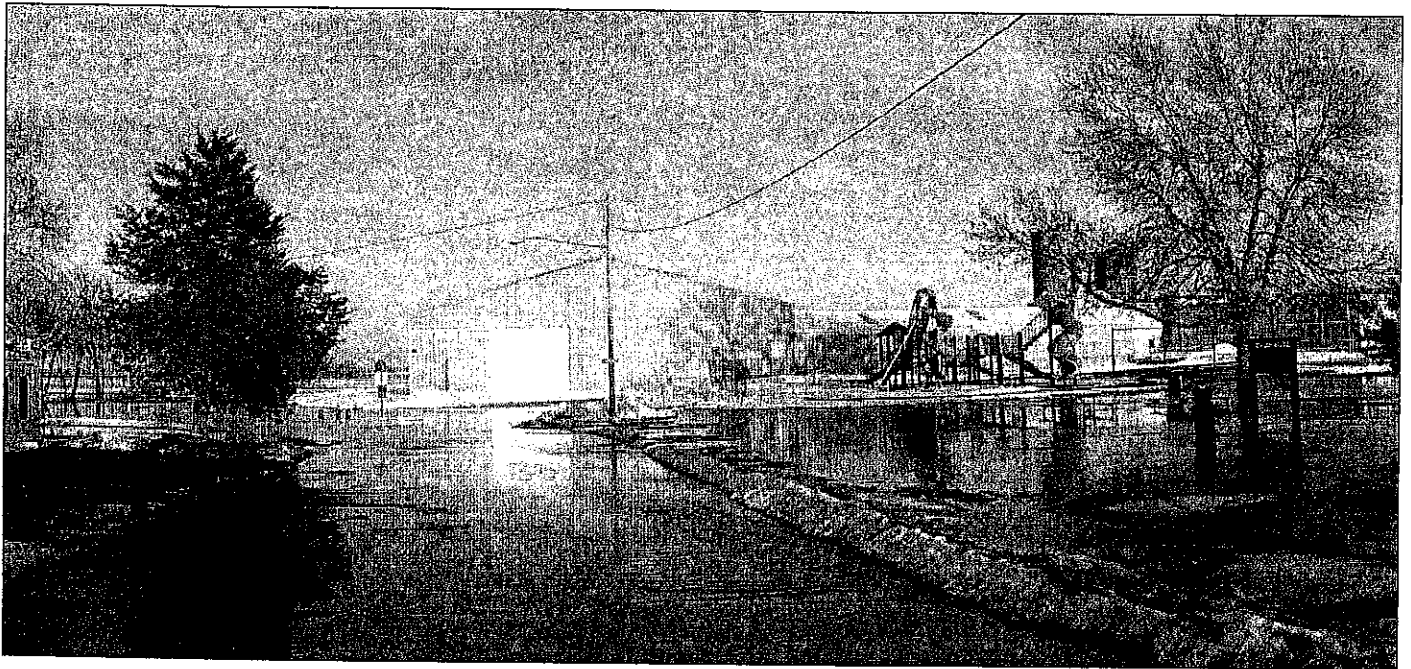
- Minimize the frequency and severity of flooding
- Minimize soil erosion
- Reduce algae growth caused by nutrients from fertilizers
- Limit the accumulation of sediment in streams and lakes
- Protect natural habitats

Preliminary design study has begun. The primary objective is to completely integrate stormwater management components within parks, trail corridors and open space areas.

Major Components

The proposed stormwater management system for the Village Area will include the following components:

- Sediment Control
 - Purpose is to reduce pollutants
- Infiltration
 - Purpose is to improve water quality, reduce stormwater volume and recharge groundwater
- Stormwater Pond
 - Purpose is to improve water quality and reduce the rate of runoff
- Pipes versus Drainage Swales
 - Purpose is to direct surface water from one place to another



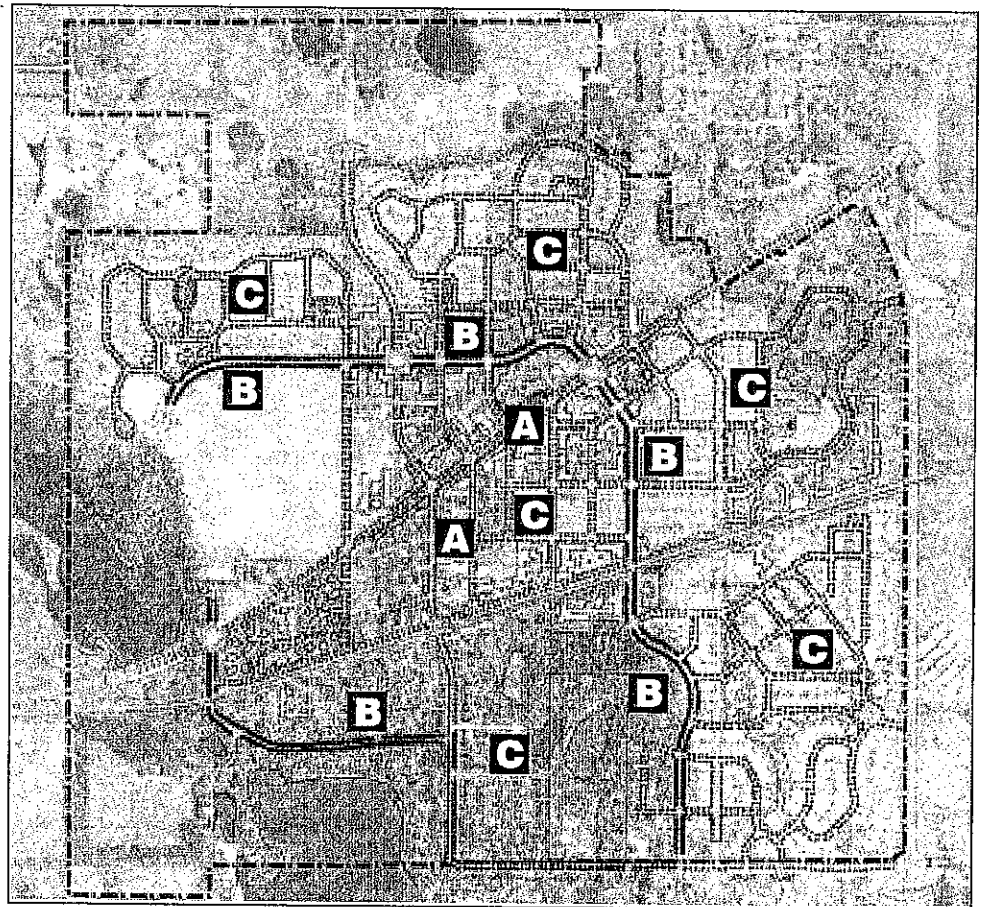
Street System

System Design Requirements

The Master Plan defines a framework of streets that balances potential traffic volume, level of service at intersections, proposed adjacent land use and desired aesthetic character. This proposed street and block pattern reflects a traditional grid based on the following design requirements:

- Provide a street network that distributes pedestrian and vehicular traffic throughout the Village, encouraging a more dispersed and less congested traffic flow (many choices or travel paths)
- Provide a clear hierarchy of streets resulting in a simple and understandable system for movement – easy access and convenient circulation between neighborhoods and the core of the Village
- Convert primary perimeter streets (the major traffic carriers) to urban street sections, providing sidewalks and street trees to replace roadside ditches
- Promote improvements that invite pedestrian and bicycle use including wide sidewalks, streetscape amenities and designated bicycle trails (both on and off-street)

Urbanist Jane Jacobs defined the street as the 'heart of the community.' The Master Plan embraces this idea . . . great streets are essential components of an attractive and inviting public realm and will contribute to the overall image and quality of life in the Village.



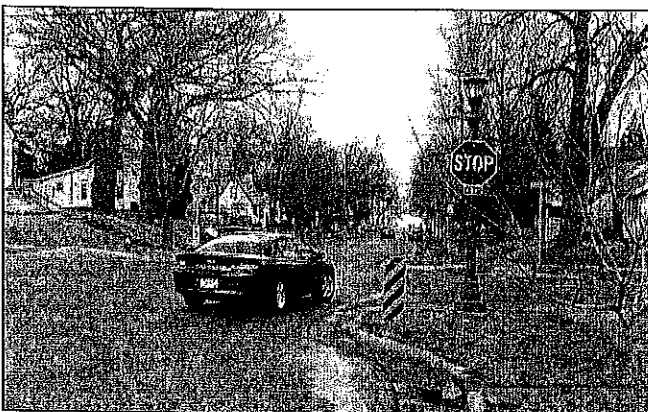
Recommended Street Types



A **Main Street – Destination Streets**
Destination streets are the address for numerous and important pedestrian destinations: shopping, work, services, food and entertainment. This street type is typically bordered by a vibrant and engaging street front: building facades, parks, plazas and so forth that attract the highest pedestrian volumes both en-route and 'stopped' (side walk cafes). Destination streets generally include a higher level of finish and detail including street furniture, lighting, plantings and other streetscape elements.



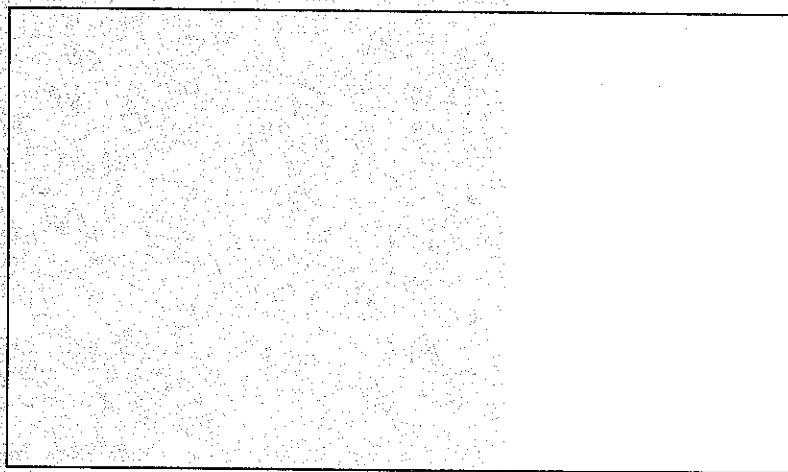
B **Village Parkway – Connector Streets**
The connector street is a primary route for pedestrians – a continuously pleasant walking environment with occasional points of interest or public amenities along the way. Users of connector streets are typically walking or biking for a sustained trip of more than a few blocks, frequently for daily-recurring purposes such as home to community center, work to lunch. The village parkway provides the additional function of connecting surrounding neighborhoods to the core area, Main Street and other 'heart of the village' uses.



C **Neighborhood Streets – Background Streets**
Neighborhood streets are neither destinations nor primary routes of travel for cars or pedestrians. The design objective for these streets is to provide a safe, pleasant and comfortable route with the intent to carry less traffic, therefore narrower street widths, pedestrian walks (both sides of the street) and safety features (designated crosswalks etc.) to promote neighborhood walkability.

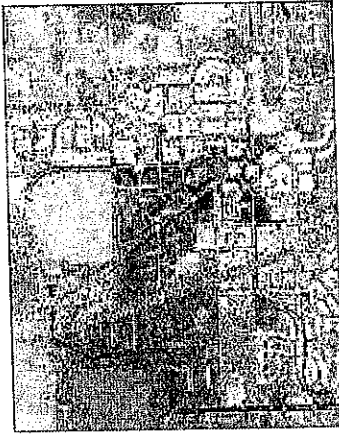
Chapter 6

Planning Process and Planning Tools



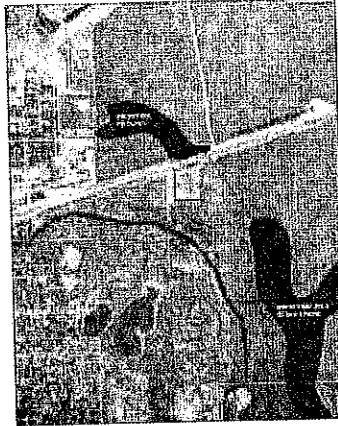
Lake Elmo Village Area Master Plan

Vision



- Existing Conditions/Objectives
- Guiding Principles
- Concept Master Plan
- Parcel Plan
- Etc

Infrastructure



- Utilities
- Stormwater Management
- Streets
- Parks, Trails and Open Space
- Etc

Financing



- Project Costs
- Finding Sources
- Funding Options
- Etc

Policy + Process



- Public Participation
- Adopt Master Plan
- Comprehensive Plan
- Zoning
- Development Guidelines
- PUD and Project Approval
- Etc

Chapter 6 – Planning Process and Planning Tools

- Overview
- Adopt Master Plan
- Comprehensive Plan Amendment
- The Alternative Urban Areawide Review (AUAR)
- Zoning Code and Subdivision Regulations
- Development Guidelines
- Design Review Board and Review Criteria
- Funding Sources and Financial Strategies