

# ROSEAU: A VISION FOR THE FUTURE

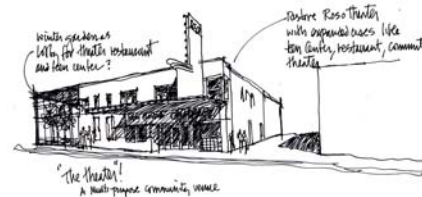
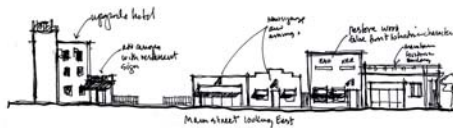
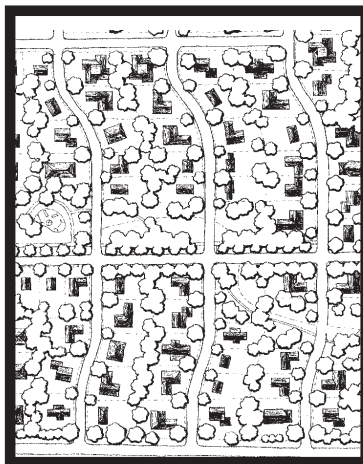


Final Report

Recommendations following the February 2003  
Minnesota Design Team Visit

Coordinated by the Center for Rural Design,  
University of Minnesota

August 2003



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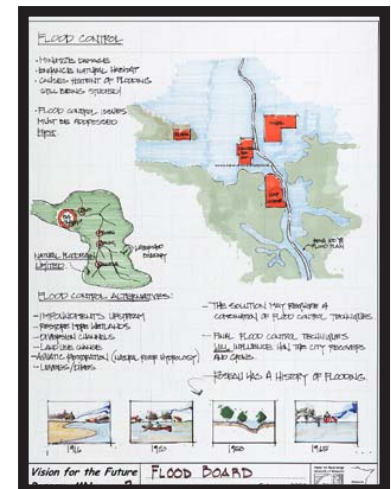
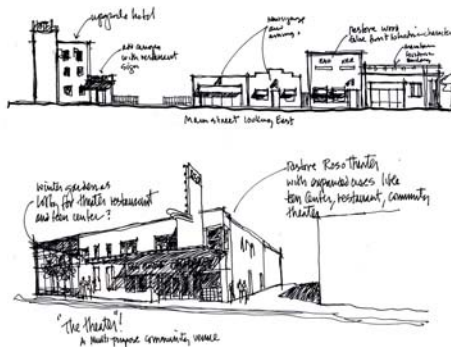
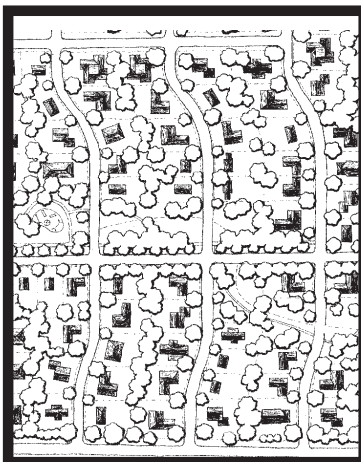
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**PREPARED FOR: ROSEAU COMMUNITY VISION FOR THE FUTURE COMMITTEE**





## *Acknowledgements*

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### *Acknowledgements*

The authors of this report would like to thank the following people. Without their support and enthusiasm this report would not have happened.

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## Introduction



Fourteen inches of rain fell on the community of Roseau, MN and the surrounding area on June 8 and 9, 2002. When a dike running along the Roseau River broke on June 10, the River flowed into the downtown and adjacent residential areas of Roseau. The River finally crested at 7.5 feet above flood stage on June 12.

Roseau, MN sits at the bottom of the large, flat geographical area formed by glacial Lake Agassiz. This lake covered northwestern Minnesota, eastern North Dakota, and a large area of southern Manitoba. The extensive rainfall in June 2002 resulted in overland flooding as much as River flooding. Indeed, the effect of 14 inches of rain on this flat landscape was much like dumping a glass of water on a table top – the water flowed rapidly everywhere. Ninety percent of 150 Commercial Buildings sustained flood damage at the cost of over \$20 million. Ninety percent of Community Buildings were damaged at the cost of over \$8 million. Eighty percent of 1,200 residential units sustained flood damage with total losses over \$20 million. Seventy-five percent of Public Utilities were damaged at a repair cost of over \$6 million. And the list continues...

This report is the result of an eight month partnership between the Roseau Community Vision for the Future Committee and the Center for Rural Design at the University of Minnesota. The Center for Rural Design was commissioned in January 2003 to assist Roseau not just in redesigning public buildings, commercial areas and neighborhoods but also in identifying a process to begin the daunting task of rebuilding the City and area. As the work progressed, the Center for Rural Design also assumed a communication role between federal and state



*Photo from the Roseau Times-Region*

agencies, the City, and citizens about flood mitigation options, design strategies, and corresponding policy.

“Design” affects the physical and environmental, experiential, social, cultural, economic and policy aspects of our daily lives. Whether it is the way we feel in a building or neighborhood, the comfort of a chair, or how we drive through a parking lot, design affects the look, feel and function of every object and space we encounter. Indeed, design greatly impacts how we interrelate with others and the environment in communities.

The Center for Rural Design employs a Community Design Process in all of its work. In Community Based Design, the community is the designer. Design professionals (architects and landscape architects) serve as assistants to the community and guide community members to the projects and solutions which best fit their needs. In Roseau, the Community Design Process began with a Design Charette, a design workshop, with volunteer design professionals, planners, and student members of the



## *Introduction*

Minnesota Design Team of American Institute of Architects – MN and over 120 members of the Roseau area community in February 2003. In that workshop, Roseau area residents addressed difficult questions such as “Is the Roseau River an asset or an enemy?” and identified the areas of flood mitigation options, downtown preservation and development, reconstruction of a civic heart of the City, connections between new neighborhoods and community amenities and the core City, and housing as priority needs. In a two day period, the design professionals, planners, students and community members worked together to create initial visual ideas and plans for the future of Roseau. Since February, the Center for Rural Design has been working with the Roseau Community Vision for the Future Committee to refine those initial ideas and develop design strategies to address the community identified priorities.

This report does not contain construction documents or final comprehensive plans for the City. Rather, the Center for Rural Design has outlined ideas, strategies, and additional resources and put them in a visual/design context as a means to spark conversation, planning, policy, and action. This report is meant to be used as an educational tool, planning tool and policy tool by Roseau area residents and policy makers as they jointly pursue strategies for flood mitigation and community revitalization with federal and state agencies and funding sources.

Roseau, MN area residents survived the flood of June 2002 by working together, showing concern for their neighbors, displaying tremendous ingenuity, and being patient. Roseau is a community deeply committed to families, children and youth, and the region’s sustainability and growth. Those qualities, the connections between people, policy makers, and the environment, and the ability to bridge economic,

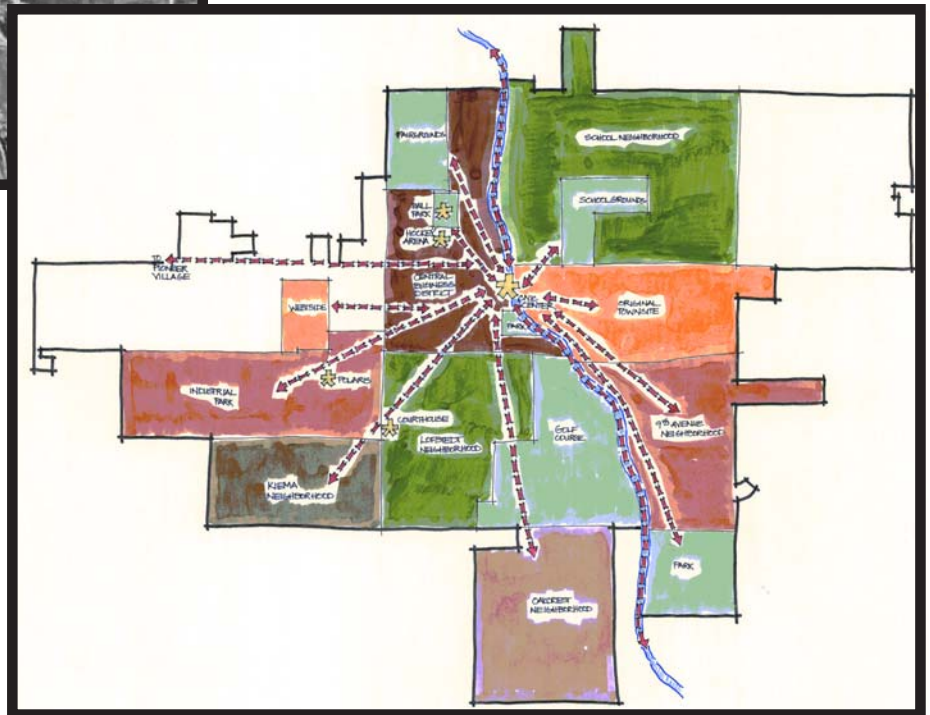
social and cultural differences have served the community well and will be essential as flood procedures plans extend for many years in the future.

The physical characteristics of Roseau will change dramatically with flood mitigation and greatly impact the social and economic structures of the area. Some residents along the River will lose their homes; others will lose property. Reconstruction of the downtown is already underway and planning for future civic structures and locations of new neighborhoods and housing has begun. In this time of tremendous change, the positive working relationships between citizens and government and Roseau and the surrounding communities must be maintained and citizen voice and concern given continuous platform. The Roseau Community Vision for the Future Committee and the City of Roseau have provided tremendous leadership and coordination since the flood and we hope residents, policymakers and funding sources continue to support their efforts.



*Photo from the Roseau Times-Region*

# Connecting Roseau







## ***Suggestions and Guidelines for Trail Development***

These trails can serve as a unifying element between the urban areas of downtown, the neighborhoods, and the industrial areas, providing recreation and transportation opportunities. By actively identifying new trail opportunities and building on the existing networks, accessibility via bicycle and walking, as well as community pride, can be enhanced. In addition to connecting people within the city, effort should be made to extend connections to outlying areas, including places such as Frontier Village.

Trails and bikeways should be designated and posted with signs. Possible new trail opportunities, such as to the fairgrounds and the arena should be identified. Site character and amenities will be appropriate to trail context. There will be two distinctive types of trails:

1. A formal urban feel along city streets, the new civic gathering space, neighborhoods and downtown
2. A natural trail with native plantings along the river, in the parks, and in the new flood interceptor ditch



*Specialty paving*



*Formal style benches*

## ***Descriptions of the Trail Portions***

### **Within the City Fabric**

#### Trail Dimensions:

A minimum ten foot wide paved path should be separate from the streets where possible. Bicycle routes could also be identified on existing streets and painted as bike lanes. Designated bike lanes should have a minimum width of five feet, with bicycle route signage posted along the street.





#### Amenities:

A palette of urban/traditional site amenities should be chosen to be used to build unity and identity throughout the city and neighborhoods. The palette should be used not only along the trail routes, but also in downtown and at the new civic plaza.

Amenities could include but are not limited to:

- Pedestrian scale street lamps
- Trash receptacles
- Park benches
- Water fountains
- Lamp pole banners (including seasonal/festival specific banners)
- Railing/fencing
- Historical signage (Roseau history, river history, geologic history, etc.)
- Paver stone or other specialty paving at crosswalks and plazas



*New trail possibilities downtown along the river*

#### Along the River and the New Flood Interceptor Ditch

#### Trail Dimensions:

A minimum ten foot wide path, preferably paved, with a two foot gravel or grass shoulder should be provided. Special care should be taken to avoid impact and erosion along the river. Edging material (of steel, plastic or another material) must be provided if gravel is used. Some naturalized trails could serve as a snowmobile trails as well.

#### Amenities:

Directional signage and lighting should be included where possible. Lighting should be spaced to provide for night use, but also be of a style to minimize light pollution impact. In addition, several park benches and trash receptacles could be located along the trails for rest stops.

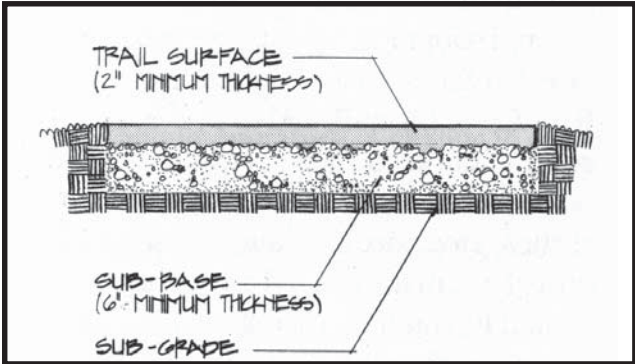


*Natural screen along a trail*

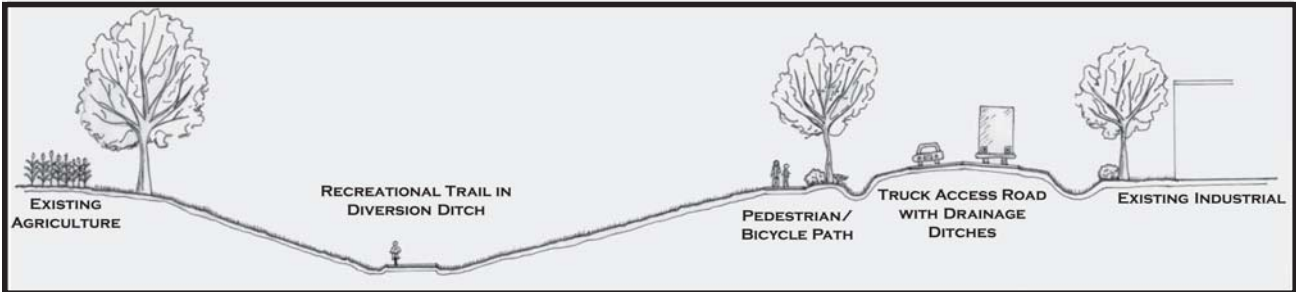


Plantings and Natural Amenities:

A palette of native plants should be used to enhance and screen trails. (Extensive documentation of native species is available from many sources, including Minnesota DNR). Trees should be planted near the trail, preferably in groupings with a minimum 8' clearance to the lower branches to accommodate bicycle and pedestrian traffic. Plantings should be set at least five feet from the edge of the trail. Selected plants, including shrubs, grasses and trees should be low-maintenance, low-water demand to minimize costs of upkeep.

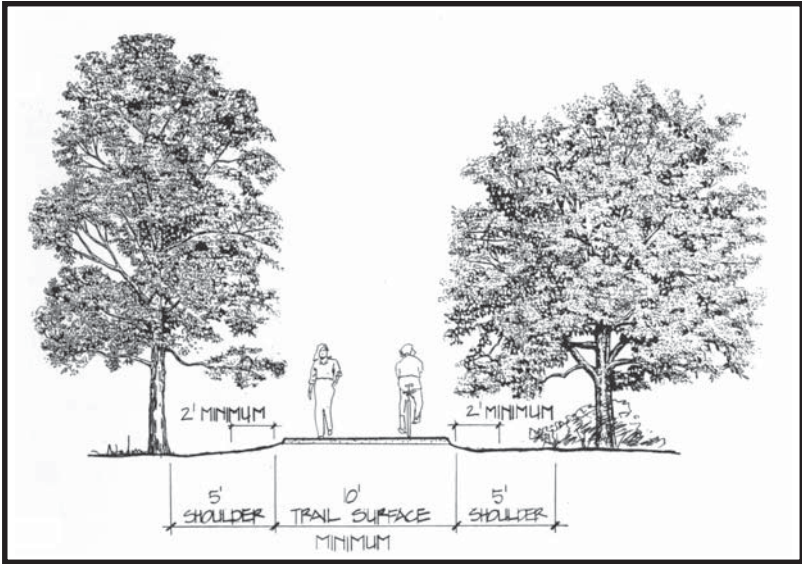


Cross-section of appropriate trail sub-base and surface



Possible interceptor ditch, trail and levee west of town

Possible trail section





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## Resources:

Bell, Simon. *Design for Outdoor Recreation*. E and FN Spon: Hong Kong. 1997.

Cobham, Ralph. *Amenity Landscape Management: A Resources Handbook*. E and FN Spon: New York. 1990.

Flink, Charles A., Peter Lagerway, Diana Balmori and Robert Searns. *Trails for the Twenty First Century: Planning, Design and Management Manual for Multi-Use Trails*. Island Press: Washington, D.C. 1993.

Harris, Charles and Nicholas Dines. *Time Saver Standards for Landscape Architecture*. McGraw-Hill: New York. 1988.

Henderson, Carol, Carolyn Dindorf and Fred Rozumalski. *Landscaping for Wildlife and Water Quality*. Minnesota DNR: St. Paul.

University of Minnesota Extension: Recreational Trail Design and Construction  
<http://www.extension.umn.edu/distribution/naturalresources/DD6371.html>





# Integrating Flood Mitigation Into the Community



**FLOOD CONTROL**

- MINIMIZE CHANNELS
- BALANCE NATURAL FLOW
- CAUSE: HISTORY OF FLOODING WILL BEING STUDIED
- FLOOD CONTROL IDEAS MUST BE REASSESSED FIRST

**FLOOD CONTROL ALTERNATIVES:**

- IMPROVE RIVER'S LIFE/STORM
- PROTECT THE WETLANDS
- DIVERTED CHANNELS
- LAND USE CHANGE
- AQUATIC VEGETATION (WATER PUMP VEGETATION)
- LEAVES/DIRTS

- THE SOLUTION MAY REQUIRE A COMBINATION OF FLOOD CONTROL TECHNIQUES
- FINAL FLOOD CONTROL TECHNIQUES WILL INFLUENCE HOW THE CITY RECOVERS AND GROWS
- ROSEAU HAS A HISTORY OF FLOODING

**Vision for the Future**  
Roseau, MN 2

**FLOOD BOARD**  
February 2003



### ***Historical Overview***

For over 100 years the City of Roseau has shared a physically intimate, if not always loving, relationship with the Roseau River. During the nineteenth and early twentieth centuries the river provided one of the major transportation routes in the area linking fur traders, followed by loggers, farmers, and settlers, with lands to the west and north. Capitalizing on this transportation route, the City of Roseau quickly grew into a major area service center for the expanding agricultural community.



*Roller mill operation in the early 1900's*

However, opportunity had its downside. Built in the Roseau River Bottom, the City of Roseau sits near the base of the uplands that drain into the river. The city is bisected by the river and lies almost entirely within its floodplain. Throughout its history the city has struggled to keep the river's flood waters at bay, often succeeding but occasionally failing. Roseau

*Methodist Church during flood of 1916*



was hit hard during the 1910's with Center St. in the heart of the city inundated by flooding in 1916.

During the 1960's, Roseau again experienced severe flooding. This time the City responded with emergency flood control measures that included the construction of an extensive system of levees. Although these levees were constructed quickly as temporary flood control structures they still provide the backbone of defense for the city today.

In 1996 and 1999 the city once again suffered from its location on the banks of the Roseau River as Heavy rains, high river levels and saturated soils led to levee failures in several places despite ongoing attempts at repairing and upgrading the levees.

June 12, 2002 saw the most recent and most devastating flood in Roseau's history with flood waters reaching record highs and affecting most of the community. The extent of this flood was a product of several factors. As in the past, flood waters overtopped the levee system in several places directly flooding areas adjacent to the river such as the downtown business district. Water also backed up the storm sewers as river water entered the outfalls and flooded the system. Overland flow contributed significantly to the overall extent of the flood as water entered town from the west on its way to the river. Combined, these three factors led to the record flood depths of 2 to 3 feet in parts of the city which resulted in an estimated \$100 million in direct damages and future flood mitigation projects.



A brief summary of the impacts of the June 2002 Roseau flood includes:

- 90% of the city's commercial operations sustained flood damage
- 90% of the city's community buildings sustained flood damage
- 80% of the city's residential properties sustained flood damage
- 75% of the city's public utilities sustained flood damage
- 50% of the city's streets sustained flood damage
- 50% of the city's electrical system sustained flood damage

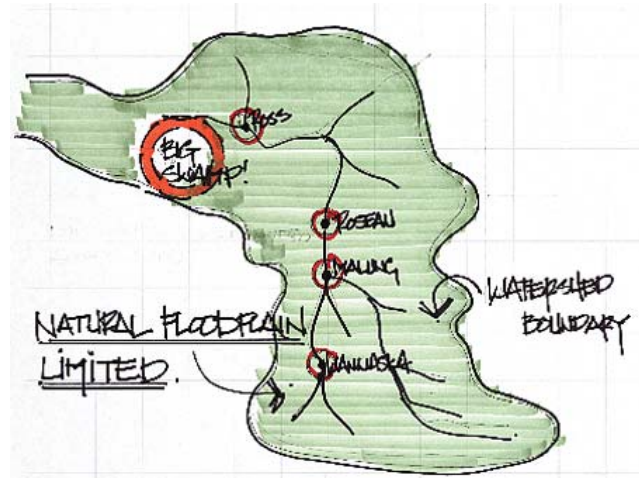




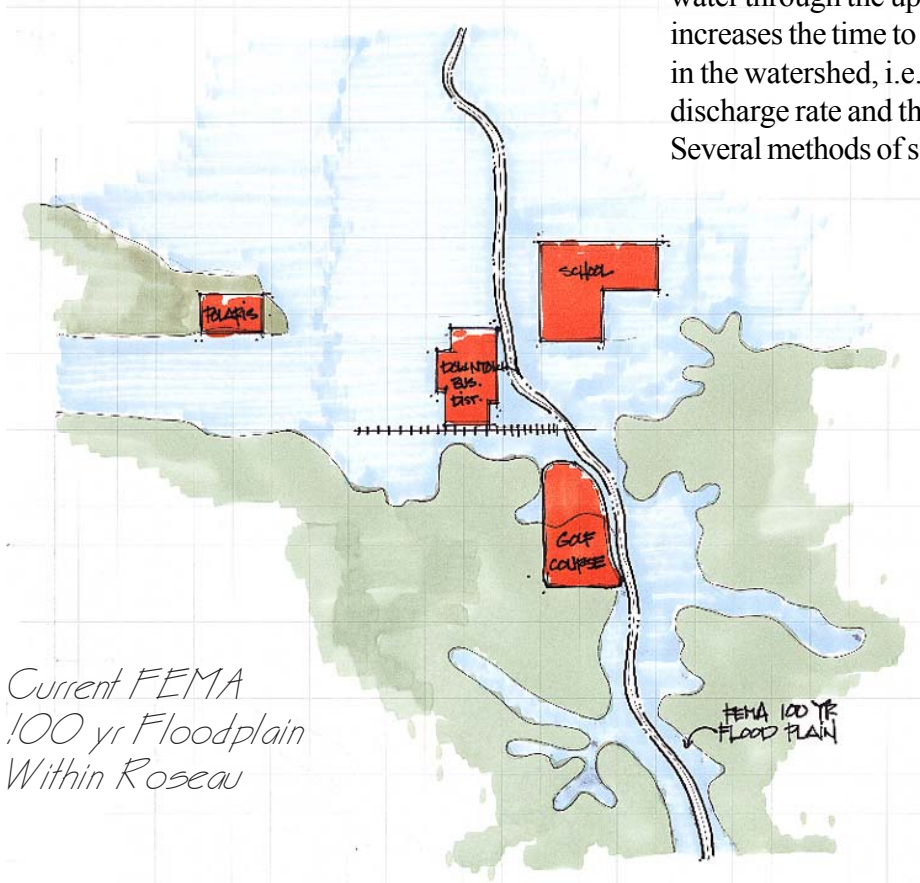
**Flood Mitigation Techniques**

As identified in the Roseau River Watershed Flood Mitigation Plan, there are principally two categories of flood mitigation techniques, flood control techniques and flood protection techniques. Flood control utilizes approaches and techniques that reduce the peak levels of a flood and are essentially flood prevention measures. Flood protection techniques utilize approaches and techniques designed to protect property from flood waters without reducing peak flood levels and are essentially damage prevention techniques.

As pointed out in the Watershed Plan, many flood control techniques are more appropriately applied at



the watershed scale while flood protection techniques are often best applied at the community or site scale. For example, slowing the movement of water through the upper reaches of the watershed increases the time to peak discharge at a given point in the watershed, i.e., Roseau, and reduces the peak discharge rate and the peak flood stage at that point. Several methods of slowing water movement can be

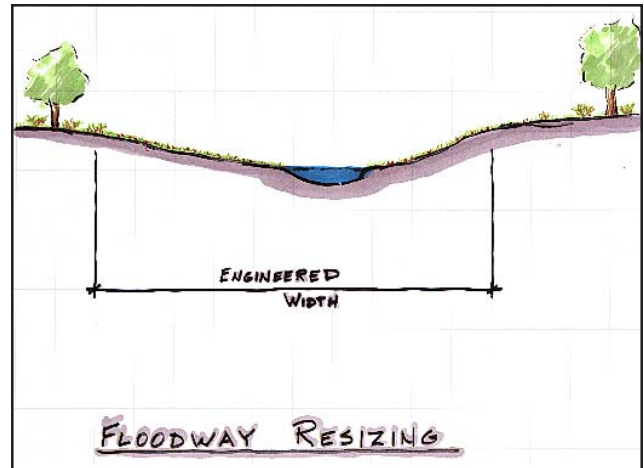






Flood Control Techniques:

- Watershed Scale Impoundments
- Wetland Restoration
- Channelization
- Diversion Channels
- Culvert Sizing
- Changes in Land Cover
- Hydrologic Function Restoration



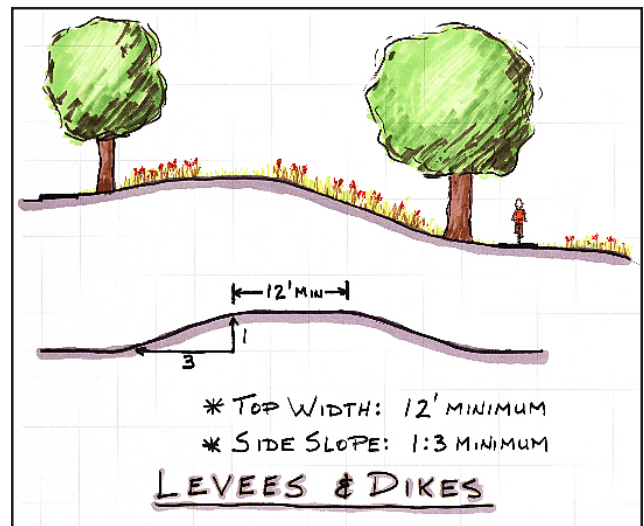
employed including changes in land cover, both temporary and permanent constructed impoundments, and large scale restoration of natural hydrologic function in the river and its floodplain. Any of these methods, as well as the others discussed in the plan, need to occur at a scale in locations that are beyond the scope of the city's ability alone.

Throughout its history, the City of Roseau has employed flood protection techniques. In the 1960's, the city constructed the current system of emergency levees. Originally designed as

Flood Protection Techniques:

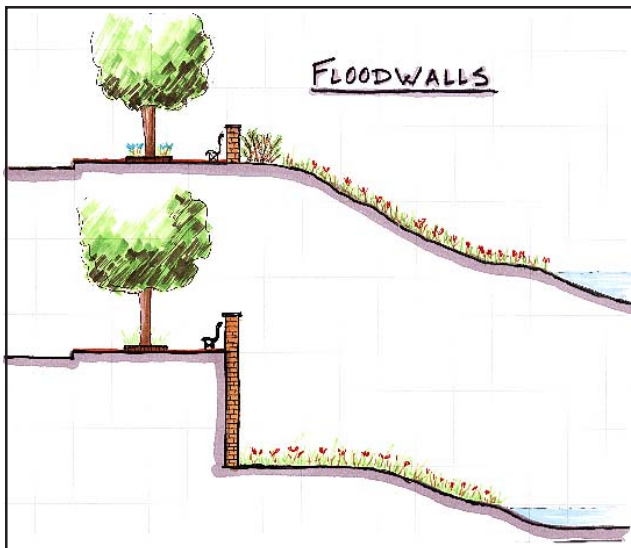
- Levees and Dikes
- Floodwalls
- Floodway Resizing
- Land Use/Zoning

However, there are flood control techniques that could be employed at the scale of the city. For example, in the Flood Mitigation Plan for Roseau, Barr Engineering identified the possibility of altering the floodway of the river within the city as a technique to reduce the peak flood stage within the city. Essentially, by providing the river with more horizontal space in its floodway it will require less vertical space and the peak flood elevation will be lower.



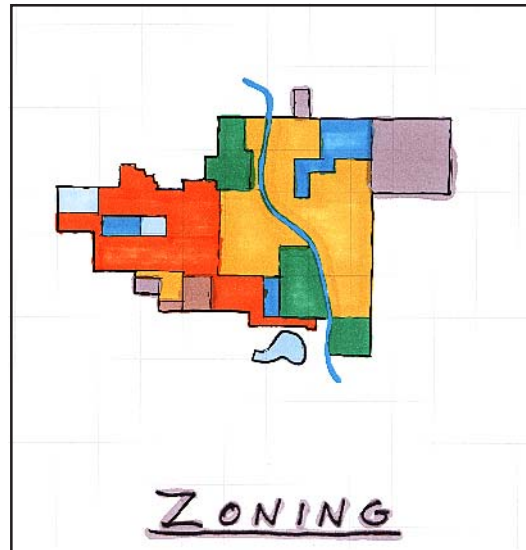


temporary structures, these levees have been in service for almost 40 years and are estimated to provide protection for a 50 year flood event. An upgraded and expanded system employing permanent levees and floodwalls would provide added levels of protection.



Part of the city's storm sewer infrastructure is equipped with flood control gates to prevent flooding of the system during periods of high water in the river. Additional protection could be achieved through upgrading the system with gates at all outfalls to the river.

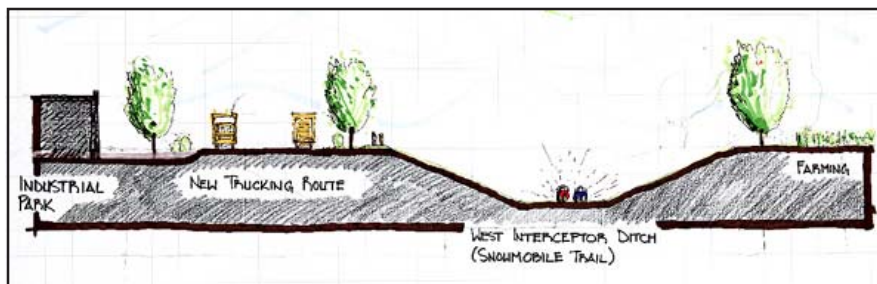
In recent times, the city has also been proactive in altering land use patterns, particularly in the vicinity



of the river, as a means of minimizing the potential for damage from any future flooding. Achieving significant changes in land use is economically and politically difficult as well as socially disruptive. However, as a flood protection technique, it can be highly effective. The tools employed are buyouts of property, where possible and appropriate, and potential changes in zoning.

Another necessary component of flood protection involves preventing overland flow from entering the city. A combined system of dikes, interceptor ditches, and temporary impoundments at the city's edge could be designed to fill this need.

A last step in flood protection involves the

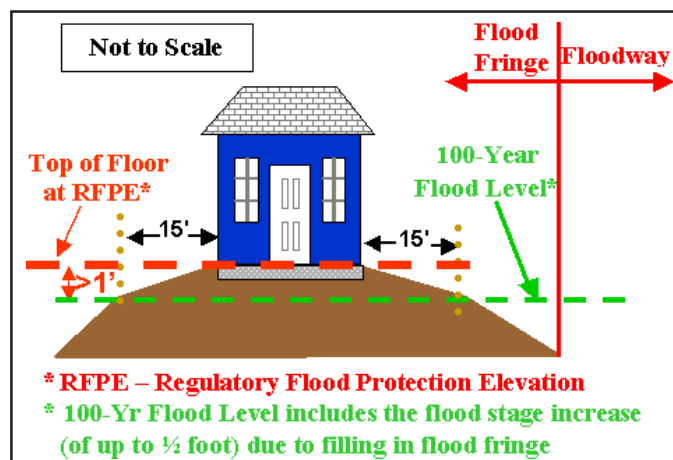




floodproofing of individual sites and structures. Techniques could include site grading, berming, and building retrofits that remove essential and expensive components from flood prone locations in the structure.



*Newer and under-construction homes on raised lots.*



### ***Flood Mitigation as a Community Amenity***

While it is certainly true that eliminating the potential for flooding adds significantly to the quality of life in the community, it is also true that the infrastructure needed to accomplish this goal can create barriers, disrupt the cultural character, and detract from the aesthetic quality of the community. On the other hand, the creation of this infrastructure, if done sensibly, sensitively, and with the guidance of the

community, can provide the opportunity to provide linkages, create a new cultural character, and beautify the city. If these goals are sought throughout the process of flood mitigation the quality of life in the community can be enhanced far beyond simply eliminating the potential for flooding. The remainder of this section will explore these possibilities.



## Components of Flood Mitigation

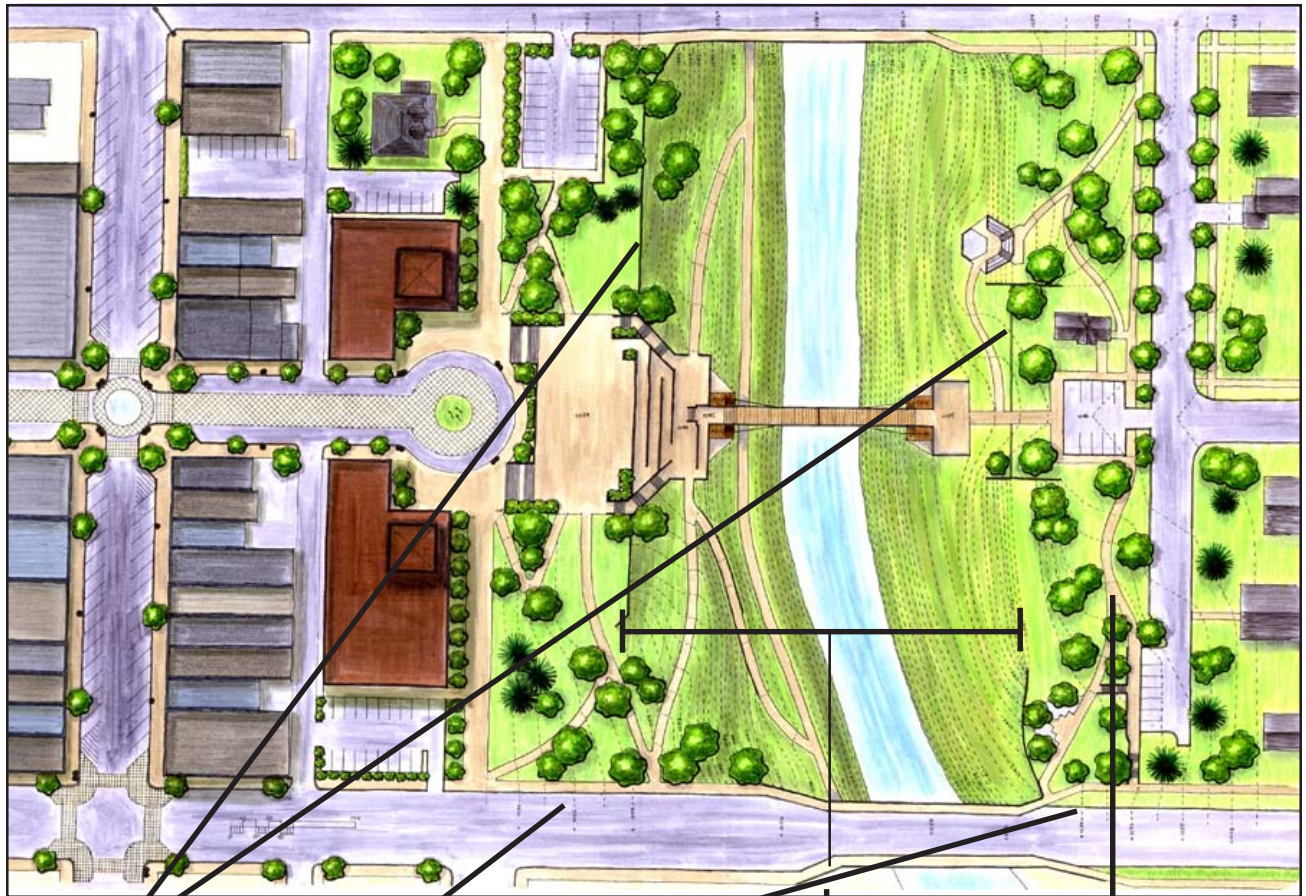
- Political:
  - \* Building Codes/Restrictions
  - \* Land Acquisition
  - \* Land Use Alterations - Zoning
- Physical:
  - \* Floodwalls
  - \* Levees/Dikes
  - \* Floodway Resizing
  - \* Land Cover Alterations □ Zoning
  - \* Diversion/Interceptor Ditches & Impoundments

Floodwalls - Permanent & Removable

Levees/Dikes

*A Sensible, Sensitive Solution Will Be -----*





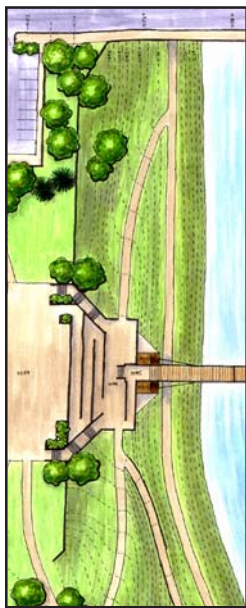
*Floodway Resizing*

*Land Use Alterations □ Zoning*

----- *A Combination Of All Components*



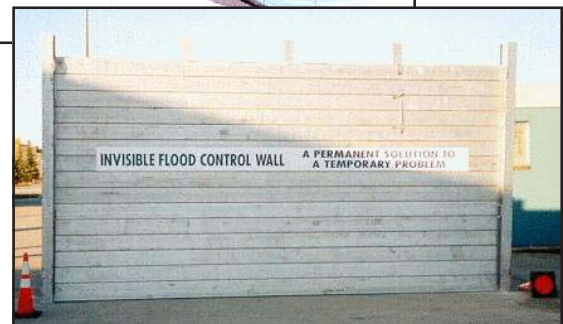
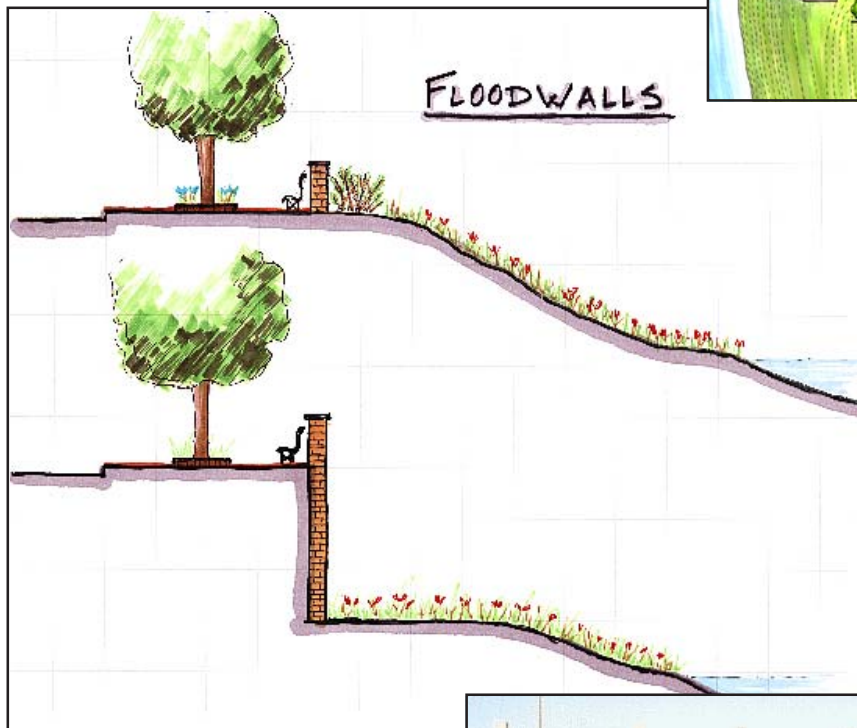
## Floodwalls □ Permanent & Removable



Permanent



Removable



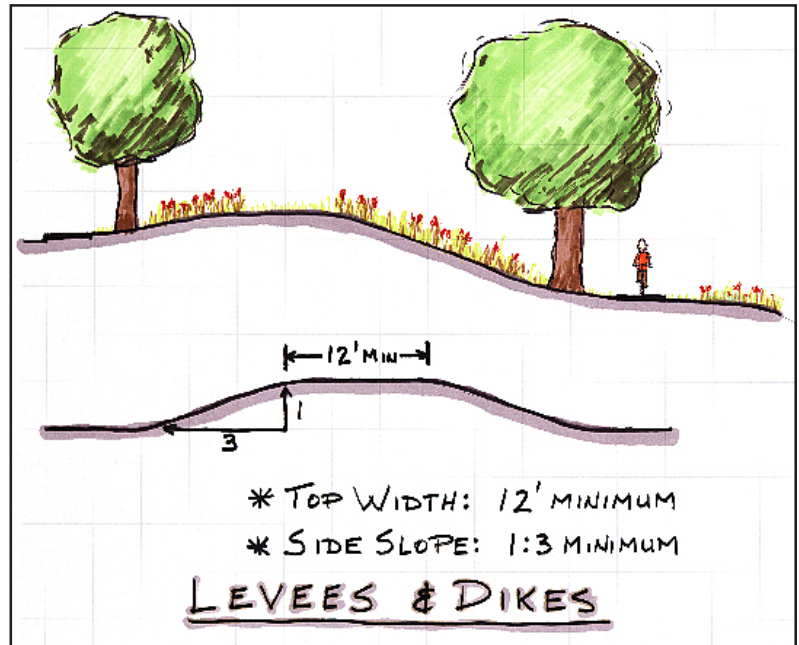
### Floodwalls:

- Add Richness of Material Detail
- Provide Rigid Definition of Space
- Conserve Space in High Density Situations
- Are Well Suited to Constructed Landscapes
- Tend To Be More Expensive
- Are Commonly Used in Combination with Levees & Dikes





## Levees and Dikes

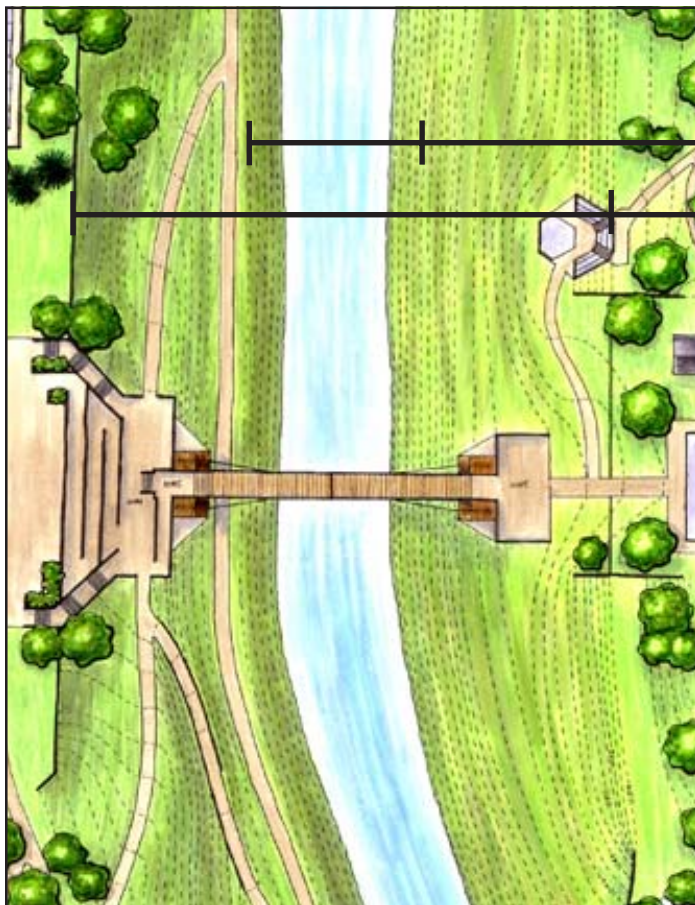
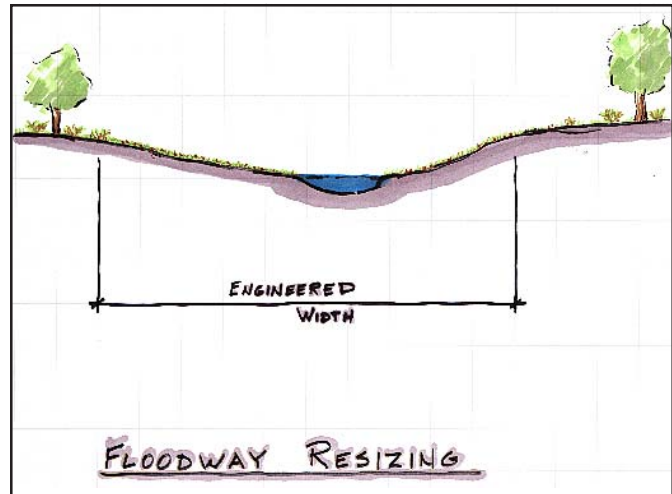


### Levees and Dikes:

- Can be Less Rigid & More Flexible in Defining Space
- Can be Organic in Form
- Occupy Significant Space
- Are Well Suited to Park & Naturalistic Landscapes
- Tend To Be Less Expensive



## Floodway Resizing



*Original Width*

*Engineered Width*

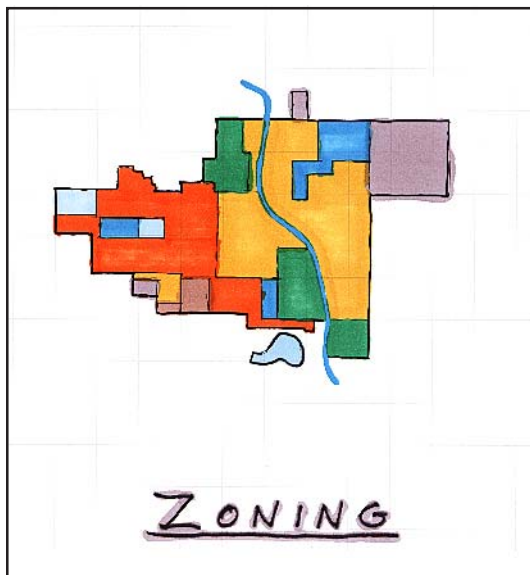
*Floodway Resizing:*

- *Creates Valuable Civic Open Space & Parkland*
- *Embraces the River as a Community Amenity*
- *Provides Recreational Opportunities*
- *Occupies Significant Space*
- *Is Well Suited to Park & Naturalistic Landscapes*





## Land Cover/Land Use Alterations - Zoning



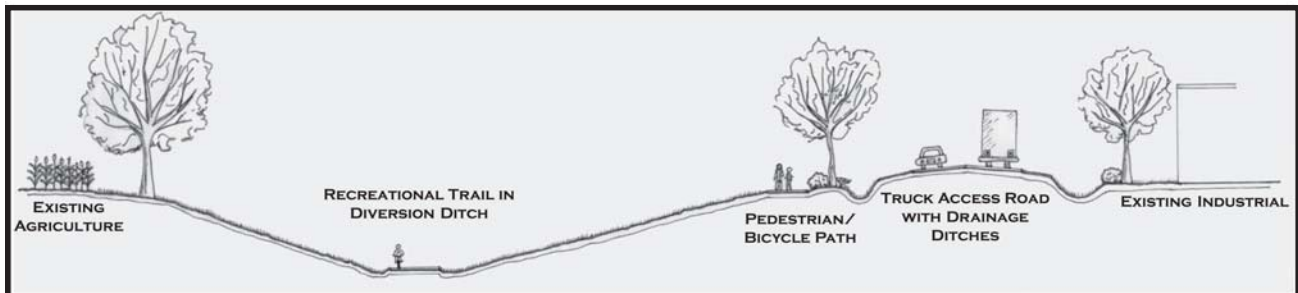
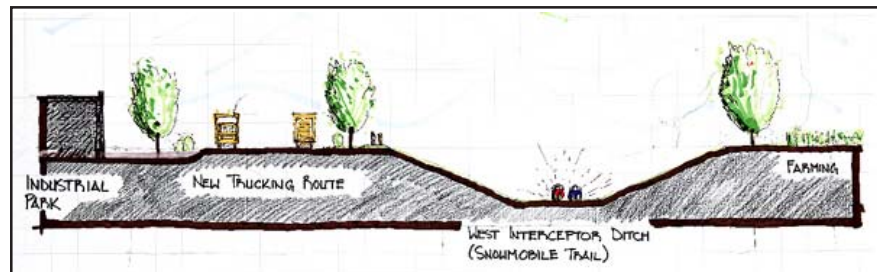
Land Use/Land Cover Alterations  
Through Land Acquisition & Buyouts

- Land Use/Land Cover Alteration:*
- Provides the Necessary Open Space for Other Components of Flood Mitigation
  - Minimizes the Physical & Financial Risk Associated With Potential Future Floods





## Overland Flow Interceptor Ditch

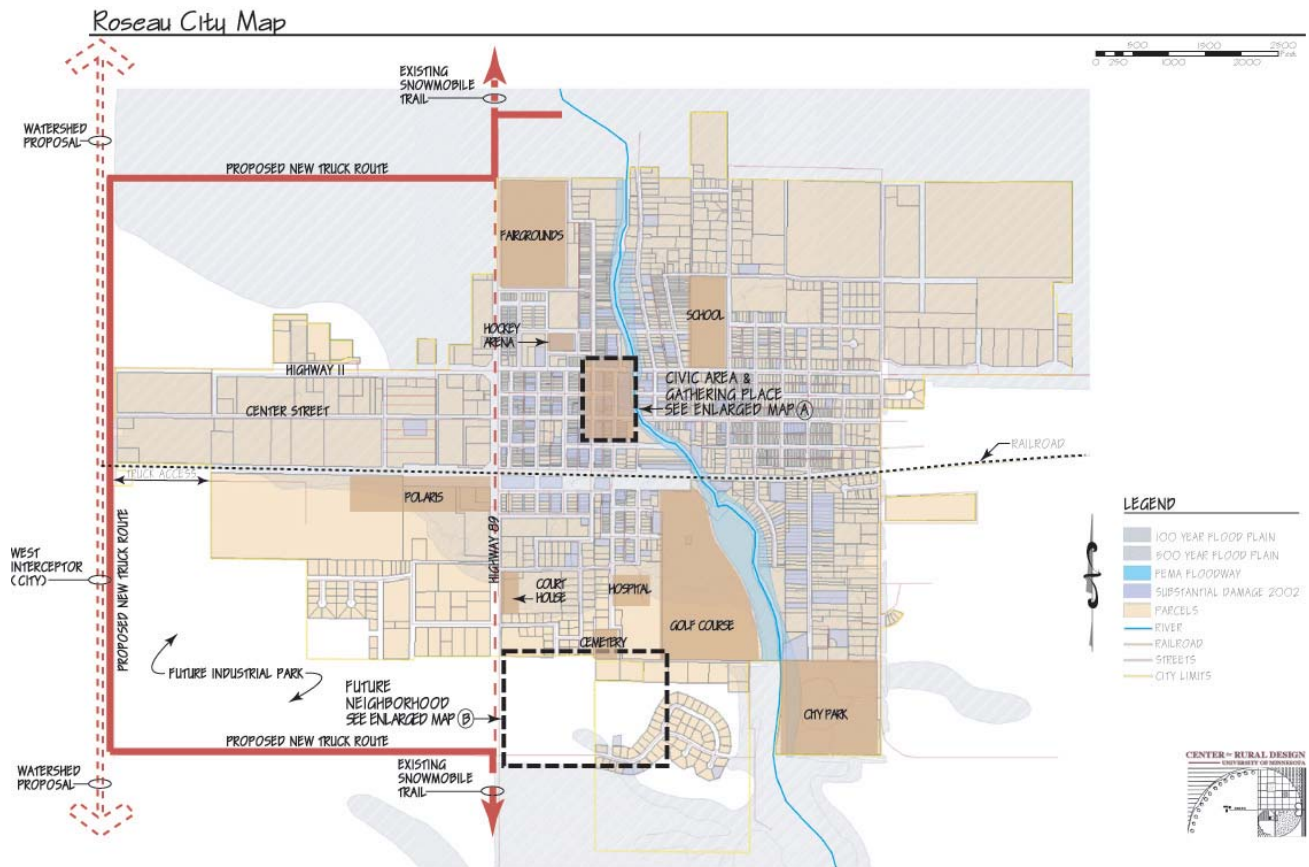


### *Principles of Diversion Ditch Proposal:*

- Divert Overland Flow From Existing Agricultural Area Away From Roseau
- Design Higher Elevation for New Truck Route to Act as a Dike to the West of Town

### *Diversion Ditch as Community Amenity:*

- Provide Recreational Opportunities
- Develop Alternate Truck Route Away From Town
- Provide Access to Existing Industrial Area



*Alternate Truck Route:*

- The proposed alternate truck route would serve the industrial area, as well as form a levee type structure to the west of town.



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### ***Resources:***

Army Corps of Engineers

<http://www.usace.army.mil/public.html#Flood>

Barr Engineering. Preliminary Draft: Flood Hazard Mitigation Plan, Roseau, MN. October 2002.

City of Roseau. Roseau River Watershed Flood Mitigation Plan. Working document.



*Recreating the Civic Heart of the Community and  
Downtown Redevelopment*





## *Recreating the Civic Heart of the Community and Downtown Redevelopment*

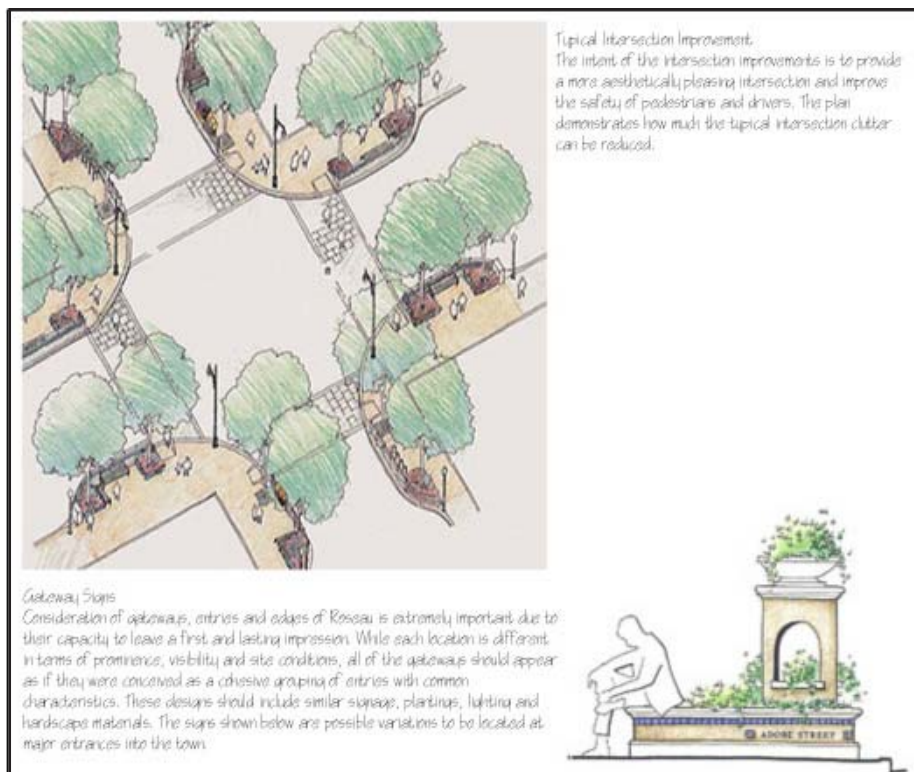
Extensive flood damage to City Hall, the Police Station and Library as well as downtown infrastructure create an opportunity to redefine the heart of the City of Roseau through design and construction of new public buildings and gathering places. Maintaining community institutions such as libraries and museums and government buildings in the downtown brings a constant stream of people into the core of the City and promotes a sense of civic engagement and community identity. Public amenities such as parks and trails celebrate the River and connect neighborhoods to the River and downtown areas. Shopper friendly features such as wide sidewalks where people can stop and visit and look in shop windows, and benches and other features where people can sit all promote a downtown where people want to be. Trees and lower scale lighting provide definition to downtown streets and create an inviting atmosphere.

Elements promoting a shopper friendly atmosphere include:

- Pedestrian Scale
- Downtown Music
- Comfortable Lighting
- Perceptually Narrower Streets
- Street Trees
- Angled Parking
- Pedestrian Oriented Street Signs
- Pedestrian Friendly Intersections

### Downtown Significance

- Preservation of Historic Architecture
- Strong Connection to Civic Plaza/  
Government Center
- Hierarchy of Intersections to Identify “Heart of the City”





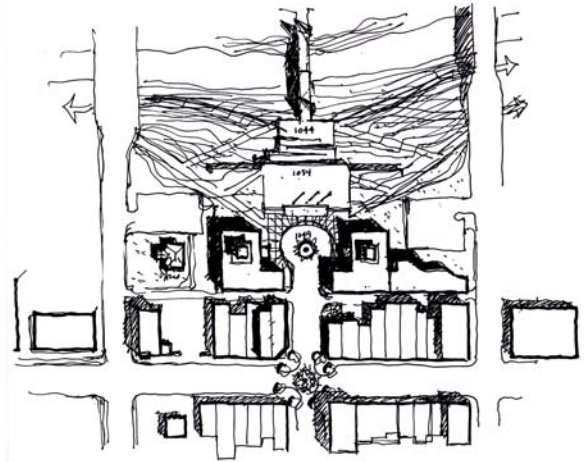


## *The Vision*

*A revitalized downtown, vibrant and active, which provides a pleasant and desirable place for the region's residents to gather, shop, and entertain themselves.*

### *Suggested Actions:*

- *Create a hierarchy of intersections to guide visitors to the Civic Heart of Roseau*
- *Incorporate actual or 'visual' bumpouts at street corners to slow traffic*
- *Use paving patterns to create gateways*
- *Street trees soften the streetscape and invite pedestrians*





## *Recreating the Civic Heart of the Community and Downtown Redevelopment*

### *Creating a New Civic Space and Public Buildings*

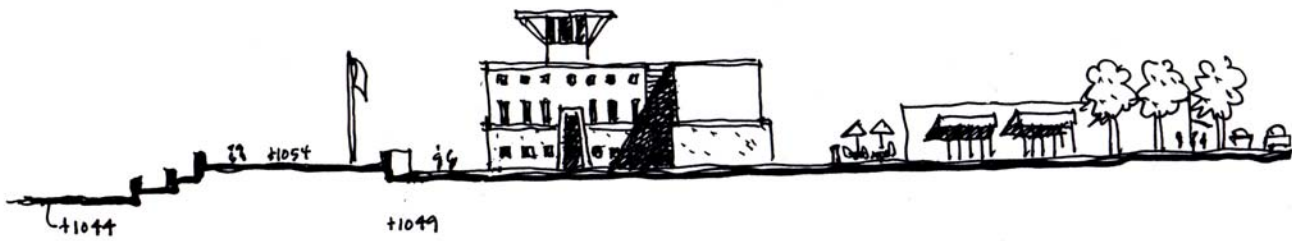
#### *Suggested Actions:*

##### *2nd Street Looking South*

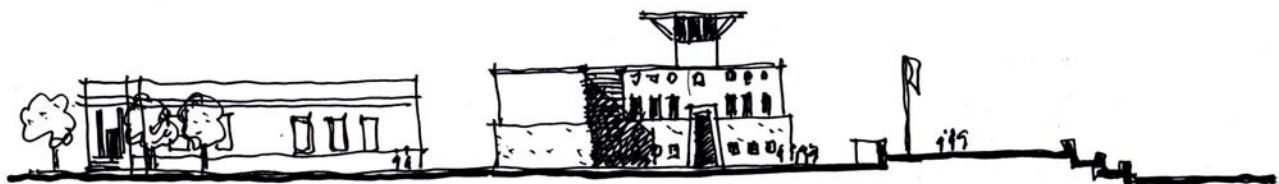
- Create new combined library and museum with meeting rooms
- Provide outdoor seating
- Build new Scandinavian restaurant

##### *2nd Street Looking North*

- Build new city hall
- Create gathering plaza at top of levee, the Nordic Plaza



*2nd Street looking south*



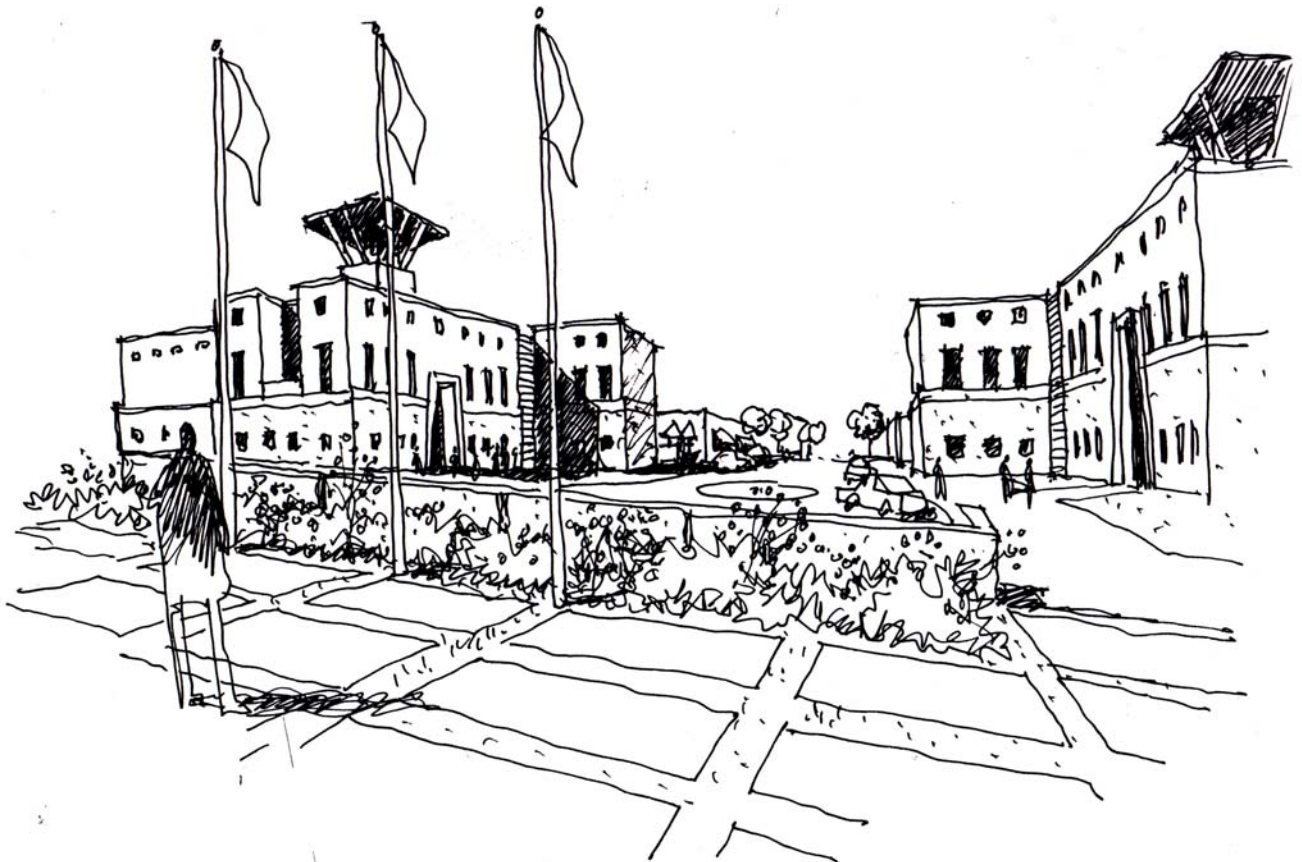
*2nd Street looking north*





*Roseau's new civic plaza, "The Nordic Plaza"*

*The new Nordic Plaza will serve as a gathering place for public events. It will sit at the heart of a revitalized downtown, serve as a focal point and gathering place, and celebrate the spirit of the people of Roseau.*



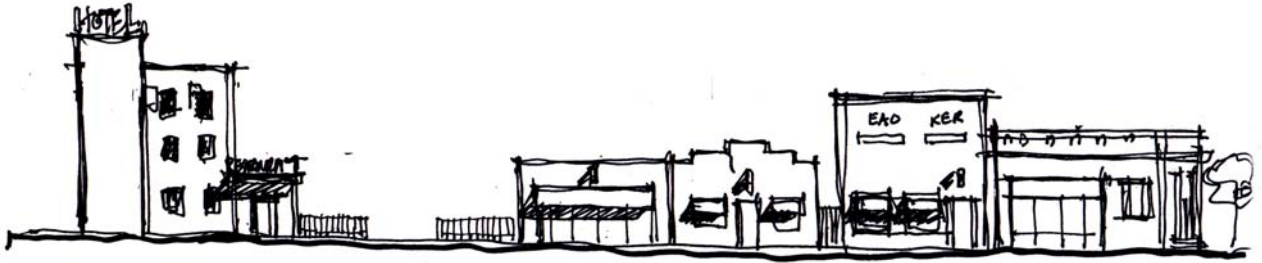


## *Recreating the Civic Heart of the Community and Downtown Redevelopment*

### *Main Street Looking East*

#### *Suggested Actions:*

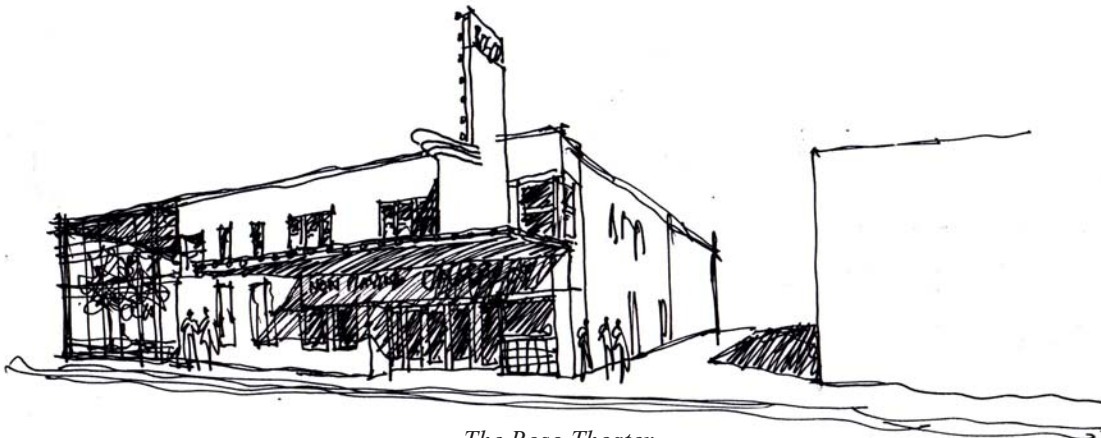
- Upgrade hotel
- Add canopy with restaurant sign
- Add new signage and awnings to existing buildings
- Restore wood false front for historic character
- Maintain historic buildings



*Main Street Looking East*

### *The Theatre: A Multi-purpose Community Venue*

- Create a winter garden as the theatre lobby and possible teen center
- Restore the Roso Theatre with multiple uses such as a restaurant, teen center, and community theatre venue in mind



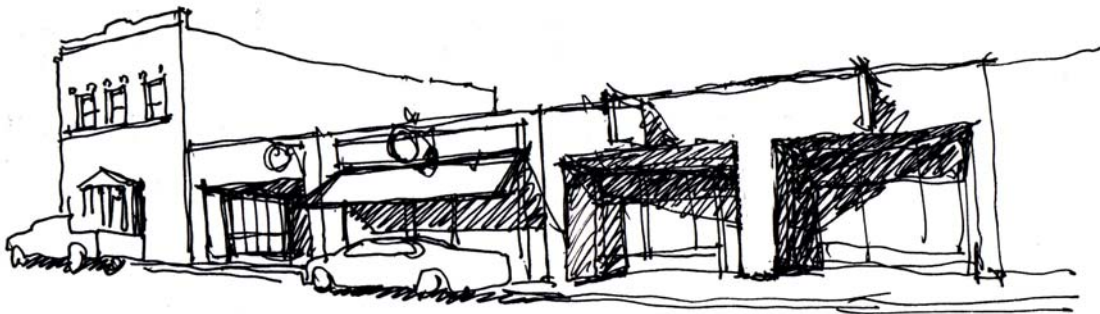
*The Roso Theater*



## *Restoring, Replacing or Improving Structures and Promoting a Sense of Place*

### *Suggested Actions:*

- *Maintain or repair historic architecture where possible*
- *Flat or cantilevered signs and awnings promote pedestrian scale*
- *Extend canopy over sidewalk or recess entryway into building*
- *Emphasize use of roll-up awnings*
- *Promote more stylized signage on buildings*
- *Use open pane glass rather than glass block to allow views into and out of stores*



*Existing buildings on Main Street*

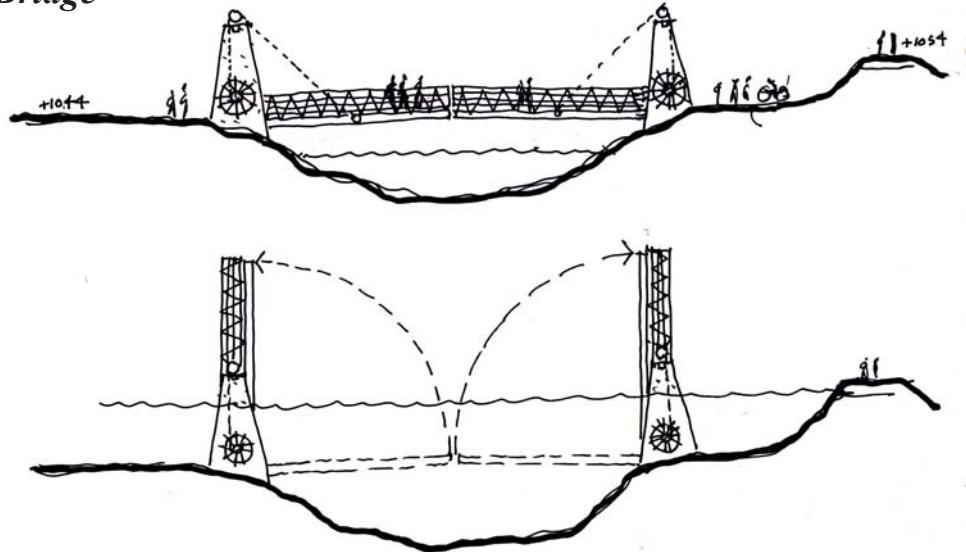






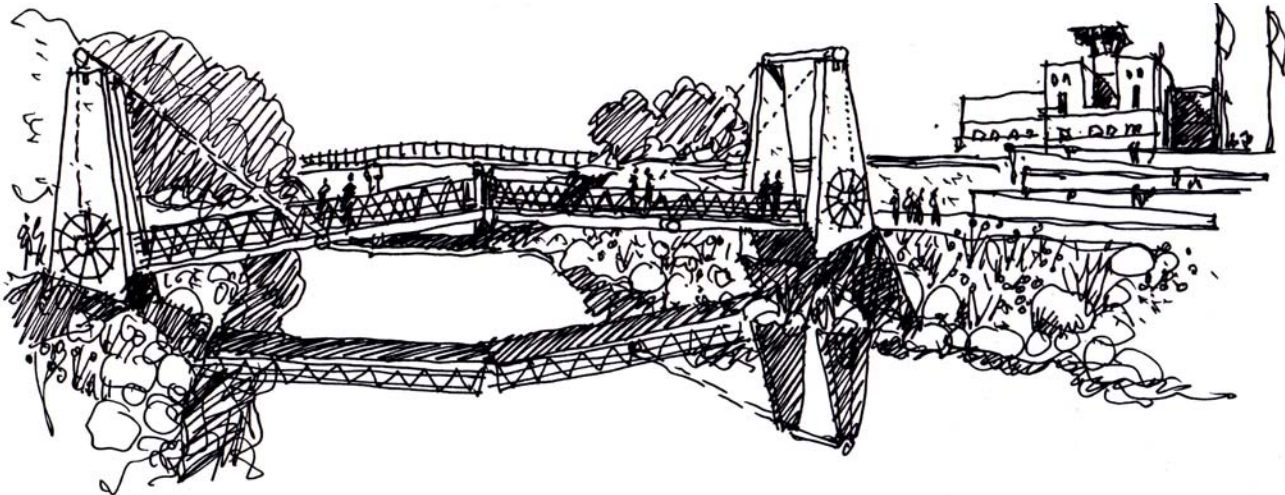
## *Recreating the Civic Heart of the Community and Downtown Redevelopment*

### *The Pedestrian Lift Bridge*



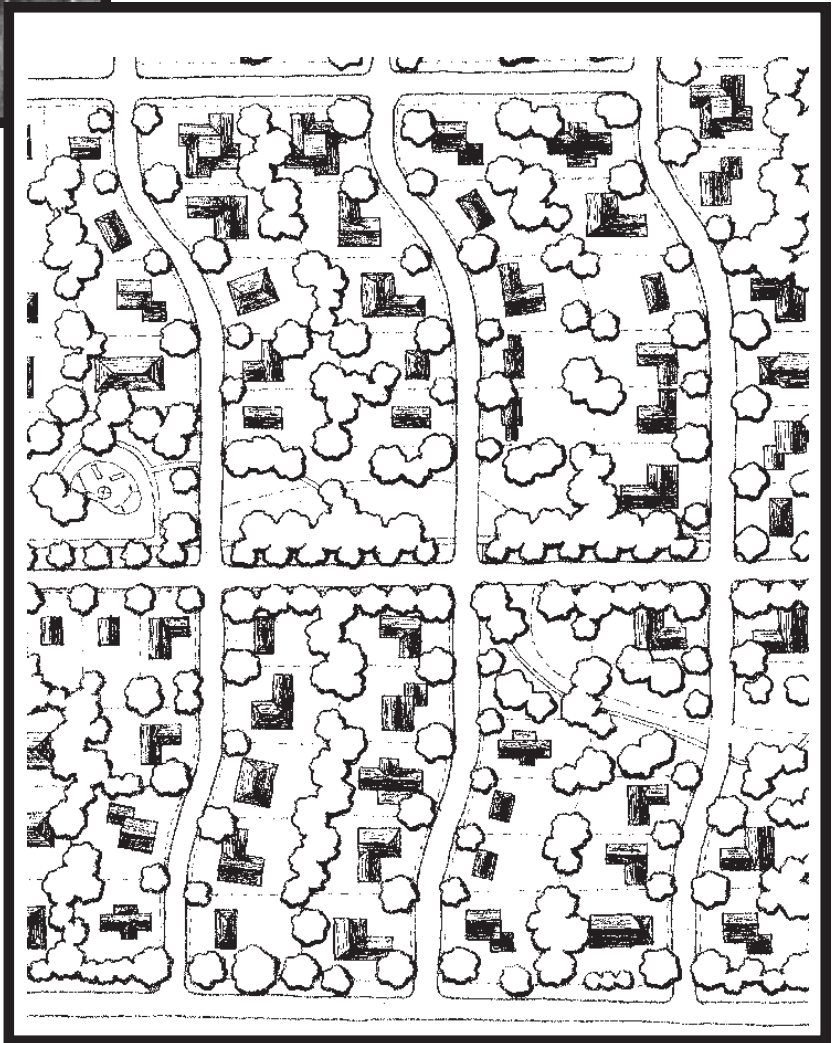
*Lift bridge at normal water levels (top)  
and at flood stage (bottom)*

The bridge will provide pedestrian access across the river, promoting connections to both sides. When water levels are low it will remain closed, but can be raised to accommodate high flood waters.



*Perspective view of the lift bridge connecting the gathering spaces*

# Housing Redevelopment





## *Housing in Roseau*

### **The Need**

Prior to the June 2002 Flood, housing vacancy rates in Roseau were at 1%. Multiple homes in the community and area were destroyed or severely damaged by the flood. As a result, the community faces not just housing needs, but also decisions related to newly vacant lots, construction challenges posed by flood plain compliance, how to connect new neighborhoods with the downtown and center of Roseau, and future housing and property loss related to flood mitigation.

Residents cite several different kinds of housing needed in the community: rental and home-ownership opportunities, lower cost housing for lower wage workers, senior housing including housing with supportive services, housing for people with special needs, and housing options for middle income families. Many residents expressed concern about the design and scale of a three story apartment building located off Highway 89 as too large and too suburban in feel for the community.

Several Townships and new developments within Roseau have enacted design standards that dictate acceptable housing types as well as minimum lot limits of 5 or more acres. In many cases, these design guidelines preclude some forms of manufactured housing, particularly “mobile homes”, and developers label them as not “high quality.” Unfortunately, these policies limit housing options for lower income people and their integration into the community.



Throughout the meetings in Roseau, residents expressed a desire to develop new neighborhoods that mirror the historic part of the community. Residents cite a mix of housing types and sizes, varied lot sizes, and neighbors who range in age, income and background as typical of any given block in these areas of town. Trees lining the streets, home and apartment gardens and bushes, public green space, pedestrian friendly streets, small scale buildings including rental options limited mostly to duplexes and four-plexes mixed in with single family homes were identified as desirable qualities for new neighborhoods.



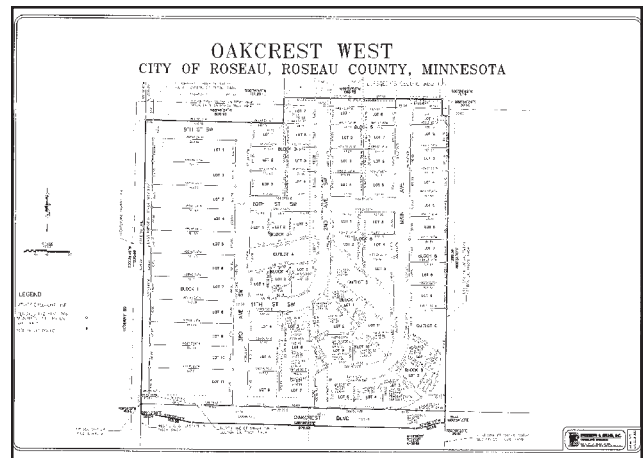


## *Housing and Development Options*

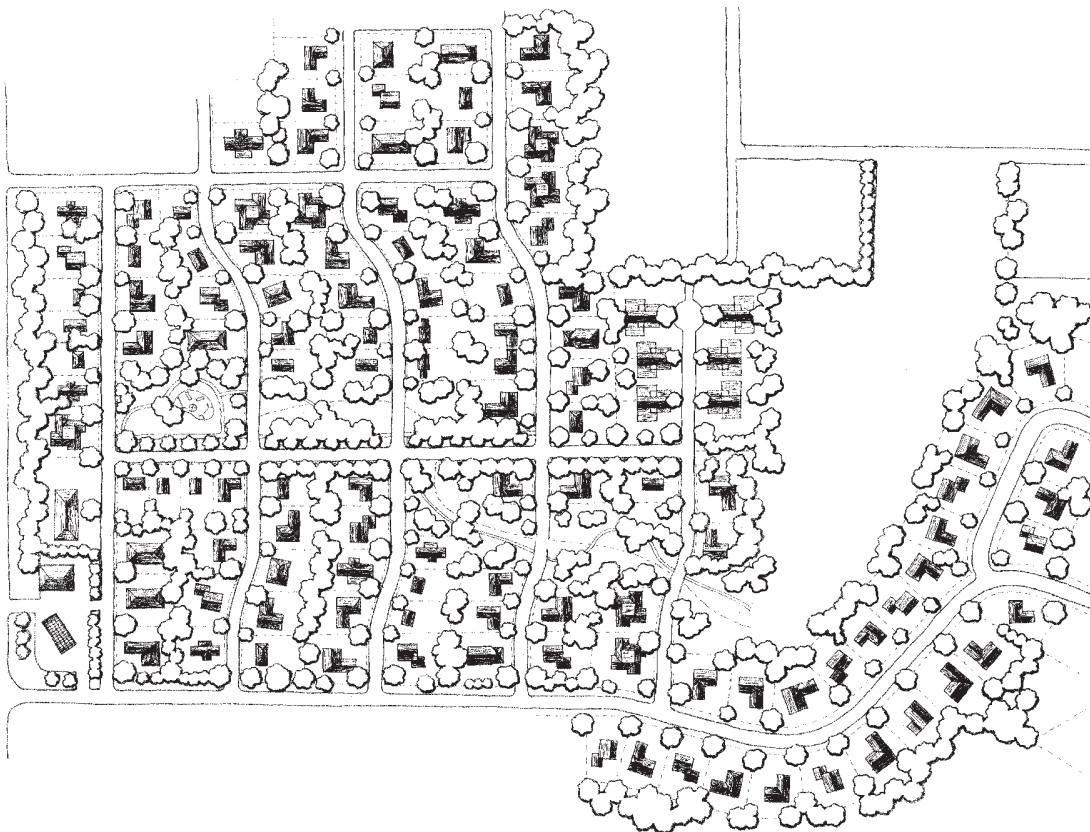
### **New Neighborhood Plan**

As a method to illustrate good site planning and neighborhood development options, Steve Roos of CRD designed a mock neighborhood plan based upon the existing Oakcrest West site.

This mock site plan has several key features that illustrate how Roseau can approach new neighborhood development, link existing neighborhoods and the downtown to developing areas, incorporate a mix of housing types and commercial properties, accommodate special needs and assisted living housing, and provide public green space.



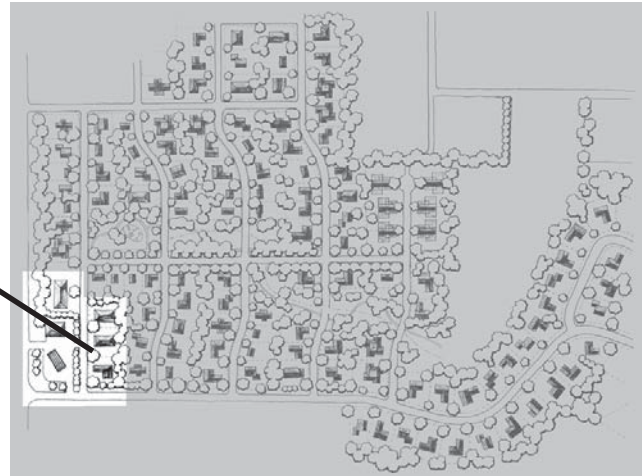
*Official plan for Oak Crest West*





## Housing Redevelopment

- Commercial and professional service properties are limited to a corner of the site located on Highway 89
- Commercial and professional service properties are connected to the entire site by walkable streets and trees and landscaping.
- Commercial properties are small (so as not to draw significantly from downtown businesses), but provide essential neighborhood services such as gas and convenience store options.



- A variety of housing types, sizes and costs are sprinkled throughout the neighborhood.

- Green space is a public amenity that links areas of the neighborhood and provides required drainage on the site.





- *Multi-family housing is limited in scale, sited throughout the neighborhood, and mixed in among single family housing.*



- *Assisted living is linked in scale and design with the neighborhood.*
- *(Consistent) landscaping and easy access to public green space further integrates assisted living/special needs housing and all residents across the neighborhood.*







## *Housing Redevelopment*

### *Incorporation of Manufactured Housing in New Developments: Clover Field Development, Chaska, MN*







- *Architectural designs are drawn from historic properties*
- *High quality construction and appearance is characteristic of today's manufactured housing*
- *Small lot design mirrors small town development and provides options for infill as well as lower cost housing*

Blending old and new housing styles



Chaska farmhouse  
"Upright & Wing" architecture

McKenzie Towne  
Small Lot (25') Model  
Calgary, Alberta, Canada



Clover Field - Small Lot (30') Homes



*Streetscape shows mix of housing types, sizes, and lots and landscaping that draws the neighborhood together.*



## *Housing Redevelopment*

*House panels are produced in a factory and trucked to the site where they are assembled. Simple assembly means lower housing costs. Interior features can be amended according to individual and family budgets and tastes.*

### Cost Effective Construction to produce affordable housing





*The Clover Field housing guide shows the relationship between lot size and housing costs and type of housing (single family, townhome, mixed use apartments and retail, apartments, and carriage houses) and housing costs.*

<b>Housing Styles</b>	<b>Estimated Price Range</b>
Single Family 30' lot	\$140,000 to \$170,000
Single Family 42' lot	\$160,000 to \$195,000
Single Family 52' lot	\$160,000 to \$250,000
Single Family 70' lot	\$250,000 to \$400,000
Stacked Flats - TH	\$120,000 to \$150,000
Live Work - TH	\$150,000 to \$160,000
Quads - TH	\$150,000 to \$180,000
Back to Back - TH	\$120,000 to \$170,000
Urban Row - TH	\$125,000 to \$160,000
Apartments over Retail	Rental (affordable)
Apartments	Rental (30% affordable)
Accessory Units	Rental (affordable)





## *Housing Redevelopment*

### *Community Land Trusts*

A community land trust achieves permanently affordable home ownership opportunities for low to moderate-income households by separating the ownership of the house and the land. In the United States and Canada, there are currently over 100 active community land trusts that provide affordable home ownership to households in their area.

A community land trust achieves permanent, long-term housing affordability through the use of a Ground Lease. CLT home buyers purchase only the house, and enter into a 99-year Ground Lease with the community land trust for the exclusive use of the land.

When a CLT homeowner decides to sell their home, the house is sold to another low-to-moderate income household for the original purchase price plus a set percentage appreciation in the home's value.

By limiting market appreciation, permanent affordability is ensured and initial subsidies invested in making the home affordable are spread across generations of low-to-moderate income home buyers.

Most importantly, this affordable housing option gives households that could otherwise only afford to rent the opportunity to take advantage of all of the benefits of home ownership — stability, security, tax benefits, and the opportunity to earn equity and appreciation in real estate that is not available through rental.



While land costs are generally low in Roseau and the surrounding area, a CLT could off-set the costs of construction associated with flood plain compliance and thereby allow more affordable development on the flood plain.



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## ***Resources***

### **Minnesota Housing Issues and Needs**

Minnesota Housing Partnership

<http://www.mhponline.org/>

### **Neighborhood Planning**

The Design Center for the American Urban Landscape at the U of MN lists an impressive list of publications on its website as well as links to other organizations.

[http://www.cala.umn.edu/design\\_center/dcaul.html](http://www.cala.umn.edu/design_center/dcaul.html)

The American Planning Association

<http://www.planning.org/>

### **Manufactured Housing**

An excellent article from the Housing Assistance Council newsletter on manufactured housing, changes in the manufactured housing industry, and policy challenges

<http://www.ruralhome.org/pubs/ruralvoices/VoicesSummer2003.pdf>

Clover Field Development: a general description of the project

[http://www.cloverfieldhomes.com/clover\\_field.php](http://www.cloverfieldhomes.com/clover_field.php)

A powerpoint presentation on the Clover Field project

<http://www.cura.umn.edu/programs/Housing-Forum/02-Mar/clover.pdf>

The link to the Manufactured Housing Developer for the Clover Ridge housing

<http://www.norsehomes.com/success.html>

### **Community Land Trusts**

Link to the national Institute for Community Economics which provides assistance to Community Land Trusts

<http://www.iceclt.org/>

Link to the Northern Community Land Trust in Duluth

<http://www.landtrustduluth.org/>

### **Funding**

Minnesota Housing Finance Agency

<http://www.mhfa.state.mn.us/>

Greater Minnesota Housing Fund

<http://www.gmhf.com>



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### ***Additional Resources:***

Biko Associates. *Model Sustainable Downtown Plan*. Hometown, Minnesota Inc. December 1998.

City of Roseau. *Roseau River Watershed Mitigation Plan*. Working document.

Minnesota Planning. *Planning Places with GIS*. June 2002. [www.mnplan.state.mn.us](http://www.mnplan.state.mn.us)

Minnesota Planning. *Under Construction: Tools and Techniques for Local Planning*. December 2002. [www.mnplan.state.mn.us](http://www.mnplan.state.mn.us)

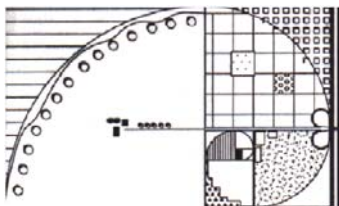
Minnesota Planning. *From Policy to Reality- Model Ordinance for Sustainable Development*. September 2002. [www.mnplan.state.mn.us](http://www.mnplan.state.mn.us)

Roseau Times-Region. *Roseau County Versus Nature*. 2002.





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