



report:

Benson Park
master plan

May 29, 2009

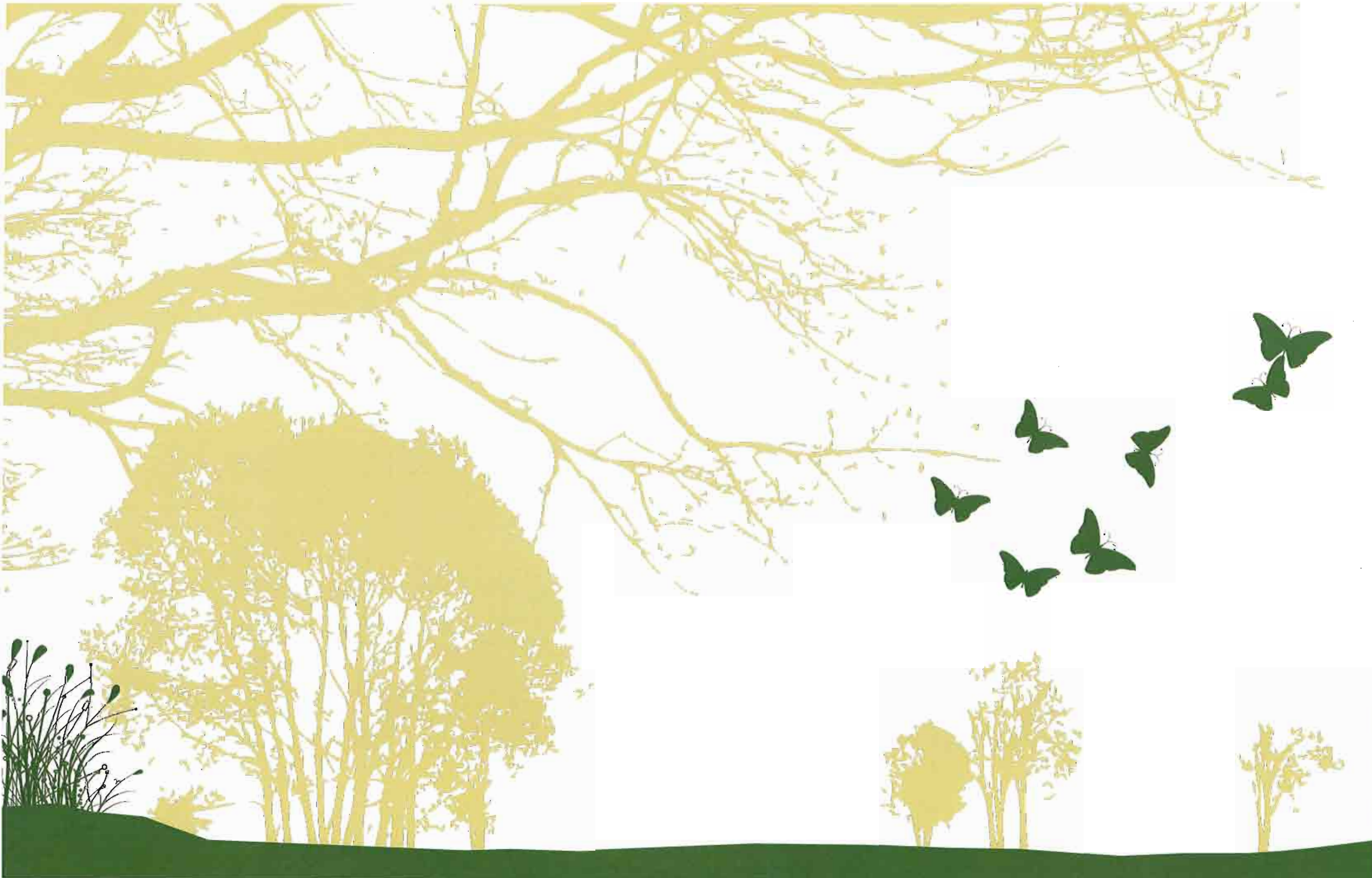




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Prepared for:



City of North Mankato, Minnesota

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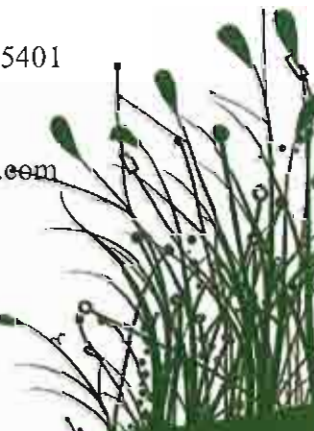
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Site Background Information



Introduction

Benson Park is a 69-acre regional park located at the developing edge of North Mankato. North Mankato, a city of 13,000, is located along the Minnesota River, an hour south of the Minneapolis/St. Paul metropolitan area.

Today, the park is an open space asset oriented to passive uses such as walking, informal picnicking and bird watching. Much of the park, once used as agricultural land, is undeveloped, and therefore has yet to realize its potential as a primary community and regional destination.

This master plan will serve as a guide for long-term park development and management to create an engaging, first-choice destination for families and children wanting a natural resource focused recreation experience. The plan expands the range of passive uses in the park, establishes native habitats and introduces educational and interpretive components to become a first-class regional park.

as the state sales and use tax, and it is administered by the Minnesota Department of Revenue.

The revenues are intended to aid municipal and local projects including the development and improvements of regional parks. The city has programmed a portion of the revenues to fund projects in Benson Park over the next five years.

In the fall of 2008, City staff members and the Benson Park Sub-committee of the city's Parks and Green Spaces Committee, began the effort to define a vision and master plan for Benson Park. Their ideas and feedback are the primary focus of this plan.

History of the park

Benson Park was founded in 1997, when the city acquired the western 29 acres of the park, including a large regional storm water holding pond. Later, the city acquired 40 more acres to the east and, in 2003, improved the park with Ladybug Lake, pedestrian trails, benches, a drinking fountain, trash receptacles, landscaping and a parking lot.

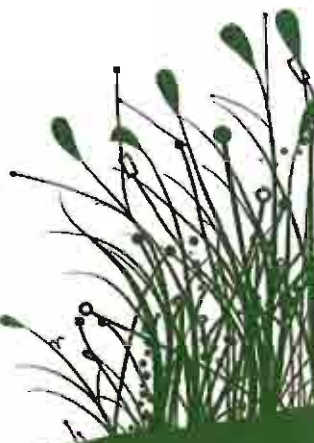
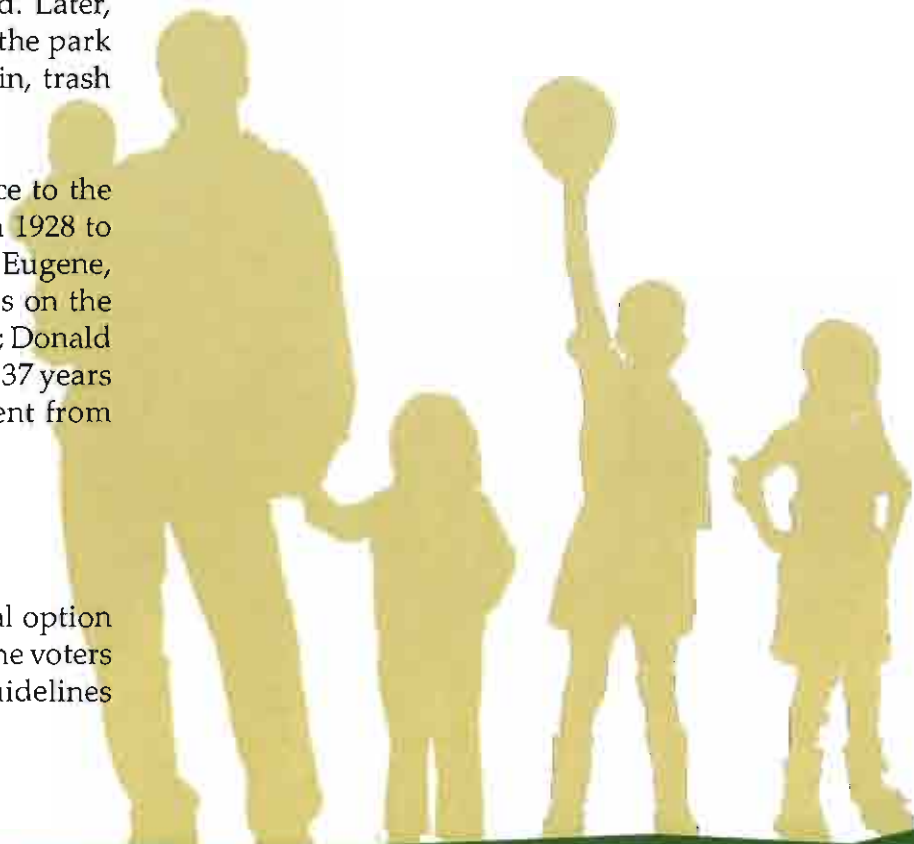
The park is named for the Benson family to recognize their service to the City of North Mankato. D. E. Benson was a Council Member from 1928 to 1931 and the Mayor of North Mankato from 1933 to 1939. His sons, Eugene, Donald and Leon were also exceptional civic leaders. Eugene was on the Planning Commission for over 30 years and a School Board Member; Donald was a Council Member from 1959 to 1964, a volunteer firefighter for 37 years and served as Fire Chief; and Leon was the Water Superintendent from 1963 to 1992.

Park development funding

On October 1, 2008 the City of North Mankato implemented a local option sales and use tax of one-half of one percent which was approved by the voters in November 2006. This local option sales tax follows the same guidelines



Existing stormwater pond at Benson Park.







Site context and analysis



Map location of Benson Park.



Oblique aerial of Benson Park.

Site context

Benson Park is located on a plateau above the Minnesota River on flat open land. East of the park, wooded river tributaries flow to the Minnesota River. Pre-settlement, the site was part of the vast prairie ecosystem that covered much of Minnesota. With European settlement, the area converted to farmland.

Today, the park is surrounded by new residential developments ranging from single-family homes to medium density developments. To the south and east, there are light industrial facilities and a manufactured home park. Significant future residential and industrial development is anticipated to the north of the park.

Benson Park is one of 4 regional parks in North Mankato. Caswell Park is a high-quality sports complex, Spring Lake Park is a mix of active and passive activities including swimming, playgrounds, ball fields, skating and group picnic grounds and Wheeler Park includes basketball courts and a band shell. Benson Park is envisioned as a natural resource based park with an orientation to passive activities, and, when complete, will draw visitors from the greater region.

Existing trails along Timm Road, Carlson Drive, and Lor Ray Drive connect the park to residential neighborhoods and Caswell Park. Future trails will make connections to neighborhoods north of the park and will extend east and south of Highway 14.

Site analysis

The design team visited the park with City staff to review and analyze existing conditions. Base maps, surveys, natural resource information and aerial photographs were provided by the City. The information gathered was used to assess the physical and social character of the Park.

Benson Park's north edge is bounded by Timm Road which currently serves as the main park access. Carlson Drive bounds the southern edge. There are no adjacent roads to the east or west.

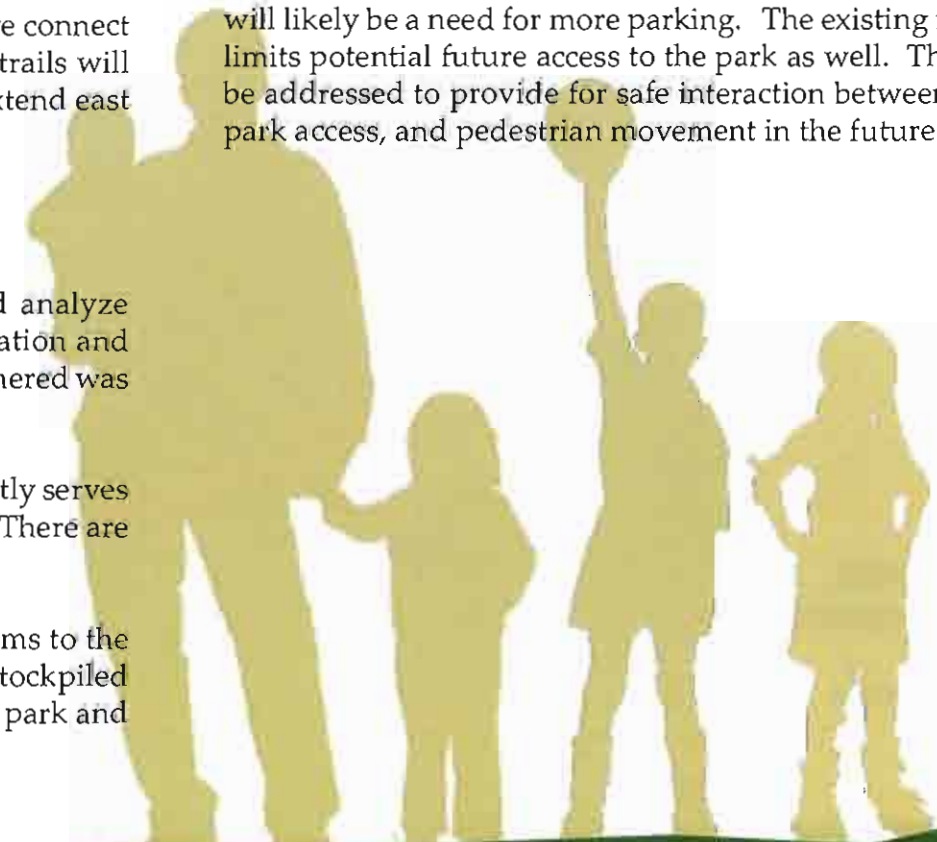
Today, the park is a relatively flat space with two bermed landforms to the west. In the northeast corner of the site, a significant amount of stockpiled dirt forms a large hill. This surplus earth is available for use in the park and

provides a great opportunity to shape new landforms. A long and narrow stormwater pond divides the park and bends at the southern edge. The area west of this linear storm pond is a treasured wetland space optimum for wildlife habitat. Another stormwater retention pond, Ladybug Lake, is located at the center of the park and is stocked for fishing.

Existing park assets, shown on the site analysis map, include:

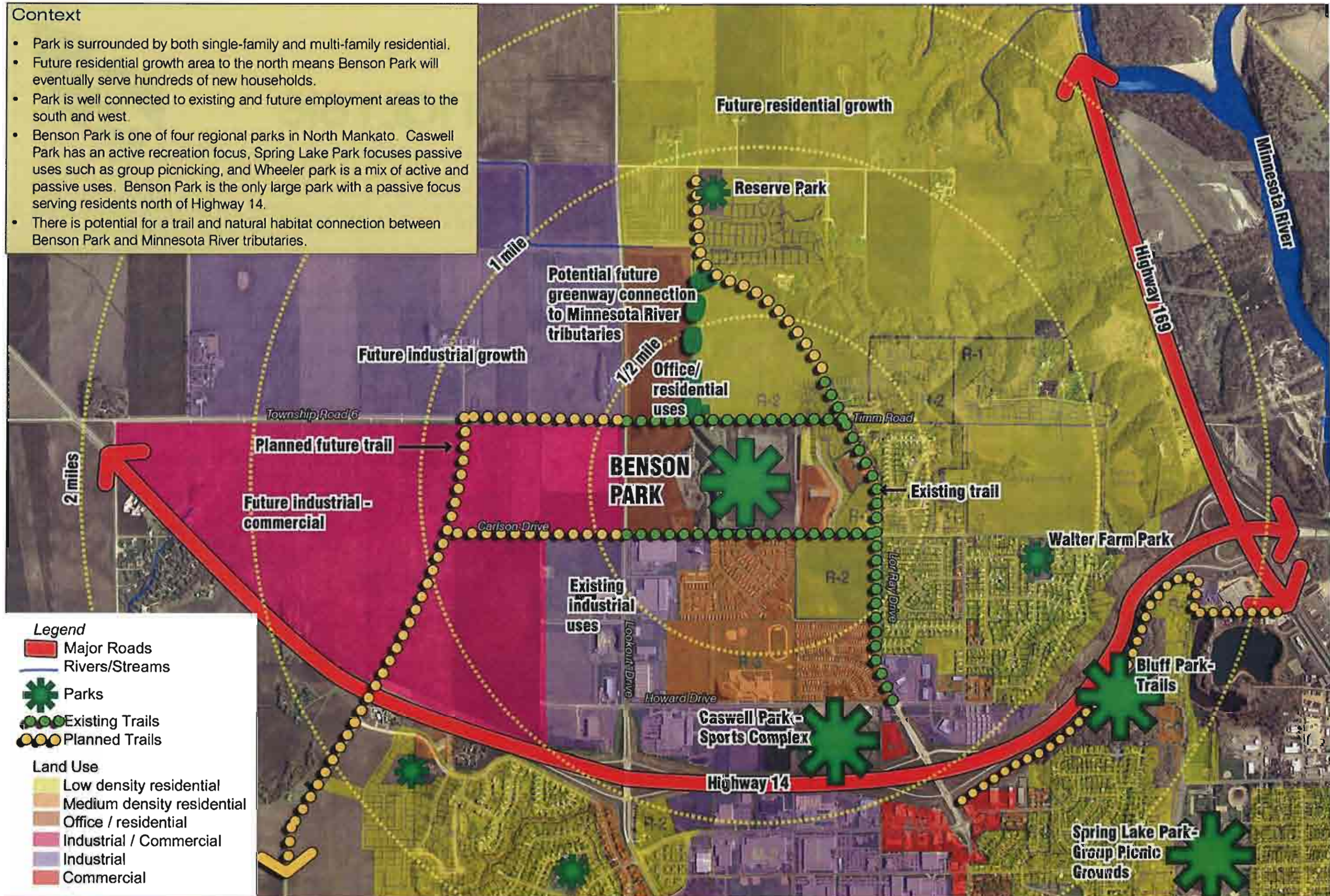
- A small parking lot and a picnic area with mature trees, picnic tables and grills at the southwest corner;
- Angled parking on the north side of the park on Timm Road;
- Bituminous trails, which are in excellent condition;
- Tree plantings, benches, and trash receptacles along the trails;
- A monument rock on the south side of the park;
- Ladybug Lake which is stocked for fishing.

A potential future issue is parking and park access on Timm Road. Existing angled parking on Timm Road satisfies current parking needs but cars backing into traffic may become a safety issue in the future, if traffic on Timm Road increases. In addition, as amenities are added to the park there will likely be a need for more parking. The existing median on Timm Road limits potential future access to the park as well. These issues will need to be addressed to provide for safe interaction between vehicular circulation, park access, and pedestrian movement in the future.



Context

- Park is surrounded by both single-family and multi-family residential.
- Future residential growth area to the north means Benson Park will eventually serve hundreds of new households.
- Park is well connected to existing and future employment areas to the south and west.
- Benson Park is one of four regional parks in North Mankato. Caswell Park has an active recreation focus, Spring Lake Park focuses passive uses such as group picnicking, and Wheeler park is a mix of active and passive uses. Benson Park is the only large park with a passive focus serving residents north of Highway 14.
- There is potential for a trail and natural habitat connection between Benson Park and Minnesota River tributaries.



Strengths

- Storm ponds act as focal points
- Two existing berms provide spectacular views
- Existing picnic area has mature trees and pond views
- Trails provide multiple loops of varying distances for walking
- Street frontage on Carlson Drive and Timm Road allow for high visibility and community access
- Park is currently used by nearby residents and office workers
- Because the park is largely undeveloped, there are few constraints to what it could be in the future

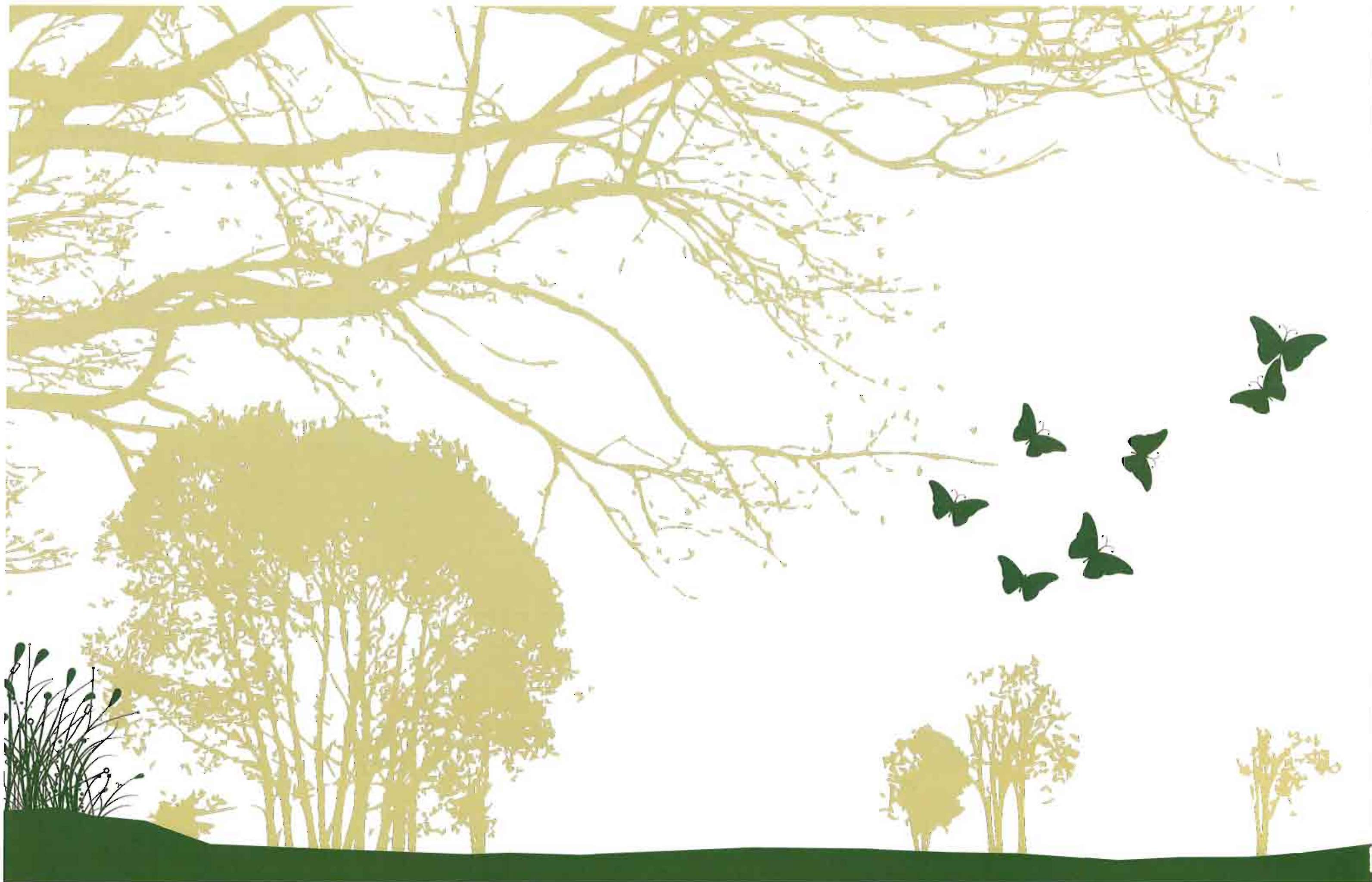
Issues

- Storm ponds act as focal points but have poor water quality
- Farmed area has few natural amenities
- Strong winds from the north / north-west

Opportunities

- Large size (70 acres) will allow park to evolve and develop to meet future community and neighborhood park needs for residents as well as become a premier regional park facility drawing visitors from the greater area
- Park could contain restored natural areas, additional water features as well as formal passive recreation such as trails, fishing, interpretive elements, art, children's play areas and perhaps some specialized uses
- Stockpiled dirt on in the northeast corner provides an opportunity for land shaping
- Improved water quality







Preliminary Concepts



To explore different approaches to the overall park theme, site circulation, access, function and aesthetics, the design team developed three preliminary design concepts. Each concept has a unique approach and is accompanied by precedent examples.

Concept 1: Natural Resources Park

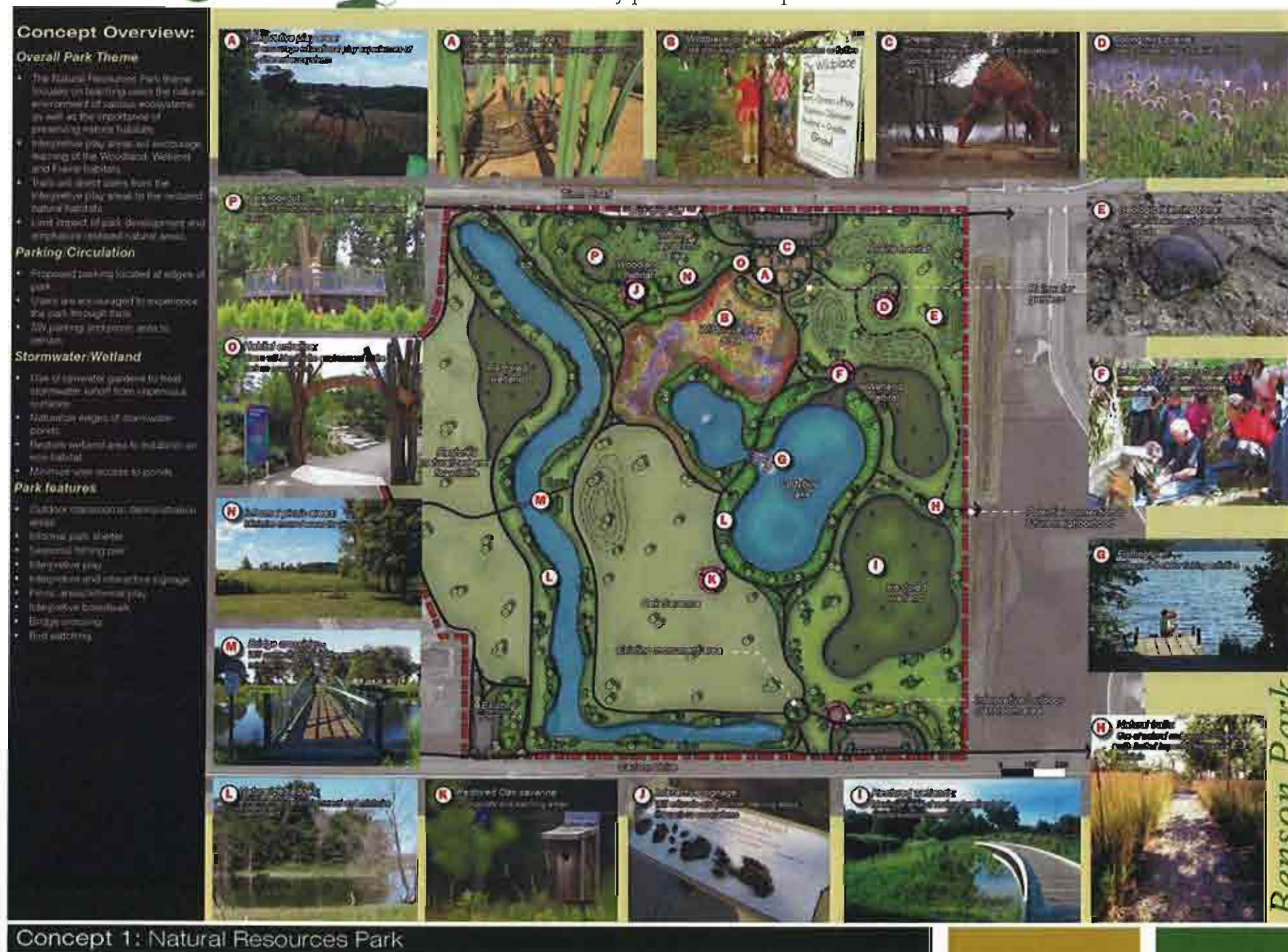
This approach allows visitors to develop personal relationships with the natural environment by introducing interactive and interpretive activities within restored natural habitats.

The concept places the active spaces at the edges of the park to preserve the interior for habitat restoration. Parking lots at the north and south edges of the park are immediately adjacent to the access roads. The main shelter is located near the north parking lot and anchors three distinctive interpretative play areas based on woodland, wetland and prairie ecosystems. Users will learn about typical plant and animal communities in each of these play areas. Each play area serves as a gateway to trails leading to a corresponding natural habitat.

The majority of the park will be restored habitats and Ladybug Lake and stormwater pond edges will be naturalized with native vegetation. Interpretive signage throughout the park incorporates exploration activities.

Strategies include:

- Interpretive play areas will encourage learning about natural habitats;
- Trails will direct users from the interpretive play areas to restored natural habitats;
- Limit impact of park development and emphasize the importance of restored natural areas and wildlife habitat;
- Fishing pier and fishing on Ladybug Lake.



Concept 2: Eco-Park

This concept focuses on demonstrating and teaching about sustainable practices. Educational play experiences encouraging environmental stewardship are incorporated into the park.

The eco-park experience starts with the park entrance drive, which is framed by bio-swales to help infiltrate stormwater run-off coming from impervious surfaces. The main activity areas are located in the core of the park adjacent to Ladybug Lake. The children's interpretive play area teaches the importance of water conservation and the use of recycled materials. Alternative energy sources such as wind and solar energy are used throughout the park and interpretive signage will educate users about sustainable development techniques.

Strategies included:

- The use of alternative energy sources;
- Play areas and structures made of recycled products and materials;
- A water feature to promote learning about water conservation and distribution;
- Year-round park activities: skiing, sledding, and skating;
- Use of permeable paving materials;
- Restore areas to natural habitats: wetland, oak savanna, prairie;
- Low-maintenance ground covers;
- Trail connections/ loop system throughout the park;
- Fishing on Ladybug Lake.

Concept Overview:

Overall Park Theme

- The Eco-park theme focuses on teaching users the importance of sustainable practices as well as incorporating educational play experiences to encourage stewardship of the natural environment.
- Use of alternative energy sources.
- Play areas and structures made of recycled products and materials.
- Water features to promote water conservation and water learning.
- Year-round use of park: water activities, skiing, sledding, and skating.
- Use of permeable paving materials.
- Restore areas to natural habitats: Wetland, Oak Savanna, Prairie, Low maintenance ground covers.
- Trail connections/ loop system throughout the park.

Parking/Circulation

- Proposed south parking to remain at the edge of park.
- North parking promotes a drive experience of the park and provides proximity to various park activities.
- SW parking and picnic area to remain.

Stormwater/Wetland

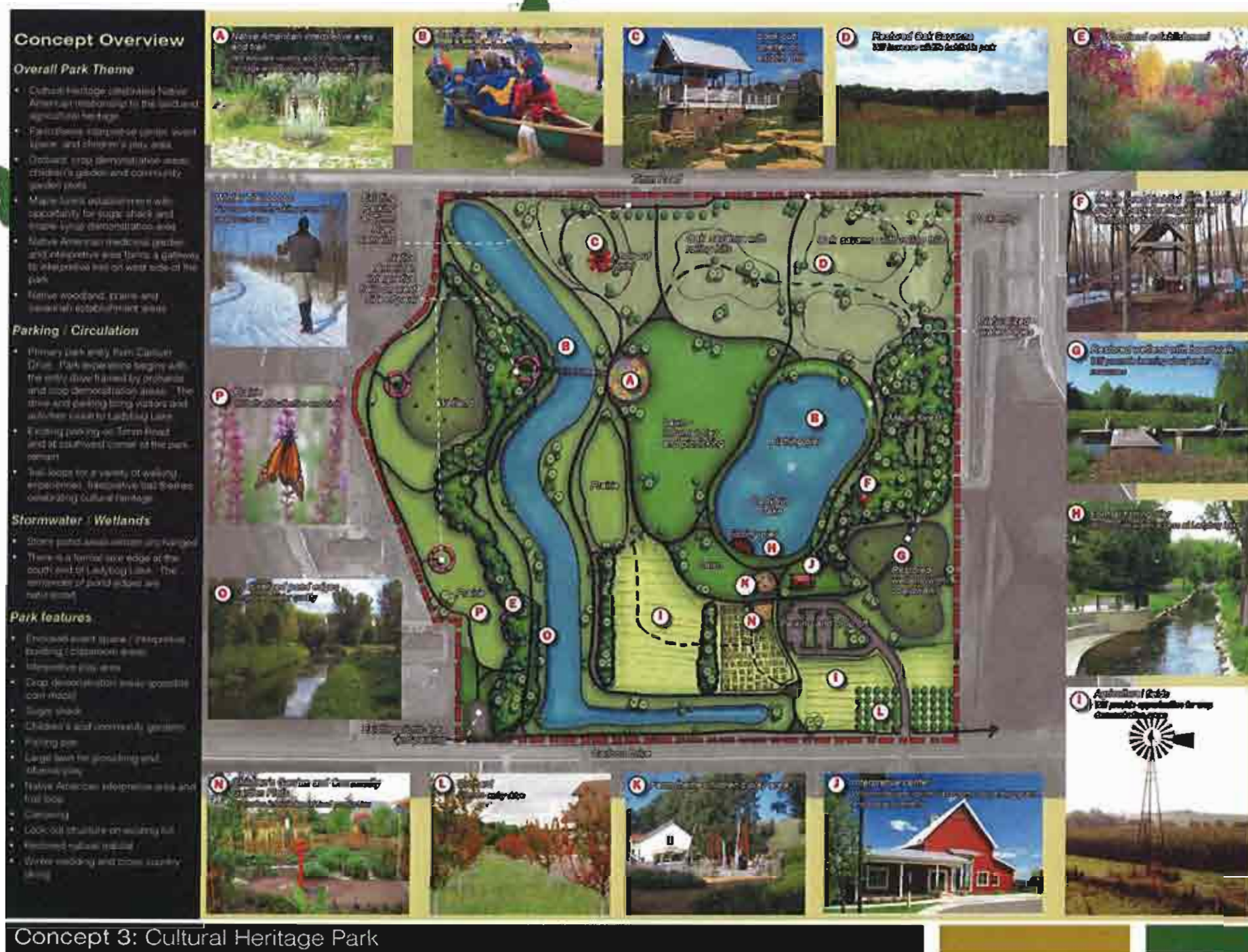
- West stormwater pond pool (be divided into multiple cells to improve water quality).
- Use of bio-swales to treat stormwater runoff from impervious surfaces.
- Naturalistic edges of stormwater ponds.
- Restore wetland area, bio-swales, and pond habitat.

Park features

- Outdoor (amphitheater, demonstration area).
- Amphitheater.
- Fishing pier.
- Water play.
- Interpretive play.
- Interpretive signage.
- Entitled park (mother could park in a warming house).
- Petting zoo/ informal petting.
- Interpretive boardwalk.
- No-mow (all trees).



Concept 2: Eco-Park



Concept 3: Cultural Heritage Park

The Cultural Heritage Park is a concept that celebrates the Native-American relationship to the land and North Mankato's agricultural heritage. The concept focuses on teaching users about the history of the land and the traditions of our ancestors.

This concept locates the main entrance of the park from Carlson Drive. The drive travels through orchard like setting and ends at a farm theme interpretive center and play area. The trails will display agricultural and Native-American traditions throughout the park.

Strategies include:

- Farm theme interpretive center, event space, and children's play area;
- Orchard, crop demonstration areas;
- Children's garden and community garden plots;
- Maple forest establishment with opportunity for sugar shack and maple syrup demonstration area;
- Native American medicinal garden and interpretive area forms a gateway to interpretive trail on west side of the park;
- Native woodland, prairie and savannah establishment areas;
- Fishing pier and fishing on Ladybug Lake;
- Large grass area for informal play.







master Plan

Preferred concept

After reviewing the three preliminary concepts, the Benson Park Subcommittee and city staff provided feedback to focus on the natural resources theme but incorporated some important elements from the other two preliminary concepts.

The vision

The vision for Benson Park is for a high quality destination to experience nature and a place for open-ended, visitor-driven discovery. When complete, the park will not only serve the community but draw visitors from the larger region.

Circulation and access

The plan concentrates park development at its edges, leaving the core of the park for habitat restoration. The primary activity area is planned off of Timm Road and a new entry drive, parking lot, and drop-off area provide a safe vehicular and pedestrian circulation. The parking lot is situated so it can be expanded as new programs develop and more parking spaces are needed.

At the south end of the park, an additional small parking lot provides access from Carlson Drive. The parking lot incorporates sustainable design features such as permeable paving, rainwater gardens, and native plantings. A small informal shelter anchors this entrance and serves as an interpretive space, as well as a resting area, for park users.

Active play

The main shelter, near Timm Road, is the focal point of the active play experience. Its design will complement the park's natural resources theme and at the same time incorporate sustainable construction practices and materials to lower operational costs.

The playground areas are adjacent to the shelter and integrate the character of natural habitats with challenging activities. Interpretive features educate visitors about the park's rolling prairie, oak savanna, woodland, and wetland habitats. At the core of the active play area, an interactive stream water

feature is set in a woodland environment and teaches about the importance of water conservation.

There is also a separate, fenced, natural play area targeted for early childhood programs. This space provides children with a much needed opportunity to explore nature with freedom in a safe area and will include informal play elements such as logs and boulders. In this area children are encouraged to learn about the woodland habitat and small groups can gather for informal presentations.

The restored habitats

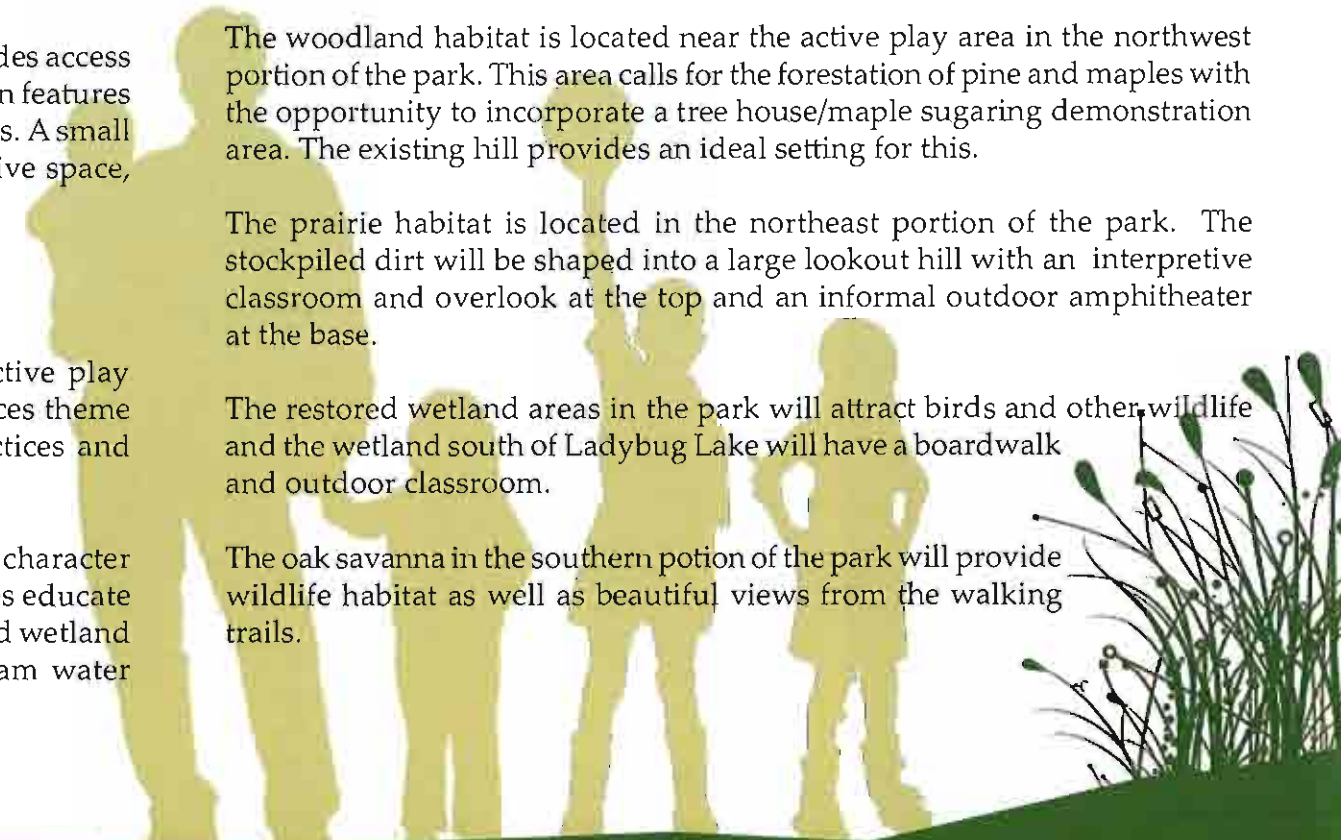
The natural areas in the park are envisioned as a mix of prairies, pine and maple woodlands, and wetlands. These habitats will be created and maintained by planting native species, prescribed burns and control of invasive species. The diverse wildlife community will be managed by proper habitat management, installation of nest boxes and population control of select species. Within each of the restored habitats, interpretive signage and informal outdoor classrooms will be strategically placed to take advantage of the restored features and to enhance the educational value of the various ecosystems.

The woodland habitat is located near the active play area in the northwest portion of the park. This area calls for the forestation of pine and maples with the opportunity to incorporate a tree house/maple sugaring demonstration area. The existing hill provides an ideal setting for this.

The prairie habitat is located in the northeast portion of the park. The stockpiled dirt will be shaped into a large lookout hill with an interpretive classroom and overlook at the top and an informal outdoor amphitheater at the base.

The restored wetland areas in the park will attract birds and other wildlife and the wetland south of Ladybug Lake will have a boardwalk and outdoor classroom.

The oak savanna in the southern portion of the park will provide wildlife habitat as well as beautiful views from the walking trails.



Concept Overview:

Overall Park Theme

- The Natural Resources Park theme focuses on teaching users the natural environment of various ecosystems as well as the importance of preserving natural habitats
- Interpretive areas will encourage learning of the Woodland, Wetland, Oak Savanna, and Prairie habitats and other natural resource opportunities
- Trails will direct users to the various restored natural habitats
- Active play include interpretive destinations designed to set the scene for open-ended, visitor-driven discovery and to put users in high quality places to experience nature.

Parking/Circulation

- Proposed parking located at edges of park. Main parking lot is located at the north end of the park and provides a safe circulation between vehicles and pedestrians
- Southeast parking lot provides an alternate access to the park
- Users are encouraged to experience the park through trails
- Southwest parking and picnic area to remain

Stormwater/Wetland

- Use of rainwater gardens to treat stormwater runoff from impervious surfaces.
- Naturalize edges of stormwater ponds to minimize maintenance
- Restore wetland area to establish wildlife habitat
- Minimize access to ponds

Park features

- Outdoor classrooms/ demonstration areas
- Formal and Informal park shelters
- Formal fishing pier
- Interpretive play and signage
- Natural play area
- Playground equipment
- Natural amphitheater
- Picnic areas/ informal lawn
- Interpretive boardwalk
- Bridge crossing
- Bird watching
- Year-round activities



A Active Play



Formal shelter with restrooms



Interpretive play area

B Tree house/ maple sugaring and sledding hill

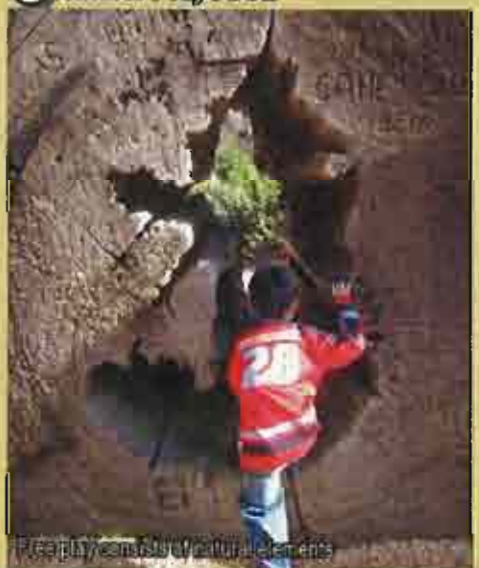


Maple forest habitat with working sugar shack for maple syrup demonstration programs could also serve as a tree house.



Opportunity to incorporate year round activities

C Natural Play Area



Play area with natural elements



Natural play area will allow users to learn about natural environment



Placement of natural elements will allow users to reconnect with nature

D Informal picnic/ lawn areas



Small mowed areas for picnic use and informal play

E Habitat gateway



F Stormwater structure

Stormwater structure will allow for disconnection of stormwater system and allow for stormwater retention on small pond



G Wildflower demonstration area



H Bridge crossing



I Oak Savanna habitat



J Rainwater gardens



K Overlook and outdoor classroom



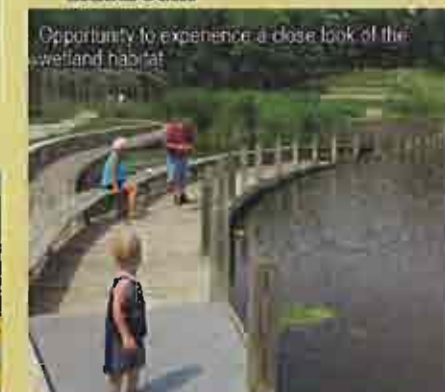
M Natural amphitheater



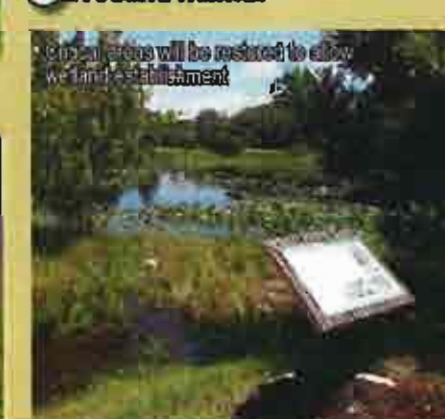
N Formal fishing pier



O Boardwalk and outdoor classroom



P Wetland habitat



Q Natural water edge



R Small shelter



S Use of pervious materials

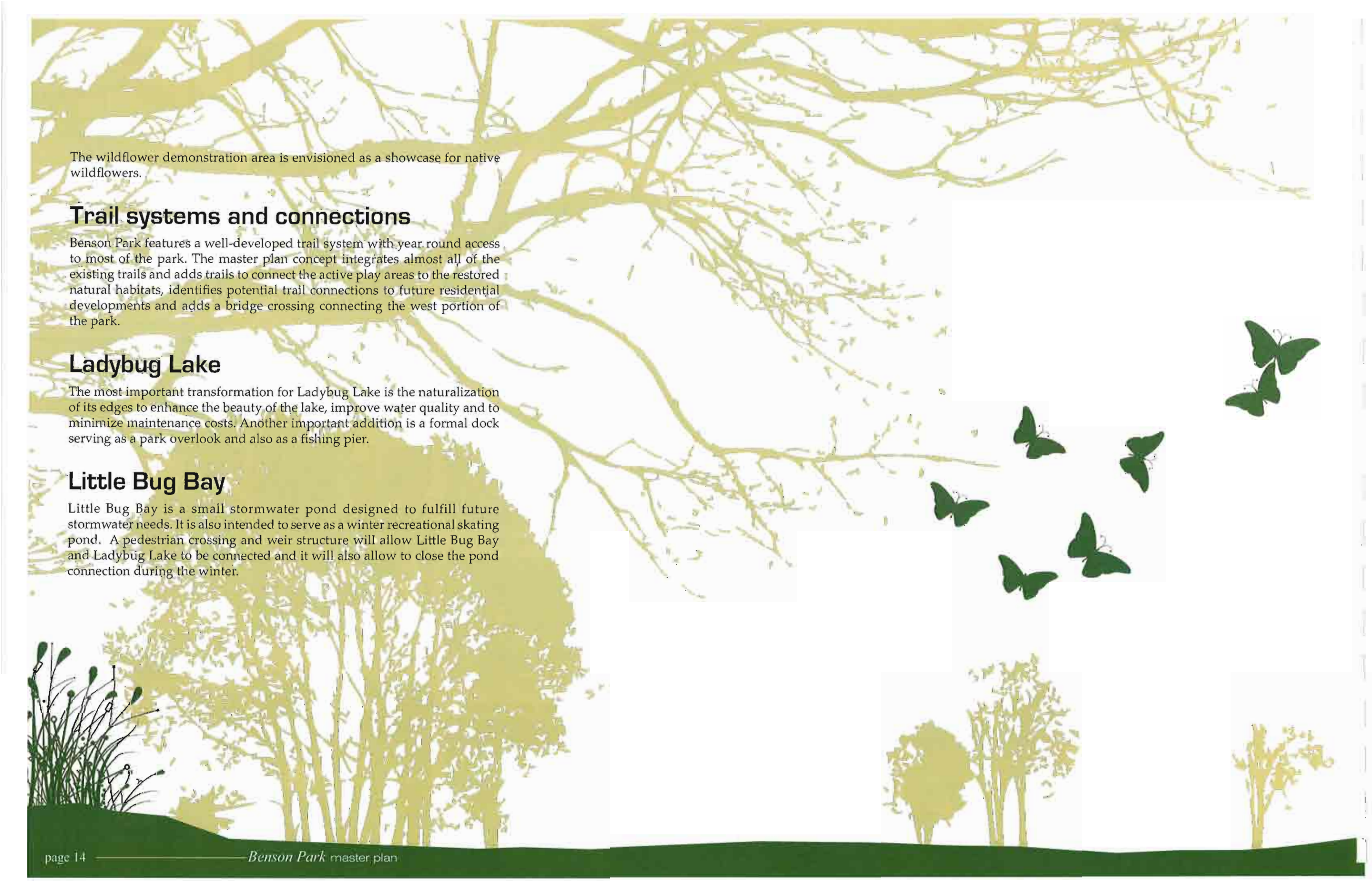


Some of the trails could also be constructed of pervious materials



T Interpretive signage





The wildflower demonstration area is envisioned as a showcase for native wildflowers.

Trail systems and connections

Benson Park features a well-developed trail system with year round access to most of the park. The master plan concept integrates almost all of the existing trails and adds trails to connect the active play areas to the restored natural habitats, identifies potential trail connections to future residential developments and adds a bridge crossing connecting the west portion of the park.

Ladybug Lake

The most important transformation for Ladybug Lake is the naturalization of its edges to enhance the beauty of the lake, improve water quality and to minimize maintenance costs. Another important addition is a formal dock serving as a park overlook and also as a fishing pier.

Little Bug Bay

Little Bug Bay is a small stormwater pond designed to fulfill future stormwater needs. It is also intended to serve as a winter recreational skating pond. A pedestrian crossing and weir structure will allow Little Bug Bay and Ladybug Lake to be connected and it will also allow to close the pond connection during the winter.



The playground area includes natural play equipment with swings, slides, and climbing features. It will also incorporate fully accessible interpretive play features.

The main shelter will be a beautiful structure with a natural character using high quality local materials. It will also include restroom facilities and could house the mechanical components from the interactive water play feature.

Bioswales will be placed adjacent to parking and driveway areas to cleanse stormwater runoff before it infiltrates.

Informal picnic/lawn areas will serve as a great place for gatherings and lawn games.

A gateway to the woodland habitat will serve as a welcoming feature and to help delineate the ecosystem transition.

The natural play area is a free play zone where users are encouraged to emerge in a woodland habitat. Surrounded by vegetation, boulders, logs, and stumps, users will play and learn about the establishment of small organisms.

Entry to the maple sugaring/tree house will serve as an opportunity for interpretive signage and resting point.

A combination of deciduous and coniferous trees will promote the establishment of wildlife and it will also provide shelter from the weather.



A small seating area will serve as a play watching area as well as an outdoor classroom for small groups.

The interactive water play feature is a meandering stream with natural elements and educational features to promote learning of water resources.

Turfed berms will incorporate play components and they will also serve as seating/viewing points to the pond.

Little Bug Bay will be carefully designed to complement Ladybug Lake and to serve as a recreational skating pond in the winter.

Active play area

A natural amphitheater consisting of a simple wood structure and natural berms will serve as a place for informal presentations, gatherings, and outdoor classrooms.

A gateway to the prairie habitat will serve as a welcoming feature and help delineate the ecosystem transition.

An intensive prairie restoration effort will allow the establishment of wildlife and to serve as an educational area of the prairie ecosystem.

Informal picnic/lawn areas will serve as a great place for gatherings and lawn games.

A wayfinding monument will welcome users to Ladybug Lake, as well as an informational sign of the diverse features of the park.

A gateway to the wetland habitat will serve as a welcoming feature and to help delineate the ecosystem transition.

Entry to the maple sugaring/tree house will serve as an opportunity for interpretive signage and resting point.

A wildflower demonstration area will enhance the beauty of the park. It will also invite users to learn about the benefits of using native plantings.



A pedestrian crossing and weir structure will allow Little Bug Bay and Ladybug Lake to be connected for future stormwater needs. The weir will also allow to close the pond connection during the winter for recreational ice skating.

The formal fishing pier made of high-quality materials will allow users to get direct access, fishing activities, and views of the Lake.

Natural edges around Ladybug Lake will be carefully planted to promote wildlife establishment and to help minimize maintenance costs.





Plan Initiatives/PHASING PLAN



Setting the stage

This master plan is intended to guide improvements in Benson Park over the long-term, 25 years or more. Recent investment and park improvements provide an excellent starting point for future development and existing Ladybug Lake, trails, wetlands and stormwater ponds will all be integrated with new improvements to realize the vision for the park.

Plan Improvement Areas

Since implementing the master plan is a long-term endeavor, elements have been broken down into discrete projects that can be incrementally implemented over time as funding becomes available. The park improvement areas are outlined below and shown on the graphic on the following page. Recommendations for projects to be implemented over the first five years follow.

- 1 North Park Access / Parking** includes: the park entry drive; park sign; drop-off; parking lot with lighting; landscaping; rainwater gardens; and trails.
- 2 Main Shelter, Playground and Picnic Area** includes: a shelter with restrooms and an open picnic pavilion; lighting; 2-5 and 5-12 playgrounds; a picnic area with benches, picnic tables, grills, and a water source; walks and trails.
- 3 Natural Play Areas**
 - 3a Wooded play area** with natural play and discovery elements, fencing, interpretive signage, and associated landscaping.
 - 3b Water play area** with a recirculation pump and filter, and a boulder lined water course, interpretive signage, and associated trails and landscaping.
 - 3c Little Bug Bay** with a pedestrian crossing, weir allowing the pond to be used for skating in the winter, and associated trails and landscaping.
- 4 Ladybug Lake Improvements** includes: a fishing pier; floating fountain and aerators; shoreline boulders and plantings; shrub and tree plantings; trails; benches, lighting; wayfinding node; and interpretive signage.

5 Outdoor Informal Amphitheater includes: earth shaping; a structure; landscaping; and trails.

6 Southeast Park Access includes: access drive; a 30-stall parking lot; lighting; rainwater gardens; landscaping; a small picnic shelter; trails; and signage.

7 Interpretation and Restoration Areas

7a Wildflower Demonstration Area includes: plantings; crushed stone trails; and interpretive signage.

7b Rolling Hills Prairie Habitat includes: earthworks (shaping the rolling hills); prairie seeding; an outdoor classroom and overlook; bituminous trails and interpretive signage.

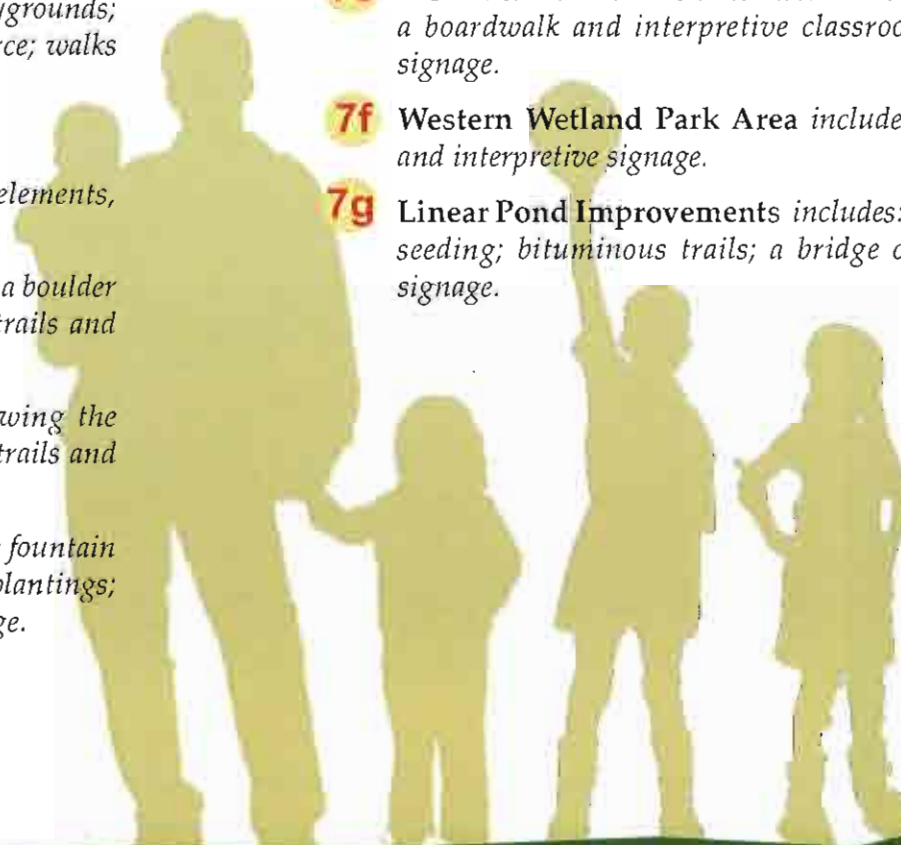
7c Woodland Habitat includes: tree and ground cover plantings; a sugar shack or tree house; bituminous trails; and interpretive signage.

7d The Oak Savanna Habitat includes: seeding; tree plantings; and interpretive signage.

7e Wetland Habitat includes: wetland shaping; plantings/seeding; a boardwalk and interpretive classroom/dock; and interpretive signage.

7f Western Wetland Park Area includes native plantings/seeding and interpretive signage.

7g Linear Pond Improvements includes: native shoreline plantings/seeding; bituminous trails; a bridge crossing; and interpretive signage.

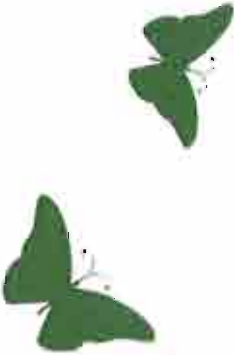


Proposed Park Improvement Areas:

1	NORTH PARK ACCESS/ PARKING	\$180,000
2	MAIN SHELTER/ PLAYGROUND/PICNIC AREA	\$415,000
3	NATURAL PLAY AREAS	
3a	Woodland Play Area	\$100,000
3b	Water Play Area	\$260,000
3c	Little Bug Bay	\$180,000
		\$540,000
4	LADYBUG LAKE IMPROVEMENTS	\$200,000
5	OUTDOOR INFORMAL AMPHITHEATER	\$65,000
6	SOUTHEAST PARK ACCESS	\$165,000
7	INTERPRETATION/ RESTORATION AREAS	
7a	Wildflower demonstration area	\$15,000
7b	Rolling Hills Prairie Habitat	\$60,000
7c	Woodland Habitat	\$50,000
7d	Oak Savanna Habitat	\$30,000
7e	Wetland Habitat	\$100,000
7f	Western Wetland Park Area Improvements	\$25,000
7g	Linear Pond Improvements	\$80,000
		\$360,000
	OTHER GENERAL PARK IMPROVEMENTS	\$110,000
	ESTIMATED PROJECT COST:	\$2,540,000*



*Estimated cost assumes construction contingencies as well as design and engineering costs. Estimation is based on cost reductions assuming city staff labor involved in the construction of all project areas.





Phasing plan

The following table identifies recommended projects and associated costs for the next five years. Because habitat restoration, particularly woodland establishment takes time, it is important to begin establishing native communities first. It is also a community priority to improve the park facilities, therefore, installing the playgrounds, main park building and picnic area is recommended in the first five years. The remaining park improvements are listed under future phases in order of priority, though these priorities may shift over time based on community priorities and funding availability.

INITIAL FIVE YEAR PROGRAM

YEAR		
1	Woodland Habitat	\$50,000
1	Rolling Hills Prairie Habitat (50%)	\$30,000
	1st. Year sub-total	\$80,000
	Contingency, Design and Engineering (20%)	\$16,000
		\$96,000
2	Rolling Hills Prairie Habitat (50%)	\$30,000
2	Playground	\$35,000
2	Lighting	\$15,000
	2nd. Year sub-total	\$80,000
	Contingency, Design and Engineering (20%)	\$16,000
		\$96,000
3	Playground	\$110,000
3	Main building	\$20,000
	3rd. Year sub-total	\$130,000
	Contingency, Design and Engineering (20%)	\$26,000
		\$156,000
4	Main building	\$125,000
	4th. Year sub-total	\$125,000
	Contingency, Design and Engineering (20%)	\$25,000
		\$150,000
5	Main building	\$55,000
5	Picnic area and site furnishings	\$45,000
	5th. Year sub-total	\$100,000
	Contingency, Design and Engineering (20%)	\$20,000
		\$120,000
FIVE YEAR TOTAL		\$618,000

FUTURE PHASES - FUNDING SOURCE TO BE DETERMINED

1	NORTH PARK ACCESS / PARKING	\$180,000
3	NATURAL PLAY AREAS	
3a	Woodland Play Area	\$100,000
3b	Water Play Area	\$260,000
3c	Little Bug Bay	\$180,000
7	INTERPRETATION/RESTORATION AREAS	
7a	Wildflower demonstration area	\$15,000
7d	Oak Savanna Habitat	\$30,000
4	LADYBUG LAKE IMPROVEMENTS	\$200,000
5	OUTDOOR INFORMAL AMPHITHEATER	\$65,000
6	SOUTHEAST PARK ACCESS	\$165,000
7	INTERPRETATION / RESTORATION AREAS	
7e	Wetland Habitat	\$100,000
	Western Wetland Park Area	
7f	Improvements	\$25,000
7g	Linear Pond Improvements	\$80,000
OTHER GENERAL PARK IMPROVEMENTS		
Lighting, trail link to eastern residential areas, benches and waste receptacles along trail		\$110,000
Other phases sub-total		\$1,510,000
Contingency, Design and Engineering (20%)		\$302,000
TOTAL FUTURE PHASES TOTAL		\$1,812,000

*Estimated costs assume city staff labor involved in the construction of all project areas.
** Estimated in 2009 dollars

Potential Funding Sources

Funding for the projects identified in the phasing plan for the first 5 years will come from the City of North Mankato local option sales and use tax approved by the voters in November 2006 and implemented by the City October 1, 2008. To make the vision for Benson Park a reality, other funding sources such as grants, partnerships and donations should be explored.

Grants

Grants are a way to make the City's dollars go further. Below is just a sample of some grant opportunities that may be available along with websites to visit for more information.

Legislative-Citizen Commission on Minnesota Resources (LCCMR)

website: www.lccmr.leg.mn/

The LCCMR makes annual funding recommendations to the Minnesota Legislature for special environment and natural resources projects, primarily from the Environment and Natural Resources Trust Fund. These recommendations are the product of a competitive, multi-step proposal and selection process.

The LCCMR developed from a program initiated in 1963. Since 1963, over \$600 million has been appropriated to more than 1,250 projects recommended by the Commission to protect and enhance Minnesota's environment and natural resources.

Minnesota DNR

website: www.dnr.state.mn.us/grants/index.html

The Minnesota Department of Natural Resources has grant programs in a variety of areas, some of which are listed below. Funded programs vary from year to year.

Environmental and Conservation Partnerships Grant Program to encourage the enhancement of fish, wildlife, and native plant habitats.

Minnesota ReLeaf Program to assist Minnesota communities with planting and caring for their trees, to increase energy conservation, to reduce atmospheric carbon dioxide and to achieve other environmental benefits.

- **Outdoor Recreation Grants** to increase and enhance outdoor recreation facilities
- **Fishing pier grants** to improve fishing opportunities, especially to meet the needs of children, the elderly and people with disabilities.
- **Local Trail Connections Program** to promote relatively short trail connections between where people live and desirable locations, not to develop significant new trails.
- **Regional Park Grants** to increase and enhance regional outdoor recreation facilities in areas outside the seven-county metropolitan area.

Minnesota Board of Water Resources

website: www.bwsr.state.mn.us

The Minnesota Board of Water and Soil Resources (BWSR) is a state agency dedicated to helping local governments manage natural resources. BWSR aims to improve local capability by providing technical, financial, and administrative assistance.

Minnesota Council on Foundations

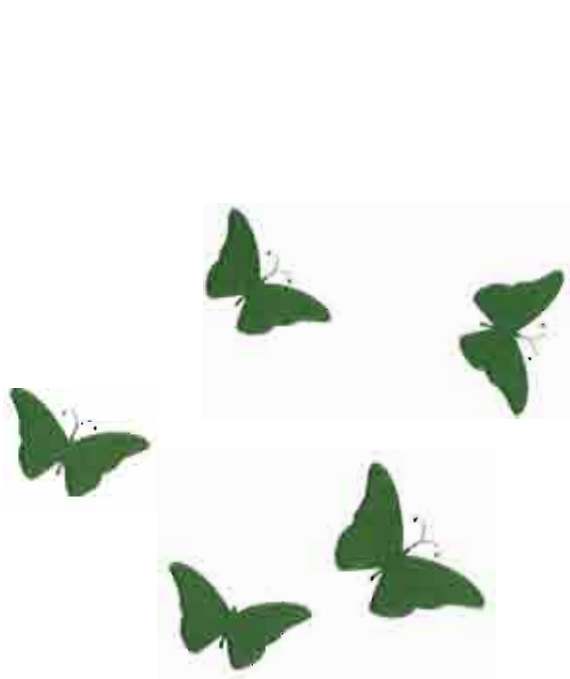
website: www.mcf.org

The Minnesota Council on Foundations produces the Guide to Minnesota Grantmakers, a directory of foundation and corporate grantmaking programs. They are dedicated to helping nonprofit organizations identify potential partners and financial supporters to help sustain and improve Minnesota communities.

Minnesota Department of Transportation

website: www.dot.state.mn.us

The Minnesota Department of Transportation has a funding category that focuses on projects that are historic, scenic or environmental in nature.



National Fish and Wildlife Foundation

website: nfwf.org/programs/grant_manage.htm

This Foundation has a variety of challenge grant programs that fund projects to conserve and restore fish, wildlife, and native plants and their habitats.

U.S. Environmental Protection Agency

website: www.epa.gov/enviroed/grants.html

The EPA's Office of Environmental Education supports projects that enhance the public's awareness, knowledge, and skills to make informed decisions that affect environmental quality.

Clean Water, Land and Legacy Amendment

On Nov. 4 2008, Minnesota voters approved the Clean Water, Land and Legacy Amendment to the Minnesota State Constitution which increased the general sales and use tax rate by three-eighths of one percentage point (0.375%) to 6.875% and dedicated the additional proceeds as follows:

- **33% to a newly created Outdoor Heritage Fund** to be spent only to restore, protect, and enhance wetlands, prairies, forests, and habitat for game, fish, and wildlife.
- **33% to a newly-created Clean Water Fund** to be spent only to protect, enhance, and restore water quality in lakes, rivers, streams, and groundwater, with at least 5% of the fund spent to protect drinking water sources.
- **14.25% to a newly created Parks and Trails Fund** to support parks and trails of regional or statewide significance.
- **19.75% to a newly created Arts and Cultural Heritage Fund** to be spent only for arts, arts education, and arts access, and to preserve Minnesota's history and cultural heritage.

The Legislature will make final funding decisions based on the merits of proposed projects. Projects can be proposed by a variety of organizations and agencies but only projects that meet the criteria established by law can be funded.

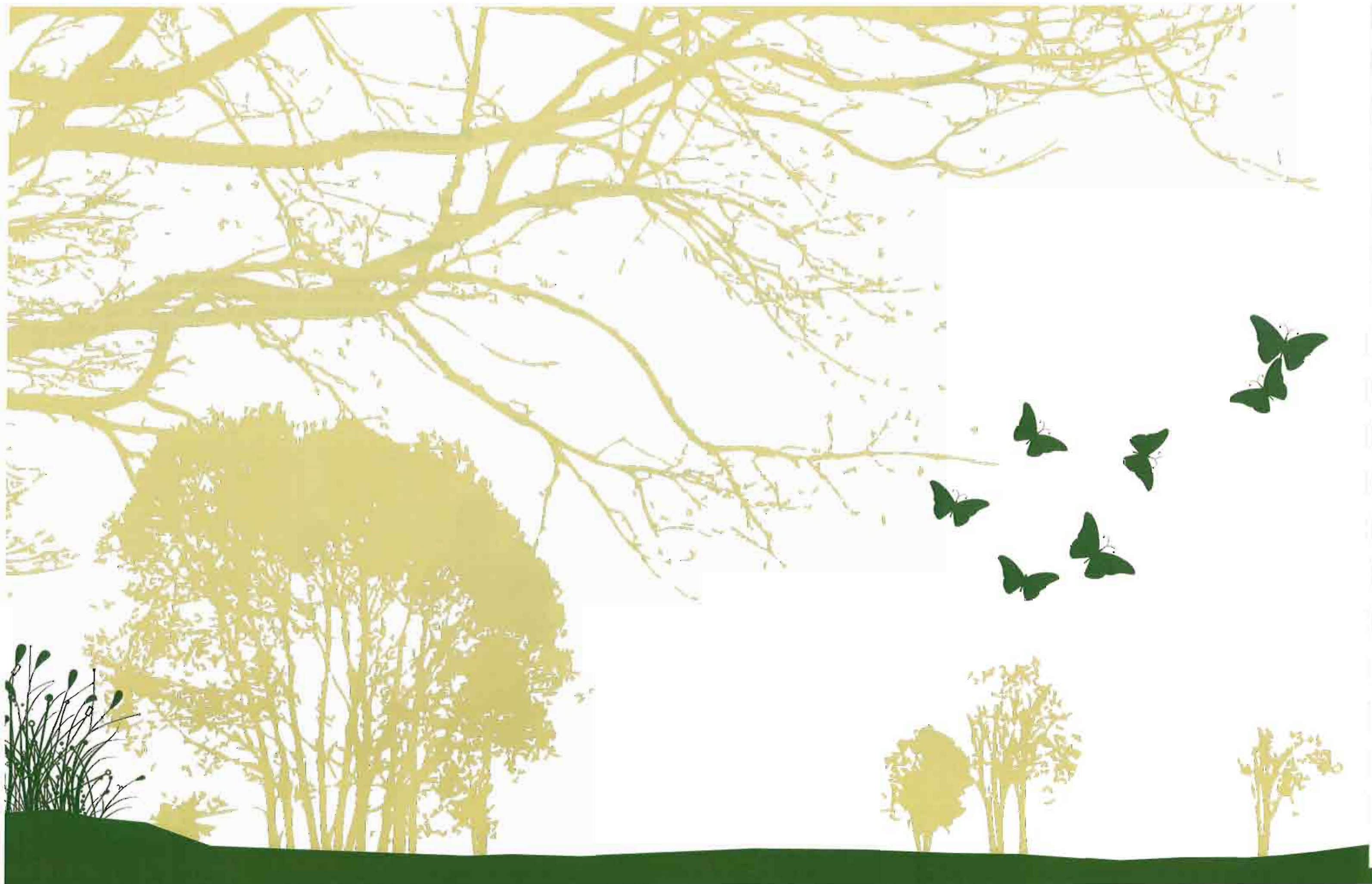
Partnerships

Partnerships with other organizations with similar goals are another way to achieve individual projects outlined in the master plan. Partnerships with Nicollet County, the Nicollet Soil and Water Conservation District, the School District and other interested organizations should be explored.

Donations

Private donations are another potential funding source. This may be financial donations from individuals, area corporations or donations of labor from organizations such as the boy scouts or a neighborhood group. Programs such as "buy-a-brick" where individuals or groups buy an engraved paver that is placed in the pavement in the park have successfully been used by many communities to raise money and enthusiasm.

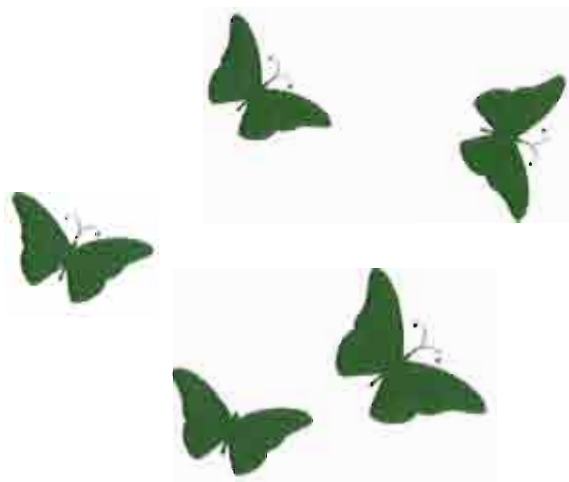






APPENDIX

Preliminary Cost Estimates Input Summary



Preliminary Cost Estimate

A preliminary cost estimate was prepared to help prioritize phasing of park improvements. All costs assume that city staff will provide some construction labor.

	Benson Park			
	North Mankato, Minnesota			
	Preliminary Cost Estimate: based on draft master plan			
	Prepared by Hoisington Koegler Group Inc.			
	Description	Qty.	Total*	Sub-category Total
1	NORTH PARK ACCESS / PARKING			
	Vehicular Circulation & Parking			
	Park entry drive, drop off	710	\$ 56,800.00	
	Curb and gutter for Park entry drive and drop off	710	\$ 14,200.00	
	Parking lot (bituminous with concrete curbing)	52	\$ 60,000.00	
	Parking lot lighting (assume 4 poles)	1	\$ 15,000.00	
	Parking lot storm sewer allowance	1	\$ 7,500.00	
	Parking lot landscaping allowance	1	\$ 5,000.00	
	Stormwater raingardens allowance	1	\$ 5,000.00	
	Primary park sign and associated landscaping	1	\$ 5,000.00	
	subtotal			\$168,500.00
	Pedestrian Circulation			
	Trail - bituminous	653	\$ 11,000.00	
	Concrete walk	322	\$ 1,288.00	
	subtotal			\$12,288.00
				\$180,788.00
2	MAIN SHELTER / PLAYGROUND / PICNIC AREA			
	Main Building			
	Main Shelter with restrooms and open picnic pavilion	1	\$ 175,000.00	
	Concrete walk around shelter	3000	\$ 12,000.00	
	Trail - bituminous to west	209	\$ 3,344.00	
	Utilities	1	\$ 10,000.00	
	Landscaping allowance	1	\$ 10,000.00	
	subtotal			\$210,344.00
	Lighting			
	Light poles for general area lighting	4	\$ 14,000.00	
	subtotal			\$14,000.00
	Playground			
	2-5 yr Play equipment, safety mulch, installation	1	\$ 55,000.00	
	5-12 yr Play equipment, safety mulch, installation	1	\$ 80,000.00	
	Concrete walk / edger	2400	\$ 9,600.00	
	subtotal			\$144,600.00
	Picnic Area / site furnishings			
	Benches	5	\$ 4,000.00	
	Waste receptacles	5	\$ 2,000.00	
	Bike racks	1	\$ 400.00	
	Picnic tables	12	\$ 12,000.00	
	Grills	6	\$ 24,000.00	
	Water source/drinking fountain/spigot	1	\$ 5,000.00	
	subtotal			\$47,400.00
				\$416,344.00

	Description	Qty.	Total*	Sub-category Total
3	NATURAL PLAY AREAS			
3a	Woodland Play Area			
	Natural play/discover elements	1	\$50,000.00	
	Landscaping allowance	1	\$25,000.00	
	Perimeter fencing - 6ft black chainlink	820	\$20,500.00	
	Interpretive signage	1	\$7,500.00	
	subtotal			\$103,000.00
3b	Water Play Area			
	Water feature pump/filter (to locate in Main Shelter)	1	\$80,000.00	
	Water course with boulders	1	\$150,000.00	
	Adjacent landscaping / trail surface	1	\$25,000.00	
	Interpretive signage	1	\$7,500.00	
	subtotal			\$262,500.00
3c	Little Bug Bay			
	Earthworks / excavation, lining	1	\$30,000.00	
	Weir - water level control device	1	\$10,000.00	
	Floating Fountain	1	\$10,000.00	
	Boulders at shoreline	1	\$15,000.00	
	Pedestrian bridge -60ft	60	\$36,000.00	
	Landscaping allowance	1	\$15,000.00	
	Trail - bituminous around pond	975	\$15,600.00	
	Pedestrian pond access	1	\$50,000.00	
	subtotal			\$181,600.00
				\$547,100.00
4	LADYBUG LAKE IMPROVEMENTS			
	Ladybug Lake Improvements			
	Earthworks - for pier	1	\$10,000.00	
	Formal Fishing pier structure -paving, stone wall, railing	1	\$80,000.00	
	Floating Fountain	2	\$10,000.00	
	Aerators	2	\$5,000.00	
	Boulders at shoreline	1	\$20,000.00	
	Shoreline enhancement - seeding & plugs	2	\$3,000.00	
	Landscaping allowance - tree / shrubs	2	\$12,000.00	
	Trail - bituminous at pier	380	\$6,080.00	
	Trail - bituminous to main shelter	335	\$5,360.00	
	Benches	7	\$5,600.00	
	Lighting allowance	6	\$21,000.00	
	Wayfinding node	1	\$10,000.00	
	Interpretive signage	1	\$7,500.00	
	subtotal			\$195,540.00
				\$195,540.00
5	OUTDOOR INFORMAL AMPHITHEATRE			
	Outdoor Informal Amphitheatre			
	Earthworks - grass slope seating	1	\$10,000.00	
	Landscaping allowance	1	\$7,500.00	
	Trellis structure	1	\$40,000.00	
	Crushed Agg. Surface	1200	\$3,600.00	
	Trail - crushed aggregate to parking lot	252	\$2,016.00	
	subtotal			\$63,116.00
				\$63,116.00

	Description	Qty.	Total*	Sub-category Total	
6	SOUTHEAST PARK ACCESS				
	Southeast park entry/picnic area				
	Access drive	170	\$13,600.00		
	Curb and gutter for access drive	170	\$3,400.00		
	30 stall parking lot (permeable pavers with concrete curbing)	30	\$81,000.00		
	Parking lot lighting (assume 2 poles)	1	\$7,500.00		
	Parking lot storm sewer allowance	1	\$10,000.00		
	Stormwater raingardens allowance	1	\$5,000.00		
	Landscaping allowance	1	\$5,000.00		
	Small picnic shelter with concrete floor	1	\$25,000.00		
	Trails - bituminous	505	\$8,080.00		
	Park Signage	1	\$5,000.00		
	subtotal			\$163,580.00	
					\$163,580.00
7	INTERPRETATION/RESTORATION AREAS				
7a	Wildflower demonstration area				
	Wildflower plantings - seeds/plugs	2.5	\$8,750.00		
	Trail - Crushed stone	450	\$3,600.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$15,350.00	
7b	Rolling Hills Prairie Habitat				
	Earthworks - spread ex. soil piles	1	\$15,000.00		
	Prairie restoration - seed/plugs	9.05	\$13,575.00		
	Classroom overlook	1	\$15,000.00		
	Trail - bituminous	642	\$10,272.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$56,847.00	
7c	Woodland Habitat				
	Woodland restoration - seed/plugs	1.55	\$7,750.00		
	Landscaping allowance - trees/shrubs	1.55	\$11,625.00		
	Trail - Bituminous trail link	40	\$640.00		
	Maple syrup / tree house interpretive structure	1	\$25,000.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$48,015.00	
7d	Oak Savanna Habitat				
	Savanna restoration - seed	13.50	\$13,500.00		
	Landscaping allowance - trees/shrubs	13.50	\$13,500.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$30,000.00	
7e	Wetland Habitat				
	Earthworks - contouring	1	\$25,000.00		
	Interpretive wetland classroom dock	700	\$31,500.00		
	Boardwalk	112	\$11,200.00		
	Wetland plantings/plugs	4.3	\$17,200.00		
	Upland restoration - seed	4.3	\$6,450.00		
	Interpretive signage	1	\$5,000.00		
	subtotal			\$96,350.00	

	Description	Qty.	Total*	Sub-category Total	
7f	Western Wetland Park Area Improvements				
	Wetland plantings/plugs - supplemental	5.58	\$11,160.00		
	Shoreline enhancement - seed	5.28	\$5,280.00		
	Landscaping allowance -tree/shrubs	5.28	\$5,280.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$24,720.00	
7g	Linear Pond Improvements				
	Shoreline enhancement - seed	2.4	\$2,400.00		
	Landscaping allowance -tree/shrubs	2.4	\$14,400.00		
	Trail - bituminous	550	\$8,800.00		
	Bridge crossing	1	\$50,000.00		
	Interpretive signage	1	\$3,000.00		
	subtotal			\$78,600.00	
					\$349,882.00
	OVERALL GENERAL PARK IMPROVEMENTS				
	Other General Park Improvements				
	Lighting along main trail and around Ladybug lake	27	\$94,500.00		
	Future trail link to eastern residential	350	\$5,600.00		
	Benches and waste receptacles along trail	10	\$8,000.00		
	subtotal			\$108,100.00	
					\$108,100.00
	Construction subtotal				\$2,024,450.00
	12% construction contingency				\$242,934.00
	Construction total				\$2,267,384.00
	Design and Engineering Costs (12% of construction)				\$272,086.08
	Potential Park Improvement Total				\$2,539,470.08

* All costs reflect total reductions assuming city staff to execute some construction labor

Input Summary

Benson Park Master Plan was created with input and guidance from the North Mankato Parks and Green Spaces Sub-Committee and City Staff. The Parks and Green Spaces Sub-Committee met three times with the design team:

- October 14, 2008 to kick off the project and discuss sub-committee desires for the park;
- November 18, 2008 to discuss and evaluate three concept alternatives;
- January 13, 2009 to review the Draft Master Plan.

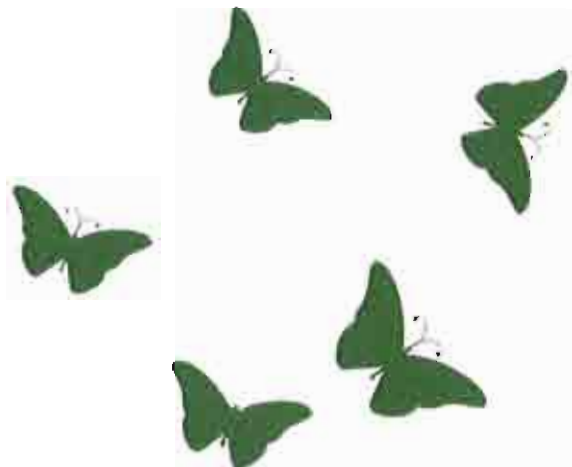
A public open house was held on February 2, 2009 for public comment and review of the Draft Plan.

Sub-Committee review of three concept alternatives

The Parks and Green Spaces Sub-Committee was asked to review three preliminary park concepts (see Chapter 3 for preliminary concepts) at their November 18, 2008 meeting. They were asked for written comments on all three concepts, to identify features that they considered important to include in the final concept and were also engaged in a "dot" exercise where they were asked to put green dots on elements in each concept they liked and red dots on elements they did not like.

Parks and Green Spaces Sub-Committee Comments on three concept alternatives

Overall Theme	<ul style="list-style-type: none">• Natural Resources because it seems to allow greater natural space.• Concept 1: Like the bridge over the pond however, could stop at west trail and not go through restored naturalized area. Would like more formal shelter w/restrooms (Concept 2 shelter is best). Like fishing pier as shown on concept 3. Like park lookout from concept 1.• Bridge, fishing pier, variety of play areas.• Eco-park: Alternative energy sources and focus on water features play into current and long term issues i.e. renewable energy general water issues facing our society. Natural habitats will be a draw wildlife and educate visitors.• Natural resources to convey the simplicity yet wonder of nature in a semi-urban environment. However, some aspects of Eco-park - interpretive play- and Cultural heritage - Maple forest - are good concepts• Concept 1: Natural Resources Park - I felt this is extremely important to maintain natural habits for both plants and animals and to stop "developing" everything.
Parking and Circulation	<ul style="list-style-type: none">• #1 or #3 keeps parking on the outside. #3 is a better street access.• Parking on edge of park.• Parking on outside at park: concept 1.• Multiple access point maybe needed, primary entry from Carlson.• Southeast lot is favorable because of blocked access from Timm. It also has one focal point.• Cultural heritage park concept. Carlson Drive road easier to access. Parking lot does not dominate park.• I would prefer the parking to stay on the edge of the park as much as possible.
Stormwater and Wetlands	<ul style="list-style-type: none">• #2 because of the separation ponds and use of the pond on the east side.• Concept 1.• 3 eliminates the need to alter existing water features. Leave wetland on west side as is.• Multiple cells, bio-swales, natural edges, rainwater gardens.• The water cells not only give demonstration of natural filtering but provides bridges.• Eco-park concept - water cells- stormwater, wetland - Cultural Heritage concept already exists. water cells - bridge• I like the water cells but I also like the idea of an additional pond next to Ladybug. I love the wetlands and want to restore as many as possible.



Parks and Green Spaces Sub-Committee Comment elements they would like to see in the final plan. The numbers represent the number of committee members that chose each element.

Park features:

4	Trails
4	Interpretive features for trail system
2	Interpretive gardens
2	Fishing pier
	Boating
1	Outdoor classroom
2	Amphitheater
	Enclosed building
3	Open shelter
3	Children's play area
2	Water play
1	Picnicking
	Lawn areas
1	Sledding
	Skating
3	Cross country skiing
5	Wildlife Habitat
2	Sustainable design practices
	Other:
	- Woods and bird habitat
	- Natural water edges
	- Grass land
	- Shelter with bathrooms
	- Features to attract wildlife i.e. prairie, wetlands, trees

Parks and Green Spaces Sub-Committee Comment placed dots on elements from each concept that they liked and disliked. Numbers represent number of dots on each element.

Dot Exercise

Overall Theme: Concept 1

* Likes:

1	Giant animal statue
6	Natural amphitheater
3	Prairie
3	Seasonal fishing pier
2	Interactive signage
4	Bird watching
6	Naturalized edges
6	Oak Savanna
3	Gateways
1	Overlook
1	Bridge crossings

Overall Theme: Concept 1

* Dislikes:

1	Fossils
1	Bridge crossings

Other Concepts:

* Likes:

1	Interpretative play (natural play)
5	Shelter (concept 2)
3	Water feature
2	Wildflower/ native demonstration
2	Pervious pavement
1	Wind turbine
1	Bringing pond from west
1	Stormwater cells
3	Woodland establishment
1	Sugar shack
4	Formal fishing pier
3	Winter trails
2	Restored wetland

Other Concepts:

* Dislikes:

6	Parking with bio-swaes
5	Solar panels
1	Divided restored natural area to west
1	Native-american interpretive area
2	Canoeing
1	Agricultural fields
2	Interpretive center
2	Farm theme play area
3	Orchard
2	children's garden/ garden flats

Public Open House

A public open house was held February 2, 2009 to allow the public to review and comment on the Draft Master Plan. Thirty-three people attended. A Summary of their written comments follows.

- Disc Golf
- Basketball Courts
- Bigger deck for better views of wetland areas
- City goose hunt
- I think plans are great, keep up the good work – picnic shelters, and playground equipment are always important, anything else is a bonus.
- Please consider law enforcement issues. Already there are troubles with dogs and their owners.
- How will the park be monitored? We're not in an ideal world and bad things do happen.
- What about emergency vehicles? Are all areas accessible?
- For now: The park needs lighting! Closed at dark or at 10:00 pm, not everyone stays out. Please enforce dog laws.
- Bridge crossing – great idea priority
- Plant trees soon – take a long time to grow.
- Love plan – great for kids and adults. But please put very high priority on creating tree lines to break wind all around existing pond so walking is bearable all year long. Seems like not enough trees (maybe pine?) to really break wind. Thanks, Sara Hausen
- Lots of trees
- Do something about geese
- Need bring lots of doggy bags pick ups and trash
- More water fountains for humans and dogs
- Dogs fountains for them to play in
- Beautiful plan (get trees started soon).

As farm kids and former owners, Bob and I are glad to see the area remaining "natural" and as a quieter place to contemplate in the middle of city activity.

Open spaces are important – not just to us. – Janet Timm

- I think you should make a small BMX track, and you should have a mowed grass and/or dirt trail for real mountain bikers, not paved. You should also have a tunnel under a stream. Leave the hills (I've already watched angrily them being broken to how it is now). No dogs! Maybe on a leash (max 10 feet). Leave it wild. It's too civilized the way it is.

Open House Attendees

Name	Address	Phone/Email
Ralph V. Baumgartner	2135 Lor Rey Dr. N. Mankato, MN 56003	507.388.7163
Lou and Marlin VonOhlm	2256 St. John Ct	387.5809
Dave and Sylvia Hudson	2142 Rolling Green Lane N. Mankato	624.4799
Sara Hensen	2034 Sundance Ln	344.1566
Jim Hirveda	2183 Arlington Lane	345.1866
Roland Louis Sheppard	2002 Round Table Rd	625.4969
Michelle Lindell	1016 Shady Oak	386.6224
Bob Freyberg	2142 Engle Ridge Drive	388.5201
Jim and Kara O'Laughlin	303 Nottingham Drive	388.8744
Pam and Larry Anderson	1936 Howard Dr.	345.6033
Gary and Mary Zellmer	1591 Sharon Dr	345.4435
Ernie and Jane Geistfeld	2120 Rolling Green	386.1598
Faith Miertz	1799 Orchid Drive North	386.1656
Tom Hagen	927 Lake St	345.3527
Mike Schneider		388.1209
Adrian Person	1532 Graystone	338.1209
Barbara Becker	315 Wheeler Ave	381.8012
Ray Smothers	14 Simon Trail	386.1201
Velma and Gary Rowles	538 Nicollet Ave	387.7859
Janet and Bob Timm	108 Emerald Ct.	388.9213
Dan and Lill Mether	2037 Morgan Way	387.2865
Scott Thiem	1003 Shady Oak Dr.	345.4203
Joe Kluender	2126 Rolling Green Lane	625.4431
Dave Pearson	55 Eagle Ridge Trail	388.7448
Claude Seigler	2231 Simon Ct	388.5639
Diane Norland	1517 Hoover Dr.	387.1304
Brian Cain	47 Deerwood Ct.	
Rob and Amy Johnston	2009 Valley View Dr.	625.5770
Sene and Dee Umhoefer	2154 Arlington Ln	625.1467
Kevin Bigbee	2211 Clare Dr.	338.6117
Anita Riese	112 Kingsway Dr.	338.2600
Dani Goodrich and Lewis Remund	14 Arlington Ct	507.2520.9934
Kayla Siegler	2249 Fairbanks Dr.	625.4141

