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# Platte Ridge Park Master Plan

Prepared for:

Platte County Parks and Recreation  
Platte City Parks and Recreation  
City of Platte City



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# Platte Ridge Park

Ariel Perspective



**“A park is a work of art, designed to produce certain effects upon the mind.”**

**-Frederick Law Olmstead, 1850**

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# Outline of Recommendations

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## Acknowledgements

The Platte Ridge Park Master Plan was developed and produced with the assistance of the citizens of Platte County and Platte City, Missouri. We would like to thank the community members who gave their time and shared their ideas. Their efforts provided the Platte Ridge Park steering committee with an awareness of the community's needs and desires.

### Key Participants

#### Platte County Commission

Betty Knight    Presiding Commissioner  
Michael Short    1<sup>st</sup> District Commissioner  
Steve Wegner    2<sup>nd</sup> District Commissioner

#### Platte County Park Board

Neil Davidson    Chairman  
Bill Hillix                      Vice Chairman  
Margie Maasen              Secretary  
Sean Eisler                  Diza Eskridge  
Dick Stephens                Nelsie Sweeney

#### Platte County Staff

Brian Nowotny              Director of Parks and Recreation  
Jim Kunce                  Assistant Director Parks and Open Spaces

#### Platte City Board of Aldermen

Dave Brooks              Mayor  
Lee Roy Van Lew          Ward 1  
Bill Knighton              Ward 1  
Shelle Browning  
Ron Porter                  Ward 2  
Gary Brown                Ward 3  
Jim Palmer                 Ward 3

#### Platte City Park Board

Dick Stephens              President  
Chris Wallen                Vice President  
Bart Bradley                Secretary  
Ward 2 Susan Wallen      Treasurer  
Marsha Clark                John Minyard  
Lisa Rehard                 Kerry Scanlon  
Tom Wooddell

#### Platte City Staff

Keith Moody                City Administrator  
Danny Stamper              Director of Parks and Recreation

## Key Citizen Participants

Patsy Baber	Doug Baldwin	Jo Jo Benner	Jack Brackney
Jack Benner	George Bundy	Zach Burkholder	Susan Campbell
John Coleman	George Esler	David Fisher	Paul Flanders
Ivan Foly	Sandy George	Bill Graham	Betty Haskins
Bill Haskins	Tom Hon	Dan Houlahan	Dean Jepson
Barbara Jepson	Charlie Kuntz	Ellis Malone	Todd Maxwell
Susan Mead	Don Mead	Nancy Milliman	Bev Morales
Leon Morales	FD Offutt	Stan Palmer	John Plank
Janis Reineke	Kevin Reineke	Mark Seamour	Kerry Scanlon
Alicia Stephens	Beverly Stewart	Bob Stinnett	Lee Stubbs
Linda Tantillo	John Thomas	Rich Tice	George Tomlee
Bob Wallingford	Donald Wallace	Kay Wallace	

## Adjunct Participant

Jan Dellamano      Missouri Department of Conservation



Platte Ridge Park Steering Committee meeting

## **Introduction / Project Background**

Platte Ridge Park is among the rolling hills of Platte County, surrounded by rural farmsteads and pasture land. The park encompasses 214 acres along Missouri Highway 371, North of Tracy and Platte City. To the southeast is a view of the Platte River Valley and to the northwest is the Bee Creek Valley. The site has steep terrain and multiple ridges. The majority of vegetation on site is cultivated fescue grass with several tree rows and random Oak trees. The overall appearance is Savannah like.

Platte Ridge Park is located near a variety of other parks. It is approximately four miles east of Weston Bend State Park, A Missouri Department of Natural Resources Park. Approximately 1.5 miles west of Platte Falls Wildlife Area, A Missouri Department of Conservation park. Approximately two miles north of Riverview Park, a Platte City Park, and approximately 1.5 miles south of Guy B. Park Conservation Area, a Missouri Department of Conservation park. The park is located in the Platte County R-III School District.



The Platte Ridge Park project is a joint effort between Platte County Parks and Recreation and the City of Platte City Parks and Recreation. The purpose of this master plan is to prepare an overall recommendation for a recreation plan. The broad issues addressed include providing uses identified by citizens and recommended phasing of improvements.



## Master Plan Process

The master planning process included several public input sessions using an open house format. An analysis of the physical opportunities and constraints of the site was prepared and displayed for participants. These analysis drawings provide an understanding of the site potential. In addition to the public input sessions, focus group surveys were distributed to potential users identified by both Platte County and the City of Platte City. Based on the site analysis, focus group input and public input, three scenarios were developed and illustrated at a subsequent public open house. See the following page for a review of the scenarios studied. The schedule of public input meetings occurred on the following dates:

1. Focus Group Meetings January 16, 2003
2. First Public Open House January 23, 2003
3. Neighborhood Meeting February 6, 2003
4. Final Public Open House May 8, 2003

Note: additional focus group meetings were held other than January 16<sup>th</sup>. The following organizations played a key role in the focus group meetings:

- Cedar Ridge Neighborhood
- Platte County Baseball
- Platte County Soccer
- Platte County Football
- Platte County R-III School District
- Local Media
- Missouri Department of Conservation



## Community Needs Assessment

**Citizen Issues** – The results of the public input sessions discussed both needs and concerns about the park. Many citizens were interested in passive uses such as walking trails, picnic areas and fishing opportunities. Other citizens also expressed a need for various athletic fields. The biggest concern was vehicular access merging onto and turning from Missouri Highway 371 because many vehicles exceed the posted speed limit along this route.

**Citizen Needs:**

Walking trails	Off leash area
Soccer fields	Prairie restoration area
Football fields	Equestrian trails
Softball fields	Amphitheatre
Baseball fields	Community center
Skate park	Observation tower
Basketball	Radio controlled airfield
Playground	Fishing
Volleyball	Picnic shelter
Camping	

**Citizen Concerns:**

- High traffic speeds along MO. HWY 371
- Security
- Light pollution
- Noise pollution
- Litter
- Dust from gravel roads
- The potential rise or fall of property values
- Over development of site with athletic fields
- Adequate money available for maintenance

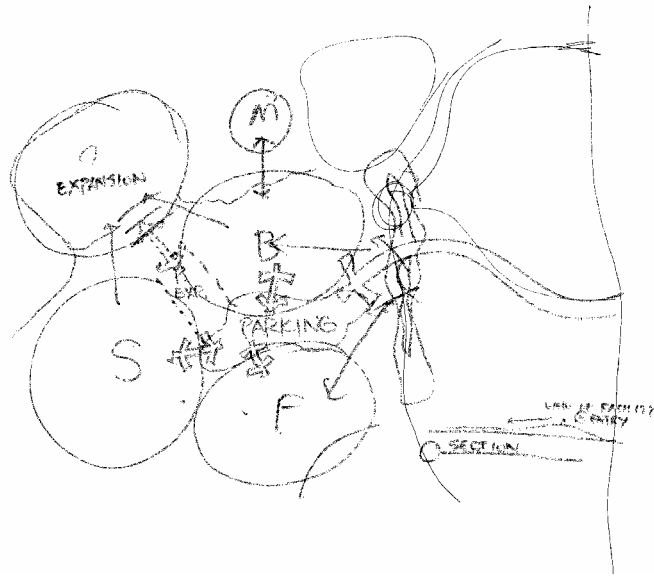
**Focus Group Input** – Based on current enrollment figures and anticipated growth rates, the focus groups provided both current and future needs. The focus group's research shows that needs double after 10 years.

	<u>Current</u>	<u>10 year</u>
• Platte City Baseball League	4 fields	8 fields
• Platte City Soccer League	4 fields	8 fields
• Platte City Football League	4 fields	8 fields
• School District R-III - quantities were not provided. A priority list included the following uses: youth football, soccer, baseball, cross country, tennis, skateboard area, shelters with BBQ, restrooms, frisbee golf and playgrounds.		
• Missouri Department of Conservation (MDC) - MDC's primary concern was an area for native prairie restoration among other native plant zones. This area would be accommodated by walking trails with interpretive signage.		



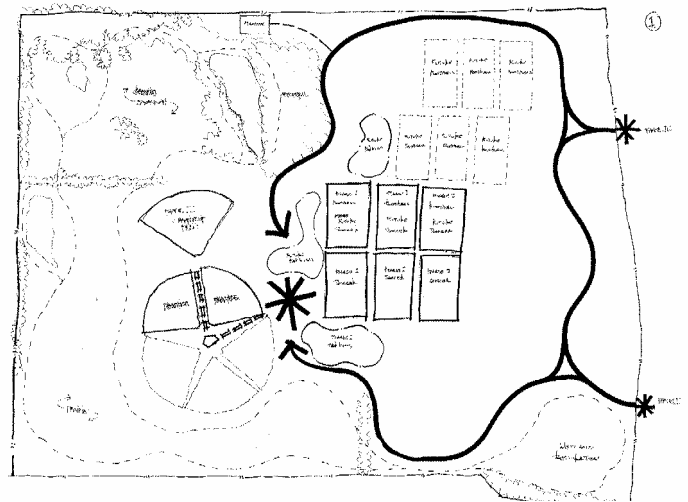
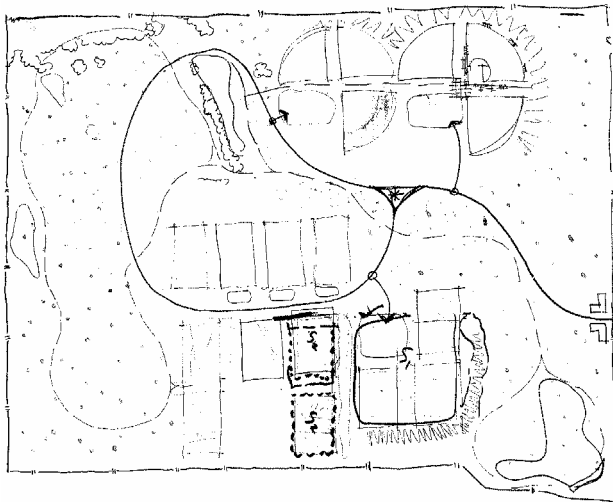
## Process Drawings

**Conceptual to Schematic** – The following drawings illustrate the conceptual diagrams and schematic plans studied in the master plan process.



### Conceptual Diagram –

Drawings depict a conceptual layout of program uses developed through the public input process.



**Schematic Plan** – These schematic plans indicate different options based on conceptual diagrams. The plan on the left indicates one point of access to MO HWY 371 while the plan on the right indicates two points of access. Other examples of differences between the plans include a greater level of developed areas on the left and more scaled back areas on the right.

**Final Program** – Additional discussions with City and County staff guided the preparation of an alternative that was presented at a final public open house. Through this process, a consensus was reached regarding the extent of proposed improvements.

Using input from the Platte County Parks and Recreation Park System Master Plan, focus group meetings and the public open houses, the results suggested a phased plan that includes the following improvements while minimizing the amount of the site:

#### **Phase I**

- Soccer complex and play area with associated amenities. Although additional baseball fields are needed, the region has a limited number of baseball fields but no soccer fields. This plan fulfills the initial need for additional soccer fields and could be used for football fields.
- Improved pond for fishing with surrounding trail, picnic shelter and play area. The most requested passive use need expressed throughout the process was a fishing area and walking trails. This plan fulfills the request from the citizens who participated in the process.

#### **Future Phases**

- Baseball / softball complex and associated amenities.
- Additional football / soccer fields
- Basketball and volleyball areas
- Picnic shelters
- Observation tower
- Multiple trails
- Prairie restoration area

Using this input a refined master plan was completed for presentation to the public at a Platte County Park Board meeting and at a Platte City Board of Aldermen meeting. The following sections provide more detail about the proposed improvements and associated costs.

The radio controlled model airplane club provided substantial interest in the master plan process and requested a facility on park grounds. Although radio controlled airplanes are a legitimate recreational activity, this report does not recommend the use be included at this time. The County and City shall work together to address the need either at this location or by suggesting another location.

## Site Analysis / Natural History

### Cultural Context

#### Previous Use

The site was primarily used as pasture land. Before settlement, the site was native prairie grasses. The Sharpsburg soil type is the needed soil structure to support native prairie grass species. The previous owners cultivated the site around 1957 and initially seeded the pasture with bluegrass. The owners introduced fescue in the 1960's which remains today.



#### Homestead History

The Wren family, who originally settled the property around the 1880's, sold the property to Platte County in early 2003. Many stories about the Wren family and the structures could be told and interpreted on site. Preliminary analysis of the existing home indicates that a cabin is within the walls of the house. The logs that have been exposed are not salvageable. If there is a desire to save the cabin, the house will need to be removed and the cabin reconstructed.



One option is to take down the structure and leave some logs for interpretation and not rebuild the structure.

There is potential to provide some historical documentation and interpretation at the homestead. If the logs are to be exposed, much care is needed to rebuild the cabin and make it historically accurate as well as protect it. Another option is to show

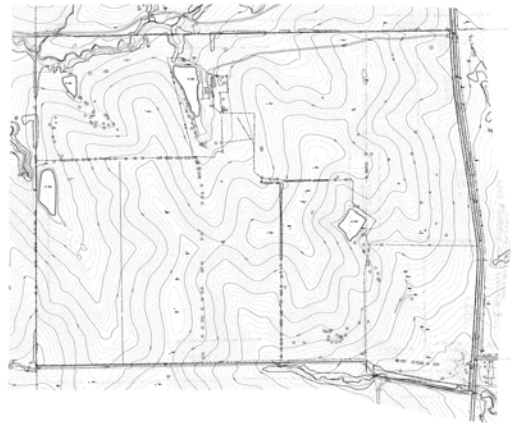
the evolution of the house by recladding it in clapboard while letting a portion of the original construction be exposed. Log houses are relatively easy to assemble and disassemble.



The Wren's also indicated that the original homestead is just south of the existing house, up the hill closer to the ridge. A historical marker at this site indicating its significance should be considered.

## Site Analysis

- a) **Topography and Soils** – The difference in site elevation from the highest to the lowest point is about 110 feet. Several ridges divide the site offering long vistas in all directions. Slopes generally vary from 2 - 14%. The primary soil type on site is Sharpsburg silt loam<sup>1</sup>. This soil tends to be deep and somewhat well drained. However, because erosion is a concern terracing and other erosion control measures are recommended. The soil type along the ridges are a Sibley silt loam. This soil is well drained.
- b) **Hydrology** – One ridge splits the site into two water sheds directing runoff to the northwest and southeast corners of the site. Runoff is collected in four small ponds and one larger pond located at the existing homestead. All ponds contain various levels of siltation and should be dredged as part of any new improvements.
- c) **Vegetation** – The vast majority of the site is cultivated fescue grass, which was planted to provide pasture for livestock. Although no prairie grasses remain, there are methods available to restore native species from seed buried within the soil. This procedure should be implemented at particular areas to provide an interpretive resource. The remainder of the site contains tree rows and random single oak trees planted to provide shade for livestock. The northwest corner of the site is the only wooded area and could be accessed by a trail.



<sup>1</sup> Soil Survey of Platte County Missouri, US Department of Agriculture, Soil conservation Service, in cooperation with Missouri agricultural Experiment Station, 1981.

- d) **Utilities** – Known utilities are along Missouri Highway 371 and include electrical, water and telephone lines. Natural gas may not be available and requires further investigation. Water line size and pressure is yet to be determined. Since no sanitary or storm water infrastructure is available, sewage will have to be treated on site and excessive runoff will need to be detained on site.

The required public services are provided by the Public Water Supply District Number 9, and the Platte Clay Electric Cooperative. Sanitary sewer will initially require a septic system on site. A central sewer system can be provided in the future.

- e) **Land Use** – According to the Platte County Land Use Plan, Platte Ridge Park is located in a "Low Density Policy Area"<sup>2</sup>. "Low-density policy areas allow for the future expansion and growth of municipalities. These areas may be served by central sewer systems and improved roads within the next 20 years. Primary land uses within these areas include single-family residential, large-lot residential and agricultural uses. Recommended maximum residential densities within these areas are 1 lot per 5 acres. Optional densities may be allowed if they occur within a designated mixed-use node or if the prospective applicant provides or can demonstrate adequate infrastructure to support the increased density.

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<sup>2</sup> Platte County Land Use Plan, HNTB Corporation, October, 2002.

- f) **Traffic** – Thorough research was conducted pertaining to the traffic concerns related to existing conditions and proposed improvements. The following is an outline of that study.

#### **Speed Study and Access Request**

The Platte County Parks and Recreation Department, in conjunction with the Platte City Parks Department are requesting a speed study onto Missouri Highway 371 (MO HWY 371) north of Tracy, in Platte County, Missouri. The speed study is being requested to initiate the lowering of the posted speed limit from the current 55 miles per hour to a lower speed limit of 45 miles per hour along the section of roadway adjacent to the planned park facility. An access point should be requested to allow the construction of a new entrance into the proposed park facility.

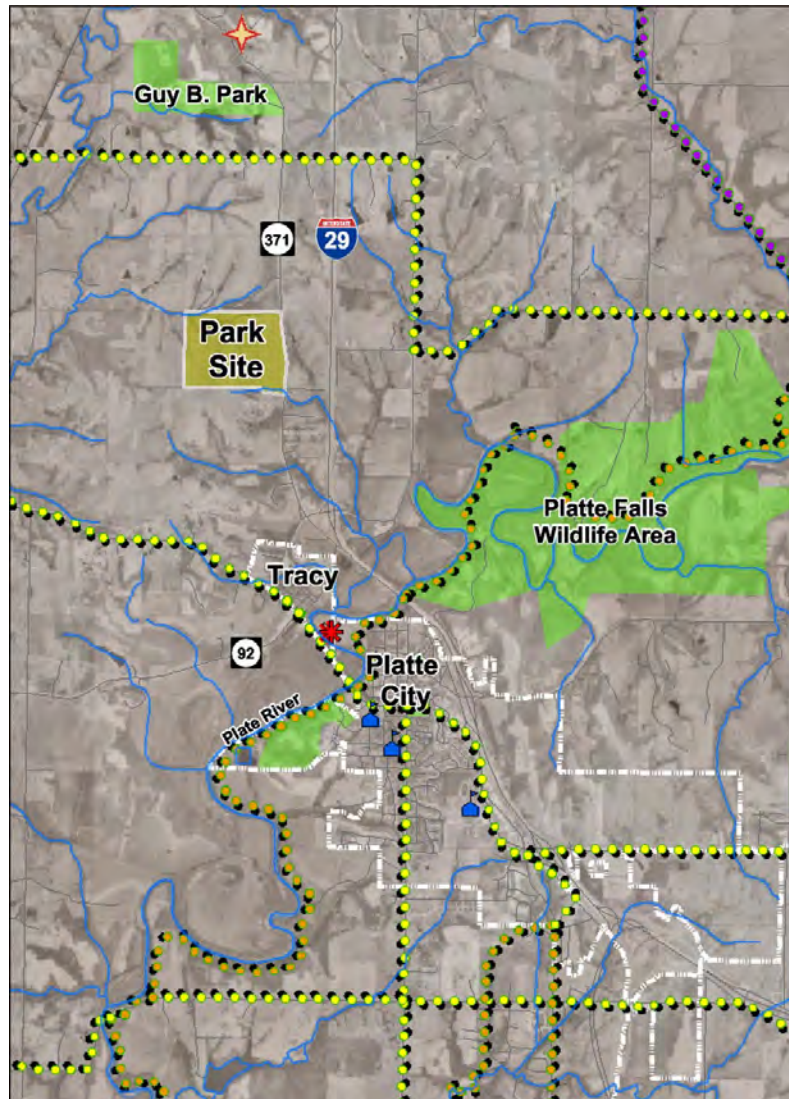


Figure 1 Platte Ridge Park Area Context



## Roadway Considerations

### MO 371

As shown in Figure 1, the Platte Ridge Park is on the Westside of MO HWY 371. MO HWY 371 is a rural arterial that is west and parallel to Interstate 29. In the vicinity of the Platte Ridge Park, the facility has a two lane cross-section with a one-foot paved and varied width gravel shoulder as shown in Figure 3. The drainage features are grass with steep slopes as shown in Figure 4. The speed limit is posted at 55 miles per hour adjacent to the proposed Platte Ridge Park.



Figure 3 Typical Cross-Section of MO HWY 371



Figure 4 Steep Slopes along MO HWY 371

### New Access Point

An access point should be requested for the proposed driveway onto MO HWY 371 from Platte Ridge Park. The location of the proposed entrance is shown in Figure 2. The approximate location of the entrance is also shown in Figure 5 with views of MO HWY 371 to the north and south shown in Figures 6 and 7 respectively. The soccer fields in Phase I and subsequent development in Phase II will need the new access point onto MO HWY 371.



Figure 5 Location of New Access Point



Figure 2 Access Point – Plan View





Figure 6 View to North of New Access Point



Figure 7 View to South of New Access Point

Field measurements show that the proposed location of the access point would provide stopping sight distance in excess of the 495 foot minimum stated in the AASHTO's 2001 Policy on Geometric Design of Highways and Streets<sup>3</sup>. The preliminary design also calls for the shaping of the hill contours west of MO HWY 371 to provide an adequate sight triangle.

#### Existing Driveway

Figure 8 shows the location of the existing gravel road. This road traverses the northern portion of the park and connects to the proposed fishing pond in the northwest corner of the park. Figures 9 and 10 show the view from this existing access point along MO HWY 371 to the north and south, respectively.



Figure 8 Existing Driveway at MO 371



Figure 9 View to North of Driveway



Figure 10 View to South of Driveway

<sup>3</sup> Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, 444 N. Capital Street, N.W., Suite 249, Washington, D.C., 20001, 2001.

**Speed Study**

The posted speed limit on MO HWY 371 adjacent to the proposed Platte Ridge Park is currently 55 miles per hour. The proposed location of the new access point would provide adequate stopping sight distance for this speed, however, a reduction in the speed limit should be requested to improve safety. Due to the nature of the park to serve youth, it is reasonable to lower the speed limit. A speed limit of 45 miles per hour would decrease the expected stopping sight distance from 495 feet to 360 feet and increase safety. Regional traffic is not impacted by the reduction in speed since MO HWY 371 is parallel to Interstate 29 which provides required mobility.

Conversations with Missouri Department of Transportation staff indicated that Missouri law requires that a speed study be conducted prior to the lowering of the speed limit along any section of highway. The 85<sup>th</sup> percentile speed is typically considered to be the appropriate posted speed, however, safety and access restrictions should also be investigated to ensure a proper posted speed. The Platte County Parks and Recreation Department and the Platte City Parks Department would like to help ensure a safe park setting by lowering the speed limit to 45 miles per hour.

## Master Plan

This section describes the proposed improvements as illustrated on the master plan. The following list highlights key features of the plan.

- Four, full size, soccer field complex with centralized restrooms and concession building, associated parking and play area.
- Historic homestead site and picnic area with enhanced water feature for fishing, walking trails, picnic shelters and associated parking.
- Multi sport athletic field complex with centralized restroom and concession building, two softball and two baseball fields, soccer/football fields, play area, volleyball and basketball courts, and park maintenance facility.
- Observation tower, picnic shelter and associated parking.
- Multiple walking and bike paths and a native prairie restoration area.
- Looped park roadway system.

### Master Plan Overview



## Phase I

**Athletic Field Complex – key features include:**

- Soccer / Football Fields
- Concession and Restroom Building
- Parking
- Children's Play Area
- Basketball and Sand Volleyball Courts



**Phase I Master Plan Overview**



The athletic fields are at the southeast corner along MO HWY 371. This is generally the area with the least change in elevation within the park. The fields are designed to accommodate soccer and football in numerous configurations. The area can provide four full size fields or multiple youth and practice fields for each sport. The fields are located on two terraced planes divided by a sloped terrace.

A centralized concession and restroom building is adjacent to each field to best accommodate users. Parking is planned to the west of the fields and is situated slightly above the fields to oversee the playing fields. Because the parking lots are west of the fields, the lots are screened from view along MO HWY 371 giving the park a green front yard.



A picnic shelter, children's play area, basketball court and sand volleyball area is located southwest of the fields. This plan accommodates these uses in an area that has mature trees for shade. These amenities allow families using the athletic fields to be in close proximity to the athletic fields.

## Historic Homestead Site and Picnic Area with Enhanced Water Feature –

key features include:

- Improved pond
- Fishing dock
- Parking
- Picnic Shelter and Play Area
- Homestead Interpretive Area

Phase I will also include an expansion of the existing pond in both surface area and depth. It is necessary to construct a new, fortified dam to the north of the existing one. An accessible fishing dock is proposed on the east side of the pond with a trail looping around the pond. A picnic shelter and play area is proposed near the proposed parking. The existing access drive will be enhanced to accommodate two way traffic and be realigned to connect to the parking area. This alignment will accommodate the terracing of the future ball fields.

The existing homestead provides an opportunity to offer historical reflection to the degree deemed appropriate. (See section 2, Homestead History) This area may also provide an additional picnic facility with a unique experience.



## Future Phases

### **Multi Sports Complex** – key features include:

- Softball and Baseball fields
- Concessions and Restroom Building
- Children's Play Area
- Football / Soccer Fields
- Basketball and Volleyball Courts
- Parking
- Maintenance Facility

To accommodate future athletic fields and facilities identified in the Platte County Parks and Recreation Park System Master Plan and through the public process, the Multi Sports Complex provides two full size softball and two full size baseball fields. The fields are on the north central area of the park. In addition, a large open field area provides multiple soccer or football fields with various size options. Integrated within the complex is a large concession and restroom structure, play area, a basketball court and two sand volleyball courts. A maintenance area is on the lower north end of the complex focusing access to the fields. Because of the large volume of cars using the site, it is recommended that the north access road be closed to the public and be used only for maintenance. Once the facility is in use, users will be directed to enter the park from the main entrance constructed in Phase I. A majority of the drainage for these fields and the parking lots should be directed to the pond area. Parking is intended to provide adequate capacity for the sports complex users and provide a link to the pond area. Pedestrian linkages will be added throughout the complex.







The remainder of the park loop road provides access to the observation tower, trail heads and potential future connections to the south. Future development to the south could be connected with a secondary entry to the park as indicated on the master plan. The loop road alignment is intended to provide visitors a taste of the grand vistas and the diversity of the natural environment the park offers. This is further enhanced when visitors climb the 50 foot tall observation tower located on the highest point of the site.

The northwest corner of the site is reserved for passive uses such as walking, biking and picnicking. Vehicular access in this area is not recommended. The plan offers a pedestrian environment to explore nature. The northwest quadrant offers the perfect area for a diverse natural environment cross section. Beginning on top of the ridge, the prairie ecosystem begins to transition down into the woodland riparian area. There are also a few very old, nice specimen bur oak trees in this area providing an Oak Savannah setting. In the future there is potential to add more athletic fields in the southwest area.

## Master Plan Implementation

### Level of Service Implementation

Priority needs are identified in the Platte County Parks and Recreation Park System Master Plan<sup>4</sup>. According to Section 6, page 10, “The equity map and park inventory show the lack of large County-owned regional and district parks and a deficiency of community and neighborhood parks. The county should proceed with the acquisition of parks in locations that meet citizen needs near population centers...the county should also identify and begin acquisition of property in more rural areas to preserve as future green/open space”. The charts on the same page recommend 50-100 acres in the Platte City/Weston area and 100-200 acres in the southern and northern districts.

The report also indicated that “The citizen survey, Public Meetings and Task Force all indicated strong demand for athletic fields and also to partner with athletic associations for the purpose of constructing fields”. (See section 6, page 12 of the Platte County Parks and Recreation Park System Master Plan) The chart on the associated page of the report indicated soccer fields as part of their short term priority.

Based on the Platte County Parks and Recreation Park System Master Plan, the Platte Ridge Park Master Plan fulfills all of these priority needs identified. Platte City is currently using a similar public input process to assist in completing a City Wide Parks Master Plan.

### Project Objectives

The primary objective in establishing a budget at this stage of the design process is to develop a probable cost range to implement the master plan. At this stage in the master planning process, there are many variables that need to be considered. Improvements can vary based upon the selection of equipment, furnishings, construction materials and construction phasing. Some of the variables were qualified in the cost estimate where possible.

All improvements are recommended to comply with the Architectural and Transportation Barriers Compliance Board's recent Accessibility Guidelines. These guidelines serve as the basis for standards to be adopted by the Department of Justice for new construction of recreational facilities covered by the Americans with Disabilities Act (ADA). The guidelines will ensure that newly constructed recreation facilities meet the requirements of the ADA.

The ultimate objective of the Platte Ridge Park master plan is to contribute to the vision shared with the City of Platte City and Platte County Parks and Recreation system; “...to enhance the quality of life for all of its citizens by providing one of the premier county parks systems in the region.”<sup>4</sup>

<sup>4</sup> Platte County Parks and Recreation Park System Master Plan, Bucher, Willis & Ratliff, June, 2000.

## **Project Schedule**

The park will be constructed in two phases with anticipated ground breaking on Phase I in the Fall of 2003. Phase I will include the soccer fields, parking and driveway entrance in the southeast corner along with expansion of the fishing pond and trail construction in the northwest corner. The main driveway will provide access to nearly all activities within the Platte Ridge Park. The fishing facilities will have access to an existing gravel road. Phase II will include athletic fields in the north portion of the park, expand the overall trail system, additional parking, additional concessions and a lookout tower.

## **Cost Estimate**

**See appendix for preliminary opinion of probable costs for Phase I and Future Phases**

## Appendix

- a) Area Context Map
- b) Phase I Master Plan
- c) Master Plan
- d) Park Perspective



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