



MASON PARK MASTER PLAN & NEW PARK DESIGN

PLAN SUMMARY

CITY OF MASON, OHIO
SEPTEMBER 2004



MASON PARKS MASTER PLAN SUMMARY



**Prepared For:
MASON PARKS AND RECREATION
MASON, OHIO**

**Prepared By:
WOOLPERT LLP
4141 ROSSLYN DRIVE
CINCINNATI, OHIO 45209**



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ACKNOWLEDGMENTS

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WOOLPERT PLANNING TEAM

Bruce Rankin, RLA, Project Manager
James Frank, RLA, Project Landscape Architect
Lydia Sowles, RLA, Project Landscape Architect
Dave Rickard, AICP, Project Planner
John Martin, Project Designer
Katie Bower, Project Designer
Ruth Triplett, Administrative Assistant



Mason Parks Master Plan Summary

SEPTEMBER, 2004

Introduction

Woolpert LLP, the City of Mason, the Mason Parks & Recreation Department, parks master plan Steering Committee, athletics program representatives and residents are engaged in a master planning process for seven new park properties and the Muddy Creek Greenway Corridor for the City of Mason. The new park properties add 261 acres to the City's current park system of 242 acres and represent a significant expansion of park and recreation facilities available to the community and athletics associations. Upon completion, the proposed park improvements will result in greater distribution of park lands and facilities within the City. The Muddy Creek Greenway Corridor is intended to create connectivity between both existing and new parklands as access along the corridor is obtained and development standards within the floodway are implemented.

The master planning process has assessed the strengths and needs of the existing park system, and identified the opportunities and constraints associated with each new park property in the context of the whole system. Meetings with both the Steering Committee and the general public provided on-going input at both the program development and planning phase. The Steering Committee is composed of members of the Park & Recreation Advisory Board and representatives from the Parks & Recreation Department.

Two rounds of Community-wide park planning meetings were conducted in May, 2004. The Kickoff Workshop in early May solicited community input on strengths and needs of the park system, and issues to be addressed through development of the new sites. A two-day workshop, late in the month allowed citizens to review and comment on analysis of the sites and opportunities and constraints to development. Participants identified and prioritized programs and facilities for the parks and sketched plan concepts of their vision for each park.

In July and August, the Steering Committee reviewed plan alternatives suggested by the workshop input and site assessments, and narrowed the alternatives into a preferred plan for each park. The preliminary plans and cost opinions were presented to the Park Board at a public hearing on August 12, 2004.

The master plan emphasizes a balance of natural resource protection and passive activity with active use of each of the larger parks. Each plan is family oriented, providing activities for multiple age groups, to the extent possible, given land available. The park master plans were adjusted to respond to buffering and access concerns for adjacent homes.

Active sports facilities are provided in locations that improve community-wide distribution, particularly in the northern portion of the City, and layouts that allow flexibility for future adjustments as the community grows. While the new parks will increase significantly the number of athletic fields available to the community for competitive and recreational league play, Mason will still be short of the projected need if population and participation trends

continue in the current manner past the year 2006. Within the next 5 years, the current trends suggest that there will be a demand for 6-8 additional soccer/football fields and 4-6 baseball fields. Recreational participation trends are outlined in *Appendix 1*. In order to maintain the concept of a balance between active and passive recreational facilities, additional park land in the range of 50 to 100 acres (1 to 2 additional parks) will be required to accommodate this future demand. The acquisition of additional park lands should continue to follow The City of Mason Comprehensive Plan's parks and open space strategy. Based on the Comprehensive Plan, there is still unmet need for park land in the southeast and northwest portions of the City.

Site assessment and meeting notes from the Steering Committee and public sessions are also attached in *Appendix 1*. The conceptual opinion of probable construction cost for each park follows the descriptions of the park plans. It is accompanied by a matrix which prioritizes improvements and potential development phases for each of the parks. A summary description of each park property follows:

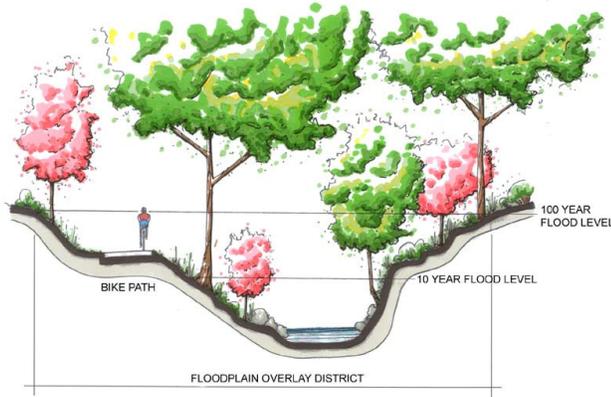
Park Plan Summaries

Muddy Creek Greenway Corridor

The Muddy Creek corridor presents an opportunity for a greenway connection between the parks and neighborhoods through the heart of Mason to the northern limits of the City. The proposed greenway consists of the Muddy Creek channel and protected floodplain area within the Floodplain Overlay District with continuous access provided along the corridor via a combined walking and bike trail. Portions of the greenway are located on property currently owned by the City of Mason. Greenway access across privately owned property will require a negotiated right-of-way or conservation easement within the creek flood plain.

At approximately 3.2 miles in length, the greenway, as currently defined, originates at the Rose Hill Cemetery west of Mason Montgomery Road, travels upstream in a northeast direction, and terminates at the new Biehle Park property located at Mason-Morrow-Millgrove Road and U.S. 42. The greenway can be extended in either direction, modeling expansion on the standards and agreements established during implementation of the initial section.

Potential trailhead sites are located on the Biehle property, adjacent to S.R. 741, at the intersection of Hanover Drive and US 42 opposite to Heritage Oak Park, on the south side of Kings Mills Road west of Pine Hill Lakes Park, and at the end of South East Street, northwest of Rose Hill Cemetery. Each trailhead location will provide bike and pedestrian linkages to the neighborhoods and parks along the corridor. Close to the proposed trailheads near Heritage Oak Park and Pine Hill Lakes Park are existing topographical features that offer an opportunity for the development of naturalized amphitheaters. These landforms can be adapted with minimal intervention for use as resting places along the corridor or as a gathering space for interpretive groups.



Muddy Creek Corridor

A continuous trail along the greenway will offer a unique recreational asset to the community and a safe bike and hiking route into downtown separate from streets and traffic. Challenges involve trail construction along the often steep stream bank, without extensive intrusion or impact on adjacent property, obtaining necessary easements, and roadway crossings. Conceptual planning and design standards for the trail are attached in *Appendix 2*.

Program Summary: Muddy Creek Greenway Corridor	
3.2 miles	Bicycle trail
4	20 car parking area and trailhead
3	Bridges over creek
2	Natural amphitheater

Crooked Tree Property

The Crooked Tree property is a small 1.9 acre “flag lot” site on Brewer Road located in the northern part of the City. It is the former site of a packaged sewage treatment facility for the Crooked Tree Estates subdivision and abuts residential properties on the east and west sides. A large portion of the property lies within the flood plain of the Little Muddy Creek.

This site has limited frontage and visibility along Brewer Road making it largely unsuitable for neighborhood park development for which visibility and surveillance are important objectives. This property is best suited for plant material storage or a satellite park maintenance or materials storage facility once demand is generated through the development of other northern park properties. In the interim, the site should be secured against unwanted access and any structures that may be retained and reused should be secured and mothballed.

Program Summary: Crooked Tree Property	
1	Live plant storage area
1	Covered storage area
1	Bulk material storage area

Old Stitt Road Property

The Old Stitt Road Property is a street right-of-way that was vacated with the realignment of Tylersville Road. The 1.4 acre site is located between the Village Lakes Condominiums and the Fairways at Pine Run golf course. During the public workshops, the adjacent property owners expressed an interest in maintaining views to the golf course and limited program development. The vacated right-of-way offers an opportunity for a landscaped pedestrian walkway connection between the new terminus of Stitt Road and the Tylersville Road bike trail.

Program Summary: Old Stitt Road Property	
1,450 LF	Bicycle trail

Kathleen Bevan Castle Park

Kathleen Bevan Castle Park is located north of the City of Mason corporation limits in Union Township northwest of U.S. 42 and Bunnell Road. In the path of projected city growth, this site is well suited to service population growth within the City and the Township as development occurs in north Mason. The former Castle Family farm property is 126 acres, similar in size to the combined area of Pine Hill Lakes and Corwin Nixon Parks located at the center of the City. The site is generally open and rolling agricultural land, with the Little Muddy Creek bisecting the property in an east-west direction. The Little Muddy Creek floodplain covers nearly one third of the central portion of the site. The northern portion contains historic farm buildings, a poorly drained old field northwest of the farmstead and a former grass airstrip. The southern portion, which features higher ground outside of the creek floodplain, has frontage on both U.S. 42 and Bunnell Road.

Park program and site plan options developed during the public workshops propose passive park uses on the northern part of the site and active City-wide soccer and lacrosse/football fields on the south portion with a naturalized creek and floodplain zone between. The farmstead complex will be preserved as the focus of an interpretive area and possible conference center with portions of the site used for agricultural cultivation as a means of preserving and interpreting the rural character of the site. Poorly drained areas will be allowed to revert to wetlands and old fields in the floodplain along the creek will succeed to woodlands. This successional area can serve both educational (interpretive) and recreational (aesthetic) purposes. Other proposed park features on the north portion of the site include walking and bike trails, a wetlands boardwalk, and an outdoor fitness and adventure ropes course which could support conferencing functions at the farmstead or act as attractions to the park on their own.

The south part of the site will be developed for active recreation. Vehicular access to the athletic complex is provided off Bunnell Road along a boulevard drive that will accommodate on-site vehicular stacking at peak use times. Approximately 900 parking spaces or 75 spaces per field can be accommodated within the two parking lots. Up to eight full sized soccer

fields and four combination lacrosse/football fields are organized along a central north-south pedestrian walkway shaded with new tree plantings. The plan concept allows field configurations to be adjusted to reduce wear and accommodate varied age groups. Under this concept, the eight full sized soccer fields could be reconfigured to up to 12 youth fields (hence the high parking to field ratio). A park plaza will feature a restroom and concession building with an adjacent play area. An on-site maintenance facility located northwest of the athletic fields will allow for storage of equipment and materials close to the fields.

Park development adjacent to the Little Muddy Creek is limited to picnic areas and the trail system. The trail system allows for looped routes on both the south and north portions of the site with foot and bicycle bridge connections over the creek. In order to allow for grading of the lacrosse/football fields, storm water flow compensation may be provided north of the creek. An area northeast of the athletic fields adjacent to the creek is reserved for detention of stormwater generated by the park.

Program Summary: Kathleen Bevan Castle Park	
8	Soccer fields; full size
4	Football/Lacrosse fields; full size
1	Concession/Restroom building with storage
1	Playground/Tot lot
900 car	Parking area
1	Picnic area (pavilion, tables, grilles)
2	Bridges over creek
	Restored farmstead, interpretive farm
1	Conference center
150 car	Parking area
	Restored wetland
	Successional area, interpretive habitat
6,800 LF	Bicycle trail
2,600 LF	Hiking trail
1	High ropes course
1	Low ropes course
1	Disc golf course
1	15 Station fitness course

Biehle Property

The Biehle park property is located just inside the northern City limits and fronts on Mason-Montgomery-Millgrove Road and the Muddy Creek corridor. The site is set back from U.S. 42 to the south. A parcel across Mason-Montgomery-Millgrove is reserved for the City of Mason Public Works maintenance compound. A new city wastewater treatment plant is under construction on the property east of Muddy creek along Mason Montgomery-Millgrove-Road.

The 54 acre Biehle property features rolling farm land on the western portion of the site, separated from a large field in the Muddy Creek valley by a steeply sloped wooded hillside. The floodplain along the east side of the park separates the fields from a large woods east of the creek. Sightlines along the Mason-Montgomery-Millgrove frontage become more limited at the south east end of the site due to the topography and a bend in the road.

Public workshops and an assessment of the current athletics programs and enrollment trends in the community have identified a need for tournament level recreational fields. In particular, additional youth baseball fields are needed in the short run and full sized baseball fields 10 to 15 years out as the current population ages. The west portion of the site can accommodate a baseball field complex of up to five full sized fields. It is anticipated that these fields can initially be configured to accommodate youth baseball play. Approximately 360 parking spaces or 72 spaces per field are provided for the baseball complex. A restroom and concession building is central to four of the ball fields with a walkway connection to the fifth field. The fourplex fields will be lighted for extended league play and one of the fields may have synthetic turf.

The existing lower field adjacent to the Muddy Creek accommodates a championship soccer/football stadium complex. A synthetic turf field with seating for 3,000 and a natural turf field with seating for 1,500 are paired with the bleachers, restrooms, and concessions in a central location. While the 330 paved parking spaces in this area may not be adequate for a major football event, overflow parking areas on lawn areas are included on the master plan.

The steep hillside on the western side of the site, the Muddy Creek corridor and the eastern parcel across the Muddy Creek will remain wooded. Located between the baseball complex and the soccer/football stadium on the wooded slope will be a disc golf course associated with the trail system that traverses the slope. Along the creek and the eastern wooded area will be an extension of the trail system with an adventure ropes course. A fitness course will also be laid out along the trails that loop the site. A small parking lot adjacent to the Muddy Creek will serve as a trailhead for the Muddy Creek Greenway Corridor.

Program Summary: Biehle Property	
5	Baseball fields (4 Lighted, 1 Synthetic)
2	Concession/Restroom building with storage
360 car	Parking area at baseball fields
1	Playground/Tot lot
1	3000 Seat Synthetic Soccer/Football Stadium
1	1500 Seat Soccer/Football Stadium
330 car	Parking area at stadium
1	Disc golf course
12,580 LF	Bicycle trail
4,900 LF	Hiking trail
2	Bridges over creek
15 car	Parking area at trailhead

1	Sledding hill
1	High ropes course
1	Fitness trail
1	Low ropes course
2	Picnic area (shelter, tables, grilles)

Mason-Montgomery Road Property

This property is located directly north of the Corwin Nixon Park entrance drive and the Mason Middle School, and south of the Municipal Center. Located on several former residential sites, the 4.5 acre property is generally level along the street, with a low hill along the eastern edge, and groupings of open grown shade and evergreen trees. Its close proximity to the High School, Community Center, downtown Mason and Municipal Center make it ideal for a town commons type of park. This site can be the focus of events and celebrations as well as passive enjoyment. Program elements identified during the public workshops include a bandstand or gazebo, benches, tables for chess and picnicking, art or interpretive elements, gardens, meandering walkways, a water feature and ornamental lighting. The pond will feature a lighted fountain jet.



Mason-Montgomery Road Property

The proposed park plan features a classical alignment of park structures with an informal arrangement of walkways and a reflecting pond in between. A central pavilion or bandstand will create a focus and identity for the park where brown bag concerts or small community events can be staged. Two smaller gazebos at the north and south ends of the park will offer shade for seating or picnicking. A constructed edge and walkway adjacent to the reflecting

pond provide access to the water's edge in the summer and skating in the winter. Informal walkways allow for as many of the existing trees to be retained as possible. Cuts through the earth berm bordering the eastern edge of the property will link the park with parking for the new High School to the east. The cut embankments may be either sloped and landscaped or retained with stone-faced walls. This park should have high quality details consistent with the plaza in front of the Municipal Center.

Program Summary: Mason-Montgomery Road Property	
3,800 LF	Bicycle trail
1	Reflecting pond with fountain jet
1	Pavilion/Bandstand
2	Gazebo
15 car	Parking area

State Property

The State property is a 23 acre parcel provided at minimal cost to the City by the State of Ohio. It is located southwest of downtown along U.S. 42 by the new post office. It consists of wooded hillsides and open old fields. Muddy Creek runs through the parcel, paralleling the eastern edge and U.S. 42. The land was granted to the City of Mason with the requirement that vehicular access over the creek from U.S. 42 be constructed and that a fully accessible play area is provided as part of the park program. The State of Ohio has retained a portion of the original parcel north of the park property for future development of a MRDD facility or group home.

This property is well suited to serve as a neighborhood park for the western part of the City and the adjacent residential neighborhood; however direct access from the residential neighborhood to the west is blocked by a continuous edge of private homes. Neighborhood access will have to be developed from the north or south. Included in the master plan are places for picnicking and a picnic gazebo, parking for 56 cars, 16 of which are for the handicapped, with a drop off at the play area, and walking and bike trails along the Muddy Creek. Potential future links via the trail system exist to the neighborhood to the west, Quinn Park to the southwest and the Muddy Creek Greenway to the north.

Program Summary: State Property	
1	100% Accessible Playground/Tot lot
56 car	Parking area
3,000 LF	Bicycle trail
1	Disc golf course
1	Picnic area (shelter, tables, grilles)

Gould Park

Gould Park is located north of the existing Meadows Park in central Mason and is surrounded by residential neighborhoods. The 49 acre property has no visible road frontage but up to five potential access points from existing city streets. The site consists of primarily open agricultural fields, with a farm house and barns located in the northeast corner of the site. The house and barn have some historical value, in addition to potential park use for programs and maintenance. Vegetation is limited to fencerow trees, a small but very prominent grouping that accents the high point in the center of the site and a small woodlot surrounding the creek in the southwest corner of the site. A glacial mound near the center of the site is an interesting feature elevated 12 to 14 feet above the surrounding park property edges. Portions of the park perimeter, especially along the southeast and south boundary are prone to flooding.

Public workshop participants agreed that programmed sports facilities are not appropriate in Gould Park. Priorities expressed are storm water detention and passive destination and neighborhood park uses. At the south side of the park and in close proximity to the Muddy Creek Branch No.2, a low area provides an opportunity to create a detention area that can be designed as a park fish pond with an outfall to the creek. It will be an amenity for the park and will also provide storm water storage capacity. A formal vehicular entrance is proposed on the east side of the park at Main Street, with a rotary terminus that affords views through the park. The walking trail system is organized around a series of seating areas and overlooks that are visually linked throughout the park. Open lawn areas provide opportunities for both community gatherings and casual use.



Gould Park

Parking areas are located to the north and south of the main entrance in close proximity to picnicking and play areas. The family center, located at the elevated part of the site, provides views and includes a children's play area stepping down the slope, restrooms and pavilion,

tennis courts and a basketball court. Picnic areas with shelters are located at the family center, at the west end near the creek (with lawn volleyball), and by the proposed pond at the south side of the park. A softball field located adjacent to the picnic areas is intended for pick-up use and not league play. An additional small parking area is accessible from Rock Garden Court on the west side of the park.

Program Summary: Gould Park	
1	Pick-up softball field
1	Volleyball court
1	Basketball court, full
2	Tennis court
1	Restroom building
1	Playground/Tot lot
4,200 LF	Bicycle trail
3400 LF	Walking trail
40 car	Parking area
20 car	Parking area
15 car	Parking area
1	Retention pond
1	Bridge over pond
	Renovated house, barn, maint. building
1	15 Station fitness course
3	Picnic area (pavilion, tables, grilles)

Storm Water Management Issues and Opportunities

The close proximity of the proposed park properties to significant water courses requires special attention to assure that the design and construction of the facilities will adhere to applicable local, state, and federal storm water and floodplain regulations and design criteria. The most challenging issues to be addressed in the detailed design will be the management of storm water runoff from impervious surfaces and encroachments on the regulated floodways and floodplain areas. However, the master plan concepts provide ample flexibility to accommodate these concerns. In addition, the concept plans provide some opportunities for the incorporation of features that will enhance storm water management while fulfilling the designated functional needs of the parks.

The proposed park areas with the most potential to be affected by storm water management requirements would be Castle Park, Biehle Property, Gould Park, State Property, and the Muddy Creek Corridor. The significance of these park areas is related to their size, proposed development intensity, and location adjacent to streams. The design of the smaller facilities, such as the Mason-Montgomery Road Property, should be reviewed for potential impact on existing storm water infrastructure.

Regulatory Requirements

The final design and construction of the storm water management system for the proposed parks must consider the applicable regulations and/or standards of the following agencies:

- City of Mason Zoning Ordinance
- City of Mason Storm Water Management Plan
- Warren County Soil and Water Conservation District
- FEMA Flood Insurance Study for City of Mason
- FEMA Flood Insurance Study for Unincorporated Areas of Warren County
- US Corps of Engineers
- Ohio Department of Natural Resources

Most of the above requirements can be addressed in the design phase of the project but others are more appropriately handled in the construction phase and made a responsibility of the construction contractor. Contractor responsibilities would typically include filing of the storm water NOI with Ohio EPA and preparation of the detailed Water Management and Sediment Control Plan and its implementation.

Storm Water Design Criteria

The following storm water design standards, documents, and software should be considered:

- City of Mason Zoning Ordinance – Chapter 1109 Design Standards
- City of Mason Zoning Ordinance – Chapter 1119 Water Management and Sediment Control
- City of Mason Zoning Ordinance – Chapter 1169 Floodplain Management Regulations
- HEC 2/HEC RAS software for evaluation of the impact of proposed stream crossings on designated floodways and floodplains, as may be necessary

Opportunities

The concepts provided in the master plans for the park areas allow some flexibility in the incorporation of features that will generally support the city's Phase II Storm Water Management Program. Examples of features that could be included in the detailed design are:

- Consolidation of detention volume requirements onto the larger sites. For example, it might be feasible to provide excess detention volume at Gould Park to compensate for lack of detention at the Mason-Montgomery Road Property, thus freeing more area at the smaller site for more intense use. This strategy is subject to identification and analysis of existing constrictions or "choke points" in the infrastructure system.
- Low-cost Best Management Practices, such as grass filter strips, buffer areas, grass swales, and trapped catch basin inlets can be utilized to provide water quality benefits.
- The increased public access to water courses can be an incentive for expanding the city's Lake and Stream Monitoring Program (water quality).
- Emphasis on the use of open channels and existing water courses to accommodate runoff and minimize connections to existing storm water closed pipe systems.

Cost Opinions and Phasing

Cost Opinions prepared for each park are based on a range of anticipated bidding and construction costs with construction phases of at least one million dollars for the larger parks. A summary table lists the overall opinion of probable development cost that should be budgeted for each park. The detailed cost opinions attached in **Appendix 3** list a low middle and high range for the construction cost. The high range includes a 20% contingency, which is appropriate at the master planning level. Therefore the cost summary table uses the high range cost as the recommended budget amount for each park. The budget amount also includes a 10% factor for soft costs, such as surveying and design fees and permitting.

Cost Opinion Summary:		
Muddy Creek Corridor		\$1,520,000
Crooked Tree Property		\$204,000
Old Stitt Road Property		\$68,000
Kathleen Bevan Castle Park		
Stabilize Farmstead	\$160,000	
Renovate Farmstead	\$1,584,000	
Sports Complex and South Park Amenities	\$4,041,000	
North Park Amenities	\$1,588,000	
Kathleen Bevan Castle Park Total:		\$7,373,000
Biehle Property		
Baseball Complex and West Park Amenities	\$5,452,000	
Soccer/Lacrosse Stadium and East Park	\$5,840,000	
Biehle Property Total:		\$11,292,000
Mason Montgomery Road Property		\$1,586,000
State Property		\$895,000
Gould Park		\$2,893,000

The **Phasing Matrix** also utilizes the high range cost, with soft cost included. Phases are prioritized for each park. Color coding identifies system-wide high, medium and low priority phases. For this reason the highest priority phase for a park may be ranked third or fourth highest priority for the system as a whole. The matrix suggests the order in which the projects may be funded over time. This ranking should be reviewed annually and adjusted to meet community and fiscal needs, or funding opportunities that may arise. Additional park land and facilities will increase the cost of maintaining and operating the system. Capital improvements for each new park will require a corresponding commitment and annual

appropriation of funds for operations and maintenance. When capital funds are committed, a corresponding commitment should be made to increase the operations and maintenance budget.

The **Operations Cost Opinion**, identifies a range of maintenance and operating budget amounts that can be expected to correlate to the development of the new park facilities. As capital funds are allocated for each phase, the Park & Recreation Department's annual operating budget must also be adjusted for the year during which the park (or phase) will be opened. This cost opinion provides guidance in making operating cost decisions to support capital investments. As each phase of park improvements is designed, the operating budget estimate can be refined. The budget can be refined by using the more specific site requirements derived from the construction documents and the associated program assigned to the new park improvements, as well as the City's past experience and expenditures for parks of similar scale and characteristics.

The City of Mason Parks & Recreation Department has recently drafted bench marks for park maintenance levels based on visibility, usage, character of park and recreation facilities and their location. As described by the Department's Maintenance Plan, levels of maintenance establish the following allocation of manpower and resources:

- Class "A"** These are areas that have a) maximum visibility, b) maximum usage, c) require high, usually daily cleaning/checking of facilities each day, and d) are considered the pride of the city. State-of-the-art maintenance is applied to a high-quality, diverse landscape at this level.
- Class "B"** These areas have a) high to moderate visibility, b) high to moderate usage, c) athletic fields for competition, d) require at least twice per week maintenance and cleaning of facilities, and e) yet, are still a showcase for the city to be proud. Areas within this level receive a moderate-high level maintenance.
- Class "C"** These areas have a) moderate to low visibility, b) moderate to low usage, and c) facilities are usually used by the local neighborhood and/or the casual player, d) require at least weekly maintenance and cleaning. Areas within this level receive a moderate level of maintenance.
- Class "D"** Class D is reserved for those properties either whose maintenance the City has contracted out to others, or which property the City does not own but has agreed to maintain. Properties in Class D thus require much less time and attention than other parks, but are still our responsibility. These properties are diverse and vary from the active softball fields to unused future park property.

Phasing Matrix

Phase	Castle	Biehle	Gould	Mason-Montgomery	Muddy Creek	State	Old Stitt	Crooked Tree
1	2 Stabilize farm buildings \$160k	1 Develop baseball complex and west side amenities \$5.5 mil.	4 Develop pond and south park amenities \$1.1 mil.	3 Entire park Development \$1.60 mil.	* Phase 1 trail connection to Pine Hill Lakes \$70k	Destination play area and parking \$630k	Entire Park Development \$70k	Entire Park Development \$200k
2	5 Develop sports complex - south \$4.0 mil.	Soccer/Lacrosse fields and east side amenities \$1.8 mil.	Family center and north park amenities \$1.8 mil.		Link from Heritage Oaks to Pine Hill Lakes \$340K	Trail Development \$260k		
3	Farmstead development for conference center \$1.6 mil.	Soccer/Lacrosse Stadium \$4 mil.			Link from Heritage Oaks to Biehle \$840k			
4	Develop park amenities - north \$1.6 mil.				Link from Pine Hill Lakes to cemetery \$280k			

* A grant application to consturct this phase has been awarded and design is in progress.



Denotes ranked short-term priority with implementation desired within the next five years



Denotes medium priority with implementation within the next ten years

Operations Cost Opinion

	Castle 126 Acres	Biehle 54 acres	Gould 49 acres	Mason-Montgomery 4.5 acres	Muddy Creek 3.2 miles	State 23 acres	Old Stitt 1.4 acres	Crooked Tree 1.9 acres
Potential Operations & Maintenance Expenditures	\$3.5k - \$5k/acre \$440,000 - \$630,000 / yr.	\$4.5k - \$6k/acre \$243,000 - \$324,000 / yr.	\$1.5k - \$3k/acre \$74,000 - \$147,000 / yr.	\$4.5k - \$6k/acre \$20,000 - \$27,000 / yr.	\$5k - \$8k/mile \$16,000 - \$26,000 / yr.	\$1k - \$3k/acre \$23,000 - \$69,000 / yr.	\$2,000/acre \$2,800/yr.	\$2,000/acre \$3,800/yr.
Repair Replacement Renovation Allocation	5% of O&M \$22,000 - \$31,500 / yr.	5% of O&M \$12,200 - \$16,200 / yr.	5% of O&M \$3,700 - \$7,350 / yr.	5% of O&M \$1,000 - \$1,350 / yr.	5% of O&M \$800 - \$1,300 / yr.	5% of O&M \$1,300 - \$3,450 / yr.	5% of O&M	
Opportunities for Sponsors or Partners	Sports Boosters Non-Profits Schools	WCCVB Sports Boosters Service Groups	Local Business Neighborhoods	Local Business Garden Club Civic Groups	Service Groups	MRDD Neighborhood	Condo Assoc.	



Class 'A' Level of Maintenance
 High Visibility, Maximum Usage



Operations Storage and Maintenance Compound



Class 'B' Level of Maintenance
 High to Moderate Visibility and Usage



Class 'C' Level of Maintenance
 Moderate to Low Visibility and Usage

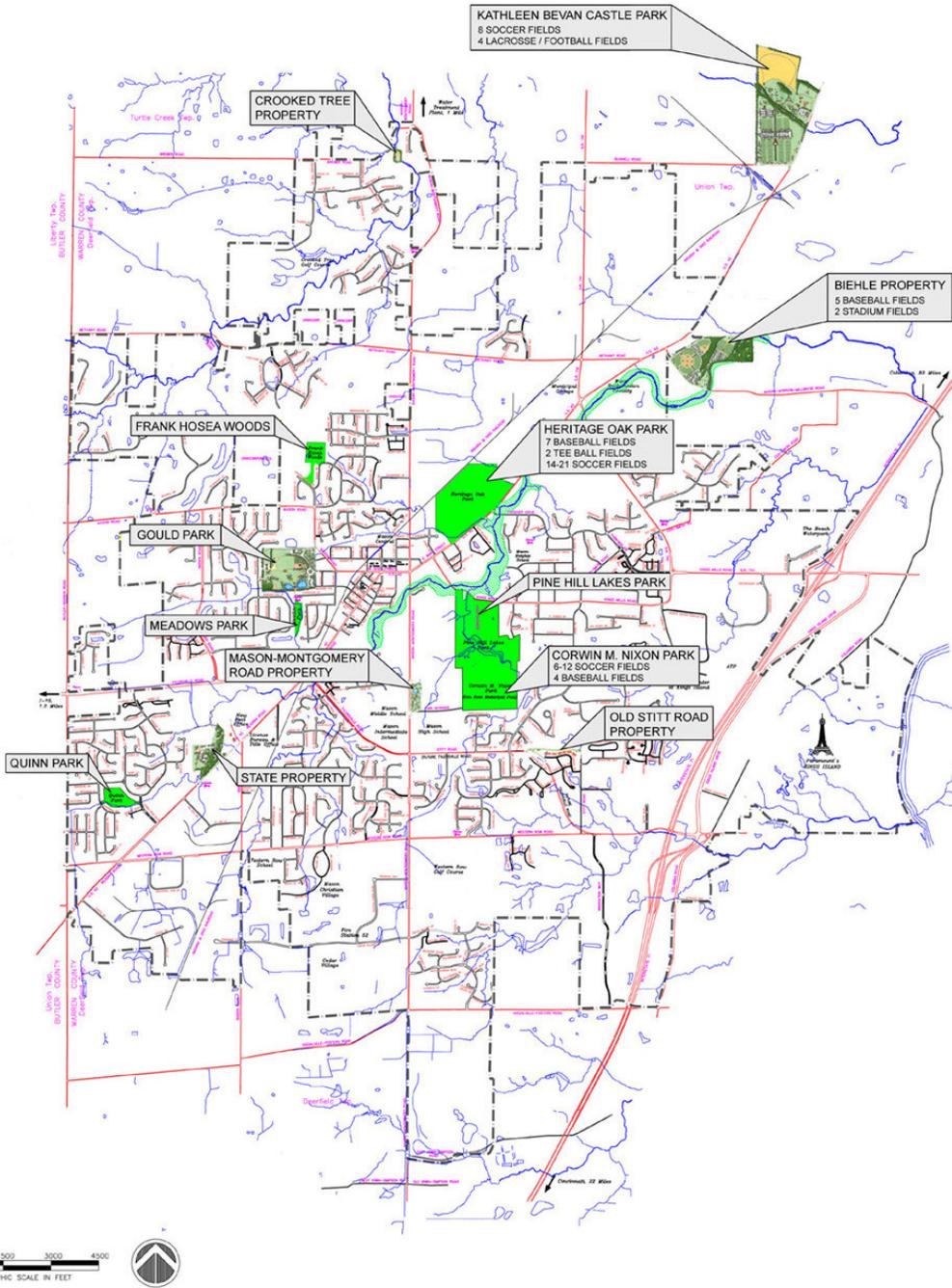
Funding Opportunities

Various sources of public grants are available for local governments for the acquisition, development and enhancement of public open space. Several private foundations are also possible sources of grants for tax exempt 501(c)(3) organizations. An overview of funding sources is provided in *Appendix 4*.

Grant themes identified in the overview include, storm water management, trail systems, storm water detention, intensive recreation and historic preservation. Many of the grant opportunities seek to foster relationships and partnering between diverse groups within the beneficiary community. Therefore, partnering with area businesses, schools and institutions may not only open avenues for sponsorship of specific park properties or facilities, but also provide an edge towards grant eligibility. The feasibility of creating a non-profit foundation that would support capital improvements and on-going maintenance costs within the parks should be reviewed for appropriateness for the City of Mason. Such an entity may solicit tax exempt donations and seek foundation grants outside of the fiscal structure of a public agency.

While granting opportunities can help leverage local funding in the form of local matches, they are competitive and finite and cannot be expected to cover all capital funding for the projected park improvements. A local or county wide parks tax levy should be considered as a potential primary source for raising the funds required for capital improvements and operating costs.

Park Master Plans



Appendix 1

Site Assessment and Meeting Notes



Recreational Projections

Soccer Participation Data							
	2000	2001	2002	2003	Projections		
	2000	2001	2002	2003	2004	2005	2006
Warren Select Soccer	225	225	225	270	324	389	467
Mason Soccer Club*	238	238	238	286	343	412	494
SAY Soccer Spring	1121	1256	1340	1237	1299	1364	1432
SAY Soccer Fall	1801	1718	1547	1754	1842	1934	2030
Total Spring	1584	1719	1803	1793	1966	2165	2393
Total Fall	2264	2181	2010	2310	2509	2735	2991
Delta Spring		135	219	209	382	581	809
Delta Fall		-83	-254	46	245	471	727
Field to Player Ratios							
	2000	2001	2002	2003	2004	2005	2006
Spring Soccer							
Participants	1584	1719	1803	1793	1966	2165	2393
% Increase since 2000		8.52%	13.83%	13.19%	24.12%	36.68%	51.07%
Fields	25	25	25	25	25	25	25
Fields/100 participants	1.578	1.454	1.387	1.394	1.272	1.155	1.045
Change since 2000		-7.85%	-12.15%	-11.66%	-19.43%	-26.84%	-33.81%
Field Shortage **							
	2000	2001	2002	2003	2004	2005	2006
Fall Soccer							
Participants	2264	2181	2010	2310	2509	2735	2991
% Increase since 2000		-3.67%	-11.22%	2.03%	10.81%	20.79%	32.13%
Fields	25	25	25	25	25	25	25
Fields/100 participants	1.104	1.146	1.244	1.082	0.997	0.914	0.836
Change since 2000		3.81%	12.64%	-1.99%	-9.75%	-17.21%	-24.32%
Field Shortage							
		-0.95	-3.16	0.50	2.44	4.30	6.08
Fields***							
Heritage Oak	14	14	14	14	14	14	14
Corwin Nixon	6	6	6	6	6	6	6
Heritage Presbyterian	5	5	5	5	5	5	5
Total	25	25	25	25	25	25	25
* For projections Mason Soccer Club participation estimate is based on 12-16 teams of 15-18 participants for average of 238 participants in 2000-2002, assume increases parallel Warren Select Soccer.							
** Fall soccer's higher enrollment establishes it as the basis for calculating demand for fields.							
*** Heritage Oak and Heritage Presbyterian fields may be reconfigured depending on age, which will affect field count.							



Recreational Projections

Football Participation Data							
	Projections						
	2000	2001	2002	2003	2004	2005	2006
Mason Youth Football	300	350	380	410	470	530	600
Total	300	350	380	410	470	530	600
Delta		50	80	110	170	230	300
Field to Player Ratios							
	2000	2001	2002	2003	2004	2005	2006
Mason Youth Football							
Participants	300	350	380	410	470	530	600
% Increase since 2000		16.67%	26.67%	36.67%	56.67%	76.67%	100.00%
Fields	0	0	0	0	0	0	0
Fields/100 participants	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Change since 2000		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Field Shortage	2.25	2.75	3.00	3.25	3.75	4.00	4.75
Fields							
Heritage	0	0	0	0	0	0	0
Corwin Nixon	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Participants and Field Shortage for the year 2000 is based on 1.3 fields per 100 participants.							

Baseball Participation Data							
					Projections		
	2000	2001	2002	2003	2004	2005	2006
MYO	1223	1323	1423	1523	1623	1723	1823
Knothole	336	420	480	540	600	660	720
Fastpitch	13	24	41	100	140	180	220
Total	1572	1767	1944	2163	2363	2563	2763
Delta		195	372	591	791	991	1191
Field to Player Ratios							
	2000	2001	2002	2003	2004	2005	2006
Participants	1572	1767	1944	2163	2363	2563	2763
% Increase since 2000		12.40%	23.66%	37.60%	50.32%	63.04%	75.76%
Fields	11	12	13.4	13.4	12.4	12.4	12.4
Fields/100 participants	0.700	0.679	0.689	0.620	0.525	0.484	0.449
Change since 2000		-2.95%	-1.49%	-11.47%	-25.01%	-30.86%	-35.86%
Field Shortage (Maintaining Year 2000 # fields/participant ratios)							
Field Shortage		1.36	2.60	4.14	5.53	6.93	8.33
Fields							
Heritage	6	6	7	7	7	7	7
Corwin Nixon	4	4	4	4	4	4	4
Intermediate School	1	1	1	1	0	0	0
Quinn Park	0	1	0	0	0	0	0
Grace@ 70% Use	0	0	1.4	1.4	1.4	1.4	1.4
Total	11	12	13.4	13.4	12.4	12.4	12.4



Kickoff Workshop

Date of Meeting: 7:00 PM May 4, 2002 **Re:** Project Kickoff Workshop

Location: Mason Municipal Building **Issue Date:** May 10, 2004

Submitted By: Woolpert LLP

ITEMS DISCUSSED

A public workshop was held at the Mason Municipal building to introduce the project and consultant team to the community, outline the scope and schedule of the project and provide an overview of each of the sites. The meeting was attended by _____citizens.

After a brief presentation on the master planning process and schedule, participants at the Community Kickoff Workshop expressed their interest in shaping the future of Mason Parks at two levels. First the group identified facilities, features or improvements needed in the overall park system. Then attendees broke into groups focused on each of the seven newly acquired properties, where they discussed and recorded specific ideas for use and character of the park and features to include.

At the conclusion of the meeting, a representative of each group presented the list of ideas. The combined group confirmed the lists and commented. These lists will form a foundational element of the master plans for each park.

Needs not met by existing parks:

1. Number of sports fields
 - a. Football
 - b. Baseball
 - c. Soccer
 - d. Lacrosse
2. Skatepark
 - a. Possibly at Corwin Nixon Park
3. Increase pool size at Corwin Nixon Park
4. Amount of passive parkland
5. Bike/Hike trails on perimeter of parks
6. Dog park
7. Increase number of trash cans
8. Increase number of water fountains
9. Safe access to Heritage Oak Park

10. Adequate signage for sports fields
11. Frisbee golf
12. Adequate handicap accessibility to sports fields
13. Number of picnic tables and shelters
14. Improve drainage on sports fields
15. Sledding
16. Cross country skiing
17. Increase number of shade trees
18. Swing set in Pine Hill Lakes Park
19. Ice hockey
20. Pedestrian access to Lindner Family Tennis Center

Amenities requested at proposed park properties:

I. Mason-Montgomery Road Property:

- Park benches
- Fitness circuit equipment along bike path
- Tables
- Grandstand for summer activities
- Ice cream vendor
- Brown bag events
- Concrete tables and benches for checkers/chess
- Gazebo
- Adopt-A-Plot garden area
- Circular seating area around large tree
- Place for memorials

II. Gould Property

- Frisbee golf
- Skatepark
- Link to Meadows Park
- Access through O'Bannon Property to Meadows Park
- Pedestrian link from Hosea Woods through Gould and Meadows to US 42
- Par Course along perimeter
- Baseball
- Soccer
- Retention pond
- Improvement to Mason Road for better access to school
- Sprayground
- Centralized gathering spot
- Gazebo

III. Old Stitt Road Property

- Parking for bike trail head
- Exercise trail

IV. Crooked Tree Property

- New fence
- More maintenance
- Picnic shelter for reservation
- Better access

V. Castle Property

- Lacrosse
- Soccer
- Improved drainage
- Concession
- Restrooms
- Shade trees, shelters,
- Sponsorship for trees
- Playground
- Museum/Farmland History/Education Center in old house
- Rent building for family reunions, art shows, etc.
- Use creek for scenic and nature education
- Trails on perimeter
- Frisbee golf
- Mountain biking
- Peewee football
- Rope course with zip line
- Working farm
- Community Sustained Agriculture (CSA)
- Indoor Sports Building
 - Racquetball
 - Volleyball (sand outside)
 - Ice hockey
- Wetland
 - Duck blind
- “Off leash” Dog Park
- Lighted Baseball
- Lighted Softball
- Adequate Parking

VI. Biehle Property

- Driving Range
- Mountain Biking
- Lake
- Football

- Soccer
- 3 mile bike path along perimeter
- Frisbee golf
- Nature trails
- Lacrosse
- Prairie
- Woods
- Sand Volleyball
- Fossil area
- Lighted baseball/softball
- Access from Muddy Creek bike/hike trail

VII. Muddy Creek Greenway Corridor

- Bike Paths
 - Avoid entire downtown by bike
- Stop erosion



Memo

To: Michael Hecker
From: Woolpert LLP
Date: May 5, 2004
Subject: City of Mason Parks Site Reconnaissance

The consultant team and members of the Parks and Recreation Department and steering committee toured the existing Mason Parks to assess current levels of service, needs and opportunities. The group then toured the new properties to observe and discuss opportunities and constraints presented by the existing conditions.

Observation and discussion notes follow.

EXISTING PARKS

Heritage Oak Park

- 7 Baseball Fields
- 2 T-Ball Fields
- 14-21 Soccer Fields depending on layout
- 6 Tennis Courts
- 3 Full court basketball, 1 crosses other 2
- Small (inadequate) department maintenance building adjoining a shelter
- Tot lot
- Play area with restrooms, picnic shelter and concession
- Bike path through middle of park
- Entrance to park is difficult to maneuver, new traffic light is planned
- Signalized entrance will provide a link to the Muddy Creek corridor
- Seepage from buried landfill keeps sections of embankment wet

Pine Hill Lakes Park

- Connection to Muddy Creek along Kings Mill Road
- Entrance damaged by construction on water tower
- Large amphitheater expanded by dam improvements (sledding area)
- Play area with restrooms, picnic shelter and sprayground

- Nature paths through woods (Boy Scouts help build and maintain)
- Lake stocked with 3,000 lbs of Trout and 2,000 lbs of Catfish
- Inadequate parking, but Community Center is close
- Shelter by the creek
- Trail connection to Corwin M. Nixon Park

Corwin M. Nixon Park

- 6-12 soccer fields
- 4 Lighted baseball fields
- Municipal pool
- School trails on adjacent property
- Concession, restrooms and picnic shelter
- Proposed skatepark
- Trail connection to Pine Hill Lakes Park

Thomas P. Quinn Park

- Playground
- 2 tennis courts
- Basketball goal in parking lot
- 2 baseball fields, one being removed because of drainage problems (too wet)
- Inadequate parking
- High number of kids in area
- Kids use tennis courts for inline hockey, skateboarding and wiffleball
- 1 practice soccer field

Meadows Park

- Playground
- Full basketball court
- 2 pedestrian connections to adjacent neighborhoods
- Creek to be designed to look more natural

Frank Hosea Woods

- Small parking off street
- Asphalt bike trail through middle of park
- Mulch trails very wet
- Small pond

NEW PARK PROPERTIES

Castle Property

- Creek splitting property in two
- Fence row trees on all borders
- Tile drains clogged, land behind house is very wet (could become a wetland)
- Most land is rolling; portions of the north field hidden from the rest of the site

- Creek has high steep banks
- Spring in back of house
- Passive park activities in floodplain
- Active facilities on higher ground
- Old runway on north portion of property
- Access on east edge and south edge
- Historic barns in stable condition, but need care to save them
- House and barn complex offers good opportunity for reuse, interpretation

Biehle Property

- Upper portion of property near US 42 is rolling farm land
- Steep wooded slope down to Muddy Creek.
- Lower secluded field in floodplain, not visible from road
- Woods across creek, difficult access
- Muddy Creek very accessible
- Large sheet metal sided barn tucked into woods
- Good road frontage on the south boundary, but road access limited due to sight distance

Gould Property

- Rolling terrain with mound in middle, good vantage point
- Small patch of young woods where creek cuts through property
- 2 fence rows separating sections of the property
- Many access points, but almost no road frontage
- Rear yards of homes along most boundaries
- Close to downtown

Old Stitt Road

- 60' wide cleared land
- Cul-de-sac at one end
- Golf course to north
- Condominiums to south
- Connected to the bikeway

Mason-Montgomery Road

- Entrance to Corwin M. Nixon Park to south
- Front yard setting for Municipal Building and Community Center to north
- Bike path along west edge of Mason-Montgomery Road
- Gently rolling terrain with some established trees
- Attractive extension of the fountain and memorial areas in front of the Municipal Building

Crooked Tree Property

- Limited access from Brewer Road
- Most of property in floodplain

- East and west bordered by residential
- Largely hidden from view
- Empty lot on Wooded Vista Court could be bought and used for access

Muddy Creek Corridor

- Access is limited
- Heavily vegetated
- Steep wooded banks present a challenge to building a bike trail
- The Corridor links Pine Hill Lakes Park, Heritage Oaks Park and Biehle Property and could be extended to other parks (Quinn).
- Greenway could provide a bike route avoiding downtown



Meeting Minutes

Date of Meeting: May 20, 2004
7:00 PM

Re: Mason Parks Steering Committee

Location: Municipal Building

Issue Date: May 24, 2004

Submitted By: Woolpert LLP

In Attendance: Michael Hecker
Jay Koepfle
Kevin Collins

Don Allen
Duke Flaherty
Ginny Sundin

Keith MacKinnon
John Martin
Jim Frank

ITEMS DISCUSSED

1. Meeting started with Jim Frank giving a quick review of the presentation given at the Kickoff Meeting.
2. Michael Hecker suggested removing the patch logo from the drawings and using the City of Mason logo.
3. Concerns among the group that the project and meetings were not given enough coverage in the local papers, The Community Press and Pulse Journal.
4. Design Principles:
 - Phased approach to implementing the park improvements with a priority on relieving athletic field demands, while simultaneously preserving open space.
 - Balance active and passive uses within the park system and as much as possible within each park.
 - Implement improvements with a “Good Neighbor” policy in mind.
 - Allow each park enough flexibility to adjust to changing demands.
 - Baseball fields positioned in clover leaf formation
 - Minimize roadway infrastructure within park properties.
5. City Council is looking for complete final plans, a vision that is flexible and could adapt to changing demands.
6. Group has concerns on how the parks will be implemented. Eg. Finish one park completely then move on to the next or complete small portions of each park
7. Concerns that school will want Mason-Montgomery Property for parking

8. Castle Property
 - Concerns about Castle being presented first in presentation because it is not in the city limits
 - Plan approval will have to come from Union Township, not the City of Mason
 - Road along north property line may be unimproved
 - Suggestions that Phase One include property south of Little Muddy Creek and Phase Two include property north of Little Muddy Creek and Farmstead
 - Dude Ranch concept could be implement at that Castle Farmstead by renting to schools and corporations
 - Football near or in the floodplain.
9. Gould Property
 - Concerns about traffic in surrounding neighborhoods if property is developed into a sports complex
 - Group was in favor of Program Option #3
 - More passive than active
10. Biehle Property
 - Football/Lacrosse
 - Stadium for championship games in lower field a possibility
 - Barn is not safe and is being removed
 - New subdivisions are planned to the east and south
 - Existing Mason-Morrow-Millgrove Road could become park entrance if road is realigned to east
11. State Property
 - Not a high priority
12. Muddy Creek Greenway Corridor
 - Preserve the corridor
13. Mason-Montgomery Road Property
 - Suggestions to develop first to become a gateway into the city
 - Concerns that an Adopt-A-Garden would not be kept up
 - Ornamental water fountains with which visitors can interact, but not a formal sprayground
 - Sculpture garden
14. Old Stitt Road Property
 - Suggestions that money would be better spent elsewhere
 - Conservation easement
 - Sell to adjacent property owners
15. Crooked Tree Property
 - Enclosed rental facility
 - Lease to adjacent property owners until need to develop becomes greater



Memo

To: City of Mason
From: Woolpert LLP
Date: May 25, 2004
Subject: City of Mason Parks Opportunities and Constraints

Could Property

- Opportunities
 - Large open agricultural land
 - 5 roadway access points
 - Connection to Meadows Park
 - Close to downtown
 - Mound at center divides site, provides overview
 - Constraints
 - Close neighbors, rear yard exposed
 - Unusual landform centrally located on property
 - Need for retention may consume open space (could be opportunity)
 - Limited frontage and poor visibility from serviceable R.O.W.
 - Little frontage with poor sightlines at vehicular access points
 - Minimal tree cover
1. Program Option #1 (Active)
 - a. Soccer
 - b. Baseball
 - c. Skatepark
 - d. Frisbee golf
 - e. Playground
 - f. Sprayground
 - g. Picnic shelters
 - h. Concessions/restrooms
 2. Program Option #2 (Passive)
 - a. Community gardens
 - b. Prairie
 - c. Dog park

- d. Lake/pond
- e. Amphitheater
- f. Gazebo
- g. Picnic shelters
- h. Successional fields
- i. Nature trails
- j. Fitness course
- k. Sledding area

3. Program Option #3

- a. Pavilions
- b. Picnic areas
- c. Walking and biking trails
- d. City commons-event lawn area
- e. Destination playground
- f. Sprayground
- g. Band shell or performance area
- h. Pond (water management area detailed as an amenity)

Biehle Property

- Opportunities
 - Large open space
 - Woods
 - Muddy Creek
 - Road frontage
 - Some frontage with good sightlines for ingress/egress
- Constraints
 - Lower field in flood plain
 - Lower field not visible from road
 - Slope near existing entrance
 - Some frontage with poor sightlines for ingress/egress

1. Program Option #1 (Active)

- a. Trail head for bike path along Muddy Creek
- b. Sports fields
 - i. Baseball, possibly with lights
 - ii. Lacrosse/football
 - iii. Soccer, possibly with lights
- c. Concessions/restrooms
- d. Picnic shelter
- e. Biking and walking trails
- f. Frisbee golf in woods across creek
- g. Biking and walking trails
- h. Championship Stadium in lower field

2. Program Option #2 (Passive)

- a. Trail head for bike path
- b. Wildflower prairie

- c. Educational center
- d. Fossil center
- e. Trails, bike, walk, nature
- f. Lake/pond in lower field
- g. Picnic shelters
- h. Dog park
- i. Arboretum

Castle Property

- Opportunities
 - Large open agricultural land
 - 2 adjacent roads
 - Creek splitting site
 - Historic farmstead
 - Multiple access opportunities
 - Constraints
 - Creek splitting site (crossing)
 - Very wet areas
 - Distance from downtown
 - Utility service capacity unknown
 - Minimal tree cover
1. Program Option #1 (Active)
 - a. Sports fields
 - i. Soccer, possibly with lights
 - ii. Baseball, possibly with lights
 - iii. Lacrosse/football
 - b. Skatepark
 - c. Frisbee golf
 - d. Concessions/restrooms
 - e. Picnic shelters
 - f. Pavilions
 - g. Playground
 - h. Indoor sports complex
 - i. Biking and walking trail
 - j. Farm house and barn historic site and meeting facility, maintenance compound
 2. Program Option #2 (Passive)
 - a. Arboretum
 - b. Educational working farm (Community Sustained Agriculture)
 - c. Fossil area
 - d. Wetland, bird watching area
 - e. Prairie
 - f. Woods
 - g. Trails, bike, walk, nature
 - h. Fitness course
 - i. Dog park

- j. Picnic shelters
- k. Lake/pond
- l. Museum
- m. Year round pavilion

State Property

- Opportunities
 - Wooded hillsides
 - Level fields
 - Creek
 - Good location to serve residential community to west
- Constraints
 - No existing access from US 42
 - Creek water quality is poor from runoff
 - Visibility from road frontage poor for security
 - Creek crossing required to access majority of property
 - Residential homeowners currently assume maintenance on a portion of property
 - Commercial development restricts access from Snider Road cul-de-sac

1. Program Option #1
 - a. Sports fields
 - i. Soccer
 - ii. Baseball
 - iii. Lacrosse/football
 - b. Skatepark
 - c. Frisbee golf
 - d. Picnic shelters
 - e. Playground

2. Program Option #2
 - a. Arboretum
 - b. Woods
 - c. Prairie
 - d. Fossil area
 - e. Wetland
 - f. Trails, bike, walk, nature
 - g. Fitness course
 - h. Dog park
 - i. Picnic shelters
 - j. Pond

Muddy Creek Greenway Corridor

- Opportunities
 - Bike path avoiding downtown
 - Preserve/restore riparian corridor
 - Bike/pedestrian link between parks

- Constraints
 - Agreements needed to secure rights to improve corridor
 - Not all adjacent land publicly owned
 - Steep creek banks
 1. Program Option #1
 - a. Many trail heads with parking for bike path
 - b. Interpretive signage
 2. Program Option #2
 - a. Trail heads
 - b. Exercise course
 - c. Stream bank and corridor restoration

Mason-Montgomery Road Property

- Opportunities
 - View from Mason-Montgomery Road
 - Near Corwin M. Nixon Park
 - Link to Municipal Building and Veteran’s Memorial Plaza
 - Mature ornamental vegetation and hill buffer school
 - Located on bike path
- Constraints
 - Small size
 - Mature ornamental vegetation
 - High volume traffic on adjacent street (noise)
 1. Program Option #1
 - a. Memorials
 - b. Park benches
 - c. Tables
 - d. Circular seating
 - e. Ornamental sprayground (fountains)
 - f. Extend high degree of improvements by linking with a timeline path or story board imbedded in walks, walls, or seats
 2. Program Option #2
 - a. Fitness course
 - b. Grandstand or performance area
 - c. Gazebo
 - d. Adopt-a-garden
 - e. Central pedestrian square

Old Stitt Road Property

- Opportunities
 - Access to bike path on Tylersville Road
 - Trail head for bike path

- Views to golf course
 - Vehicular access from Stitt Road cul-de-sac
 - Open space would serve condo community to south
 - Constraints
 - Narrow width
 - Neighbors desire to maintain golf views across site
1. Program Option #1
 - a. Trail head for bike path
 - b. Wildflower planting
 - c. Fitness course
 - d. Playground
 2. Program Option #2
 - a. Conservation easement
 - b. Sell to adjacent property owners

Crooked Tree Property

- Opportunities
 - Privacy
 - Creek access
 - Constraints
 - Most of property in flood plain
 - Small size
 - Limited access
 - Poor visibility from road
 - Poor sightline at existing access point
1. Program Option #1
 - a. Picnic shelter with restrooms
 - b. Volleyball
 - c. Trailhead for bike path along Muddy Creek
 - d. Playground
 - e. Educational center for creek
 2. Program Option #2
 - a. Lease to adjacent property owners



Memo

To: Mason Parks Steering Committee

From: Woolpert LLP

Date: June 10, 2004

Subject: Community Workshop Comments 5.25.04 and 5.27.04

Participants marked up plans and trace overlays to show arrangements of preferred improvements on the sites. Following is a list of improvements and related comments recorded by the groups in the charette.

Gould Property

- Majority passive
- Parking on north side with vehicular access from existing farm entrance in northeast corner
- Retention pond in southwest corner
- Paved bike path connecting surrounding neighborhoods with circular path around knoll; connections at:
 - Meadows Park
 - Church
 - Dead end streets
- Meandering 1.0 mile wood chip trail with par course and distance markers
- Centrally located natural amphitheater or performance stage on northwest face of knoll (retain trees)
- Destination playground in southeast corner
- Keep farm buildings for possible use as:
 - Meeting facilities
 - Restrooms
 - Indoor play area
 - Sand pit
- Picnic areas located inside knoll perimeter path
- Hidden source lighting for trail use after dark and in early morning
- Additional trees planted along trails
- Regional bike path connection to:
 - Hosea Woods Trail (North)
 - Tylersville Road (South)

- Miami to Miami connection on Ham/Mason Road
- Special event use:
 - Parade terminus
 - Concerts
 - Fairs (Heritage Festival)
- Pulsed wetland for storm water management
- Tennis
- Volleyball
- Family oriented
- No organized sports

Biehle Property

- Sports fields in upland
- Frisbee golf on wooded hillside, near existing entrance and near creek
- Preserve woods (nature trails)
- Sports in lower field (football stadium)
- Parking along top of slope near woods
- Indoor playground
 - Sand pit
- Tennis courts
- Vehicular access on upland close to Houston Inn
- Connection to bike path along Muddy Creek
- Gazebo
- Overlook
- Pedestrian bridge over creek (scout projects)

Castle Property

- North of Little Muddy Creek (Passive)
 - Restore farm buildings
 - Working farm
 - Scouting
 - Dude Ranch
 - Revenue from corporate functions
 - Paintball
 - Farm animal petting zoo (school field trips)
 - Vehicular access off US 42 with parking between Little Muddy Creek and farm buildings
 - Dog park near creek
- South of Little Muddy Creek (Active)
 - Frisbee golf near creek in flood plain
 - Vehicular access off Bunnell Road
 - Parking in southeast corner
 - Football/Lacrosse in southwest corner
 - Tennis north of parking
 - Basketball north of parking
 - Pavilion/concessions/restrooms north of tennis and basketball
- Active on north and south ends with passive along the creek in the floodplain

State Property

- Indoor play area
 - Sand pit
- Pond in field
- Playground
- Frisbee golf

Muddy Creek Greenway Corridor

- Concerns about security for trail heads at night
- Bike path avoiding downtown, move bikes out of downtown (narrow streets)
- Convert railroad into city bypass (vehicular)
- Connect Gould Property with Meadows Park and continue onto Reading Road to maximize utilization of both parks
- Natural amphitheater near Kings Mills Road
- Signage for outstanding trees
- Wildlife/woodland/wetland appreciations points
- Designate points of interest
- Peace park for reflection
- Reflecting pool and running stream quiet area

Mason-Montgomery Road Property

- Center point for gatherings in evenings
- Bandstand in center (gazebo)
 - Karaoke
 - Quartette
 - Brown bag lunch events
- Concrete tables (chess/checkers)
- Sculpture garden
- Benches
- Parking
 - No parking on site (use school parking lot after hours)
 - Small parking lot at south end
- Meandering walkways
- Ornamental lighting
- Gardens
- Gazebo
- Tables
- Interactive fountains
- Passive space
- Drop off for fitness course
- Living buffer (noise)

Old Stitt Road Property

- Allow Village Lake Condo Association to maintain as lawn area
- Wildflowers

- Shrubs with a maximum height of 4 feet at maturity
- No new trees
- No paved bicycle or walking path
- No trailhead
- Playground
- Tennis courts

Crooked Tree Property

- Leave as greenspace



Meeting Minutes

Date of Meeting: June 10, 2004
8:00 PM

Re: Mason Parks Steering Committee

Location: Municipal Building

Issue Date: June 12, 2004

Submitted By: Woolpert LLP

In Attendance: Michael Hecker
Kevin Collins
Rod Russell

Char Pelfrey
Duke Flaherty
Ginny Sundin

Keith MacKinnon
John Martin
Bruce Rankin

ITEMS DISCUSSED

1. Gould Property
 - a. Picnicking closer to parking
 - b. Use parking at Meadows Park
 - c. Not enough parking for large festivals; questions
 - d. Occasional use for large groups
 - e. Main use for small groups
 - f. Be aware of Pedestrian/Bike collisions
 - g. Bring road farther into site
 - h. Consider a small on-site parking lot off Rock Garden Road
 - i. Consider main entrance from Main Street
 - j. State owns property in front of Gould Residence
 - k. Round-a-bout just inside entrance for traffic calming
 - l. Think of it as a "Central Park;" Olmsted like design
2. Biehle Property
 - a. Baseball fields on upper field
 - b. Rectangular championship fields in lower field
 - c. Artificial turf on championship fields
 - d. Back to back bleachers at lower fields
 - e. Trail head for Muddy Creek trail
3. Castle Property
 - a. Rectangular fields on south portion of site
 - b. Working farm on north portion of site
 - c. Baseball could be on north edge of the north portion of site

4. State Property
 - a. May not be the site for an indoor playground
5. Muddy Creek Greenway Corridor
 - a. Establish boundary of greenway with conservation easement
 - b. Connection from greenway to Pine Hill Lakes Park
 - c. Main trail head near entrance to Heritage Oak Park
6. Mason-Montgomery Road Property
 - a. Small parking on south portion of site
 - b. Tables
 - c. Gathering spaces with performance area
 - d. Pedestrian connection to school parking lot
7. Corwin M. Nixon Park
 - a. Move some soccer fields, probably to Castle Property, and convert to practice football and lacrosse fields
 - b. Add skatepark in open field near pool
 - c. Possible indoor play area site



Meeting Minutes

Date of Meeting: July 15, 2004
7:00 PM

Re: Mason Parks Steering Committee

Location: Mason Municipal Building

Issue Date: July 26, 2004

Submitted By: Woolpert LLP

In Attendance: Michael Hecker
Kevin Collins
Jay Koepfle
Charlene Pelfrey

Duke Flaherty
Ginny Sundin
Angie Gardner
Marty Gargis

Keith MacKinnon
Bruce Rankin
John Martin

ITEMS DISCUSSED

Staff Meeting 5:30PM

There was discussion about removing a championship field at Biehle Property and using the land for a maintenance area.

Show a bike path through the Old Stitt Road Property for the August meeting.

Show Crooked Tree Property as landscape and bulk material storage for August meeting.

Locate maintenance facilities on all preliminary plans.

Look at cost of netting around baseball fields.

Determine costs for irrigation using grey water from the adjacent waste water treatment plant at Biehle Property.

Research amount of revenue that can be created by the championship fields.

Steering Committee Meeting 7:00PM

Gould Property

- Opportunity for sprayground at family center.
- Could make mound larger with the excavated soil from pond location.
- Use walks cutting through spiral for a more direct route to overlook in Option B.
- Softball field could be muted by only skinning the batters box.

- Identify costs of softball field in Options A and B.
- Present the Gould Property plan after the plans with the sports fields have been discussed at the August meeting.
- Use aspects of Options A and B in Recommended plan by making the lawn larger while reducing the wildflower meadow and bring the parking farther into site for better access.

Biehle Property

- Could reduce cost of championship fields by making one synthetic turf and the other a high quality natural grass in lieu of two synthetic fields.
- Develop a plan to accommodate more parking. (shuttle from Heritage Oak Park)
- Double check the scale of the baseball diamonds.

Castle Property

- US 42 bridge over creek restricts flow after heavy rain causing flooding on property.
- Relocate east pedestrian bridge away from US 42.

Mason-Montgomery Road Property

- Create a visual connection to Veteran's Memorial.
- Locate parking off Corwin Nixon Park entrance drive.

State Property

- Develop 25% of parking to be handicap accessible.
- Double check size of detention pond.
- Design detention pond to be more aesthetically pleasing. (natural)

Muddy Creek Greenway Corridor

- Locate two city owned properties to north of Pine Hill Lakes Park.

Appendix 2

Design Guidelines for Muddy Creek Greenway Corridor Bike/Hike Trail

Trail Design Criteria

The trail should be multi-use, constructed to accommodate occasional service vehicles no larger than a one ton pick-up. The majority of the service runs can be anticipated to use a gas or electric utility cart. Therefore, the pavement profile for the trail should be 2.5 inches of asphalt over 5 inches of compacted crushed granular base. A tack coat should be applied between the granular base and the asphalt course.

The paved trail should be ten feet wide with a two foot unpaved shoulder along each side, resulting in a fourteen foot wide terrace. The terrace should slope 2% toward the downhill side of the slope. Where possible, drainage from the uphill side of the slope should be diverted from crossing over the top of the trail pavement. Diversions may include swales and culverts. When appropriate, the trail terrace may slope 2% toward the swale on the uphill side. This reversal of cross slope direction should be used if the slope along the trail centerline exceeds 200 linear feet. This reversal of cross slope will reduce the velocity of run-off and erosion.

Slopes along the trail centerline should not exceed 5%, but extraordinary cost should not be expended to accomplish this. When extraordinary cost becomes an issue, then slopes up to 10% may be permitted along the trail centerline. Length of slopes along the trail centerline should not exceed 200 linear feet. Where grades require longer slopes, then cross slope reversals mentioned above should be used. Drains and culverts should be used at all cross slope reversals.

When creating trail terraces where existing terraces do not exist, the trail centerline should be located along a 55/45 split between cut and fill, where 55% of the trail is located on cut and 45% located on fill. The 10% surplus will be used to control drainage and erosion. Slope to existing grades in cut areas should not exceed 2:1, and in fill areas 3:1. Where 3:1 slopes are not possible in fill areas, then controlled engineered fill at 2:1 may be used. All 2:1 slopes should have groundcover or rock armor to protect from erosion. 2:1 slopes should not be seeded with lawn grasses. In lieu of controlled engineered fill, concrete segmental walls with geo-grid may be used to contain areas of fill.

The trail should follow closely the top-of-bank where possible. This will provide maximum views for the user and a safe horizontal and vertical alignment. This will also help to reduce construction cost. The proposed trail should diverge from the top-of-bank for environmental, safety or aesthetic reasons only. When diverging from the top-of-bank, only appropriate terracing methods mentioned above should be used.

Creek Crossings

The trail alignment should be placed along the side of the Muddy Creek that results in the optimum balance of less environmental impact, reduced construction cost, and maximum aesthetic appeal. To meet these requirements, the trail will need to switch sides at least two times along the alignment. Conceptually the trail will run along the northwest side of the creek between Rosehill Cemetery and S.R. 741, and again along the Biehle Property. It will run along the southeast side of the creek between S.R. 741 and the Biehle Property. Three creek crossings are recommended. One crossing adjacent to Pine Hill Lakes for access from the park on the southeast side of the creek to the trail on the northwest side is needed. The other two crossings will be at S.R. 741, and adjacent to the Biehle property.

The creek crossing bridges should be a minimum of 15 feet wide and serve pedestrian and bicycle traffic only. Bridges suitable for emergency and service vehicles are not recommended. The trail crossing at S.R. 741 may be able to share access along the existing roadway with some modifications. Modifications may include bridge widening or simple lane markings. The preference would be to construct a new bridge to separate trail traffic from roadway traffic. The bridges for pedestrian and bicycle loads may be pre-cast concrete or steel spans with side railings. Railings should not obscure views to the creek from bridges.

Street Crossings

Street crossings “at grade” should be avoided when practical. Alternatives to “at grade” crossings include the use of pre-cast concrete tunnels such as Con-span, or utilizing existing overpasses such as at Hanover Drive. When trails pass beneath overpasses, efforts should be made to protect trail users from falling debris from above, and to ensure headroom clearance of at least twelve feet.

Tree Clearing

Trail alignments should avoid the removal of large mature trees. After preliminary design and stake out, realignment of the trail to protect specific worthy specimens should be considered. Once trail alignment is determined all trees less than six inches in caliper should be removed from within twelve feet of the trail centerline and all trees greater than six inches in caliper should be removed within seven feet of the trail centerline. Tree branches overhanging the trail should be cleared to a height of twelve feet above trail pavement. Also, a budget should be established for tree planting. Where no trees exist, an average of 40 new trees per 1000 linear feet of trail should be planted to enhance and restore the greenway corridor.

Trailhead Design Criteria

Trailheads with parking should be provided to accommodate users not directly adjacent to the trail. When possible, existing or planned parking within adjacent parks should be used as trailhead parking. When necessary to construct specific trailhead parking, each trailhead should include 20 asphalt parking stalls, a table, a bench, a trash receptacle, and a trail sign. The asphalt parking lot should be constructed of four inches of asphalt placed in two lifts of two inches over a six inch course of compacted crushed granular base. Miscellaneous items that should be included in the trail design are benches, signs, trash receptacles placed every 1000 feet along the trail.

Appendix 3

Park Development Opinion of Probable Costs

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
MUDDY CREEK GREENWAY CORRIDOR
RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
12	Site Preparation and Clean-up	ACRE	0	\$ 2,500.00	\$ 30,000.00

Site Preparation Total **\$30,000.00**

Park Facilities					
1	500-person Amphitheater Sitework (18k SF)	EA	\$8,810.00	\$35,240.00	\$44,050.00
1	Natural Amphitheater Stage and Canopy (900 SF)	EA	\$18,000.00	\$13,500.00	\$31,500.00

Park Facilities Total **\$75,550.00**

Trails, Roads, and Parking					
1100	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$62,700.00
17000	15 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$13.00	\$391,000.00
80	Asphalt Parking Lot (20 Cars per lot)	Per Car	\$260.00	\$340.00	\$48,000.00
3	50 Foot Long Timber Bridge	EA	\$3,000.00	\$9,000.00	\$36,000.00

Trails, Roads, and Parking Total **\$537,700.00**

Restoration and Preservation					
9650	Prairie (Grading and Seeding)	SY	\$10.00	\$6.00	\$154,400.00
3000	Retention Pond	CY	\$10.00	\$5.00	\$45,000.00
70	Pond Edge Protection	CY	\$20.00	\$20.00	\$2,800.00

Restoration and Preservation Total **\$202,200.00**

Miscellaneous Park Amenities					
10	Interpretive Sign	EA	\$190.00	\$250.00	\$4,400.00
4	Secondary Entrance Sign	EA	\$600.00	\$800.00	\$5,600.00
5	Directional Sign	EA	\$60.00	\$80.00	\$700.00
20	Picnic table	EA	\$900.00	\$1,200.00	\$42,000.00
20	Bench	EA	\$380.00	\$500.00	\$17,600.00
20	Trash Receptacle	EA	\$230.00	\$300.00	\$10,600.00

Miscellaneous Park Amenities Total **\$80,900.00**

Plant Material					
50	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$21,000.00
25	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$7,000.00
10	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$2,700.00
25	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$1,500.00
25	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$880.00
0	Perennials (4 SF)	EA	\$10.00	\$6.00	\$0.00

Plant Material Total **\$33,080.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
 MUDDY CREEK GREENWAY CORRIDOR
 RECOMMENDED PLAN**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$767,544.00	\$959,430.00	\$1,151,316.00
Overhead (5%):	\$38,377.20	\$47,971.50	\$57,565.80
Construction Management (15%):	\$115,131.60	\$143,914.50	\$172,697.40
Subtotal	\$921,052.80	\$1,151,316.00	\$1,381,579.20
Design Fees (10%):	\$92,105.28	\$115,131.60	\$138,157.92
TOTAL:	\$1,013,158.08	\$1,266,447.60	\$1,519,737.12

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
CROOKED TREE PROPERTY
RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
2	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 5,000.00

Site Preparation Total **\$5,000.00**

Trails, Roads, and Parking					
450	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$25,650.00
15	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$9,000.00

Trails, Roads, and Parking Total **\$34,650.00**

Miscellaneous Park Facilities					
1	Entrance Sign	EA	\$60.00	\$80.00	\$140.00
1020	Perimeter Fence, 6' c.l.f.	LF	\$6.00	\$8.00	\$14,280.00
1	Entrance gate	EA	\$380.00	\$500.00	\$880.00
1200	Plant storage area	SY	\$1.00	\$1.00	\$2,400.00
1	Storage Facility Sitework (6750 SF)	EA	\$5,630.00	\$22,500.00	\$28,130.00
1	Storage Facility Building (1500 SF)	EA	\$20,000.00	\$15,000.00	\$35,000.00

Miscellaneous Park Amenities Total **\$80,830.00**

Plant Material					
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00
25	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$1,500.00

Plant Material Total **\$8,250.00**

ESTIMATE SUMMARY

	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$102,984.00	\$128,730.00	\$154,476.00
Overhead (5%):	\$5,149.20	\$6,436.50	\$7,723.80
Construction Management (15%):	\$15,447.60	\$19,309.50	\$23,171.40
Subtotal	\$123,580.80	\$154,476.00	\$185,371.20
Design Fees (10%):	\$12,358.08	\$15,447.60	\$18,537.12
TOTAL:	\$135,938.88	\$169,923.60	\$203,908.32

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
 OLD STITT ROAD PROPERTY
 RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
2.2	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 5,500.00

Site Preparation Total **\$5,500.00**

Trails, Roads, and Parking					
1450	15 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$13.00	\$33,350.00

Trails, Roads, and Parking Total **\$33,350.00**

Plant Material					
15	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$6,300.00
15	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$4,200.00

Plant Material Total **\$4,200.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$34,440.00	\$43,050.00	\$51,660.00
Overhead (5%):	\$1,722.00	\$2,152.50	\$2,583.00
Construction Management (15%):	\$5,166.00	\$6,457.50	\$7,749.00
Subtotal	\$41,328.00	\$51,660.00	\$61,992.00
Design Fees (10%):	\$4,132.80	\$5,166.00	\$6,199.20
TOTAL:	\$45,460.80	\$56,826.00	\$68,191.20

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

Stabilize Farmstead

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
4	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 10,000.00

Site Preparation Total **\$10,000.00**

Restoration and Preservation					
3500	Stabilize Barn	SF	\$2.00	\$7.00	\$31,500.00
2000	Stabilize House	SF	\$2.00	\$6.00	\$16,000.00
14540	Stabilize Out Buildings	SF	\$1.00	\$2.00	\$43,620.00

Restoration and Preservation Total **\$91,120.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$80,896.00	\$101,120.00	\$121,344.00
Overhead (5%):	\$4,044.80	\$5,056.00	\$6,067.20
Construction Management (15%):	\$12,134.40	\$15,168.00	\$18,201.60
Subtotal	\$97,075.20	\$121,344.00	\$145,612.80
Design Fees (10%):	\$9,707.52	\$12,134.40	\$14,561.28
TOTAL:	\$106,782.72	\$133,478.40	\$160,174.08

Renovate Farmstead

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
1	Feasibility Study	LS	\$ -	\$ 30,000.00	\$ 30,000.00
2	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 5,000.00

Site Preparation Total **\$35,000.00**

Trails, Roads, and Parking					
375	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$21,375.00
200	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$3,200.00
150	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$90,000.00

Trails, Roads, and Parking Total **\$114,575.00**

Restoration and Preservation					
3500	Renovate Barn	SF	\$17.00	\$68.00	\$297,500.00
2000	Renovate House	SF	\$15.00	\$60.00	\$150,000.00
14540	Renovate Out Buildings	SF	\$5.00	\$17.00	\$319,880.00

Restoration and Preservation Total **\$767,380.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

Miscellaneous Park Amenities					
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
1	Interpretive Sign	EA	\$190.00	\$250.00	\$440.00
3	Bench	EA	\$380.00	\$500.00	\$2,640.00
3	Trash Receptacle	EA	\$230.00	\$300.00	\$1,590.00
1900	Three Rail Board Fence	LF	\$4.50	\$6.00	\$19,950.00
300	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$15,900.00
1	Site Lighting	LS	\$5,000.00	\$5,000.00	\$10,000.00

Miscellaneous Park Amenities Total **\$52,620.00**

Plant Material					
50	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$21,000.00
15	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$4,200.00
100	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$3,500.00
100	Perennials (4 SF)	EA	\$10.00	\$6.00	\$1,600.00

Plant Material Total **\$30,300.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$799,900.00	\$999,875.00	\$1,199,850.00
Overhead (5%):	\$39,995.00	\$49,993.75	\$59,992.50
Construction Management (15%):	\$119,985.00	\$149,981.25	\$179,977.50
Subtotal	\$959,880.00	\$1,199,850.00	\$1,439,820.00
Design Fees (10%):	\$95,988.00	\$119,985.00	\$143,982.00
TOTAL:	\$1,055,868.00	\$1,319,835.00	\$1,583,802.00

Sports Complex and South Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
53	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 132,500.00

Site Preparation Total **\$132,500.00**

Sports Fields					
4	Football/Lacrosse Field Grading	EA	\$5,770.00	\$23,075.00	\$115,380.00
4	Football/Lacrosse Field Equipment	EA	\$15,300.00	\$7,650.00	\$91,800.00
					\$207,180.00
8	Soccer Field Grading	EA	\$6,250.00	\$25,000.00	\$250,000.00
8	Soccer Field Equipment	EA	\$15,620.00	\$7,810.00	\$187,440.00
					\$437,440.00

Sports Fields Total **\$644,620.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

Park Facilities					
1	Eight Stall Restroom Sitework (4500 SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Eight Stall Restroom Building (500 SF)	EA	\$30,000.00	\$22,500.00	\$52,500.00
					\$93,250.00
1	Concession Stand Sitework (4500SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Concession Stand Building (500 SF)	EA	\$25,000.00	\$18,750.00	\$43,750.00
					\$84,500.00
1	Maintenance Facility Sitework (13500 SF)	EA	\$11,250.00	\$45,000.00	\$56,250.00
1	Maintenance Facility Building (1500 SF)	EA	\$75,000.00	\$56,250.00	\$131,250.00
					\$187,500.00

Park Facilities Total

\$365,250.00

Playground Facilities					
0	Large Playground Loose Fill and Drainage	EA	\$3,190.00	\$12,750.00	\$0.00
1	Large Playground Poured Rubber Surface	EA	\$7,500.00	\$30,000.00	\$37,500.00
1	Large Playground Equipment	EA	\$70,000.00	\$52,500.00	\$122,500.00
					\$160,000.00
0	Tot-Lot Playground Loose Fill and Sitework	EA	\$840.00	\$3,350.00	\$0.00
1	Tot-lot Playground Poured Rubber Surface	EA	\$2,100.00	\$8,400.00	\$10,500.00
1	Tot-lot Playground Equipment	EA	\$14,000.00	\$10,500.00	\$24,500.00
					\$35,000.00

Playground Facilities Total

\$195,000.00

Trails, Roads, and Parking					
2653	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$151,221.00
640	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$10,240.00
1671	10 Foot Wide Concrete Walk	LF	\$20.00	\$26.00	\$76,866.00
850	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$510,000.00
1	50 Foot Long Timber Bridge	EA	\$3,000.00	\$9,000.00	\$12,000.00

Trails, Roads, and Parking Total

\$760,327.00

Plazas, Steps, and Walls					
9322	Concrete Plaza	SF	\$1.50	\$2.00	\$32,627.00

Plazas, Steps, and Walls Total

\$32,627.00

Miscellaneous Park Amenities					
5	Small Gazebo (25' Dia.) Picnic Shelter	EA	\$15,000.00	\$20,000.00	\$175,000.00
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
5	Directional Sign	EA	\$60.00	\$80.00	\$700.00
15	Picnic table	EA	\$900.00	\$1,200.00	\$31,500.00
15	Bench	EA	\$380.00	\$500.00	\$13,200.00
10	Trash Receptacle	EA	\$230.00	\$300.00	\$5,300.00
1900	Three Rail Board Fence	LF	\$4.50	\$6.00	\$19,950.00
500	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$26,500.00
1	Site Lighting	LS	\$17,500.00	\$17,500.00	\$35,000.00

Miscellaneous Park Amenities Total

\$309,250.00

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

Plant Material					
200	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$84,000.00
30	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$8,400.00
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00
100	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$6,000.00
100	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$3,500.00
200	Perennials (4 SF)	EA	\$10.00	\$6.00	\$3,200.00

Plant Material Total **\$111,850.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$2,041,139.20	\$2,551,424.00	\$3,061,708.80
Overhead (5%):	\$102,056.96	\$127,571.20	\$153,085.44
Construction Management (15%):	\$306,170.88	\$382,713.60	\$459,256.32
Subtotal	\$2,449,367.04	\$3,061,708.80	\$3,674,050.56
Design Fees (10%):	\$244,936.70	\$306,170.88	\$367,405.06
TOTAL:	\$2,694,303.74	\$3,367,879.68	\$4,041,455.62

North Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
	Site Preparation				
77	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 192,500.00

Site Preparation Total **\$192,500.00**

Trails, Roads, and Parking					
6190	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$99,040.00
2620	6 Foot Wide Wood Chip Path	LF	\$5.00	\$5.00	\$26,200.00
1	50 Foot Long Timber Bridge	EA	\$3,000.00	\$9,000.00	\$12,000.00
900	6 Foot Wide Boardwalk	LF	\$40.00	\$45.00	\$76,500.00

Trails, Roads, and Parking Total **\$213,740.00**

Restoration and Preservation					
5	Wetland (Grading and Seeding)	ACRE	\$17,250.00	\$23,000.00	\$201,250.00
8	Woodland (Grading, Seeding, and Planting)	ACRE	\$11,250.00	\$15,000.00	\$210,000.00

Restoration and Preservation Total **\$411,250.00**

Extreme or Adventure Sports					
1	High Ropes Course	EA	\$37,500.00	\$50,000.00	\$87,500.00
1	Low Ropes Course	EA	\$6,750.00	\$9,000.00	\$15,750.00
1	15 Station Fitness Course	EA	\$11,760.00	\$15,675.00	\$27,440.00

Extreme or Adventure Sports Total **\$130,690.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

Miscellaneous Park Amenities					
2	Interpretive Sign	EA	\$190.00	\$250.00	\$880.00
5	Directional Sign	EA	\$60.00	\$80.00	\$700.00
3	Bench	EA	\$380.00	\$500.00	\$2,640.00
3	Trash Receptacle	EA	\$230.00	\$300.00	\$1,590.00

Miscellaneous Park Amenities Total **\$5,810.00**

Plant Material					
100	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$42,000.00
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00

Plant Material Total **\$48,750.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$802,192.00	\$1,002,740.00	\$1,203,288.00
Overhead (5%):	\$40,109.60	\$50,137.00	\$60,164.40
Construction Management (15%):	\$120,328.80	\$150,411.00	\$180,493.20
Subtotal	\$962,630.40	\$1,203,288.00	\$1,443,945.60
Design Fees (10%):	\$96,263.04	\$120,328.80	\$144,394.56
TOTAL:	\$1,058,893.44	\$1,323,616.80	\$1,588,340.16

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
KATHLEEN BEVAN CASTLE PARK
RECOMMENDED PLAN**

CASTLE PARK ESTIMATE SUMMARY

Stabilize Farmstead

Site Preparation	\$12,000.00		
Restoration and Preservation	\$109,344.00		
		<u>Low Range</u>	<u>Mid Range</u>
Subtotal:	\$97,075.20	\$121,344.00	\$145,612.80
Design Fees (10%):	\$9,707.52	\$12,134.40	\$14,561.28
TOTAL:	\$106,782.72	\$133,478.40	\$160,174.08

Renovate Farmstead

Site Preparation	\$42,000.00		
Trails, Roads, and Parking	\$137,490.00		
Restoration and Preservation	\$920,856.00		
Miscellaneous Park Amenities	\$63,144.00		
Plant Materials	\$36,360.00		
		<u>Low Range</u>	<u>Mid Range</u>
Subtotal:	\$959,880.00	\$1,199,850.00	\$1,439,820.00
Design Fees (10%):	\$95,988.00	\$119,985.00	\$143,982.00
TOTAL:	\$1,055,868.00	\$1,319,835.00	\$1,583,802.00

Sports Complex and South Park Amenities

Site Preparation	\$159,000.00		
Sports Fields	\$773,544.00		
Park Facilities	\$438,300.00		
Playground Facilities	\$234,000.00		
Trails, Roads, and Parking	\$912,392.40		
Plaza, Steps and Walls	\$39,152.40		
Miscellaneous Park Amenities	\$371,100.00		
Plant Materials	\$134,220.00		
		<u>Low Range</u>	<u>Mid Range</u>
Subtotal:	\$2,449,367.04	\$3,061,708.80	\$3,674,050.56
Design Fees (10%):	\$244,936.70	\$306,170.88	\$367,405.06
TOTAL:	\$2,694,303.74	\$3,367,879.68	\$4,041,455.62

North Park Amenities

Site Preparation	\$231,000.00		
Trails, Roads, and Parking	\$256,488.00		
Restoration and Preservation	\$493,500.00		
Extreme or Adventure Sports	\$156,828.00		
Miscellaneous Park Amenities	\$6,972.00		
Plant Materials	\$58,500.00		
		<u>Low Range</u>	<u>Mid Range</u>
Subtotal:	\$962,630.40	\$1,203,288.00	\$1,443,945.60
Design Fees (10%):	\$96,263.04	\$120,328.80	\$144,394.56
TOTAL:	\$1,058,893.44	\$1,323,616.80	\$1,588,340.16

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
 BIEHLE PROPERTY
 RECOMMENDED PLAN**

Baseball Complex and West Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
19.5	Site Preparation and Clean-up	ACRE	\$0.00	\$2,500.00	\$48,750.00

Site Preparation Total **\$48,750.00**

Sports Fields					
5	Baseball Field Grading, Seeding, and Infield	EA	\$13,750.00	\$55,000.00	\$343,750.00
5	Baseball Field Equipment and Fencing	EA	\$45,000.00	\$22,500.00	\$337,500.00
4	Baseball Field Irrigation	EA	\$60,750.00	\$45,570.00	\$425,280.00
5	Baseball Field Lighting	EA	\$50,000.00	\$37,500.00	\$437,500.00
1	Synthetic Field Surface	EA	\$230,000.00	\$172,500.00	\$402,500.00

Sports Fields Total **\$1,946,530.00**

Park Facilities					
1	Eight Stall Restroom Sitework (4500 SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Eight Stall Restroom Building (500 SF)	EA	\$30,000.00	\$22,500.00	\$52,500.00
					\$93,250.00
1	Concession Stand Sitework (4500SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Concession Stand Building (500 SF)	EA	\$25,000.00	\$18,750.00	\$43,750.00
					\$84,500.00

Park Facilities Total **\$177,750.00**

Playground Facilities					
0	Large Playground Loose Fill and Drainage	EA	\$3,190.00	\$12,750.00	\$0.00
1	Large Playground Poured Rubber Surface	EA	\$7,500.00	\$30,000.00	\$37,500.00
1	Large Playground Equipment	EA	\$70,000.00	\$52,500.00	\$122,500.00
					\$160,000.00
0	Tot-Lot Playground Loose Fill and Sitework	EA	\$840.00	\$3,350.00	\$0.00
1	Tot-lot Playground Poured Rubber Surface	EA	\$2,100.00	\$8,400.00	\$10,500.00
1	Tot-lot Playground Equipment	EA	\$14,000.00	\$10,500.00	\$24,500.00
					\$35,000.00

Playground Facilities Total **\$195,000.00**

Trails, Roads, and Parking					
650	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$37,050.00
2840	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$45,440.00
360	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$216,000.00

Trails, Roads, and Parking Total **\$298,490.00**

Plazas, Steps, and Walls					
35000	Brick Paver Plaza	SF	\$4.50	\$6.00	\$367,500.00

Plazas, Steps, and Walls Total **\$367,500.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
 BIEHLE PROPERTY
 RECOMMENDED PLAN**

Miscellaneous Park Amenities					
1	Medium Gazebo (40' Dia.)	EA	\$37,500.00	\$50,000.00	\$87,500.00
2	Small Gazebo (25' Dia.) Picnic Shelter	EA	\$15,000.00	\$20,000.00	\$70,000.00
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
1	Interpretive Sign	EA	\$190.00	\$250.00	\$440.00
3	Directional Sign	EA	\$60.00	\$80.00	\$420.00
15	Picnic table	EA	\$900.00	\$1,200.00	\$31,500.00
10	Bench	EA	\$380.00	\$500.00	\$8,800.00
10	Trash Receptacle	EA	\$230.00	\$300.00	\$5,300.00
1100	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$58,300.00
1	Site Lighting	LS	\$17,500.00	\$17,500.00	\$35,000.00

Miscellaneous Park Amenities Total **\$299,360.00**

Plant Material					
200	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$84,000.00
30	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$8,400.00
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00
50	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$3,000.00
100	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$3,500.00
200	Perennials (4 SF)	EA	\$10.00	\$6.00	\$3,200.00

Plant Material Total **\$108,850.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$2,753,784.00	\$3,442,230.00	\$4,130,676.00
Overhead (5%):	\$137,689.20	\$172,111.50	\$206,533.80
Construction Management (15%):	\$413,067.60	\$516,334.50	\$619,601.40
Subtotal	\$3,304,540.80	\$4,130,676.00	\$4,956,811.20
Design Fees (10%):	\$330,454.08	\$413,067.60	\$495,681.12
TOTAL:	\$3,634,994.88	\$4,543,743.60	\$5,452,492.32

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
BIEHLE PROPERTY
RECOMMENDED PLAN**

Soccer/Lacrosse Stadium and East Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
	Site Preparation				
12.5	Site Preparation and Clean-up	ACRE	\$0.00	\$2,500.00	\$31,250.00

Site Preparation Total **\$31,250.00**

Sports Fields					
2	Championship Stadium Sitework (360k SF)	EA	\$24,000.00	\$96,000.00	\$240,000.00
2	Championship Stadium Facility (5000 Seat)	EA	\$298,295.00	\$223,730.00	\$1,044,050.00
2	Championship Stadium Lighting	EA	\$50,000.00	\$37,500.00	\$175,000.00
1	Soccer Field Irrigation	EA	\$60,750.00	\$45,570.00	\$106,320.00
1	Synthetic Field Surface	EA	\$515,000.00	\$386,250.00	\$901,250.00
					\$2,466,620.00
2	Soccer Field Equipment	EA	\$15,620.00	\$7,810.00	\$46,860.00
2	Football/Lacrosse Field Equipment	EA	\$15,300.00	\$7,650.00	\$45,900.00
					\$92,760.00

Sports Fields Total **\$2,559,380.00**

Park Facilities					
1	Eight Stall Restroom Sitework (4500 SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Eight Stall Restroom Building (500 SF)	EA	\$30,000.00	\$22,500.00	\$52,500.00
					\$93,250.00
1	Concession Stand Sitework (4500SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Concession Stand Building (500 SF)	EA	\$25,000.00	\$18,750.00	\$43,750.00
					\$84,500.00

Park Facilities Total **\$177,750.00**

Trails, Roads, and Parking					
1100	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$62,700.00
9740	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$155,840.00
4850	6 Foot Wide Wood Chip Path	LF	\$5.00	\$5.00	\$48,500.00
330	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$198,000.00
2	50 Foot Long Timber Bridge	EA	\$3,000.00	\$9,000.00	\$24,000.00

Trails, Roads, and Parking Total **\$489,040.00**

Plazas, Steps, and Walls					
6000	Brick Paver Plaza	SF	\$4.50	\$6.00	\$63,000.00

Plazas, Steps, and Walls Total **\$63,000.00**

Extreme or Adventure Sports					
1	High Ropes Course	EA	\$37,500.00	\$50,000.00	\$87,500.00
1	Low Ropes Course	EA	\$6,750.00	\$9,000.00	\$15,750.00
1	18 Hole Disc Golf Course	EA	\$27,000.00	\$36,000.00	\$63,000.00
1	15 Station Fitness Course	EA	\$11,760.00	\$15,675.00	\$27,440.00
6000	Sledding Hill	CY	\$1.00	\$1.00	\$12,000.00

Extreme or Adventure Sports **\$205,690.00**

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Preliminary cost opinion subjected to change, and contingent upon selection or approval of final site plan.
Cost Data as of 8/19/2004

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
 BIEHLE PROPERTY
 RECOMMENDED PLAN**

Miscellaneous Park Amenities					
1	Small Gazebo (25' Dia.) Shelter	EA	\$15,000.00	\$20,000.00	\$35,000.00
2	Interpretive Sign	EA	\$190.00	\$250.00	\$880.00
2	Directional Sign	EA	\$60.00	\$80.00	\$280.00
10	Bench	EA	\$380.00	\$500.00	\$8,800.00
10	Trash Receptacle	EA	\$230.00	\$300.00	\$5,300.00
500	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$26,500.00
1	Site Lighting	LS	\$17,500.00	\$17,500.00	\$35,000.00

Miscellaneous Park Amenities Total **\$111,760.00**

Plant Material					
100	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$42,000.00
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00

Plant Material Total **\$48,750.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$2,949,296.00	\$3,686,620.00	\$4,423,944.00
Overhead (5%):	\$147,464.80	\$184,331.00	\$221,197.20
Construction Management (15%):	\$442,394.40	\$552,993.00	\$663,591.60
Subtotal	\$3,539,155.20	\$4,423,944.00	\$5,308,732.80
Design Fees (10%):	\$353,915.52	\$442,394.40	\$530,873.28
TOTAL:	\$3,893,070.72	\$4,866,338.40	\$5,839,606.08

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
BIEHLE PROPERTY
RECOMMENDED PLAN**

BIEHLE PROPERTY ESTIMATE SUMMARY

Baseball Complex and West Park Amenities

Site Preparation	\$58,500.00
Sports Fields	\$2,335,836.00
Park Facilities	\$213,300.00
Playground Facilities	\$234,000.00
Trails, Roads, and Parking	\$358,188.00
Plazas, Steps, and Walls	\$441,000.00
Miscellaneous Park Amenities	\$359,232.00
Plant Materials	\$130,620.00

	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal:	\$3,304,540.80	\$4,130,676.00	\$4,956,811.20
Design Fees (10%):	\$330,454.08	\$413,067.60	\$495,681.12
TOTAL:	\$3,634,994.88	\$4,543,743.60	\$5,452,492.32

Soccer/Lacross Stadium and East Park Amenities

Site Preparation	\$37,500.00
Sports Fields	\$3,071,256.00
Park Facilities	\$213,300.00
Trails, Roads, and Parking	\$586,848.00
Plazas, Steps, and Walls	\$75,600.00
Extreme or Adventure Sports	\$246,828.00
Miscellaneous Park Amenities	\$134,112.00
Plant Materials	\$58,500.00

	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal:	\$3,539,155.20	\$4,423,944.00	\$5,308,732.80
Design Fees (10%):	\$353,915.52	\$442,394.40	\$530,873.28
TOTAL:	\$3,893,070.72	\$4,866,338.40	\$5,839,606.08

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
MASON-MONTGOMERY RD.
RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
4.51	Site Preparation and Clean-up	ACRE	0	\$2,500.00	\$ 11,275.00

Site Preparation Total **\$11,275.00**

Trails, Roads, and Parking					
180	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$10,260.00
3800	10 Foot Wide Concrete Walk	LF	\$40.00	\$52.00	\$349,600.00
15	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$9,000.00

Trails, Roads, and Parking Total **\$368,860.00**

Plazas, Steps, and Walls					
7500	Stone Paver Plaza	SF	\$4.50	\$6.00	\$78,750.00
640	Stone Veneer Concrete Wall	FF	\$24.00	\$32.00	\$35,840.00

Plaza, Steps, and Walls Total **\$114,590.00**

Restoration and Preservation					
5000	Retention Pond (Ornamental)	CY	\$10.00	\$5.00	\$75,000.00
1	Aeration Fountain (for Retention Pond)	EA	\$2,630.00	\$3,500.00	\$6,130.00
500	Pond Edge (Concrete)	LF	\$50.00	\$60.00	\$55,000.00

Restoration and Preservation Total **\$136,130.00**

Miscellaneous Park Amenities					
1	Large Gazebo (60' Dia.)	EA	\$56,250.00	\$75,000.00	\$131,250.00
1	Medium Gazebo (40' Dia.)	EA	\$37,500.00	\$50,000.00	\$87,500.00
1	Small Gazebo (25' Dia.)	EA	\$15,000.00	\$20,000.00	\$35,000.00
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
1	Secondary Entrance Sign	EA	\$600.00	\$800.00	\$1,400.00
5	Picnic table	EA	\$900.00	\$1,200.00	\$10,500.00
20	Bench	EA	\$380.00	\$500.00	\$17,600.00
150	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$7,950.00
1	Site Lighting	LS	\$15,000.00	\$20,000.00	\$35,000.00
2	Drinking Fountain	EA	\$180.00	\$240.00	\$840.00
10	Trash Receptacle	EA	\$230.00	\$300.00	\$5,300.00

Miscellaneous Park Amenities Total **\$334,440.00**

Plant Material					
40	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$16,800.00
25	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$7,000.00
10	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$2,700.00
50	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$3,000.00
100	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$3,500.00
200	Perennials (4 SF)	EA	\$10.00	\$6.00	\$3,200.00

Plant Material Total **\$36,200.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
MASON-MONTGOMERY RD.
RECOMMENDED PLAN**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$801,196.00	\$1,001,495.00	\$1,201,794.00
Overhead (5%):	\$40,059.80	\$50,074.75	\$60,089.70
Construction Management (15%):	\$120,179.40	\$150,224.25	\$180,269.10
Subtotal	\$961,435.20	\$1,201,794.00	\$1,442,152.80
Design Fees (10%):	\$96,143.52	\$120,179.40	\$144,215.28
TOTAL:	\$1,057,578.72	\$1,321,973.40	\$1,586,368.08

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
STATE PROPERTY
RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
23	Site Preparation and Clean-up	ACRE	\$ -	\$ 2,500.00	\$ 57,500.00

Site Preparation Total **\$57,500.00**

Playground Facilities					
0	Large Playground Loose Fill and Drainage	EA	\$3,190.00	\$12,750.00	\$0.00
1	Large Playground Poured Rubber Surface	EA	\$7,500.00	\$30,000.00	\$37,500.00
1	Large Playground Equipment	EA	\$70,000.00	\$52,500.00	\$122,500.00
					\$160,000.00

0	Tot-Lot Playground Loose Fill and Sitework	EA	\$840.00	\$3,350.00	\$0.00
1	Tot-lot Playground Poured Rubber Surface	EA	\$2,100.00	\$8,400.00	\$10,500.00
1	Tot-lot Playground Equipment	EA	\$14,000.00	\$10,500.00	\$24,500.00
					\$35,000.00

Playground Facilities Total **\$195,000.00**

Trails, Roads, and Parking					
350	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$19,950.00
3050	10 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$6.00	\$48,800.00
75	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$45,000.00
1	50 Foot Long Timber Bridge	EA	\$3,000.00	\$9,000.00	\$12,000.00

Trails, Roads, and Parking Total **\$125,750.00**

Extreme or Adventure Sports					
1	18 Hole Disc Golf Course	EA	\$27,000.00	\$36,000.00	\$63,000.00

Extreme or Adventure Sports Total **\$63,000.00**

Miscellaneous Park Amenities					
1	Medium Gazebo (40' Dia.)	EA	\$37,500.00	\$50,000.00	\$87,500.00
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
3	Interpretive Sign	EA	\$190.00	\$250.00	\$1,320.00
2	Directional Sign	EA	\$60.00	\$80.00	\$280.00
3	Picnic table	EA	\$900.00	\$1,200.00	\$6,300.00
5	Bench	EA	\$380.00	\$500.00	\$4,400.00
3	Trash Receptacle	EA	\$230.00	\$300.00	\$1,590.00

Miscellaneous Park Amenities Total **\$103,490.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
STATE PROPERTY
RECOMMENDED PLAN**

Plant Material					
20	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$8,400.00
15	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$4,200.00
10	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$2,700.00
25	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$1,500.00
50	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$1,750.00
100	Perennials (4 SF)	EA	\$10.00	\$6.00	\$1,600.00

Plant Material Total **\$20,150.00**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$451,912.00	\$564,890.00	\$677,868.00
Overhead (5%):	\$22,595.60	\$28,244.50	\$33,893.40
Construction Management (15%):	\$67,786.80	\$84,733.50	\$101,680.20
Subtotal	\$542,294.40	\$677,868.00	\$813,441.60
Design Fees (10%):	\$54,229.44	\$67,786.80	\$81,344.16
TOTAL:	\$596,523.84	\$745,654.80	\$894,785.76

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
GOULD PROPERTY
RECOMMENDED PLAN**

Park Amenities

QTY	NAME	UNIT	MATERIAL	LABOR	TOTAL COST
Site Preparation					
40	Site Preparation and Clean-up	ACRE	0	\$ 2,500.00	\$ 100,000.00

Site Preparation Total **\$100,000.00**

Sports Fields					
1	Softball Field Grading, Seeding, and Infield	EA	\$8,000.00	\$16,000.00	\$24,000.00
1	Softball Field Equipment and Fencing	EA	\$7,500.00	\$3,750.00	\$11,250.00

Sports Fields Total **\$35,250.00**

Sport Courts					
1	Volleyball Court Grading and Drainage	EA	\$1,380.00	\$5,500.00	\$6,880.00
1	Volleyball Court Equipment	EA	\$750.00	\$380.00	\$1,130.00
					\$8,010.00
1	Basketball Court Grading and Surfacing	EA	\$4,250.00	\$17,000.00	\$21,250.00
1	Basketball Court Equipment and Fencing	EA	\$8,500.00	\$4,250.00	\$12,750.00
					\$34,000.00
2	Tennis Court Grading and Paving	EA	\$7,930.00	\$15,500.00	\$46,860.00
2	Tennis Court Equipment and Fencing	EA	\$9,500.00	\$4,750.00	\$28,500.00
0	Tennis Court Lighting	EA	\$10,000.00	\$5,000.00	\$0.00
					\$75,360.00

Sports Courts Total **\$117,370.00**

Park Facilities					
1	Eight Stall Restroom Sitework (4500 SF)	EA	\$8,150.00	\$32,600.00	\$40,750.00
1	Eight Stall Restroom Building (500 SF)	EA	\$30,000.00	\$22,500.00	\$52,500.00

Park Facilities Total **\$93,250.00**

Playground Facilities					
0	Large Playground Loose Fill and Drainage	EA	\$3,190.00	\$12,750.00	\$0.00
1	Large Playground Poured Rubber Surface	EA	\$7,500.00	\$30,000.00	\$37,500.00
1	Large Playground Equipment	EA	\$70,000.00	\$52,500.00	\$122,500.00
					\$160,000.00
0	Tot-Lot Playground Loose Fill and Sitework	EA	\$840.00	\$3,350.00	\$0.00
1	Tot-lot Playground Poured Rubber Surface	EA	\$2,100.00	\$8,400.00	\$10,500.00
1	Tot-lot Playground Equipment	EA	\$14,000.00	\$10,500.00	\$24,500.00
					\$35,000.00

Playground Facilities Total **\$195,000.00**

Trails, Roads, and Parking					
1795	24 Foot Wide Asphalt Road	LF	\$30.00	\$27.00	\$102,315.00
4200	15 Foot Wide Asphalt Bike/Hike Trail	LF	\$10.00	\$13.00	\$96,600.00
3400	6 Foot Wide Wood Chip Path	LF	\$5.00	\$5.00	\$34,000.00
75	Asphalt Parking Lot	Per Car	\$260.00	\$340.00	\$45,000.00
1	50 Foot Long Timber Bridge	EA	\$6,750.00	\$9,000.00	\$15,750.00

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Preliminary cost opinion subjected to change, and contingent upon selection or approval of final site plan.
Cost Data as of 8/19/2004

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
GOULD PROPERTY
RECOMMENDED PLAN**

Trails, Roads, and Parking Total **\$293,665.00**

Plazas, Steps, and Walls					
8500	Stone Paver Plaza	SF	\$9.75	\$13.00	\$193,375.00

Plazas, Steps, and Walls Total **\$193,375.00**

Restoration and Preservation					
3500	Prairie (Grading and Seeding)	SY	\$10.00	\$6.00	\$56,000.00
7000	Retention Pond	CY	\$10.00	\$5.00	\$105,000.00
340	Pond Edge Protection	CY	\$20.00	\$20.00	\$13,600.00
					\$174,600.00

2000	House Renovation	SF	\$15.00	\$60.00	\$150,000.00
2500	Barn Renovation	SF	\$17.00	\$68.00	\$212,500.00
1800	Out Building Renovation	SF	\$5.00	\$17.00	\$39,600.00
					\$402,100.00

Restoration and Preservation Total **\$576,700.00**

Events and Sports Amenities					
1	15 Station Fitness Course	EA	\$11,760.00	\$15,675.00	\$27,440.00
10000	Events Lawn	SY	\$1.00	\$1.00	\$20,000.00

Events and Sports Amenities Total **\$47,440.00**

Miscellaneous Park Amenities					
3	Small Gazebo (25' Dia.) Shelter	EA	\$15,000.00	\$20,000.00	\$105,000.00
1	Monumental Entrance Sign	EA	\$900.00	\$1,200.00	\$2,100.00
1	Secondary Entrance Sign	EA	\$600.00	\$800.00	\$1,400.00
5	Directional Sign	EA	\$60.00	\$80.00	\$700.00
20	Picnic table	EA	\$900.00	\$1,200.00	\$42,000.00
20	Bench	EA	\$380.00	\$500.00	\$17,600.00
20	Trash Receptacle	EA	\$230.00	\$300.00	\$10,600.00
350	Utility Corridor (Sewer, Water, Elec.)	LF	\$23.00	\$30.00	\$18,550.00
1	Site Lighting	LS	\$15,000.00	\$20,000.00	\$35,000.00

Miscellaneous Park Amenities Total **\$127,950.00**

Plant Material					
250	Shade Tree (625 SF)	EA	\$180.00	\$240.00	\$105,000.00
50	Ornamental Tree (200 SF)	EA	\$120.00	\$160.00	\$14,000.00
25	Evergreen Tree (225 SF)	EA	\$120.00	\$150.00	\$6,750.00
100	Large Shrub (16 SF)	EA	\$30.00	\$30.00	\$6,000.00
100	Small Shrub (9 SF)	EA	\$20.00	\$15.00	\$3,500.00
0	Perennials (4 SF)	EA	\$10.00	\$6.00	\$0.00

Plant Material Total **\$135,250.00**

**ORDER OF MAGNITUDE PARK PLAN COST OPINION
GOULD PROPERTY
RECOMMENDED PLAN**

ESTIMATE SUMMARY	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
Subtotal Labor and Materials:	\$1,461,104.00	\$1,826,380.00	\$2,191,656.00
Overhead (5%):	\$73,055.20	\$91,319.00	\$109,582.80
Construction Management (15%):	\$219,165.60	\$273,957.00	\$328,748.40
Subtotal Design Fees (10%):	\$1,753,324.80	\$2,191,656.00	\$2,629,987.20
(10%):	\$175,332.48	\$219,165.60	\$262,998.72
TOTAL:	\$1,928,657.28	\$2,410,821.60	\$2,892,985.92

Appendix 4

Funding Sources

Ohio Department of Natural Resources Division of Real Estate and Land Management

<http://www.dnr.state.oh.us/grants.htm>

Land and Water Conservation Fund Program (LWCF)

URL: <http://www.nps.gov/ncrc/programs/lwcf/index.html>,
http://www.nps.gov/ncrc/programs/lwcf/plan_prjts.html

Description: The federal Land and Water Conservation Fund Act was passed by Congress in September 1964, and became effective January 1965. The Land and Water Conservation Fund provides funds for acquisition and development of needed land and water areas and facilities. Since Land and Water Conservation Fund became effective in 1965, the state of Ohio has received over \$131 million for state and local projects from the National Park Service. Also referenced as National Park Service CFDA#15.916: Outdoor Recreation, Acquisition, Development, and Planning Grants.

Past Recipients: <http://www.dnr.state.oh.us/news/may04/0526conservgrants.htm>

Eligibility: All local subdivisions of government and local school boards (with prior approval)

Specifications:

- These grants provide up to 50 percent reimbursement for outdoor recreation projects.
- Federal money is administered by the state in cooperation with the National Park Service.
- The applicant must own the property being developed or rehabilitated (leased property is ineligible). Funding of this program is determined on a yearly basis by Congress. Our office should be able to provide funding guidance the preceding November or December to the application deadline.

Application: The application being updated and expected to be complete by September 30, 2004.

Deadline: February 1

Contact: Dameyon Shipley at 614.265.6646 or dameyon.shipley@dnr.state.oh.us

Additional Documents: Land and Water Conservation Funds Procedural Guide for Development Projects.pdf

Nature Works – Local Recreation Grants

URL: <http://www.dnr.state.oh.us/natureworks/default.htm>

Description: NatureWorks identifies projects funded by the Ohio Parks and Natural Resources Bond Issue which was approved by Ohio voters in November 1993. Through this program, a total of \$200 million in bonds may be issued to provide a long-term source of funds for the maintenance and improvement of Ohio's parks and natural resource facilities. In addition, local governments are eligible for more than \$40 million in NatureWorks grants to assist community parks and recreation projects. Warren County is expected to receive approximately \$21,140 for the 11th round of the NatureWorks program (2004).

Past Recipients: <http://www.dnr.state.oh.us/news/jan04/0127natureworks.htm>

Eligibility: All local subdivisions of government (local school boards are ineligible)

Specifications:

- Local governments can apply for up to 75 percent reimbursement grants (state funding) for acquisition, development, or rehabilitation of public park and recreation areas.
- The agency must have proper control (title or at least a 15-year non-revocable lease) to be eligible for a development or rehabilitation grant.
- Eligible government agencies within each county compete for grants.
- All projects must be completed within one-and-a-half to two years.

Application: The application being updated and expected to be complete by September 30, 2004.

Deadline: February 1

Contact: Dameyon Shipley at 614.265.6646 or dameyon.shipley@dnr.state.oh.us

Additional Documents: NatureWorks Procedural Guide for Development Projects.pdf

Recreational Trail Program (RTP)

URL: <http://www.dnr.state.oh.us/grants.htm>

Also referenced as US Department of Transportation Federal Highway Administration CFDA#20.219: Recreational Trails Program.

Past Recipients: <http://www.dnr.state.oh.us/news/nov03/1103trailsfunds.htm>

Eligibility: Cities and villages, counties, townships, special districts, state and federal agencies, and nonprofit organizations

Specifications:

- Up to 80 percent matching federal funds is reimbursed.
- Eligible projects include development of urban trail linkages, trail head and trailside facilities; maintenance of existing trails; restoration of trail areas damaged by usage;

improving access for people with disabilities; acquisition of easements and property; development and construction of new trails; purchase and lease of recreational trail construction and maintenance equipment; environment and safety education programs related to trails.

Application: See Additional Documents

Deadline: February 1

Contact: Mary Fitch at 614.265.6677 or mary.fitch@dnr.state.oh.us

Additional Documents: Recreational Trails Grant Application.pdf

Clean Ohio Trail Fund

URL: <http://www.dnr.state.oh.us/grants.htm>

Past Recipients: <http://www.dnr.state.oh.us/news/oct03/1009trailgrants.htm>

Eligibility: Political subdivisions and non-profit organizations

Specifications:

- Provides up to 75% of the project costs for eligible trail acquisition and development costs.
- The local match can be in-kind contributions or other interests in land, labor, or materials.
- Projects will be selected by criteria identified in, but not limited to, a statewide trails plan and Amended Substitute House Bill 3.
- A nine-member advisory board appointed by the director of ODNR will provide advice to the director regarding the selection of applications for funding.
- Approximately \$6.25 million will be available in each of the first four years of the program.

Application: See Additional Documents

Deadline: February 1

Contact: Mary Fitch at 614.265.6677 or mary.fitch@dnr.state.oh.us

Additional Documents: Clean Ohio Trails Fund Grant Application.pdf

National Fish and Wildlife Foundation, Environmental Protection Agency, etc.

Five-Star Restoration Matching Grants Program

URL: <http://www.nfwf.org/programs/5star-rfp.htm>

Description: The National Association of Counties, the National Fish and Wildlife Foundation, and the Wildlife Habitat Council, in cooperation with the U.S. Environmental Protection Agency (EPA), the Community-Based Restoration Program within NOAA Fisheries, and other sponsors (e.g., Office of Surface Mining), are pleased to solicit applications for the Five-Star Restoration Matching Grants Program. The Five-Star Restoration Program provides modest financial assistance on a competitive basis to support community-based wetland, riparian, and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach and training activities. In 2003, 56 projects received grants of on average \$10,000 out of approximately 240 applications received.

Eligibility: The Five-Star Restoration Matching Grants Program is open to any public or private entity.

Specifications:

- The stars in "Five-Star" are the partners, funders, and/or participants necessary to complete the project including:
 - Schools or youth organizations (e.g., state or local youth conservation corps, county job training programs);
 - Local or tribal governments (e.g., boards of county commissioners, departments of planning, environment or parks and recreation);
 - Local businesses or corporations;
 - Conservation organizations or local citizens groups;
 - State and federal resource management agencies; and
 - Foundations or other funders.

Projects must therefore involve diverse partnerships of ideally five organizations that contribute funding, land, technical assistance, workforce support, and/or other in-kind services.

- Awards are between \$5,000 and \$20,000; **the average grant is \$10,000.**
- Projects must include a strong on-the-ground wetland, riparian, or coastal habitat restoration component and should also include training, education, outreach, monitoring, and community stewardship components. Projects involving **only** research, monitoring, or planning are not eligible for funding.
- Applicants must demonstrate that measurable ecological, educational, social, and/or economic benefits are expected to result from the completion of the project.
- Projects may be a discrete part of a larger restoration effort but must be ready to complete within a one-year time-frame upon receipt of funding.
- Preference will be given to projects that:
 1. Are part of a larger watershed or community stewardship effort;
 2. Include specific provisions for long-term management, monitoring, and protection; and
 3. Demonstrate the value of innovative, collaborative approaches to restoring the nation's waters.
- Projects that are part of a mitigation requirement are **not** eligible for funding.
- Organizations or projects that have received funding under this program are eligible to reapply; however, preference will be given to those that have not previously received support.

Application: See Additional Documents

Deadline: March 1

Additional Documents: Five-Star Restoration Matching Grants Program Application.doc

US Soccer Foundation

URL: <http://www.ussoccerfoundation.org/GNT.html>

Description: The goal of the grant making program for FY 2005 is to focus funding on those programs or projects that develop players, referees, and coaches with special emphasis on the economically disadvantaged in urban areas. Two of the major objectives of the grants making program for FY 2005 are to increase grassroots awareness of the Foundation's grants making opportunities and to make basic information available in a bilingual format.

Past Recipients: <http://www.ussoccerfoundation.org/GNT/PST.html>

Eligibility: The Foundation's Grants Program is open to anyone with a soccer-specific program or project that benefits a non-for-profit purpose and meets the established focus for the FY 2005 grant cycle (see the Goals and Objectives Section).

Specifications:

The Foundation will emphasize programs or projects that have a significant impact on furthering the Foundation's mission. In addition, priority will be given to projects or programs where:

1. The Foundation's commitment of resources has a significant impact on the project or program;
2. The project or program affords the Foundation the opportunity to develop alliances or partnerships;
3. The impact of the project or program and the Foundation's involvement in it are measurable; and,
4. The Foundation supports but does not operate the project or program.

Application: <http://www.ussoccerfoundation.org/GNT/APP.html>

Deadline: October 15 for letter of inquiry, December 1 for grant application if invited

Contact: grants@ussoccerfoundation.org

Warren County Foundation

URL: <http://www.warrencountyfoundation.org/grant.html>

Application: See Additional Documents

Contact: Warren County Foundation at 513.934.1001

Additional Documents: Warren County Foundation Grant Application.pdf

Greater Cincinnati Foundation

URL: <http://www.greatercincinnati.org/page12797.cfm>

Application: See Additional Documents

Deadlines: November 15, February 15, May 15, August 15

Contact: Greater Cincinnati Foundation at 513.241.2880

Additional Documents: Greater Cincinnati Foundation Pre-Application Form.doc
Greater Cincinnati Foundation Common Grant Application.doc