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## SECTION IV • MASTER PLAN

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This section of the report describes the last three phases of the design process and includes public input, design alternatives, and final design.

The final design represents a culmination of the previous data collection and analysis of the natural and physical characteristics. The public input process identified the direction the Master Plan should focus on, while the design alternatives process sorted through the preferred design features to be included in the final design. The final design includes the Master Plan illustrative graphic, its support narrative, budget estimate, and phasing strategy.

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### A PUBLIC INPUT

Public input during the design process is an important component to all recreation master plans. The first opportunity for public input occurred early in the design process prior to the development of design alternatives. The public forum was convened at the Cascades Manor House on April 25, 2006, and was attended by approximately 200 residents. During the forum, attendees were asked to identify likes and dislikes of the Park, and to assist in brainstorming new ideas that could be included in the final design.

#### 1. Likes and Dislikes

During the forum, attendees were asked to place dots on the existing site plan identifying specific natural and built features that contribute to their overall positive and negative impressions of the Park (Figure 4). In addition to the dots, comments were recorded to fully understand aspects of their preferences, as summarized below.

##### Most Popular Likes:

- Cascade Falls is a major attraction
- Cascades Manor House
- Natural/open character of the site
- Daffodil plantings
- Wetlands and contiguous ponds
- Cascade Falls Amphitheater and summer concerts
- Playground area
- Ice cream concessions building
- Golf course
- Historical bridge
- Civil War Muster

##### Most Popular Dislikes:

- Cascade Falls Amphitheater walls
- Water quality of wetland ponds and canals
- Road system – too many vehicles on Brown Street and speed bumps
- Limited trails and walkways
- Unsightly condition of batting cages
- Paredo is too overgrown
- Attention to maintenance and graffiti on the walls

At the same public forum, the attendees were asked to identify the most desirable types of new recreation opportunities that should be planned for, and what existing recreation experiences should remain or be expanded upon. The following is a summary of the most popular ideas.

2. Most Popular Ideas for New Facilities
  - Natural systems restoration and enhancements in wetland and ponds areas
  - Wetland interpretive opportunities for visitors and adjacent school, including wetland trails and observation areas
  - New plaza at bottom of Cascade Falls
  - Local garden club involvement
  - Landscape enhancements including formal and informal gardens
  - Utilize open space at school for more defined field activities
  - Make the ground around the Cascades Manor House more gardenesque with better wedding gazebo
  - More jogging trails
  - More concerts and other programming activities
  - More picnic facilities
  - Historic lighting
  - Splash pool/aquatic park
  - Dog park
  
3. Other Ideas for New Facilities
  - Gateway landscaping and unified signage
  - Other active recreation such as disk golf, skate park, cross-country skiing, hockey
  - Expand Civil War Muster
  - Fishing
  - Expanded water feature at Cascade Falls
  - Close Brown Street or reduce traffic flows
  - Create photographer's garden
  - Park tours and more recreation programs
  - Enlarge Cascade Falls Amphitheater

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## B VISION STATEMENT

Provide for a variety of four-season recreational opportunities for the Jackson County citizens and public at large. The opportunities will focus on the built and natural amenities of the Park while maintaining the vision of William Sparks to provide visitors with a positive impression of the city. The Park will continue to provide recreational opportunities for all age groups.

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## C GOALS AND OBJECTIVES

The public forum summaries were presented to the Committee and Park's director for discussion and prioritization. The results of these discussions led to the development of the following Goals and Objectives that would be used to guide the design alternative phase of the design process.

1. Goal: Restore the grandeur of Cascade Falls and historic Paredo.

Objectives:

- Renovate the existing Cascade Falls. Emphasis should be placed on the structure, and lighting, mechanical, and sound systems with the intent to introduce advanced water, sound, and light technologies and code compliance.
- Develop new water features that attract daytime interest and expanded revenue. The historic character of Cascade Falls must be maintained, and the new fountains and pools would provide for daytime interaction through the use of synchronized jets, sprays, fountains, and sound.
- Maintain and enhance the Cascade Falls Amphitheater at the base of Cascade Falls. Provide for improved visibility from Brown Street, consider increased seating capacity and provide for concessions and paid admissions. Consider reducing Brown Street to two lanes or its complete removal to allow for an expanded Amphitheater and stage area, and improved safety of Park users.
- Improve the visual aesthetics of Cascade Falls through the careful siting of fence materials. Consider fencing materials that complement the historic character.
- Restore the historic Paredo as close to the original design as possible. Improvements should include the historic footbridges, entrance plaza at the east terminus, and benches. Mowings should be considered where soil conditions allow.

2. Goal: Provide for traffic calming to minimize pedestrian/vehicular conflicts.

Objectives:

- Reduce the speed limit of all Park streets to 15 MPH and provide additional traffic signage.
- Provide stop signs at all pedestrian crosswalks.
- Provide for more clearly defined pedestrian crossings, and expand on the site path/sidewalk system.
- Consider roundabouts at critical intersections.
- Reduce Brown Street to two lanes or remove it entirely.
- Provide for consolidated parking lots that have controlled ingress/egress onto adjacent streets. Wherever feasible, remove perpendicular parking where motorists are required to back into public right-of ways.

3. Goal: Expand environmental education and stewardship programming.

Objectives:

- Maintain the site's open fields, woodlots, and natural character throughout the Park.
- Develop a partnership with the school district to provide for environmental education.
- Remove the accumulated sediment from the ponds and canals, and consider opportunities for urban fishing and boating.
- Develop wetland trails with interpretive signage that emphasize environmental stewardship of the site. Consider organized interpretive programs for school groups with volunteers or develop self-guided tours.
- Construct a four-season, multi-use environmental center. The building should contain interpretive displays, indoor/outdoor classrooms, museum, equipment rentals, warming room, concessions, and restrooms.
- Utilize the existing groundwater pumps to develop a cold water fishery (stream and pond) and viewing chamber for educational opportunities. Provide periodic restocking, and catch and release fishing only.
- Develop opportunities for groups and clubs that would serve as volunteers. Functions could focus on tour groups, trail maintenance, invasive plant species eradication, and wildflower gardening.
- Provide site restoration east of Brown Street with native plant communities.

4. Goal: Expand upon the four-season recreational opportunities of the Park while maintaining the open and natural character of the site.

Objectives:

- Provide for expanded, paved multi-use trails on the west side of Brown Street. The trails would permit bicycling, roller skating/rollerblading, hiking, jogging, and cross-country skiing. Equipment rentals could be provided at the environmental center.
- Continue to provide for special events that would draw visitors from the southern Michigan region and further. Include and expand upon: summer concerts, Civil War Muster, Fourth of July celebration light displays, and other special events expanded into the fall, winter, and spring.
- Develop and maintain a four-season building (refer to goal 3 above) as a visitor center for the Park.
- Relocate the driving range and fencing, and utilize this area to allow for expansion of the Civil War Muster. Use the soils excavated from the ponds and canals to develop natural landforms that complement the existing landforms and open character of this area.
- Organize and relocate active recreation to the north side of the site (batting cages, ball fields, rollerblade center, basketball court, tennis courts, etc.). Maintain the existing little league baseball fields. Reduce ball fields as and when demand is decreased, and replace with alternative active recreation.
- Provide expanded picnic opportunities throughout the Park and consider support recreation (tot lots/splash pools).

5. Goal: Provide gateway beautification.

Objectives:

- Develop landscape enhancements at vehicular gateways into the Park. Enhancements should include, but not be limited to: signage, historic columns or walls, landscaping, and irrigation.
- Promote volunteer programs for installation and care of garden areas.
- Encourage expansion of daffodil planting program and additional theme gardens in certain locations (butterfly, native plants, etc.).

6. Goal: Expand upon the Cascades Manor House banquet facilities.

Objectives:

- Upgrade the grounds to include a formal garden with a large gazebo for special events such as weddings.
- Make structural repairs to the Cascades Manor House building to prevent structural deterioration.

7. Goal: Provide long-term funding for maintenance and upkeep of existing and proposed facilities.

Objectives:

- Establish an endowment through private, public, and non-profit contributions that would generate annual revenues to support the Park.
- Develop new revenue sources at the Park.
- Consider a county-wide millage with specific reference for funds to install and maintain capital improvements at the Park.
- Increase funding from Jackson County's annual budget for increased maintenance.

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## D DESIGN ALTERNATIVES AND PUBLIC INPUT

A second public forum was held at the Cascades Manor House on May 17, 2006, and was attended by approximately 50 residents. The purpose of the forum was to give the attendees the opportunity to discuss the design alternatives and vote on the most desirable design elements of each alternative. The three alternative designs were presented to the public, discussions followed, and the attendees were then asked to vote on the plans.

The Cascade Falls public forum did not select a single concept, but showed preference to various parts of each alternative. The following is a brief summary of the voting (listed by level of importance).

### Cascade Falls/Amphitheater Area

- Repair/restore Cascade Falls, and expand on top and side terraces.
- Remove Cascade Falls Amphitheater wall.
- Close or narrow Brown Street.
- Lower Cascade Falls Amphitheater seating.
- Construct traffic roundabouts and crosswalks with stop signs.

### Natural Wetland Area

- Create fishing/viewing platforms.
- Build boardwalks.
- Design outdoor classroom.

### Active Recreation Area - Paved Surfaces

- Create an active recreation zone adjacent to little league fields.
- Create a skateboard park.

### Visitors Center

- Construct a viewing chamber.
- Build a nature/interpretive center at high point on Randolph Street.
- Relocate the William Sparks Museum.

### Historic Paredo

- Restore to historic design.

### Cascades Manor House

- Design formal gardens.
- Build a wedding gazebo.

### Natural Area behind Bandshell

- High interest in the trout pond for this area.

### Multi-Use Paved Path

- Complete loop on west side of Brown Street.

### Children's Play Area

- Overall, the residents are happy with the children's playground and ice cream concessions building area, as is.

Gateway Entries

- Incorporate new signage.
- Install new plantings.

Batting Cages

- Relocate the batting cages closer to the little league field complex.

Active Recreation - Open Field by Frost Middle School

- Improve the existing hardball field.

Open Field/Civil War Muster Area

- Overall, the residents are happy with the program uses for this area, with some interest in Frisbee golf.

Rental Center

- Low interest in the rental center.

Open Areas

- Overall, the residents are satisfied with the program uses for this area.

Little League Fields

- Overall, the residents are happy with the little league field complex, as is.

Putting Course

- Low interest in the putting course.
- Relocate the Maintenance Building.

Bandshell and Restrooms

- Overall, the residents are happy with the bandshell area, as is.

Driving Range

- Low interest.

Splash Pools

- Low interest.



Figure 5: Sparks Foundation County Park (Cascades Park) Master Plan

## E FINAL DESIGN

The final design includes: the Master Plan, accompanying text to describe the categories of improvements, the budget estimate, and phasing strategy.

### 1. Master Plan

The Master Plan represents a refinement of the design alternatives from feedback given by the Committee and Park's director during follow-up meetings. The Master Plan is intended to serve as a framework for future improvements. Like all master plans, it should be considered a flexible document that is subject to change as the Park continues to evolve and improvements are implemented.

The Master Plan identifies 16 categories of improvements (Figure 5). Each category represents an area or a specific type of improvement. In several instances, the Master Plan identifies sub-categories for additional clarifications or where special but related improvements are proposed. Improvements are summarized as follows:

(1) Cascade Falls: Cascade Falls is divided into three levels of improvements that include repairs and upgrades to the existing Cascade Falls, expansion of Cascade Falls, and the redesign of the Amphitheater area. When complete, this combination of improvements would provide an expanded regional draw to the Park, increased daytime revenues, and more opportunity for expanded special events and increased revenues for maintenance and operations. These improvements can be implemented as separate phases depending on financing.

(a) Existing Cascade Falls Upgrades: The first and highest priority pertains to maintenance and upgrades to the existing Cascade Falls and includes the replacement of the perimeter fencing with new fencing.

Repairs would focus on extending the life of Cascade Falls through the implementation of a range of miscellaneous structural repairs and systems upgrades. The work should include, but not be limited to, structural repairs to the concrete walls, steps, railing, and pool surfaces. Plumbing systems would need to be inventoried to identify repairs to nozzles, jets, pipes, vaults, pumps and valves. Upgrades would address improvements to the lighting, fountains, and audio systems, and would enable the Jackson County Parks Department to synchronize these systems to live or recorded performances.



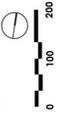


Figure 6: Falls and Brown Street Area Improvements

- (b) Expanded Cascade Falls Area: The focus of the expanded Cascade Falls is to create daytime use, renew interest in viewing Cascade Falls, increase attendance to special events, and generate additional revenue for maintenance and operations. This would be accomplished through the development of up to nine additional pools and fountains constructed at the top and along the side terraces of the existing Cascade Falls (Figure 6). The design of the additional features would focus on the use of water displays that create walls, jets, sprays, and animated movement of water in an interactive setting. The expansion would complement the design details of the existing Cascade Falls through the use of similar details and materials. The expansion will also utilize the upgrades in sound, fountain repair, and lighting that would be implemented under the existing Cascade Falls upgrades.

Other site amenities to be included under this item is the installation of a new 50-foot-tall flagpole at the top of Cascade Falls, plazas and benches with historic design around the new water features, landscape enhancements to frame views, and irrigation. Provisions for fireworks displays at the top of Cascade Falls would still be maintained.

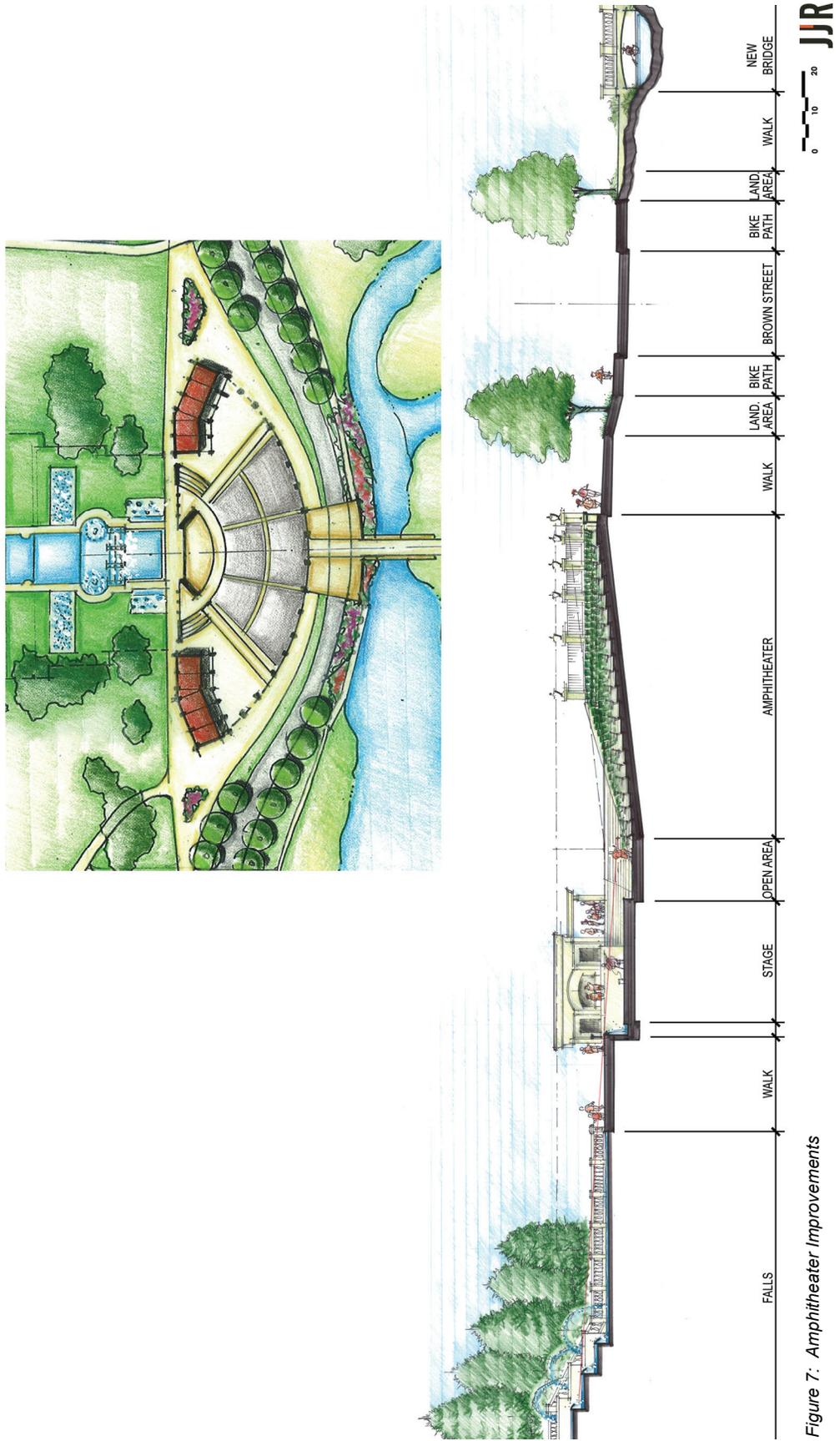


Figure 7: Amphitheater Improvements

(c) Amphitheater Area: The entire Amphitheater, stage, buildings, and infrastructure would be removed and replaced with new facilities (Figure 7) including a new performance area, an Amphitheater with approximately 2,500 permanent seats, ornamental fencing, columns and lighting, plaza space, two new concessions buildings, landscaping, and irrigation. Brown Street would also be reduced to two lanes with the two westernmost lanes being removed to accommodate the seating and plaza expansion, and new sidewalk and bike path.

The design approach is to recess the performance area approximately 5 to 7 feet below the current stage elevation with a new water wall as a backdrop. Access would be maintained at Cascade Falls through a continuous, at-grade sidewalk above and behind the recessed stage. The Amphitheater seating would also be recessed, and the uppermost seating would enable partial visibility of Cascade Falls from Brown Street and the roadside plaza area. Extensive site retaining walls and concrete pavement would be required throughout the seating area and adjacent expanded plaza. The space would be defined with ornamental security fencing and columns with light fixtures. Special paving would be used between the historic Paredo and the Amphitheater.

The two new buildings would be designed in a style that is compatible with the Cascade Falls architecture and would be programmed for uses including ticketing, concessions, office, restrooms, mechanical rooms, and space to choreograph the special effects during performances and other events.

The sound system would be updated to accommodate the special effects that are associated with the Cascade Falls restoration and expansion identified above.

Landscape enhancements and irrigation is planned for high use areas in the exterior plazas and along Brown Street.

(2) Historic Paredo Restoration: The historic Paredo is the linear path that exists between Brown Street and the Kibby Road/West Avenue intersection. The Paredo is a gravel walkway that is approximately 20 feet wide and over 2,000 feet long. This path would undergo several levels of improvements/restoration to reflect its original design. Improvements would include: three widened path areas with grass islands equally spaced along the path, tree removal to restore sight lines to Cascade Falls, fill and lawn restoration (20-foot-wide mowed edges) paralleling the path, historic benches, and tree plantings.

The eastern terminus of the path would be a large gravel plaza with a classical, cast stone railing similar to Cascade Falls and an arched concrete footbridge across the canal. Gateway-type landscape enhancements would be designed and would include flowers and shrubs, and extend into the Kibby Road boulevard.



(3) Children's Play Area: Improvements planned for this area focus on the expansion of active recreation uses created for children. The existing playgrounds are new and in good condition. Future replacement structures should focus on an expanded barrier-free facility with emphasis on universal access throughout the playground.



An interactive splash pool and plaza are new design features. The pools are intended to be zero depth, designed to contain a variety of interactive water jets, sprays, and bubblers for children, and fenced for security. The adjacent plaza would serve for sunbathing and seating. Site furnishings would include chairs, benches, and café tables. The pool is anticipated to generate revenue for maintenance and staffing.

Associated with the splash pool is a small building with an attached picnic shelter. The picnic shelter would include tables and grills. The building would house the pool mechanical room and restrooms. Locker rooms are not anticipated.

Parking expansion and renovations are identified in two locations. The existing lot along Brown Street would be reconstructed, paved, and landscaped. The second existing lot on Denton Road would be expanded, paved, and landscaped. The angular parking that exists along Denton Road would be removed.

(4) Open Field Area - Passive Recreation: Proposed improvements to the open landscape area to the west of Cascade Falls involve recreation opportunities that are not disruptive to the natural character of the area. As part of item 12, this area would serve as the disposal site for approximately 90,000 cubic yards of soil excavated from the ponds and canals. The soil would be graded to complement the natural landforms and would serve to enhance and expand the Civil War Muster that occurs annually in this area (refer to Figure 5, item 4a). Other improvements would be limited to informal siting of picnic tables and grills, a disk golf course, geocaching, and the relocation of the driving range to an off-site location still to be determined.



(5) Bandshell and Restrooms: This area of the park includes the grassy slope on the north side of Cascade Falls, the bandshell, restrooms, picnic grove in the woodlot, and the adjacent large parking lot. The bandshell, restrooms, and connecting sidewalk are a result of contributions from the Rotary Clubs of Jackson, and improvements were completed approximately two years ago. A variety of summer concerts are programmed for the bandshell. The northern hillside is used for sledding in the winter.

Long-term improvements in this area would focus on façade renovations to the bandshell appropriate to the Civil War era, plus maintaining the existing sledding hill, fountain, restrooms, and picnic grove. Parking lot modifications would include resurfacing, a new entry drive, sidewalks, and parking lot tree plantings (refer to Figure 5, item 5a).

(6) Natural Area - Trout Pond: A small half-acre shallow pond exists behind the bandshell and restrooms. The source of water is the existing fountain that is created from the groundwater pump used as a water source for the lagoons and canals. The pond discharges into a shallow swale that drains into a culvert pipe adjacent to the putt-putt golf course before discharging underground to the wetland on the east side of Brown Street. The fountain is operated during the summer months, and the cold, aerated groundwater from the fountain is ideal for the creation of an urban trout stream that would support fish species such as rainbow and brown trout.

Under this category of improvements, the pond would be dredged to a depth of 10 feet and enlarged. The culvert pipe would be removed, and a new 800-foot-long stream would be constructed. The stream would be an interpretive opportunity and serve to educate the visitors about cold water fisheries habitat. A variety of trout stream interpretive panels would be installed to educate the visitors on stream channel ecology, and key features would focus on aquatic species and stream channel features such as riffles, pools, under-cut banks, meanders, and sand bars.

At the pond, a fishing platform would be constructed for catch and release opportunities. The fountain would need to operate year-round, and seasonal restocking would be needed. A nearby picnic shelter with tables and grills would also be provided for group gatherings associated with the existing little league fields.



*Interpretive Stream Representation*



*Interpretive Sign Representation*

(7) Little League Fields: The six existing little league fields, parking, and support buildings (concessions and restrooms) serve as a regional draw to the Park, and organized games are played throughout the summer. The fields are day use only and fully funded and maintained by various sponsors. Currently, this form of recreation is well received, and there are no plans to change the use. It has been suggested that demand for the six fields may decline in the future, opening an opportunity to remove the easternmost field. Refer to item 8 for additional opportunities associated with the removal of this field.

(8) Active Recreation Area - Paved Surfaces: The existing field between Brown Street and the little league fields would serve as a consolidated location for active recreation on paved surfaces, primarily for teenagers. A variety of paved recreation can be programmed to this area, and the extent of these activities would depend on whether additional space is provided by removing one of the ball fields (see item 7).

In this location, the basketball court, tennis courts (two courts), and batting cages would be relocated. Additional paved surfaces for in-line hockey, a skateboard park, and possibly a new putt-putt golf course could be programmed if additional space is made available. The renovated parking lot (item 5) would provide parking, and a footbridge would be installed over the trout stream (item 6) to provide access.

(a) Batting Cages: The batting cages were identified as an important Park feature; however, they have been poorly sited. They are proposed to be relocated to the active recreation area behind the new Maintenance Building.

(b) Maintenance Building: This site would serve as the location for the new Maintenance Building that would be relocated as a part of the Amphitheater expansion at Cascade Falls (item 1). The architectural style would complement the theme of the new building at Cascade Falls and would include the same floor space and programming that currently exists. A new driveway and small parking lot is also planned for staff. Landscape screening is proposed between the site and the adjacent neighborhood to the north.

(9) Active Recreation Area - Open Field: The large open field at the northeast corner of the Brown/Randolph Street intersection is currently used by the adjacent Frost Middle School for informal open field recreation (refer to Figure 5, item 9a). Additional summer programming for soccer and t-ball also occurs in this area. The hardball field in the west corner of this area is currently programmed for non-organized baseball and has fallen into disrepair.

Under this category, proposed improvements would be limited to the ball field area. In this location, the field would be restored, the backstop replaced, and benches added. The lawn area to the west of the field would be converted to a new bituminous parking lot with sidewalks and landscape screening. A small picnic shelter with tables and grills would also be added that would be used primarily on a rental basis with exclusive use to the ball field.

(10) Gateway Landscaping: Since the Park is bisected by several roads, there exists a need to develop a positive, first impression when pedestrians and motorists first enter the Park. To accomplish this, four critical gateways are identified and would be utilized for a variety of landscape enhancements. The following is a brief description of the proposals for these locations.



*Representative Gateway Landscaping*

Site 10A: Brown Street / Randolph Street Roundabout

- Coordinate with Brown Street closure – item 16
- Construct roundabout
- Park entrance sign/special feature
- Special paving in pedestrian crosswalks and sidewalks
- Extensive landscaping – flowering trees, shrub masses, and perennials
- Volunteer garden club to maintain

Site 10B: Randolph Street / High Street Intersection

- Park entrance sign/special feature
- Special paving in pedestrian crosswalks
- Extensive landscaping – flowering trees, shrub masses, and perennials
- Volunteer garden club to maintain

Site 10C: Denton Road / Kibby Road Intersection

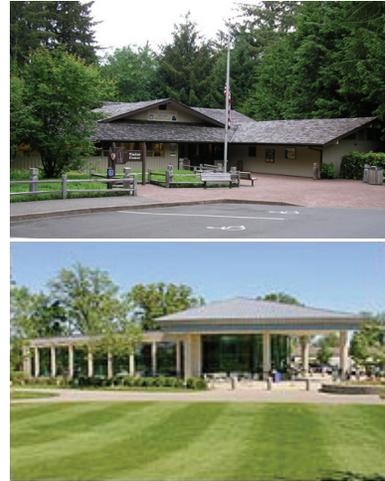
- Boulevard island sign/special feature
- Special paving in pedestrian crosswalks and sidewalks
- Extensive landscaping and irrigation – flowering trees, shrub masses, and perennials
- Volunteer garden club to maintain

Site 10D: Brown Street / Denton Road Intersection

- Special paving in pedestrian crosswalks and sidewalks
- Large fountain in Cascades Manor House pond
- Extensive landscaping – flowering trees, shrub masses, and perennials
- Volunteer garden club to maintain

(11) Interpretive/Visitors Center: As part of the expanded visitor experience to the Park, a new multi-use visitors center is identified on the high point on Randolph Street adjacent to the stand of mature white pine trees. The visitors center is intended to be a four-season structure in a style compatible with the rest of the site architecture. A variety of uses would be programmed for the center and could include: the William Sparks Museum relocated from Cascade Falls, interpretive displays with indoor and outdoor classrooms associated with the adjacent natural areas development (item 12), concessions, office space, and equipment rentals.

A variety of site improvements would also be part of this category and would include angular parking along Randolph Street, a realigned trail system, sidewalks, patio and benches, a dock, canoe livery and warming hut at the pond, butterfly garden and volunteer programs on environmental stewardship, and landscape maintenance programs.



*Interpretive/Visitors Center  
Representations*

Concessions would include limited food service, retail space, and rentals for boats, ice skates, roller skates, bicycles, and cross-country skis (refer to Figure 5, item 11a).

(12) Natural Area: A substantial portion of the Park east of Brown Street falls within this category of improvements. The natural area can be defined as the existing wetlands, canals, ponds, and adjacent mowed lawns. A variety of opportunities are available for Jackson County to program this area for environmental education, natural systems restoration, and water-related recreation such as boating and wildlife viewing.

Under this category of improvements, there are three sub-categories. These include the existing canal and pond dredging, the development of a wetland interpretive component throughout the area, and construction of a viewing chamber.

(a) Canal and Pond Dredging: The existing canals and ponds were created back in the 1930s as part of William Sparks' vision for the historic Paredo and Cascade Falls. Since then, the canals and ponds have degraded for a variety of reasons and their restoration has become a major priority of Jackson County Parks Department. The purpose of the planned dredging is to improve water quality, create open water, improve circulation, develop an urban warm water fishery, and provide opportunities for canoeing and wildlife viewing.

The dredging is anticipated to deepen the ponds to 10 feet and the canals to 5 feet. Soils removed would be transported to the open field area (item 4) and would be aesthetically graded and stabilized with seed and mulch. Once completed, the Jackson County Parks Department would implement a fish stocking program for catch and release opportunities. Species to be stocked would include bluegill, sunfish, and bass.

Other improvements to be included under this category are associated with the golf course canals and include culvert and bridge crossings, and overflow structure modifications.

(b) Wetland Interpretive Opportunities: The Frost Middle School currently uses this area on an informal basis for environmental education. Under this category, the wetland area would be developed to provide an expanded environmental education program for the school and public at large. Boardwalks would be constructed throughout the wetland area; interpretive sign panels would be installed at key locations to be determined; fishing platforms are proposed in three locations; proposed wood bridges would connect the boardwalk segments across the canals; and benches adjacent to viewing areas and interpretive panels would be installed.

A more formal arrangement would be made with the school district for environmental education programming, and the visitors center (item 11) would be an integral feature in this program.

Native vegetation (grasses and wildflowers) along the exterior perimeter of the canals would be expanded to reduce maintenance mowings, provide a natural buffer for the canal, and expand wildlife habitat.



*Representative Wetland Interpretive Opportunities*

A volunteer program is also proposed to provide naturalists to lead group tours through the wetlands, conduct classes at the visitors center, and assist in purple loosestrife eradication from the wetlands.

(c) Viewing Chamber: The third element to this program is the construction of a viewing chamber. The viewing chamber is a unique opportunity that would provide environmental education on stream channel ecology. Constructed after or in conjunction with the trout stream (item 6), the concrete, heavy timber structure and glass panel viewing area would provide eye-level observation of the cross-section of the stream. The



*Viewing Chamber Representations*

chamber would be recessed into the ground, be ADA accessible, and would provide interpretive panels. Sidewalks would lead from the adjacent parking constructed as part of the visitors center (item 11).

(13) Open Areas: Located between Denton Road and the wetland canal, this area is a low-lying mowed area with a picnic shelter, small playground, footbridge, and roadside parking. Proposed improvements would focus on maintaining this use by replacing the picnic shelter, adding tables and grills, providing off-street paved parking, reconfiguring the multi-use trail, and adding landscape plantings.

(14) Cascades Manor House: The Cascades Manor House is operated by the non-profit Cascades Park Foundation. It was originally designed as the clubhouse for the golf course. Its current use for special events such as banquets and wedding receptions is a source of revenue for the Park. To expand upon this concept, proposed improvements would include the addition of a large gazebo installed in a formal garden setting with the adjacent pond as a backdrop. The gazebo would be used for outdoor weddings and other special events.



*Gazebo Example*



*Formal Garden Representation*

The formal garden would be irrigated and planted with a variety of perennials and low shrubs, and would be maintained by a volunteer garden club.

The Cascades Manor House is a Tudor style building with a combination of wood and stucco, and would need to undergo miscellaneous exterior maintenance.

(15) Multi-Use Path: The existing bituminous and wood path east of Brown Street is approximately 8 feet wide. The bituminous path also continues around the little league fields. Its principal use is to provide access to the ball fields. Under this category, a new 10-foot-wide bituminous path would be constructed around the west half of the Park. It would serve as a



*Multi-Use Path Representations*



multi-use, ADA accessible path for jogging, walking, bicycling, roller skating/rollerblading, and cross-country skiing. A 16-station fitness trail would also be located at intervals along the path. It would be day use only, and no lighting is anticipated.

(16) Brown Street Improvements: Brown Street is currently a four-lane road with a landscape boulevard dividing north- and southbound lanes. It divides the Park in nearly equal sections and makes a distinct jog in its north/south alignment to avoid the Amphitheater. It is a heavily traveled road and is often used as a bypass through the Park to access the commercial district to the north along Michigan Avenue. Historically, the road has been in its current location since Cascade Falls was originally constructed. The changing landscape of the Park and the surrounding areas has resulted in the road becoming a barrier through the Park. It has often been identified by Park users as a safety issue due to the quantity and speed of the vehicles. The absence of crosswalks and a path system along the west edge of the road further adds to this negative perception.

Under this category, a series of traffic calming measures are proposed. The two west lanes would be removed and replaced with a pedestrian sidewalk, bike path, and landscaping as part of the Amphitheater redevelopment (item 1). A roundabout would be constructed at the Brown Street/Randolph Street intersection (item 10A) to slow traffic, and special road paving would be installed at defined pedestrian crosswalks. The southern end of Brown Street would need to be redesigned at its terminus at Denton Road, to include the northbound lane, and separate right-turn and left-turn lanes for southbound traffic (refer to Figure 6).

Further traffic calming measures would include stop signs at the crosswalks, reduced speed limit to 15 MPH, and complete road closure during special events at the Park.

As part of the street enhancement program, a new sidewalk would be added on the west side of the right-of-way, and street trees, irrigation, and ornamental street lights would be installed. A wide pedestrian plaza with special pavement is proposed in the road surface in front of Cascade Falls at the Paredo terminus.



Figure 8: Phasing Plan

2. Phasing / Estimating

Phasing is identified under three levels of priority with priority 1 being the highest for implementation (Figure 8). The timeframe for implementation of the improvements has no specific dates and would be based on funding and needs. It should be noted that like the Master Plan, the schedule of priorities is flexible, and items can be adjusted from one level to another as needs change. It should also be noted that some proposed improvements on the same priority level are interrelated and should be considered if there are changes in phasing. Most of these relationships are identified under the Master Plan narrative (IV.E.1.).

Estimating is based on current pricing and generated at a level commensurate with master planning. As such, design contingencies are included at 20% of the estimate, and engineering, permitting, and testing services are included at approximately 15% of the total cost.

Lastly, pricing would need to be periodically updated based on changing demands and pricing for materials, equipment, labor, and annual inflation.

A complete itemized budget estimate is listed in the appendix.

PRIORITY 1 CATEGORY OF IMPROVEMENTS

Pricing based on 2006 estimating.

(1)	<u>Cascade Falls</u>	
	(a) Existing Cascade Falls Upgrades .....	\$2,608,000
(10)	<u>Gateway Landscaping - 3 Sites</u>	
	Site 10B: Randolph Street / High Street Intersection .....	\$ 93,000
	Site 10C: Denton Road / Kibby Road Intersection .....	\$ 153,000
	Site 10D: Brown Street / Denton Road Intersection .....	\$ 148,000
(12)	<u>Natural Area</u>	
	(a) Canal and Pond Dredging (including golf course) .....	\$2,100,000
(14)	<u>Cascades Manor House</u> .....	\$ 407,000
(15)	<u>Multi-Use Path</u> .....	\$ 340,000
	Total Priority 1 .....	\$5,849,000

## PRIORITY 2 CATEGORY OF IMPROVEMENTS

Pricing based on 2006 estimating.

(1)	<u>Cascade Falls</u>	
	(b) Expanded Cascade Falls Area .....	\$ 5,181,000
	(c) Amphitheater Area .....	\$ 5,932,000
(2)	<u>Historic Paredo Restoration</u> .....	\$ 493,000
(4)	<u>Open Field Area- Passive Recreation</u> .....	\$ 24,000
	(a) Relocate Driving Range .....	TBD
(8)	<u>Active Recreation Area</u>	
	(b) Maintenance Building.....	\$ 782,000
(9)	<u>Active Recreation Area - Open Field</u> .....	\$ 335,000
(10)	<u>Gateway Landscaping - 1 Site</u>	
	Site 10A: Brown Street / Randolph Street Roundabout .....	\$ 282,000
(11)	<u>Interpretive/Visitors Center</u> .....	\$ 3,162,000
(12)	<u>Natural Area</u>	
	(b) Wetland Interpretive Opportunities .....	\$ 1,904,000
(13)	<u>Open Areas</u> .....	\$ 248,000
(16)	<u>Brown Street Improvements</u>	
	(a) Road Improvements.....	\$ 223,000
	(b) R.O.W. Enhancements .....	\$ 799,000
	Total Priority 2 .....	\$19,365,000

## PRIORITY 3 CATEGORY OF IMPROVEMENTS

Pricing based on 2006 estimating.

(3)	<u>Children's Play Area</u> .....	\$ 1,673,000
(5)	<u>Bandshell and Restrooms</u> .....	\$ 219,000
(6)	<u>Natural Area – Trout Pond</u> .....	\$ 646,000
(8/8a)	<u>Active Recreation Area – Paved Surfaces</u> .....	\$ 1,263,000
(12)	<u>Natural Area</u>	
	(c) Viewing Chamber .....	\$ 483,000
	Total Priority 3 .....	\$ 4,284,000
	TOTAL PRIORITY 1 THROUGH 3 .....	\$29,498,000

### 3. Funding and Community Support

The Park has been a major attraction and source of pride for Jackson County. The Master Plan described in this report is a long-term vision to guide improvements for many years to come.

A wide variety of funding assistance can be made available to help realize this vision: Michigan Department of Natural Resources and other state and federal grants for habitat restoration and environmental programming; state, county, and local community grants for recreational facilities; state and federal transportation enhancement grants for the redesign of Brown Street and its pedestrian walks and bikeways; new revenue sources from expanded programming and concessions; unique donor opportunities for private businesses, individuals, and organizations; grants from local and national foundations; and the contributions and volunteer efforts of city and county residents. This level of public and private commitment will keep the Sparks Foundation County Park (Cascades Park) relevant and a destination for new generations to come.

