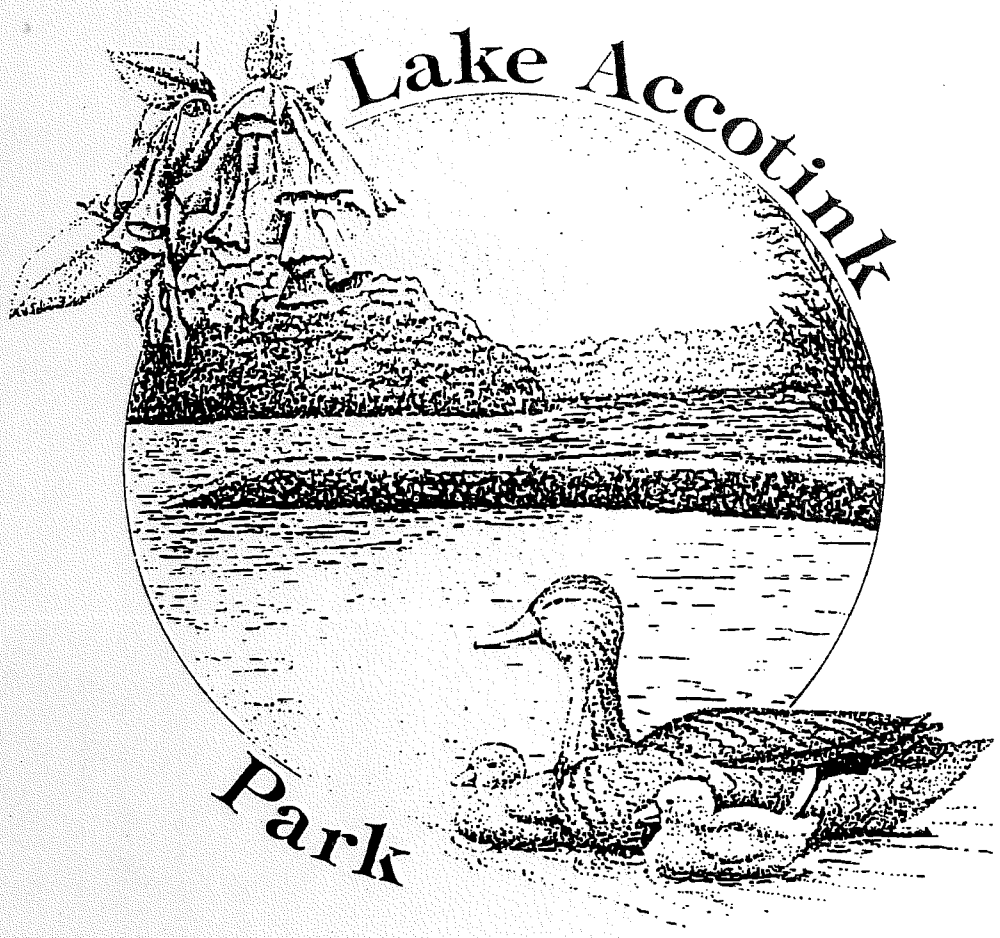

CONCEPTUAL DEVELOPMENT PLAN

AND

PROJECT IMPLEMENTATION PLAN

PREPARED BY:
FAIRFAX COUNTY PARK AUTHORITY
STRATEGIC PLANNING TEAM
JANUARY 1993

CONCEPTUAL DEVELOPMENT PLAN
AND
PROJECT IMPLEMENTATION PLAN
FOR
LAKE ACCOTINK PARK

PREPARED FOR:

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APPENDIX

1. Recreation and Entrance Zone Conceptual Development Plan
2. Recreation Zone/ Core Area Conceptual Development Plan
3. Restaurant Feasibility Study
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LAKE ACCOTINK
CONCEPTUAL DEVELOPMENT PLAN
AND
PROJECT IMPLEMENTATION PLAN

Background: The General Management Plan for Lake Accotink was approved by the Park Authority Board in July of 1992. This Conceptual Development Plan and Project Implementation Plan reflects the collective input of the assigned members of the Project Team for this park. This signature sheet verifies that the undersigned support and concur with the contents herein.

CDP AND PIP APPROVAL

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William C. Beckner Date

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1/14/93
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1/12/93
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I. Introduction and Background

A General Management Plan (GMP) for Lake Accotink was completed in July of 1992. The GMP provides direction for the conceptual planning stage of development. The park purpose, desired future visitor experiences, and park themes establish important guidelines for the Conceptual Development Plan and are stated below as they appear in the GMP.

The Conceptual Development Plan (CDP) for Lake Accotink describes the recommended improvements to existing facilities and recommendations for future park development. The CDP contains descriptions of the concept plan elements, design concerns, and plans (maps) that show the general locations of recommended projects.

Included in this document is a Project Implementation Plan (PIP) that states recommendations for implementing the projects recommended in the CDP. The PIP contains project scope definitions, cost estimates, funding recommendations, and a phasing plan.

A. Park Purpose

The purpose of Lake Accotink Park is to:

- o preserve, protect, and restore natural resources, both terrestrial and aquatic.
- o preserve, protect, and restore cultural resources.
- o educate visitors about the existing natural and cultural resources, and how to protect them.
- o provide a variety of recreational opportunities for all County citizens.
- o generate revenue to support the operation, maintenance, and restoration of the resources and facilities.

B. Desired Future Visitor Experiences

Desired Future Visitor Experiences

- o Visitors will be able to learn about the history of the park and understand the historical significance of the area.
- o Visitors will be able to learn about the impacts that humans have had on the lake environment and its surroundings.
- o Visitors will be able to learn about and observe the existing natural resources and understand the importance of protecting this ecological link in the watershed.
- o Visitors will be able to learn about and view first hand how the area is used by wildlife.
- o Visitors will be able to enjoy the natural beauty and be provided the opportunity for solitude and relaxation.
- o Visitors will be able to participate in active recreation activities.
- o Visitors will be able to participate in passive recreation activities.

C. Park Themes

Lake Accotink Park Themes

- o Avenues for Leisure: Trade, Travel, and Troops (cultural history)
- o An Ecological Link in the Watershed (natural resource)
- o A Highway for Wildlife (wildlife)
- o A Place to "Get Away" in an Urban Setting (relaxation, recreation)

The main theme to be developed is "Trade, Travel, and Troops". Building designs should be based on a railroad theme and interpretive signs should explain the significance of this area through history. Interpretive signs should also be provided to explain the ecological significance of this site.

D. **Proposed Recreational Opportunities**

The activities and programs to be provided at Lake Accotink, as stated in the GMP, are listed below. (Note: a few facilities and programs have been added that were omitted from the GMP.)

Proposed Recreational Facilities at Lake Accotink

- o Trails
- o Picnic areas
- o Group picnic pavilions
- o Boating
- o Fishing
- o Carousel
- o Playgrounds
- o Open play area
- o Food concessions
- o Meeting room
- o Miniature golf

Proposed Programs at Lake Accotink

- o Interpretive programs
- o Nature hikes
- o Nature camps
- o Special events
- o Group activities
- o Boating classes
- o Recreational classes

II. **Description of the Concept Plan Elements**

A. **Design Concerns**

- o Low maintenance: The site and building designs should be designed for low maintenance. Staff availability is limited, so all buildings and facilities should be easy to clean and maintain.
- o Access for people with disabilities: The Americans with Disabilities Act of 1990 requires that all new construction be made accessible to people with disabilities. The Park Authority does not provide similar services elsewhere that are accessible which makes the provision of accessible facilites at Lake Accotink mandatory.
- o Separation of vehicular and pedestrian traffic: Future designs should eliminate, as much as possible, conflicts between vehicular, bicycle, and pedestrian use areas.
- o Through traffic: Through traffic should be controlled, especially during rush hour traffic times.
- o Logical signage: Providing visitors with information and direction are critical elements in the overall design of facilities. Lack of visual access to available facilities at Lake Accotink makes good signage even more critical.
- o Unified design theme: It is important that all elements within the park are unified by one common theme. There are so many activities at the park that a unified theme is needed to tie them together.
- o High Quality Design: As part of the unified design theme of the park, all elements should be designed with the highest quality standards.
- o Drainage: Provision of good drainage is critical to the design of all park elements, but especially in the core area. If the core area is not carefully designed, drainage problems could be created.
- o Flooding: It is possible that from time to time the core area may experience flooding, thus all elements in the core area should be able to withstand periodic flooding.
- o Debris control: Accumulation of debris is a problem in the marina area. A device is needed to prevent debris from entering the marina.
- o Lighting: Lighting of the core area for night use should include lighting of trails and roads from the core to both parking lots.
- o Recycled Products: Recycled products, particularly picnic tables, benches, and trash cans should be purchased and installed as much as possible, within cost limitations.

B. **Vehicular Flow**

Most park visitors will probably continue to use the park entrance on Accotink Park Road off of Highland Avenue to the south. Visitors who enter the park from this direction will have the opportunity to park at either the lower or upper parking lots. They will also be able to leave the park either via the Heming Avenue entrance or the Highland Avenue entrance. The connecting road between the existing core parking lot and the upper parking lot should be widened to a two-way travel lane to assist in this traffic pattern. Parking in the core area should be limited to parking for people with disabilities and core area staff.

The Heming Avenue entrance should be used for delivery of goods to the core area and pick-up of refuse from the park.

A drop off area should be provided at the entrance to the core area. This area should be carefully designed to accommodate turn around traffic, through traffic, and drop off traffic.

C. **Visitor Contact Station**

The main point for visitor contact with park staff should be in the core area and should be provided by means of a contact station. Visitor services provided should include information distribution, safety monitoring, first aid, and boat rescue.

D. **Map Kiosks and Signage**

Map kiosks should be located at both the Heming Avenue and the Accotink Park Road entrances. They should be positioned so that they can be read from a vehicle, and so that other vehicles can pass someone reading the sign. An area should be available on the map kiosks for posting announcements of upcoming programming and interpretive events.

Throughout the park, but especially at the park entrances, there should be informational signs giving park hours of operation, park rules, and a list of available activities.

Directional signs should be provided on Braddock, Backlick and Old Keene Mill Roads with international symbols depicting the activities available at the park.

Interpretive signs should be located next to the road that leads from the lower parking lot to the core area. These signs should provide information on the history of the park. Interpretive signs should also be placed along the trail around the lake. These signs should provide information on the ecological significance of the park, and why it should be protected.

Signage indicating accessible routes for people with disabilities should be provided throughout the park.

E. **Maintenance/ Office Building**

This building should be located just off of Accotink Park Road with its entrance near the proposed map kiosk. The function of this building is to provide interior and exterior areas for storage and maintenance of park equipment, and offices for park staff.

The building should be located so it is screened from Accotink Park Road. Existing trees should be preserved to the greatest extent possible.

F. **Lower Parking Lot**

This parking lot cannot be significantly expanded because it is located in a flood plain, however, it should be resurfaced and re-striped. The parking lot, as well as the trails to the core area, should be lighted.

This lot should provide parking for people with disabilities and designated parking spaces for buses.

The picnic area at the east end of the lower parking lot should be improved by adding wood chips to define the area, installing permanent tables and grills, and by providing accessible picnic sites for people with disabilities.

G. **Upper Parking Lot**

The upper parking lot should be expanded as much as possible. The existing trees that serve as a buffer to the adjacent property owners should be preserved as much as possible. Access to the parking lot from the adjacent open space and the proposed pavilions should be provided by trails with a grade of five percent or less.

Reserved parking for groups using the pavilions should be provided in this lot, with unreserved spaces also available. If no groups have rented the pavilions all the parking spaces should be unreserved. Logical signage will be critical to making it clear to visitors which spaces are reserved.

H. **Core Facilities**

The critical design concerns in the core area include the separation of pedestrian, bicycle, and vehicular traffic, trails to connect all the proposed elements, lighting of the facilities, drainage, and the universal expression of the park theme.

1. Concession/ Rest Room Building This building should serve two basic purposes: to provide food concession that meets the needs of the majority of park visitors and to provide accessible rest rooms. Indoor and outdoor seating areas are desirable. A portion of the indoor seating area should be made available for groups as needed. The outdoor seating area should be sited for possible use as a stage area, using the natural slope of the adjacent hill for seating. The building facade should carry out the train theme.

   Food Concession The food concession to be offered should be similar to a cafeteria or deli. Visitors should be able to purchase pre-packaged foods and quickly prepared foods. The focus should be on providing visitors with nutritious, easily packaged, quickly prepared foods. The food concession area should be set up so that visitor groups could use the facility.
   (Note: A study had been conducted on the feasibility of providing an upscale restaurant in the core area. A copy of the study in in the appendix.)

   Accessible Rest Rooms None of the existing rest rooms are accessible to people with disabilities. The new rest rooms should serve the majority of park visitors because of their location in the core area.

2. Ticket Building The ticket building should be in the location of the existing office building (the former concession stand). This building should be renovated to serve as a place to purchase tickets for boat rentals, tour boat rides, miniature golf, and carousel rides. The ticket window should be located so that when lines form the overflow area is away from the lake and does not inhibit other traffic in the park. The building design should carry out the train theme.

3. Visitor Contact Station It is important that a place be available in the core area where people can contact park staff. Possible locations for this service include the ticket building or the concession/ rest room building.

   The functions of this contact station should be to answer questions, provide first aid, and to provide a place for site interpretation and exhibits. Interpretation should be provided through the use of display cases mounted outside the visitor contact station. Interpretive and informational kiosks should also be provided in the core area.

4. Miniature Golf The existing miniature golf course should be removed and a new course constructed in the existing open play area. A minimum of eight holes, and the last hole, should be accessible to people with disabilities. The course should be lighted for night use and depict the train theme.

5. Marina The existing boat dock should be removed and replaced by a dock that is fully accessible to people with disabilities. The dock should provide locations for paddle boats, a tour boat, private boat launching (for boats that are carried into the core area), fishing, and viewing of the lake. Visitors who bring boats with trailers will be allowed to use the existing boat launching area at the discretion of park management.

   The sand beach that exists on the north side of the marina area should be continued into the area that is now pea gravel.

6. Tour Boat/ Fishing Dock A dock should be installed separate from the marina docks for the purpose of docking the tour boat. This dock should also provide places for fishing and viewing of the lake.

   The area of shoreline from this dock to the new marina, the area that is not protected by the lakeside wall, should have river wash stone installed to stabilize the bank.

   A device should be installed to control the entrance of debris into the inlet where the marina is located. This device should be designed so that it can function with the tour boat dock to direct debris to the dam area for removal.

7. Carousel The carousel should remain in its existing location with an enclosure constructed to protect it. Access should be provided for people with disabilities.

8. Playground A new playground should be installed adjacent to the carousel. It should provide a wide range of play events and be accessible to people with disabilities. An important element of the design of this playground is to provide visual access from the playground to the miniature golf course, carousel, and marina. Seating areas should be provided in the best possible locations to provide this visual access. As much of the playground as possible should be placed in the shade.

9. Parking/ Vehicular Access Parking in the core area should be limited to parking for people with disabilities and core area staff. Some of the existing parking surface should be removed.

   A drop off area should be provided at the entrance to the core area. Design considerations include the ability of trucks to make deliveries to the concession/ rest room building and the ability of the drop off to facilitate through traffic, drop off traffic, and turn around traffic.

   Visitors should no longer be able to park vehicles with trailers in the core area. If visitors wish to launch boats they must pull into the drop off area, unload their boat and carry it to the water. The pier closest to the drop off area should be designated for this use. Boat launching from trailers will be available at the discretion of park management.

I. Existing Pavilion/ Rest Rooms

The existing pavilion should continue to function as a group rental location. It should be renovated, but the existing rest rooms should be removed and the area used for storage of supplies used in the core area. The cost of renovating these rest rooms is prohibitive and the concession/ rest room building will provide accessible rest rooms for park visitors. These rest rooms should not be removed from use until the new concession/ rest room building is built.

J. Group Picnic Areas

In the northeast portion of the park, near the upper parking lot, two new group picnic areas should be developed. One pavilion, with rest rooms and a capacity of 300 visitors, should be installed in the area of the existing softball field. The area currently used as a softball field should become an open play area. If necessary the backstop should be moved to the best location, in conjunction with the new group picnic pavilion. The infield should be grass. The open space should be available for use by picnic groups for volleyball, soccer, frisbee, etc.

The second pavilion should be installed in the location of the existing multi-use courts. This pavilion should be approximately the same size as the existing large pavilion.

Reserved parking for the group picnic areas should be provided in the upper parking lot.

K. Trails

The trails that connect Lake Accotink Park with other parks along the stream valley trail system are in need of repairs. As a major connection in the countywide trail system, the trail that goes through the core area from the north side of the lake to the lower dam area is a critical link. Attention should be paid to the logical flow of these users through the core area. The trails should be resurfaced (either asphalt or gravel as appropriate), and erosion control devices and directional signage installed.

The section of trail from Braddock Road, along the north side of the lake, to the core facilities is scheduled to start design in FY 93 as a separate project. This project does not include moving the existing bridge over Flag Run, which should be considered part of the core renovation project.

Trails within the park that link the various visitor experiences are also needed. These trails should be of a slope of five percent or less wherever possible, and be in a logical location so visitors will use them.

L. Staffing Requirements

Staff will be pursuing the attainment of a private partner to design, develop, and operate the facilities in the core area. The number and type of staff needed will vary depending on the level of involvement of a private partner. At a minimum, without a private partner, the Park Authority staff should consist of a park manager, assistant manager, programmer, four maintenance workers, five to ten seasonal maintenance workers, and a visitor contact specialist. If the Park Authority develops and operates the core facilities 5 additional full-time and 10 seasonal staff will be needed. Additional staff expenses should be covered by revenues generated.

III. Project Implementation Plan Recommendations

A. Issues and Recommendations

The phasing of projects is critical to the success of the park renovation because the park is already staffed and used constantly by visitors. Projects should be phased is such a way as to ensure that park visitors are inconvenienced as little as possible. Park staff should be consulted throughout the development process to assist in the transition to the new facilities.

In order to keep this project moving as quickly as possible simultaneous tasks have been identified. The Project Team recommends that the development of this park begin with the design and construction of the maintenance facility. While the maintenance facility is being designed, the conceptual development plan for the core facilities will go through the Fairfax County Special Exception process. Also at the same time a request for proposals for the development of the core area by a private partner will be sent out.

Critical points in the project phasing include:

- approval of the Special Exception for the core area at approximately the same time as the completion of the RFP process for private partners,
- the demolition of the existing maintenance facility when the new facility is complete and
- completion of the concession/ rest room building prior to renovation of the existing rest rooms in the large pavilion.

B. Project Scope Definitions

Project scope definitions are listed below for each portion of the larger projects which are: 1) Maintenance Building, 2) Core Facilities, and 3) Amenity Projects. The descriptions listed here are more detailed than the Conceptual Development Plan element descriptions.

1. Maintenance/ Office Building

a. General

The purpose of this facility is to provide interior and exterior working areas for the maintenance and office functions of the park. This includes space to work on equipment used on-site (mowers, earth moving equipment, all terrain vehicles, etc.), offices for park employees, storage of materials used on-site, and storage of equipment used on-site.

The layout of the proposed building should be designed to maximize utility for a variety of maintenance functions. One full garage bay with two adjacent half bays are proposed on one side of the building. A work bench and bay storage area should function with the garage bays.

b. Storage

Storage requirements for this maintenance facility include storage of a variety of materials and equipment. Storage of turf maintenance supplies will be separate from paper products, janitor supplies, hand tools, and safety equipment. Safety guidelines as required by the Fairfax County Safety Manual will be observed.

Additional storage of janitorial supplies and paper products will be available in the existing pavilion in the core area.

c. Offices

Three office spaces will be provided in the maintenance building, one for the park manager, one for assistant manager(s) and support staff, and a seasonal staff office. Other staff that will be working from this facility without designated office space are laborers (3), night guard (1), additional seasonals ($\pm$ 22).

d. Support Space

The other functions that are needed to support this facility include: a staff lunch room, toilet/shower room, storage/ laundry room, toilet room, lockers, and sink and eye wash stations.

e. Parking

A minimum of twelve spaces should be provided, with two of these spaces designed and designated for people with disabilities. The remaining area of useable space outside the building should be paved for parking, outdoor storage, and covered storage.

f. Facility Entrance

The entrance to the facility should be paved and a gate installed around the entire paved area. A lockable sliding gate should be provided for access to the fenced area.

g. Utilities

Electric lines, water lines, and sanitary sewer service are available in the vicinity. Natural and cultural resources should be preserved as much as possible during the placement of utility lines.

2. **Core Facilities**

a. Concession/Rest Room Building This building should be placed in the location of the existing maintenance building in the core area. The building should provide indoor eating space and rest rooms that are fully accessible to people with disabilities. Outdoor seating should also be provided. The outdoor seating area should be covered as much as possible and be designed for use as a stage area for outdoor performances, using the adjacent hill as a seating area. The building facade should carry out the train theme.

The concept of the food service should be similar to a cafeteria (for example an "American Cafe") or a fast food restaurant that provides table service during certain operating hours. The food to be served should not be strictly "fast food". A variety of choices should be offered from fresh fruit, to pre-packaged sandwiches, to easily prepared food.

b. Ticket Building The existing ticket building should be used for selling tickets for boat rentals, tour boat rides, miniature golf, and the carousel. It should be completely renovated. The ticket window should be located so that when lines form the overflow area is away from the lake and does not inhibit other circulation in the park. Barriers should be installed to direct people waiting in line and to keep them from inhibiting other pedestrian and bicycle traffic in the area. The building design should carry out the train theme.

c. Visitor Contact Space in the ticket building or the concession/ rest room building should be made available for a visitor contact station. Functions of this space include information distribution, first aid, and a place for site interpretation and exhibits.

d. Miniature Golf Course The miniature golf course should be located in the area of open space north of the existing ticket building. It should provide a minimum of 18 holes, with a minimum of 9 holes fully accessible to people with disabilities. The course should be challenging for a variety of skill levels. The train theme should be depicted in the course design.

The location of the miniature golf course requires that it be able to withstand periodic flooding. Although flooding has not occurred in this area for some time, the potential for this area to flood does exist.

e. Marina The marina docks should be located in the same place as the existing boat docks. The purpose of the marina area is to provide a place for docking of rental boats, a place for fishing off the docks, and a place for visitors to view the lake. The marina docks should be accessible from the parking area, the ticket building, and from the adjacent trails. This area should be fenced so that when the other uses are active at night this area can be safely closed.

f. Tour Boat/ Fishing Dock The tour boat/ fishing dock should be located at the end of the existing peninsula. It should serve several purposes:
1. It should provide a location away from the activity of the marina area for groups to gather for tour boat rides.
2. The decking should protect the shoreline.
3. The dock should provide visitors with a place to view the lake.
4. The dock should provide a place to fish.
5. It should control debris entering the marina area by helping to direct debris to the dam.

The area of shoreline from this dock to the new marina, the area that is not protected by the lakeside wall, should have river wash stone (two to three inches in diameter) installed to stabilize the bank.

A fence with a gate should be provided to limit access to the tour boat and dock at night.

g. Carousel The carousel should remain in its existing location. A ramp should be provided that makes the deck of the carousel accessible to people with disabilities.

A cover and shelter structure should be built to protect the entire carousel from the elements. The shelter structure should be enclosed on all sides so that when the carousel is not in operation it is fully protected.

h. Playground The new playground should be located near the existing carousel. The playground should be similar to playgrounds provided at district parks throughout the County. It should provide a variety of play activities for various skill levels and be accessible to people with disabilities.

i. People Mover Because the parking areas are a short walking distance from the core area a "people mover" should be provided. This vehicle should consist of two or three cars for transporting passengers from the parking areas to the core. It should be useable by people with disabilities and carry out the train theme.

j. Parking Approximately two-thirds of the existing asphalt surface should be removed from the core area. The remaining area should be resurfaced and have a minimum of four accessible parking spaces installed.

k. Lighting Lighting should be provided for all the activities in the core area: miniature golf, carousel, playground, parking, and concession. The marina area should be lit for safety reasons, even though this use will not be available at night.

3. **Amenity Projects**

a. Entrance Road off Accotink Park Road The existing entrance road has an average width of 12 feet and is approximately 4700 feet long from the park entrance to the entrance to the core area. This road should be stripped, repaved, re-striped, and have the speed bumps replaced. The gravel shoulders on both sides of the road should be improved.

At the map kiosk the entrance road should be widened to allow a car to pass another car stopped at the map kiosk.

b. Trails Trail connections are needed throughout the park. The connection of the countywide trail from north of the lake through the core area is critical. The existing park trails should be resurfaced (either asphalt or gravel as appropriate), and erosion control devices and directional signage installed.

c. Parking The lower parking lot has 198 spaces on 95,000 s.f. of area that needs resurfacing. When the lot is re-striped there should be a minimum of three parking spaces for people with disabilities. Preferably, the accessible parking spaces should be located in several different places in the lot.

The upper parking lot has 60 spaces on 21,500 s.f. of paved area. New parking spaces should be added on an additional 20,000 s.f. of available space. A minimum of three parking spaces should be provided for people with disabilities. The entrance road to the upper parking lot is approximately 5000 s.f. and needs to be resurfaced. All spaces should have the existing wheel stops reinstalled.

d. Open Play Area The area of the existing ballfield should be regraded, seeded, and mulched for use as an open play area. Most of the grading will be required to provide access for people with disabilities. The grading should be done in coordination with the installation of the new pavilion/ rest room building in this area. The existing trees should be preserved as much as possible.

e. Pavilion/Rest Room Adjacent to the open play area a pavilion/ rest room building should be installed. The pavilion should accommodate a minimum of 300 visitors. The rest rooms should be fully accessible to people with disabilities. Trails with appropriate signage should be provided to connect this use with the core area.

f. Pavilion A new pavilion should be installed over the existing multi-purpose courts. This pavilion should accommodate a minimum of 200 visitors. Trails with appropriate signage should be provided to connect this use with the core area.

g. Signage There are four basic sign types that should be installed at Lake Accotink Park.

1. Directional street signs: On Braddock Road, Backlick Road, and Old Keene Mill Road signs should be installed in both directions directing visitors to the park. The signs should use international symbols to indicate the types of recreational activities available.

2. Directional park signs: Signs are needed throughout the park to direct visitors to the various activities and to inform them about park rules.

3. Interpretive signs: Interpretive signs should be located in and around the core area and along the park trails. The signs should tell the story of the history of the park and inform visitors about human impact on the environment.

4. Map kiosks: At both park entrances map kiosks should be installed to provide visitors with a point of reference and a place to pick up park maps. Bulletin board space should be available for posting of special event information.

h. Lighting Both the lower and upper parking lots should be lighted. Main trails that lead from the parking lots to the core area should be lighted for safety.

i. Access Road The road that leads from the core area to the upper parking lot is currently only wide enough for one-way traffic. The road should be widened for two way traffic and have speed bumps installed.

j. Drop Off Area At the entrance to the core area a drop off area is needed. It should be wide enough to accommodate truck deliveries and cars with trailers.

k. Picnic Area At the end of the lower parking lot an accessible picnic area should be installed. There should be a minimum of four accessible picnic tables, complete with grills and trash cans.

l. Existing Pavilion/ Rest Room Building The existing pavilion should be renovated and the existing rest rooms removed from use. The rest room fixtures should be removed and the rooms used for storage of maintenance supplies used in the core area (ie. trash bags, toilet paper, paper towels).

m. Shoreline Stabilization Some potions of the marina with a sand surface should be replaced with river wash gravel to prevent erosion. The areas that are currently in pea gravel behind the lakeside wall should be surfaced with sand for ease of maintenance and clean-up. A debris control device should be installed to prevent litter and leaves from entering the marina area.

n. Debris Control A method of debris control is needed to prevent debris from accumulating in the lake at the marina. The device should prevent as much of the debris coming down Accotink Creek from reaching the marina as possible, without limiting boat access to the lake.

C. **Phasing Plan**

The chart on the next page represents the recommended phasing and schedule for projects to be completed at Lake Accotink Park.

The schedules approved in by the Park Authority Board in the Strategic Plan did not include the Special Exception and RFP processes, which will need to be completed before the design process can begin. The approved schedules from the Strategic Plan were adjusted to include these processes.

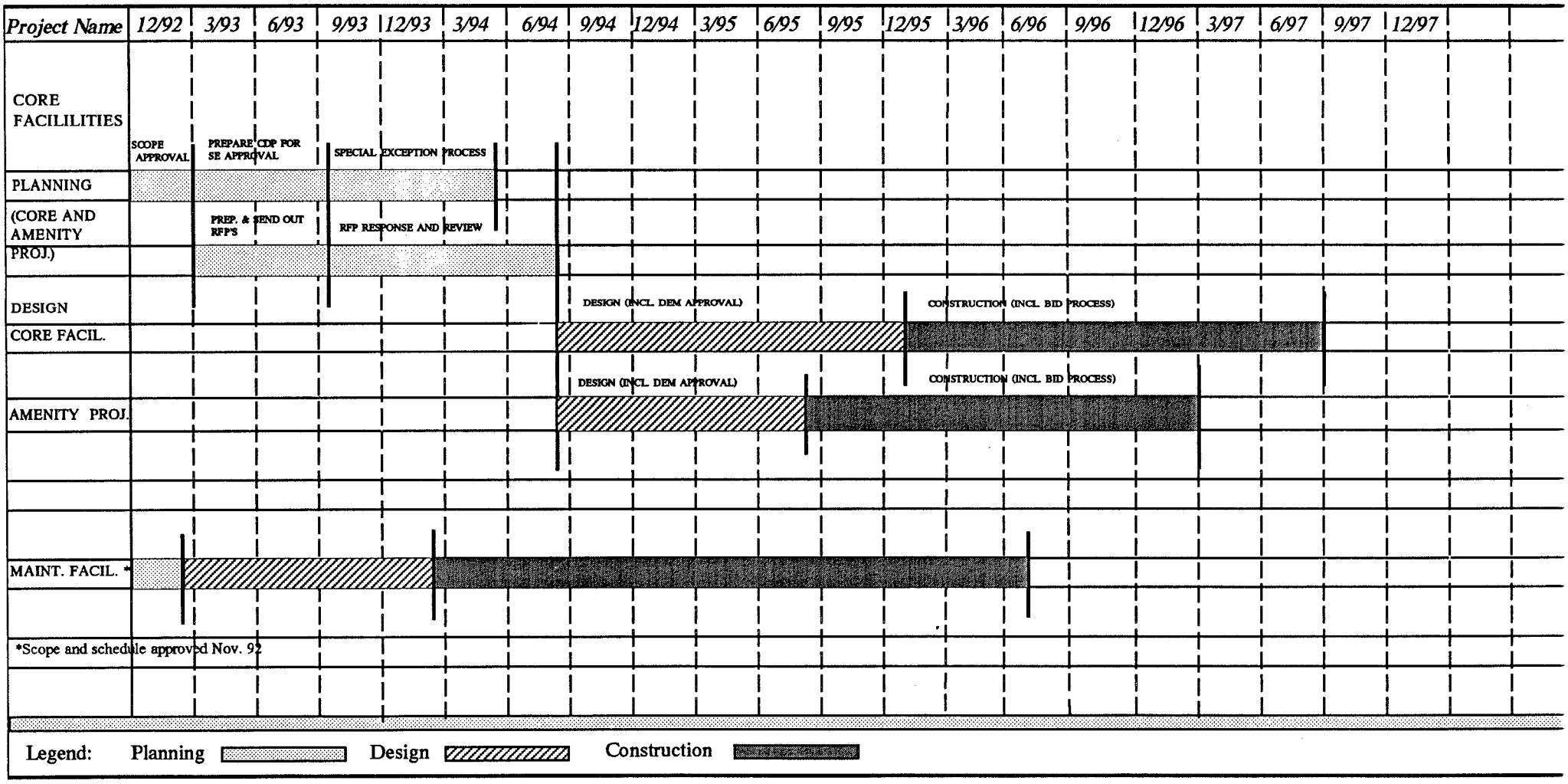
LAKE ACCOTINK PARK RENOVATION AND DEVELOPMENT PROJECTS

December, 1992

Plan. & Land Mgmt. Division

Planning, Design and Construction Project Phasing and Schedules

Planning Coordinator: Cecilia Lammers



D. Cost Estimates

The following cost estimates are based on the best available information at this time and are conceptual only. During the design phase, as more detailed information is available, adjustments to these figures may need to be made.

To calculate the numbers shown, contingencies, general contractor overhead and profit, and design fees have been added to the estimated cost of time and materials. Some figures do not have these added fees shown because they are already included. All figures have been rounded to the nearest $100.

The additional cost of contingencies, overhead and profit, and design fees have been calculated for each item separately so that the actual estimated cost of each item is presented. Detailed cost estimates are available in the project file.

SAMPLE CALCULATION

$ 28,000 (time and materials)
+$ 2,800 (10% contingency)*
=$ 30,000
+$ 7,500 (25% general contractor overhead and profit)
=$ 37,500
+$ 3,750 (10% design fee)**
=$ 41,250 (TOTAL PROJECT COST)

* For some projects where there are more unknown factors, the contingency was figured at 15%.

** Design fee percentages vary because of different types and volumes of work.

COST ESTIMATES FOR LAKE ACCOTINK RENOVATION AND DEVELOPMENT PROJECTS

Concession/ Rest Room (new) (includes site work)	$716,300
Ticket Building (ren.) (estimate based on estimates for Burke Lake Clubhouse and Greenbriar Park Concession)	$110,000
Miniature Golf Course (ren.)	$222,800
Marina (ren.)	$106,600
Tour Boat/ Fishing Dock(new)	$ 40,400
Lighting (new) (core area only)	$ 50,500
Carousel Cover (new)	$ 90,000
People Mover (new)	$ 20,000
Maintenance/ Office Building (new)	$537,000
Pavilion/ Rest Room (new)	$143,200
Pavilion (new)	$ 54,800
Pavilion/ Rest Room (ren.)	$ 6,000
Accotink Park Entrance and Road (ren.)	$130,100
Heming Avenue Entrance (ren.)	$ 20,700
Trails (ren.)	$159,600
Parking Core Area (ren.)	$ 47,400
Upper Parking Lot (ren.)	$137,000
Lower Parking Lot (ren.)	$ 62,000
Access Road (incl. drop off area)	$ 94,000
Lighting (new)	$143,900

COST ESTIMATES (CON'T)

Playground (new)		$143,700
Open Space Area (ren.)		$ 17,800
Signage (new)		$ 40,400
Picnic Area (ren.)		$ 16,300
Shoreline stabilization (ren.)		$ 26,100
Debris Control Device (new)		$ 7,000
Benches (new)		$ 6,800
Trash Cans (new)		$ 7,400
	TOTAL	$3,157,800

E. **Funding**

1. Available Funding

Current funding as stated in the Capital Improvement Program for 1994 - 1997 approved by the Park Authority Board on October 6, 1992 is listed below.

Park Maintenance Facility	$ 500,000
Picnic and Playground	$ 64,440
Renovation of Marina/Lakeside Wall	$ 502,946
Rest room Concession Bldg. & Parking	$1,107,920
	$2,175,306

TOTAL PROJECT COST:	$3,157,800
TOTAL AVAILABLE:	$2,175,306
FUNDING DEFICIT:	$ 982,494

2. Recommended Funding

Two basic options exist for making up the shortfall of funds for developing this project: 1. a private partner could be solicited to invest in the project or 2. items can be deleted from the list of projects. The project team recommends that option #1 be pursued.

If a private partner has not been obtained within one year of the County approval of the Special Exception application, the project should proceed using only FCPA bond funds. A list of project priorities is available in the appendix.

Team Recommendations for Public/Private Division of Projects

Projects that should be done by the **Park Authority** using bond funds:

1.	Maintenance Facility (new)	$537,000
2.	Pavilion/ Rest Room (new)	$143,200
3.	Pavilion (new)	$ 54,800
4.	Pavilion/ Rest Room (ren.)	$ 6,000
5.	Accotink Park Entrance and Road (ren.)	$130,100
6.	Heming Avenue Entrance (ren.)	$ 20,700
7.	Trails (ren.)	$159,600
8.	Parking Core Area (ren.)	$ 47,400
9.	Upper Parking Lot (ren.)	$137,000
10.	Lower Parking Lot (ren.)	$ 62,000
11.	Access Road (incl. drop off area)	$ 94,000
12.	Lighting (new)	$143,900
13.	Playground (new)	$143,700
14.	Open Space Area (ren.)	$ 17,800
15.	Signage (new)	$ 40,400
16.	Picnic Area (ren.)	$ 16,300
17.	Shoreline stabilization (ren.)	$ 26,100
18.	Benches (new)	$ 6,800
19.	Trash Cans (new)	$ 7,400
	TOTAL (AMENITY PROJECTS USING FCPA FUNDS)	$1,763,200

Projects that should be done by the **Private Partner**:

1.	Concession/ Rest Room (new)	$716,300
2.	Ticket Building (ren.)	$110,000
3.	Miniature Golf Course (ren.)	$222,800
4.	Marina (ren.)	$106,600
5.	Tour Boat/ Fishing Dock(new)	$ 40,400
6.	Lighting (new)	$ 50,500
7.	Carousel Cover (new)	$ 90,000
8.	People Mover (new)	$ 20,000
	TOTAL (PRIVATE PARTNER INVESTMENT)	$1,356,600

If a private partner cannot be obtained, the following project priority list should be used to develop and renovate the park.

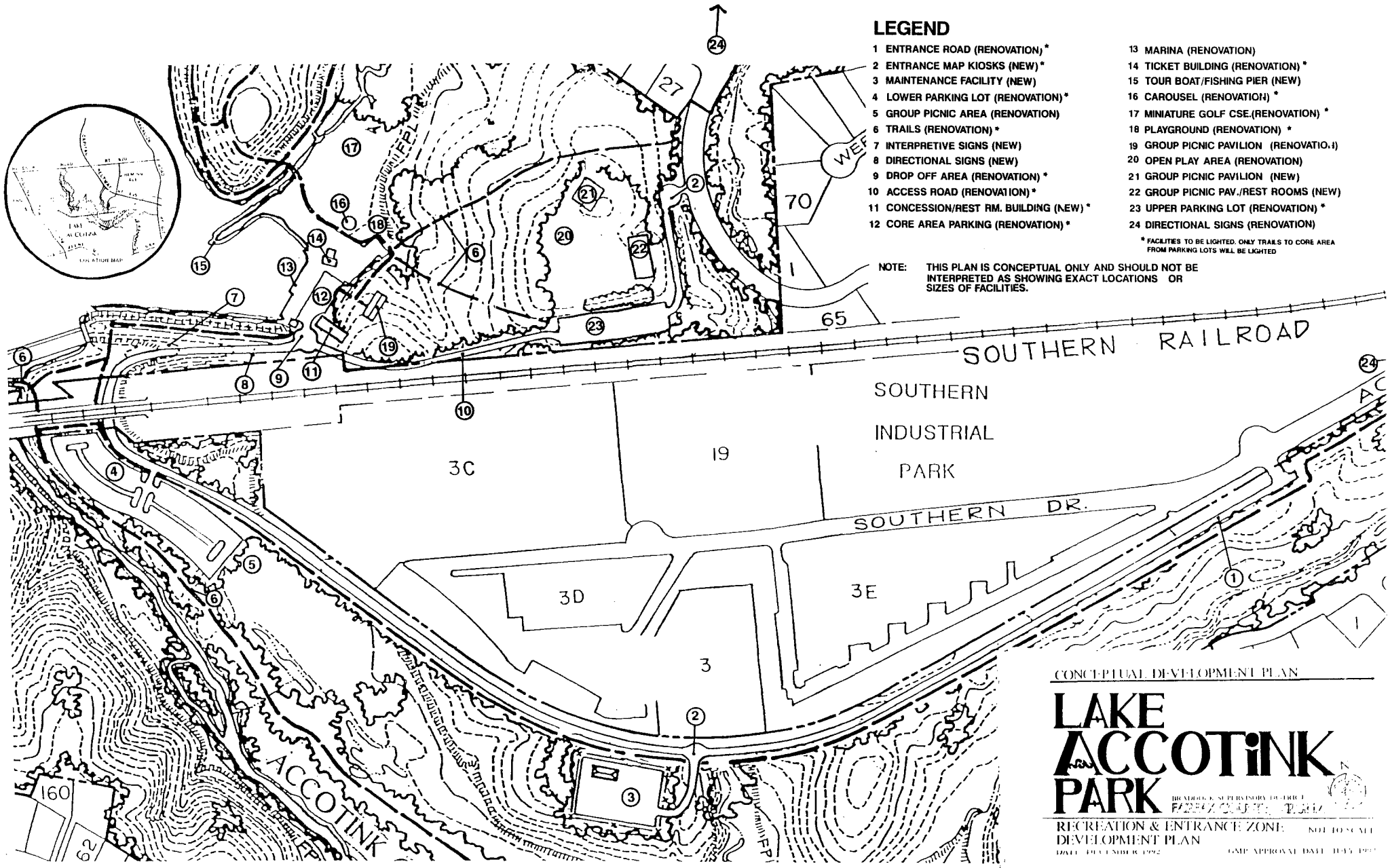
Project Priority List for Renovation and Development Projects at Lake Accotink Park
(to be used if a private partner cannot be obtained)

1.	Maintenance/ Office Building (new)	$537,000
2.	Ticket Building (ren.)	$110,000
3.	Concession/ Rest Room Building (new)	$716,300
4.	Miniature Golf Course (new)	$222,800
5.	Marina (ren.)	$106,600
6.	Entrance Road (ren.)	$130,100
7.	Upper Parking Lot (ren.)	$137,000
8.	Lower Parking Lot (ren.)	$ 62,000
9.	Pavilion/ Rest Room Building (new)	$143,200
10.	Pavilion/ Rest Room (ren.)	$ 6,000
11.	Signage (new, partial)	$ 40,400
		$2,172,700

TOTAL BOND FUNDS CURRENTLY AVAILABLE = $2,175,306

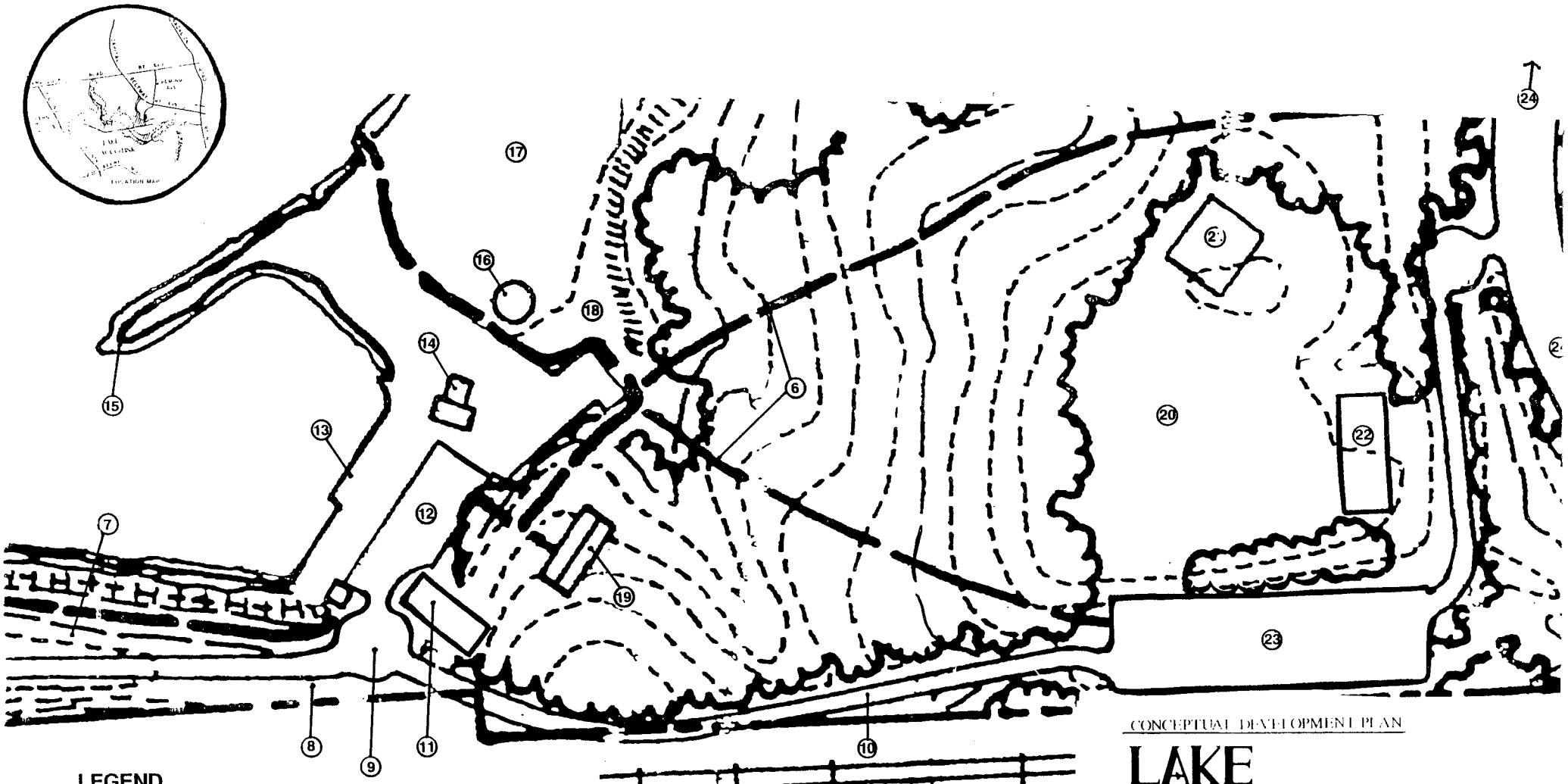
Projects that would require additional funding:

12.	Open Space Area (ren.)	$ 17,800
13.	Playground (new)	$143,700
14.	Signage (new, partial)	$ 38,700
15.	Tour Boat/ Fishing Dock (new)	$ 40,400
16.	Trails	$159,600
17.	Carousel Cover (new)	$ 90,000
18.	Shoreline Stabilization (ren.)	$ 26,100
19.	Access Road (ren.)	$ 94,000
20.	Lighting (core, new)	$ 50,500
21.	Lighting (new)	$143,900
22.	Core Parking Lot (ren.)	$ 47,400
23.	Picnic Area (ren.)	$ 16,300
24.	Pavilion (new)	$ 54,800
25.	Trash Cans and Benches (new)	$ 14,200
26.	Heming Avenue Entrance (ren.)	$ 20,700
27.	People Mover (new)	$ 90,000


LEGEND
1 ENTRANCE ROAD (RENOVATION) *
2 ENTRANCE MAP KIOSKS (NEW) *
3 MAINTENANCE FACILITY (NEW)
4 LOWER PARKING LOT (RENOVATION) *
5 GROUP PICNIC AREA (RENOVATION)
6 TRAILS (RENOVATION) *
7 INTERPRETIVE SIGNS (NEW)
8 DIRECTIONAL SIGNS (NEW)
9 DROP OFF AREA (RENOVATION) *
10 ACCESS ROAD (RENOVATION) *
11 CONCESSION/REST RM. BUILDING (NEW) *
12 CORE AREA PARKING (RENOVATION) *
13 MARINA (RENOVATION)
14 TICKET BUILDING (RENOVATION) *
15 TOUR BOAT/FISHING PIER (NEW)
16 CAROUSEL (RENOVATION) *
17 MINIATURE GOLF CSE.(RENOVATION) *
18 PLAYGROUND (RENOVATION) *
19 GROUP PICNIC PAVILION (RENOVATION)
20 OPEN PLAY AREA (RENOVATION)
21 GROUP PICNIC PAVILION (NEW)
22 GROUP PICNIC PAV./REST ROOMS (NEW)
23 UPPER PARKING LOT (RENOVATION) *
24 DIRECTIONAL SIGNS (RENOVATION)
* FACILITIES TO BE LIGHTED. ONLY TRAILS TO CORE AREA FROM PARKING LOTS WILL BE LIGHTED
NOTE: THIS PLAN IS CONCEPTUAL ONLY AND SHOULD NOT BE INTERPRETED AS SHOWING EXACT LOCATIONS OR SIZES OF FACILITIES.
SOUTHERN RAILROAD
SOUTHERN INDUSTRIAL PARK
SOUTHERN DR.
ACCOTINK
3C
19
3D
3E
3
70
65
27
160
62
CONCEPTUAL DEVELOPMENT PLAN
LAKE ACCOTINK PARK
RECREATION & ENTRANCE ZONE DEVELOPMENT PLAN
NOT TO SCALE

APPENDIX

1. Recreation and Entrance Zone Conceptual Development Plan
2. Recreation Zone/ Core Area Conceptual Development Plan
3. Restaurant Feasibility Study
4. Maintenance Cost Estimates



CONCEPTUAL DEVELOPMENT PLAN

LAKE ACCOTINK PARK

BRADDOCK SUPERVISORY DISTRICT
FAIRFAX COUNTY, VIRGINIA

RECREATION ZONE/CORE AREA DEVELOPMENT PLAN

NOT TO SCALE

DATE: DECEMBER 1997

GMP APPROVAL DATE: JULY 1997

LEGEND

6 TRAILS(RENOVATION)*
7 INTERPRETIVE SIGNS (NEW)
8 DIRECTIONAL SIGNS (NEW)
9 DROP OFF AREA (RENOVATION)*
10 ACCESS ROAD (RENOVATION)*
11 CONCESSION/REST ROOM BUILDING (NEW)*
12 CORE AREA PARKING (RENOVATION)*
13 MARINA (RENOVATION)
14 TICKET BUILDING (RENOVATION)*
15 TOUR BOAT/FISHING PIER (NEW)
16 CAROUSEL (RENOVATION)*
17 MINIATURE GOLF COURSE (RENOVATION)*
18 PLAYGROUND (RENOVATION)*
19 GROUP PICNIC PAVILION (RENOVATION)
20 OPEN PLAY AREA (RENOVATION)
21 GROUP PICNIC PAVILION (NEW)
22 GROUP PICNIC PAVILION /RESTROOM (NEW)
23 UPPER PARKING LOT (RENOVATION)*
24 DIRECTIONAL SIGNS (RENOVATION)

NOTE: THIS PLAN IS CONCEPTUAL ONLY AND SHOULD NOT BE INTERPRETED AS SHOWING EXACT LOCATIONS OR SIZES OF FACILITIES

* FACILITIES TO BE LIGHTED. ONLY TRAILS TO CORE AREA FROM PARKING LOTS WILL BE LIGHTED

ANALYSIS OF THE POTENTIAL FOR A COMMERCIAL RESTAURANT FACILITY IN LAKE ACCOTINK PARK

The purpose of this study is to examine the potential for establishing a commercial restaurant facility as one of the elements of a revitalized Lake Accotink Park.

The study addresses the following questions:

- To what extent does the population in the area served by Lake Accotink Park generate business potential that can support restaurant facilities?

- Does Lake Accotink Park provide the locational features which are necessary to attract enough restaurant expenditures to support a successful restaurant?

- What is the level of restaurant facilities that could be supported at Lake Accotink Park?

The analysis provided in the following pages leads to the following conclusions:

- The area served by Lake Accotink Park contains a large population with relatively high incomes which, in turn, generate significant sales potential for restaurants serving the area.

- The location of Lake Accotink Park lacks the locational features considered to be necessary to support a successful commercial restaurant facility at the park.

- The high number of patrons attracted to use the various recreational facilities in the park create an excellent opportunity to support an eating establishment that: provides a wider, more comprehensive menu than has been provided at traditional park snack bars; and caters to the needs and desires of park patrons. Such an opportunity could be enhanced if the revitalized park facilities are packaged around a cohesive and marketable theme in which a park patron oriented eating facility is a creatively designed element.

POPULATION, HOUSEHOLDS, INCOME, AND RESTAURANT EXPENDITURE POTENTIAL IN THE LAKE ACCOTINK MARKET AREA

The following table presents data on population, households, and personal income in the various market area segments considered in this analysis.

The table also presents estimates of restaurant expenditures made by market area residents. All data are for 1991 and dollar values are in 1991 dollars.

	Primary Market Area	Secondary Market Area	Combined Primary and Secondary	Total Regional Market Area
Population	126,371	367,263	493,604	3,621,773
Households	45,371	149,387	194,758	1,368,585
Average Household Income	$76,256	$66,182	$68,529	$61,262
Total Personal Income (millions)	$3,459.8	$9,886.7	$13,346.6	$83,845.3
Per Capita Income	$27,378	$26,920	$27,037	$23,149
Estimated Per Household Restaurant Expenditures	$3,355	$2,846	$2,947	$2,634
Estimated Total Restaurant Expenditures (millions)	$152.3	$425.1	$573.9	$3,605.2

The data reveals extremely high levels of population, income, and restaurant expenditures at each market area level. The existence of numerous eating and drinking establishments in areas surrounding Lake Accotink offers evidence of this fact.

THE POTENTIAL LAKE ACCOTINK PARK RESTAURANT MARKET AREA

The market areas which are analyzed in this report to identify potential sources of restaurant business for Lake Accotink are:

- The Primary Market Area; an area of approximately 3 miles radius around Lake Accotink Park.

- The Secondary Market Area, which extends beyond the Primary Market to a distance from Lake Accotink of 5 to 5 1/2 miles south; 6 1/2 miles east; and 7 1/2 to 8 miles northwest, north, and northeast. This area goes beyond the Fairfax County boundaries to include: the eastern half of Fairfax City; the cities of Falls Church; and parts of Arlington County and the City of Alexandria The delineation is based on location of recreation and park facilities that compete directly with those at Lake Accotink (boating, carousel, miniature golf, etc.).

- The Regional Market Area, which includes:

  <u>Virginia</u>
  Fairfax County
  Prince William County
  Loudoun County
  Arlington County
  Fairfax City
  Falls Church City
  Alexandria City
  Manassas City
  Manassas Park City
  Leesburg City

  <u>Maryland</u>
  Montgomery County
  Prince Georges County

  <u>District of Columbia</u>

EXISTING RESTAURANT COMPETITIVE FACILITIES SERVING THE LAKE ACCOTINK PARK SERVICE AREA

Lake Accotink Park is surrounded by nodes of commercial development that offer a great variety of dining-out options for residents of the area from which the park attracts its patrons. These nodes include: the I-95 corridor area immediately south and east of the park; Central Annandale, which is less than three miles north of Lake Accotink; and Bailey's Crossroads, which is located in the northeastern portion of the Lake Accotink Park service area. Numerous restaurants are located elsewhere in the park service area outside of these major commercial concentrations.

- A study of the I-95 corridor by the Fairfax County Office of Comprehensive Planning shows that there are 105 restaurants in the I-95 study area, almost half of which are in the Central Springfield shopping core. The remainder are in shopping centers and free standing locations along major arteries in the study area. These 105 establishments represent about 11% of all restaurants in Fairfax County. The fact that the I-95 study area contains only 5% of the County's population shows the strong pull that highly accessible and visible commercial locations have in attracting commercial business activity from surrounding residential areas.

- The central Annandale area has more than 50 dining establishments mostly in commercial areas surrounding the intersection of Columbia Pike and Little River Turnpike.

- The Bailey's Crossroads area has between 40 and 50 eating establishments, including a great many that serve ethnic specialties. Most of these are along Leesburg Pike (Rt. 7) and Columbia Pike.

- In the outer portions of the Lake Accotink service area, numerous other restaurants exist in locations such as Seven Corners, Merrifield, the western half of Alexandria City and the eastern half of Fairfax City.

LOCATIONAL VIABILITY OF LAKE ACCOTINK PARK AS A COMMERCIAL RESTAURANT LOCATION (ACCESS, VISIBILITY AND TRAFFIC FLOW)

Virtually all the literature on establishing restaurant businesses repeat the well-known real estate cliche - location, location, location. The most important locational factors are access, visibility and traffic flow. The Lake Accotink Park location is lacking in each of these factors.

To paraphrase one of the numerous articles provided by the National Restaurant Association: no matter how good and original a concept may be, if a restaurant is in the wrong place, its chance for survival is slim.

Access

Lake Accotink can be reached from two directions, each of which is cumbersome and neither of which provides a viable opportunity for a commercial restaurant venture.

The park itself is a considerable distance from the nearest commercial concentrations, and furthermore, even after reaching the park entrance, the site which would be considered for a restaurant facility in Lake Accotink Park is not easily accessible.

- The distance from the Heming Avenue entrance to the site is about 1300 feet. This includes about 400 feet from Heming Avenue to the upper parking lot, and an additional 900 feet from the parking lot to the site.

- To reach the park from Backlick Road, north of central Springfield, via Highland Street, the distance to the park entrance is about a mile. From the Highland Street/Accotink Park Road split, the distance to the main parking lot is more than 3000 feet.

Visibility

The access described above provides no visibility for a restaurant facility on the Lake Accotink Park site. It is made quite clear in literature provided by the National Restaurant Association that sales volume is likely to be significantly limited if potential customers cannot find the restaurant without searching for it.

Traffic

Restaurant locational guidelines provided by the National Restaurant Association indicate that it is desirable to have a traffic flow of at least 20,000 cars or more during a 24 hour period. According to the Fairfax County Office of Transportation, the highest traffic count near Lake Accotink Park is about 2,000 cars per day on Highland Street, several thousand feet from the proposed Lake Accotink Park restaurant site.

Other Important Locational and Site Factors

Other factors which are considered important for commercial restaurant facilities to operate successfully include parking and nearby activities which generate restaurant traffic.

Parking

It is assumed that parking can be somewhat increased at Lake Accotink Park as part of the overall park revitalization. However, the nature of the park facility itself creates situations where access to the park may have to be limited (or even stopped) when the parking lots are full. It is unlikely that a commercial venture can put up with such a situation. A restaurant must have parking facilities that are accessible throughout all hours of restaurant operation.

Parking availability at the park may also be impeded by the average length of time spent in the park by patrons. A commercial venture needs to have relatively frequent parking space turnover.

Traffic Generators

Traffic generators such as office or industrial development shopping centers or institutional establishments are an important source of restaurant business. In the case of Lake Accotink Park, the only traffic generator is the park itself. The park is too distant and too inaccessible from shopping, office buildings, industrial parks and other activities which provide business to existing restaurants in surrounding areas.

POTENTIAL FOR A PARK PATRON ORIENTED FOOD SERVICE ESTABLISHMENT

Park Authority staff estimates that the park currently attracts upward from 360 thousand patrons annually. These patrons make up a significant "captive" market which creates an excellent opportunity for a high quality food service facility catering to their needs.

Such a facility could be highly successful if it is based on a food services management plan designed to accommodate the hours of high use which are unique to park usage. This would probably require weekend operations during eight to nine months of the year and seven days per week operation during the remaining three to four months.

Success of a good quality food service operation at the park would be enhanced if it was designed as part of an overall park theme and was visually oriented toward the lake to provide an attractive view for diners.

In 1991 there were 1,374 eating/drinking establishments in Fairfax County. According to Virginia sales tax records, the average sales amounted to approximately $540,000 per establishment. It would require an expenditure of $1.50 from each of the 360,000 Lake Accotink Parks' patrons to achieve $540,000 in sales.

ANNUAL MAINTENANCE COST ESTIMATES

The following annual maintenance cost estimates are based on similar existing facilities and current available information from park staff. The annual operating costs are based on actual annual figures supplied by park staff. The building maintenance cost estimates are based on similar existing facilities.

The replacement or "life cycle" costs were determined by taking the construction or renovation cost estimate, and using an inflation figure of 3%, the total cost of full replacement of the building was calculated assuming a 20 year life of the building. The cost of full building replacement in 20 years was then divided by 20 to reach the annual cost for building replacement. Life cycle costs have only been figured for the existing and future buildings.

Figures are provided for both development scenarios: with and without a private partner.

1. Annual Maintenance Cost Estimates (with a private partner)

A. Annual Operating Costs	
Materials and Supplies	$ 34,400
Grounds Maintenance	$ 26,000
Staff Salaries	$252,000
TOTAL ANNUAL OPERATING COSTS	$312,400
B. Annual Building Maintenance Costs	
Maintenance Building	$ 15,000
Pavilions (4)	$ 8,000
TOTAL ANNUAL BUILDING MAINTENANCE COSTS	$ 23,000
C. Building Replacement Costs (Life Cycle Cost)	
Maintenance Building	$ 48,500
Ticket Building	$ 9,900
Rest Room/ Concession Building	$ 64,700
TOTAL BUILDING REPLACEMENT COSTS	$123,100
D. Cost Summary (with private partner)	
ANNUAL OPERATING COSTS	$312,400
ANNUAL BUILDING MAINTENANCE COSTS	$ 23,000
BUILDING REPLACEMENT COSTS	$123,100
ANNUAL MAINTENANCE COST ESTIMATE:	$458,500

2. Annual Maintenance Cost Estimates (without a private partner)

A. Annual Operating Costs	
Materials and Supplies	$ 34,400
Grounds Maintenance	$ 26,000
Staff Salaries	$400,000
TOTAL ANNUAL OPERATING COSTS	$460,400
B. Annual Building Maintenance Costs	
Maintenance Building	$ 15,000
Concession/ Rest Room	$ 10,000
Ticket Building	$ 7,000
Pavilions (4)	$ 8,000
TOTAL ANNUAL BUILDING MAINTENANCE COSTS	$ 40,000

C. Building Replacement Costs (Life Cycle Cost)

Maintenance Building	$ 48,500
Ticket Building	$ 9,900
Rest Room/ Concession Building	$ 64,700
TOTAL BUILDING REPLACEMENT COSTS	$123,100

D. Cost Summary (without private partner)

ANNUAL OPERATING COSTS	$460,400
ANNUAL BUILDING MAINTENANCE COSTS	$ 40,000
BUILDING REPLACEMENT COSTS	$123,100
ANNUAL MAINTENANCE COST ESTIMATE:	$623,500