

**TO:** CITY MANAGER **DATE:** 1999 APRIL 22  
**FROM:** DIRECTOR PARKS, RECREATION AND CULTURAL SERVICES  
**SUBJECT:** DEER LAKE PARK MANAGEMENT AND CONCEPTUAL DESIGN PLAN  
**PURPOSE:** To request Council to approve the Deer Lake Park Management and Conceptual Design Plan.

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**RECOMMENDATION:**

- 1. THAT approval be given to the Deer Lake Park Management and Conceptual Design Plan.

**REPORT**

At its meeting of 1999 April 21, the Parks and Recreation Commission received the attached staff report on the above subject and adopted the two recommendations contained therein.



KATE FRIARS  
DIRECTOR PARKS, RECREATION  
AND CULTURAL SERVICES

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Attachment  
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cc: Director Planning and Building  
Director Engineering  
Director Finance.

## **SUBJECT: DEER LAKE PARK MANAGEMENT AND CONCEPTUAL DESIGN PLAN**

### **RECOMMENDATIONS:**

1. THAT the Deer Lake Park Management and Conceptual Design Plan be approved.
2. THAT a copy of this report be sent to Council for approval.

## **REPORT**

### **BACKGROUND**

In May of 1997, the Parks and Recreation Commission approved a multi-phased management plan process for Deer Lake Park. Consultants were hired in June of 1997 directed by an interdepartmental team of staff initiating a comprehensive research, design and public process. Three public Open Houses were held on June 25, 1997, February 25, 1998, and October 14, 1998. The third Open House included a public forum hosted by the Parks and Recreation Commission. Representatives of key stakeholder groups closely associated with Deer Lake Park were approached for their detailed input of environmental, cultural, and recreational issues.

The Management Plan document has four components:

- A 'vision', planning goals and objectives for Deer Lake Park;
- A summary analysis of the park's uses and resources;
- Management Recommendations to guide the administration of the park and to better assure protection and enhancement of its important natural and heritage attributes; and
- Design Concepts and Recommendations expressed in drawings and feature specific recommendations to enable people to better experience, appreciate and protect Deer Lake Park.

An executive summary of the Deer Lake Park Management Plan follows, and concludes with a discussion of the final steps in the process.

### **EXECUTIVE SUMMARY - DEER LAKE PARK MANAGEMENT PLAN**

#### **A) PUBLIC INPUT**

The public process conveyed several important messages to the project team:

- protect and enhance the park's valuable natural habitats;
- enhance the park's identity, access and circulation;
- provide a coherent loop trail around Deer Lake;
- protect and enhance the roles of the park's key components: natural habitats, arts and heritage resources;
- improve the water quality of Deer Lake;
- provide greater opportunities for the arts, particularly outdoor uses; and
- manage Deer Lake Park primarily for passive enjoyment.

There was considerable enthusiasm and knowledge concerning Deer Lake Park exhibited by participants at the open houses and workshops. The public contribution was informative and crucial to the process and will continue to be an important resource in the evolution of Deer Lake Park.

## **B) PARK VISION, GOALS AND OBJECTIVES**

### VISION FOR DEER LAKE PARK

Deer Lake Park is a "jewel" in the City of Burnaby. The park's natural values, recreation, arts and cultural opportunities and heritage legacy are an inherent part of its future. The lake is a focal point, a unique feature in the urban environment. The protection, preservation and improvement of these diverse attributes is paramount and will direct the park's future.

Deer Lake Park will continue as a significant natural green space and park. The lake, forests, meadows, wetlands and streams with their abundant wildlife and diversity will be maintained in a healthy state. Environmentally sensitive areas will be protected, preserved and celebrated. Arts, cultural and festival activities and their facilities will be promoted and improved. Recreational activities and facilities which interpret and compliment the natural, arts and heritage features of the park will be offered for all age groups. Collectively, the heritage, arts and recreational aspects of the park will be integrated while preserving and protecting its natural attributes. This vision will become a reality by involving the citizens of Burnaby in the planning and continued stewardship of the park.

### PARK MANAGEMENT GOALS

The long term vision for Deer Lake Park provides the direction for the Management Plan. Setting goals or objectives provides the focus or end toward which the study is directed. By establishing goals that achieve integration of the heritage, cultural and recreational aspects of the park while protecting the natural environment, a planning framework is developed. The basic structure of the Management Plan must:

- 1) Recognize Deer Lake Park's unique character and its civic and regional role;
- 2) Maintain and enhance ecological features and systems of the park;
- 3) Protect and improve existing and future heritage resources;
- 4) Provide appropriate cultural and recreational experiences in the park;
- 5) Integrate the natural, heritage, recreational experiences in the park in a compatible manner which protects the park's integrity;
- 6) Enable all people to access, experience and enjoy the park;
- 7) Provide and improve linkages within the park and to adjacent neighborhoods, the community and Burnaby's green space system; and
- 8) Raise awareness and stewardship regarding the significance of natural, cultural and recreational attributes.

## PARK MANAGEMENT OBJECTIVES

Concurrent with the management goals are objectives which focus on the park's diverse aspects:

### **Environmental Objectives:**

1. Protect and preserve the diverse natural habitats in a healthy state;
2. Manage habitats to encourage fish and wildlife diversity;
3. Manage stream and lake water quality for aquatic life and non-contact water recreation;
4. Increase public awareness of the environment and the role of stewardship; and
5. Monitor key ecological indicators and assess ecological health.

### **Heritage Resource Objectives:**

1. Conservation of heritage resources;
2. Increase awareness, adaptive re-use and public support of heritage resources and programs;
3. Develop programs for the assessment, conservation and promotion of heritage resources; and
4. Recognize the heritage value of the natural landscape through assessment and interpretation.

### **Cultural & Arts Objectives:**

1. Improve and increase opportunities for civic arts and cultural activities;
2. Expand outdoor arts and cultural programs and activities;
3. Establish a public art program for the park; and
4. Improve and diversify events and festivals complementary to park resources.

### **Recreational Objectives:**

1. Provide opportunities for activities and user groups which are compatible with the environment, heritage and cultural attributes of the park;
2. Increase public awareness of the diverse attributes of the park by providing educational and interpretive programs; and
3. Reduce barriers in the park to encourage participation by those with disabilities.

### **Park Open Space and Context Objectives:**

1. Define park edges and entrances;
2. Define key access points with directional signs;
3. Provide greenway and circulation linkages to neighbouring parks and open space;
4. Improve park access for non-vehicular users;
5. Integrate built elements with the landscape;
6. Identify areas or features in the park that will require detailed design direction; and
7. Improve access and circulation around the lake.

### **Operational Objectives:**

1. Maintain and promote park user safety;
2. Establish cost effective maintenance programs that are compatible with the park's multiple objectives and public priorities; and
3. Initiate pro-active, preventative maintenance programs that ensure protection of amenities and resources.

**C) INDIVIDUAL PARK ZONES - MANAGEMENT PLAN**DEER LAKE (Attachment #1)

The lake itself would be managed for uses such as rowing, canoeing, sport fishing and wildlife viewing. Water quality improvements through additional biofiltration ponds would be managed to a level suitable for secondary contact, but not for swimming. Buckingham Creek and First Beach Creek would benefit from the creation of small deep water pools to provide summer refuge for trout. Along the lakeshore, overhanging and submerged tree branches should be retained for the benefit of perching or basking habitat for wildlife such as turtles.

Coarse fish as well as stocked trout utilize the lake. Currently, its highly turbid and nutrient rich condition attributed to natural aging as well as urban runoff, make it a stressful environment for trout and other salmonids. It is hoped that through a biofiltration pond water quality improvement system, the rate of aging can be managed to a steady level and the streams feeding into Deer Lake may be suitable for salmonid spawning and enhancement.

THE BEACH AREA (Attachments #2 & 3)

In years past, the beach at Deer Lake's east end was the focus of much swimming related activity. With water quality not able to sustain swimming, the parking lot, grass areas and play equipment are dated and incompatible with current day use aspirations for this precinct. The beach is often overrun by Canada geese. In summer, stocked rainbow trout seek refuge in creeks from high lake water temperatures.

The plan seeks to address and rectify many of these problems through both management procedures and design improvements. In this way, the beach precinct can become an attractive family and seniors oriented day use area. The following steps are essential to achieve this desired result.

The parking area would be improved by reconfiguring it into a smaller footprint with similar capacity and introducing tree planting (no hedges in consideration of resident views). A new playground and picnic area with shade trees would be provided. The sand area of the beach would be substantially reduced with the introduction of fine gravel, which is much less attractive to Canada geese. Tree plantings and new riparian plantings would reduce the area of open lawn, thus further diminishing goose habitat.

The area around the washroom concession would be substantially upgraded. The buildings would either be replaced or renovated to offer a consolidated structure more sympathetic in appearance to its lakeside setting combining washrooms, boat storage and concession. A drop off and canoe launch area would be provided. A promenade/pier would be installed affording a place to relax, view the lake and to fish. It would be wheelchair accessible. Bicycle racks, new signs and interpretive information would be offered. As part of the lake loop trail, access and interpretive nodes leading to the adjacent restored Eagles Estate would be provided. This would eventually lead to the heritage houses along Deer Lake Drive including a lakefront residence designed by Arthur Erickson with the potential to become a park interpretation centre.

A distinctive pathway would link the beach area with the arts and heritage precinct, making evening strolls for those attending events and performances inviting and safe.

### HERITAGE & ARTS PRECINCT (Attachments #4 & 5)

This is the most developed portion of the park and the area of greatest activity. The Shadbolt Centre for the Arts, the Burnaby Village Museum, Ceperly Mansion Art Gallery, Hart House Restaurant and the 'festival lawn' for outdoor events are some of the facilities found in this location. In this vicinity there are buildings of significant heritage status.

Opportunities exist for improvements in circulation, directional (or "way finding") signs, interpretation and for better outdoor uses by the arts community. The lake loop trail would be an important backbone of park circulation, linking this precinct with the beach area and the more pastoral parts of the park. Secondary loops would provide improved access between the heritage and arts buildings and between the Burnaby Village Museum and the rest of the park.

Outdoor spaces adjacent to buildings and near the lake would be created for use by artists such as sculptors, painters, dancers and musicians. A gazebo deck projecting into the water would provide a scenic pause to the lake. In these ways, more creative use of the outdoor setting could be experienced for everyone's benefit. Through some regrading and expansion, the 'festival lawn' would be improved, offering better view lines and an established site for a seasonal stage. Additional meadows of the Deerholme Estate could be managed for use during larger events as required.

Riparian edges would be maintained and managed near the festival lawn to maintain view lines toward the lake. Hedgerows would be retained and in some locations replanted as trees die out. Additional riparian plantings along Deer Lake Brook should be considered. An inventory of specimen trees is recommended to help forge a long term plan for their management and a possible arboretum tour.

Of urgency is an overall heritage and arts resource plan as an initial step toward determining the level of conservation and appropriate uses for the heritage buildings and landscapes in this area and in assuring their protection and upkeep. In the interim, the trail through the heritage precinct with viewpoints and interpretive information would help to inform visitors about the importance of this resource.

### THE HERITAGE MEADOW (Attachment #6)

The large meadow east of the Royal Oak re-alignment has an important habitat and historical role. Once farm and pasture land affiliated with the Oakalla Prison, the meadow has become valuable habitat for a range of wildlife species, particularly birds of prey (raptors). Therefore, protection of the meadow by limiting it to pedestrian only use, routing pathways around it and by providing viewpoints and interpretive opportunities are primary recommendations. Bicycle use would be restricted to the Urban Trail network and dogs would have to be on leash.

For the meadow itself, some rotational cropping of grasses is advised to maximize habitat value. Along the south edge of the meadow below the Oaklands housing development would be a pocket orchard of native fruiting trees to enhance bird habitat. Native shrub plantings along the south slope forest edge would benefit wildlife. To help control successional change along the meadow perimeter, encroaching vegetation should be removed.

Trails would be crushed rock. Viewpoints would include interpretive signs about the meadow's role and history. While it has been determined that the Oakalla Hawks Model Glider Club does not have major detrimental effects on this habitat, it is recommended that their vehicles not be parked in the meadow and that a permanent washroom be located at the small parking lot off Royal Oak.

The water quality improvement plan for Deer Lake (focus of a separate study) calls for the creation of biofiltration ponds at the base of several streams which run off the south slope forest. If environmental assessments confirm their suitability, these ponds would be located adjacent to the south shore of the lake as well as off Beaver Creek. While they would somewhat reduce the total area of meadow habitat, the overall benefits of lake water quality improvement would be a reasonable trade off. In addition, the creation of these biofiltration ponds would protect the ecosystem and non-contact water recreation.

Along Beaver Creek, fish habitat would be improved by planting native vegetation for shading and bank stabilization and by introducing some deeper water pools for summer fish refuge.

#### THE SOUTH SLOPE FOREST (Attachment #7)

The south slope forest is generally well drained and healthy. It is mostly deciduous with some stands of conifers. Several streams run off the south slope into Deer Lake. There is evidence of erosion in particular stream bank locations such as along the upper reaches of Flume Creek. Currently, a number of informal foot paths enter this forested area from Oakland Street. The forest also contains some small clearings and meadows which attract wintering songbirds.

Several foot paths which contribute to stream bank erosion and siltation will be closed. Reducing the number of paths would discourage mid-block crossing of Oakland Avenue. In addition, foot bridges across streams would be installed in specific locations to lessen damage to creek beds and banks. Providing baffles and other instream devices could reduce the rate of peak flows and enhance stream habitat for fish. Any such measures would need to be integrated with the City's overall storm water management procedures.

As in the west forest, there are opportunities to introduce limited groves of conifers amongst monoculture alder stands amplifying habitat diversity. Maintaining the small meadows and clearings benefits songbirds as well as raptors. This may entail periodic removal of invading alder and other woody plant species.

#### NORTH FOREST (Attachment #8)

Changes have occurred over time to this woodland including the die back of many conifers and large deciduous trees. These changes are coincidental with a high water table and in some locations, seasonal flooding. Probable causes include poor local drainage and high lake levels. Thus, the North Forest is an area which requires ongoing monitoring and in depth research, design and assessment. In the interim, the following recommendations prevail.

Healthy areas of the forest should be maintained. Drier and higher sites should be replanted with young conifers while wetter sites should be planted with wet regime species such as cottonwoods as they have significant wildlife benefits. Unless determined to be a hazard, snags can be maintained as they provide important roosts for raptors and habitat for cavity nesting birds. The proximity of this forest area to the meadow and wetlands adjacent to Beaver Creek underscores its usefulness for birds of prey.

The parking area off Royal Oak provides important parking and trail access to the western sector. Therefore, it would be retained with the addition of a washroom, bicycle rack and signs typical of a primary access point.

#### PARK LAND WEST OF ROYAL OAK (Attachment #9)

The portion of park, between Royal Oak and Willingdon, is sloping and mostly wooded with some small wetlands at its lower elevations. In this west section of the park the primary focus is on protecting and maintaining the largely deciduous woodlands. There are some small scale forest enhancement opportunities which could include the introduction of native conifer plantings in clearings on the upper drier slope to augment habitat diversity. However, the mostly deciduous forest is prime songbird habitat and should be protected and enhanced. Any introduction of conifers would be judiciously introduced in small groups.

In the bottomlands are several small wetlands which are significant from a wildlife use and educational perspective. Access to them would be limited, with viewpoints from the main east-west trail and interpretive sign information provided. Several streams which run down slope require the restoration of riparian vegetation and instream habitat.

The crushed rock foot path linking Willingdon would pass beneath the new Royal Oak Bridge alignment, connecting up with a path along the south edge of the Heritage Meadow. In this way, the west area is linked to the rest of Deer Lake Park. A number of informal pathways leading from the neighbourhoods on the south perimeter currently exist. Some of these would be closed while those leading from street ends would be marked as connections to the main trail.

Dogs would be permitted only on leash. No bicycle use would be permitted other than on designated urban trail routes.

#### **D) THE DEER LAKE PARK EXPERIENCE**

Deer Lake Park is truly unique. Remaining property acquisitions to complete the lake loop trail will solidify a feature civic walk. A lake loop trail will connect landmarks proposed, of the festival zone gazebo, the beach pier, a lakeside park interpretation centre, and a wildlife viewing tower within the heritage meadow.

With new trail connections, visitors will be able to traverse the park from Willingdon Avenue to Sperling Avenue, from Deer Lake Parkway to Oakland Street. On circumnavigating the park one can enjoy outdoor art or a concert; a canoe paddle; diverse habitat and wildlife viewing opportunities; a tour of heritage residences, landscapes or the Village Museum; a picnic, lunch or a dining experience.

The Management Plan provides for the enhancement and maintenance of the park's intrinsic character. It offers a sensitive balance of natural habitat protection, cultural events or arts uses, and heritage resource protection and enhancement. It establishes the framework for specific actions to take the park into the next century for the long term enjoyment of people and the protection of valuable resources for present and future generations.



**PRIORITIES / FIRST ORDER COSTS**

A broad overview of recommended priorities for Deer Lake Park is included in the Management Plan based upon site analysis and results of the public open houses. There are of course many other cost/benefit, scheduling and approval factors to consider.

Initiatives for primary consideration include completion of the pathway system and support facilities such as access points, parking areas, signs and site furnishings. Environmental initiatives also ranked high, including biofiltration ponds, assessment and enhancement of fish refuge or riparian plantings, further investigation of high water levels, and establishment of environmental baseline monitoring. The beach zone is felt to be a prime area to upgrade for improved family day use activities.

Concurrent or secondary initiatives for consideration include a heritage and arts management plan, and forest management plan. In accordance with this, two feature improvements would be the festival lawn, and implementation of the Eagles Estate conservation master plan.

Generalized first order costs with contingencies have been prepared by the consultants as a preliminary guide to future priorities for Deer Lake Park. Highlights are as follows:

• Pathway system upgrades and enhancements	\$ 864,000
• Access point and parking area improvements	\$1,023,000
• Orientation, sign and site furnishing provisions	\$ 175,000
• Beach area, picnic, playground, parking, washroom, pier, and landscaping	\$1,854,000
• Vegetation management (control and enhancement)	\$ 919,000
• Wildlife enhancement	\$ 154,000
• Further related research (environmental, lake, arts & heritage studies)	\$ 362,000
• Timber viewing structure provisions	\$ 68,000
• Festival lawn and upper terrace area improvements	\$1,093,000
• Eagles estate landscape restoration	\$ 288,000
• Improved pedestrian and plaza linkages for the arts precinct	\$ 154,000
• Future removal of non-heritage buildings along Deer Lake Avenue	\$ 184,000

**NEXT STEPS**

The Deer Lake Park component of the 1999 Annual Capital Budget includes a provision of \$400,000. The recommended priorities of implementation for Deer Lake Park in 1999 will be the subject of a future report.

Upon approval by the Parks and Recreation Commission and Council, highlights of the Deer Lake Park Management Plan will be put on display at City Hall and the public so notified. The display of the Management Plan may then tour several of our major civic facilities.

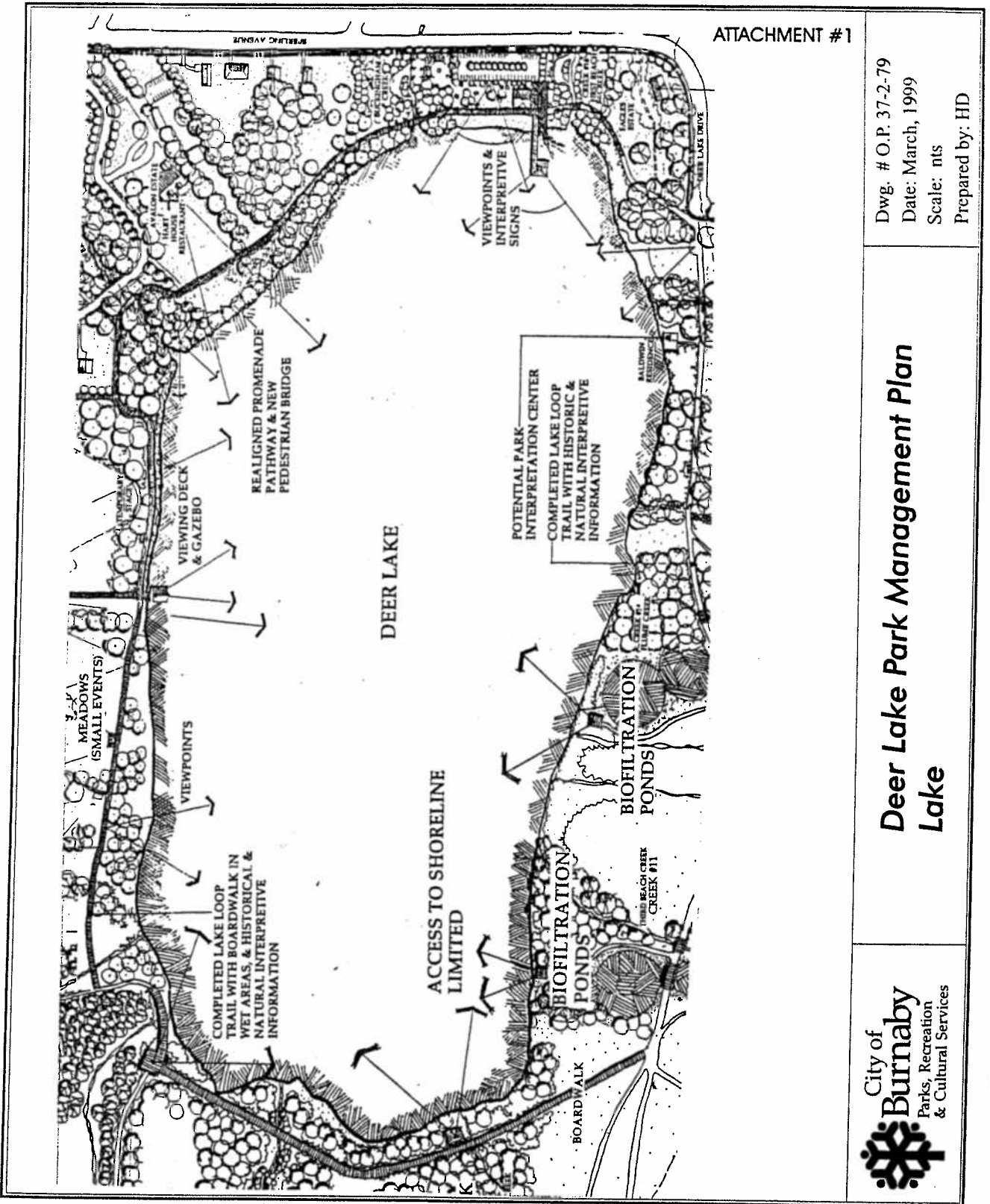
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Attachments (9)

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cc: Director Planning and Building  
Director Engineering  
Director Finance



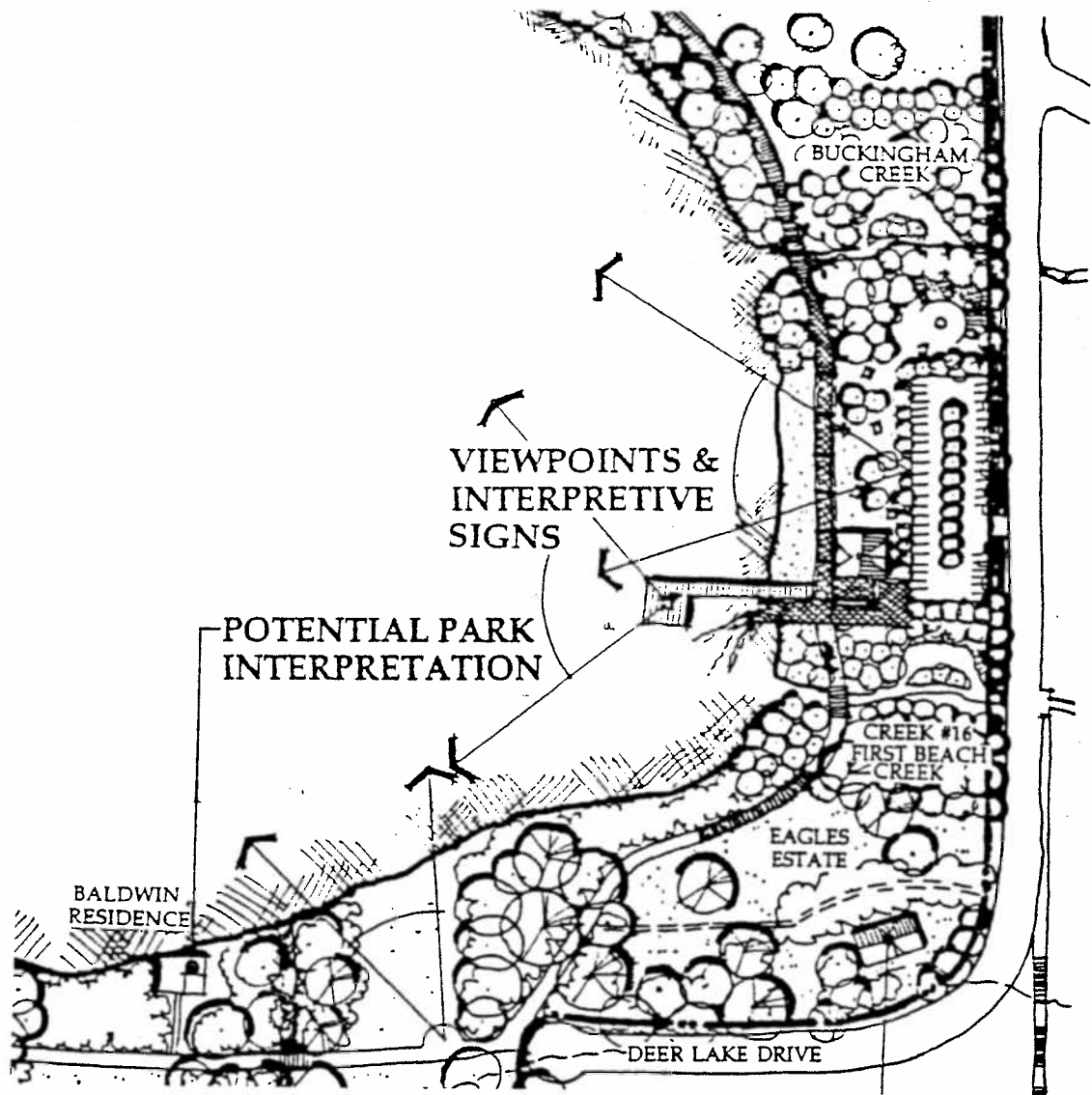
ATTACHMENT #1

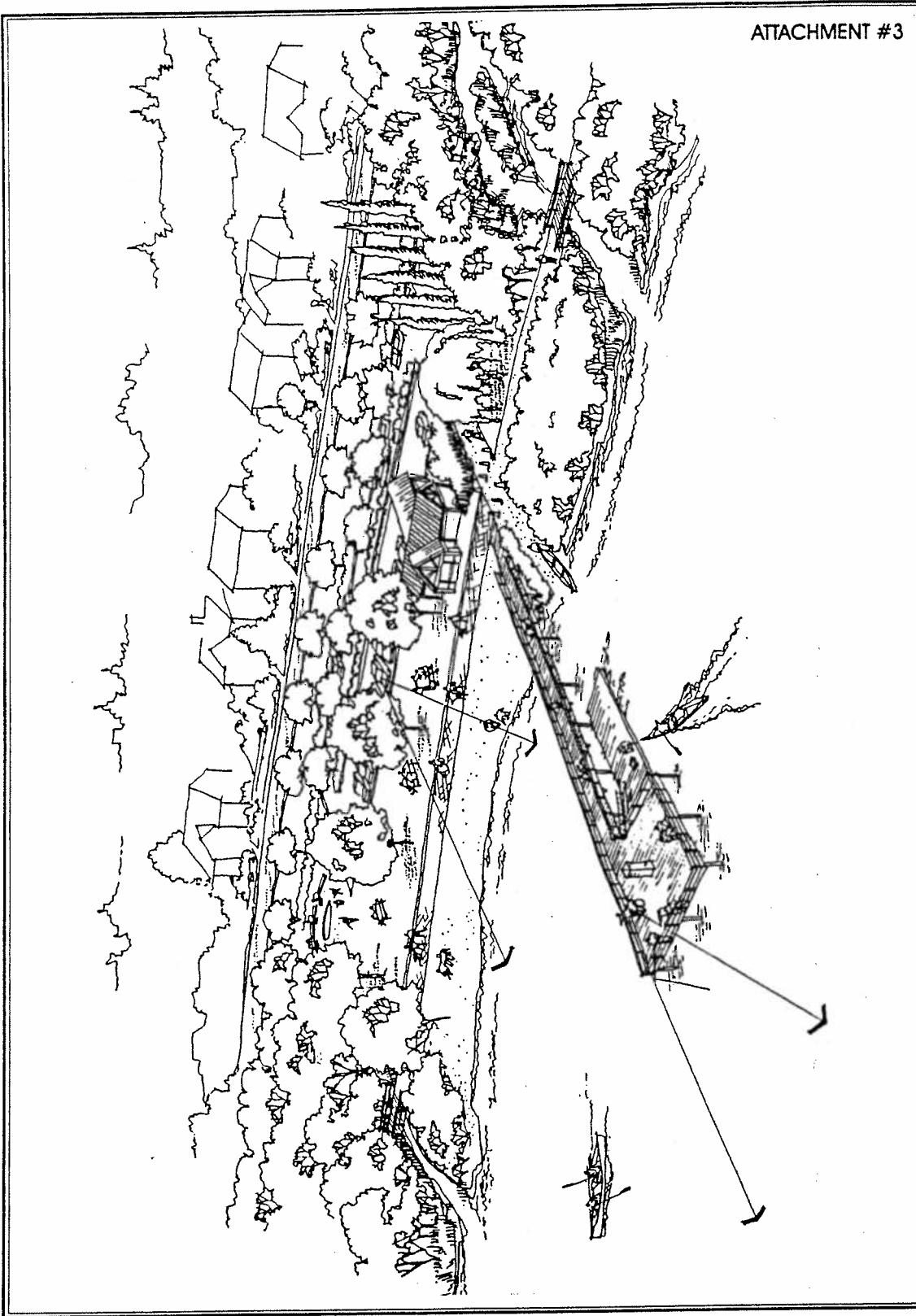
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# Deer Lake Park Management Plan

## Lake





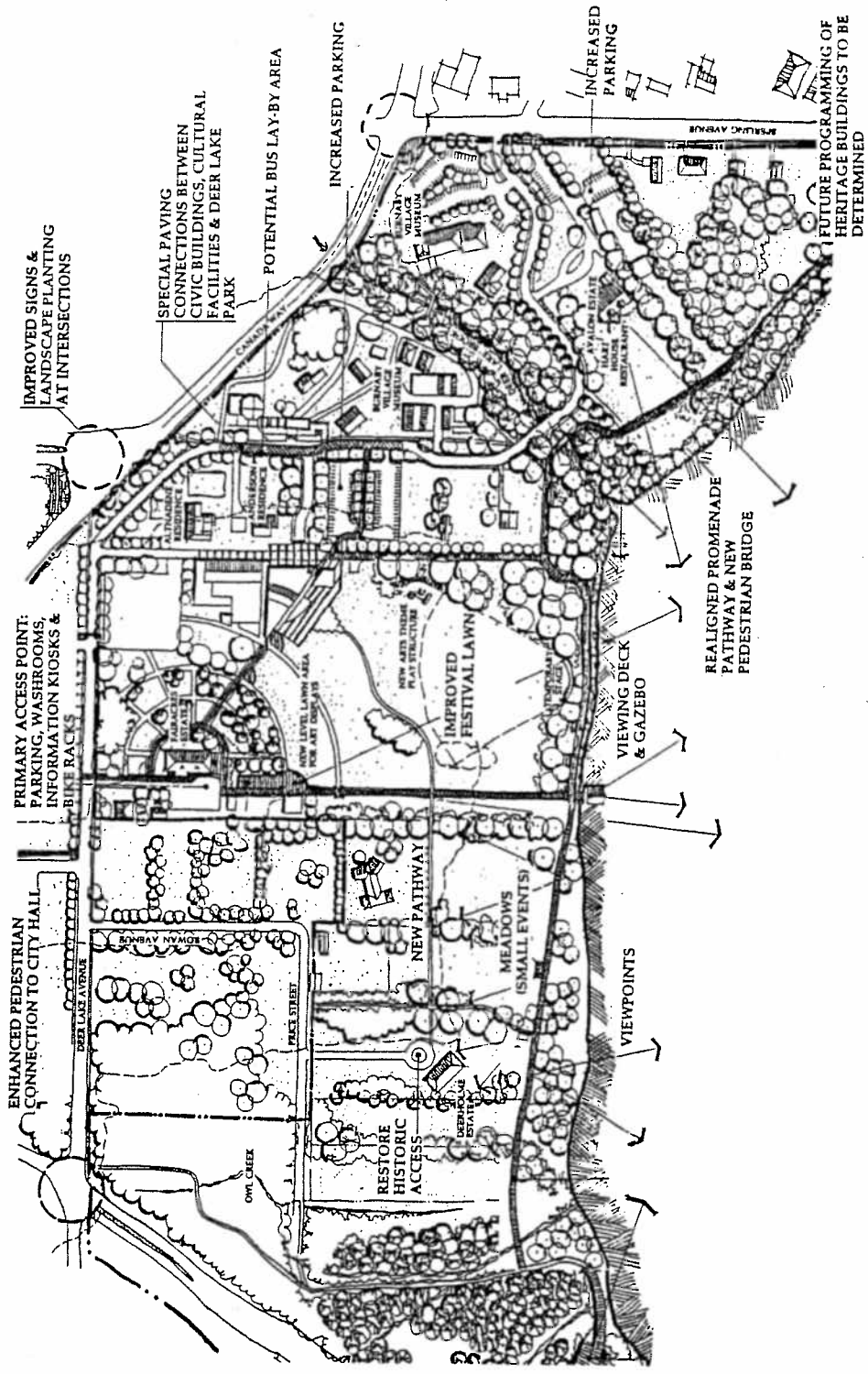


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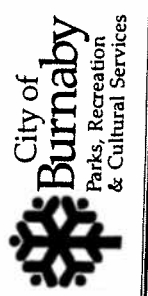
## Deer Lake Park Management Plan Beach Area - Perspective



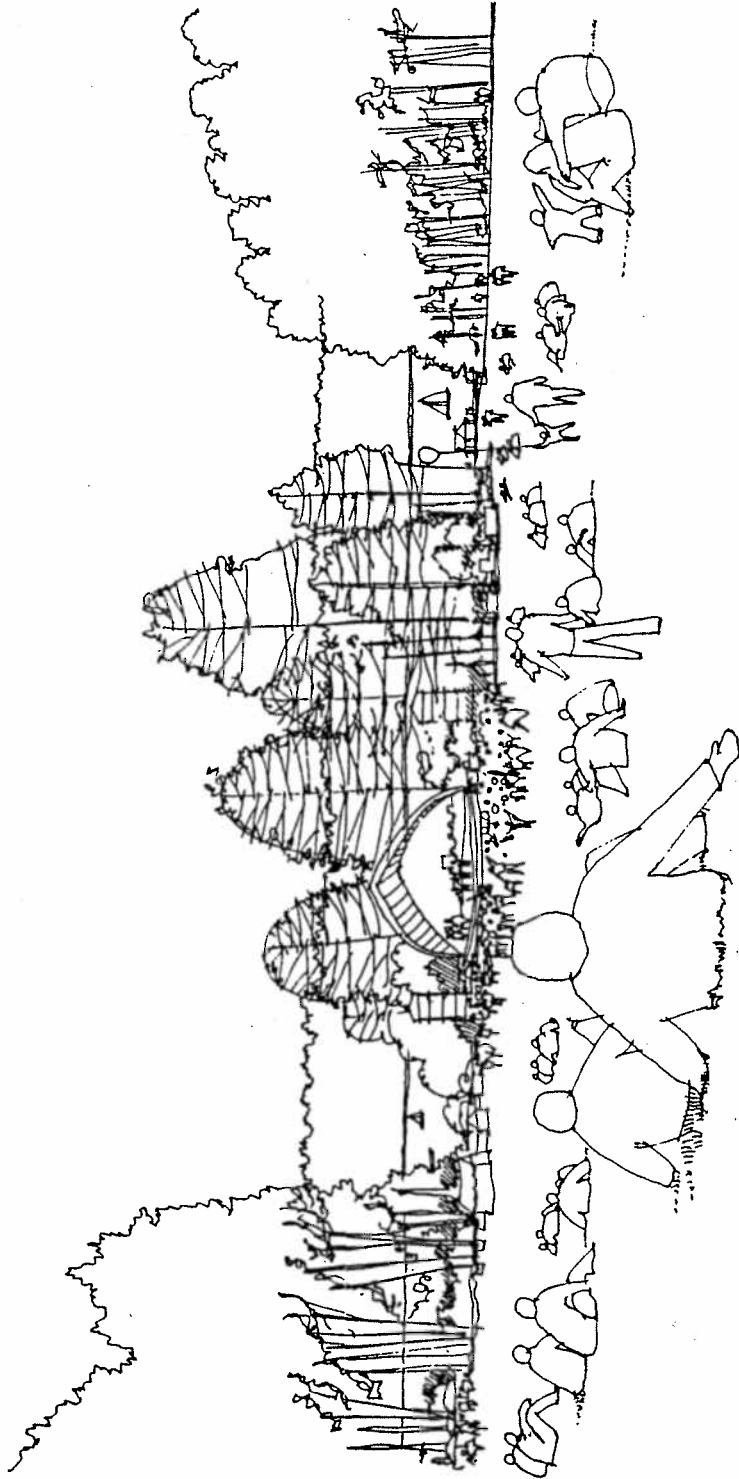


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**Deer Lake Park Management Plan  
 Heritage and Arts Precinct**



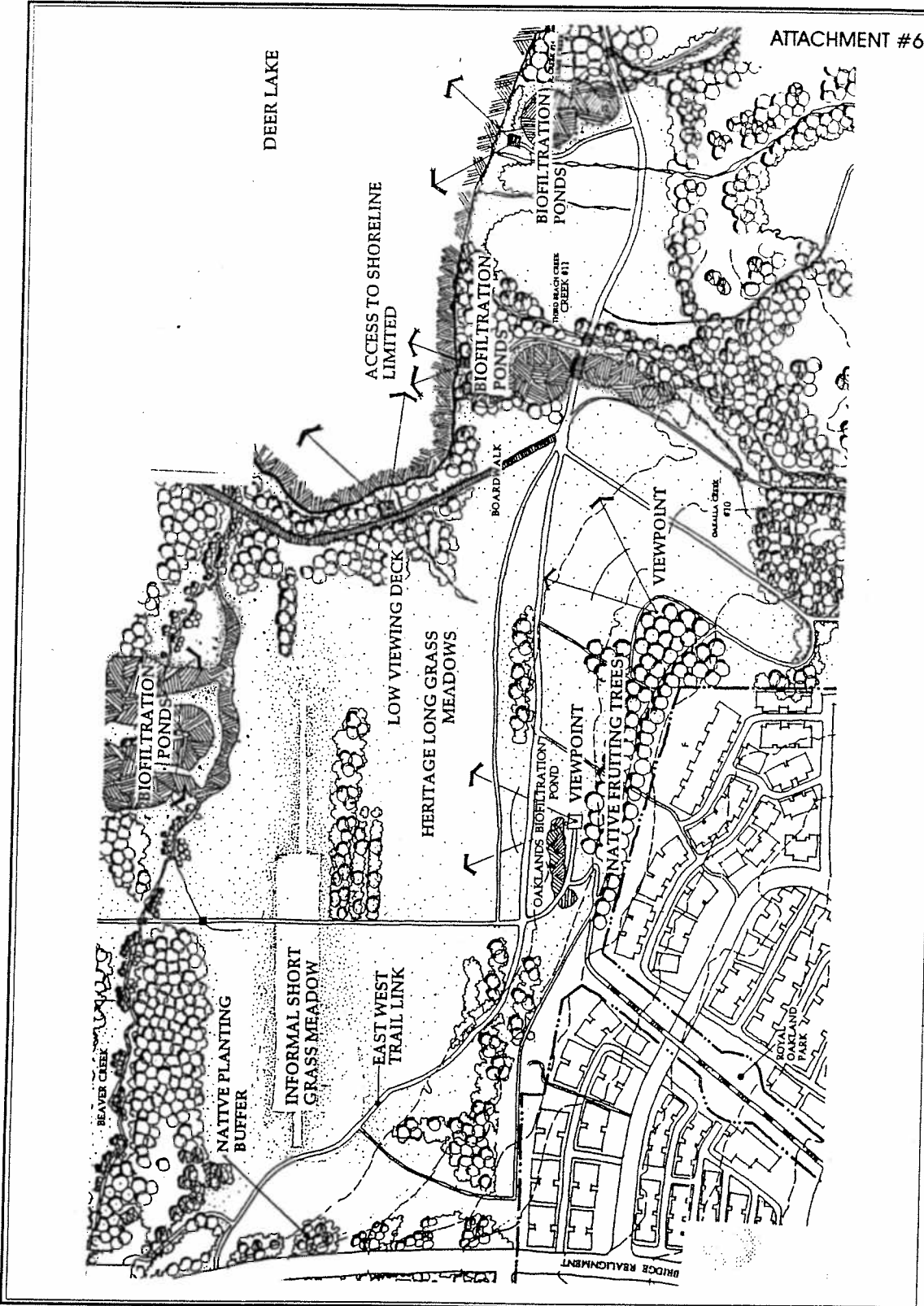
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**Deer Lake Park Management Plan  
 Festival Lawn - Perspective**



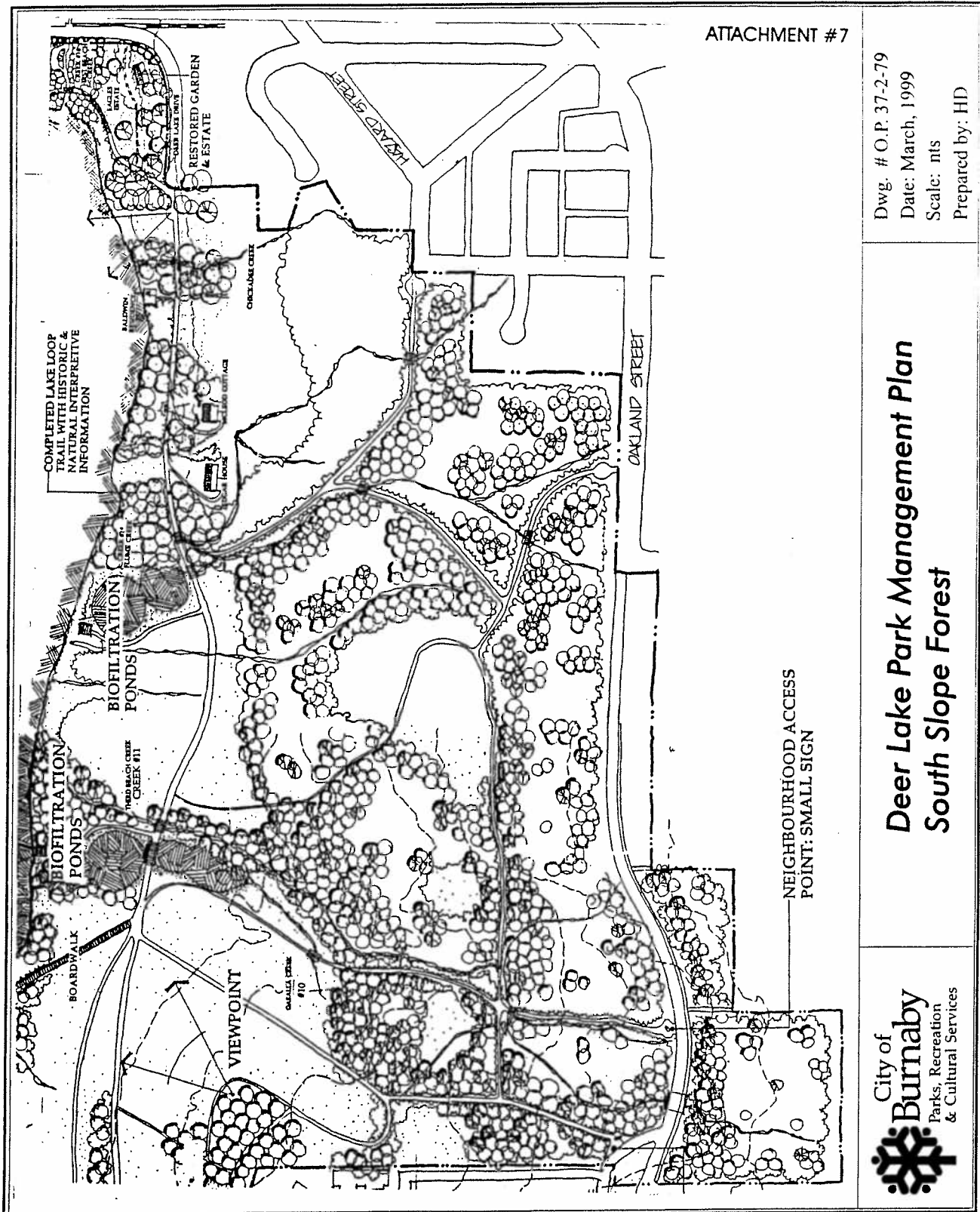


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## Deer Lake Park Management Plan Heritage Meadow





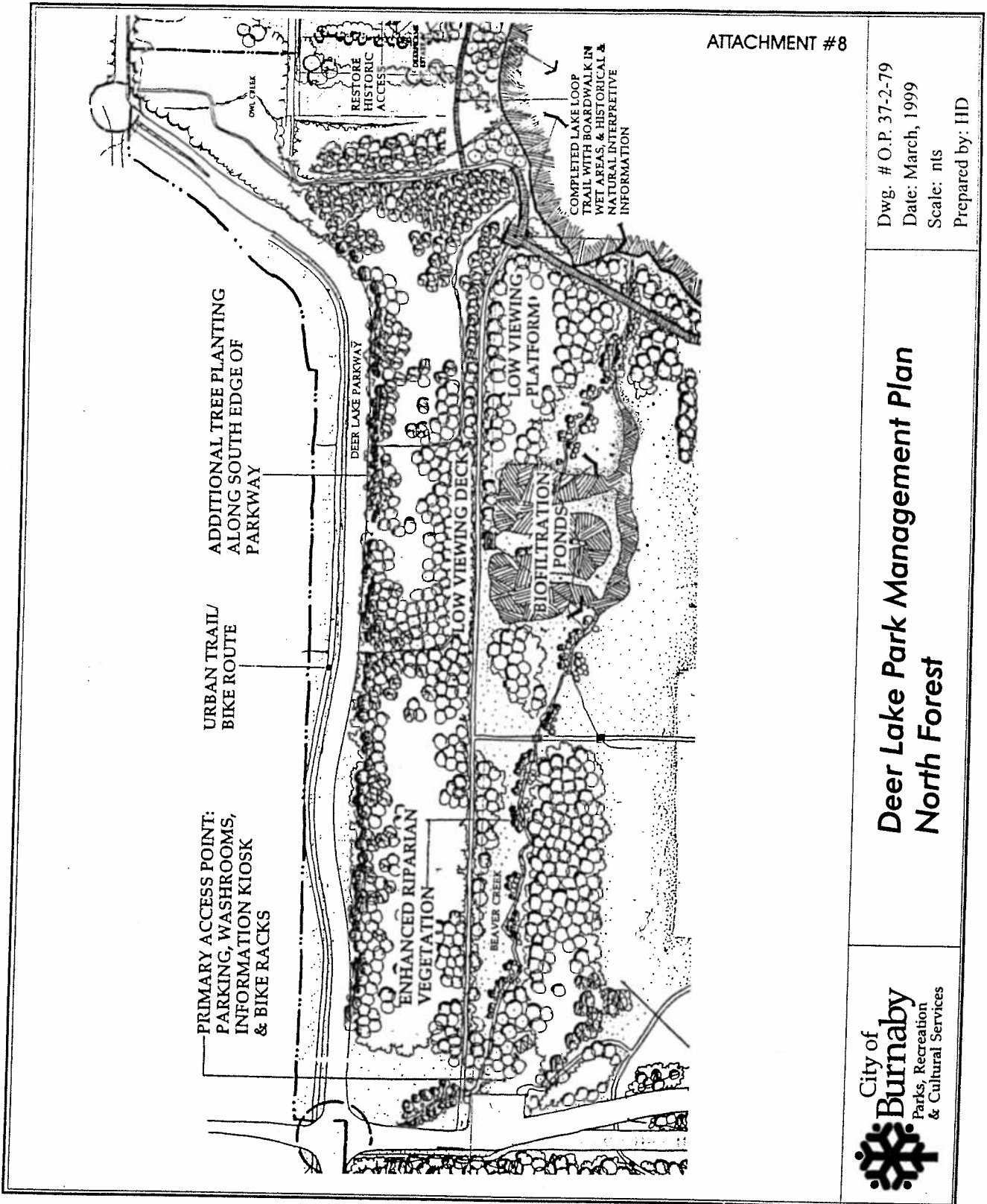


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## Deer Lake Park Management Plan South Slope Forest





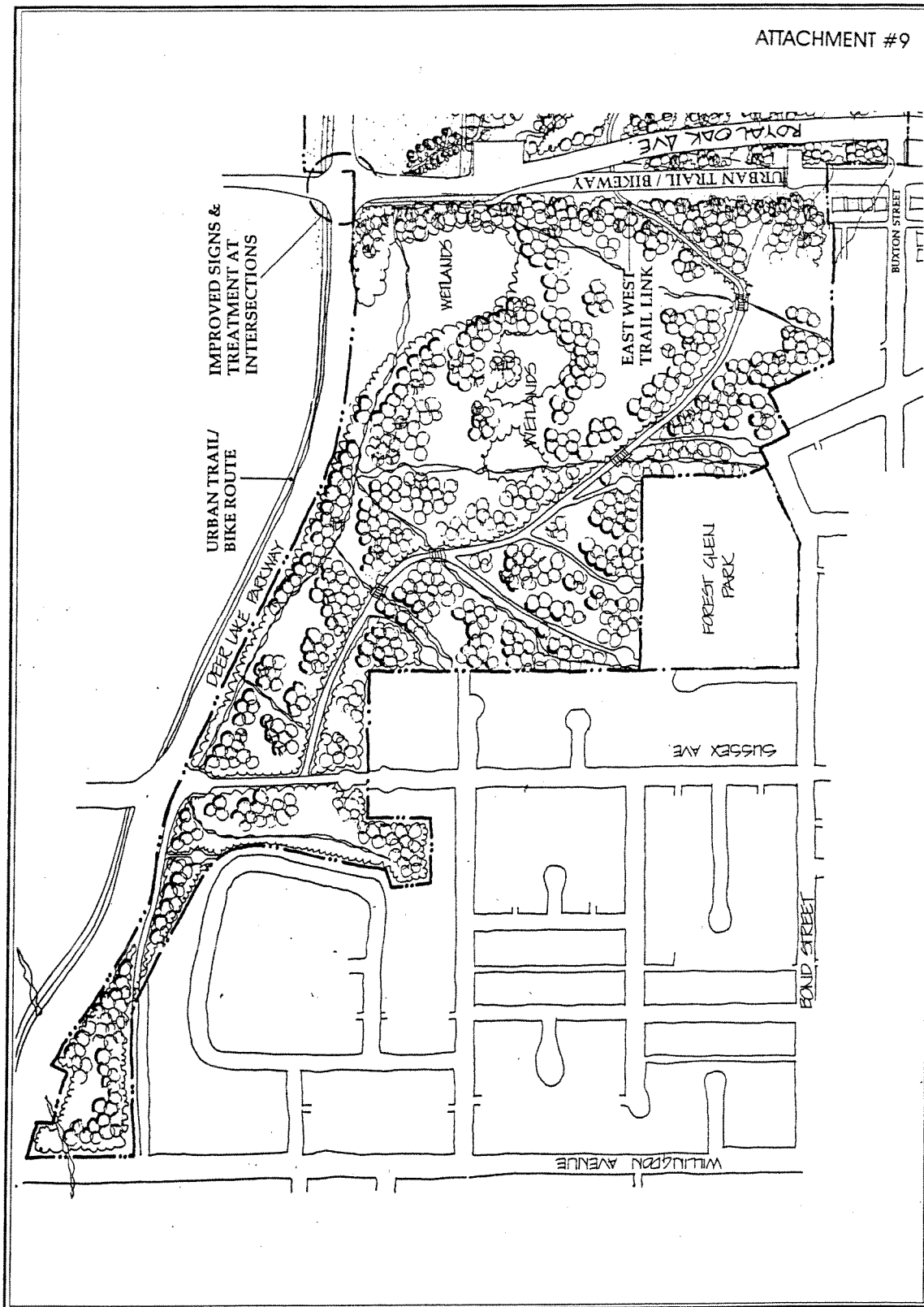


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# Deer Lake Park Management Plan North Forest





ATTACHMENT #9

Dwg. # O.P. 37-2-79  
 Date: March, 1999  
 Scale: nts  
 Prepared by: HD

**Deer Lake Park Management Plan**  
**Park Land West of Royal Oak**

