LAKE MERRITT
PARK MASTER PLAN

1852 2002
OAKLAND
Growing for Over 150 Years

July 2002

CONTENTS

I. INTRODUCTION

Mission Statement I-2
Planning Context I-4
Why Plan Now? I-5
Water Quality I-6
Relevant History I-7

II. EXECUTIVE SUMMARY

Process II-2
Vision II-4
Plan Summary II-8

III. PLAN OVERVIEW

Design Concepts III-2
Park Programming III-4
Water Resources III-6
Access and Circulation III-10
Park Landscape III-20
Ecology III-38
Buildings III-44
Shadow Study III-50
Art Element III-52

IV. DETAIL GUIDELINES

12th St / Cultural District IV-2
- Design Concept IV-2
- Recommendations IV-5
- Additional Area Recommendations IV-9
- Other 12th Street Alternatives Studied IV-10
- Circulation IV-11
- Landscape Recommendations IV-16

Downtown Park Edge IV-18
- Design Themes IV-19
- Recommendations IV-19
- Circulation IV-24
- 1520 Lakeside Drive:The Municipal Boathouse IV-26
- Landscape Recommendations IV-29

Lakeside Park IV-30
- Recommendations IV-32
- Shoreline Management Zone IV-35
  - Ecological Restoration Areas IV-35
  - Bluff Area IV-37
  - Beach IV-37
  - Sailboat House IV-38
- Program Zone IV-42
  - Bowing Green IV-42
  - Children's Fairyland IV-44
  - Lakeside Park Garden Center IV-46
  - Junior Center for Art and Science (JCAS) IV-48
  - Maintenance Facilities IV-50
  - Police Substation IV-51
  - Police Horse Stables / New Maintenance IV-51
  - Rotary Nature Center IV-52
  - Snack Bar IV-53

Free and Clear Open Space IV-54
Circulation IV-56
Landscape Recommendations IV-58
Grand Ave. Promenade IV-66
Recommendations IV-67
Circulation IV-68
Landscape Recommendations IV-69
Lakeshore Ave. Edge IV-70
Recommendations IV-71
Circulation IV-78
Landscape Recommendations IV-31
Irrigation Plan IV-82
Existing Irrigation System IV-82
System Rehabilitation IV-84
Site Furnishings IV-86
Current Conditions IV-86
Background on Park Furnishings IV-86
Overall Bench Recommendations IV-87
Lake Merritt Necklace of Lights IV-90
Bicycle Racks Recommendations IV-91
Trash Receptacles IV-91

V. IMPLEMENTATION PLAN

Overview V-2
A Park Conservancy V-4
Funding V-6
Project Descriptions V-8
Project Prioritization V-12

VI. MAINTENANCE PLAN

Introduction VI-2
Maintenance Review VI-4
Guidelines for Care VI-10

VII. APPENDIX

Process Notes VII-2
Analysis VII-8
Circulation Data VII-16
Sources VII-30
Credits VII-31

INTRODUCTION

CHAPTER I

MISSION STATEMENT

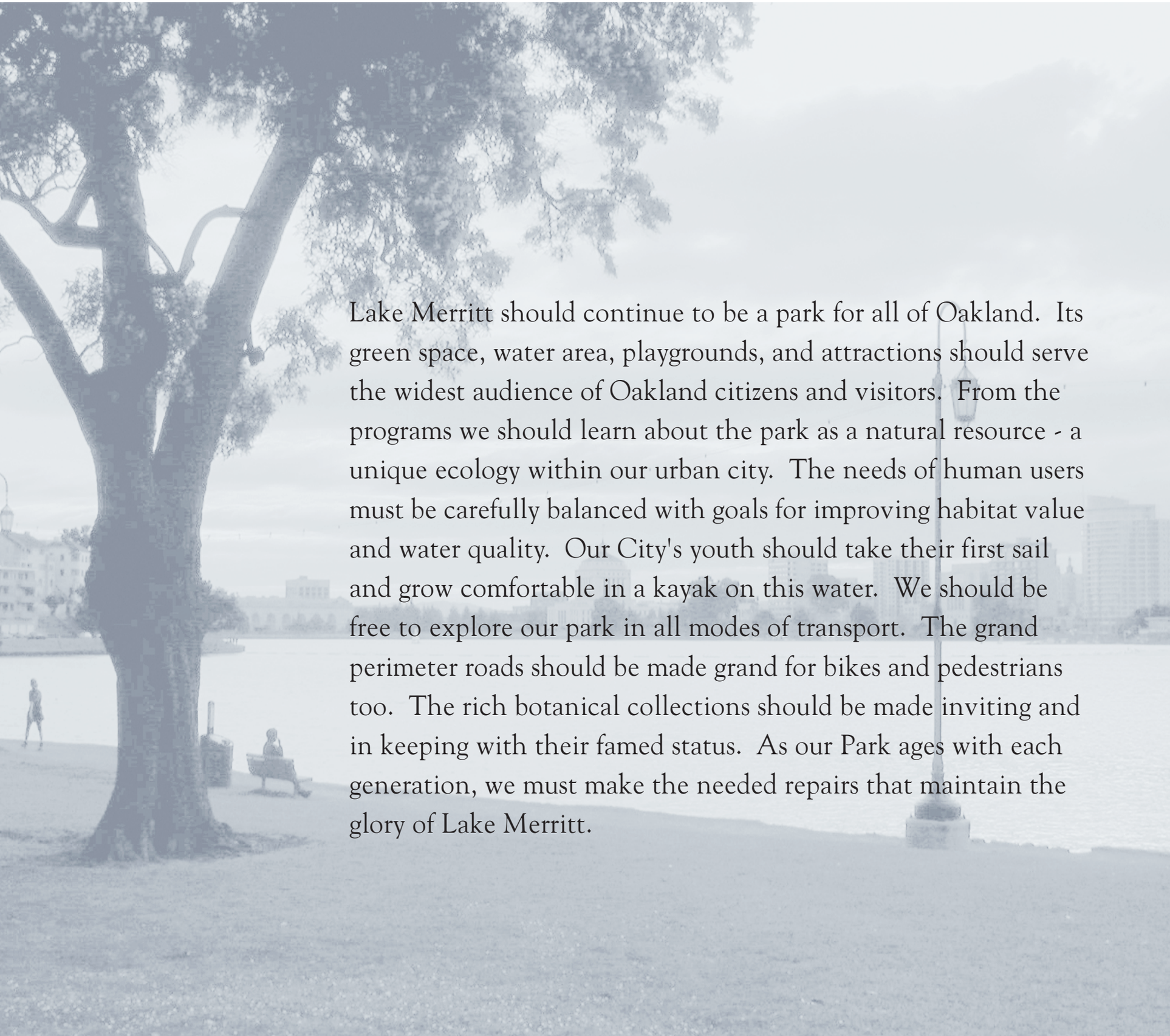
PLANNING CONTEXT

WHY PLAN NOW?

WATER QUALITY

RELEVANT HISTORY

MISSION STATEMENT



Lake Merritt should continue to be a park for all of Oakland. Its green space, water area, playgrounds, and attractions should serve the widest audience of Oakland citizens and visitors. From the programs we should learn about the park as a natural resource - a unique ecology within our urban city. The needs of human users must be carefully balanced with goals for improving habitat value and water quality. Our City's youth should take their first sail and grow comfortable in a kayak on this water. We should be free to explore our park in all modes of transport. The grand perimeter roads should be made grand for bikes and pedestrians too. The rich botanical collections should be made inviting and in keeping with their famed status. As our Park ages with each generation, we must make the needed repairs that maintain the glory of Lake Merritt.

Four guiding principles shape the park's planning:

- Ecology: to manage and enhance the park as a refuge for people and wildlife. Natural resources in ecological zones are given the highest priority for use by wildlife.
- Education: to reveal the natural processes, botanical interests, culture, and history of Lake Merritt and its surrounding community through organized youth programs, art, signage, and overall park design.
- Recreation: to improve the park as a place of informal, outdoor recreation. Oakland's youth should especially benefit from the lake's resources.
- Culture: to reflect the unique culture of Oakland, its diverse peoples, neighborhoods, built form, history, and natural environment. Art elements are one way of exploring cultural factors.

Forested hill area and McElroy Fountain in Lakeside Park

Special paving with oak tree at the Pergola

Beach, Lakeside Park

Planning Context

In 1999, the city embarked on a plan to revitalize downtown Oakland. The vision espoused, an active city center supported by new housing attracting ten thousand new residents. Public open space is the essential amenity for the new urban residents. The restoration of Lake Merritt Park as a major urban green space will serve the established and new neighborhoods alike. The promenades, lawns, docks, and natural areas will define the daily lifestyles of those residents. Sidewalk and bicycle lane connections to the Lake and Estuary are also addressed as the primary means of circulation between home and park.

Lake Merritt's continuous park border touches the many communities of central Oakland. The park- its "necklace of lights" and green space- joins together these enclaves. Key city boulevards and avenues reach out from the lake back into the fabric of the entire City and its many neighborhoods. In this way, all communities of people are connected to the lake. By reinforcing these urban linkages, the people of Oakland will be afforded greater access to Lake Merritt's open space and educational programs.

Park amenities will serve the existing communities of Oakland and the East Bay. From adjacent neighborhoods to nearby cities, Lake Merritt will continue to be a central park destination and green refuge.

Right: View of gondola tour at sunset

Why Plan Now?

The Park's celebrated history and unique ecological heritage are highly revered by the thousands served by Lake Merritt each year. So why is there a need for a plan?

Time for Major Renovations

The love affair by the public takes its toll on the paths, lawns, plantings, and furnishings at the park. High use, coupled with under-funded urban park maintenance has deteriorated the open space condition. Repairs and the few improvements ever completed were based upon an unclear park vision and with modest available resources. The master plan lays out a comprehensive program to make the park changes necessary to improve operations and service to its users. The common vision and excitement generated by the plan provides a context for change to occur.

Changing Urban Conditions

Oakland's renaissance is quickly shaping downtown, and neighborhoods throughout the City- from economic vitality to active street life. With central Oakland becoming a highlight of the city, civic leaders have identified the restoration of Lake Merritt as a major part of the City's renaissance. The emphasis on new downtown housing furthers the need for quality open space. The neighborhoods and business districts surrounding the lake are also part of the renaissance and thus will greatly benefit from the master plan. Attention to the waterfront is growing. the estuary plan proposes a highly public urban waterfront. The Lake Merritt Channel is envisioned to serve as a major connector between Lake Merritt and the Estuary.

A Time to Dream

A park master plan provides opportunity for civic leaders and members of the public to consider long term visions. The many community open houses and stakeholder workshops conducted during the planning process provided opportunity for these visions to be shared. The Lake merritt Master Plan (LMMP) then organizes these broad ideas into a single, cohesive plan. Recommendations in the plan add detail to an idea that may have started as a brainstorm comment at a workshop. The LMMP will act as a guide for improvement projects in the years to come. Future master plan updates and related planning projects should review the fundamental visions and embrace them where appropriate. The values expressed in the plan – whether ecological, educational, recreational or cultural— are reflective of the people of Oakland and the users of Lake Merritt.

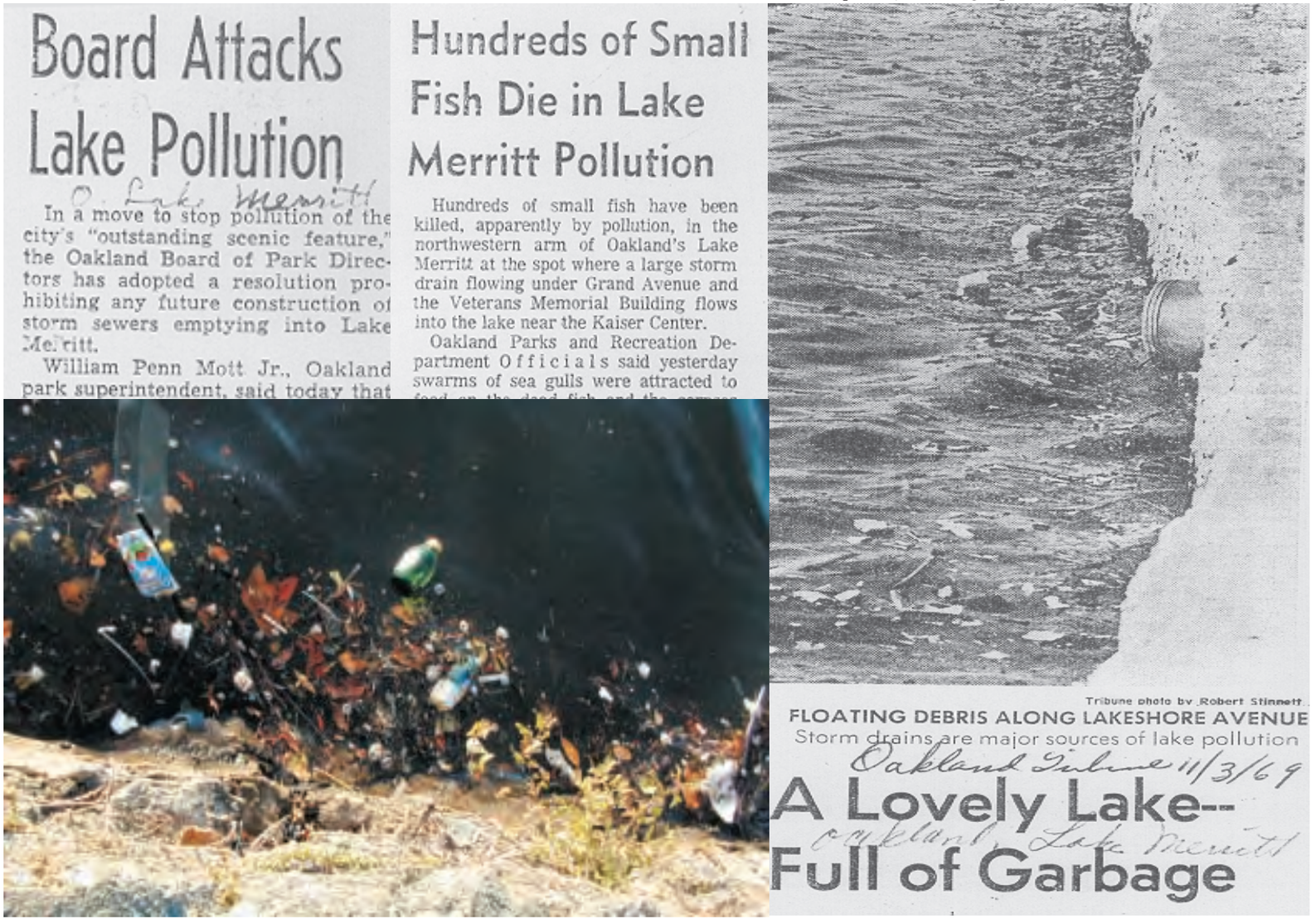
Past Planning/Community Efforts at Lake Merritt

The idea of revitalizing Lake Merritt is not a new one. In fact, throughout its history the lake has been the subject of notable Oakland philanthropy. The restoration of the Necklace of Lights by the Lake Merritt Breakfast Club is a recent example of a citizen-led project executed for the enjoyment of all. In 1988, the American Society of Landscape Architects (ASLA) Northern California Chapter initiated a community-based review of Lake Merritt. The Community Assistance Team (CAT) study completed a thorough analysis and developed a series of recommendations to improve such aspects as circulation, recreation, maintenance, and the inclusion of the arts into the park- many of which are still quite relevant today. A final recommendation was made to prepare an official park master plan that would coordinate all recommendations and provide technical research to ensure ultimate feasibility. This is that plan.

Water Quality

Poor water quality affects the aesthetic, ecological, and recreational value of the park. Foul smells and unsightly detritus result from an unbalanced system. The historic decline of fisheries in the lake is a combined result of acute problems with water quality and conditions in the greater San Francisco Bay. While the dumping of sewage has long been corrected, Lake Merritt is still the downstream destination for over 4,670 acres of urbanized watershed runoff. The amount of nutrients, chemicals, hydrocarbons, and animal waste overwhelms the ability of the lake to flush and dilute the pollution. The low dissolved oxygen due to decomposition of organic matter is further exacerbated by the stratification of lake salt water, and storm influxes of fresh water runoff.

The master plan coalesces the recommendations of several studies and highlights the need for a water quality program. Not surprisingly, the citizen participants in the planning process identified water quality as a high priority to be addressed.



Board Attacks Lake Pollution

Oakland Lake Merritt

In a move to stop pollution of the city's "outstanding scenic feature," the Oakland Board of Park Directors has adopted a resolution prohibiting any future construction of storm sewers emptying into Lake Merritt.

William Penn Mott Jr., Oakland park superintendent, said today that

Hundreds of Small Fish Die in Lake Merritt Pollution

Hundreds of small fish have been killed, apparently by pollution, in the northwestern arm of Oakland's Lake Merritt at the spot where a large storm drain flowing under Grand Avenue and the Veterans Memorial Building flows into the lake near the Kaiser Center.

Oakland Parks and Recreation Department Officials said yesterday swarms of sea gulls were attracted to

Tribune photo by Robert Stinnett

FLOATING DEBRIS ALONG LAKESHORE AVENUE

Storm drains are major sources of lake pollution

Oakland Tribune 11/3/69

A Lovely Lake--

Oakland, Lake Merritt

Full of Garbage

Ecology

Four streams (now known as Glen Echo, Pleasant Valley, Trestle Glen, and Park Boulevard creeks), draining over 4500 acres of uplands, came together and formed a marshy, brackish tidal habitat inhabited by many fish and birds. Costanoan Indians lived nearby, and used the lake as a hunting and fishing ground.

1772-1852 - The Lake is part of a grant ceded to the Peraltas. The slough serves as a shipping terminus, but is not substantially altered.

1852 - The new City of Oakland builds a pipe system discharging all of its sewage into the slough.

1869 - The southern end of the slough is dammed, restricting the tidal flows and raising the level of the water to form a lake.

1870 - Lake Merritt is designated by the state governor as the first wildlife refuge in North America. In the late 1800's, various projects begin giving the lake a hard edge.

1915 - Official bird feedings instituted.

1922 - Dredging spoils create the first bird island.

1926 - Annual banding of migratory ducks begun.

1935 - Run of 15 lb. sea bass into the Lake.

1948 - Federal Fish and Game investigation of the 'Duck Dinner' incident.

1951 - Three additional bird islands are constructed.

1962 - $8 million project to eliminate lake contamination through rerouting storm drains proposed and rejected

1971 - Laney College opens, built upon former tidal marshes along San Antonio Creek.

2001 - The first storm drain filter is installed to remove trash from runoff.


Dead Bass Taken Away From Lake

C. J. Bokman—Removes Dead Bass

While Oakland fishermen watched with saddened faces, park depart-

which have spread through th water, according to experts of th fish and game department. The tin

OAK. TRIBUNE A1 7/31/39

Vandals Cut Down 73 Trees In Park Area by Lake Merritt

RELEVANT HISTORY

Patterns of Use

Late 1700s - Indians ousted by the Spanish Peralta family

1850 - Peraltas ousted by Horace Carpentier.

1853 - Erection of the Bridge of Sighs - exorbitant tolls charged.

1854 - Horace Carpentier elected Mayor of Oakland: he awards himself twenty-five miles of waterfront

1869 - 12th Street Dam built.

1898 - City of Oakland obtains 32 acre parcel "Peralta Park" in the current area of 12th Street, Kaiser Center, Laney College, and Peralta Park.

1909 - City acquires the Lake property title.

1909 - Salt water pump house built for downtown fire protection. Later becomes Main Boathouse

1911 - McElroy Fountain constructed.

1912 - Embarcadero pergola, lawn bowling greens, and tennis courts completed.

1912 - Swimming in Lake Merritt banned.

1915 - Oak Street Main Boathouse completed. Later becomes a restaurant and Parks & Recreation office.

1916 - Sandy beach installed on the Willows for sunbathing and swimming.

1918 - Edoff Memorial Bandstand.

1926 - Lawn Bowling clubhouse built.

1927 - First powerboat regatta.

1950 - 3-acre Children's Fairyland completed.

1950's - Water contact sports again banned in the Lake, due to water pollution.

1953 - Rotary Natural Science Center.

1957 - Proposal approved to build a fleet of scaled-down boats from all nations.

1959 - Lakeside Park Garden Center.

1960 - Fairyland expanded to 10 acres.

1961 - Lake Merritt Rowing Club established.

1970s - 80s - Lake stocked with trout.

1980 - First annual Festival at the Lake. Festival discontinued in late '80s.

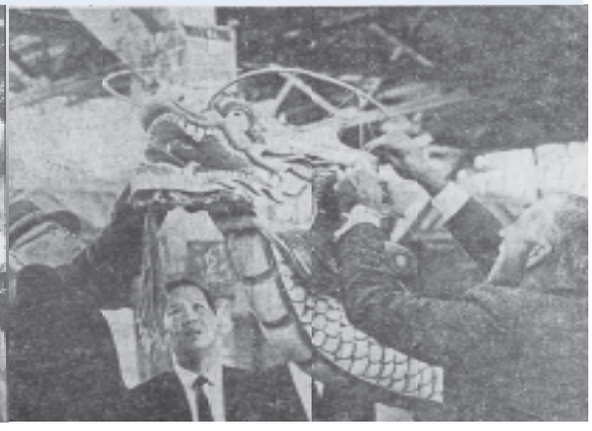
1980s - Cruising and working on cars in parking areas banned at the lake.

1996 - Children's Fairyland renovated.

1998 - Festival at the Lake cancelled over security concerns.

1999 - Bandstand reopened after '89 closure.

2000 - Bonsai and Suiseki garden completed.



Ring Roads

1853 - 12th Street "Bridge of Sighs" constructed by Horace Carpentier.

1868 - New bridges in what we call the Estuary - 8th Street to Jefferson drawbridge constructed, railroad bridge built from 1st Street to San Antonio Embarcadero.

1869 - 12th Street dam opened as an alternate traffic route.

1869 - 60' wide perimeter boulevard proposed.

1876 - 12th Street dam is widened, bridge abandoned.

1877 - 200' wide perimeter boulevard proposed.

1891 - City discovers it does not own the Lake.

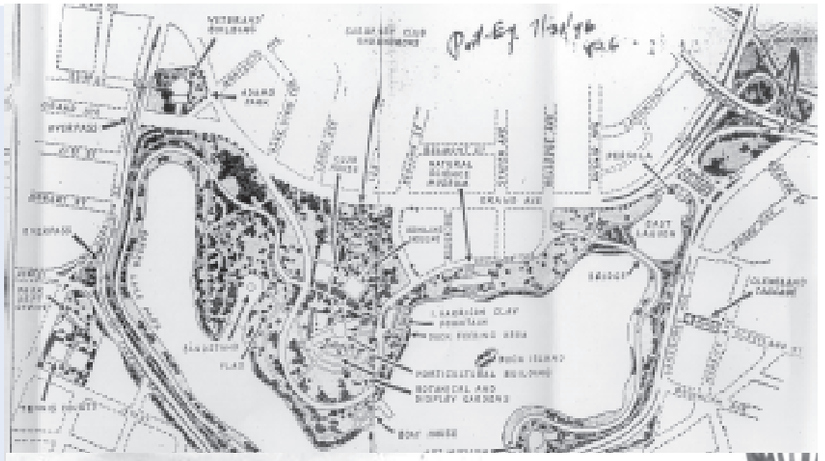
1893 - Boulevard proposed again - supported by a bond issue which passes. Dredging and filling along Lakeshore Avenue begun.

1909 - Work on the boulevard begins again .

1914 - Loop roads connected around the Lake, except for Lakeshore Avenue.

1922 - After filling along west shore of lake, cutting off many docks from the water, the City completes Lakeshore Avenue, bringing the Lake to its current configuration, more or less.

1939 - Embarcadero medians installed.




Boulevard Along Shores of Lake Merritt
Proposed in the Tribune of 35 Years Ag

RELEVANT HISTORY

Big Dreams

1887 - Racetrack proposed for El Embarcadero.

1891 - Southern Pacific RR plan to fill the lake for a new train station.

1906 - City planner proposes boulevard, two islands connected by 'artistic' bridges.

1910 - Proposal to build a huge casino with fountains, domes, and Greek statues at present Kaiser Center site.

1915-1930 - Mayor Davie era - 1919 swimming beach, man-made island, trotting park for horses, and landing field for small planes; bridge across the lake touching down at a new landfill extension, and a 1930 four-lane tube.

1925 - Necklace of Lights built.

1930s - Swimming at Lake Merritt; one included a man-made, planted barrier cutting off the Glen Echo arm of the lake for swimming.

1938 - Bridge of Great Beauty, four lanes over the lake - the 'viaquadrome'.

1933 - New Lakeside library proposed and built.

1938 - Singing Fountain proposed.

1944 - Shooting Rainbow Fountain.

1950s - Thousands of fruit trees planned to ring the Lake - first groups planted are vandalized.

1951 - Necklace of Lights relighted after WWII.

1959 - Fishing lagoon with pier shaped like a boat.

1962 - Plan to put flags of all fifty states along 12th Street dam.

1989 - CAT study makes recommendations for the Park's improvement including a lid park at 12th Street.

2000 - Cathedral proposed at Kaiser Center parking lot area (formerly Peralta Park). Citizen group submits competing proposal for a grand boulevard.

Lake Merritt Public Bathing

Cal. Lakes - 6-25-61

Project Held Impractical

Development of swimming facilities in Lake Merritt, as suggested to the City Council water doesn't circulate enough. authorization of funds for construction of a pool

The "Singing Fountain" to be seen from the entire shoreline is proposed in 1938.

B-6 Monday, March 28, 1960 Oakland, California

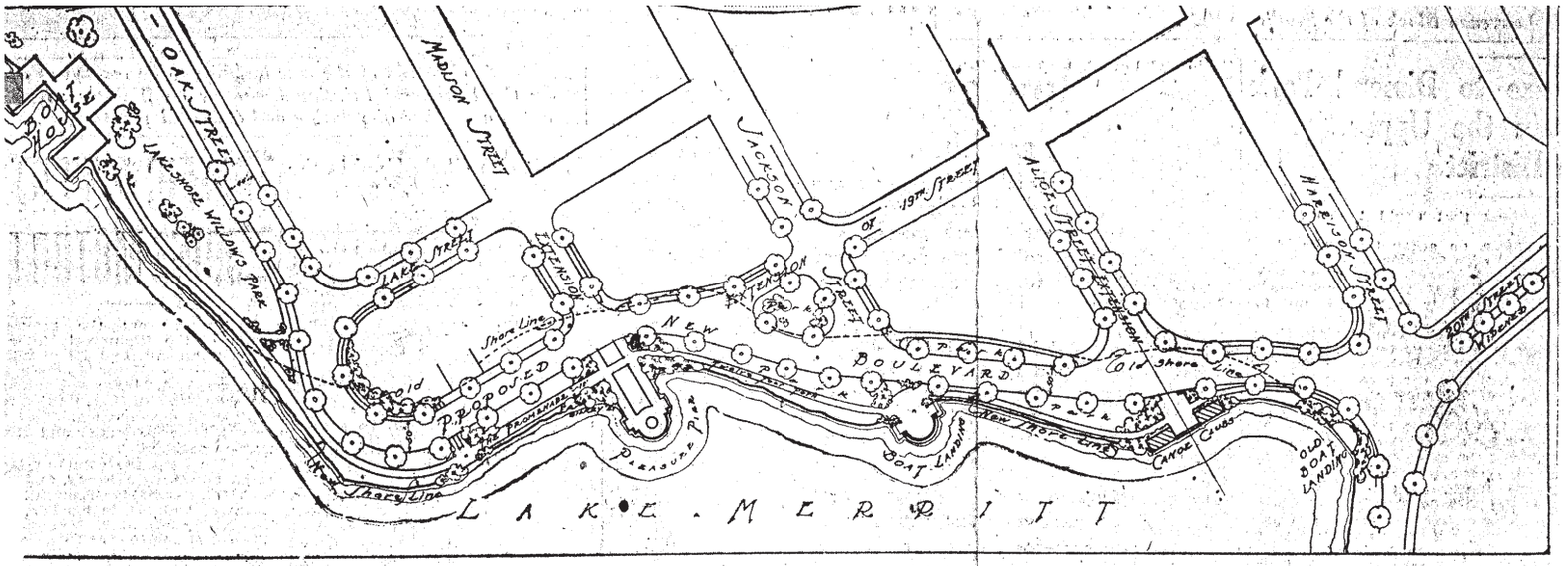
Polishing Oakland's jewel

Lake Merritt, Oakland's crown jewel, attracts walkers, joggers, rollerskaters, cyclists, boaters, picnickers, bird watchers and daydreamers. Corporations flock to locate their office buildings within site of its peaceful expanse.

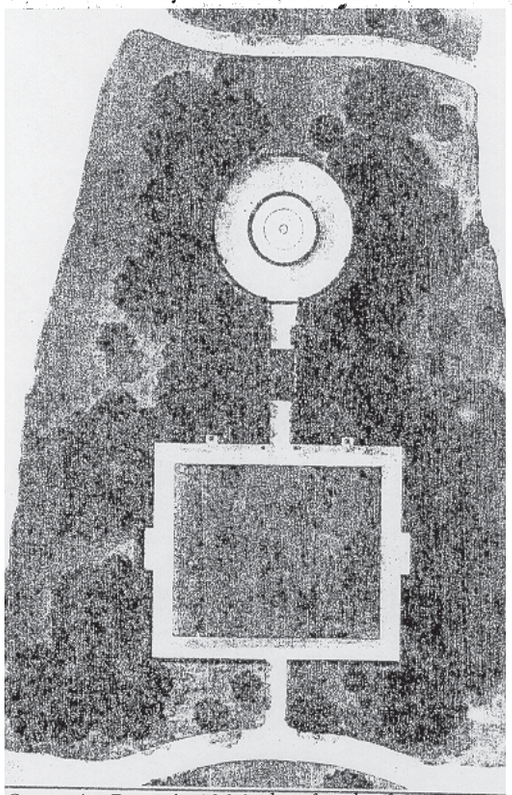
But as befits so well patronized and loved a community asset, Lake Merritt needs protection from decay and fragmentation. It also needs a visionary treatment to help it to attain its full potential.

But Oakland, surprisingly, has no master plan for the future development of the lake, and a trail to circle Lake Merritt and connect up with the planned Bay Trail around San Francisco Bay are being discussed. Under the CAT master plan, all such projects with a potential impact on the lake would be studied as part of the whole.

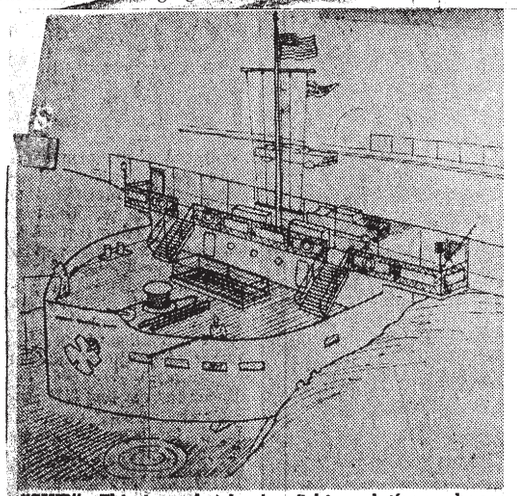
The master plan also calls for bringing to fruition the greenbelt connection long ago proposed but never realized between Lake Merritt, Channel Park and Estuary Park. The plan includes other improvements such as widening the lake's borders either by reducing traffic lanes, redirecting on-street



dging Lake Merritt and building a section of the Lake Shore Boulevard at the same time. This dredger was built on Lake Merritt under the direction of the epartment of public works, and is now working upon the new boulevard which will run from Oak street to Twentieth street and Harrison boulevard. The map hows the lines of the boulevard which will be built from the lake dredgings.



Oscar A. Prager's 1906 plan for the fountain and bowling green in Lakeside Park.



"SHIP"—This is a sketch of a fishing platform, shaped like a vessel's prow, which will be built for children in Lake Merritt Channel as a modern "fishing hole."

Oak Tribune – 9/21/58

Park Commission Approves Plans for 'Fishing Ship'

The Oakland Park Commission has approved use by the city's recreation department of Lake Merritt Channel between E. Eighth and E. 10th Streets, as a modernized "fishing hole" for youngsters.

lights and portholes.

City Architect John Pap dakis is working with Jay I Ver Lee, recreation superi tendent, and Lions committe men on the design for the $2 000 project.

iles Show Mayor's Plan for Improvement Is Not Entirely New.

Thirty-five years ago in a special edition of The TRIBUNE the project of a new boulevard along the shores of Lake Merritt from Harrison to Oak streets was advanced.

Today, sponsored by Mayor John L. Davie and Commissioners Colbourn, Carter and Baccus, plans are being made to effect this boulevard sought after by the pioneer resident.

In the annual edition for 1887 of The TRIBUNE, maps of Lake Mer- i and adjacent territory were ed, showing a boulevard around lake and including the portion filled in today.

The pictures shown on this page are reproductions from the files of January, 1887, and the boulevard is plainly shown in the drawings.

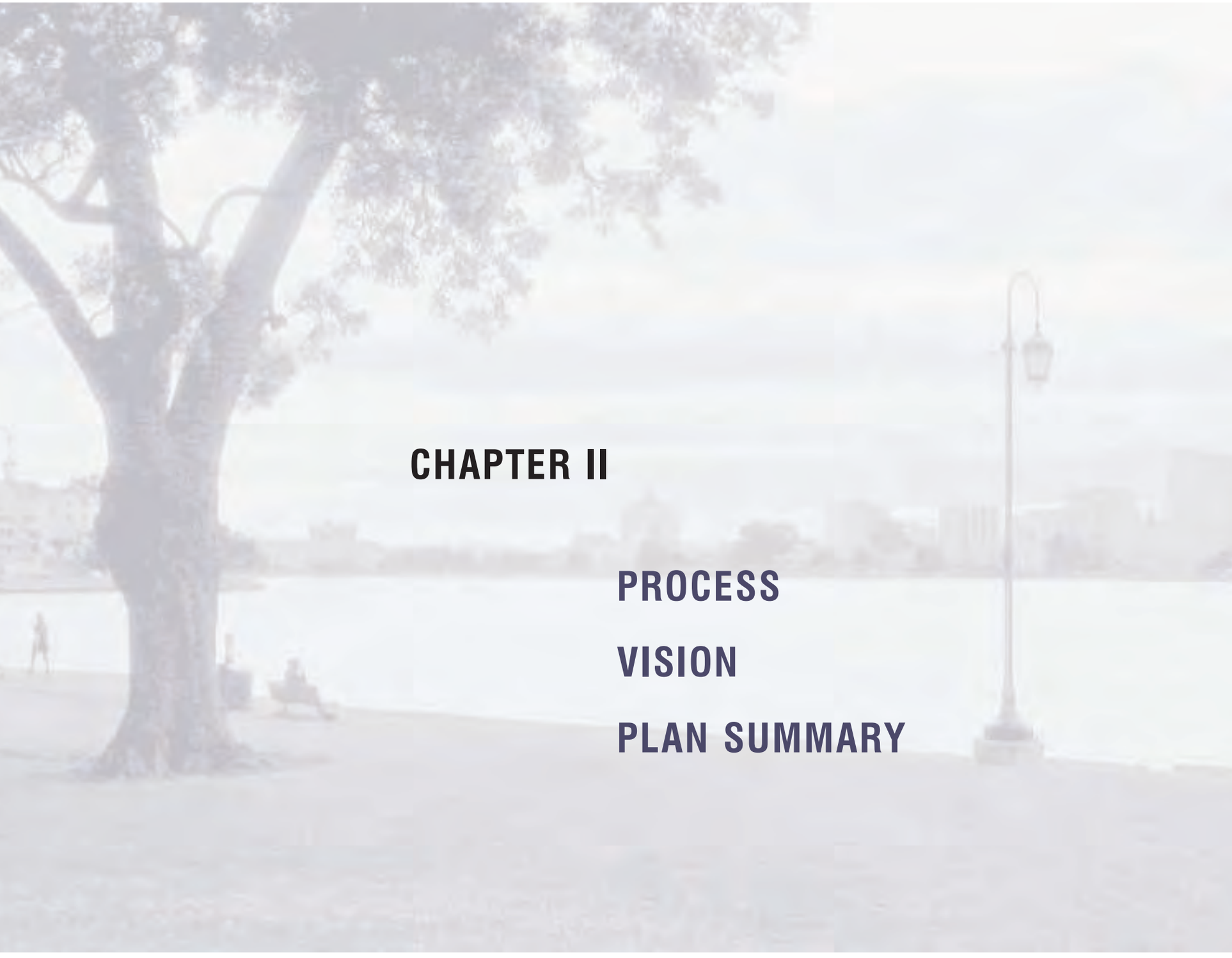
The work now is being carried in nder the joint supervision of Har- bor Engineer Ralph Beebee and andscape engineer Howard Gilkey of an Francisco.

WORK TO COMMENCE

According to Mayor Davie the oulevard in one part of the general

WORK ON THE IMPROVEMENT OF LAKE MERRITT WELL UNDER WAY

EXECUTIVE SUMMARY



CHAPTER II

PROCESS

VISION

PLAN SUMMARY

Process

The Master Plan process occured under the guidance of the mayor, city council, and comunity leaders. Major renovations to the park are long overdue. The years of neglect show in the conditions of paths, planting, buildings, restrooms, benches, and wildlife areas. Furthermore, the Park's programming does not support a use scenario that best benefits the community and wildlife.

The master plan sets clear goals for improvements to the design, function, and ecological value of the Park. Based on a holistic approach that considers traffic, recreational use, urban design, architecture, planting, maintenance, and ecology, the plan supports the Park's role as the "central park" or jewel of Oakland. Lake Merritt is popular with all types of users, from enthusiasts of horticulture to wildlife, from strollers enjoying the evening light, to determined runners beating the pavement. The plan enhances these opportunities by recommending facility improvements and by clarifying the areas that support these uses.

The master plan process was one year in duration. It began with detailed analysis of the Park. Analysis from previous studies contributed to the present understanding of the park. With input from the greater community, stakeholders, and city staff, the plan generated detailed goals and design alternatives for consideration. A preferred set of recommendations was then publicly reviewed and this final plan was prepared.

MOCHA craft project at the October Public Open House

October Public Open House

December Public Open House

October Public Open House

Outreach

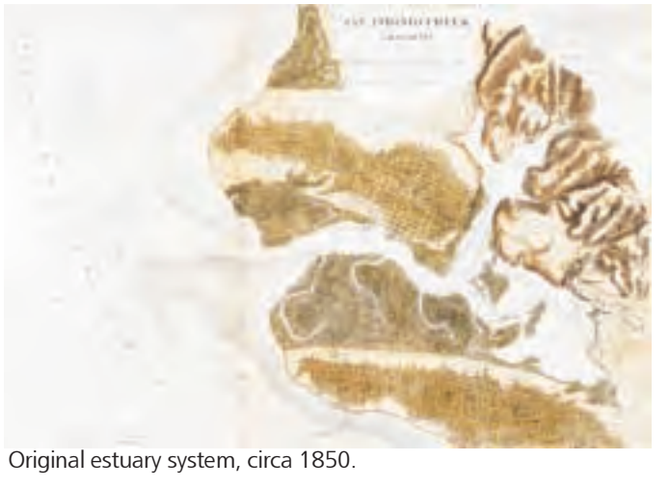
The plan is based on the community's long term advocacy for Lake Merritt and the specific visions that have been championed. Through a participatory process, those community objectives have been translated into a comprehensive set of recommendations (this Master Plan). Through the one year planning process, stakeholders, park users, local business owners, residents, issue advocates, and other members of the public, joined in defining the vision for the park. City staff provided direction to design, policy, management, and project coordination concerns. Detailed recommendations, developed during the process, are an outgrowth of the initial visions.

Right: Comments on Lakeside Park at Public Open House
Below Left: Comments on creek daylighting at Public Open House
Below Right: Comment on Project Prioritization

VISION

Layers of ecological heritage, unique neighborhood cultures, and recreational expectations form the foundation of the plan. The Lake—a part of the original estuary system—its bay connection, and the stream corridors leading in to it, once played a major role in the function of this ecosystem. The master plan reflects this original ecological function. Creek restorations, reopening of the estuary, interpretive elements, and habitat restorations are proposed as part of the ecological theme. Gateways are coordinated with the locations of creeks and borrow from that character.

The plan also recognizes the Park's role as the City's central park or "jewel" of Oakland. Lake Merritt is central to both the downtown core, as well as the many historic neighborhoods that surround its edge. Each neighborhood district projects a unique culture rooted in a social story of ethnic diversity, architectural patterns, and urban form. Small plazas, docks, promenades and other design elements will tell these unique stories. Street tree species are associated with each neighborhood. Special history markers advance the efforts of Oakland to identify and present its rich past. For the recreational benefit of all, new jogging and walking paths will circle the Lake uninterrupted. Similarly, new bike lanes will be added to the roads surrounding the park. The plan envisions ring roads that surround the Lake be made more park-like and therefore become a part of the Lake Merritt landscape.



Original estuary system, circa 1850.

The City grows beyond the original estuary. Overlaying historic watershed and shorelines with those of today.

Highlight of major east-west circulation routes and the original estuary. Contemporary streets follow former creek corridors.

Historic watershed, major circulation routes of present day city. The Lake becomes the green "jewel" in the center of Oakland.

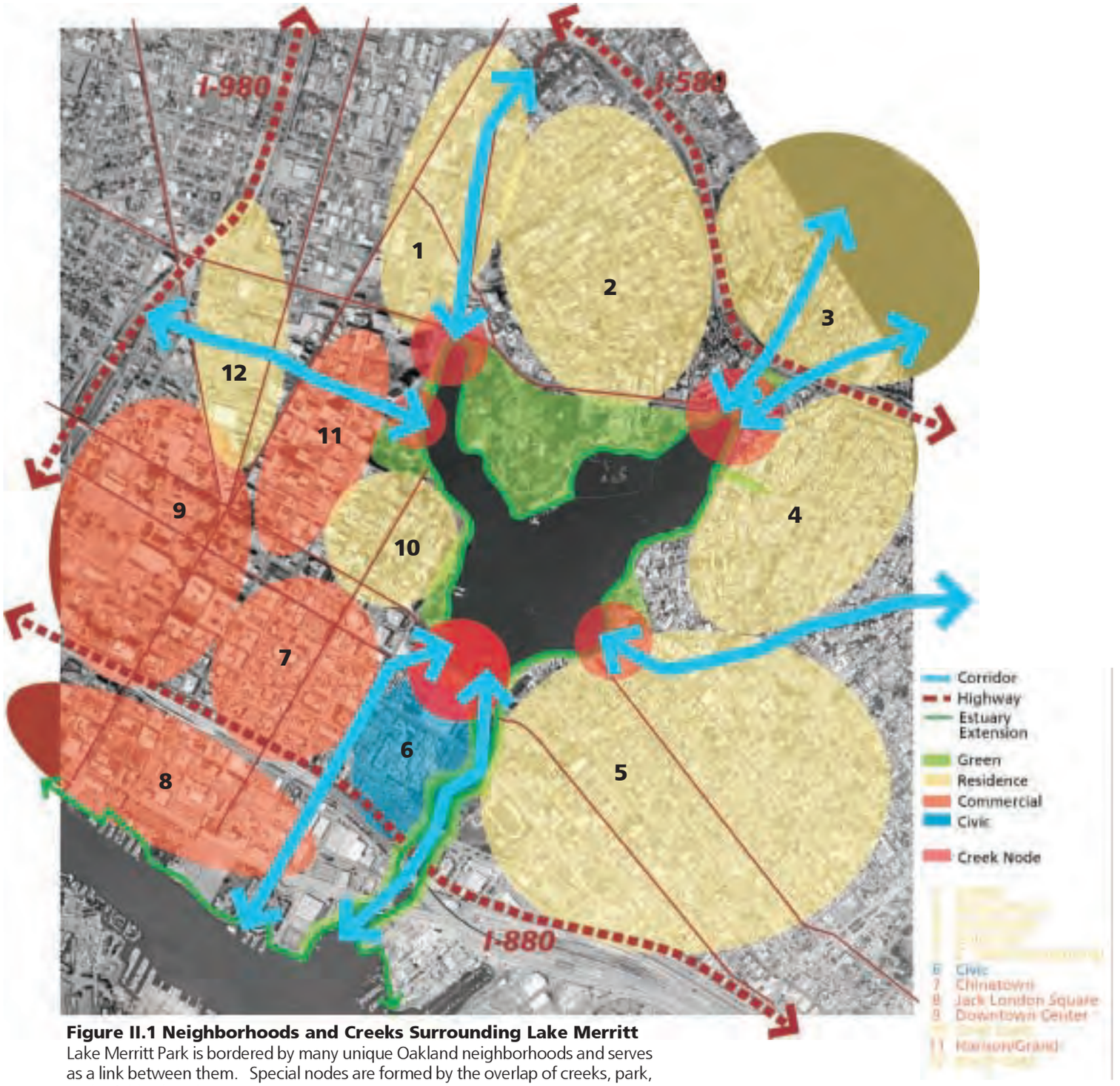


Figure II.1 Neighborhoods and Creeks Surrounding Lake Merritt
Lake Merritt Park is bordered by many unique Oakland neighborhoods and serves as a link between them. Special nodes are formed by the overlap of creeks, park, and neighborhood.

Figure II.2 Park Concept Plan

Above: Existing conditions photo of East 18th Street.
Below: The gateway concept explored at 18th street highlights the historic and ecological patterns of fish spawning in the creek that flows under the present roadway.

PLAN SUMMARY

Overall Plan Topics

The plan makes recommendations to improve the following aspects of the park:

- Park Programming: Land Use and Water Resources
- Planting and Arboretum Elements
- Buildings
- Circulation
- Art Element
- Ecology
- Shadow Study

Design Guidelines

The park is described in greater detail on a zone by zone basis. Recommendations for park programming, landscape, circulation and buildings are provided. The five zones include:

- 12th Street/Cultural District
- Downtown Park Edge
- Lakeside Park
- Grand Avenue Promenade
- Lakeshore Drive

"I want to applaud ... the City of Oakland for making a genuine attempt to improve our Lake Merritt park area. I am especially excited about the significant efforts that you are making to enhance recreational, educational, and natural uses of the historical park, i.e. the ecological impact that it has had for more than a century..." - Community Member comment on Lake Merritt in December 2001.

Figure II.3 Overall Illustrative Plan

PLAN SUMMARY

Five Overall Recommendations

While the plan makes many detailed recommendations, a sum of these parts can be explained in the following five themes:

1. The Park should be Expanded in Key Areas

Narrow park borders currently constrict the activities of those using the park. Paths cannot live up to their popularity, yet have nowhere to expand. Perimeter roadways at times seem to overwhelm the fragile park. Crossing these streets can be dangerous, an unfortunate situation in the context of a park. Under the master plan, the perimeter roadways have been carefully studied and selectively recommended for narrowing in order to provide wider, multi-use paths and on-street bike lanes. Several intersections are likewise modified to improve pedestrian and bicycle safety while expanding the park.

2. Park Amenities should be Enhanced

The park furnishings do not measure up to the natural grace and beauty of the landscape. Restrooms, drinking fountains, benches, signage, and other amenities critical to everyday use should be upgraded, made more vandal resistant, and maintainable. These features may be improved through the art element. The prestigious Necklace of Lights should be expanded along 12th Street. Improvements specific to accessibility, drainage, lighting, and uneven pathways should provide a safer environment.

View of Lake from Cleaveland Cascade.

3. An Estuary Connection should be Initiated

The 12th Street area of the lake, historically Peralta Park, should be redesigned to allow for an open water channel connection to the estuary. Improved water flow can greatly enhance lake water quality- improving the habitat value, appearance and even the smell of the Lake. Important pedestrian and bicycle opportunities for new connections to the estuary are initiated by these changes. The now obsolete twelve-lane roadway should be reduced to an ample three lanes each way with an opportunity for express bus lanes to be added. This should allow the park to be increased from a narrow sidewalk next to hostile traffic to a hundred-foot wide green space re-establishing the "front yard" to grand civic buildings and the Oakland Museum. The new park space also affords continuous perimeter paths, a beach, and open lawns for play and festivals. An art display—in conjunction with the Oakland Museum's new entrance—may be incorporated into the open space and its walkways.

4. Park Programs should be Improved

On the water and in the park, unique youth programs teaching boating, ecology, reading readiness, horticulture, art, and science all contribute to the value of the park. The plan proposes that a new facility be developed which consolidates these programs within the interior of the park eventually replacing older structures and freeing up the shoreline for important park space. Additionally, non-Lake Merritt maintenance operations/ facilities should be relocated out of the park, opening up new park space for public use. Finally, park ranger patrols should be increased to improve public safety.

5. Maintenance should be Improved

Park operations are a critical point of realizing the long-term vision. It is recognized that additional resources would be required to maintain the new grounds. As part of this plan, detailed maintenance programs are outlined which provide the necessary level of care to properly maintain the new facilities. The costs of these programs are calculated to give clear budgetary guidance to city agencies. Furthermore, a park conservancy is proposed to provide a strong, long-term advocacy group that has the improvement and maintenance of the park as its express mission.

Implementation

The plan includes a discussion of implementation. Projects are organized according to priority and construction logic. Planning level cost estimates are included for reference. In general terms, the top priorities identified by the community are:

- Water Quality and Ecology
- Pedestrian Circulation and Pathways
- 12th Street Area Improvements

Figure II.4 Diagram of Five Zones

Boardwalk spur with posts continuing across the pond, as is proposed in Lakeside Park Ecology Zone

MOCHA craft project at the October Public Meeting

PLAN OVERVIEW

CHAPTER III

DESIGN CONCEPTS

PARK PROGRAMMING

WATER RESOURCES

ACCESS & CIRCULATION

PARK LANDSCAPE

ECOLOGY

BUILDINGS

SHADOW STUDY

ART ELEMENT

Design Concept Zones

Detailed park area descriptions and recommendations are found in Chapter 4. For the purposes of this Master plan, the park is divided into the following zones:

- 12th Street/San Antonio Creek/Estuary Connection/ Civic District
- Downtown Park Edge
- Lakeside Park
- Grand Avenue Promenade
- Lakeshore Park Edge

Proposed 18th street perspective drawing

Gateways

Gateways highlight the sense of identity of our built environments. They mark boundaries of districts, serve as points of reference, and often highlight the unique qualities of our environment. The LMMP recognizes the lake's presence as a natural gateway—giving identity to nearby streets and neighborhoods. To further the characterization of the "lake district," specific types of markers are proposed. Each relates a particular theme identified in the master plan, including creek ecology, surrounding neighborhoods, and Oakland history.

Creek Nodes

Creeks that once visibly flowed into Lake Merritt are the basis for special gateway nodes. Special planting, custom benches, and interpretive signage, marks the location of creek corridors. The design encompasses the pedestrian realm of the park as well as the surrounding street. Creek nodes typically occur at major intersections—the entry point of various neighborhood enclaves. On 18th Street for example, the creek, business district, and street all converge at a single point. The plan recommends improvements that celebrate the creek and provide for a lively, urban streetscape. Creek nodes are the primary gateway and could be included as part of the Art Element.

Neighborhood Nodes

Oakland's unique neighborhoods are one of the defining characteristics of the City. The LMMP promotes the park as a connector—a common thread that joins the surrounding communities. Special neighborhood nodes are proposed along the park perimeter. They are located at the terminus of streets, and special view locations along the shoreline. The nodes are oriented to the pedestrian, using the perimeter paths or entering the park from the adjacent neighborhood. Low seatwalls, special paving, and text inscriptions commemorate the nodes. These are second in hierarchy to the Creek nodes. Neighborhood nodes could be included as part of the Art Element.

History Markers

The history of Oakland is championed by its citizenry through many institutions, interest groups, and city departments. Two historic resources, the Oakland Heritage Alliance, and the Oakland Museum, are located on Lake Meritt. History markers are proposed to present the history of the lake—its events, people, related Oakland lore, and the history of the surrounding neighborhoods. The markers occur at irregular intervals, often at park entry locations or near neighborhood nodes. They would be sculptural in form as opposed to a sign. History markers could be included as part of the Art Element.

Figure III.1 Park Concept Plan

PARK PROGRAMMING

Figure III.2 Park Programming

Land Use Overview

The park's overall programming is graphically described in this section. In most cases, existing patterns of use are maintained and facilities that support the uses are enhanced. Pathways, benches, lawns, and docks are recommended for restoration. Some park programmatic changes occur where conflicts were found to exist. Wildlife and recreational uses that competed are clarified by making one more prominent and enhancing the other in a more suitable location. Promoting water views, and access to shoreline and open space areas also improve the experience of park users.

Land Use Recommendations

- Continuous, perimeter circulation should be provided for walkers, bicyclists, and dogs on leash. Generally two separate paths provide this opportunity. A decomposed granite path should provide a soft surface for jogging the perimeter.
- Open lawn areas on the park border areas should be provided for picnicking, informal play, and other casual activities.
- Select open lawn areas should be enhanced for larger scaled, active, informal sports.
- Picnic tables and other amenities for family gatherings should be provided.
- The park width between the shoreline and roadway should be expanded where possible to allow for better pathway circulation and to reduce the negative presence of busy roadways.

Types of Program Uses Considered

- Promenades
- Free and Clear Open Space
- Dedicated Lawns
- Picnic Facilities
- Naturalized Landscape
- Beaches
- Event Spaces
- Parking
- Commercial Facilities
- Restrooms
- Private lessee

WATER RESOURCES

Figure III.3 Water Resources

Water Oriented Recreation

The water portions of the park offer exceptional opportunities for recreation. Sailing and rowing for youth and adults alike are some of the most established events at the park. Two main facilitates support water recreation: the Sailboat House in Lakeside Park and the Municipal Boathouse at 1520 Lakeside. The plan recommends enhancements to both of these facilities to better provide the public with positive recreational venues. Access to the water is improved by restoration of the many docks around the lake including those near Lakeside Drive, the Glen Echo arm, Bandstand beach, 18th Street Landing, and the 12th Street shoreline area. Kayaking, dragon boating and other personal watercraft use is increasing in popularity throughout California and the Bay Area. Lake Merritt offers calm water and a safe environment for beginners and youth. All water activity should conform to seasonal wildlife restrictions.

Current water oriented programs (organized groups) operating on the lake include:

- OPR's Sailing into Science
- Ladies of the Lake
- Gondola Servicio
- OPR Boat rentals
- Dragon Boating
- Lake Merritt Rowing Club/ Berkeley HS Rowing

Water contact sports are contingent upon water quality. Beginning windsurfing is often practiced on the lake. Swimming/ wading is appropriate near beach locations.

Fishing is not commonly practiced at Lake Merritt. Environmental contamination concerns coupled with wildlife protection concerns have essentially marginalized this activity. in the 1950's and 1990's, city sponsored fishing events were popular. The plan recommends that provisions for controlled fishing opportunities for youth be implemented. Existing programs such as California Departments of Fish and Game's "Fishing in the City" should be reviewed for applicability.

Water Oriented Recreation Recommendations

- Restore and maintain docks for water access, boat tie up, gondola use, water taxi use, and general public interaction with the open water.
- Restore and maintain beaches for public use including sunning, wading, kayak launch, and play.
- Maintain a minimum water depth in the high use corridors for sailboats, skulls, and windsurfers.
- Seasonal restrictions on use for wildlife protection should be maintained.
- Programs for youth that support water oriented recreation should be supported. Current programs that use the lake should enhance their operation by involving youth in their organization.
- Opportunities for a controlled, youth-oriented program to fish in select areas should be considered.
- Water taxis should be considered as a means of further reducing local vehicle trips and providing a unique means of experiencing the lake. Taxis should be coordinated with dock locations. Vessels should minimize pollutants by using manual power, electric motors or alternative fuels.

Wildlife

Water based wildlife are a significant part of Lake Merritt's ecology. Discussions and recommendations regarding wildlife are described in the Ecology section.

Dredging

Lake Merritt has been dredged regularly over the last century. In fact the lake quality we know today is a result of dredging operations that deepened and widened the water area. Earth removal was recorded in 1893, 1907, 1921-24, 1934, 1953, 1964, 1972, 1985, and 1997. Recent extraction occurs on a twelve year cycle. The operation is conducted to maintain flood control capacity and supports water recreation activities. Without this expensive but necessary procedure the Lake would become a shallow mudflat with increased quantities of widgeon grass, algae, and mudflats. Sediment accumulates near storm drain outfalls and migrates into calm water—typically the arms of the lake. Soils require testing to determine the level of metals and other hazards prior to disposal-not uncommon in bay bottoms. Permit application procedures are complicated. The process can take one or more years to complete. The last dredging operation included only the major storm drain outfall areas (not the entire lake) and cost over $1.5 million. Past studies have recommended that some dredging occur every 2-3 years. In order to reduce operation costs, the City may elect to purchase the equipment. The small machine would be operated by City staff.

Facing page: Children play on the beach near the bandstand
Below: Moored boats at the Muncipal Boathouse

Dredging Recommendations

- Dredging operations to remove sediments should be continued on a schedule of every 2-3 years for the arms and about every 12 for the full lake.
- The City should explore purchasing a small dredge boat to be operated more regulary. Annual removal of sediments in small quantities may save money while preventing the build up of sediment, expansion of widgeon grass, and odorous conditions.

"Diversify the bird sanctuary so that it is not just a duck, goose and seagull sanctuary." - Community Member comment on Lake Merritt in December 2001.

ACCESS AND CIRCULATION

Figure III.4 Circulation

Roadway Circulation

In order to develop comprehensive recommendations for the Park, a thorough understanding of traffic patterns and circulation access was required. Studies were conducted on all perimeter roadways and major intersections. The following circulation goals were developed early in the process:

Objective 1: Improve Pedestrian and Bike Circulation

The Master Plan addresses improvement of pedestrian and bike circulation for the entire park. Two facilities are recommended. First, is the development of a continuous trail around the lake and through the park. The trail would consist of a wide off street multiuse path for pedestrians and recreational bicyclists. Second, is the creation of on-street class II bike lanes provided for commuter and high speed bike traffic. This would help to reduce bicycle and pedestrian conflicts. The wide multiuse path would not require any paving over park green space; however it would require narrowing the streets around Lake Merritt. This plus the addition of bike lanes would require the reduction in vehicle travel lanes. Creating the on street bike lanes and off street bike path conforms to, and would implement the Oakland Bicycle Master Plan around Lake Merritt. (Refer to Figure III.6 Project Bike Facilities and III.10 Project Pedestrian Crosswalks).

Figure III.5

Figure III.6

Figure III.7

Figure III.8

Objective 2: Improve Estuary Connection

The Lake Merritt Master Plan calls for constructing a park link that would directly connect Lake Merritt Park to Peralta Park. The San Antonio Creek channel would be opened up, with channel side trails, providing a seamless small boat, pedestrian and bicycle connection without crossing a street. Twelfth Street would span the channel over a signature bridge. For those who would prefer not to cross under Twelfth Street nearby signalized intersections with crosswalks would provide safe pedestrian crossings.

Objective 3: Connect Park to Neighborhoods

Narrowed roads would improve the pedestrian connection to surrounding neighborhoods. Bulb outs would be added at crosswalks to reduce the crosswalk distance. The Master Plan identifies several street segments surrounding the lake to be reduced in the number of travel lanes. All crosswalks at signalized intersections should have audible countdown pedestrian signals.

Figure III.9

Figure III.10

Objective 4: Parking

One goal of the Lake Merritt Master Plan is to move parking away from the environmentally sensitive shoreline areas. The total amount of parking within the park is to be kept the same. Parking, therefore, could be moved to areas inside the park where there would be less environmental impact. Special event participants would be directed to use off site parking facilities to solve the parking demands, which at times, exceeds the parks parking capacity. (Refer to Figure III.8 Project Parking).

Objective 5: Improve Transit Access

Another goal of the Lake Merritt Master Plan is to improve transit access to Lake Merritt Park. New bus stops should be located on roads around the lake and park where there are large gaps between stops. Distinctive bus shelters with maps and information about Lake Merritt Park should be installed at all bus stops around the lake. These shelters could be equipped to accommodate future technology, for example, next bus message screen technology, to encourage transit use. These devices could also announce Lake Merritt Park events, similar to the devices utilized at BART Stations. (Refer to Figure III.12 Project Transit Access).

Figure III.11

Figure III.12

Figure III.13 12th Street Existing Conditions

Recommendation Overview by Zone

12th Street/San Antonio Creek/Estuary Connection/Civic Area

The Lake Merritt Master plan calls for replacing the 12th Street Viaduct with a new six lane boulevard, connecting 11th/12th Street with 1st Avenue, between Oak Street and International Boulevard. The 12th Street "freeway" would be converted into a normal urban city street, potentially called Lake Merritt Boulevard.

- There would be four new signalized intersections including; 13th with 14th Street, Lake Merritt Boulevard with 14th Street, Lake Merritt Boulevard with Kaiser Convention Center, and Lake Merritt Boulevard with East 12th Street. There would be crosswalks at all intersections.
- The street crosses the channel on a bridge high enough for pedestrians and bicyclist to cross under it adjacent to the channel. Boaters would be able to access the channel from Lake Merritt, meeting a goal of the Lake Merritt Channel Project.
- The current pedestrian tunnels would no longer be needed and therefore be removed.
- On street parking and bike lanes could be provided.

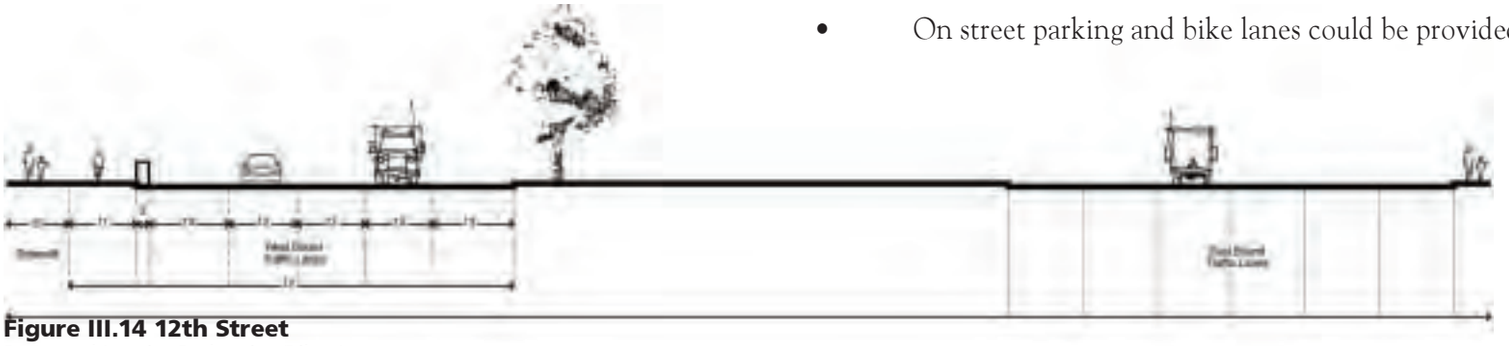


Figure III.14 12th Street
Proposed Interim Pedestrian/Bike Access

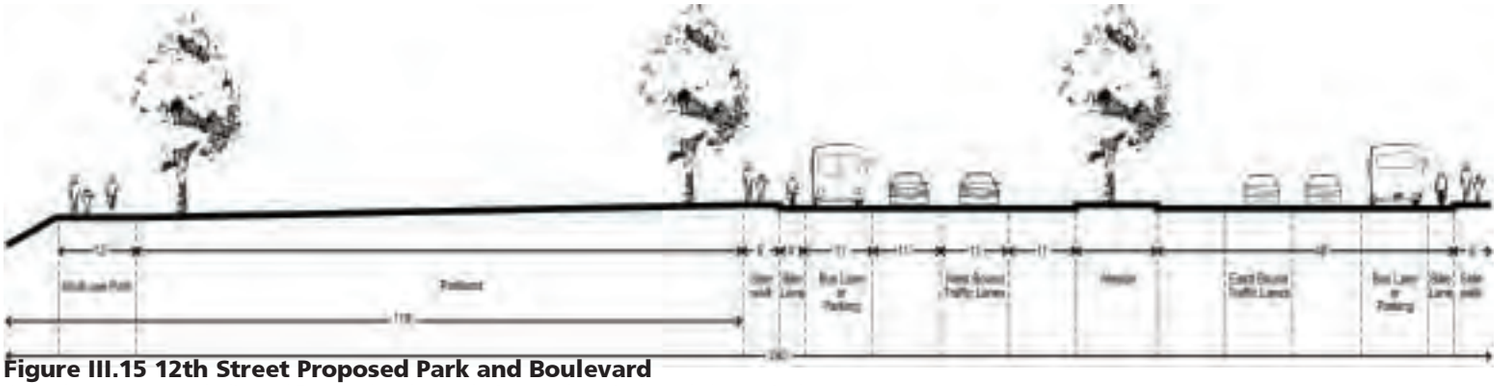


Figure III.15 12th Street Proposed Park and Boulevard
Outer lanes serve as dedicated Express bus lanes during peak periods and alternatively as parking . Class II bike lanes provide dedicated access to commuters.

Downtown Park Edge

The Lake Merritt Master plan calls for narrowing both Lakeside Drive and Harrison Street providing on street bike lanes and room for a 14 foot two way multi-purpose trail to be built along the lake. Plan specifics are:

- Narrowing a portion of Lakeside Drive, a one-way street, to three lanes, from 14th to 17th Street. A northbound bike lane to be added.
- Also narrowing the two-way portion of Lakeside Drive to two lanes, with one in each direction, from 19th to 20th Street. Bike lanes to be added in each direction for this two way segment.
- Removing 20th Street between Lakeside Drive and Harrison Street and replacing pavement with parkland. The Harrison and Lakeside intersection to be moved to form a perpendicular T intersection. Both Snow Park and Lake Merritt Park would be expanded.
- Harrison Street to be reduced to three lanes southbound between Grand avenue and Lakeside Drive. A new bike lane added in the southbound direction.
- A 14 foot two way bike path should be built on the lake side of Lakeside Drive and Harrison Street.

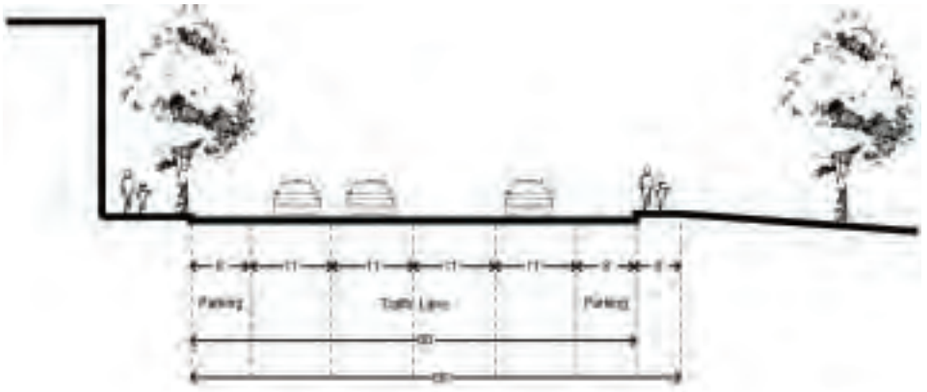


Figure III.16 Lakeside Drive Existing Condition (14th to 17th)

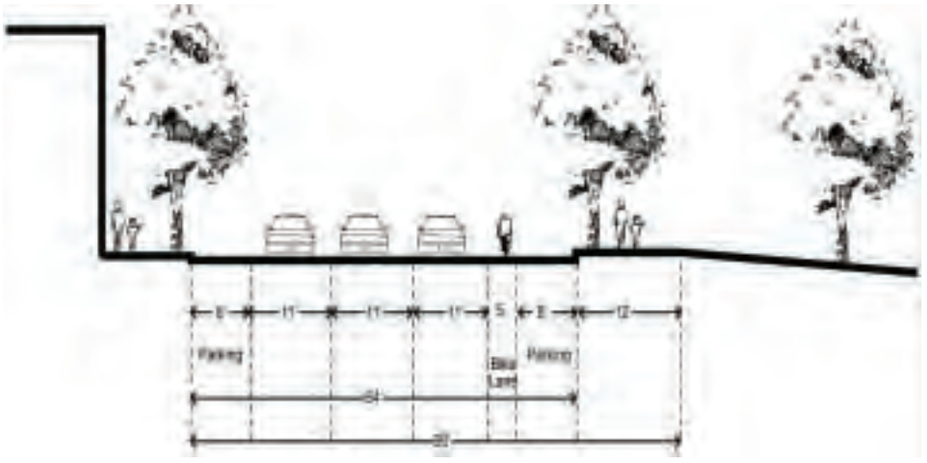


Figure III.17 Lakeside Drive Proposed (14th to 17th)

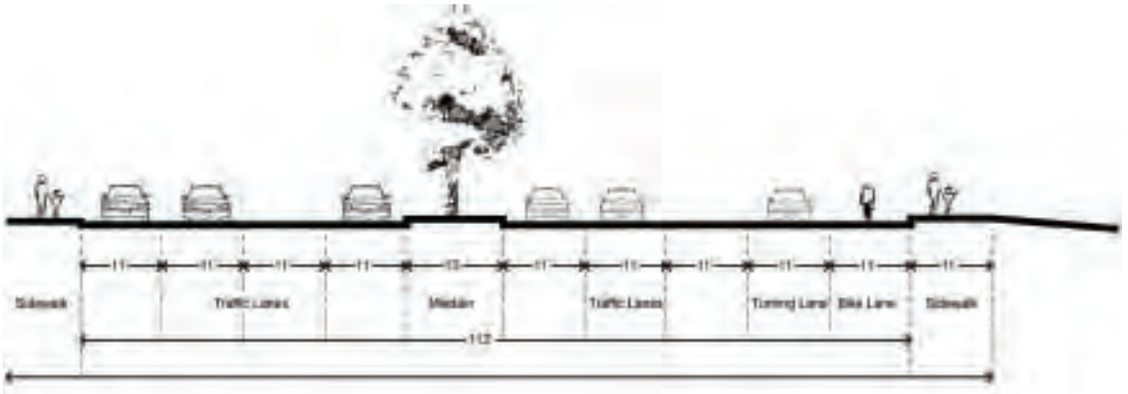


Figure III.18 Harrison Street Existing Conditions

Figure III.19 Harrison Street Proposed
Northbound bike lane width is resized to standard lane. The park border is widened to accomodate a multi-use path and enhanced planting.

Lakeside Park

The Lake Merritt Master plan calls for the Sailboat house parking lot to be removed, the parking to be replaced on Bellevue Avenue, and for the parking demand to be managed.

- Bellevue Avenue, in Lake Merritt Park, to be widened by eleven feet. This would allow for diagonal parking on both sides of Bellevue Avenue, replacing the spaces lost at the Sailboat House parking lot.
- Part of Sailboat House parking lot to be converted into park space. A few spaces would be preserved for handicapped, loading and boat trailer parking.
- It is proposed that events that have an expected 25 or more visitors would be required to submit a proposal for parking management. A new database would notify all participants, entities and the Lake Merritt management group, as to what events are to happen within the park at any given time. Event planners could make an informed decision as to if they need to utilize outside parking facilities as well as a shuttle service.

Grand Avenue Promenade

The Lake Merritt Master plan calls for the intersections of Grand Avenue and Bellevue, at both the park entrance and exit, to be narrowed. This would provide a safer and more pedestrian friendly crosswalk across Bellevue. The bulb outs and crosswalks called for in the Grand Avenue Bicycle, Pedestrian, and Parking Project should be constructed.

Lakeshore Avenue Edge

- The Lake Merritt Master plan calls for narrowing Lakeshore Avenue allowing for on street bike lanes and room for a 14 foot two way multi-purpose trail to be built along the lake.
- Lakeshore Avenue would be narrowed to two lanes, with one in each direction, between the El Embarcadero intersection and the East 18th Street intersection.
- Lakeshore Avenue should be narrowed between 18th and 15th to four lanes, two in each direction.
- Existing parking on Lakeshore to be preserved.
- Bike lanes to be added in each direction.
- A fourteen foot wide multi-use path would replace the six foot sidewalk on the lake side of the street
- The Lake Merritt Master plan also calls for ending Lakeshore Avenue at 12th Street, with a cul-de-sac. This would divert traffic to 1st Avenue allowing Lakeshore Avenue to be narrowed to one lane each way and made into a more park friendly neighborhood street.
- East 15th Street intersection should be reconfigured to open up parkland next to lake.
- The Master Plan would reconfigure 1st Avenue as a four-lane street by eliminating parking.
- 1st Avenue should be a signed bike route.
- The Lake Merritt Master Plan is compatible with and fully supports the Grand Lake Green Link Plan, and its recommendation to consolidate El Embarcadero to one road.

Figure III.20 Lakeshore Avenue Existing Condition

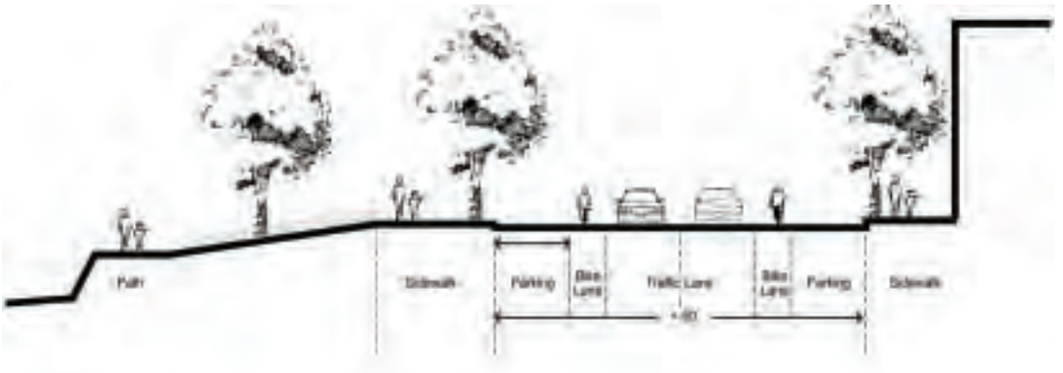


Figure III.21 Proposed Lakeshore Avenue

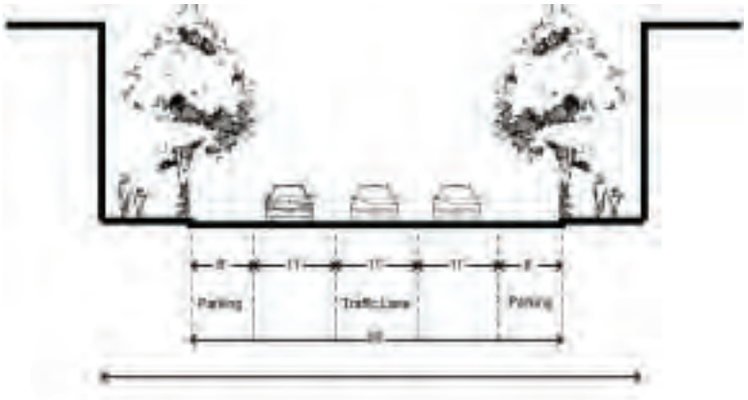


Figure III.22 First Avenue Existing Condition

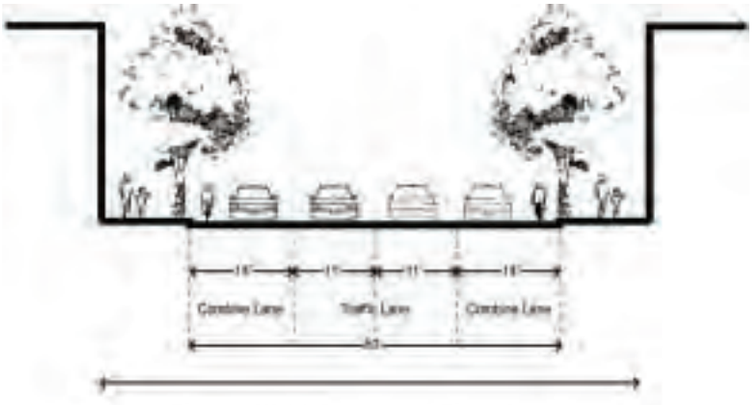


Figure III.23 Proposed First Avenue

PARK LANDSCAPE

Figure III.23 Park Landscape

Landscape Plan Overview

Two dominant themes of ecology and multiculturalism recur throughout the history of Lake Merritt Park and its surrounding neighborhoods. An ecological awareness was expressed by establishing the estuary as one of the first federal wildlife refuges (urban wildlife protection area) in March of 1870. Since then, civic leaders, local scientists and national ecologists studying the Lake's unique conditions have continued to advocate for Lake Merritt's wildlife protection.

Lake Merritt Park is an 85-acre public garden with unique specimens of both native and exotic trees and plants from around the world. In 1910, the first Oakland Parks Commission expressed the conviction that "visitors to this park would want to see plants from their native lands," setting the stage for a multicultural landscape vision. Native plants as well as species from the eastern United States, Eurasia, temperate Africa and South Africa and the Australian region were added in the early 1900s. Tree gifts from the 1915 World's Fair augmented the collection.

In the recent past, some areas of the Park have lost their landscape cohesiveness, and only scattered islands of trees remain. Mature Leptospermums are in danger of loss from inappropriate care and attrition and many other mature specimens may no longer be available for future generations to enjoy.

The Landscape Plan seeks to strengthen the cultural and ecological landscape themes throughout Lake Merritt Park, adding planting beyond the existing fenced areas to expand the envelope of the existing Botanical Garden. The Plan also outlines an active reforestation program for the Park to ensure the vitality and continuity of the landscape. The following are specific recommendations:

- Clusters of Valley and Blue Oaks along perimeter Park areas
- Boulevard trees along ring roads extending Park boundary
- Accent plantings of Leptospermums at gateway entries to Lake Merritt
- New entry to the fenced Botanical Garden
- Stronger pathway connection from Botanical Garden to Sailboat House
- Additional secondary paths meandering through new climate gardens
- Massing of groundcover shrubs from various climate and continental regions
- Reduction in open lawn areas with increase in groundcover areas
- New plantings in the Ecological Restoration Area
- Ecological and Botanical Garden themes
- Demonstration landscape design utilizing recycled water in new Park area at 12th Street

The founders envisioned a park where visitors and newly arrived immigrants could see familiar plants from their native lands. Today, by an ironic twist of history, the Park may provide second generation immigrants, who have never visited their countries of origin, the opportunity to learn about plants from their ancestral lands. For all park users, the Landscape Plan seeks to strengthen and communicate ecological and cultural themes and thereby enhance the quality of their experience.

History

The following is a brief history of the events shaping the ecological and cultural landscapes of Lake Merritt Park:

Ecological Landscape

- Originally named Lake Peralta, Lake Merritt was created in 1869 from the marshy San Antonio Slough, where four creeks converged toward the Bay. In 1869, Dr. Samuel Merritt (then mayor) persuaded the state to designate the Lake as a National Wildlife Refuge. The designation was granted in 1870. The area's vegetation and wildlife included oaks, alders, maples, willows, quail, deer, and rabbits. Fresh streams flowed where one could catch crabs, salmon, steelhead trout, smelt rock cod, lobsters, shrimp, clams, and mussels. Lake Merritt, being the first National Wildlife Refuge, became the model for President Theodore Roosevelt to follow in setting up the national park system. Lake Merritt Wild Duck Refuge is now a National Historic Landmark, designated by the Secretary of Interior on May 23, 1963.
- In the late 1800s, Lakeside Park included scrub oaks and about 30-40 very old trees grouped around a small cove on the western half of the peninsula (Quercus agrifolia, Quercus kellogii, etc.). Oaks and a Redwood grove could be seen from outside the San Francisco Bay and were used to navigate ships into the Bay.
- In 1923, the Lake was dredged and the fill used to construct manmade islands as nesting sites for birds. From 1920 to 1940, five resting and nesting islands were constructed by driving piles into the lake bottom, fastening planks to the piles and filling the resulting boxes with soil. Shrubs and trees were planted and fresh water was provided on the islands.
- Other filled lands included Adams Park, the bandstand and beach area, Eastshore Park, Lakeside Drive from 17th to 20th Street, East 18th Street from Athol to Park Boulevard, and the land under the Auditorium.
- In the late 1970s, the refuge served 4,000 - 5,000 migratory waterfowl daily during the migration season. In 1977, there was a resident population of some 500 birds who commuted to feeding grounds in the San Francisco Bay, including a large population of American and snowy egrets as well as approximately 200 black-crowned night herons.

Cultural Landscape

- In the 1870s, the area, then pristine, was inhabited by a handful of settlers and a few Costanoan (Ohlone) and Miwok Indians. At the head of the slough (the present location of the Grand Lake Theater) was a pier operated by the Peralta brothers for boats transporting timber or cattle products to the bay.
- In 1909, during Mayor Frank Mott's tenure, Oakland acquired the entire lake frontage, set up the first Park Commission and began to develop Lakeside Park. The Embarcadero area including Trestle Glen Creek and Lakeshore Avenue to Park Street had wooded creek land, spacious upper areas, natural and historic oak trees. Between 1907 and 1912 the road around the Lake was paved, the boathouse and canoe house were built, a boat landing was created and the Camron-Stanford house was acquired for the new Oakland Museum
- In 1909, the architect Oscar Praeger was asked by Mayor Frank Mott to design parts of the existing landscaped 45-acre Lakeside Park. Preliminary ideas included the original bowling green and fountain site, augmented by live oaks with deciduous oaks, (Quercus cerris, rubra and coccinea), groups of pines (Pinus austriaca) and birches (Betula alba), madrones and flowering cherries.
- Trees were added from the 1915 World's Fair held on Treasure Island. At one time, a conservatory similar to the Conservatory of Flowers in Golden Gate Park existed on Adams Point in Oakland.
- The original lights, which are today a landmark, were installed in 1925 by consulting electrical engineer, Romaine W. Myers. The "Necklace of Lights" referred to the 128 electroliers installed along the shoreline and the "Festival Lights" were the strings of lights suspended between temporary poles and the electroliers. The circuit included 3,400 lights. In 1946, a Dr. Brown bought the discarded "Festival Lights" from a junkyard and they ended up lighting a mission, mission hospital and nearby villages close to the City of Swatow, China.
- Fairyland was built in the 1950s and reputedly served as the inspiration for Disneyland. The architect of approximately 50 of the original structures was William Russell Everritt. Approximately 60 settings based on fairy stories and Mother Goose rhymes form the pioneering playground. Currently, the non-profit entity run by Nancy Stark has renovated the gardens, entry and oversees educational programs. New programs will include a reading and learning program for preschool children and a volunteer gardener's docent tour of the Fairyland grounds. Mapping and plant collection lists exist for the Fairyland grounds.
- In November 1999, the one-third-acre Bonsai and Suiseki Display Garden opened. This nationally known collection of precious trees and stones includes a display booth, a fence surrounding the bonsai collection with entry gate, volunteers' office, display building and future workshop. It serves as the open-air cultural museum of the Golden State Bonsai Federation Collection - North. Many bonsais, by outstanding masters and collectors, have been in families for 20, 30 or 40 years. A special 400-year Japanese black pine bonsai was part of the 1915 Pan Pacific Exposition in San Francisco.

Figure III.24 Existing Vegetation

Vegetation Survey and Analysis

A tree survey was conducted, which identified a wide variety of planting in Lake Merritt Park and served as the basis for the Existing Vegetation Plan. Vegetation is classified into the following zones:

- Coastal bluff plant communities
- Fenced area (Fairyland and Botanical Garden)
- Mixed oak woods
- Mixed pine woods
- Groves of other trees
- Flowering ornamental trees (accent)
- Street trees
- Lawn
- Significant and historic trees

Historic trees are those planted after the 1915 World's Fair and/or trees referenced in Praeger's original planting design, such as the New Zealand Tea trees. These trees were identified largely from early writings and plans. Some trees have been newly planted (replacing those diseased), but there has been much resistance to planting trees because some residents prefer to preserve their view of the Lake. There was a large planting of ornamental cherry trees during the 1950s, but many of the trees were vandalized.

Significant trees are those trees that have grown to a large specimen size and/or trees or groves of trees that form a special, sanctuary space. Specimen trees include some specific trees within the Botanical Garden that were identified as "thriving" in the East Bay but not in San Francisco.

Lawn occurs predominantly in areas without trees as well as areas under trees. The planting slope to the west of Fairyland was once groundcover, but due to lack of maintenance, a rodent population became problematic.

Landscape Themes

Bio-diversity

The Landscape Plan will focus on enhancing the biological diversity and variety of life at Lake Merritt Park. Lake Merritt is the first wildlife refuge declared in the United States. The challenge is to enhance this wildlife refuge within an encroaching urban environment while responding to increasing human recreational demands. The Landscape Master Plan builds upon the existing wildlife habitat and park, offering a wide range specialty plants and environments. Restoring lost vegetation such as oak trees along the narrow vegetated perimeters of the Lake will provide a wider range of habitat and wildlife corridors to balance plant, animal and human needs.

Multiculturalism

Building upon the multicultural theme, development of the Botanical Garden extensions beyond the fenced gardens will capitalize upon the existing plant collections. Low groundcover massing of plants such as Hemoracallis and Phormium tenax will provide hardier theme plantings beyond the fenced areas. These plants will be selected from the Mediterranean climate, African continent, temperate and mild temperate climates of Asia and Australia, tropical climates of New Zealand, native Bay Area habitats and drought-tolerant species.

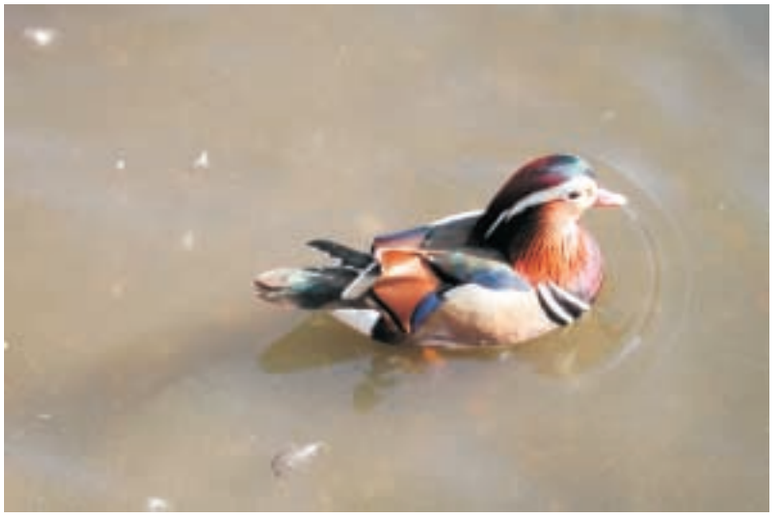
The drought-tolerant garden will combine plants from all areas to provide a design theme based on form, shape, color and textures. The Botanical Garden extensions (approximately 20-45 acres) will provide seamless landscape transitions and add to the overall landscape character of the Park. Educational themes of the Botanical Garden will stress the ecological values of plants such as low water usage. In keeping with historic precedent, New Zealand tea trees (Leptospermum), "whose branches, as noted in early writings, “will droop into the lake and give a most pleasing effect," will be planted as accents along the bulkheads and at the gateway entries into the Park.

Ecological Systems

Prior to the 1909 Park plantings, the existing site supported groves of oaks and a few buckeye trees. Today striking specimens of this period still exist and add to the rarity of the Park's collection of trees. The Landscape Plan extends clusters of Valley and Blue Oaks along the Lakeside and Lakeshore portions of the Park where site conditions permit.

Low groundcovers under oak trees will provide native oak woodland habitat for plant and animal species and reduce maintenance. A balance of open lawn areas and groundcover areas will help to restore bird and animal resources.

Along the Ecological Zone a restored tidal marsh is envisioned, consisting of upland and wetland habitat and vegetation. In the Ecological Zone Area, the water's edge will be supplemented with wetland plants to enhance bird habitat. The walkway will be pulled back from the water's edge to allow more extensive wildlife habitats, similar to those existing prior to the undergrounding of creeks and damming of the estuary, and to provide more natural viewing areas for people.



Riparian Corridors

The large arterial streets surrounding Lake Merritt follow the route of the four creeks that formerly drained into the Lake Merritt estuary: Trestle Glen Creek (Grand Avenue / Lakeshore Avenue), Glen Echo Creek (Harrison Street), Park Boulevard Creek (Park Boulevard- Foothill Street) and San Antonio Creek (12th Street). Current conditions along these former riparian corridors are as follows:

- Trees along Grand Avenue are London plane trees with limbs pruned back. Past the freeway the trees are evergreen flowering pear trees. Foothill Street has London plane trees in the street median and scattered trees and vegetation in Athol Park and along the sidewalks.
- Many of the existing plantings along these streets are an accumulation of smaller landscapes and not part of a large cohesive design theme. Scattered trees exist along both Lakeside Drive and Lakeshore Drive.

In order to visually recall the former creeks, riparian planting is proposed along these corridors, as outlined in the following table.

Botanical Name	**Common Name**	**Comments**	**Habitat**
TREES			
Platanus racemosa	*California Sycamore*		X
Alnus rhombifolia	*White Alder*		X
Acer macrophyllum	*Big Leaf Maple*	where conditions permit	X
Salix babylonica	*Weeping Willow*	where conditions permit	
SHRUBS			
Calycanthus occidentalis	*Spice Bush*		X

Figure III.25 Existing Forest

Urban Forestry Program

Existing Conditions

Lake Merritt Park provides the City of Oakland with a signature urban forest in the heart of downtown Oakland, including many historic and heritage category trees, such as oaks, California buckeyes, and New Zealand tea trees. In general, trees in Lake Merritt Park (including Lakeside Park) fall into the following three groupings:

1. Grown prior to European settlement (1800s) - including scrub oaks and woodland oaks (Quercus agrifolia, Quercus kellogii, Quercus douglasii).
2. Planted from 1909 through 1915 - including deciduous oaks, Quercus cerris, rubra and coccinea, groups of pines (Pinus austriaca) and birches (Betula alba), madrones and flowering cherries. Included are specimen trees from the 1915 World's Fair.
3. Planted to replace diseased trees and sporadic plantings from 1950 to present.

Many of the Park's trees are at the end of their life span; the age of most forested sections of Lake Merritt is 87 years. Over-mature trees are susceptible to pests and diseases, wind damage and hazardous weakening effects. Reforestation efforts need to be more aggressive to sustain the value of this urban forest and its wildlife and recreation value to the City of Oakland.

A comprehensive forest-management program is needed. New trees have only been sporadically planted largely due to the political climate of preserving views of the Lake. On a larger scale, it must be recognized that these forests also support a wide range of wildlife and will need to be replanted for wildlife habitat. New trees have not been routinely planted to offset the aging of the forest. Very few trees have been planted along the eastern, western and southern shores of the Lake. Luckily many of the oak trees have a longer life span. However, the effects of new oak diseases have not yet been clearly considered.

Goals

A reforestation program should be established that operates at a 25-30-year replacement cycle and includes the eastern and western shores as defined in the Landscape Plan. Consistent with the Existing Vegetation Plan, reforestation would serve the following goals

- Aesthetic - framing vistas, defining open spaces, including areas of smaller parks in Lake Merritt Park (i.e., Pine Knoll Park), accentuating riparian corridors (gateways), and providing color and visual accents.
- Habitat - multi-story landscape providing a diversity of habitat, food sources and canopy.
- Boulevard street trees - providing a border and extension of the Park boundaries beyond its present edge.

Forestry Recommendations

Specifically, the reforestation program should include the following elements:

- Public Information: Provide the public with information about the reforestation project and process through informational brochures and signs at the sites and at the Rotary Nature Center.
- Native Plant Preservation: Preserve the remnant native plant population, especially the oaks and California buckeyes. Educate the public that this is an oak preserve and that other oak areas will be re-established in the historic areas such as Lakeside Drive, Lakeshore Drive and the 12th Street Peralta Park areas. Prepare gateway areas for Riparian-native populations and replanting at the gateways of El Embarcadero - Eastshore Park, 18th Street, Harrison - Adams Park area, and the Estuary Channel area.
- Specimen Tree Replacement: Replace individual large trees in kind, with similar species, such as the Italian stone pines along the promontory in Lakeside Park. Other large trees such as the California buckeye could be planted around the Bandstand areas. The New Zealand tea trees and the Auraucaria tree outside of the Botanical Gardens should be identified and addressed in replacement cycles.
- Reforesting High-Use Areas: Reforest high-use and high-visibility areas in Lake Merritt Park (Boathouse, Sailboat house, Tropical Garden area, New Promenade area, Duck Pond Feeding area, etc.) with larger trees rather than seedlings. Options include using trees being removed by the tree-spade method and moving them to new sites.
- Tree Maintenance: Provide ongoing maintenance of structurally weak trees that present risks to the health and safety of the public and property. These need to be identified, monitored and removed as an ongoing safety program. The Arborist Division of the City of Oakland is addressing safety issues but is in need of more current databases and tracking systems as afforded by a GIS tree system.
- Reforesting Plant Communities: Use species and forest communities similar to those identified in the Existing Vegetation Survey and Analysis. For example, Coastal Bluff plant communities should utilize a range of species similar to those found within the existing plant community.

Construction Coordination with Wildife

Timing of construction can have a major impact on the wildlife and habitats in the area. Different components of the new park developments should be planned and timed to ensure that any negative impact is minimized, e.g., avoid lopping trees when birds are known to nest during breeding seasons.

Visual Analysis

12th Street Panorama

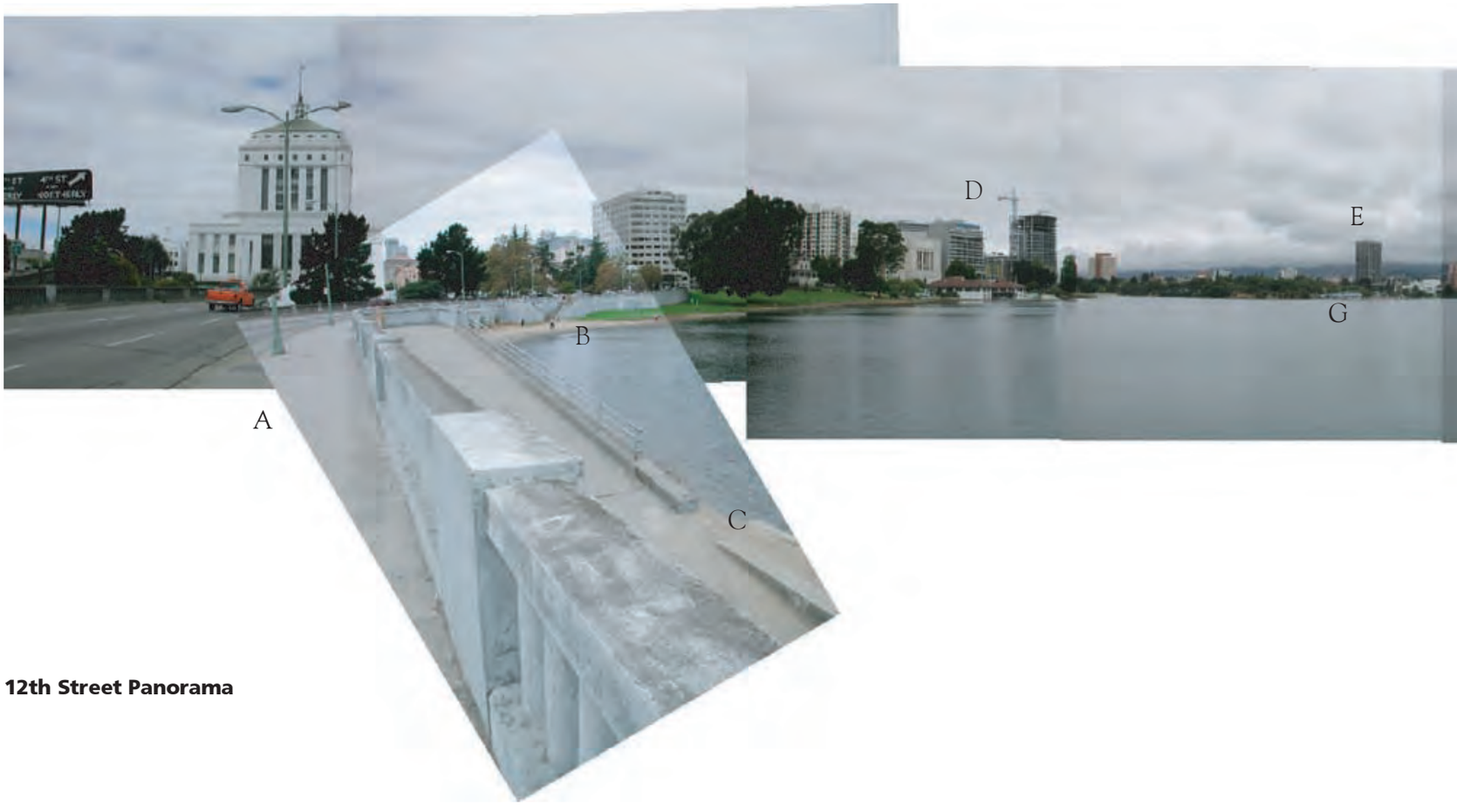
The 12th Street panorama provides many opportunities for interpretive art. The view to the north provides views of the Oakland hills and part of the watershed for Lake Merritt. There is one large building that mars the low, mass of buildings with the Oakland hills beyond. The Park portion of land is narrow and the promenade continues along the 12th street "short freeway." This is the site where the estuary water entering and exiting the Lake can be defined. It is also the historic site where the first bridge—Bridge of Sighs—connected the old township of Brooklyn and Oakland. It has a colorful history that can be interpreted here. This portion also links the Lake with Kaiser Convention Center, the Oakland Museum and Laney College. To the west is the Fire Alarm building. This site can be improved with more civic uses and landscape - park connection to the Lake.

A. Fast-moving vehicular traffic conflicts with pedestrian, bicycling activities or crossing to Kaiser Convention Center area. Provide elevation or landscape separation experience to buffer from vehicular traffic.

B. 30' to 40' wide beach at low tide used for two regattas, in July and October.

C. High tide - narrow path to ramp access. Ramp is not to ADA codes. Second area where public can contact water's edge / lake water.

D. High-rise building can frame views across the Lake, however their mass can be imposing and unattractive. Higher degrees of facade articulaiton are desirable.



12th Street Panorama

E. Few high-rise buildings on hill preserve Oakland Hills views.

F. Positive view of Oakland hills. Maintain low building heights to preserve view of Oakland hills beyond.

G. Views of sailboats and opposite shores.

H. High-rise building frames view.

I. Saltwater inflow opportunity to make tides readable.

Snow Park Panorama

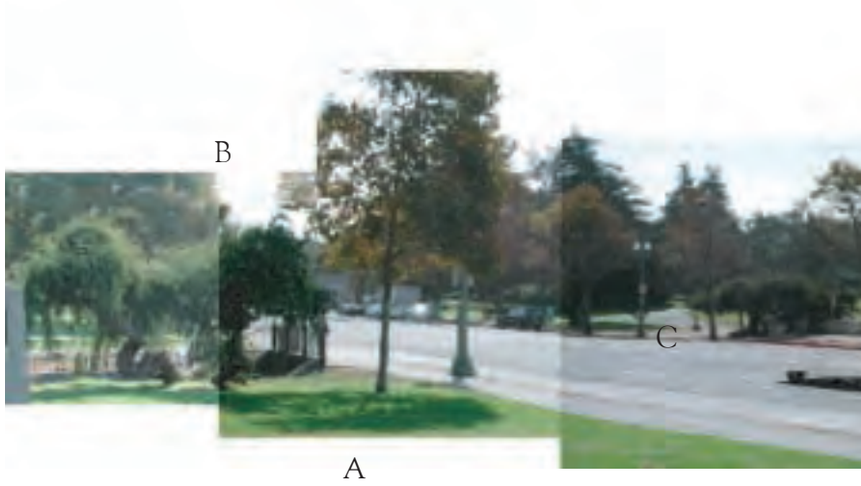
Snow Park panorama provides a large park space for commercial office workers. The expansive lawn is sometimes used by geese and their feces remain. The lawn provides a sweeping view up to the Lake with water barely visible through the park setting of mature trees. Lakeside Park looks very wooded. Additional siting of trees can visually screen the two predominant high-rises from this view. This park is a vital pedestrian link between the commercial downtown area and Lake Merritt.

A. Light standards create visual "noise" and clutter.

B. Cedar trees provide evergreen screening of buildings.

C. Good landscape views of Lake Merritt, trees and banks from Snow Park.

D. High-rise building diminishes view. Provide additional evergreen trees for screening.



Snow Park Panorama

Grand Avenue Panorama

Grand Avenue Panorama

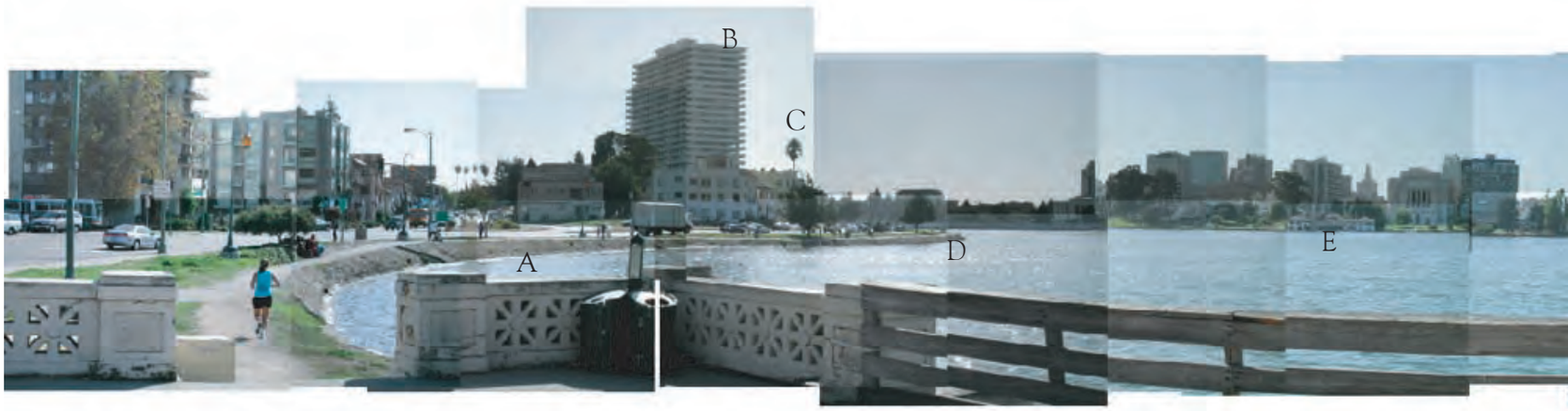
From the Grand Avenue panorama, the lawn groundcover creates a strong and positive horizontal band, extending the Park and providing visual respite from the built environment. Trees and landscape fronting the tall apartments and high-rises add significantly to the "extension" of the Park and increases the Park's apparent size. The commercial high-rises form a strong edge that is softened on the east side by the Park trees.

A. Open lawn area.

B. Mature New Zealand Tea trees have specific pruning requirements. Only a qualified arborist should prune them since damage done by inappropriate pruning will kill trees. Veteran's Memorial Auditorium Grove provides good specimens of New Zealand Tea trees that have not been damaged.

C. Lawn groundcover provides positive horizontal view.

D. Trees and landscape fronting tall buildings provide visual extension of park beyond park boundaries.



Lakeshore Avenue Panorama

Lakeshore Avenue panorama has an open feeling. There are few trees lining the Park boundary at this location. The large apartment building to the south is less intrusive at this point and probably provides residents with striking views of the Lake. From this vantage point the Federal Courthouse is visible. The Lake appears very large with a built skyline to the southwest and the Oakland hills to the northwest. The Park appears most narrow at this panorama.

A. View of apartment building's narrow side is less intrusive.

B. Retaining wall with no landscape.

C. Federal Court House.

D. Sunny open lawn area.

E. Historical Cameron Stanford House.

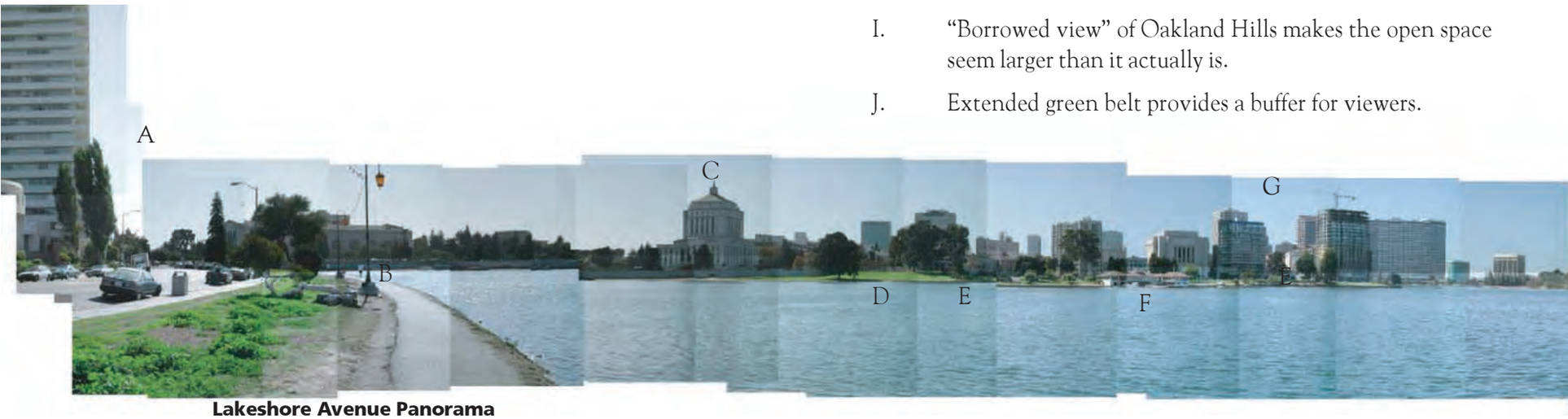
F. Park setting around Boathouse.

G. 19th Street skyline provides a backdrop of the Lake view.

H. Open Lake view.

I. "Borrowed view" of Oakland Hills makes the open space seem larger than it actually is.

J. Extended green belt provides a buffer for viewers.



Lakeshore Avenue Panorama

18th Steet Panorama

18th Street Panorama

The historic pier is on axis with the Boathouse, builit in 1915 and now housing the Parks and Recreation offices. From this vantage point, the green lawn is a positive visual amenity. This historic building site is enhanced within the landscape setting. The building provides a strong architectural façade and sets the tone for the rest of the architecture within the Park. The view of the downtown skyline is striking. The banks need landscape improvements to the south and north of the pier. To the south of the pier is a view of the only angled bank where goslings can exit the lake (besides the boat ramp at the Sailboat house). The pier is in need of restoration. The balustrade details provide a solid architectural element that is enduring and important to maintain.

A. Balustrade details of 18th Street Pier provides historical time setting, pier in need of repair.

B. High-rise building provides housing density in relationship to ground area used. Guidelines for landscape trees or terraces could soften impact from ground view.

C. Existing palm tree creates striking look against skyline.

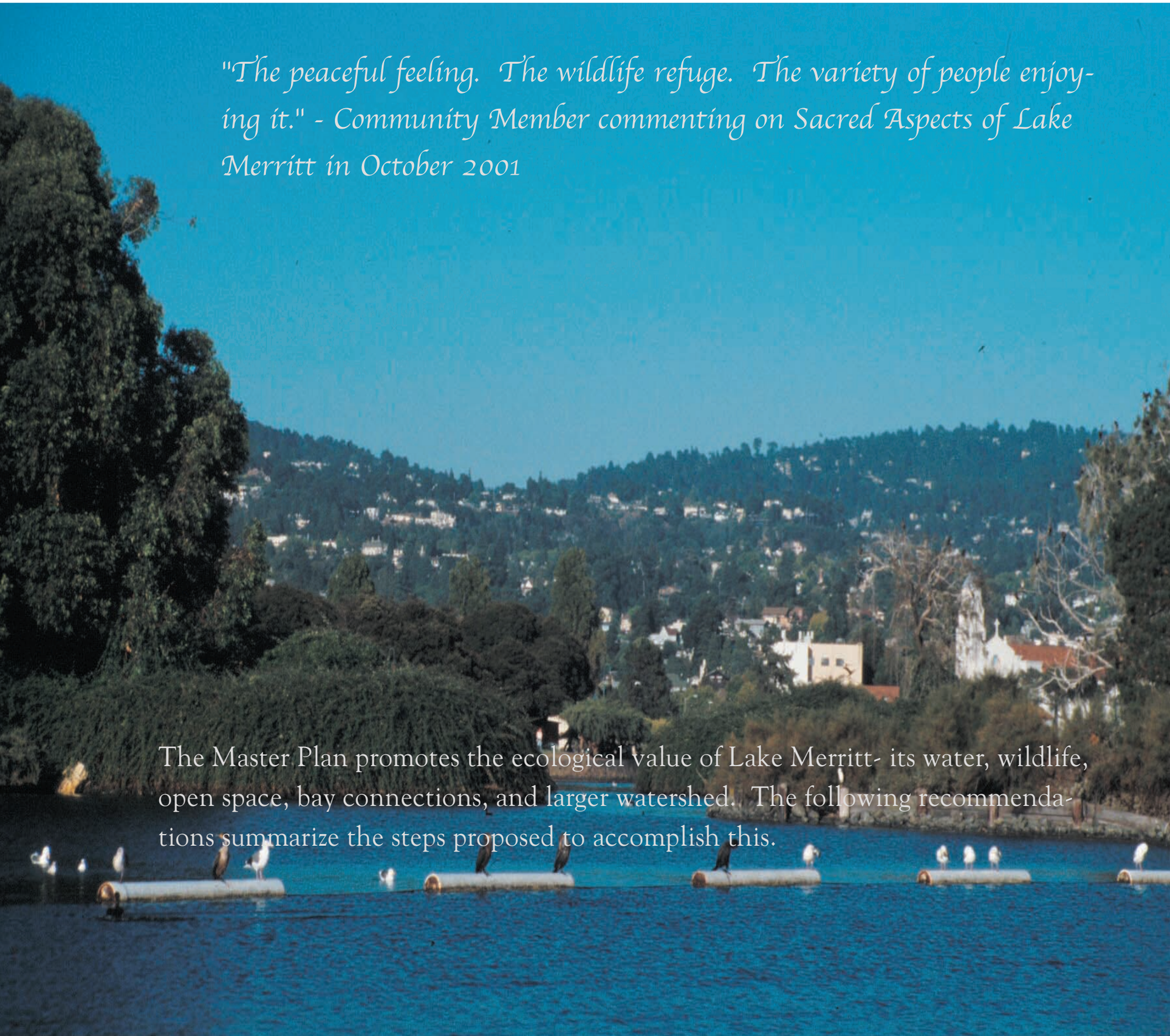
D. View of angled bank from 18th street pier provides one of the few places where goslings can exit the lake.

E. Boathouse is on direct axis view from 18th street pier, view provides park architectural setting.

F. View of 19th Street building skyline from 18th street pier.

G. Band from green lawn enhances view. Banks of soil need improvement

ECOLOGY



"The peaceful feeling. The wildlife refuge. The variety of people enjoying it." - Community Member commenting on Sacred Aspects of Lake Merritt in October 2001

The Master Plan promotes the ecological value of Lake Merritt- its water, wildlife, open space, bay connections, and larger watershed. The following recommendations summarize the steps proposed to accomplish this.

Recommendations

Water Quality

1. Improve water quality by controlling pollution in the watershed. This should be accomplished by:

- A significant increase in enforcement of litter laws
- Continuous educational campaigns targeting businesses where litter is generated
- Educational and enforcement campaigns to eliminate waterfowl feeding
- See applicable activities on list of projects from water quality task force.

2. Control and remove trash that enters the Lake from storm drains and from the shoreline. This should be accomplished by:

- Installation of storm drain filters (CDS or other brand) five each year for 12 years
- Continuation of the Clean Lake Program to remove trash from the Lake.
- Building hook shaped "trash traps" into the shoreline at several locations when the bulkhead wall is replaced.

3. Improve water circulation in the bottom layer of the Lake by enhancing the connection to the estuary via the channel. This should be accomplished by:

- Forging an agreement with Alameda County to make tide gate closure decisions on a 12 hour basis.
- Removing the culvert condition at 12th Street and lowering the weir elevation to a point that maximizes water flow while minimizing disruption to recreational and scenic resources.
- Eliminating flow obstructions in the channel such as the culverts at 10th Street, the Flood Control Station (7th Street), the railway tracks and utility structures.
- Completion of a hydrology survey to recommend specific Lake water levels and alternatives for achieving these.
- Relocating the Alameda County pump facility to a location closer to the Lake and drawing water from the bottom of the Lake.

4. Provide for long term control of sediment, seaweed and plankton. This should be accomplished by:

- Continuation of algae and widgeon grass harvesting with establishment of several sanctuary areas
- Obtaining a small, city owned dredge boat (run by the harvester operator) to reduce the area of widgeon grass infestation and remove sediment around storm drains and docks
- Based on monitoring data, targets for reduction of nitrogen entering the Lake from creeks and storm drains should be established.

ECOLOGY

Figure III.26 Ecology

Wildlife

1. Enhance specific areas for wildlife, including creation of a ecological zone in Lakeside Park (Shoreline Zone). This should be accomplished by:

- Moving the path away from the shoreline in key locations, creating a more natural (slight gradient) shoreline, relocating inconsistent uses such as parking lots, active playgrounds, and operations that are not waterfront dependent.
- Calming motor and pedestrian traffic near the duck pond by expanding walkways, and separating users
- Creation of a paved fresh water pond at the mouth of outfall # 1 by the Bandstand beach
- Creation of a wetland area by removing the center of one of the islands, depositing it around the shoreline, and creating a fresh water pond within the island
- Implementation of a habitat improvement plan on the islands
- Providing perches for birds on the water side of the perimeter bulkhead walls

2. Restore a managed, youth fishing program, beneficial to those from all areas of Oakland. This should be accomplished by:

- Accepting offers from the state Department of Fish and Game to stock steelhead trout and conduct "Fishing in the City" programs.
- Establishment of rules including "no fishing" zones in natural areas or where conflicts with other park users may occur
- Requiring completion of an educational program prior to obtaining a mandatory city fishing permit

3. Establishment of a policy that the wildlife refuge should be managed primarily for migratory waterfowl. This should be accomplished by:

- An educational campaign to eliminate public feeding of birds
- Management to reduce overwhelming concentrations of pigeons, resident geese, and similarly domesticated fauna

Goose Management

The unique balance between wildlife and human users at Lake Merritt is threatened by the large populations of geese. Both recreationalists and geese utilize the lawn areas of the park. The presence of fecal material from such high numbers renders the areas unusable for human recreation. Walkways, docks, bowling greens, and tables are also covered in goose excrement. This is especially problematic in areas where children congregate and during molting season (June to August). Geese feed on the mown lawns and are attracted by the visual openness. The geese typically congregate nearer the shoreline, however it is not uncommon to find them along Grand Avenue or in Snow Park.

The LMMP recognizes the need to review potential wildlife management practices to ensure that the notion of refuge is afforded to all. During the outreach process, many voices in the public expressed that geese are negatively impacting the park. As a significant ecological resource, Lake Merritt management should be sensitive to habitat provisions for wildlife. Practices should emphasize native avian species (shorebirds, migratory waterfowl) and fisheries. By implementing a range of techniques, domesticated wildlife such as geese should be brought into balance with other species and park uses.

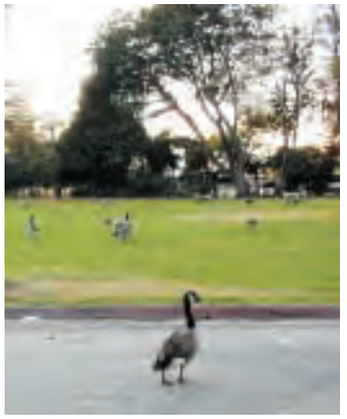
Background Information ("Managing Canada Geese in Urban Environments")

- Canada gee se have undergone a significant population increase from a few thousand in 1965 to 1.1 million in 1996 in the central United States alone.
- Lake Merritt is not a historic site for large goose poulations. In the 1940's several crippled birds were released. Their numbers grew to about 75 in 1994. By 2001, a total of 1,093 birds were noted before fall migration. After migration, about 400 resident geese remained.
- Heavy concentrations of goose feces contain nitrogen which can lead to excessive algae growth in Lakes.
- High concentrations of geese increase the likelihood of avian disease to be transmitted between geese and other waterfowl.
- Migratory patterns have been researched and coordinated with habitat protection.
- Geese at LM molt in summer early June to late July-they are flightless during this time and concentrate along the shoreline. Numbers at the lake increase dramatically during this period causing increased conflicts with the park's most popular summertime use by humans.
- Geese prefer fertilized lawns to unfertilized ones and graze on the young grass shoots.
- Goose management programs to reduce the size of local flocks have been initiated at numerous sites in the Bay Area.

"Need to separate feeding and bird congregation areas from public paths where everybody walks." -Community Member commenting on geese at Lake Merritt in October 2001.

Lake Merritt Site Conditions

- Studies have shown that geese excrete 10,000,000 fecal coliform bacteria per day. A total coliform count of 170,000 (unit unknown) was recorded near the bird islands in April, 2000.
- Open grass lawns near lake edge are populated with geese.
- Gatherings of 2-200+ geese are common.
- Fecal material covers all lawn areas inhabited by geese.
- Playground near Rotary nature Center has extensive fecal material.
- Accumulation of feathers is visible in the shallow water.
- Visitors feed and greatly enjoy the presence of geese.
- Nesting areas on the lake's shore are few- Geese are opportunists and will find small, protected spots in man made structures or high use areas. Natural lake edges like bluff segments in Lakeside may be used. Most successful nesting occurs on the refuge islands.
- Goslings appear on lake with adults during April.



Goose Habitat Conditions in Park

- Geese prefer open grassy areas where they feed on new grass growth.
- They tend to prefer park areas that are near or in sight of the lake.
- Geese require fresh water and congregate in areas of wet grass where available.
- Geese avoid areas frequented by dogs.

Goose Management Recommendations

Limit goose access in areas extensively used by people. This should be accomplished by:

- Initiating a Goose Management Study to determine the best practice techniques for reducing the impacts of geese on themselves, vegetation, other wildlife, and recreational users. This may involve commencement of a trial use of commercial Goose-Buster service to prevent geese from congregating in designated recreation areas during the summer.
- Creating a zone within Lakeside Park (Free and Open Space Zone) that emphasizes unimpeded use of lawn areas for informal recreation without disruption by goose fecal material.
- Eliminate the feeding of geese by park visitors.
- Reduction of grass and replacement with vegetative cover to that prevents grazing by geese in designated areas; increasing mowing height elsewhere.
- Establishment of vegetative visual and flight barriers to discourage geese from congregating in designated areas.
- Allowing on-sidewalk leashed dog walking per city park code.

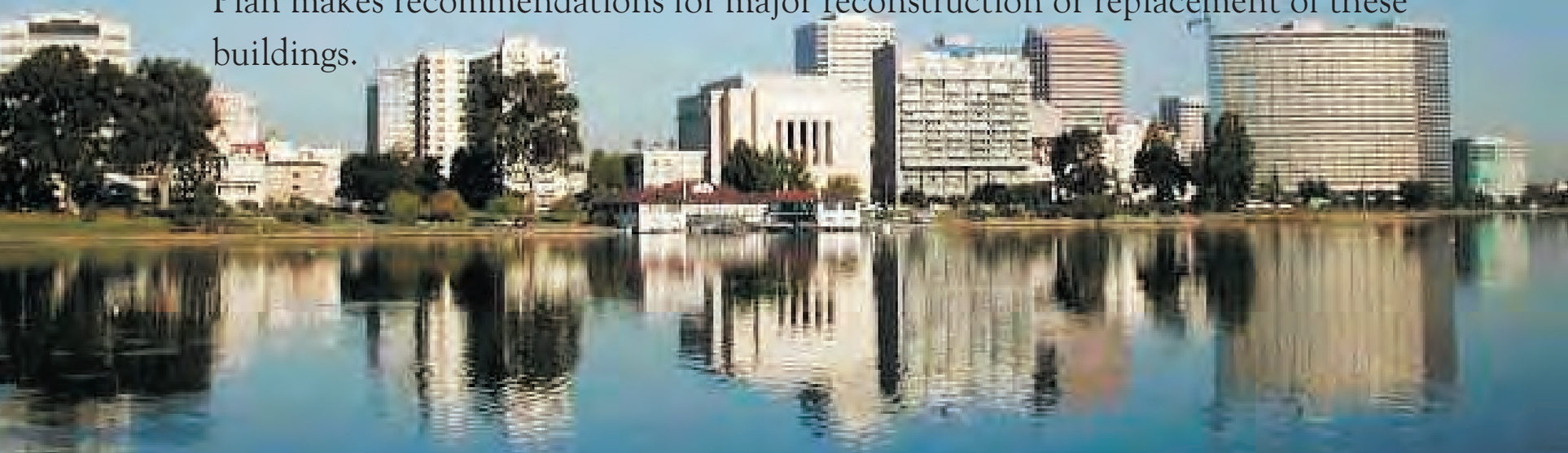
BUILDINGS

General Architectural Background

The buildings of Lake Merritt have evolved over a ninety year span, from the Municipal Boat House (originally constructed as the high-pressure salt water pumping station), to the recent Police Horse Stables. Understandably, there is a wide variety of styles, materials, scales, methods of construction, etc. in the architecture.

The buildings included in this study can be divided generally into two categories based on era of construction. The first era includes buildings constructed between 1909 and 1926: specifically, the Municipal Boat House, the Sailboat House, and the Lawn Bowling Clubhouse (and related outbuildings). The second era includes buildings originally constructed in the 1950's; the Rotary Nature Center, the Lakeside Park Garden Center, and the building which houses the Junior Center of Art and Science.

It should be noted that the Sailboat House and the Junior Center of Art and Science building have had major alterations during their history. in the case of the Sailboat House, the remodel has completley altered its appearance. The Master Plan makes recommendations for major reconstruction or replacement of these buildings.



Extents of Study

The Lake Merritt Master Plan focuses on exterior form and appearance of existing buildings and makes suggestions for future construction. The eleven buildings included in this study are:

1. Municipal Boat House
2. Municipal Boat House Restrooms
3. Sailboat House
4. Sailboat House Restrooms
5. Sailboat House Storage
6. Lawn Bowling Clubhouse
7. Lakeside Park Garden Center
8. Rotary Nature Center
9. Junior Center of Art & Science
10. Police Horse Stables
11. Snack Bar

There are other significant buildings and structures in and around the Park which should be evaluated and be involved in any discussion of architectural character of the Park's structures. Specifically, these are:

12. Camron Stanford House
13. Glen Echo Pump House
14. Glen Echo Restrooms
15. Edoff Bandstand
16. Garden Center Restrooms
17. Corporation Yard
18. Greenhouse and Lath house
19. McElroy Fountain
20. Geodesic Dome
21. El Embarcadero Landing Pergola
22. El Embarcadero Library
23. Library Restrooms
24. Pine Knoll Restrooms
25. Fire Alarm Building
26. Snow Park Restrooms

BUILDINGS

Figure III.27 Buildings

Architectural Goals and General Recommendations

The Lake Merritt Master Plan makes four types of recommendations for the buildings included in the study.

1. Buildings to be revived/restored

2. Buildings to be rehabilitated/reconfigured

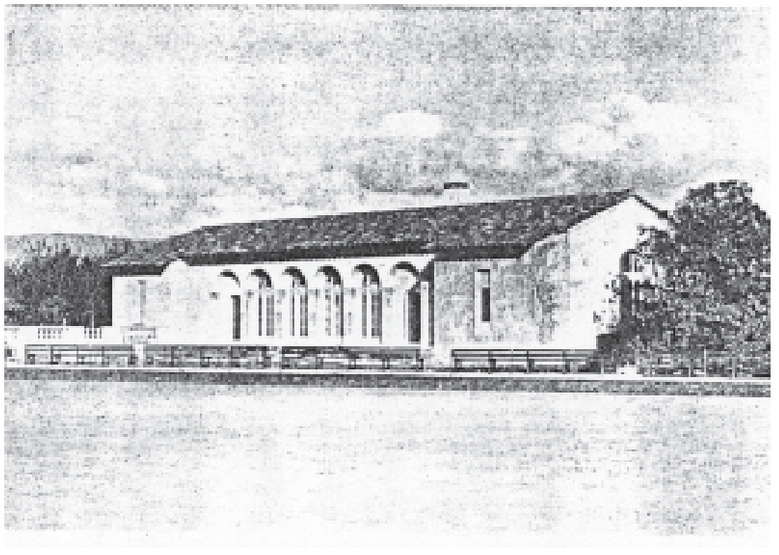
3. Buildings to be removed or relocated

4. New buildings

Buildings to be revived and restored include the Municipal Boathouse, and the Lawn Bowling Clubhouse. These are two of the defining buildings of Lake Merritt Park. They possess many inherent qualities which should be revived and encouraged. Restoration should be performed to the U.S. Secretary of the Interior's standards. Additions of poor quality should be removed or reconfigured in a manner which is sympathetic to the building's character, yet readily identifiable to avoid false historicism.

Buildings to be rehabilitated and reconfigured include the Sailboat House and the Lakeside Park Garden Center. While the Sailboat House will require major work to uncover the original character of the 1915 building, and integrate it with the site, the Lakeside Park Garden Center can be improved with a handful of discreet projects in key areas. The bulk of the building should remain intact.

Buildings which are intrusive, and detract from the Park should be removed or relocated. Two buildings which should be removed from the Park are the Police Horse Stables and the Snack Bar. A third, the building which houses the Junior Center of Art and Science (JCAS) should eventually, also be removed. A new building should be constructed to house the Junior Center of Art and Science, allowing the programs that this non-profit group offers to operate without interruption. This new building could also provide space to other educational programs and serve as a police sub station. In the interim, minor renovations to the existing JCAS building that improve its function and relate it to the park improvements are recommended



General Building Recommendations

General architectural goals for new and existing buildings include:

1. To strengthen the relationship of the buildings to the landscape, using the buildings to help define outdoor spaces.
2. To strengthen the relationship between buildings by enhancing or introducing vistas, axes, etc.
3. To preserve key views and vistas around the Lake, and reinforce or establish view corridors where appropriate.
4. To enhance the sense of entry into the buildings.
5. To engage public interest with the buildings and invite interaction with the architecture, through introduction of courtyards, verandas etc.
6. To locate possible new buildings within the park, with the stipulation that there be no net increase to the overall ground coverage by buildings.
7. To provide a unified design theme for the two building types and new structures, this may take the form of materials, color palette, form, orientation, siting, etc.
8. To clearly identify building use through a unified signage program and where applicable, through use of materials, forms, and artistry.
9. To incorporate sustainable architecture, including use of recycled and environmentally friendly materials and methods.
10. To encourage passive systems for energy conservation wherever possible, and active systems, such as solar panels where not.
11. To provide accessibility to all buildings for people with disabilities.

Specific Recommendations for Future Buildings

1. Buildings should be of a civic scale, with monumental presence.
2. Architectural materials should be durable and solid, such as concrete or stone, to suggest permanence.
3. No new building should be more than two stories tall.
4. Accessory or secondary buildings should not overshadow or obscure primary park buildings.
5. New buildings should be sited on major circulation routes, as defined by the Master Plan.
6. Park buildings should be integrated into the landscape.

Opportunities for Future Study

While the Master Plan does include façade improvement studies for existing buildings and thematic standards for future buildings, additional examination of the buildings should be performed as part of a complete study. This work might include seismic/structural, planning/use, mechanical/plumbing/electrical systems, hazardous materials, and accessibility compliance studies.

SHADOW STUDY

Figure III.28 Shadow Study

Sunlight Access and Shadow Study

Tall buildings are located on the perimeter of the Lake casting deep shadows into the parkland. This is problematic in that it reduces solar access for park users and disrupts the normal growing conditions for park vegetation. Furthermore, the imbalance of scale presented by these masses creates an uncomfortable sensory condition for those using the lawns, pathways, and benches nearby. This is further described in the Landscape section of this chapter though the use of panoramic photographs. The public has expressed concern for the negative impact of such structures, often characterizing the feeling as being "walled in." While the Master Plan presents no formal policy to non-park land use and massing, the effects are stated below. General recommendations are also stated to educate planners of future area buildings. No visual preference survey was completed during the planning process, however much public comment was received to substantiate this discussion.

Existing Conditions

- Buildings that cast continuous shade on the park (including Snow Park) for more than several hours each day negatively impacts vegetation growth.
- The blockage of afternoon/evening sunlight provides further negative impacts to park use and enjoyment.
- Groups of buildings form a continuous mass that can further block sunlight from reaching the park.
- Tall buildings (20+) floors standing alone are visually distracting when viewed from a distance (such as the several residential towers built around the Lake in the 1960's and 70's) .
- Four to twelve story residential buildings that have greater façade articulation and tall trees in the foreground generally provide a positive atmosphere. Examples of these are found on Lakeside near Snow Park and on Lakeshore Avenue.
- The view of tall buildings on the downtown edge are generally more scenic when viewed from across the lake as opposed to from the Downtown Park Edge due to the more comfortable scale relationship between people and buildings afforded at that distance.
- If heights were maximized per allowable zoning, the shade on park areas would be great (refer to figure III. on the facing page). Design review is required in most zoning areas of significant height.

General Recommendations

- New buildings should minimize interruption of sunlight into the Park.
- District zoning, design guidelines, and FAR regulations should consider building mass impact to park scale and sunlight access.
- Buildings should accommodate ample room for tall tree plantings in the foreground and along the street.
- The design review process required by most adjacent zoning should consider sunlight access and building mass impacts to the park and its users.
- The placement of new buildings should consider views to popular landmarks from the Lake Merritt park areas. These could include the County Courthouse, the Kaiser Convention Center, the Oakland Hills, St. Paul's Church, the Tribune Building, and others of visual importance.

ART ELEMENT

The Lake Merritt Master Plan supports the City of Oakland's commitment to weaving arts and culture into the fabric of everyday life. Public art as an "element" of the park master plan maintains an openness of application. The art may include, singly produced objects, functional designs, a process of creation and collaboration, or an overall approach and design of a place. The art may be the product of individual artists' creativity or the result of collaboration between artists of different disciplines, designers, architects, and community members. The resulting condition can be a landscape of meaning and visual intrigue.

Through "Spotlight on the Arts", the Craft and Cultural Arts Department is seeking to establish Oakland as the center for artistic-cultural events and entertainment in the Bay Area. From downtown renaissance projects to the restoration of Lake Merritt, the opportunities to promote arts and culture are found throughout our city.

The LMMP recognizes opportunities for artists to reflect the unique environment, culture and social conditions of Oakland, its neighborhoods, history, natural resources, and people. The intent of the art element is to describe the many opportunities for integrating arts into the revitalization of the park. No specific projects are determined, nor is a single arts approach recommended. Rather, the master plan sets the thematic and programmatic content of the Lake Merritt Park art element. The plan then acts as a guide to shape the artistic exploration of concepts and projects as part of the art element. This chapter describes the opportunities and highlights the guidelines.

Opportunities

Art Element Overview

Environmental Art

Natural conditions/processes should be recognized as a basis for site design and restoration. The landscape -more specifically, the art element-should integrate ecology as a function of the park and provide a means of its interpretation. Suitable locations for this type of expression could include the shoreline restoration in Lakeside Park; creek daylighting in Eastshore Park; other creek nodes, bird perches, storm drain filter covers, etc.

Designed Elements

Artists and craftspeople should be included to provide aesthetic input on functional elements in the park. Elements could include railings, fences, docks, botanical garden entries and perimeter fencing, neighborhood nodes (paving, seatwalls); historic markers and signage, entire promenades, low retaining walls, sections of the perimeter path, etc.

Collaborative Design Process

Many successfully designed and built projects are the result of collaborations between artists and designers. The process requires the partnership and collaboration of minds to conceive and execute such a work. Such an effort obscures the line between landscape and art, between meaning and aesthetic. Any improvement project is applicable to this process including zones or spaces within the park; entrances, nodes, and gateways; buildings recommended for restoration, remodeling or new construction; and park amenities.

Environment for Display

In addition to the incorporation of art as a design process, the lake and park offers a unique setting for the display of permanent and temporary sculptural work. The civic district of the park- stretching from 14th Street to the Estuary- is a potential area for sculpture display. Specific sites include the new 12th Street park area, the Fire Alarm Building Site, and the plaza at the 14th Street terminus. The Oakland Museum is recognized as a potential partner in the sculpture component and arts zone overlay.

ART ELEMENT

Ecology

The art element should reinforce the park's ecological heritage and potential. By highlighting the creeks, watershed, habitat zones, and natural systems, the story of ecology can be made evident.

Education

An understanding of natural processes, horticultural diversity, cultural heritage, and the history of Lake Merritt can be reinforced through the application of the art element. The plan describes several methods for application under Opportunities.

Recreation

The park is used by many as a place for recreation. Provisions for these movements could be explored through the art element. For example, park amenities such as benches, signs, or walls, could combine exercise functions into their design; pathways could mark the pace or distance traveled of a jogger. The components could be artistically designed to serve a multipurpose role in the park.

Culture

Culture is an underlying theme to all aspects of the master plan. Oakland's urban form, social composition, ecology, history, and present activities each shape the notion of local culture. The art element can reflect the unique character of Oakland, its peoples, neighborhoods, built form, history, and natural environment.

Art Element Recommendations

- The art element should be compatible with and enhance ecology/resource sensitivity.
- The art element should enhance the historic, cultural, aesthetic, and interpretive potential of the park and support the park program and management per the master plan and the department of Parks and Recreation.
- The art element should conform to applicable design guidelines for functional park elements, while enhancing the aesthetic and educational possibilities of these necessary amenities.
- The art element should consider maintenance requirements and minimize the need for specialized practices.

DETAIL GUIDELINES

CHAPTER IV

12TH ST/CULTURAL DISTRICT

DOWNTOWN PARK EDGE

LAKESIDE PARK

GRAND AVE. PROMENADE

LAKESHORE AVE. EDGE

IRRIGATION PLAN

SITE FURNISHINGS

12TH ST / CULTURAL DISTRICT

Figure IV.1 12th Street Existing Conditions
Poor park access, 12 lane roadways, uninviting tunnel, limited park land at shoreline

Design Concept

1. Restore the Urban Fabric

The 12th Street area should be restored as part of the urban fabric of Oakland. It is the basic vocabulary of our communities- pedestrians, city streets, green parks, and natural areas- that should be use to form this new district. In this way, the following proposals seek to knit together the neighborhoods of the south end of Lake Merritt. The Kaiser Convention Center, Laney College, and the Oakland Museum should be reconnected to the Lake.

2. Connection to Channel Park and the Oakland Estuary

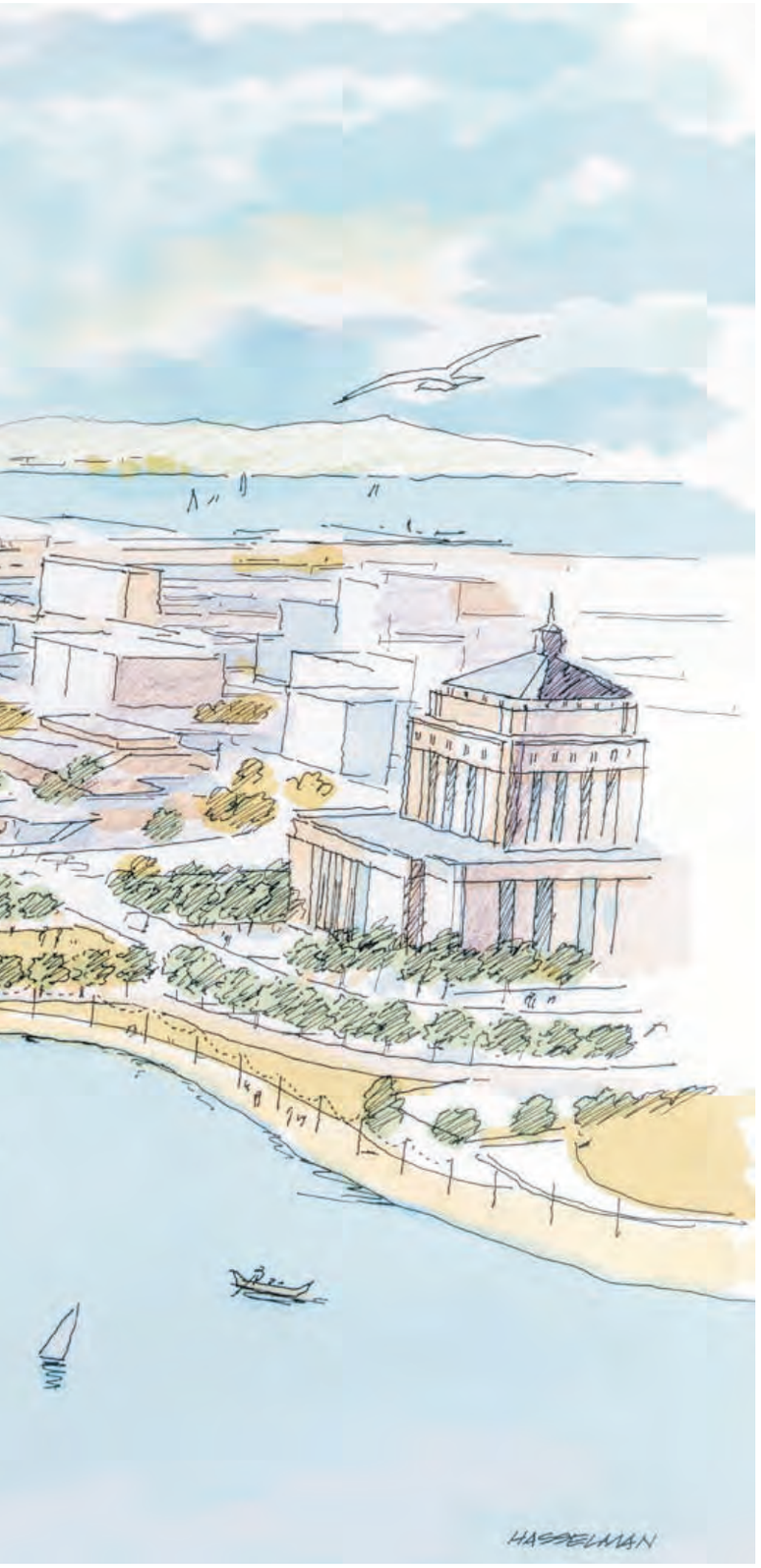
The lake is currently cut off from the estuary, both physically and in spirit. No safe pedestrian access is possible to Channel Park from the Lake. As the Estuary area becomes an attractive public destination, access must be improved in kind. The environmental health of the Lake is dependent upon tidal flushing through the channel. Removing barriers such as low culverts will allow for increased water exchange in the lake and improved habitat for fish and wildlife.

Figure IV.2 Proposed Plan
Reconfigure roadway from 12 to 6 lanes with center median, create shoreline park area with multi-use path, open lawn, special planting and beach, engage cultural district theme and proximity to museum with public art display, implement pedestrian street crossings

3. Cultural District

Several significant, civic entities make up the 12th Street district: the Oakland Main Library, County Administration Building, County Courthouse, Cameron Stanford House, Kaiser Convention Center, Laney College, Oakland Museum and the Fire Alarm Building. Recognizing the civic and cultural importance of these uses, the redesign of 12th street provides a stage for civic life, architecture, and grandeur. Large scale gatherings would be appropriate in this forum. The ornate Kaiser Building and grand courthouse should be unified with their setting. The BART station should be made more accessible to lake users.

12TH ST / CULTURAL DISTRICT



Recommendations

The plan proposes to create a grand boulevard and new shoreline park with connections to the Estuary.

Boulevard

- The 12th Street roadway area should be restored to a more typical street as found elsewhere in the center City by first eliminating the high-speed roadway. The plan reduces the number of lanes to six total and creates regular intersections to regulate traffic and allow pedestrian crossings. Pedestrian access between the Kaiser Center and Laney College to the Lake should be provided at signalized crosswalks wherever possible. A widened median should be provided to allow a person to wait between signal cycles if the distance proves too great to cross at one time. Signalized crosswalks should be provided at all feasible intersections and at a mid-point location near the Kaiser Convention Center.
- Bicycle lanes should be provided on the road.
- AC transit's express bus lanes should be provided on the outer parking lanes for use during peak weekday times. Weekends and mid-day times would allow for on-street parking.

Above: Exisitng conditions at 12th Street
Facing Page: Birds-eye view of proposed boulevard and park

12TH ST / CULTURAL DISTRICT

Shoreline Park

- Continuous green space and circulation around the lake should be a basic provision of improvements to this area. A continuous, multi-use path should provide access along the shore and across the channel. The path should connect to the Channel Park area.
- The new parkland should allow for a range of activities from kite flying to exercising and strolling. The design should emphasize open turf for informal use, promenades and multi-use paths for strolling, biking, and jogging. The shoreline should be developed as a gently sloped sand beach.
- Events should be accommodated on the large turf areas, roadway sections and Kaiser Center parking lot. The plan identifies opportunities for large scaled civic events to be held in this grand scaled park. Events of such size would be refrained from using other park areas where disruption to neighborhoods and wildlife is of concern.
- The proposed park design acknowledges the architectural formality of the Kaiser Center and County Courthouse by aligning trees and open areas to the building axes. By creating a "forecourt" to these significant public buildings, the urban fabric should be further reinforced. While the plan promotes enhancements to each building's setting, the response should not compromise the overall usability of the new park space.

Facing Page: View of proposed boulevard and park at Lake Merritt Channel

Estuary Connections

- Channel Park should be made accessible directly from the Lake. The plan proposes a multi-use path to pass under an elevated roadway bridge at 12th Street.
- Flushing of the lake would be improved by removing the culvert system and creating bridges for circulation over the channel. Kayak access between the lake and channel should be accommodated as feasible by future flood control operations.

Figure IV.3 Existing Conditions

"Great urban design promenade concept. Add gateways at Park Ave Terrace, Perkins as a node. Street design along creek corridors emphasize original creek preserves. Access: need very wide class I continuous multi-use path. Restoring boathouse is great." - Community Member comment on Lake Merritt in March 2002.

Additional Area Recommendations

- Partner with the Oakland Museum to develop a "Cultural District" with art and sculpture displays in the vicinity of the new boulevard and shoreline park.
- The Oakland Museum should be encouraged to open a special entrance onto the 12th Street area at the Kaiser Convention Center. The Kaiser parking lot area should be redesigned to complement such an improvement by the Museum. Further study should be completed as part of 12th street design and the Oakland Musuem Master Plan.

Oakland Musuem area facing 12th Street

Figure IV.4 Roadway and Park Section
Refer to figure III.15 for accurate dimensions

Figure IV. 5 Lake Merritt Channel Bridge and Path Access Section
Expanded necklace of lights

Other 12th Street Alternatives Studied

Alternative: Lid Park

A lid park alternative was studied as part of the master plan. The envisioned structure extended from the current Kaiser Center parking lot edge to the shoreline. The lid structure was planted as a park with walkways, lawn and trees. To the pedestrian, the lid provides unimpeded access to the lake edge from the Kaiser Center. Stairs provide access down to the shore. The roadway passed below the deck. In order for the structure to meet elevations critical to pedestrians, the roadway was lowered and shifted away from the water. No specific lane reduction was proposed. The alternative was identified as undesirable by the community participants and design team due to several factors:

- No direct estuary pedestrian connections were possible.
- Tidal flow was not improved from the current conditions.
- The structure would not enhance shoreline access.
- The costs to provide such a structure did not measure up to the benefits.

Alternative: Boulevard with Pedestrian Bridge

This alternative provided many of the same benefits as the recommended Boulevard and Park alternative. In contrast, a pedestrian bridge was extended over the reduced roadway connecting Kaiser Center and Laney College to the shoreline. The alternative was identified as undesirable by the community participants and design team due to several factors:

- The roadway should be designed to accommodate at-grade pedestrian crosswalks as a means of reconnecting the pedestrian network, calming traffic, and repairing the urban fabric.
- The master plan recognizes that future traffic and design studies in the 12th street area may suggest a scenario that makes pedestrian crossings less feasible. While not the recommended alternative, pedestrian over-crossings could provide safe access for walkers, joggers, and bicyclists.

The master plan recognizes that future traffic and design studies in the 12th street area may suggest a scenario that makes pedestrian crossings less feasible. While not the recommended alternative, pedestrian over-crossings could provide safe access for walkers, joggers, and bicyclists.

Circulation

Roadway Changes

A new six lane boulevard, potentially called "Lake Merritt Boulevard", is to be constructed connecting 11th/12th Street with 1st Avenue, between Oak Street and International Boulevard.

- There would be four new signalized intersections: 13th with 14th Street, Lake Merritt Boulevard with 14th Street, Lake Merritt Boulevard with Kaiser Convention Center, and Lake Merritt Boulevard with East 12th Street. There would be crosswalks at all intersections.
- The street would cross the channel on a bridge high enough for pedestrians and bicyclist to cross under it adjacent to the channel. Boaters would be able to access the channel from Lake Merritt, meeting a goal of the Lake Merritt Channel Project.
- The current pedestrian tunnels would no longer be needed and therefore be removed.
- On street parking and bike lanes would be provided. The parking lanes should be wide enough to be converted into bus only lanes for the future Bus Rapid Transit system during weekdays or peak hours.
- Driveway access to the large apartment building at 1200 Lakeshore Avenue, and the parking lot at the east corner of East 12th Street and First Avenue will be maintained.

Traffic Operations

- Lake Merritt Boulevard would be aligned with 1st Avenue and not with East 12th Street, because two-thirds of the traffic entering or exiting 12th Street on the southeast side comes from or goes to 1st Avenue. It collects from and distributes to International, East 15th, Foothill and East 18th Street. Only one third of the traffic on Lake Merritt Boulevard comes from or goes to East 12th Street.
- Three lanes would be needed each way to handle travel demand according to City Level of Service standards (LOS E or better) and to be integrated with three-lane one-way streets on the downtown end that feed it, such as 11th Street and 13th Street. A further lane reduction would probably cause unacceptable intersection level of service, congestion and queuing.
- This Master Plan recommends that the new signals on Lake Merritt Boulevard be coordinated.

Bike and Pedestrian

- The proposed roadway changes, especially the addition of bike lanes, would make bike travel across the channel much safer and more attractive.
- The bike lanes would fill in a gap in the regional bike network. This should make bike commuting into downtown far more attractive.
- The multiuse path along the lake and along the channel, under the bridge, would provide a great bike and pedestrian recreational route.
- Four new signalized intersections with crosswalks would provide multiple safe and convenient pedestrian crossing points across Lake Merritt Boulevard.

Parking

- When 12th Street is converted into Lake Merritt Boulevard and realigned, the parking between International Boulevard and the channel, next to the large apartment tower, would be moved about a hundred feet away from its present location. Open park green space would fill in the area in between.

- The parking added to 14th Street and Lake Merritt Boulevard (70 spaces) would mitigate the parking lost by the removal of Fallon Street (17 spaces).

Transit

The bus stop on 11th Street just as it exits the tunnel should be moved, and a new westbound bus stop created. The two stops should be located at the intersection with the convention center access road. Far side bus stops would work best operationally. It would most likely serve the 13, 14, 15, 40, 43 and 82 AC Transit bus routes. This would create direct transit access to the South Lake Merritt Cultural District from a large part of Oakland.

Future Transit Alternatives

- AC Transit has recently completed a Major Investment Study, to improve transit service. Several different routes between downtown Berkeley, downtown Oakland and the Bay Fair Mall in San Leandro were studied. The route chosen by the MIS includes 14th Street and International Boulevard and the Bus Rapid Transit was the selected mode. The BRT system would include designated stations with loading platforms, shelters, proof-of-payment, ticketing, ticket vending machines, security features and real-time vehicle arrival information. Low floor busses would travel in special bus only lanes with traffic signal priority and coordination. This means that two of the four lanes on 14th Street and International Boulevard would be converted into transit lanes, leaving only two lanes for normal traffic. This would most likely divert traffic from 14th Street and International Boulevard to 11th, 12th and East 12th Street. AC Transit would consider using 11th and 12th Street downtown (west of the channel) instead of 14th Street.
- There are two alternative ways the design of Lake Merritt Boulevard (12th Street) could be modified to accommodate the bus only lanes of the Bus Rapid Transit Project. Option one could be to have a wide on street parking lane that could be converted to bus lanes on weekdays or just during peak hours. This option would only work if the bus lanes were on the outside lanes, which is only compatible with the one-way street alignments in downtown Oakland (11th/12th or 12th/13th). Option two could convert two of the vehicle lanes into bus only lanes permanently. Option two should work with both outside and inside lane configurations. Inside bus lanes would work best for a downtown 14th street alignment with median rapid bus stations. According to the traffic analysis, all six lanes would be needed to preserve acceptable Level of Service on Lake Merritt Boulevard and to prevent long queues. Therefore, the plan recommends option one, six regular lanes with outside bus lanes that are used for off peak parking. This option has been utilized in many urban downtowns, (for example Seattle). It might be possible to have only four traffic lanes and two bus lanes in the future, (option two), if traffic access to the convention center is limited to peak hours. There is a small amount of pedestrian traffic crossing 12th Street during peak hours and the Bus Rapid Transit diverts a significant amount of traffic. At this time it is not known how much traffic would be reduced by an improved transit system and this is the subject of an ongoing AC Transit study.
- The Bus Rapid Transit System on Lake Merritt Boulevard should include a station at the Kaiser Convention Center access road, which could be skipped during normal days. It would provide transit service for large special events at the South Lake Merritt Civic Area, including the Kaiser Convention Center and the Oakland Museum.

Convention Center Access

The demolition of the 12th Street Viaduct and its replacement with Lake Merritt Boulevard will improve access to the Kaiser Convention Center. Vehicles going southeast on Lake Merritt Boulevard will be able to turn right into the Kaiser Convention Center parking lot. Vehicles exiting the Kaiser Convention Center parking lot will be able to turn right onto Lake Merritt Boulevard.

Improvements to the Kaiser Convention Center should include an assessment of access from Lake Merritt Boulevard. Allowing left turns into and out of the site could provide better access however; they could negatively effect the traffic operations on Lake Merritt Boulevard. Possible locations include the 14th Street intersection (West Drive), the current tunnel site centered on the building, and the southeast side of the building (East Drive). The Lake Merritt Master Plan recommends the East Drive location to provide the best at-grade pedestrian crossing between Lake Merritt and Peralta Park.

Interim Measure

Due to the immense cost and lengthy time required for the 12th Street Viaduct demolition and construction of Lake Merritt Boulevard, a short term and low cost temporary measure to improve bicycle safety was requested. Although its exact design is not know at this time, it would most likely include the following:

- The northern westbound lane of 12th Street (lakeside) would be closed, and converted into a bikeway, from Lakeshore Avenue to Lakeside Drive. A concrete barrier would separate it from 12th Street traffic. Only five westbound lanes would remain on 12th Street.
- The two lanes of Lakeshore would enter into lane one and two of 12th Street.
- 1st Avenue, south of International would be narrowed to one lane westbound. It would enter lane three of 12th Street.
- East 12th Street, west of 2nd Avenue would be narrowed to two lanes. It would enter lanes four and five of 12th Street.
- In the future, when lower Lakeside Drive is closed with a cul-de-sac 1st Avenue will be restored to two lanes westbound and East 12th Street will be restored to three lanes westbound.

Existing pedestrian tunnel

Existing pedestrian tunnel entrance from the Kaiser Center

Feasibility of Closing the 14th Street Extension

There has been significant community interest in the potential of closing 14th Street between Lakeside Drive and 12th Street. This would be done to unify the Fire Alarm Building property with the lakeside park across the street. This would add about half an acre to the park.

- Fourteenth Street, which extends from Lake Merritt through City Hall area to West Oakland is a major east-west street. It connects with International Boulevard and several nieghborhoods to the east. Fourteenth Street is the only two-way east-west street through downtown Oakland. It is a very important route for commuters as well as for visitors. East of the lake, traffic from International Boulevard connects with other significant flows of traffic from streets such as 1st Street, Lakeshore Drive, Eighteenth Street, and Twelfth Street. In the morning, the traffic east of the lake merges to a single roadway at the south end of the lake and distributes to the network of streets on the west side. In the afternoon, the reverse pattern occurs. The distribution of the traffic flow at either end is critical to the level of congestion that the system experiences.

Existing 14th Street conditions at the Park

- The street system in Oakland operates to a degree in a grid pattern, where vehicles have multiple crossing points, and multiple opportunities for turning. The one-way pattern of the street system west of Lake Merritt limits the number of turning opportunities, and therefore increases the turning movements. Drivers are only permitted to turn right at every other corner rather than every corner. At the south end of Lake Merritt, the lake and the Kaiser Center/Oakland Museum, creates an hour glass effect on traffic. It forces a merge and distribution at each end. As a result, there is significant weaving as traffic enters and leaves the variety of streets that feed into the single crossing street (Twelfth Street) at the south end of the lake. The result is that there are an inordinately high amount of turning movements that occur at each side of Lake Merritt from Twelfth Street. One of the key streets that receives high traffic volumes is Fourteenth Street. The distribution of traffic from Twelfth Street during the morning commute to Fourteenth Street and Lakeside Street is significant requiring multiple turning lanes. Currently the alignment of the street system allows the volume of the traffic to flow without significant backup.
- Oak and Twelfth Street have a high number of pedestrian crossings. Multiple turning lanes are undesirable for pedestrians, especially if right-on-red turns are permitted. We anticipate that without permissive right-on-red, congestion at the intersection would be unacceptable.

- Another notable consideration is that if 14th Street were closed all of the westbound vehicles headed to 14th and Lakeside would be forced to turn right at the 12th and Oak Street intersection. The intersection of Twelfth and Oak would bear the brunt of all of the westbound traffic. This would overload the capacity of the signal. Furthermore, if Oak Street is narrowed to three lanes as planned, the capacity of the right turn movement is further reduced. Between the Oakland Museum and the Courthouse there is no room to widen the Twelfth Street in order to add right turn lanes.
- Closing 14th Street east of Oak Street would force eastbound drivers to cross over to 13th Street at Madison, which is one block before Oak Street, in order to go east over 12th Street. Traffic improvements would be needed to divert vehicles down Madison. However, due to the short blocks in the area, there would be significant weaving patterns and merge patterns that would result in high congestion at the intersections of Madison and Fourteenth, and Madison and Thirteenth. Drivers unfamiliar with the area would likely miss the right turn at Madison and Fourteenth and end up at Lakeside Drive being only able to turn left onto northbound Lakeside Drive. They would then have to drive all the way up to 19th to crossover to Madison to get to estbound 13th Street.
- An alternative proposal recommended closing 14th street as discussed above, but also making 13th Street two-way east between Oak Street and Twelfth. This would provide two right-turn lanes for westbound 13th to northbound Oak traffic. At Oak Street, we assume that 13th Street would be two lanes eastbound and two lanes westbound, on the eastern approach and four lanes eastbound on the western approach. This would create a safety issue where westbound traffic would be facing an eastbound one-way street. Measures would have to be devised in order to prevent westbound drivers from going down 13th Street the wrong way. This problem could be eliminated if 13th Street were converted into a two-way street to Broadway downtown, where it ends. Additional significant traffic analysis would be necessary to determine if this alternative would operate satisfactorily.
- There would be about twenty parking spaces lost if 14th Street was closed. This impact would likely be increased if the Fire Alarm Building parking lot is replaced with additional parkland.

At this time the Lake Merritt Master Plan does not recommend closing 14th Street between Lakeside Drive and 12th Street, or Lake Merritt Boulevard. If at some time in the future circumstances change, then the issue could be reinvestigated.

"People, bikes and kayaks being able to travel back and forth would be fantastic." -Community Member comment on 12th Street/Cultural District proposal in December 2001.

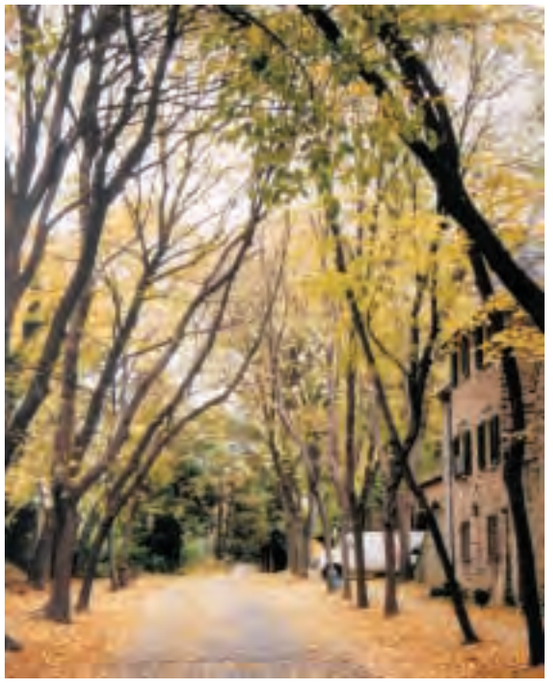
Landscape vegetation can focus on Kaiser Convention Center (photo by Adrienne Wong)

Landscape Recommendations

This area provides an opportunity to add significant park acreage to Lake Merritt Park as well as a significant improvement to park usability. A strong landscape design will reflect well on the City of Oakland's future. Among some of the many items to consider are:

- A strong landscape design theme should include the existing Kaiser parking lot, extending the visible park area by an additional 22 acres.. This would add emphasis to the park landscape and further reduce the impact of vehicles in the area.
- Provide accent trees that focus attention on the Kaiser Convention Center.
- Provide accent trees that allow a strong axial relationship to the Oakland Museum and Laney College.
- Plantings shall be done in an informal style for design and continued maintenance concerns.

- The large open space of lawn from the new roadway to the edge of Lake Merritt can serve multi-functional uses.
- A new beach is proposed. Hydrological models should be formed to determine erosion patterns.
- Use plants (trees, shrubs and lawn) that are compatible with using reclaimed water. If there are improvements to the recycled water or other conditions such as a drought, planning may allow for a future EBMUD recycled water connection.
- Boulevard trees on sidewalks and an 11-foot median: Date Palm with blue flowering trees such as the Jacaranda will allow views while also providing months of bloom for pedestrian enjoyment.
- An alternative tree may be the Princess Flower that is a smaller tree. For several months, the blue flowers make a striking effect along a boulevard.
- Two axial allees from Lake Merritt Park to Laney College and the Oakland Museum, narrow flowering trees, Flowering Pear, *(Pyrus calleryana 'Chanticleer)* with paving and lighting improvements.

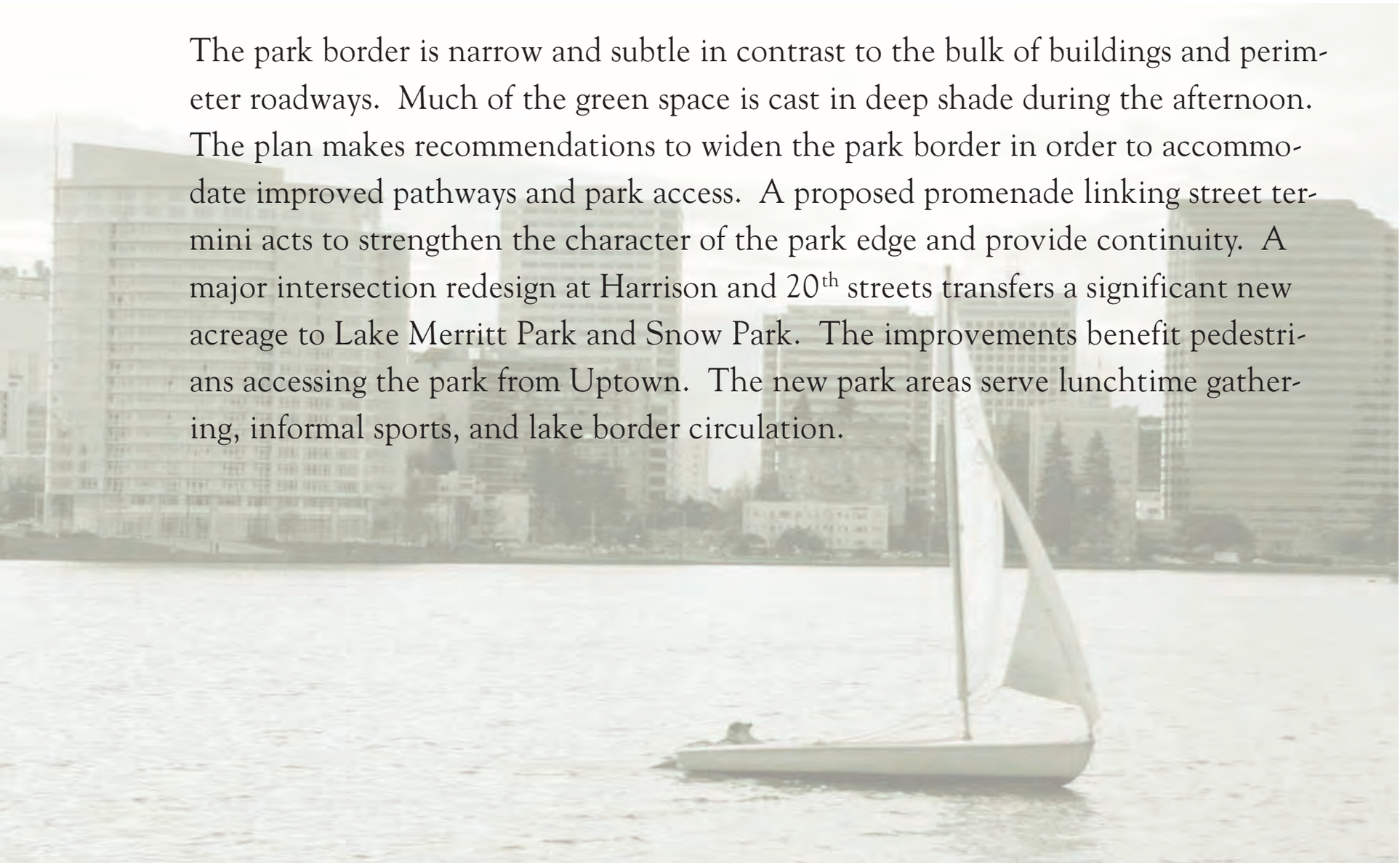


Top: Alle effect of trees
Bottom: Lawn and park form an amphitheater

DOWNTOWN PARK EDGE

The western edge of Lake Merritt is uniquely characterized – for better or worse- by the mass and vitality of downtown. City Center, Chinatown, the Oakland Museum, Alameda County public facilities, Uptown District, and the intensive Gold Coast residential area, all are found nearby. The relationship between downtown workers and residents to the Park is important to nurture. The linkage is currently tenuous because streets from downtown only intermittently reach the Park. The connections need to be reinforced through streetscape treatments and park design at the street's terminus.

The park border is narrow and subtle in contrast to the bulk of buildings and perimeter roadways. Much of the green space is cast in deep shade during the afternoon. The plan makes recommendations to widen the park border in order to accommodate improved pathways and park access. A proposed promenade linking street termini acts to strengthen the character of the park edge and provide continuity. A major intersection redesign at Harrison and 20th streets transfers a significant new acreage to Lake Merritt Park and Snow Park. The improvements benefit pedestrians accessing the park from Uptown. The new park areas serve lunchtime gathering, informal sports, and lake border circulation.



Design Themes

- Highlight Downtown Street Connections
- Improve Pedestrian / Bike Circulation
- Widen the Park Border by 6-10 Feet
- Restore the Municipal Boathouse
- Reintroduce the Fire Alarm Building into the Park
- Enhance the Potential for Evening Uses
- Enhance perimeter parks such as Snow Park

" I applaud the plan- embracing the idea of a grand civic plaza. Especially, the setting for the Courthouse..." - Community Member comment on Lake Merritt in March 2002.

Recommendations

Downtown Street Termini

- Special "Nodes" or points of interest should be located at the end of downtown streets in order to enhance the connections to downtown. These points may be designed as small plazas for noontime lunches, or major gateways, symbolic of the point of arrival. 14th and 20th Streets are examples of major gateways. Paths should connect from the intersecting street to the shoreline path.
- The major gateway at 14th Street should incorporate a civic plaza for casual gathering, public events, and inclusion of art. The plaza should offer a visual terminus to 14th Street while maximizing views to the water. The design could incorporate modifications to the opposite side of the lake or include floating objects placed on axis.
- The major gateway at 20th street should incorporate a visual element in addition to exposing views to the water. The creation of plazas should balance with the green nature of Snow Park and the Lake Merritt Park border.

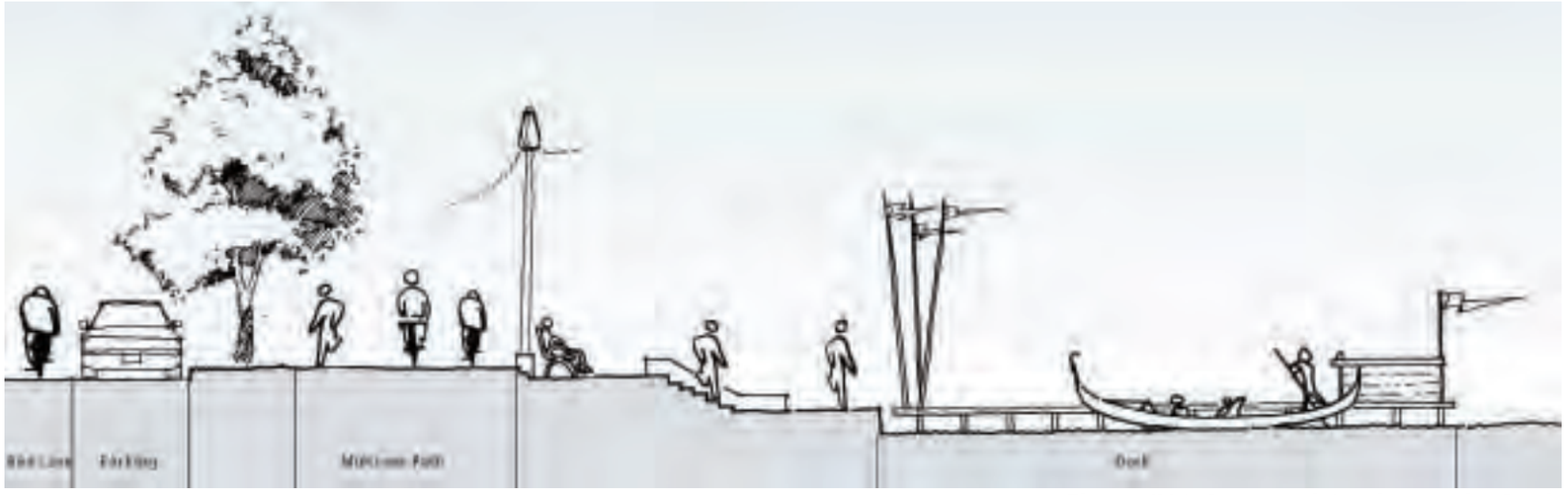


Figure IV.6 Proposed Section at the Dock

DOWNTOWN PARK EDGE

The Park Border

- The width of Lakeside Drive should be reduced by one travel lane in order to provide new parkland and to create a bike lane on the street. Approximately 6-10 feet in additional width is identified. Refer to Circulation for additional information.
- A continuous, 12-14' multi-use path should be provided for joggers, children on bikes, dogs, and walkers. Its surface should be smooth concrete to accommodate all sizes of wheels. Special patterns of color and texture may be developed to express a particular cultural interest.
- On-leash dogs should be permitted on the path nearest the street.
- The dock opposite the Lake Merritt Hotel should be restored as a public use pier. Funding and preliminary design has been completed concurrent with the master plan by the Lake Merritt Breakfast Club. Use by the Gondola, future water taxis, and casual park visitors should be encouraged.

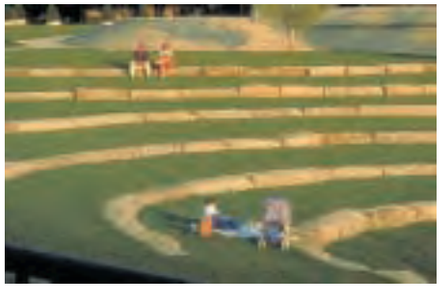
Facing Page: **Figure IV.7 Downtown Park Edge Existing Condition (12th - 17th)**

Left: **Figure IV.8 Proposed Plan to Connect to Downtown**
Accent street termini, inprove Snow Park, restore the dock at the LM Hotel, and widen the park.

DOWNTOWN PARK EDGE

Snow Park and Uptown Gateway

The Intersection of Harrison and 20th Streets should be redesigned in order to enlarge Snow Park and the lake park border. This recommendation improves pedestrian access from downtown by simplifying the route and reducing crossings.



Facing Page: **Figure IV.9 Downtown Park Edge Existing Conditions (Snow Park and 19th-Grand Ave.)**

Left: **Figure IV.10 Proposed Downtown Park Edge**
Redesigned intersection at 20th Street and Harrison, provide connection between downtown and Lake Merritt, create a downtown and park gateway

Circulation

Roadway Changes

- The Lake Merritt Master plan calls for narrowing the one way portion of Lakeside Drive to three lanes, from 14th to 17th Street. A northbound bike lane would be added. The Plan also calls for the removal of parking on one side of the street from 17th to 19th Street if necessary to have a continuous bike lane.
- The Plan also calls for the narrowing of Lakeside Drive to two lanes, with one in each direction, from 19th to 20th Street. Bike lanes would be added in each direction for this two-way segment. A 12-14 foot mulit-use path should be built on the lake side of Lakeside Drive.
- A double right turn bay would replace the double free right-turn at the intersection of 14th and Lakeside Drive.
- The Lake Merritt Master plan calls for removing 20th Street between Lakeside Drive and Harrison Street and replacing the area with green park space. The Harrison and Lakeside intersection would be moved to form a perpendicular T intersection. Both Snow Park and Lake Merritt Park would be expanded.
- Harrison Street would also be reduced by one lane southbound between Grand avenue and Lakeside Drive. A new bike lane would be added southbound.
- The northbound bike lane would be narrowed to four feet.
- A southbound bike lane should be built on Madison to complement the northbound bike lane on Lakeside but this is outside of the Lake Merritt Master Plan scope.
- Driveway access to properties on Lakeside Drive would be maintained.

Traffic Operations

- This design maintains a Level of Service of C or better. This meets the minimum standard of LOS E or better downtown.
- Narrowing the one way portion of Lakeside Drive down to three lanes would be consistent with the Downtown Streetscape Project study alternatives for a three lane one-way Lakeside Drive.
- The reason that narrowing Harrison Street from four to three lanes southbound could be done without unacceptable traffic congestion is that Harrison Street is only six lanes north of Grand Avenue. Only three lanes of traffic should enter the street. Harrison Street south of 20th and 20th Street has only two lanes feeding Harrison Street north of 20th.
- The existing northbound right-turn lane at Grand would be preserved because of the high turning volumes.

Above: Downtown district bus stop in Portland, Oregon

Bike and Pedestrian

- The proposed addition of bike lanes would make bike travel along Lakeside Drive and Harrison Street more convenient as well as attractive to bike riders.
- It would implement the bike lanes identified in the City of Oakland Bicycle Master Plan.
- The Master Plan calls for the addition of a 12-14 foot multi-use path to be built on the lake side of Harrison Street and Lakeside Drive. The multi-use path along the lake would provide a bike and pedestrian recreational route.
- The narrower streets would be more attractive and should make pedestrians crossing feel safer.

Neighborhood street with view leading to the Park

Parking

The Master Plan recommends that there be no net on-street parking loss.

- There could possibly be some parking removed on the park side of the street from 17th to 19th Street, but it could be replaced with new on-street parallel parking north of the 14th Street intersection and between Madison and 20th.
- Some parking spaces would be moved from the Cameron Stanford House parking lot to a reconfigured Municipal Boat House parking lot.
- The proposed roadway changes should have no impact to on-street parking, because there is no on-street parking on Harrison Street between 20th and Grand Avenue.

Transit

- The feasibility of a new bus stop on Lakeside Drive between Jackson and 20th, for the 59 and 59A, should be investigated as part of the redesign of the Lakeside Drive 20th Street intersection. This would provide a great direct connection to both the Lake Merritt and 19th Street BART Station.
- The planned bus stop on Harrison Street between 21st Street and Grand Avenue should be built to improve transit access to Lake Merritt Park.

Link downtown and and Grand Lake business Districts with a themed promenade..., highlight the park as part of the Grand Avenue streetscape..., provide a continuous jogging path at the Park edge...

1520 Lakeside Drive: The Municipal Boathouse

- Under the plan, the building should be restored in architecture and in use. A restaurant, banquet hall, community meeting space, boat storage, rowing classes, and other public uses are recommended to be accommodated. Refer to the Buildings Chapter for additional information.
- Public art commissions should be considered in the scope of the restoration.
- Gondola service should be relocated from the Sailboat house to this facility in association with other food services.
- The Parks and Recreation District may maintain a small public service counter if the need is identified. Other planning and administration staff should be relocated to offices in City Center or other locations to be identified.
- The site around the building should be redesigned to better facilitate public access along the shoreline. Parking for future uses should be provided within a single parking area.
- The master plan recognizes the potential for coordination between 1520 operators, the Camron Stanford House, and the Masonic Hall. Opportunities for shared resources, marketing, parking, and event services should be explored.

History

This building was originally designed by John Galen Howard as a "high pressure salt water pumping station" for the City of Oakland Fire Department in 1909. The additions of two building wings to function as the Municipal Boathouse were designed by Walter D. Reed in 1913. The Boathouse offered excursions, regattas, mooring privileges, locker rooms, a tea-room, and later a succession of restaurants.

In 1935, the last of the open arches were filled in, and three new stationary piers were constructed. The Restroom building was added in 1940 in conjunction with two tool houses, one located at El Embarcadero, and one at Pine Knoll Park. Both have since been converted to restrooms.

The pump station remained in operation until about 1955, at which time the building was converted to offices. The Parks and Recreation Department currently uses most of the building. The Lake Merritt Rowing Club has used the lower south wing since 1961.

Left: Municipal Boathouse 1915
Below: Municipal Boathouse 1909

Design Recommendations

The Municipal Boathouse is one of defining buildings of Lake Merritt. It should be restored to reflect its original architectural character as well as function. The office of Parks and Recreation should be relocated to another building outside the park. A small satellite "customer service office" could remain somewhere in the park to facilitate interaction with the public. For example, making park reservations and scheduling of events.

The building use should be restored to incorporate public activities including boat storage for the city as well as the various boating clubs that use the lake, storage facilities for those users, regattas and boating events.

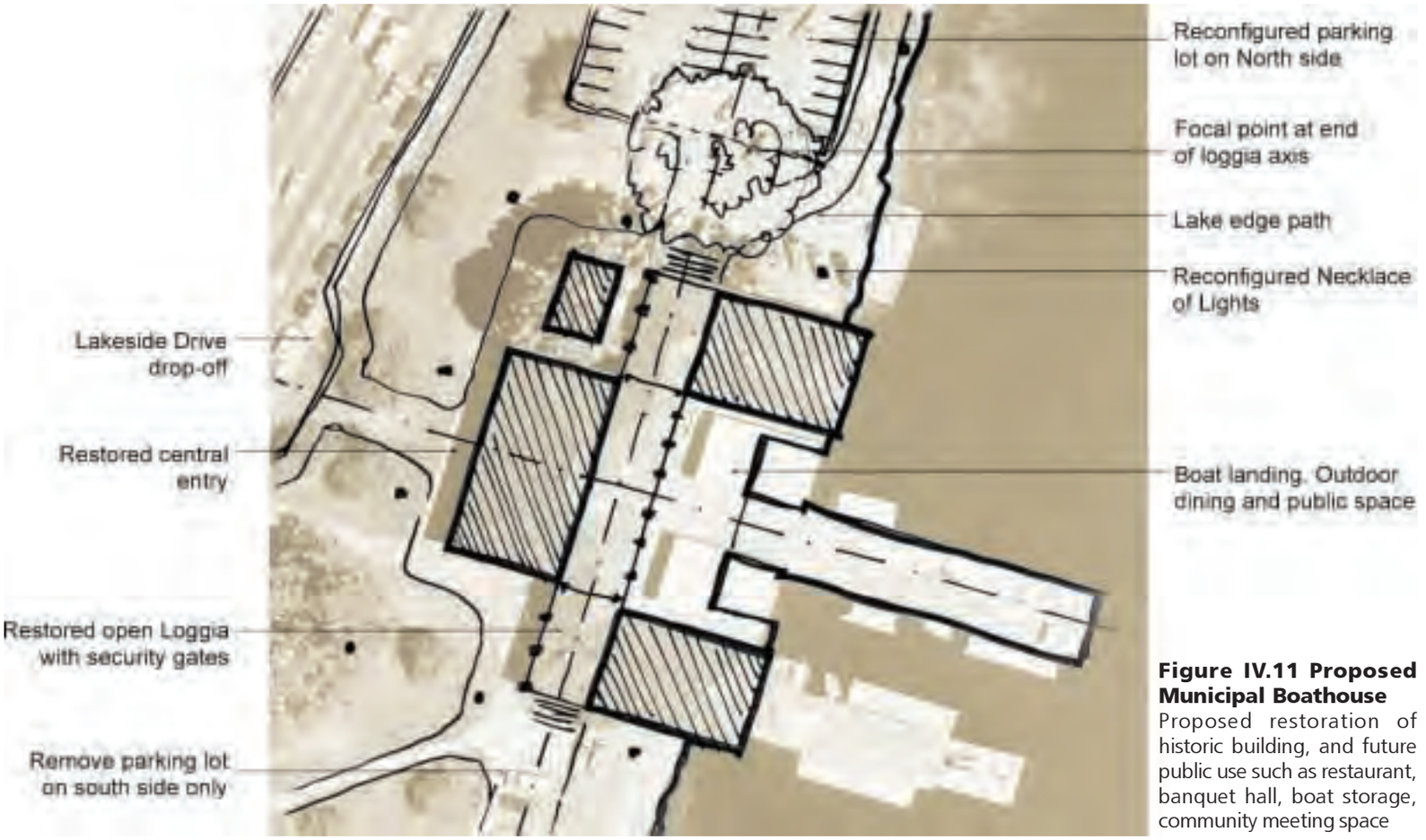
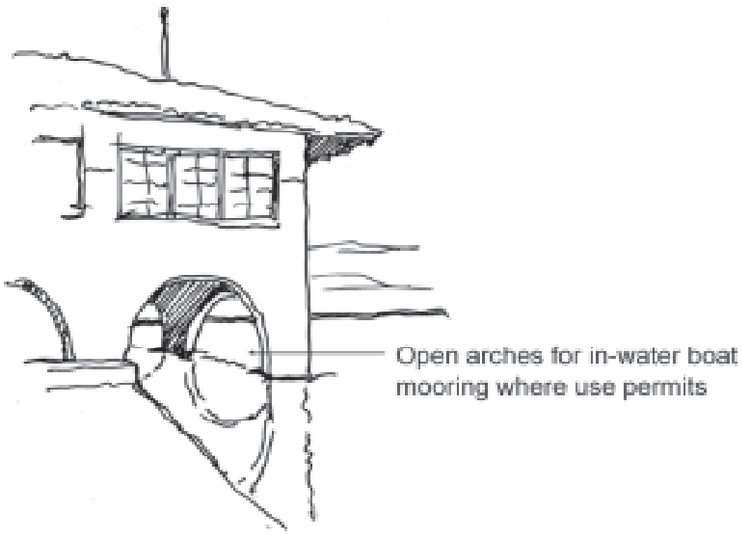
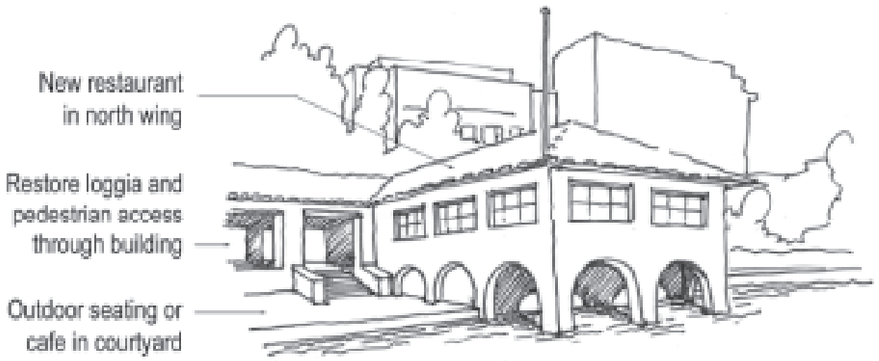


Figure IV.11 Proposed Municipal Boathouse
Proposed restoration of historic building, and future public use such as restaurant, banquet hall, boat storage, community meeting space

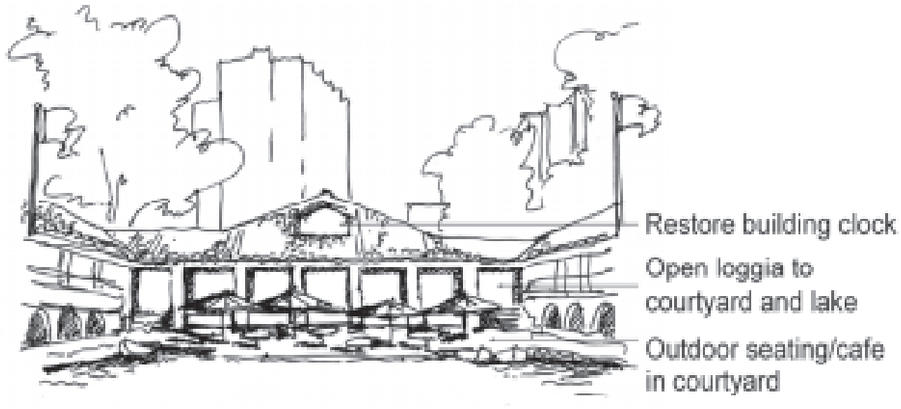
DOWNTOWN PARK EDGE





Public interest in re-establishing a restaurant in the building is high. This restored use could be coupled with a reception/ meeting hall that could accommodate a number of events that could be coordinated with adjacent established uses in the Camron Stanford House as well as the Masonic Temple.

Architecturally, the Municipal Boathouse should be restored to its 1913 configuration. The original design successfully blurred the edge between water and park which has been obscured by additions and renovations. This relationship could be restored by reopening the veranda as a public access walkway, linking the lakeshore path, and encouraging public access. The arches, which support the wings of the building, should be reopened to allow for boat storage in the water.



Top: Restoration of arch at the Municipal Boathouse
Middle: Sketch view of water-facing side of Municipal Boathouse
Bottom: Proposed courtyard area at Municipal Boathouse

Landscape Recommendations

Lakeside Drive

The conversion of a traffic lane results in an increased park border width. This new park land will afford the additionof a promenade and street tree plantings. Boulevard trees added to both sides of the street will allow the Park to visually extend beyond the park curb and incorporates the outer street edge (as indicated in panorama in Chapter III).

Ginko Trees on a street

Street Tree Recommendations

- Street trees should be in scale with the building facade heights.
- Leaf litter should not overburden the Lake and pose a major detriment to water quality.
- Street trees should present a grandness as envisioned by Mayor Merritt when he proposed scenic boulevards around the perimeter of the Lake.
- Tree selection and spacing should consider views from adjacent properties without compromising the street or park appearance.

Figure IV.12 Proposed Section Lakeside Drive Street Trees

LAKESIDE PARK

Lakeside Park is the heart of activity at Lake Merritt. The bulk of the public facilities for recreation, education, and leisure are found here. The park area receives the highest concentration of activity of the entire Lake Merritt area. Fairyland for example, attracts upwards of 2000 people per weekend. The park is also well utilized for organized activities such as concerts, Shakespeare theatre, youth classes, receptions, community meetings, gardening, and large special events. Several key buildings house these activities and are also described in this chapter. Informal uses by the general public include strolling, picnics, boating, playground visits, and wildlife viewing. Facilities for these informal activities do not adequately meet the demand. Beyond its traditional community park attributes, Lakeside Park is the also the heart of the ecological mission of Lake Merritt. The refuge zone and islands occupy a potion of the shoreline area. Remnant oak woodlands and natural bluffs portray a landscape almost foreign to downtown Oakland.

"Lake Merritt Park's versatility is its most important quality; it offers the possibility of exercise, entertainment, and refuge to nearly every type of user." -Community Member Commenting on Sacred Aspects of Lake Merritt in October 2001.

The LMMP recommends improvements that enhance the public's use of lakeside Park and its existing programs. Improvements to access, circulation, and program facilities will enhance the experience of the public. The plan encourages various park programs to work together by combining operational resources such as outdoor facilities, event planning, composting, landscape maintenance, and educational programs. Each park entity is recommended to integrate into the park's shared landscape through fencing improvements, façade restoration, common signage, coordinated entrance, and the Art Element.

Bounded by the Grand Avenue Business District, the neighborhood of Adam's Point, Glen Echo lake area, and the Trestle Glen lake area, Lakeside Park constitutes the largest, contiguous park zone. Its area offers a diversity of landscapes from open lawn areas to impenetrable thickets, and forested hills to waterfront bluffs. The LMMP seeks to enhance the park area's remarkable character by clarifying the landscape typologies and facilitating public use.

Bluff areas should be restored with natural vegetation. Special lookout points are proposed. Forested areas should be protected while the sidewalks that meander through them should be improved. Dense understory vegetation that poses a public safety hazard should be selectively thinned. Open lawn are important recreational use areas and should be enhanced by grading, phased tree removal, and the replanting of grass.

Lakeside Park as discussed in the Lake Merritt Master Plan refers to the area bound by Grand Avenue and the Lake edge. Children's Fairyland, the Garden Center, and other popular programs are located in this park zone

Recommendations

Lakeside Park Management Zones: Based upon existing landscape typologies and patterns of use, the plan establishes three management zones. It is important to clarify these zones in part due to the complex ecological and recreational resource balance.

Figure IV.13 Lakeside Park Zoning Diagram

1. Shoreline

The water's edge is emphasized as Lakeside's Park most sensitive zone. The interface of water and shore is a highly valued as an ecological resource. Bluff areas are restored and a major natural zone is envisioned near the islands. Wildlife is protected. The landscape is managed to emphasize habitat. The plan recommends relocation of uses not essential to the shoreline ecology or not facilitating access to the Lake. Water recreation is maintained at the Sailboat House as it is a water dependent use.

2. Interior Program Areas

Independent programs and their facilities change the character of the park's landscape by reducing the public nature of the open space. The zone designation serves to protect the value of the programs while guiding their public interface. The plan emphasizes public access to these important educational programs: parking, visibility, sidewalks, and signage. As the plan is implemented, new/relocated program facilities should be located in this zone. Programs are encouraged to have a strong educational component that is based upon the Lake Merritt environment.

3. Free and Clear Open Space

The recreational value of non-programmed open space in the park is high. Most notable, are the open lawn areas sized to accommodate informal games. The lawns can support the weekday activities of nearby youth programs as well as weekend use by the public. No formal sports or specialized facilities are recommended (except for Lawn Bowling activities). Included in this management zone is the Grand Avenue Promenade, open lawns, pathways, and forested areas. The zone recommends facility improvements to enhance recreational activities such as jogging, strolling, picnicking, tai-chi, and low impact games.

Figure IV.14 Proposed Lakeside Park Plan

Shoreline Management Zone

Ecological Restoration Areas

- Create a naturalized water edge zone along Bellevue NE from the Rotary Center. The main path would be setback from the edge appropriately. Lawn would be used sparingly near the street for picnicking and sitting. The playground should be relocated out of the refuge area.
- Use native planting to improve ecological value throughout the park.
- Revitalize the fresh water pond at the refuge. Redesign should incorporate sustainable principles for wildlife and educational displays for visitors. Public feeding of birds should be eliminated.
- Boardwalks and other specially designed access features should be created in the less sensitive areas to facilitate public access and strengthen the educational opportunities.

Park Features

A	Enhance Park Entry and Fairyland Access
B	Bellevue Drive - Angle Parking Both Sides, with Tree Pockets - Bulb-out Crossings - Entry Gate - Exit Booth
C	Mid Park Promenade
D	Mid Park Courtyard Plaza / Garden Entry
E	Consolidated Education Center, Proposed Ranger Station (1 or 2 Bldgs.) and Future JCAS Phase II.
F	Open Lawn Areas
G	Revegetated Bluff
H	Edhoff Bandstand and Beach
I	Maintenance Facility and Service Access
J	Wetland Restoration Test Site
K	Sailboat House and Classrooms
L	Ecological Zone: Shoreline Restoration & Boardwalks
M	Jr. Center for Arts & Science (Phase I)
N	Relocated Playground
O	McElroy Fountain and improved Paths
P	Informal Amphitheater

Greenwood Pond
Double Site Project
by Mary Miss

Figure IV.15 Detail Plan of Proposed Ecology Zone

Figure IV.16 Existing Condition Section at Future Ecology Zone

Bluff Area

- Implement a wetland as a pilot project below the bluff area. An accessible overlook should be provided with a interpretive signage.

Beach

- The beach area should be preserved for shoreline play and water access. New sand should be added to the area.

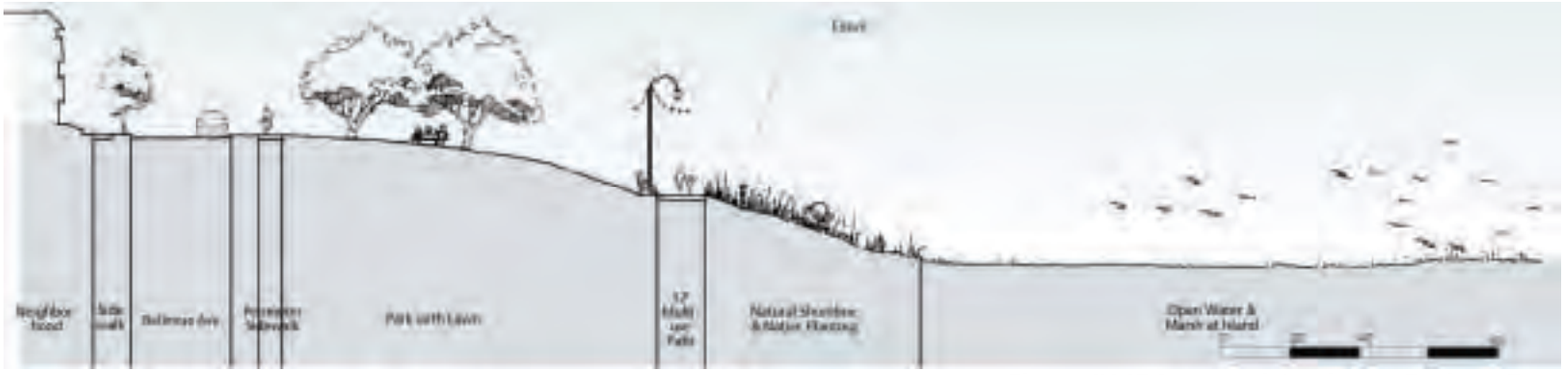


Figure IV.17 Proposed Section at Ecology Zone

Sailboat House

The Master Plan recommends improvements to the site and building. The plan recognizes the historical conditions of access, visibility, and use, and seeks to reestablish those characteristics into the contemporary park.

- The Sailboat House building should be remodeled to reveal its historic character, to improve its use as a public facility, and to integrate it into the park. The continued operation of sailing programs and boat rental is encouraged by the plan.
- The boat storage garages should be rebuilt in place to accommodate aquatic-program related storage and youth classroom space.
- The main building entry should be reoriented to Bellevue Avenue.
- The area to the east should be developed as a public shoreline use area with pathways, lawn, picnic tables, and boardwalks. The boat ramp and hoist should be rebuilt and be available for public use. Five to eight parking spaces for vehicles with boat trailers should be provided. Accessible spaces should also be provided
- Public art commissions should be considered in the scope of the remodeling.

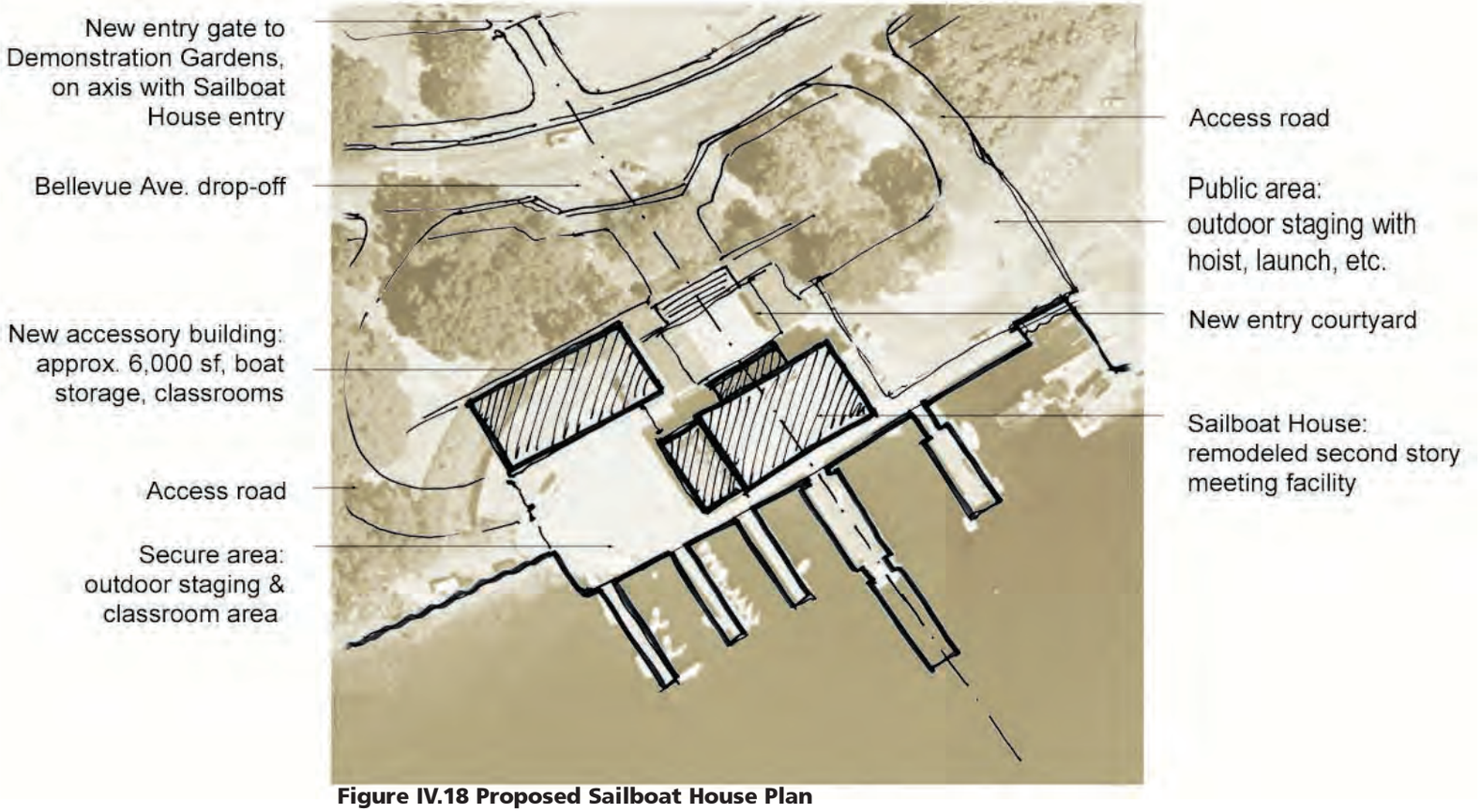


Figure IV.18 Proposed Sailboat House Plan

History

The Sailboat House began life as the "Canoe House," designed by Walter D. Reed in 1915. The first floor was, and still is, a series of boat storage vaults, open to the lake on the south side. The second floor was a columned, open air viewing platform and gathering place, entered from the north (leeward) side through a courtyard and up a split, exterior staircase.

In 1940, new buildings for boat storage were designed by the City of Oakland Park Department. The boat storage was in two separate buildings flanking the courtyard, immediately to the north of the Sailboat house. In 1945 the parking lot was added to the east of the building on the water's edge.

In 1954 the building received a major renovation and addition, which is how it stands today. The architect of this remodel was Ponsford and Price, who undertook most of the design services for Lakeside Park in the 50's. Included in the work was a new curved, one story boat storage wing, restrooms, and the complete replacement of the second story, which houses a meeting hall with supporting facilities. The boat storage wing is now used for both boat storage and instructional classrooms.

In the 1970's, the building was again remodeled to add the elevator. The upstairs meeting room was remodeled.

The building sits on the southeastern shore of Adam's Point, at the tip of Lakeshore Park. The buildings relationship to the site has become increasingly utilitarian over the years, and is now bordered by parking and access roads on either side. The northwest face, which faces the park, no longer has the processional entry through the courtyard. This side is now obscured by shrubbery and the rear wall of the 1940 boat storage addition.

The original Sailboat House had stucco walls, brick detailing, and a tile roof. The vaulted boat storage space on the first floor still exists; however, the rest of the original building is no longer recognizable. The 1950's remodel and addition represents the architectural trend of that time.

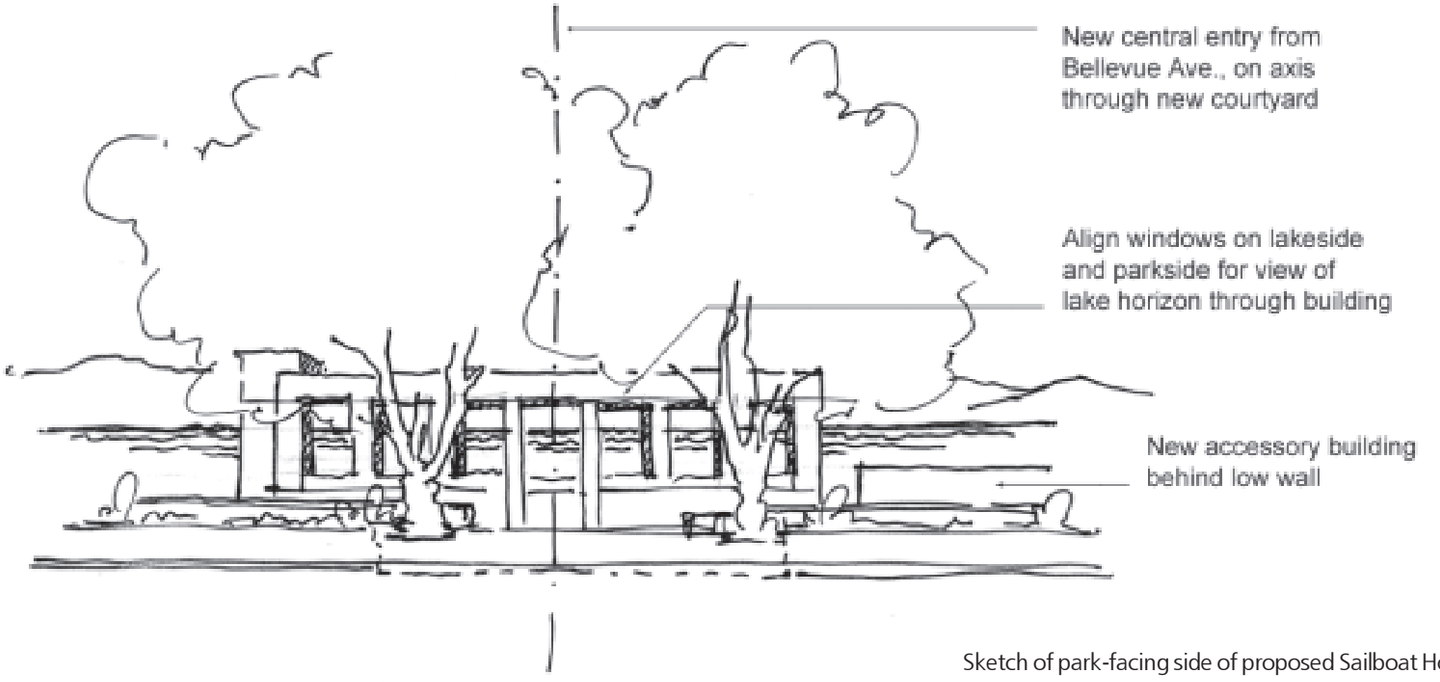
Design Recommendations

The Sailboat House is one of the most used buildings in Lakeside Park. Unfortunately, it has been isolated from the rest of the park by the succession of remodels and additions over the years, and now has very little relation to anything but the parking lot and the Lake itself. Its prominence should be restored through architectural and landscape design.

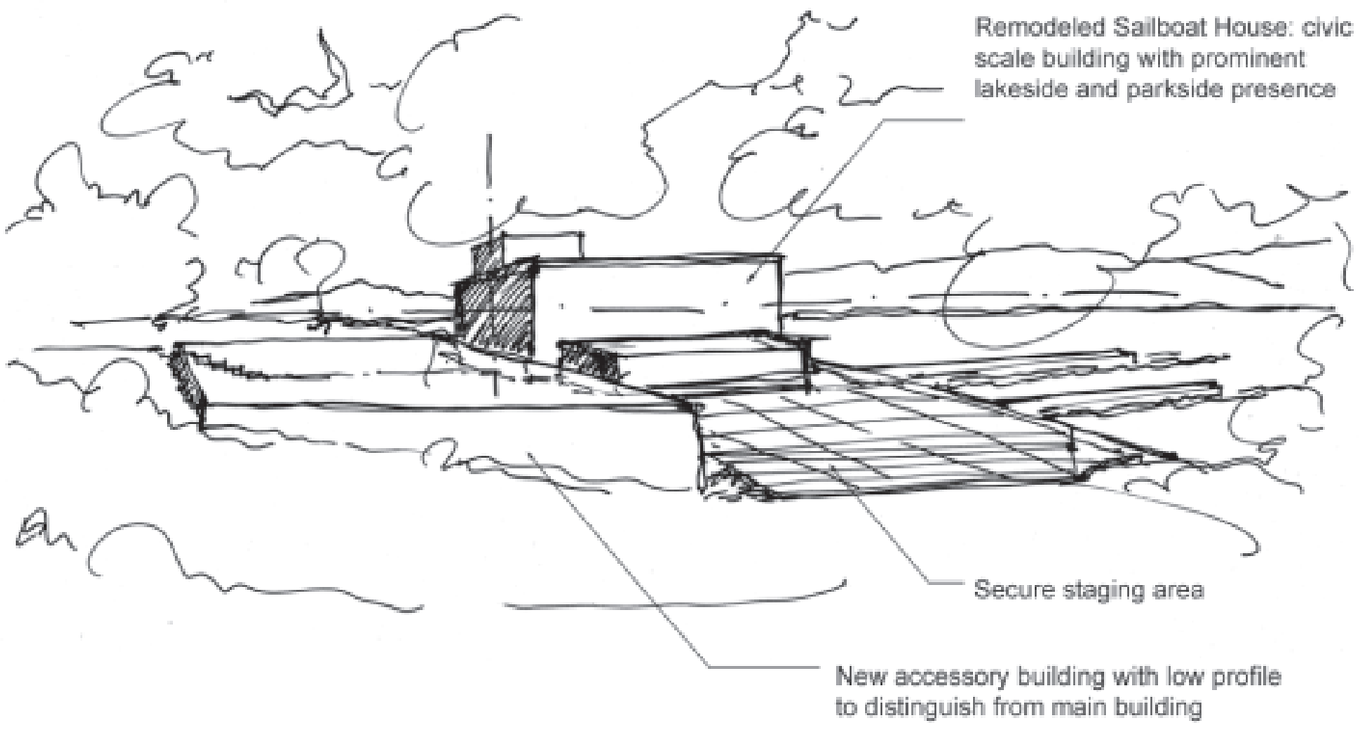
The Sailboat House should receive a complete architectural rehabilitation and reconfiguration. All of the outbuildings added to the site should be removed, as they are of poor quality, do not suit the current uses, and obscure the main building from the rest of the park. The formal entry to the Sailboat House should be reinstituted to face Lakeside Park, and pass through a revitalized courtyard on the leeward side. The main entry should be linked to the greater park via a new pathway. The first floor vaulted spaces should be restored.

The second floor should be completely redesigned to restore the building relationship to the park, and give it a strong identity. Second story windows should be aligned on the north and south walls to allow pedestrians at the street level to see through the building to the Lake's far edge.

A new one story building should be constructed to the north-west of the main building to accommodate boat storage lost by removal of the existing buildings. New landscaping should be introduced to help re-establish the building's relationship to the park.



Sketch of park-facing side of proposed Sailboat House



Sketch of west-facing side of proposed Sailboat House

Program Zone

Bowling Green

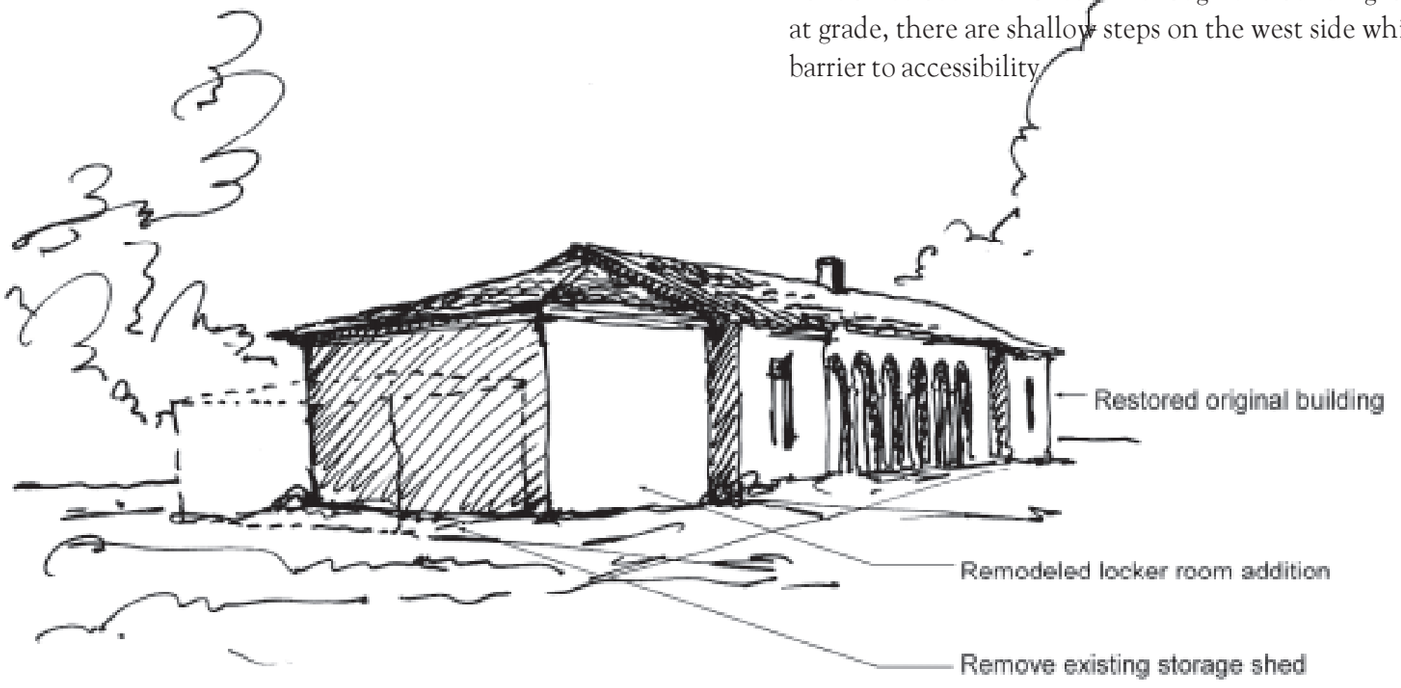
- Restore the front bowling green with an artificial turf system for ease of maintenance and competition superiority. Spectator seating and new attractive fencing would make the game a more publicly accessible and understood activity. Membership could be bolstered as a result. The rear bowling/croquet court should be similarly addressed for club use and public visual access. Natural grass should be used. The replacement of one front court with additional practice greens or bocce ball courts should be considered in the future.

Lawn Bowling Clubhouse and greens

History

The first lawn bowling green was conceived as part of the original master plan for Lake Merritt Park by Landscape Architect Oscar A. Prager in 1909. Green 1, on the east side of the clubhouse was dedicated in 1912. Greens 2 and 3, on the west side of the clubhouse, were dedicated in 1923 and 1935 respectively.

In 1926 The Bowling Green Clubhouse, designed by Architect Charles W. McCall, was built. Charles McCall's building continued the Lake Merritt tradition of stucco buildings with clay tile roofs. An arch-topped colonnade runs the length of both the east and west facades, enabling the clubroom to be opened up to the greens on either side. Carved wood detailing exists at the eaves and windows and doors. Tile mosaics illustrating the game of lawn bowling are inlaid in the exterior walls, some from the time of original construction and some from the recent work of Robert Howden in 1993. Originally, there were terraces with balustrades on both the west and east sides. They have since been removed. Although the building is essentially at grade, there are shallow steps on the west side which are a barrier to accessibility.



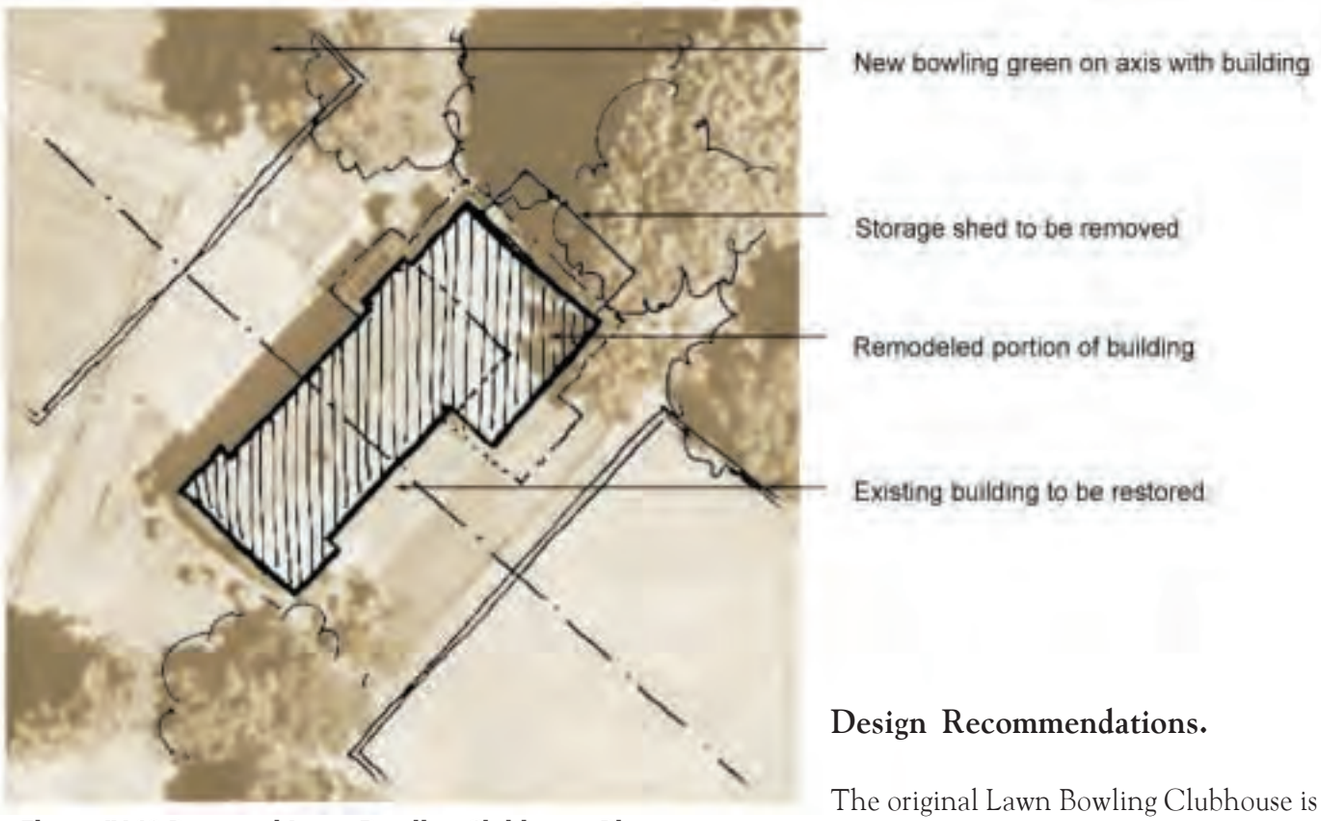


Figure IV.19 Proposed Lawn Bowling Clubhouse Plan

This building stands much as it originally did, with the addition of a locker room and restroom on the north end, designed by H.T. Johnson, Architect in 1948. The 1948 addition does not match the original style or quality of the building. It has a low slope tar and gravel roof, clerestory windows, flat wood trim and horizontal wood outriggers at the eaves which are deteriorated. An equipment storage shed was later attached to the north of the addition, and has since been damaged by fire.

Other custom details, such as carved wood detailing, tile mosaics illustrating the game of lawn bowling, and custom pendant light fixtures make this building significant in establishing a palette for future design in Lake Merritt Park.

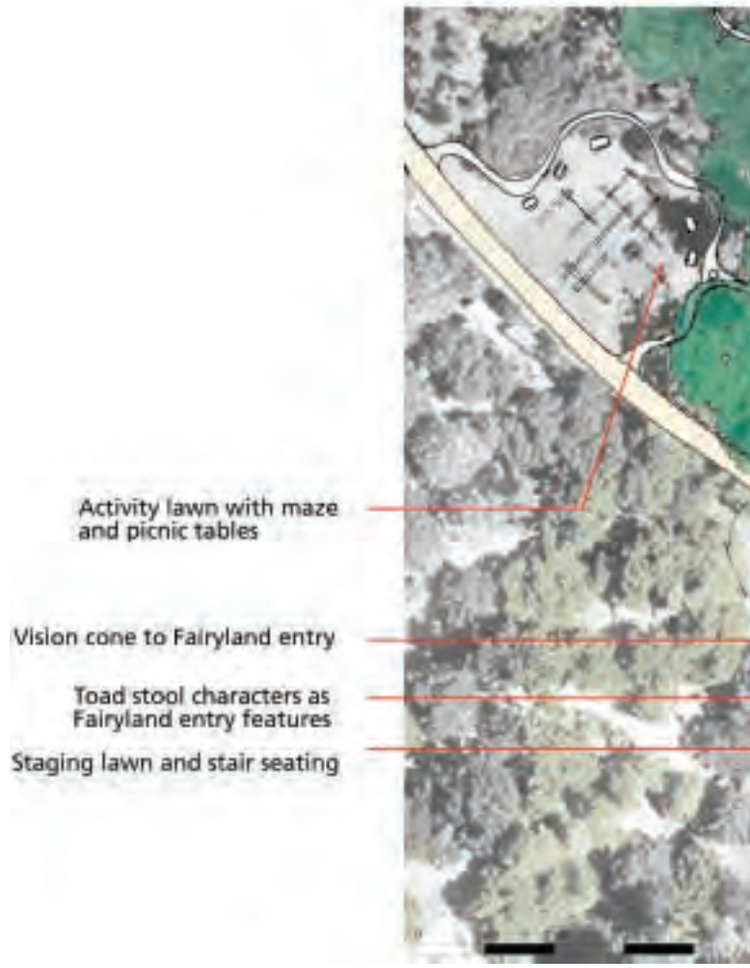
Design Recommendations.

The original Lawn Bowling Clubhouse is in relatively good condition, and will need only minor exterior restoration work. The 1948 addition is not in keeping with the buildings architectural character, and is in poor condition. The addition should be remodeled to be more sympathetic with the original building. This could include similar materials, roofline and detailing, but should be careful to avoid a false historicism.

The grade elevation on both the north and south sides of the building should be raised to remove the accessibility barrier.

Children's Fairyland

- City and Fairyland operators should improve perimeter fencing and visible interior conditions over time.
- The entry approach to Fairyland should be enhanced in association with Bellevue Avenue and Lakeside Park entry projects. New accommodations for bus loading, staging, seating, and entry visibility are recommended.
- Service access and additional staff parking should be provided on the West service road. The road should emphasize use by staff and service vehicles, however full public, pedestrian access should also be accommodated. Extraneous perimeter gates should be phased out and staff parking that occurs in the planted areas by the fence should be eliminated.




Entrance to Children's Fairyland


Entrance to Lakeside Park from Grand Avenue

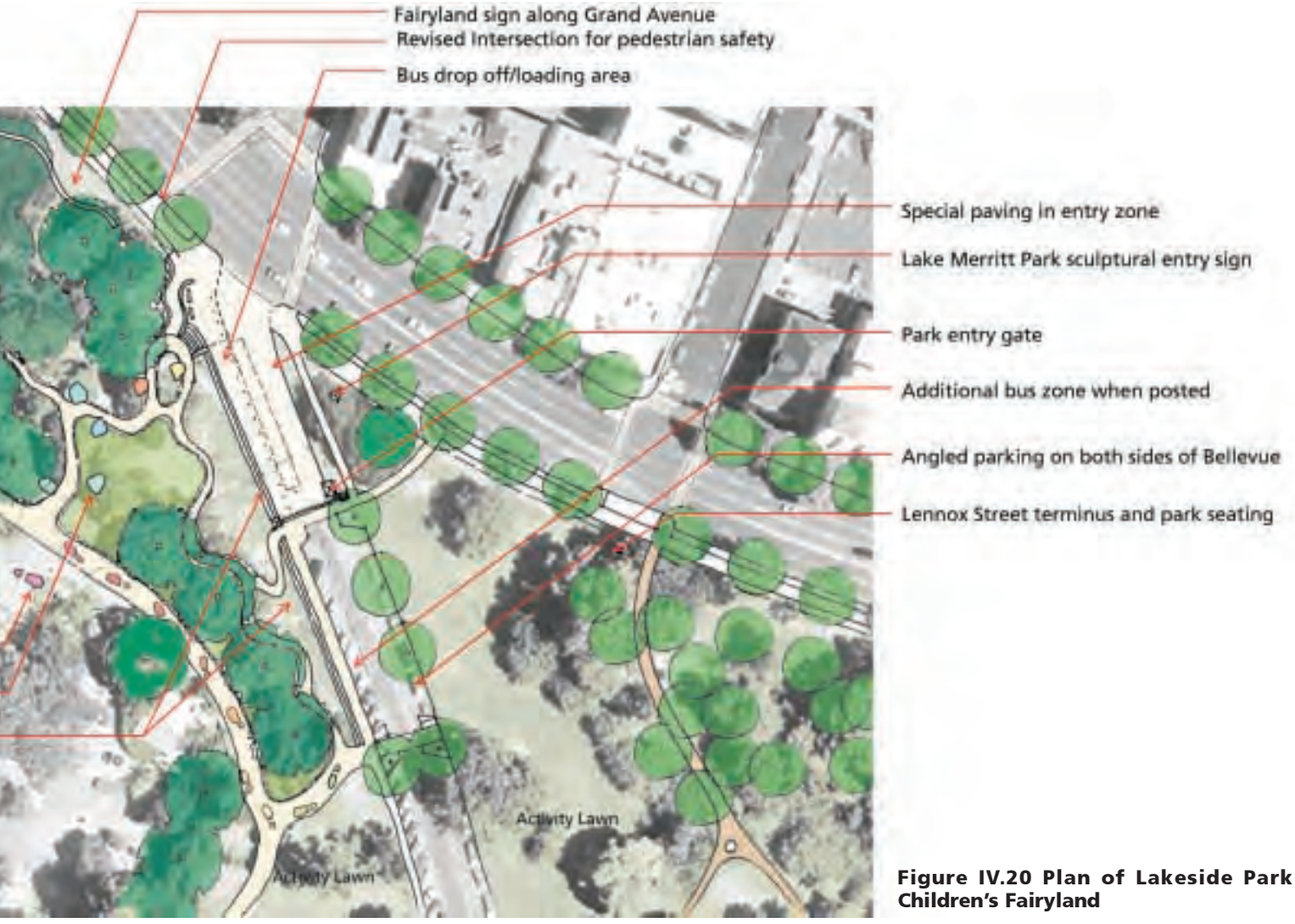


Figure IV.20 Plan of Lakeside Park Entry and Children's Fairyland

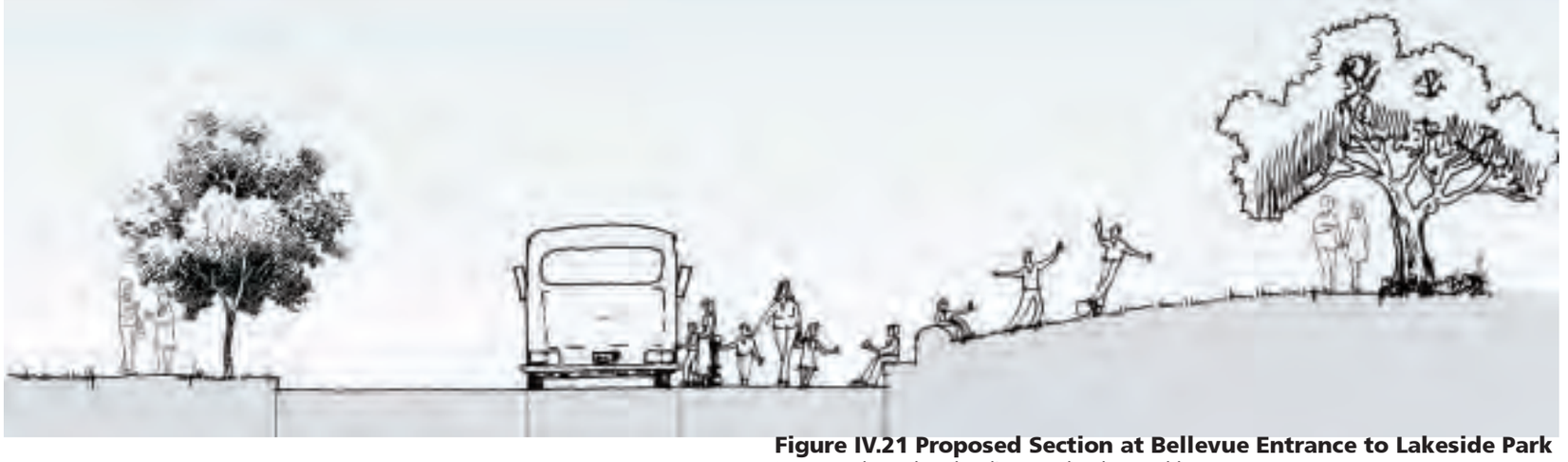


Figure IV.21 Proposed Section at Bellevue Entrance to Lakeside Park
New roadway, bus loading, and enhanced lawn area

Lakeside Park Garden Center

History

The Lakeside Park Garden Center was designed by Ponsford & Price Architects in 1957. The complex of buildings and structures was built in phases and includes the Garden Club itself with meeting facilities, a large work shed with storage, a glass greenhouse and an aluminum lath house. Adjacent to the buildings and structures are the demonstration gardens.

Design Recommendations

The Garden Center building would benefit greatly from better integration with the site through façade remodel and additional landscaping. The main entry to the building is on the west side, fronting on Bellevue Ave. This entrance should be reinforced as a clear, processional entry with vegetation leading the way and continuing into the building. The existing monumental trellis at this entry should be highlighted and plants should be encouraged to grow on it, blurring the boundary between garden and building.

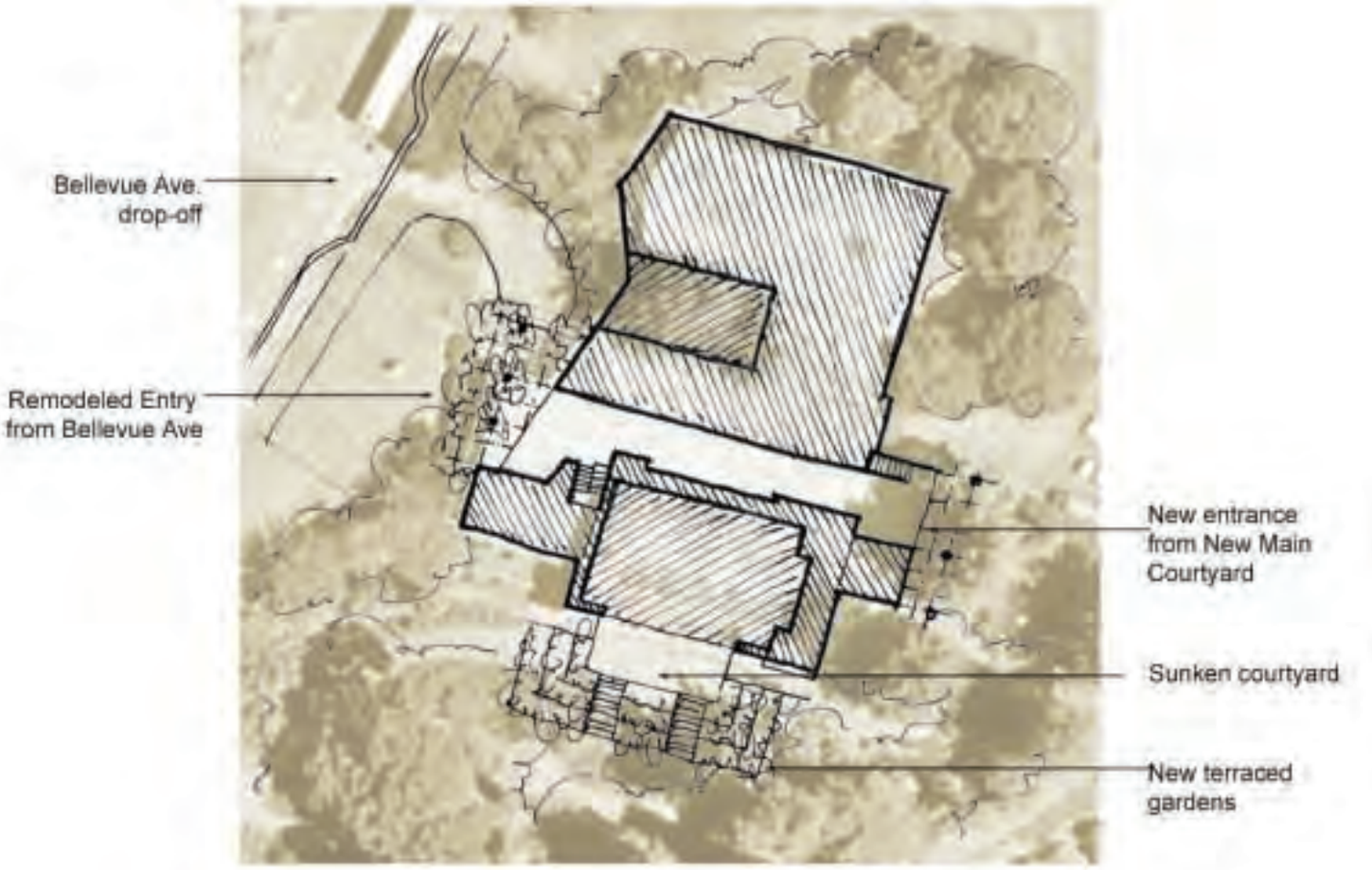
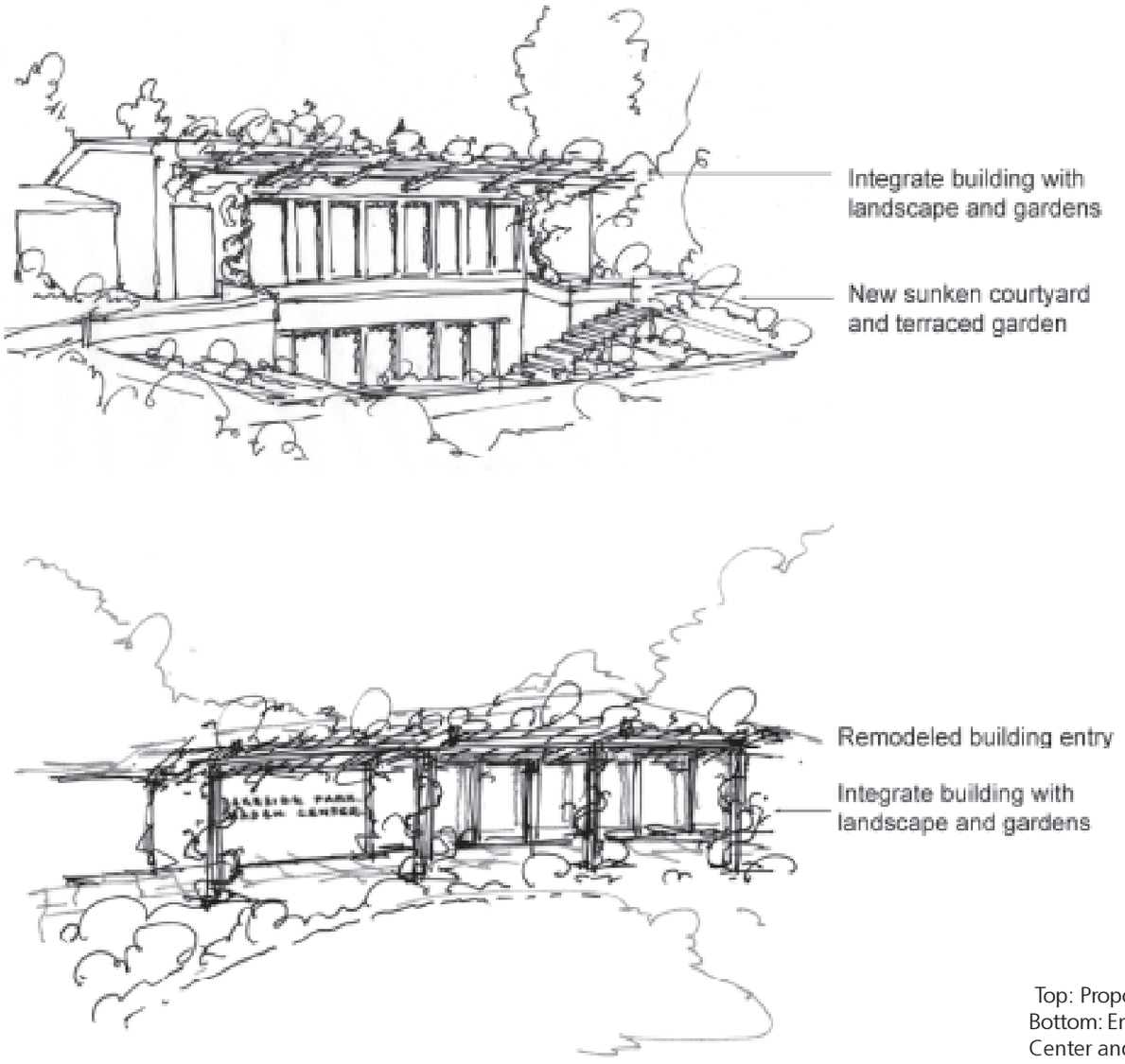


Figure IV.22 Proposed Lakeside Park Garden Center plan



Top: Proposed terrace from lower level
Bottom: Entry view of Lakside Park Garden
Center and Concept of new arbor

A new building entry should be introduced on what is proposed as the new courtyard entry on the east side of the building. This entry should also have heavy vegetation surrounding the entry. Connecting the two building entries will require an extension of the "lanai" which is a wide hallway bisecting the building.

The large abandoned assembly space below grade should be remodeled to be an inviting hall. Accessibility and ventilation should be upgraded. A sunken garden should be introduced on the south wall of the hall, which will enable the new assembly space to open out to the demonstration gardens and gain natural light and air. The south façade should also be integrated with the gardens by the use of trellises, arbors etc.

Junior Center for Art and Science (JCAS)

The master plan recommends the relocation of the facility in a two-phased approach.

Phase 1:

- Current (2002) building remodeling and facility expansion should be supported. Specific recommendations are made in the description of the building on the following pages. Site improvements should enhance public access around the structure and minimize impacts to the shoreline.

Phase 2:

- A new facility should be provided to accommodate the JCAS program within the educational complex in the Program Zone. Outdoor classroom space should be shared with other facilities.
- The new facilities should be completed prior to demolition of the old structure.
- The JCAS program should maintain a sense of individuality from other uses in the building cluster whether housed in a detached building or not.
- The existing JCAS location would become important waterfront open space for a demonstration wetland, or interpretive area. Pedestrian circulation would be improved through the currently constrained portions of sidewalk.
- Public art commissions should be considered in the scope of the new construction.

Figure IV.23 Proposed Junior Center for Art and Science Plan

History

The building currently occupied by the Junior Center of Art and Science has been in its current location in Lakeside Park for almost fifty years. It originally housed a restaurant, and has been remodeled and added to numerous times over the years. The Junior Center of Art and Science has occupied the building for ten years and is currently developing plans to remodel the building to gain more classroom space and better suit their needs.

This building has many problems, but the most serious one is its location. It is situated very close to both Bellevue Avenue and the edge of the lake, constricting both access corridors. Additionally, the building has no clear entry, an odd and carved up shape, many unharmonious roof lines, and poor building materials and methods of construction.

Existing Comfort Station

Design Recommendations

The building should respond to the park's architectural context and proposed design themes in a more harmonious manner. Given the current status of the program's remodel and fundraising plans, the Master Plan will have a two phase recommendation.

The first phase of work should be a remodel of the existing building, in its current location. The following items should be considered in concert with the Junior Center's schematic design plans.

A. Unification of the building mass.
- Fewer roof shapes
- Infill of awkward exterior spaces
- Integration of outdoor classrooms
- Uniformity of materials and colors

B. Provide a clear street presence on Bellevue Ave.
- Relocation of main entry
- New building identification signage

C. Mitigation of constricted path at lake edge.
- Reconstruction/reconfiguration of "cupola" portion of building

The second phase of work should provide a new home for the Junior Center of Art and Science as part of a new educational complex situated on the current site of the park maintenance shed. This building should include enough space to accommodate the Junior Center's expanded programs, including outdoor classrooms, along with classroom space designated for Garden Center education programs, expanded Rotary Nature Center programs, auxillary Sailboat House classrooms, and others. A police sub-station, and concession stand should also be housed in the complex. The existing original park "comfort station" should be restored as new accessible restrooms. This site will be highly visible on the border of the new pedestrian promenade, anchoring the east side of the new hilltop courtyard, with views and direct access to the shore of Lake Merritt.

Maintenance Facilities

- The existing regional maintenance facility in the center of the park should be reorganized and relocated to maximize park use by the public. Non-Lake Merritt equipment, staff facilities, and storage should be located outside the park.
- Lake Merritt equipment, staff facilities, and storage should be relocated to a combined service area in conjunction with Fairyland. The operation should add a modest new building, and occupy the adjacent historic building (currently a closed restroom).
- An educational sustainable maintenance center is proposed at the “Garden Center Courtyard”. This facility would operate as part of the Garden Center and demonstrate sustainable maintenance techniques. Organic composting, integrated pest management, and ecological management are activities that could be emphasized to the public.

Police Substation

A permanent facility for ranger patrol should be provided in Lakeside Park. Increases in patrol hours should be provided in addition to increased visibility of security.

- The facility should house a small, permanent office for a full time administrative attendant, staff lockers, break areas for off-duty rangers, and storage for patrol bicycles. Patrol vehicle parking should be provided nearby.
- Meeting space in other nearby facilities should be made available to rangers for community outreach.
- Signage should indicate the presence of the ranger station.
- Public art commissions should be considered in the scope of the new construction.

Police Horse Stables / New Maintenance

The Oakland Police Department Horse Stables are the most recent architectural addition to Lakeside Park. Essentially a barn, the building houses half a dozen horses. The exterior wall material is a particle type board which is already showing wear. The entire site, including a corral and pasture, is surrounded by barbwire topped chain link fence. According to the Park Rangers, the stable will be closed in the next few years, making the site available for other uses.

Design Recommendations

The building and surrounding amenities should be removed from the park. The run off from the pasture contributes to the poor water quality of the lake. The hilltop on which it is situated is essentially cut off from the public, and will be a valuable space to reclaim.

Lake Merritt Park maintenance facilities, which should be removed from their current location adjacent to the Demonstration Gardens, should be relocated here. These facilities should be dedicated to Lake Merritt maintenance only. The existing closed restroom building should be reconfigured to house a staff office and restroom, taking care to preserve the historic architectural character of the building's exterior. In addition, a modest storage shed for equipment and supplies should be constructed adjacent to the access road.

Rotary Nature Center

History

The Rotary Nature Center is a natural science education center that was designed by Chester H. Treichel, Architect in 1953. The redwood clad building houses an assembly hall, interactive displays, which include an active beehive integrated with the architecture, and more. The building has canted exterior walls and wide overhangs. It has sloped glazing for glare-free viewing of the lake to the south and twelve foot tall glazing to the north. It has bathrooms, which are directly accessible from the adjacent park. Minor additions and remodels have occurred over the years, most notable in 1970 and 1994. All are in keeping with the original architectural style.

The Rotary Nature Center is situated on the north shore of Lake Merritt, directly ashore from Lake Merritt's man-made islands. It is adjacent to the freshwater duck pond, which has been present at The Lake for at least eighty years.

Design Recommendations

The Rotary Nature Center is a well-loved and unobtrusive building, which is well sited. The building should receive new signage and the restrooms should be upgraded.

Existing Rotary Nature Center

Example of interpretive signage

Snack Bar

General

The presence of a snack bar in Lakeside Park dates back to 1912, when a permit for a refreshment stand was granted at a construction cost of $300. Today's snack bar sits halfway between The Garden Center and the Edoff Bandstand. It is a small nondescript wood building with a rollup counter door and stainless steel counter.

Design Recommendations

The building is in poor repair and as it seldom operates, should be removed from the park. New concessions should be incorporated into the education complex at the new Garden Center courtyard. Extensive commercialization and trash should be avoided. The use of biodegradable containers should be encouraged. This location, away from the lake's edge and protected from the wind, should help make sanitation controllable.

"Picking out historic detailing is great. We want what's new to blend in and enhance the contributing elements." - Community Member comment on Lake Merritt in March 2002.

Free and Clear Open Space

- A central lawn should be provided for informal, active recreation. The site should be graded and the lawn replaced. Select removal of existing trees should be considered where play opportunities would be enhanced.
- New pathways should be added and existing ones replaced to facilitate better circulation in Lakeside Park. Pathways to be used by Fairyland's Lark Train should be sized to safety accommodated the vehicle.
- The center of the park should be enhanced for public use. A pedestrian promenade should be created that connects the two sides of the park- the bandstand and the ecological restoration area. Benches, lights and special paving should be included.
- The viability of scheduled Bellevue street closures for promenading and events should be explored. Timing of closures would be critical in order not to disrupt parking needs.
- The operation and context of the Mclroy Fountain should be restored. Lighting should be provided that is in keeping with the historic character while maintaining safe levels of illumination. The pump house should be eliminated and the pump operations moved below ground.
- Geese should be actively discouraged from using this zone. Refer to the Ecology section of the Plan Overview for additional recommendations.

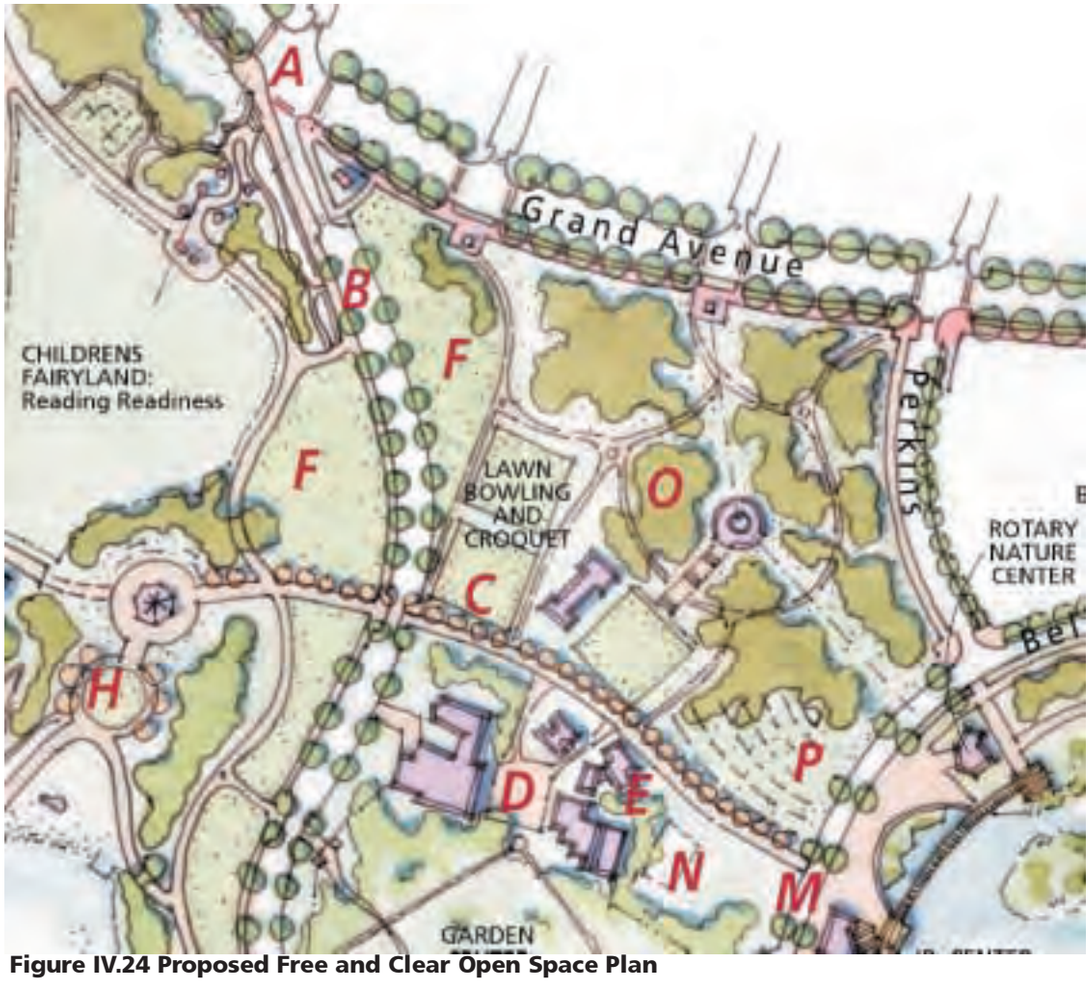
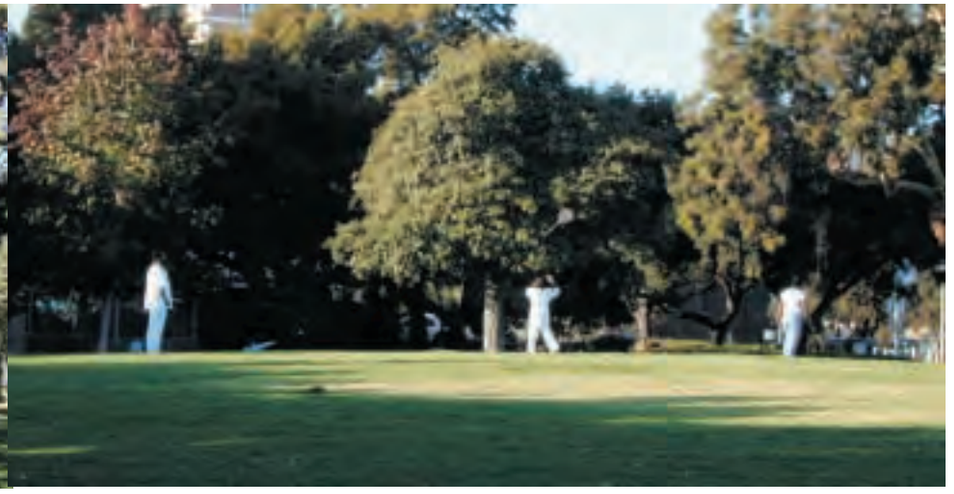


Figure IV.24 Proposed Free and Clear Open Space Plan



Circulation

Roadway Changes

- The Lake Merritt Master plan calls for Bellevue Avenue, within the park, to be widened by eleven feet. Diagonal parking could be implemented on both sides of Bellevue Avenue and could be broken up by planter islands at important view areas and by bulb outs at crosswalks. The plan also recommends the reduction in paved area and the removal of all but boat related parking in the shoreline lot next to the sailboat house.
- Bellevue, at Parkview, should be narrowed to one lane at the entrance. That would provide a much narrower and safer pedestrian crossing. It would also make it clear where cars should queue up to get a parking ticket.
- Improvements to the bus pickup and drop off to Fairyland are recommended.

Traffic

- Implementing diagonal parking on Bellevue would encourage reduced travel speeds within the park.
- Two gate parking control systems should be added to the parking lot. Its purpose would be to discourage through- traffic and parking fee violators.

Transit

- Improvements to the bus pickup and drop off to Fairyland are recommended.

Parking

The Lake Merritt Master Plan recommends that there be no net gain or loss in parking within the park.

- Diagonal parking would be striped on both sides of Bellevue Avenue to replace the spaces lost at the Sailboat House parking lot. The diagonal parking would be broken up by occasional bulb outs for crosswalks and landscaping.
- A majority of the Sailboat House parking lot would be converted to park space. A few spaces should be preserved for handicapped, loading and boat trailer parking.

Parking would be more efficiently managed by charging people by the hour instead of by the day. This should discourage all-day parking by local residents, businesses and other off-site users, and provide more parking opportunities for park visitors. Managing Bellevue more like a parking garage should accomplish this. A ticket machine at the entrances could issue drivers a time-stamped ticket. Push buttons for ticket machines would need to be located low for autos and high for busses. Drivers would then turn the ticket in to a live person at an exit booth that would check the ticket for time parked, charge the driver and collect the money. If someone could not find a parking space on Bellevue and exited within ten minutes of entering, they would not be charged. A high fee could be implemented for overnight parking. The entrance gate would be closed at night when the park is closed. It could be left open for free days.

Parking Event Management

The Lake Merritt Master Plan recommends that a management group should be employed to oversee the coordination of all park events. It is proposed that events that have an expected 25 or more visitors would be required to submit a proposal for management. This would be done to get a better sense of what events are occurring within the park and if special attention needs to be given to parking. The event registration/application could be completed through an internet based database. The database would allow all participants, entities and the management group, to know what events are happening within the park at a given time. Event planners could make an informed decision as to if they might need to utilize outside parking facilities as well as a shuttle service. The use of outside parking facility should solve the parking problems in the park caused by large or simultaneous events. The Kaiser Center parking lot could be an important resource in this regard.

"Event planners should encourage patrons not to drive and provide incentives. Park management should prioritize non-automobile access."
- Community Member comment on Lake Merritt in March 2002.

Landscape Recommendations

Park Management and Botanical Gardens

A new botanical area of approximately 17 acres, organized by geographic areas will expand beyond the existing Botanical Garden fenced collections. The new botanical area is intended as an adjunct to the existing Botanical Garden to entice the Park visitors to enter the Botanical Gardens and walk leisurely along additional pathways through new planting bed areas on both sides of Bellevue Avenue. Seating areas should be provided for park visitors to rest. This area could be distinguished from the rest of Lake Merritt Park by entry points and a different color aggregate treatment on the pathways as well as interpretive signage.

The new planting beds build upon the original intent of the Lakeside Botanical Gardens. The original garden vignettes within were intended as small sample gardens that post World War II homeowners could build in their yards. Garden themes included water gardens, Japanese gardens, small arbor seating areas and annual flowering gardens, such as chrysanthemum gardens, dahlia gardens, etc.

Drawing upon the multi-cultural make-up of the City of Oakland, the arboretum ideas draw upon geographic-based, climate-adapted garden beds. The Mediterranean Northern African and South African vegetation provide physical representation from this area as well as from the southern European continent. People from many cultures could visit and see plants from distinctive landscape zones around the world.

Newer gardens include Firescape Garden, Bonzai Garden, Community Gardens and the new Mediterranean Garden. The continued support and involvement of garden volunteers and non-profit groups in the maintenanceand programming of the arboretum grounds should be encouraged. These clubs and vignettes provide a dynamic to the educational mission of the garden.

A high cyclone fence surrounds the existing Botanical Gardens to protect the valuable collections within. The fencing is necessary, however it is not inviting for visitors. To lessen the divisiveness, tree plantings that knit the outside form to the inside form are recommended. Dominant trees are Italian stone pines and palm trees. New tree and palm massings will build upon these existing plantings. In addition to the Mediterranean plant areas, a tropical plant area is planned next to the Botanical Palm collection, extending toward the Lake's edge in the new picnic and lawn area.

Figure IV.25 Illustrative Landscape Recommendations Plan

Botanical garden recommendations include:

- Provide plantings that add to the existing botanical themes.
- Increase the use of flowering plants in the park
- Provide vegetation that benefits wildlife.
- Provide educational areas for schools- from youths to community college students- for the general public interested in plants useful to their home yards, for park visitors, and for resident programs of Lakeside Park.
- To reduce the maintenance required in 17 acres of labor-intensive areas such as lawns.
- To provide non-lawn areas that reduce goose grazing and provide habitat for other wildlife such as smaller birds, quail, hummingbirds, butterflies, etc.

Figure IV.26 Botanical Garden Diagram

Arboretum Recommendations

- Plant collections should be selected that can survive outside the fenced area.
- Massing of low shrubs from the various theme zones is designed with a seamless progression from one geographic area to the next. Shrubs and groundcover should be under three feet in height for visual safety.
- Shrub areas (mostly in Lakeside Park) should be organized into Mediterranean climate adapted plants from various Mediterranean geographic areas: European and North African Mediterranean Area, South Africa, Central and Coastal Chile, Southern and Southwestern Australia and California.

- Color schemes should be selected by color of bloom, texture or contrasting elements drive the design.
- Plants should be selected based on the benefits for wildlife habitat such as shelter and/or food.
- Educational signage should be located on pathways to depict botanical themes and species.
- Interpretive signage, such as a numbering system, should be provided. Brochures detailing plants, geographical areas and interpretation should be made available at Children's Fairyland or the new educational facilities/landscape maintenance area. Volunteers (or others) who now lead tours of Children's Fairyland gardens may include (or be trained for) further tours of the new Arboretum grounds.

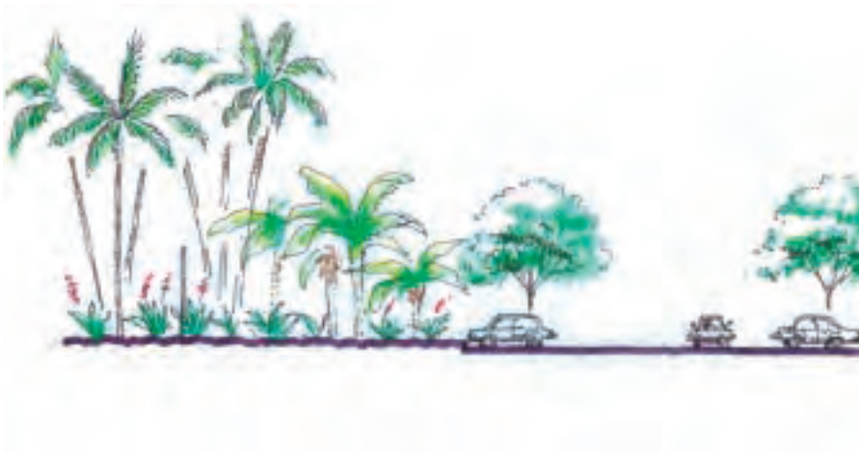
In addition to the Mediterranean plant areas, a tropical plant area is planned next to the Botanical palm collection, extending toward the Lake's edge in the new picnic and lawn area.

The Vegetation Plan is compatible with park wildlife management and long-term maintenance goals. The planting design tool balances various needs of wildlife. The recommendations allow lower growing shrubs and groundcovers to provide cover and nesting for smaller birds such as quails, etc. Lower growing shrubs include plants used by wildlife. Smaller areas of plants attracting hummingbirds and butterflies are included.

These plant changes will aid goose management by reducing lawn areas used as feeding areas by the geese and will provide habitat for additional wildlife. Shrubs that are climate adapted should be used to reduce maintenance hours and allow maintenance staff time for other necessary tasks.

Botanical Garden Interpretive Walk

An interpretive path of colored aggregate asphalt that has a beginning and ending trailhead with signage could mark the arboretum path. The path should provide inscribed directions to other areas of interest, such as the North African plants or the Mediterranean plants from the European Continent and Mediterranean climate areas. The pathway meanders through the Botanical area on both sides of Bellevue. The pathway with interpretive signage at the entry point will provide educational material concerning the trees and native locations. The pathway will end at the axial connections between the Sailboat House and the new entry to the enclosed Botanical plant collections.



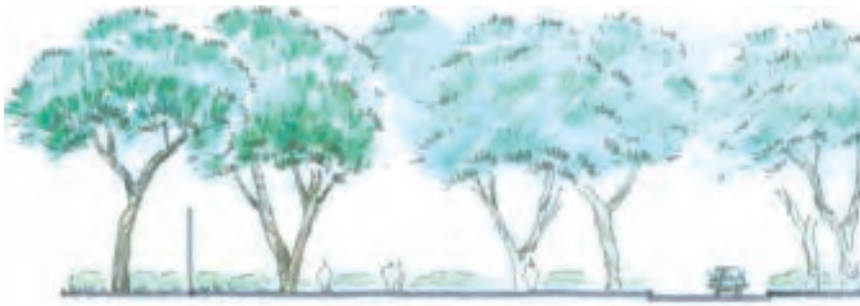


Figure IV.27 Proposed Tree Planting on Mid-park Promendade

Figure IV.28 Proposed Section with Expanded Palm Tree Planting in Lakeside Park

Figure IV.29 Proposed Section with Expanded Pine Tree Planting in Lakeside Park

Entry Gates

New entry gates to the Botanical Gardens would clearly mark the points of public entry and provide a more significant presence to the gardens. Gates should be constructed of metal material and to provide a strong entry statement to the Botanical Gardens.

Major entry control points:

1. Entry across from Sailboat House on a direct axis.
2. Entry from Interior Promenade Walk: This entry can have a focal fountain in a paved plaza area. Area can be a gathering area and waiting point where people can meet.
3. Minor entry at the Garden Center Side. This entry gate should be similar in design and meterial, but less elaborate.
4. Other entries: The entry from the former Firescape Garden area is abandoned. Problems controlling the area exist when the gates are left open. This gate should not be used by Botanical Garden visitors, but could be used as a maintenance access. All other gated entries should be abandoned aside from maintenance staff access points.

Top: Gate by Tito Patri & Associates
Bottom: Gate detail at Jewish Center, San Francisco
Facing Page: Flowering magnolias

Other Special Areas in Lakeside Park

Lawns

Highly used lawn areas should remain open for active public use and new lawn areas by the Sailboat House should be added for picnics and other recreational needs.

Woodland Areas

The northeastern section of Lakeside Park bounded by Grand Avenue and Perkins Street was planted in 1910 with Austrian pines. The area was originally planted to afford visitors a secluded space in the urban world. The tall trees helped block the views of the houses to the north. The Master Plan has identified this area as an area to be maintained as a woodland area. Meandering pathways are identified to be repaved. Leaves and needles will be utilized as mulches under the drip lines. Lawn should be removed from the base of the tree and replaced with mulch or sod. No automobiles or heavy machinery should be allowed under any drip lines.

Bellevue Drive Landscape Recommendations

Interior Promenade Walk

Current Conditions: This area is now used by park maintenance staff and City of Oakland employees who often drive around during their lunch break and park their vehicles under the trees. It has a backyard, neglected feeling.

Master Plan Guidelines: Provide flowering Magnolia promenade. Trees can be of various species with pink flowers.

Pathway: Colored aggregate concrete of a surface conducive to rollerblading, skating, and small bicycle areas. Pathway with interpretive signage at the entry point will provide educational material concerning the trees and native locations.

- This woodland area also contains the McElroy Memorial Fountain. Built in 1911, it has bas stone reliefs by the sculptor Douglas L. Tilden.
- Tall street trees that allow a clear view of the Kaiser Convention Center are appropriate. Small flowering trees that provide color at a pedestrian level should be planted in between the tall street trees.

GRAND AVE. PROMENADE

Grand Avenue is a common link to a diverse collection of urban conditions. Stretching from the Grand Lake business district to downtown at Harrison Avenue, it ties the local businesses to the park façade. The master plan recognizes the opportunity to extend the improved park character to the local business community. The design concept is to create a unified streetscape/sidewalk that composes planting, decorative paving, unique benches, banners, park signage, and gateway markers. The condition to connect the two ends as well as the many pieces in between. As a promenade, it would be designed for movement: strolling, jogging, shopping, and passing driving by. Local residents, customers and downtown walking commuters would use the promenade daily. It would be identifiable by night and day. The improvements would become a central part of the revitalization of Grand Avenue and Lake Merritt's Lakeside Park.

Recommendations

A promenade (enhanced sidewalk) is recommended in both the park border areas and retail segments.

- In park segments, the concrete sidewalk should be widened to 8 feet in order to comfortably accommodate neighborhood pedestrians and recreational users.
- The promenade paving should be enhanced artistically to highlight the uniqueness of the route and context.
- A 3' decomposed granite jogging track should be placed adjacent to the sidewalk on park segments.
- In the business and residential sections of Grand, a portion of sidewalk should be replaced with decorative paving motif to match the park segment design. (Alternatively, the entire sidewalk should be replaced with the promenade theme paving).
- The parking strip should be planted with lawn in applicable park segments.
- Over time, new plane trees with natural branching habit should replace the pollarded species.
- Special attention to night-time illumination of benches, markers, and the promenade should be provided.

Lake Merritt entry signs curently welcome with "NO".

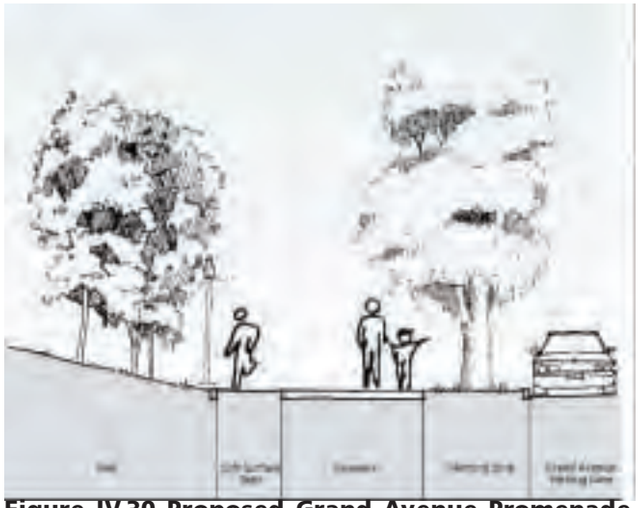


Figure IV.30 Proposed Grand Avenue Promenade along Park Segments


Figure IV. 31 Proposed Grand Avenue Promenade along Neighborhood Business Segments

Facing Page Left: Proposed Grand Ave. Promenade
Facing Page Right: Sidewalk with surfacing in the planting strip

GRAND AVE. PROMENADE

Circulation

Roadway

- The Lake Merritt Master Plan recommends that the Bellevue Avenue leg of the intersection of Grand Avenue with Parkview Terrace should be narrowed to one lane with bulb outs.
- The southern leg of the intersection of Grand Avenue with Bellevue Avenue should be narrowed to two lanes with bulb outs, removing the sweeping right turn.
- The bulb outs and crosswalks called for in the Grand Avenue Bicycle, Pedestrian, and Parking Project should be constructed.

Traffic Operations

- The proposed changes to Grand Avenue will not have any significant impact on traffic operations.

Pedestrian and Bike

- The Lake Merritt Master Plan recommends that the two crosswalks crossing Bellevue Avenue be shortened to less than half their current length. This should make Grand Avenue more pedestrian friendly.
- The existing on-street bike lanes on Grand would become part of the bike lane loop around Lake Merritt.

Parking

There would be no parking impact to Grand Avenue.

Transit

- The feasibility of moving bus stops from the near side to the far side of signalized intersections should be investigated when improvements to the respective streets are designed. This would reduce bus blockage of through vehicle lanes.

Landscape Recommendations

Current Conditions

London Plane Tree *(Platanus acerifolia)* with headed limbs.

Landscape Recommendations for a Boulevard Effect

Successive trees to replace existing or new street trees on Grand Avenue Blvd. should be London plane trees *(Platanus acerifolia)*. A natural growth habit without pollarding or heading back of limbs is recommended. Existing non-pollarded London plane trees along Grand Avenue Blvd. should remain. Turf should be planted in the parking strip in park sections.

LAKESHORE AVE. EDGE

The master plan identifies the Lakeshore Avenue Edge as a unique zone characterized by the low-scaled neighborhoods, the narrow park border, the perimeter parks, and the panoramic views of downtown. Opportunities are discussed for each area. The sum of the parts will provide the restoration of the entire Lakeshore Avenue park zone.

Recommendations

Lakeshore Avenue (Upper and Lower)

- The segments of park along Lakeshore Avenue are identified as important passages and places for pause. With dramatic views of the lake framing the city skyline, the area is a popular destination for walkers, joggers, and scenic enthusiasts. The plan proposes to provide new pathways for the diverse types of mobility- both on the street, in the park and on the shore. New benches and opportunities for viewing are proposed. Significant neighborhood histories are expressed at nodes found along the shoreline, possibly through the Art Element.

Lakeshore Avenue Park Border

- The plan recommends narrowing Lakeshore Drive in order to provide additional park area. This benefits park recreational users and those seeking access to the Cleveland Cascade and Pine Knoll Park.
- Marked lanes on Lakeshore should be provided in order to improve regional and local bicycle circulation.

Multi-Use Path

- A 12-14' multi-use path should extend the entire Lakeshore zone to provide circulation for the many users along this edge such as children on bikes, dog walkers, joggers, wheelchairs, and strollers. The pathway should be made of concrete. Its surface should be smooth to accommodate all sizes of wheels. Special patterns of color and texture may be developed to express a particular cultural interest such as the historic "Spanish Trail".
- A six to eight foot lawn strip planted with street trees should separate the street curb and promenade.

Lakeshore Avenue Shoreline Trail

- A decomposed granite path should be provided along the lake edge for jogging and walking. In two short segments where the curb-to-shore dimension is less than 50 feet, there is insufficient width to accommodate the two paths. In these few cases, the two paths should combine to form a single, multi-use path.

Proposed multi-use path along Lakeshore Avenue

LAKESHORE AVE. EDGE

Lakeshore Avenue Nodes/ Gateways

Viewpoints or intersections with neighborhood pedestrian routes should be highlighted as important nodes. A higher level of landscape development such as planting, paving, low walls, or other subtle treatments should mark these locations. History markers or Art Elements could also be included here. Special paving such as stone unit pavers should be used.

Figure IV.32 Existing Lakeshore Avenue

Figure IV.33 Proposed Lakeshore Avenue

Pine Knoll Park

The perimeter park should be incorporated into the larger Lakeshore edge parkland both visually and physically. The plan envisions the park as a prime afternoon sunning spot and viewpoint to the downtown waterfront edge. A low retaining wall should be placed along the base of the slope to improve the usable area of the upper terrace. The proposed design includes a staircase to mark the entry and provide a lookout from the top. Bulb-outs and marked crosswalks should be placed in the street to enhanced access from Lake Merritt Park. The historic restroom facility should be maintained until a modern replacement can be constructed at nearby Athol Park. At that time, it would be converted to storage for use by maintenance personnel.

LAKESHORE AVE. EDGE

East 18th Street

The dock at the terminus of East 18th Street is restored and made accessible. Athol Park and street medians are also improved.

- The historic dock is rebuilt as an important plaza and viewpoint.
- Railings, pavement, planting, lighting, and signage are replaced. Ecology and history should be interpreted by use of interpretive signage and art.
- The plan identifies the potential for redeveloping the shopping center to better address Athol Park and the business street. By promoting a more intensive use of the site, the park and retail street could become more active and successful.

Photo of East 18th Landing

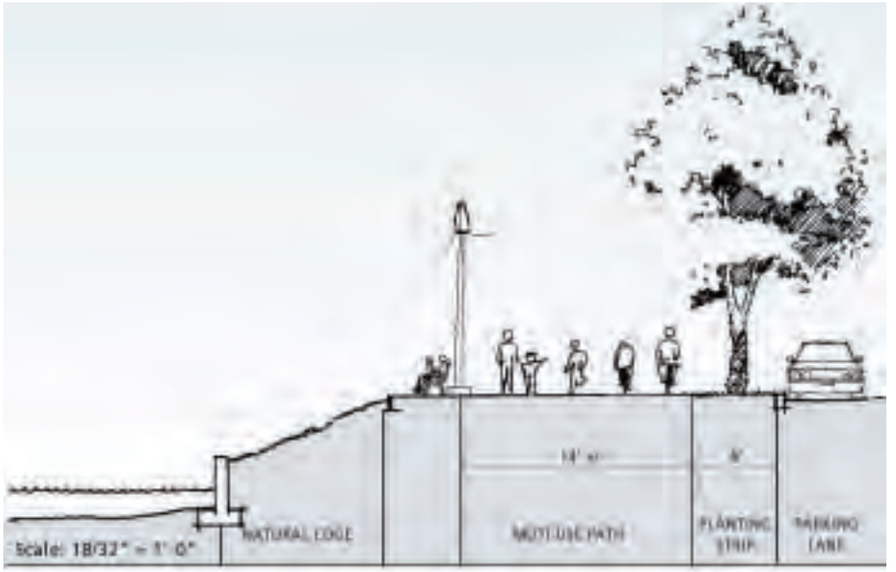


Figure IV.34 Section at Lakeshore Avenue (Park is less than 50 feet wide)

- Athol Park is revitalized as a part of Lake Merritt Park and gateway to the 18th Street business district. Envisioned as a pocket park, the new destination provides community event space for markets (combined with a street closure), a children's playground, new furnishings, and a restroom. The tennis courts remain.
- Renovate street medians and islands per the gateway concept.
- Special paving such as stone unit pavers should be used in the vicinity.

"I'm glad to hear the pier at 18th is going to be developed. That could be a beautiful spot. The whole little area, with tennis courts, greenery, pier-it could be quite idyllic." - Community Member comment on Lake Merritt in December 2001.

Figure IV. 35 Section at Lakeshore Avenue (Park is greater than 50 feet wide)

Figure IV. 36 Plan of Proposed Athol Park and Street Modifications

LAKESHORE AVE. EDGE

Figure IV.37 Existing Grand Lake Green Link Area

Figure IV.38 Proposed Grand Lake Green Link Area

Grand Lake Green Link and Eastshore Park

This perimeter park area represents a significant open space area with heavy use by neighbors, local shoppers, and school children. The tot lot, restrooms, and open lawn areas are recommended for enhancement. The plan recognizes the subsurface creeks as asignificant element of the lake's ecology. A creek restoration is envisioned as a central feature of the park adjacent to the proposed promenade along Grand Avenue. The feasibility of daylighting the creek needs further technical exploration. As an alternative to daylighting the creek, its presence could be interpreted by a designed surface landscape. A special area for dogs (per city parks rules) is identified along MacArthur Boulevard.

- Low fences could be used to designate and corral activities adjacent to MacArthur Boulevard.
- All features of the park are renovated including restrooms, lawn, pathways, planting areas, fencing, parking, sidewalks, furnishings and lighting.
- Library building renovation and program enhancement at the Lakeview Library is supported by the plan. While no specific improvement proposals were identified during the master plan process, the present use of the facility by children, teens, and adults is encouraged.
- The modified parking lot should be accessed from Lakeshore Avenue. Green design principles should be implemented in the reconstruction. The quantity of spaces is maintained in the proposal.
- Pleasant Valley Creek (or Trestle Glen Creek) should be uncovered or partially diverted to the surface from MacArthur Boulevard to the Pergola. Pedestrian bridges should connect the Grand Avenue promenade to the park interior. Special riparian and oak woodland plantings are proposed to line the restored creek.
- Play fields should be maximized for use by the community and nearby schools. Decorative fencing should be used to reduce conflicts with passing cars.
- The plan identifies a dog use area as a potential use in the park. Off-leash status should be pursuant to City of Oakland regulation. Low fencing should be required to corral dogs in an off-leash conditions.

LAKESHORE AVE. EDGE

Circulation

Roadway Changes

- The Lake Merritt Master plan calls for Lakeshore Avenue to be narrowed to two lanes, with one in each direction, from west of the El Embarcadero intersection to east of the East 18th Street intersection. At those intersections there would still be four through-lanes, and a left turn lane. At all other intersections there would be three lanes, including center left turn lanes. Restricting parking near the intersection would provide the space for the center left turn lane. This is already done at those intersections. Therefore, there is no loss of parking. On street parking should be provided everywhere else. Bike lanes would be added in each direction
- Lakeshore Avenue should be narrowed between 18th and 15th to four lanes, two in each direction. Bike lanes would be added in both directions. A narrow median would be built between Foothill and 15th Street
- The Lake Merritt Master Plan recommends ending Lakeshore Avenue at 12th Street, with a cul-de-sac. This would divert traffic to 1st Avenue allowing Lakeshore Avenue to be narrowed and made into a more park friendly neighborhood street. The East 15th Street intersection would be reconfigured to open up parkland next to the lake.
- The Master Plan would reconfigure 1st Avenue as a four-lane street by eliminating parking. Unfortunately there would not be enough room for bike lanes on 1st Avenue. This short street section should be made as bike friendly as possible by narrowing the two inside lanes to the minimum width and therefore making the outside lanes wide enough for bicycles and vehicles to share. 1st Avenue would be a signed bike route. The two-lane free-right-turn onto International would be converted into a double right turn bay to improve bicycle safety.
- No property would need to be acquired because the proposed changes only narrow the road. Thus the project would stay within the existing road right of way.
- The Grand Lake Green Link Plan calls for closing one of the El Embarcadero roadways. The remaining roadway would be converted into a two way operation. This would increase park space and reduce the number of street crossings for pedestrians. The Lake Merritt Master Plan is compatible with and fully supports the Grand Lake Green Link Plan and its recommendation to close one half of El Embarcadero.
- Driveway access to properties on Lakeshore Avenue will be maintained.

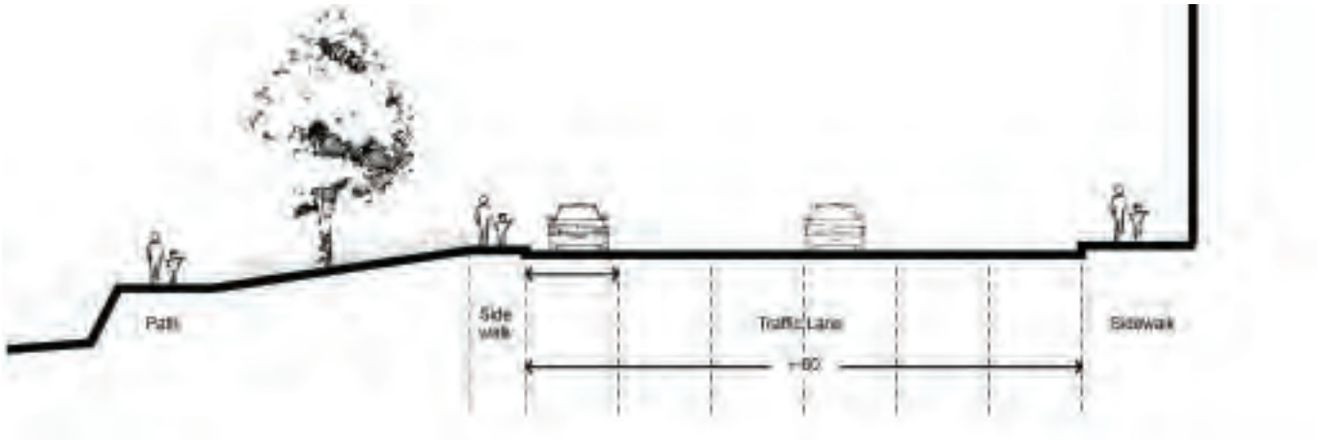


Figure IV.39 Existing Condition Section at Lakeshore Avenue

Traffic Operations

- The reason Lakeshore Avenue could be narrowed to only one lane each way north of 18th Street (but needs to be four lanes south of East 18th Street), is because there are significantly higher traffic volumes on the street south of East 18th Street. Traffic from East 18th, Foothill, East 15th and International merges onto Lakeshore Avenue to get over the channel at 12th Street.
- This design maintains a Level of Service of C or better.
- Left turns from southwest bound Lakeshore Avenue to East 15th would be prohibited. This is because there would not be enough space on 1st Avenue for five full lanes (with a left turn lane), as needed to handle the through traffic volume.
- Left turns from 1st Avenue would be prohibited, again because there is not enough room for left turn bays. under the proposed configuration, raffic that currently turns left from southbound Lakeshore onto East 15th would turn early at East 18th or later at the new 1st Avenue and East 12th Street intersection.
- Between 16th Street and the cul-de-sac at 12th Street, First Avenue driveway access would be right-in and right-out only. This is because the intersection of with Lakeshore Avenue and 1st Avenue is too far away from East 15th Street to be part of the signalized intersection and too close to be a separate signalized intersection. There is also no room for a left turn bay on 1st Avenue. Vehicles exiting to go north on Lakeshore Avenue may make a U-turn at the intersection of 1st Avenue with East 12th Street. Vehicles going north on 1st Avenue that desire to enter may go around the block of East 15th, 2nd, Foothill and Lakeshore. The traffic volumes are expected to be very small.

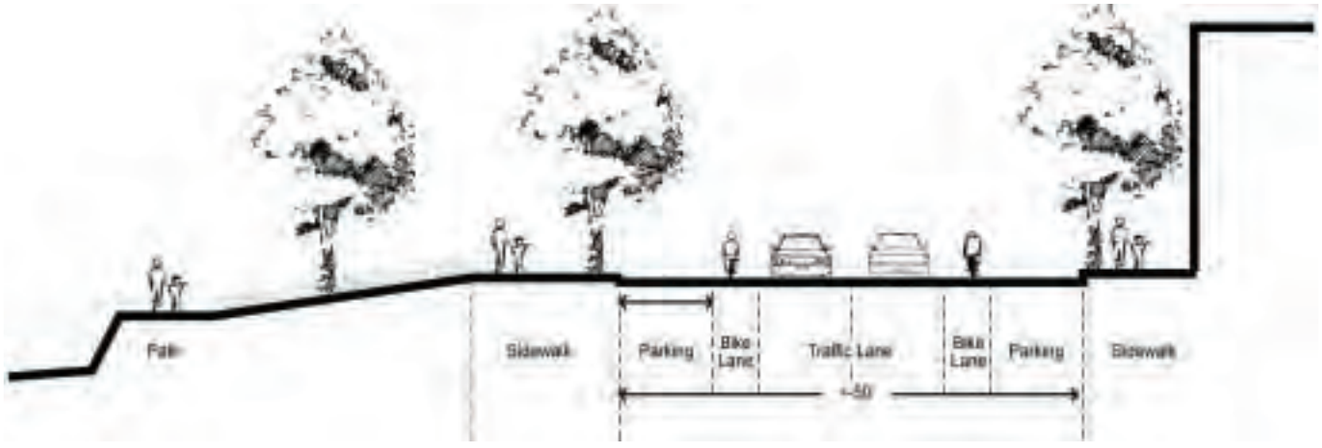


Figure IV.40 Proposed Section at Lakeshore Avenue

LAKESHORE AVE. EDGE

Bike and Pedestrian

- The addition of bike lanes should make bike travel on Lakeshore Avenue much safer.
- The bike lanes would implement a portion of the Oakland Bicycle Master Plan.
- A fourteen foot wide multi-use path would replace the six foot sidewalk on the lake side of the street, with a park strip in between the path and the street. The multiuse path along the lake would provide a bike and pedestrian recreational route.
- The narrower streets should make pedestrians feel safer when crossing.

Parking

- There would be no loss of parking on Lakeshore.
- All parking would be removed on 1st Avenue between East 15th Street and International Boulevard.
- Some of the parking would be replaced by new parking on Lakeshore between Foothill and 15th Street.
- There would be new parking spaces created about a block away on East 12th Street.

Transit

- The bus stops on 1st Avenue just north of International Boulevard would most likely be relocated north of 15th Street or south of International Boulevard. This would affect AC Transit bus routes 13, 14, 15, 40, 40L, 43, and 618.
- When number of lanes on Lakeshore Avenue is reduced, the northbound bus stop at Brooklyn Avenue should be moved north of Brooklyn Avenue to prevent bus blockage of Lakeshore Avenue.

Landscape Recommendations

Street Tree Planting Selection Criteria

- Street trees should be in scale with the building facade heights.
- Leaf litter should not overburden the Lake and pose a major detriment to water quality.
- Street trees should present a grandness as envisioned by Mayor Merritt when he proposed scenic boulevards around the perimeter of the Lake.
- Tree selection and spacing should consider views from adjacent properties without compromising the street or park appearance.
- Maintenance of trees should be completed when seasonally appropriate and in an expeditious manner.

Ginko tree leaf

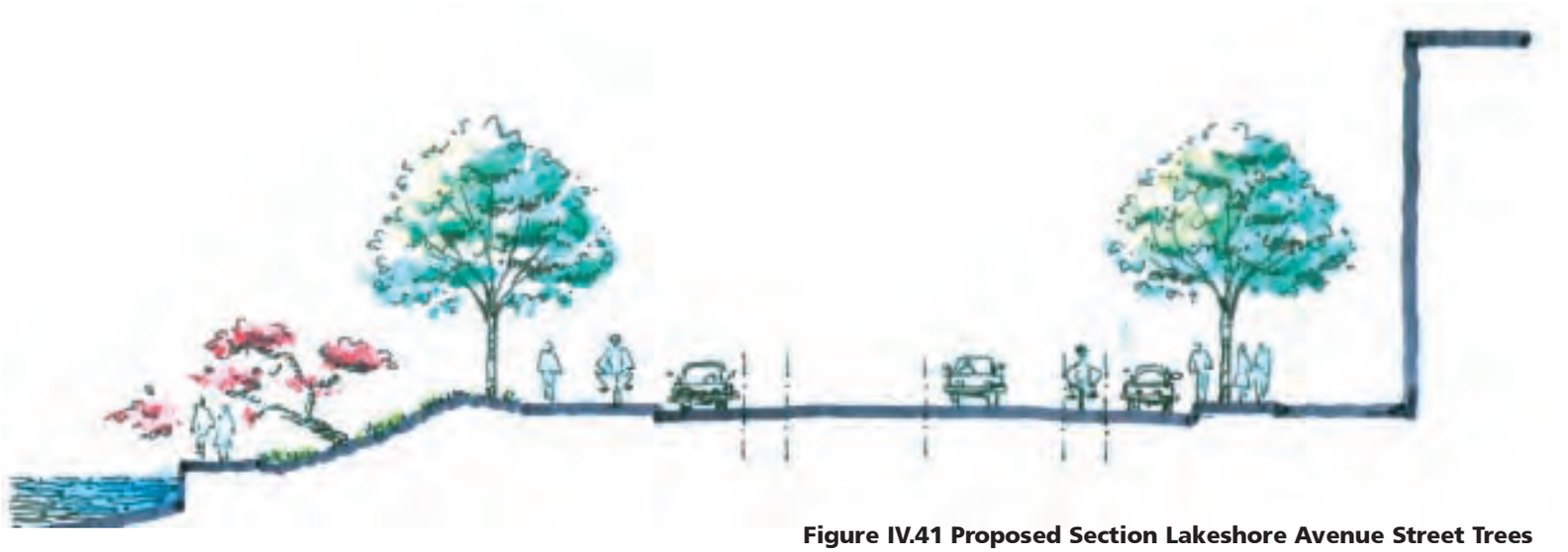


Figure IV.41 Proposed Section Lakeshore Avenue Street Trees

Existing Irrigation System

Water Supply Sources

Currently Lake Merritt Park uses one source of supply for irrigation, the East Bay Municipal Utilities District (EBMUD) domestic water supply. The water is delivered at five water meter locations. There are 19 controllers for the irrigation water.

A backflow device is located at each of these series of metered service connections at various locations in the periphery of Lake Merritt Park. These backflow devices prevent reversal of the irrigation system into the EBMUD water distribution system.

Pipeline Distribution System

Irrigation system distribution pipelines are generally positioned two feet off of sidewalks in Lake Merritt Park. Some lines cross Lakeshore or Lakeside depending on water meter locations. Pipelines that are four inches and smaller are generally schedule 40 PVC pipe. Generally, distribution pipes are no larger than four inches, but there are some areas along Lakeshore that are six inches PVC for short runs. The only information available regarding the condition of the old water pipe system is from water system operating personnel who have observed the condition of the pipe while repairing leaks and breaks.

There is a mixture of old and newer irrigation pipeline systems. The newest areas where mainlines have been replaced are the 18th Street to Kaiser Area and at newly repaired sections along Lakeshore Avenue. The Harrison Street area from Snow Park to the median islands and up to Grand Avenue, Grand Avenue and Lakeside Park areas have the oldest systems. The oldest areas and systems (+30 years) are the area just east of Fairyland in the lawn and tree areas and areas surrounding the Kaiser Building. The mainlines in the Kaiser Area and 19th / Harrison Streets are transite pipe lines and patched new PVC lines. Many of Lake Merritt's Park areas are watered through a hose system. There are irrigation plans for Eastshore Park, areas next to the Veterans' Building, and Snow Park (1986). Plans of the Veterans' Building and Eastshore Park are not dated. There are no as-built drawings of the irrigation systems. There are no accurate maps of the existing water pipelines. Leakage quantities from irrigation system distribution pipelines are not known.

Figure IV.42 Irrigation Controller Location Map

System Evaluation

- Water Quality

  Most areas of Lake Merritt Park have sensitive vegetation that is not conducive to reclaimed water use. The water quality is good and should be free of algae growths and debris. Typically, the irrigation system is in working order but commonly malfunctions due to old age or damage from vehicles and people.

- Water Pressure

  Measured at about 70 psi by OPR staff.

Monitoring and Control System

Operations are inefficient due to a lack of current control systems, satellite remote control systems and old inefficient irrigation systems. New clocks have remote control capacity, but lack of funding eliminate this remote use presently. Some parks have been watered by hand (hose) in the past, necessitating a half day of labor every day.

Maintenance

Maintenance is insufficient due to a very old irrigation system and lack of adequate personnel and funding.

System Rehabilitation

Water Supply Sources

The domestic water supply system by EBMUD will continue to be used for irrigation water. Reclaimed water trunk lines will not be in the Grand Area - Lakeside Park area in the near future. There is an EBMUD reclaimed water supply line which is in the 12th Street shoreline park area. Use of the reclaimed water needs to be balanced with vegetation and more importantly, additional reclaimed irrigation maintenance. Reclaimed (tertiary) water delivery systems need to be flushed once a month to flush out build-up of salts in the soil. Reclaimed water may be used to flush toilets or be used in water features.

Pipeline Distribution System

The existing irrigation water supply lines should be replaced with new pipelines when areas are renovated. The location of the main pipeline is affected by departmental labor divisions. If the main water system is placed under or next to roadways, it under the jurisdiction of the Public Works Agency (PWA) for repair. The Office of Parks and Recreation (OPR) is then charged with the costs. Due to the access and costs, it is desirable to place the mainlines in soil areas which are accessible to minimize pavement or roadway repair. Between the new promenade and the Lake edge, the mainline should be placed two feet from the walk edge. Mainlines should be buried to an adequate depth to minimize root intrusion and impact by maintenance equipment. The pipeline supply system should be designed to continue distribution when irrigation circuits need to be closed down for repair. A looped delivery system is a method used to prevent delivery interruption duing repairs.

Drainage as Related to Irrigation

Standing water is comonly found throughout the park during seasonally dry months. This contributes to erosion, poor plant performance, and degraded path and lawn use. New irrigation delivery and management will reduce overwatering. Minimizing soil compaction and installing a new drainage system will furthure reduce runoff.

Monitoring and Control System

A new monitoring and control system will be provided for total automatic operations. This new system should be evaluated for not only quality and durability of the system but also on-going educational training provided by the manufacturers. The new monitoring system should be kept as simple as possible to help maintenance by park personnel. Appropriate monitoring and control systems have realized up to a 40% water savings in similar parks. More importantly are other benefits from other cities of a sizable reduction of complaints to the City.

A new monitoring and control system can effectively streamline work of the maintenance personnel. It is recommended that a person within the department capable of monitoring such a system be retained for this specific work. Another alternative would be to have the computer monitoring and control system off-site with personnel capable of running this kind of system and having an irrigation maintenance/monitor person who works with the off-site unit and verifies the conditions of water distribution in the field. Irrigation distribution can be affected by wind or weed build-up around irrigation heads.

A computer controlled central system should be linked to AutoCAD irrigation drawings. System failures can be pinpointed in areas such as water flow, electrical or other failures. The computer system would then intervene and shut down failed irrigation circuits.

SITE FURNISHINGS

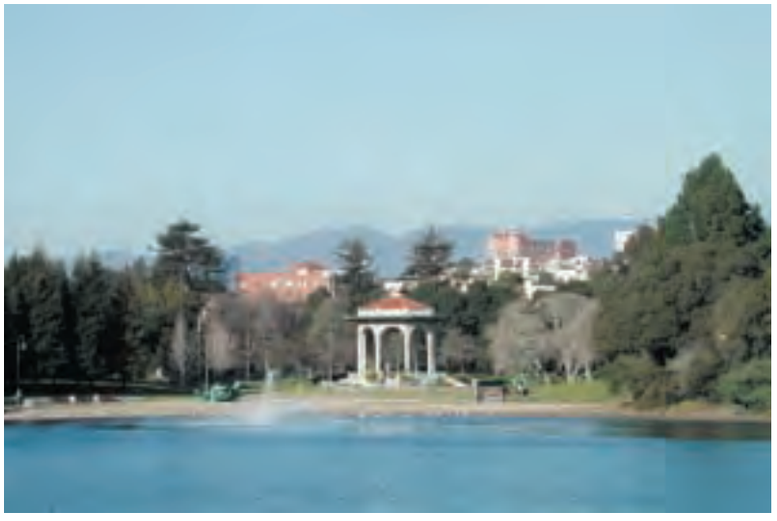
Current Conditions

- Park site furnishings have suffered from decreases in park budgets over time. Existing park benches are in poor shape and the few that remain are scattered throughout the park. Benches not secured to the ground can be moved by people into inappropriate places, and are sometimes thrown into the Lake by vandals.
- The Lake Merritt light fixtures are in better shape; however, when damage occurs the fixtures are not always replaced, creating gaps in the necklace of lights. The original necklace of lights was made up of 3200 lights, and hung in 1925. For 17 years the necklace gave Oakland nation-wide renown. The necklace was taken down during World War II.
- There are three types of trash receptacles. One is made of concrete, one is of recycled plastic, and one is of cardboard Oakland type. Maintenance of the various trash receptacles varies, with different scheduled times to empty the containers. Two separate groups maintain the trash receptacles: PWA and OPR.

Background on Park Furnishings

Site furnishing input was gathered from the Redevelopment Agency, Public Works Agency and Office of Parks and Recreation staff, stakeholders as well as the technical advisory committee. This background information about durability, life cycle, replacement ease and maintenance contributed to the selection and design of new site furnishings. Input gathered through public outreach suggested fostering an eclectic appearance, yet avoiding great variation in style.

Benches are important public resources that are essential in making the Park part of a functioning, open-space system. The Master Plan recommends their use to highlight the character of certian park features such as creeks.



Overall Bench Recommendations

- Use cast iron components in park benches.
- Do not use wood or recycled "plastic wood" in park site furnishings since they are susceptible to vandalism and have a short life cycle.
- Benches should have an arm in the middle so as to discourage sleeping on the benches.
- Benches shall be eight feet long and if more than one bench is installed, there should be a minimum of four feet left clear between the benches.
- Benches in Lake Merritt Park should be attached or anchored to the ground / sidewalk. Benches in the curb zone along sidewalks must be anchored to the sidewalk.
- Bench placement should not interfere with disabled access ramps, blue zone parking or loading areas, fire hydrants, or emergency vehicle access.
- Public benches should be placed in the curb street furniture area oriented towards the sidewalk and placed a minimum of two feet from the face of the curb.
- Benches must leave at least three feet clear on all sides from any standing objects including, but not limited to, parking meters and utility poles.
- Public benches along sidewalks should leave a minimum of six feet clearance for pedestrian traffic.

Lake Merritt Bench

The preferred, standard bench for Lake Merritt Park and perimeter parks should be an historically styled bench of cast iron and metal similar to as shown below. Plastic, wood, recycled material benches are not recommended.

Bench sponsorship should be sought after. Benches should be carefully placed to facilitate the needs of users and to accommodate paticular views.

Proposed park bench style

Grand Avenue Bench

The custom bench developed for Grand Avenue Blvd. is a perforated metal base of approximately 4' with a granite top, lit from the interior. Base shall be black powder coat. The guidelines outlined above for bench placement along Grand Avenue Blvd. shall be the same as outlined above.

Riparian Corridor– Gateway Benches

Develop custom bench in cast iron and granite, to be used in the special Riparian - Gateway Areas. Cast iron bench shall have backing with a design based on riparian plant such as cattail, tulle, or red willow leaves. Base and cast iron components shall be black powder coat. The guidelines outlined above for bench placement along Riparian Area Corridors (18th Street, Eastshore Park Area – Embarcadero, - Piedmont Street) shall be the same as outlined above.

Figure IV.43 Proposed Grand Avenue Bench

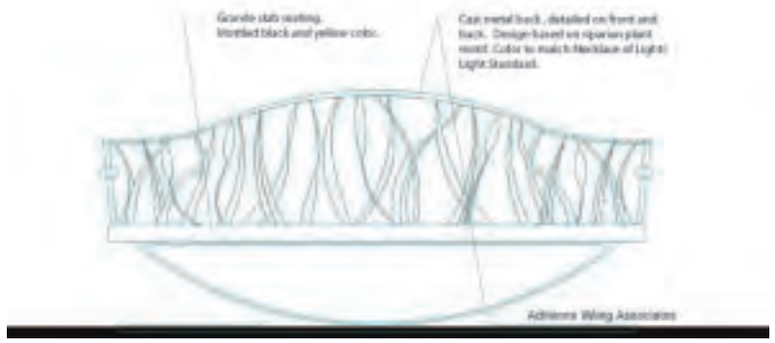
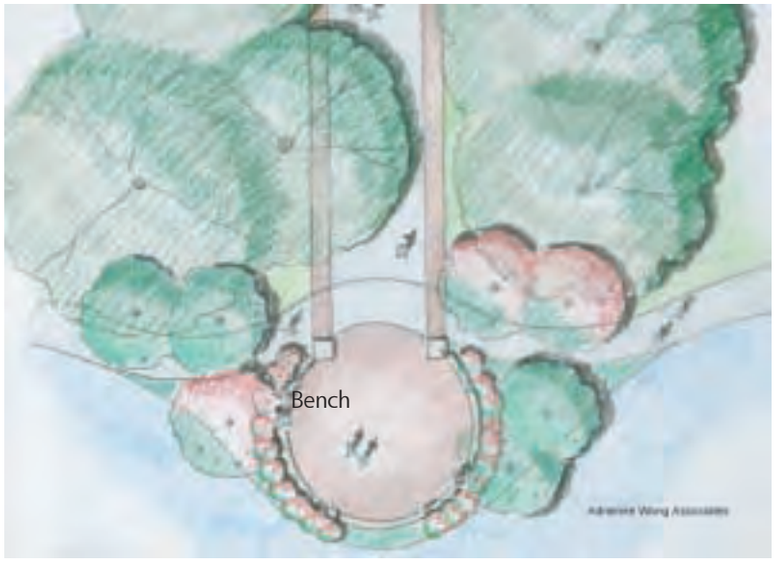


Figure IV.44 Proposed Riparian Corridor Bench



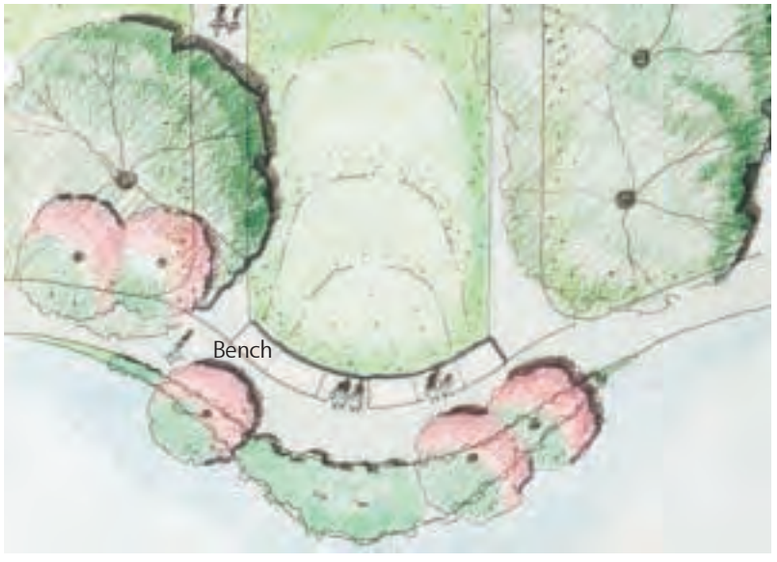


Figure IV.45 and Figure IV.46 Proposed Variations for Neighborhood Node Seating and Art Element

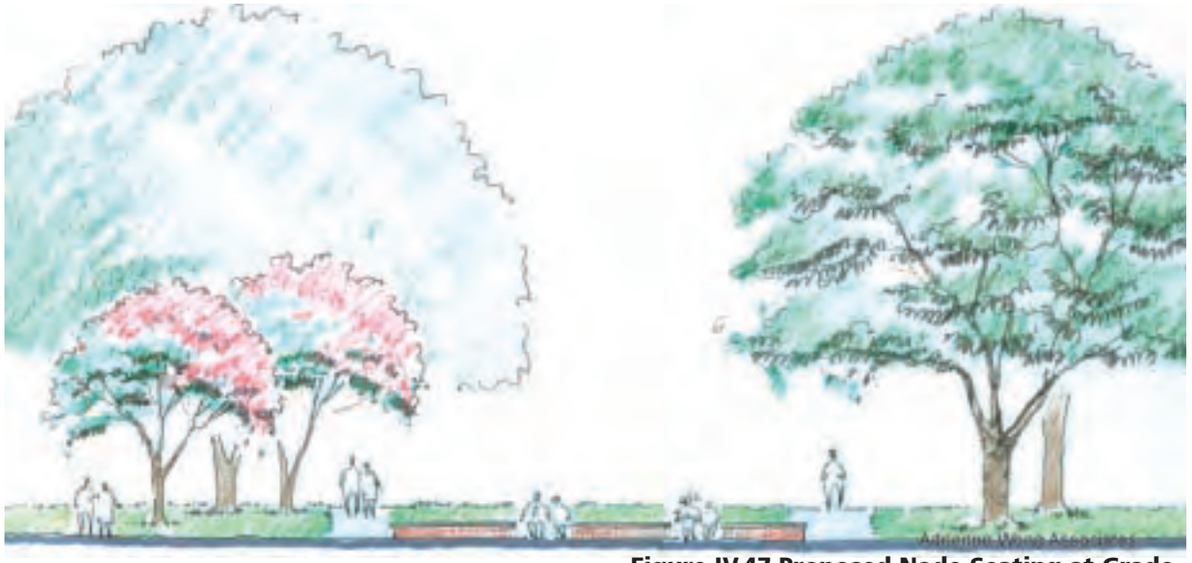


Figure IV.47 Proposed Node Seating at Grade

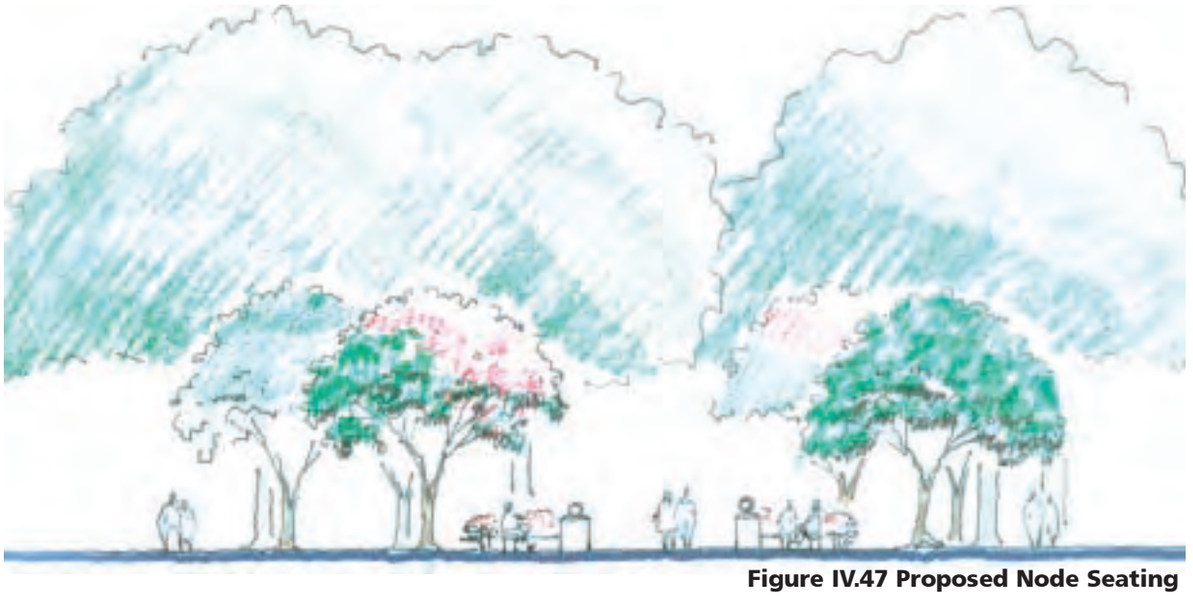


Figure IV.47 Proposed Node Seating

Node Seating

At the nodes or vista points established at street termini at the Lake, built-in seating with a typical cap to be used throughout Lake Merritt should be designed. These node-seating areas are opportunities for interpretive art, such as tiles, inset writing within the paving, paving "pattern language" reflective of the adjoining neighborhoods, and accent plantings. The seat walls should have facings reflective of the adjoining neighborhoods, such as terra cotta from the uptown district and Moorish style tiles from China Hill/Haddon Hill area. The node areas should vary in size from small to larger areas such as the 18th Street or 19th Street nodes. Terra cotta at 19th Street could be a green color to blend with the positive visual character of lawn.

Lake Merritt Necklace of Lights

Original lights were installed in 1925 by consulting electrical engineer, Romaine W. Myers. The term "necklace of lights" referred to the 128 electroliers installed along the shoreline while the "Festival Lights" were the strings of lights suspended between the temporary poles and the electroliers. The circuit included 3,400 lights.

Lighting Recommendations

- Shoreline lights in Lake Merritt Park are referred to as the Necklace of Light light standard. They shall be placed at a standard spacing around the Lake at 120' on-center The light standards where possible should be staggered in the original pattern of close to the water's edge, then back thirty feet (30') from the water's edge at the next 120' interval. Where possible, the light standards should stagger back and forth.
- The "Necklace of Light" light standard shall be the light fixture used at the new shoreline park at the 12th Street area. Spacing along this boulevard section will be 75' on-center and at the typical recommended distance from the street curb. Standard light placement is in the curb / street furniture, eighteen inches (18") from the outside edge of the curb.
- All lights should be directed downward with light shields to prevent light pollution.
- Lighting on interior park paths should be provided for public safety and wayfinding.

Lake Merritt Riparian Corridor Lights

Light fixtures shall have the same blue patina as the Lake Merritt Light Fixture, yet a more contemporary designed fixture. Light fixture glass shall be the same amber color as the Lake Merritt Park Light Fixture.

Bicycle Racks Recommendations

- Bicycle racks are permitted throughout Lake Merritt Park and are encouraged along the street corridor gateways into Lake Merritt Park. Bicycle racks should not block pedestrian traffic.
- No bicycle rack shall be permitted upon any portion of the park's street, roadway, or other public right-of-way on which motor vehicles are lawfully permitted.
- A minimum of six feet of clear pedestrian through space must be maintained at all times, including when bicycles are parked at the rack.
- There must be 36 inches of clearance between bicycles parked at the racks and any other street furniture.
- The inverted "U" rail rack and the ribbon rack are the preferred racks for normal park and sidewalk installation. The preferred finish is anodized bronze.

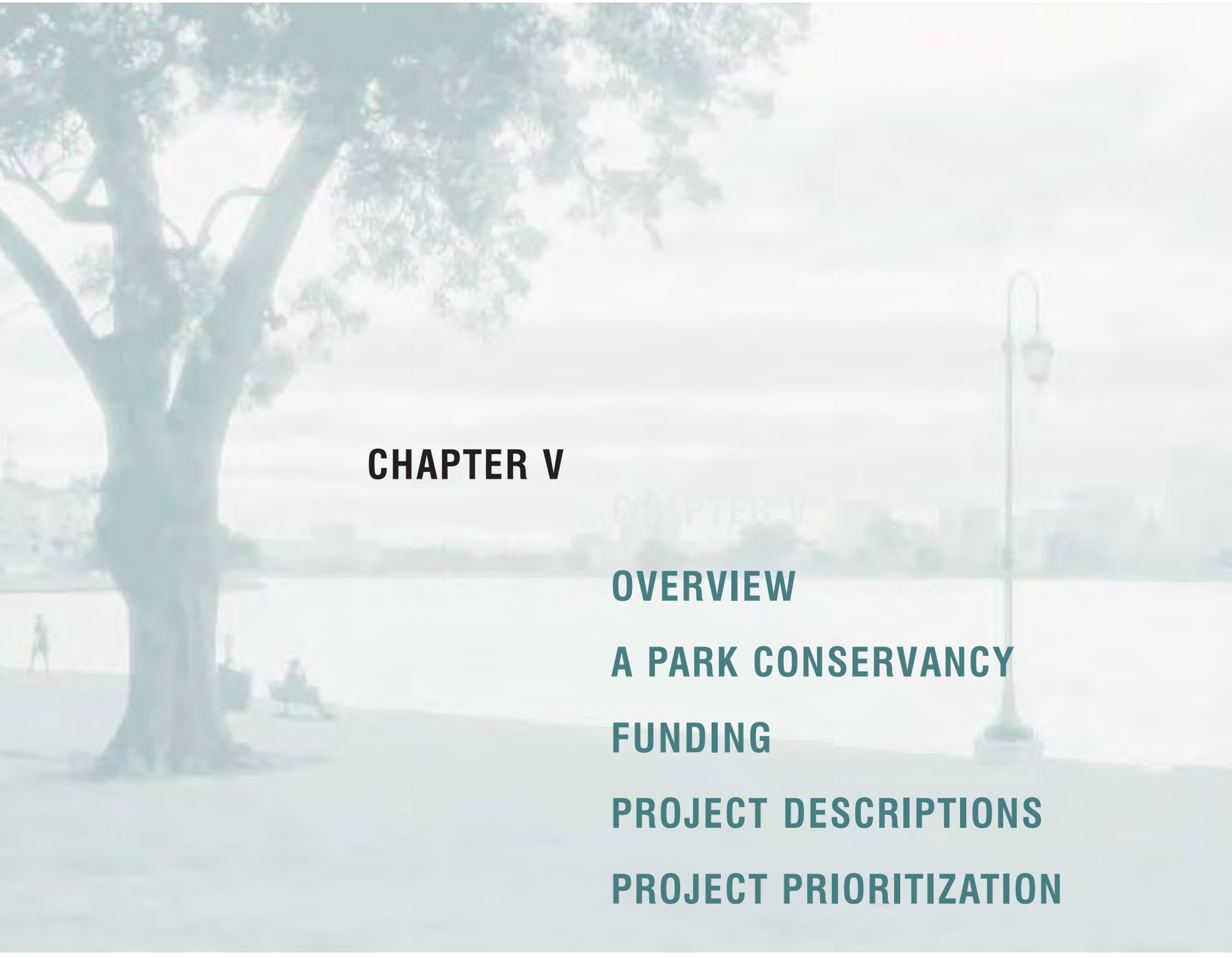
Proposed bike rack style

Trash Receptacles

Trash receptacles of a consistant design should be used throughout Lake Merritt Park and perimeter parks. A recycle bin should be included with each receptacle. The size of the trash receptacle should be modified to accept a City of Oakland recycled cardboard box. The trash receptacle should have an ashtray option when placed near building entries or seating areas. The materials, color, and form of the trash receptacle should match or be consistant with the standard Lake Merritt bench.

Proposed trash receptacle style

IMPLEMENTATION PLAN



CHAPTER V

OVERVIEW

A PARK CONSERVANCY

FUNDING

PROJECT DESCRIPTIONS

PROJECT PRIORITIZATION

OVERVIEW

Implementation

The Lake Merritt Master Plan sets goals and makes specific recommendations for various improvements. This chapter presents how those goals and improvements can be realized in a timely and sensible manner. The plan prioritizs certain projects for immediate implementation based on community interest, consultant recommendation, and City staff guidance. Construction sequence and concept level cost estimates are provided to guide project planning. A description of funding opportunities is included as an additional resource to park management. A park conservancy is proposed as a means of implementing the master plan and advocting for the park's long term management.

Master Plan Improvement Projects

Improvement projects are categorized by zone in Table V.1. Descriptions of the type of improvements to be completed are provided.

Project Prioritization and Planning Level Cost Estimate

Table V.2 presents recommended project implementation sequencing based on priority and logical construction techniques. Planning level estimated costs are provided for each project to assist planning and funding procurement.

Construction Sequence

The following table outlines the various projects recommended by the Master Plan and identifies a logical implementation sequence based on project priority, construction sequencing, other parallel projects, and potential funding.

Project Prioritization

The community has weighed heavily on what types of improvements and specific projects are of greater importance. Based on the public's survey responses and stakeholder input, several project themes have consistently been highlighted as essential:

Water Quality: Projects that improve water quality in Lake Merritt such as storm filters and removal of tidal flow barriers (12th Street culverts).

Pedestrian and Bicycle Circulation: Projects that improve circulation around the lake such as: multi-use paths, class II bike lanes, soft surface jogging paths, and shoreline access at 12th Street.

Ecology and Wildlife Interaction: Projects that benefit the lake ecology such as habitat restoration, wildlife viewing armoval.

Park Maintenance: The basic care of landscape elements and park furnishings is considered by many to be the single most pressing deficiency at Lake Merritt. Repair and replacement of many park elements are chronically deferred, resulting in a lack of amenities.

Projects Prioritized by the Public on March 13, 2002

(Numbers reflect ranking by numbers of responses)

39 Water Quality Improvements (ie. Storm Drain Filters)

35 Multi-Use Pathway around Lake

30 Widening of Park Borders

22 Bellevue Shoreline Naturalization: Wetlands and Boardwalks

20 Creek Day-lighting

19 On Street Bike Lanes

18 Park Furnishings (Benches, Drinking Fountains, Trash Receptacles, Etc.)

13 Boat House Restoration and Site Improvements (1520 Lakeside)

11 Signage: Directions, Mile Markers, Location Names

10 Dock Renovations

10 Major Gateway Enhancements (Creek Nodes)

10 New Park Flowering Trees

9 Restored Lawns

9 Arboretum/Botanical Plantings

9 Restoration of Perimeter Parks

7 Enhanced Planting in Street Medians

6 Neighborhood Interpretive Markers and Mini-Plazas

5 Pergola Restoration

4 New Street Trees

3 Sailboat House Restoration and Site Improvements

Zones Prioritized by the Public on March 13, 2002

59 12th Street/San Antonio District and Estuary Connection

27 Grand Avenue Promenade

23 Lakeshore Avenue (Grand Lake Green Link/Eastshore Park)

22 Lakeside Park

18 Downtown Park Edge (Oak to Grand, Snow Park Expansion)

16 Lakeshore Avenue (Embarcadero to E. 18th)

16 Lakeshore Avenue (E. 18th to 12th Street)

6 Lakeshore Avenue (Cleveland Cascade)

Project prioritization activity, Public open House, March 2002

A PARK CONSERVANCY

"Need independent foundation or conservancy for the Park that can oversee all activities, projects, programs and maintenance..." - Community Member comment on Lake Merritt in March 2002.

Throughout the Master Plan Process, a clear desire was repeatedly expressed by the community; the desire for a properly maintained and operated park. Although much of the Master Plan recommendations address capital improvements, maintenance and operations programs and costs are also clearly identified in order to address this strong desire of the community. However simply recommending the programs and identifying costs will not go far enough to ensure the long-term successful maintenance of the park.

The problem, historically has been one of consistent allocation of funds, or lack thereof, for maintenance and operations. Somehow, the funds needed for the park's proper maintenance need to be provided in a more consistent, more guaranteed manner. General Fund allocations need to be earmarked and those allocations preserved over the long term, new sources of funding need to be identified from both public grants and private doners, pro-rata portions of capital project budgets need to be consistently set aside to contribute to maintenance and operations budgets. Even the idea of establishing an endowment should be pursued. This endowment could gradually grow over time through fund-raising campaigns and provide an increasing source for supplemental assistance for maintenance and operations.

But to pursue these goals effectively, strong leadership is needed and strong commitment expressly focussed on Lake Merritt, without distractions from other priorities. A strong and focussed advocacy is needed for the Lake. In order to accomplish this advocacy, the Master Plan recommends establishing the Lake Merritt Conservancy. This non-profit (501-c(3)) would be charged specifically to promote the well-being of the Lake and its surrounding parklands.

The Conservancy's priorities would include but not be limited to the following:

- The promotion of the implementation of this Master Plan
- Political advocacy for the allocation of City funds to Lake Merritt maintenance and operations
- Identifying other public funding sources for park maintenance and improvements projects
- Conducting private fundraising campaigns for funding of park maintenance and improvements projects
- Pursuing the potential creation of an endowment for long-term contribution to maintenance and operations costs.

Numerous other functions and priorities are possible in the name of promoting the well-being of Lake Merritt. Once a group of qualified and enthusiastic board members are assembled, additional initiatives will surely follow. This has been accomplished quite successfully in New York City with the Central Park Conservancy. In this case, the Conservancy has actually contracted with the City to undertake all of the management of the Park. The role of the Lake Merritt Conservancy should be tailored to best suit the objectives of the City of Oakland and the community.

FUNDING

Local Funding

Oakland City Council, the Mayor, and citizens are currently pursuing a bond measure to fund various waterfront improvements throughout Oakland. Cost for the creek, park, and estuary projects identified as part of the bond are currently totaling over $250 million. Lake Merritt projects total over $50 million.

Landscape and Lighting Maintenance Districts (LLMD) can assess property owners for both capital and maintenance costs. LLMD are currently formed to provide streetscape improvements and maintenance. No limits are placed on dollars towards maintenance. Assessments are fixed, despite inflation, rising costs of operation, or needed improvements.

Sub-Regional Watershed Center is an organization that was recently founded to support citizen groups, schools, and provide information to planners, land owners, businesses, and elected officials. The Watershed Center, a one-stop-shop accessible to those with local creek interests, is located at the Merritt College Environmental Center, 12500 Campus Drive, Oakland, CA 94619, off Redwood Road in the Oakland hills. The geographic area (Sub Region) covered by the Watershed Center stretches from San Pablo Creek in Richmond south to San Leandro Creek in Oakland. The Center houses monitoring data and equipment, a reference library, a meeting place, a classroom, and an office. Center staff has developed a Field Program in Watershed Awareness, a Monitoring Program, an Outreach Program, an Assessment Science Program, and a Policy Program.

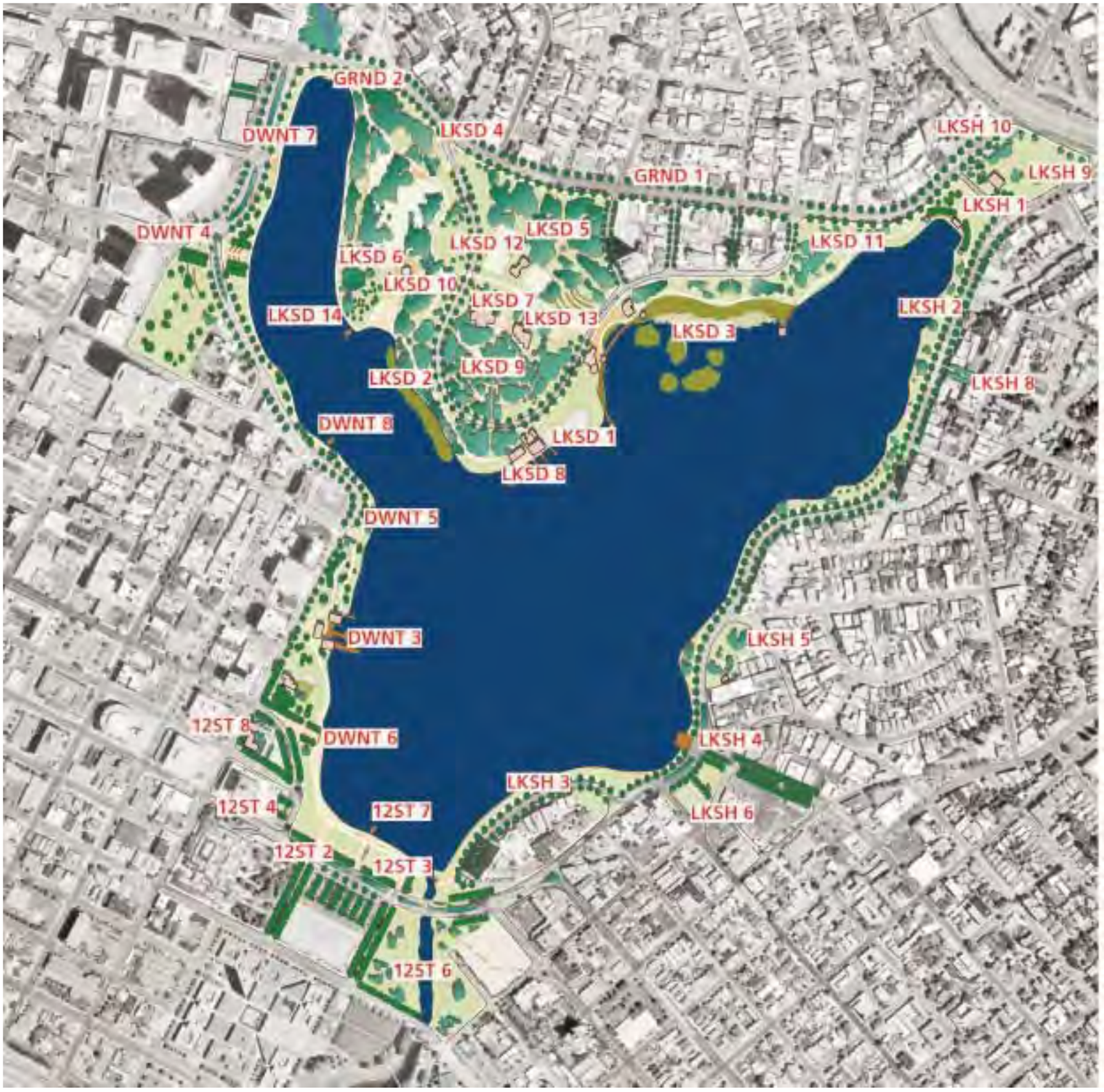
State Funding

Following the March 2002 passage of the State parks bond Proposition 40, $2.6 billion has been designated by the Coastal Conservancy for various State projects. The City of Oakland may apply for project funding to the Coastal Conservancy.

The City of Oakland should actively apply for future dollars that are to be allocated for the following types of projects:

- Parks
- Open space
- Tree planting
- Fit cities
- Urban art/environmental art
- Heritage buildings and landscapes
- Public building seismic upgrades/code based improvements
- Water quality
- Pedestrian enhancements
- Major Roadway/Transportation
- Transit corridors, stops, and shelters
- Habitat restoration
- Flood control
- Volunteer/environmental education programs
- Youth recreation programs

Figure V.1 Project Locations
Use the map on the right to locate projects listed in Table V.1. Only projects with a specific location are shown. Overall (OVRL) projects are not shown.


GRND 2
DWNT 7
LKSD 4
LKSH 10
GRND 1
LKSH 9
LKSH 1
DWNT 4
LKSD 5
LKSD 12
LKSD 11
LKSD 6
LKSD 10
LKSD 7
LKSH 2
LKSD 14
LKSD 13
LKSD 3
LKSD 2
LKSD 9
LKSH 8
DWNT 8
LKSD 1
LKSD 8
DWNT 5
DWNT 3
LKSH 5
12ST 8
DWNT 6
LKSH 4
LKSH 3
12ST 4
12ST 7
LKSH 6
12ST 2
12ST 3
12ST 6

PROJECT DESCRIPTIONS

Table V.1 Lake Merritt Park Master Plan Project Descriptions

Phase	Item No.	Project Title	Project Description	Construction Length (Months)	Phasing Opportunities
12th Street / Shoreline Park					
12ST	1	PRELIMINARY ENGINEERING, SCHEMATIC DESIGN STUDY	Preliminary engineering study of 12th street roadway, bridges, approaches, bike circulation, construction staging, and transit accommodations.	8-14 mos	
12ST	2	ROADWAY RECONFIGURATION & INTERIM LANDSCAPE	Demolition of 12th Street roadway and tunnels, bridges; construction of new boulevard and bridge over the estuary channel; realignment of 1st, 12th, 13th, 14th approaches; median planting and irrigation; crosswalks; channel path under bridge; interim shoreline multi-use path; temporary lawn; reclaimed irrigation supply connection.	16-32 mos	Median plantings
12ST	3	SHORELINE PARK	Complete park design/installation including multi-use path; beach restoration; pedestrian bridge over channel; focal fountain; art element; plaza; restroom; streetscape; planting; irrigation.	4-8 mos	
12ST	4	COURTHOUSE PLAZA	Complete plaza design/installation including plaza; hardscape; art element; planting, irrigation.	4-6 mos	
12ST	5	KAISER CONVENTION CENTER	Complete design/construction including tunnel area re-landscaping; streetscape; parking lot; planting/ irrigation.	4-6 mos	
12ST	6	PERALTA PARK	Park renovation to include shoreline trail; furnishings; restoration area; planting; irrigation.	4-6 mos	
12ST	7	DOCK RENOVATION	Rebuild posts, decking and railings of wooden dock at shoreline area. Add accoutrements such as lights, banners, signage, plaques, benches.	2-4 mos	
12ST	8	FIRE ALARM SITE	Site improvements such as new hardscape; furnishings; signage; planting; irrigation.	1-2 mos	
Downtown Park Edge					
DWTN	1	PRELIMINARY ARCHITECTURAL/ENGINEERING INVESTIGATION OF MAIN BOATHOUSE	Preliminary architectural/engineering study of building for seismic, code, and other relevant investigations.	1-2 mos	
DWTN	2	RELOCATION OF PARKS AND RECREATION DEPARTMENT OPERATION	Relocation of Parks and Recreation Department including, staff, computer systems, and furnishings.	1-2 mos	
DWTN	3	MAIN BOATHOUSE (1520 Lakeside)	Building renovation to restore historic structure and prepare for new public/commercial use; building lighting; project area work to include building entry; drop off; parking lot; temporary multi-use path; furnishings; planting; irrigation.	6-12 mos	
DWTN	4	INTERSECTION RECONFIGURATION & SNOW PARK RENOVATION	Demolition of roadway; construction of new intersection and street segments; median planting and irrigation; crosswalks; Snow Park improvements including hardscape; furnishings; lighting; focal art element; planting; irrigation.	3-6 mos	Focal Art Element, non-impacted Snow Park renovation.
DWTN	5	LANDSCAPE RENOVATION & MULTI-USE PATH (14th to 19th Streets)	Complete park design/installation including roadway modifications; multi-use path; street sidewalk; streetscape; furnishings, lighting; planting; irrigation.	4-6 mos	
DWTN	6	14TH STREET PLAZA	Complete plaza design/installation including hardscape; art element; planting; irrigation.	4-6 mos	
DWTN	7	LANDSCAPE Renovation & MULTI-USE PATH (19th to Grand Avenue)	Complete park design/installation including multi-use path; street sidewalk; streetscape; retaining wall construction at grade separated walkways; decorative railing and crash barrier; dock area enhancements; furnishings, lighting; planting; irrigation.	4-6 mos	
DWTN	8	DOCK RENOVATION	Rebuild posts, decking and railings of wooden dock at shoreline area. Add accoutrements such as lights, banners, signage, plaques, benches.	2-4 mos	

Phase	Item No.	Project Title	Project Description	Construction Length (Months)	Phasing Opportunities
Lakeside Park					
LKSD	1	BELLEVUE AVENUE, SHORELINE PARKING LOT & ENTRY	Parking management planning/design/implementation including redesign of sailboat parking lot; porous pavement; basic planting; entry configuration; adjust parking on Bellevue to two sides; sidewalks, bulb outs; crosswalks; entry gate; exit gate and booth; tree planting; irrigation.	4-6 mos	Parking lot area could be completed as a later phase in order to maintain parking and access.
LKSD	2	DEMONSTRATION WETLAND	Construct a demonstration wetland to test the feasibility of permanent wetlands in Lake Merritt. Project would include wetland creation and management; interpretive signage, and overlook platform.	2-4 mos	
LKSD	3	ECOLOGY ZONE	Renovation of area to include pathways; boardwalks; fencing; natural planting; lawn area;	8-12 mos	Delay relocation of playground until concurrent with mid park renovation.
LKSD	4	LAKESIDE PARK ENTRY ENHANCEMENTS	Completion of improvements at park entry including decorative walls; pathways; Fairyland characters; monument art element; entry signage; planting; irrigation.	2-4 mos	
LKSD	5	McELROY FOUNTAIN & FORESTED HILL AREA	Renovation of area including fountain, pump house, lighting, pathways, planting, irrigation.	1-2 mos	Pathways
LKSD	6	MAINTENANCE FACILITY	Design/install a new maintenance facility on service road; remodel existing restroom building on service road for use by staff; remove existing maintenance shed; clean up site.	2-4 mos	
LKSD	7	MID PARK RENOVATION	Renovation of the central park area including mid park promenade; outdoor theater area; botanical courtyard; playground relocation; planting; irrigation.	4-6 mos	Botanical courtyard, outdoor theater, playground
LKSD	8	SAILBOAT HOUSE BUILDING RENOVATION	Renovation of Sailboat House main building; classrooms, storage facilities; pedestrian entry; site work.	8-12 mos	
LKSD	9	BOTANICAL GARDEN	Renovations include interior pathways; new perimeter fencing; entry gates; exterior pathways; lighting; expanded botanical planting; irrigation.	2-4 mos	
LKSD	10	LAKESIDE PARK WEST & BANDSTAND	Renovation of western park area including shoreline path, bluff vegetation; beach; bandstand area; other pathways; open lawns; Fairyland service road; maze clearing art element; planting; irrigation.	4-6 mos	
LKSD	11	EAST LAKESIDE / GRAND AREA PARK IMPROVEMENTS	Renovation of eastern park area including shoreline path, other pathways; open lawns; planting; irrigation.	2-4 mos	
LKSD	12	BOWLING CLUB HOUSE	Renovation of building exterior and site including roof overhangs; storage areas; entry; greens; fencing; furnishings; lighting; drainage; planting; irrigation.	4-6 mos	
LKSD	13	MID PARK EDU CENTER: Junior Center for Arts and Science (JCAS), Ranger Station, and Maintenance Demonstration Center.	New facilities serving educational and public safety uses including the JCAS, Oakland Park Rangers, and Parks & Recreation Garden Center Maintenance.	8-12 mos	
LKSD	14	DOCK RENOVATION	Rebuild posts, decking and railings of wooden dock at bandstand beach shoreline area. Add accoutrements such as lights, banners, signage, plaques, benches.	2-4 mos	
Grand Avenue Promenade					
GRND	1	GRAND AVENUE STREETSCAPE: Promenade, Furnishings, Nodes (Harrison to MacArthur)	Design/installation of park segment promenade; business segment promenade; decomposed granite pathway; special benches; neighborhood nodes; light fixtures.	4-6 mos	Business segment pathway construction; benches; neighborhood nodes.
GRND	2	DOCK RENOVATION	Rebuild posts, decking and railings of wooden dock at creek node area. Add accoutrements such as lights, banners, signage, plaques, benches.	2-4 mos	

PROJECT DESCRIPTIONS

Lakeshore Park Edge					
LKSH	1	GRAND LAKE GREEN LINK / EL EMBARCADERO	Realign roadway to single two way couplet with new green space and improved crosswalks per the Grand Lake Green Link Plan.	4-6 mos	Green space areas.
LKSH	2	LANDSCAPE RENOVATION & MULTI-USE PATH (Embarcadero to E. 18th)	Complete park design/installation including roadway modifications; multi-use path; shoreline path; pergola pathways; streetscape; furnishings, lighting; planting; irrigation.	4-6 mos	Description of Interim, Phase 1, 2
LKSH	3	LANDSCAPE RENOVATION & MULTI-USE PATH (E. 18th to 12th)	Complete park design/installation including roadway modifications; multi-use path; shoreline path; streetscape; furnishings, lighting; planting; irrigation.	4-6 mos	
LKSH	4	EAST 18TH CREEK NODE (Landing and Gateway)	Renovation of landing including structure; hardscape; walls; special benches; interpretive signage; lighting. Design installation of gateway elements in 18th Street approach including art elements, hardscape; planting; irrigation.	4-8 mos	
LKSH	5	PINE KNOLL PARK RENOVATION	Renovation of park including perimeter retaining wall; staircase; lighting; planting, irrigation.	4-6 mos	
LKSH	6	ATHOL PLAZA PARK RENOVATION	Renovation of park including new play area; restroom, plaza; lighting; bus shelter; planting, irrigation.		
LKSH	7	NEIGHBORHOOD NODES	Design/installation of art element nodes to depict local history. Amenity includes low seatwall; art tiles; special planting; paving.	2-6 mos	
LKSH	8	CLEVELAND CASCADE RENOVATION	Renovation of area including crosswalk; railings; fountain; lighting; planting, irrigation.	2-4 mos	
LKSH	9	EASTSHORE PARK RENOVATION	Renovation of park area including parking lot; library sitework; open lawn areas; dog area enclosure; sports facilities; lighting; planting; irrigation	4-6 mos	
LKSH	10	CREEK DAYLIGHTING	Design/engineer/construct open creek channel along Grand Avenue promenade in Eastshore Park including excavations; pedestrian bridges; filtration devices; stabilization; planting; irrigation, art element; signage.	4-6 mos	

Overall Park Projects					
OVRL	1	SIGNAGE: DIRECTIONS	Design/installation of directional signage.	2-4 mos	Park signage should be installed simultaneously; building signage could be completed incrementally
OVRL	2	HISTORY TRAIL MARKERS	Design/installation of markers along the perimeter path and at neighborhood nodes.	2-4 mos	
OVRL	3	KIOSKS	Design/installation of 6 kiosks to display park related notices.	2-4 mos	
OVRL	4	SIGNAGE: PARK RULES	Design/installation of City signage at key locations or at kiosks.		
OVRL	5	CENTRAL CONTROL IRRIGATION SYSTEM	Installation of a central control computer and management system. Existing controllers not compatible with the system are replaced.	1-2 mos	
OVRL	6	PRELIMINARY ARCHITECTURAL/ENGINEERING INVESTIGATION OF PARK BUILDINGS	Preliminary architectural/engineering study of building for seismic, code, and other relevant investigations.	2-4 mos	
OVRL	7	STORM DRAIN FILTERS	Install filters in major storm drains around the Lake at a rate of 3 per year for 10 years (30 filters)	1-2 mos	Install at rate of three (3) per year; could be included in zone project
OVRL	8	NECKLACE OF LIGHTS		2-4 mos	
OVRL	9	GOOSE MANAGEMENT STUDY	Complete a study of geese and wildlife at Lake Merritt and the surrounding area to determine best management practices. The study may be coupled with immediate measures (Goosebusters dog patrol) to relocate geese from Free and Clear Open Spaces in Lakesi	6-12 mos	Begin Goosbuster dog patrol immediately in high human use areas.
OVRL	10	PARK CONSERVANCY	Implement a Park Conservancy to lead the master plan implementation and to assist funding of park maintenance.	6-12 mos	

Table V.2 Lake Merritt Park Master Plan Project Prioritization and Costs

Sequence	Zone	Project Title	Percentage of Construction for Design	Estimated Design Cost	Estimated Construction Cost	Additional Contingency @ 5% (permits, fees, etc)	Inflation to 2004 @ 5%	Estimated Total Project Cost
1	OVRL	PARK CONSERVANCY		120,000		$ 6,000	$ 6,000	$ 132,000
2	DWTN	LANDSCAPE RENOVATION, NODES & MULTI-USE PATH (19th to Grand Avenue)	18%	309,708	$ 1,720,600	$ 86,030	$ 86,030	$ 2,202,368
3	DWTN	INTERSECTION RECONFIGURATION & SNOW PARK RENOVATION	18%	749,070	$ 4,161,500	$ 208,075	$ 208,075	$ 5,326,720
4	OVRL	CENTRAL CONTROL IRRIGATION SYSTEM	8%	2,800	$ 35,000	$ 1,750	$ 1,750	$ 41,300
5	DWTN	DOCK RENOVATION	10%	10,000	$ 100,000	$ 5,000	$ 5,000	$ 120,000
6	12ST	INTERIM SIDEWALK WIDENING	20%	236,640	$ 1,183,200	$ 59,160	$ 59,160	$ 1,538,160
7	DWTN	PRELIMINARY ARCHITECTURAL/ENGINEERING INVESTIGATION OF MAIN BOATHOUSE		46,000		$ 2,300	$ 2,300	$ 50,600
8	OVRL	GOOSE MANAGEMENT STUDY		20,000		$ 1,000	$ 1,000	$ 22,000
9	12ST	12TH STREET PRELIMINARY ENGINEERING, SCHEMATIC DESIGN STUDY	8%	1,408,100		$ 70,405	$ 70,405	$ 1,548,910
10	DWTN	RELOCATION OF PARKS AND RECREATION DEPARTMENT OPERATION				$ -	$ -	$ -
11	LKSD	DEMONSTRATION WETLAND	10%	30,000	$ 300,000	$ 15,000	$ 15,000	$ 360,000
12	OVRL	PRELIMINARY ARCHITECTURAL/ENGINEERING INVESTIGATION OF PARK BUILDINGS		234,000		$ 11,700	$ 11,700	$ 257,400

Sequence	Zone	Project Title	Percentage of Construction for Design	Estimated Design Cost	Estimated Construction Cost	Additional Contingency @ 5% (permits, fees, etc)	Inflation to 2004 @ 5%	Estimated Total Project Cost
13	DWTN	LANDSCAPE RENOVATION, NODES, & MULTI-USE PATH (14th to 19th Streets)	18%	308,970	$ 1,716,500	$ 85,825	$ 85,825	$ 2,197,120
14	OVRL	STORM DRAIN FILTERS	15%	225,000	$ 1,500,000	$ 75,000	$ 75,000	$ 1,875,000
15	DWTN	MAIN BOATHOUSE (1520 Lakeside)	15%	823,500	$ 5,490,000	$ 274,500	$ 274,500	$ 6,862,500
16	DWTN	14TH STREET PLAZA	12%	98,640	$ 822,000	$ 41,100	$ 41,100	$ 1,002,840
17	12ST	ROADWAY RECONFIGURATION & INTERIM LANDSCAPE	12%	3,379,440	$ 28,162,000	$ 1,408,100	$ 1,408,100	$ 34,357,640
18	12ST	SHORELINE PARK	10%	130,500	$ 1,305,000	$ 65,250	$ 65,250	$ 1,566,000
19	12ST	KAISER CONVENTION CENTER SITE AREA	12%	56,520	$ 471,000	$ 23,550	$ 23,550	$ 574,620
20	12ST	PERALTA PARK	10%	42,300	$ 423,000	$ 21,150	$ 21,150	$ 507,600
21	12ST	DOCK RENOVATION	10%	10,000	$ 100,000	$ 5,000	$ 5,000	$ 120,000
22	12ST	COURTHOUSE PLAZA	10%	27,600	$ 276,000	$ 13,800	$ 13,800	$ 331,200
23	12ST	FIRE ALARM SITE LANDSCAPE	12%	28,500	$ 237,500	$ 11,875	$ 11,875	$ 289,750
24	LKSD	DOCK RENOVATION	10%	10,000	$ 100,000	$ 5,000	$ 5,000	$ 120,000

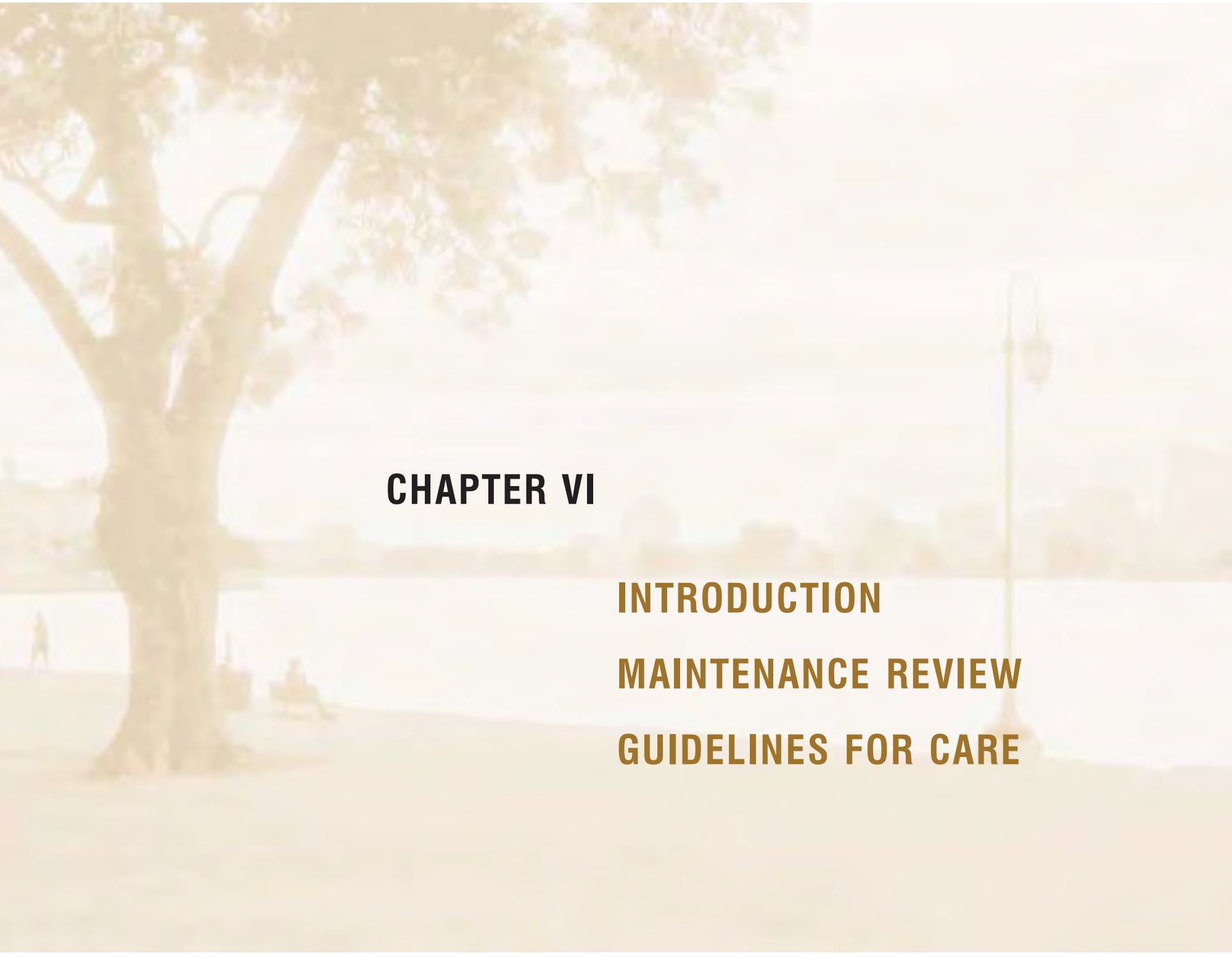
PROJECT PRIORITIZATION

Sequence	Zone	Project Title	Percentage of Construction for Design	Estimated Design Cost	Estimated Construction Cost	Additional Contingency @ 5% (permits, fees, etc)	Inflation to 2004 @ 5%	Estimated Total Project Cost
25	LKSH	LANDSCAPE RENOVATION, NODES, & MULTI-USE PATH (E. 18th to 12th)	18%	338,400	$ 1,880,000	$ 94,000	$ 94,000	$ 2,406,400
26	LKSD	BELLEVUE AVENUE, SHORELINE PARKING LOT & ENTRY	18%	484,758	$ 2,693,100	$ 134,655	$ 134,655	$ 3,447,168
27	LKSH	LANDSCAPE RENOVATION, NODES & MULTI-USE PATH (Embarcadero to E. 18th)	18%	280,728	$ 1,559,600	$ 77,980	$ 77,980	$ 1,996,288
28	LKSD	LAKESIDE PARK WEST & BANDSTAND	10%	485,250	$ 4,852,500	$ 242,625	$ 242,625	$ 5,823,000
29	LKSH	EAST 18TH CREEK NODE (Landing and Gateway)	10%	100,000	$ 1,000,000	$ 50,000	$ 50,000	$ 1,200,000
30	LKSD	LAKESIDE PARK ENTRY ENHANCEMENTS	12%	90,000	$ 750,000	$ 37,500	$ 37,500	$ 915,000
31	LKSH	GRAND LAKE GREEN LINK / EL EMBARCADERO	18%	248,616	$ 1,381,200	$ 69,060	$ 69,060	$ 1,767,936
32	LKSH	EASTSHORE PARK RENOVATION	10%	193,500	$ 1,935,000	$ 96,750	$ 96,750	$ 2,322,000
33	LKSH	CREEK DAYLIGHTING	20%	100,000	$ 500,000	$ 25,000	$ 25,000	$ 650,000
34	LKSD	MAINTENANCE FACILITY: Demo of Old Structure, New Shed, Renovation/Reuse of Existing Restroom Bldg.	15%	60,900	$ 406,000	$ 20,300	$ 20,300	$ 507,500
35	LKSD	MID PARK RENOVATION	10%	250,200	$ 2,502,000	$ 125,100	$ 125,100	$ 3,002,400
36	LKSD	MID PARK EDU CENTER: Junior Center for Arts and Science (JCAS), Ranger Station, and Maintenance Demonstration Center. Demo of Old Structure	15%	288,675	$ 1,924,500	$ 96,225	$ 96,225	$ 2,405,625

Sequence	Zone	Project Title	Percentage of Construction for Design	Estimated Design Cost	Estimated Construction Cost	Additional Contingency @ 5% (permits, fees, etc)	Inflation to 2004 @ 5%	Estimated Total Project Cost
37	LKSD	ECOLOGY ZONE	10%	462,000	$ 4,620,000	$ 231,000	$ 231,000	$ 5,544,000
38	LKSD	SAILBOAT HOUSE BUILDINGS RENOVATION: Including Demo of Old Auxillary Structures	15%	742,500	$ 4,950,000	$ 247,500	$ 247,500	$ 6,187,500
39	LKSD	McELROY FOUNTAIN & FORESTED HILL AREA	10%	139,000	$ 1,390,000	$ 69,500	$ 69,500	$ 1,668,000
40	GRND	DOCK RENOVATION	10%	10,000	$ 100,000	$ 5,000	$ 5,000	$ 120,000
41	LKSD	BOTANICAL GARDEN BUILDING	15%	405,000	$ 2,700,000	$ 135,000	$ 135,000	$ 3,375,000
42	LKSD	BOTANICAL GARDEN	10%	141,250	$ 1,412,500	$ 70,625	$ 70,625	$ 1,695,000
43	LKSD	BOWLING CLUB HOUSE	15%	105,300	$ 702,000	$ 35,100	$ 35,100	$ 877,500
44	GRND	GRAND AVENUE STREETSCAPE: Promenade, Furnishings, Nodes (Harrison to MacArthur)	12%	1,175,616	$ 9,796,800	$ 489,840	$ 489,840	$ 11,952,096
45	LKSD	EAST LAKESIDE / GRAND AREA PARK IMPROVEMENTS	10%	62,400	$ 624,000	$ 31,200	$ 31,200	$ 748,800
46	LKSH	ATHOL PLAZA PARK RENOVATION	10%	70,750	$ 707,500	$ 35,375	$ 35,375	$ 849,000
47	LKSH	PINE KNOLL PARK RENOVATION	10%	33,250	$ 332,500	$ 16,625	$ 16,625	$ 399,000
48	LKSH	CLEVELAND CASCADE RENOVATION	10%	24,300	$ 243,000	$ 12,150	$ 12,150	$ 291,600

PROJECT PRIORITIZATION

Sequence	Zone	Project Title	Percentage of Construction for Design	Estimated Design Cost	Estimated Construction Cost	Additional Contingency @ 5% (permits, fees, etc)	Inflation to 2004 @ 5%	Estimated Total Project Cost
49	OVRL	NECKLACE OF LIGHTS	20%	20,420	$ 102,100	$ 5,105	$ 5,105	$ 132,730
50	LKSH	PERGOLA RESTORATION	15%	75,000	$ 500,000	$ 25,000	$ 25,000	$ 625,000
51	OVRL	SIGNAGE: PARK RULES	15%	7,500	$ 50,000	$ 2,500	$ 2,500	$ 62,500
52	OVRL	HISTORY TRAIL MARKERS	15%	37,500	$ 250,000	$ 12,500	$ 12,500	$ 312,500
53	OVRL	SIGNAGE: DIRECTIONS	15%	37,500	$ 250,000	$ 12,500	$ 12,500	$ 312,500
54	OVRL	KIOSKS	20%	24,000	$ 120,000	$ 6,000	$ 6,000	$ 156,000
		GRAND TOTAL		**$ 14,801,601**	**$ 98,337,600**	**$ 5,008,285**	**$ 5,008,285**	**$ 123,155,771**



CHAPTER VI

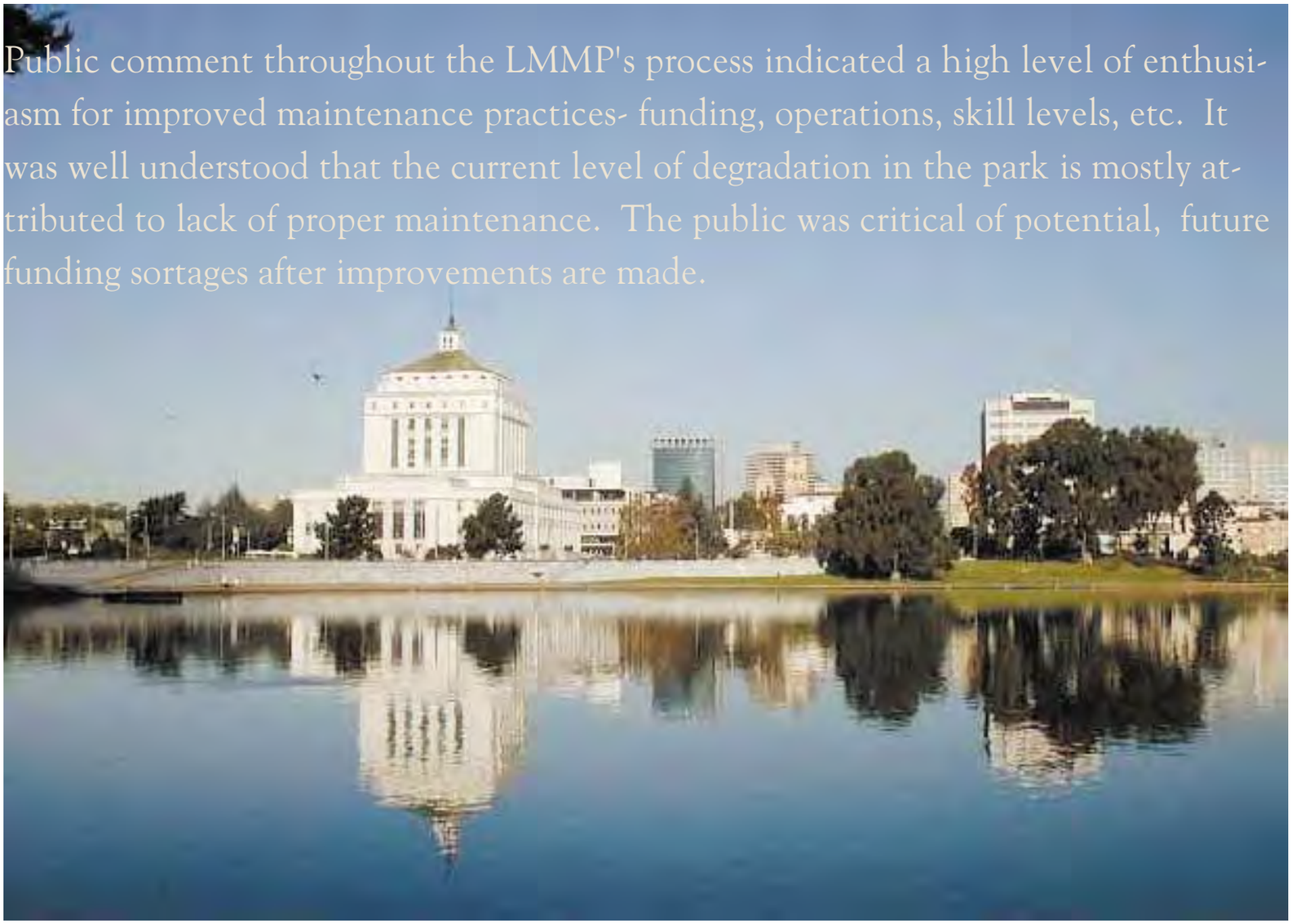
INTRODUCTION

MAINTENANCE REVIEW

GUIDELINES FOR CARE

INTRODUCTION

While the planning and design of a park may paint a picture of beauty, the long term care and durability of a public environment is the realistic factor in its success. The Lake Merritt Master Plan promotes a durable, yet thoughtful design for the park improvements. The standard level of care for the park is provided as a guide for park managers. Maintenance practices and expected life cycle timeline are shown. Expected cost for this level of care is provided to similarly inform the park operations.



Public comment throughout the LMMP's process indicated a high level of enthusiasm for improved maintenance practices- funding, operations, skill levels, etc. It was well understood that the current level of degradation in the park is mostly attributed to lack of proper maintenance. The public was critical of potential, future funding sortages after improvements are made.

Comparative Aspects of Maintenance

Figures from the Trust for Public Land's 2000 "Inside Parks" (Peter Harnik) publication are useful to gauge Oakland open space expenditures against other comparable cities.

In April of 2002, the Oakland Parks Coalition released a report on park maintenance. The document indicates public awareness of maintenance issues effecting Oakland's public parks.

Maintenance Recommendations

The LMMP makes strategic recommendations for improving the quality of maintenance at Lake Merritt Park. Estimates of costs for this standard are included.

Guidelines for Care/Life Cycle

Tables VI.1 and VI.2 describes expected care and life cycle standards for park landscape and furnishings.

Facing Page: Alameda County Court House
Left: Harvester machine

MAINTENANCE REVIEW

Maintenance Facilities

Maintenance and Operations Areas

Maintenance and operations areas within Lake Merritt Park are necessary for efficiency and care of Lake Merritt Park. The Maintenance operations facilities now house maintenance operations for other City of Oakland parks. The other maintenance facilities needs are over taxing the current area where these facilities are housed. Recently, an area formally park forest and grass areas was converted to a parking lot for maintenance vehicles. Maintenance needs for other Oakland parks should be housed at another facility, leaving the maintenance operations area for caring for Lake Merritt Park. Below are recommendations for the site:

- Remove truck parking facility for overall City of Oakland parks to another location.
- Remove large maintenance structure and integrate maintenance staff needs into new educational facility.
- Relocate maintenance equipment (large trucks) needed to maintain Lake Merritt Park to the location recommended in this plan.

Existing trash/recycling receptacle in Lakeside park

Park Management

Park Management and Maintenance

The City of Oakland Parks and Recreation Department has several maintenance groups that work in Lake Merritt Park:

Gardeners

Gardeners have primary responsibility for horticultural and landscape maintenance. Lake Merritt Park is based on a "beat" system with the Park divided into five sections. There is one supervisor who oversees the gardeners who are assigned to beats. This system provides knowledgeable gardeners who can take pride in their section. Some jobs may be more efficiently handled with more gardeners working as a crew. Trash pick-up is an additional responsibility.

Irrigation Division

This division has 3 full time employees who repair irrigation systems for the City of Oakland parks. They design irrigation systems, repair major plumbing such as repairs below the irrigation head (lateral and mainlines) and conduct irrigation inspections.

Tree Division

This division cares for trees, pruning, removal. At present, due to lack of personnel and funding, responds only to crises. The division operates throughout the City of Oakland.

Turf Management

This division maintains the turf areas. There are two people who mow the lawns. They are not dedicated to Lake Merritt Park, but mow turf areas throughout the City of Oakland parks and recreation areas.

PWA

This division has several crews that are involved with Lake Merritt Park.

- One crew handles widgeon grass harvesting on Lake Merritt six months out of the year utilizing four full time employees.
- Another crew handles site furnishing repair, play structures, water fountains and swings.
- Trash pick-up is another responsibility of DPW crews. This takes place at the Park edges along roadways.

Non-profits

There are many non-profit groups that take care of areas within Lake Merritt Park. One non-profit is Children's Fairyland, which maintains its gardens aside from tree repair which is handled by the Tree Division. Another non-profit group is the Lake Merritt Institute, which among other aims, maintains and cleans the watershore edge of Lake Merritt.

Landscape Evaluation

The overall quality of the landscape can be rated as poor. This can be attributed to any number of factors, one of which is landscape maintenance practices, which is addressed here.

Information regarding irrigation controller locations, makes, and models, water meter and backflow locations, mow times, etc. have been provided by staff.

There seems to be no overall plan or strategy for carrying out park maintenance tasks. It appears that the concept of "landscape management" has not been introduced and that day-to-day maintenance tasks are performed on an as-needed basis. An immediate and significant improvement could be achieved in the quality of the park by simply involving the staff in the development of an overall plan for better maintenance practices.

It is unclear what personnel are responsible for various tasks, specifically what those tasks are, and what sort of data is available in carrying out those tasks. For example, while there are apparently five permanent staff members responsible for maintenance tasks, mowing (edging and cleanup?) is done by another crew. Minor irrigation repairs are done by staff, but "other" irrigation work is done by another crew. All tree work is apparently done by others on an emergency, as-needed basis only.

While some staff has worked at the park for a number of years, little appears to be known, documented, or available regarding the park's inventory: square footage of areas, plant inventory or requirements, or irrigation system components or operational data.

Costs for Maintenance

Current Areas

Annual landscape maintenance cost, excluding forestry and PWA mainenance, was projected to be $1,125,000. This figure breaks down to an average of $13,235.00 per year per acre. The work includes gardeners, mowing lawns, edging, keeping pathways clean, attending to plant needs of turf, groundcovers and shrubs, and irrigation maintenance.

No cost basis was available for labor, benefits, materials, equipment, or administrative overhead. An average hourly cost of $35.00 was used in this first iteration. This rate was averaged to be $75,000 per year per person labor including overhead. At the calculated costs for proper maintenance, this translates from the schedule to an average of fifteen (15) people required per year at $1,125,000 per year. At 85 acres in the current park this translates to $13,235 per acre maintenance costs. The projections of 15 full-time equivalent people is an average, with October, November and December carrying the most persons (24.50) and May requiring the least (9.4). Park managers typically utilize part-time (floating) people relative to the cyclical demands of maintenance.

In addition to the Park landscaped areas are the lake maintenance and watershore edge clean-up. These costs are $132,000 for Lake Merritt edge clean-up performed by the Lake Merritt Institute and widgeon grass harvesting, performed by four people from PWA for four months per year.

New Park Areas

Estimated costs of maintenance for additional park area is approximately $300,000 per year (number includes new shoreline park area in the 12th Street/Cultural District). This new park acreage translate to an additional 3.88 persons required.

Annual costs for maintaining wetland and restored upland plantings in the Ecology Zone are estimated at $12,000 for a 5 acre area. This is recommended to be completed by a contract company specializing in habitat restoration type projects. Maintenace should be considered for inclusion in the contract to install the specialized plantings.

Recommendations

- Involve the staff in the development of an overall plan for better maintenance practices.
- Change lawn mowing heights to four inches instead of one inch and transfer labor to another labor item.
- There is no question that instituting the practice of integrated pest management (IPM), which would include the safe, judicious, and *very limited* use of herbicides, would improve the appearance of the park landscape. The implementation of an IPM program would not reduce labor costs, but would most surely allow for a far more effective use for those costs. Due to the long term establishment of a number of perennial weeds, herbicides might be required, in certain locations only, and in very minimal quantities, for one season. After that, good horticultural and management practices would, to a large extent, nearly eliminate the need for their further use. This is, after all, the basic tenant of *integrated* pest management, the *integration* of a number of tools and management practices in the management of pests.

- Future gardening staff for Lake Merritt Park hired by the City of Oakland should be technically skilled and have a minimum background/degrees in horticulture, landscape and computer skills.
- Immediately implement a goose management system that balancing numbers of geese, access to lawns, elimination of unused lawn areas such as in woodland areas and areas surrounding the arboretum.
- The CAL/FED Bay Delta agreement includes the implementation of a number of "Best Management Practices" (BMP) to conserve water throughout California. EBMUD is signatory to this agreement. BMP#5 pertains to the use of landscape water and requires that landscape water use shall not exceed 100% of the local reference evapotranspiration (ETo) rate. EBMUD's target is 80% for turf and 60% for shrub areas.
- No historical landscape water use data was available at the writing of this report to be able to determine the historical application at the park. Steps should be immediately undertaken to gather all the landscape data required to effectively program the park's irrigation controllers to meet EBMUD's goal. Additionally, it is highly recommended that staff begin to record landscape meter readings on a weekly basis to be able to monitor current use.
- Incorporate the checklist system (Refer to Oakland Park Coalition report, not attached) into evaluating the landscape maintenance on an on-going basis. A checklist specific to Lake Merritt Park should be developed.
- Prepare a forestry plan using a geographic information system outlining locations of trees and associated data, such as species, condition of tree, heights.
- Better police enforcement of parking on streets abutting the park. Gardeners can then schedule lawn edging, trimming.
- Reorganize the interior of Lakeside Park to better monitor and eliminate on-site parking under trees by City of Oakland and Children's Fairyland employees. These parking restrictions should be enforced.

Role of Volunteers

Volunteers are becoming a strong constituency that increases the awareness, commits community involvement and provides political support. Volunteers are increasingly playing important roles in the continued maintenance of parks. The Presidio and San Francisco parks systems have viable involvement of community volunteers.

Management and supervision of volunteers is important for meaningful participation and effects of their work. Volunteers can be used to fill maintenance voids that existing staff cannot handle. Using volunteers should be balanced with not threatening jobs of park staff. Sometimes, specialized volunteers can effectively be used for special areas needing special expertise.

Volunteers should work under the supervision of park staff. This may require flexibility to be available on weekends when most volunteers are available.

Landscape Maintenance Estimated Monthly Tasks and Frequency Schedule

The attached annual frequency schedule should be considered a first iteration for establishing a higher level of staff understanding of the park's requirements, with the ultimate goal being an improvement in the overall quality of the park and a higher return for taxpayer invested dollars.

This first iteration has been prepared to establish baseline of those tasks presently being performed and the frequencies that they are performed on weekly, monthly, and annual basis. Hours have been estimated for each task to establish monthly personnel requirements. (Please note that we have not been able to ascertain the present number of "floating" personnel used). Based on the limit data available, the estimate of personnel required is for all tasks and assumes that mowing and tree work is done by other (and therefore is not included).

A number of tasks on the frequency schedule show no frequencies associated with them. It is assumed that these (required or not) are not being performed. Other task frequencies have been assigned as a "best guess." At present, it appears that no such task frequencies exist, or are at least are documented.

Note: An urban forestry evaluation was not done. This was out of the scope and no existing maps or counts are known to exist of the conditions of the trees, maturity or heights.

Table VI. 1Guidelines for Landscape/Life Cycle

Park Landscape							
Planting Type	**Annual Maintenance Procedure**						
	Winter	Spring	Summer	Fall	**At 2 Years**	**At 5 Years**	**At 10+ Years**
Trees and Shrubs							
Planting	x				Remove tree stakes. Prune lower branches that will form a hazard. Do not prune leader. Prune back woody branches of shrubs where this will improve look of shrub. Do not shear shrubs.	Selectively replace shrubs that have become overly woody. Prune back woody branches of shrubs where this will improve look of shrub. Do not shear shrubs. Remove sections of tree grate that will interfere with tree trunck.	Replace shrubs that have become overly woody.
Fertilization		April	June	Sept.			
Mulch		x					
Pest Control		x	x				
Plant Repair	x	x	x	x			
Pruning	x						
Groundcovers							
Planting	x				In areas where establishment proves unsuccessful, amend soil and re-plant. Where pedestrian traffic is prohibiting groundcover establishment, replant and fence area off during establishment period.		Replace groundcovers in areas where they have become too woody.
Fertilization		April	June	Sept.			
Mulch		x					
Pest Control		x	x				
Trimming	x						
Weed Control	x	x	x	x			
Vines							
Planting	x				Train vines to trellises and prune selectively to direct growth. Prune runners that grow along ground. Protect young vines at base against damage from pedestrians.		
Fertilization		April	June	Sept.			
Mulch		x					
Pest Control		x	x				
Plant Repair	x	x	x	x			
Pruning	x						

Planting Type	Annual Maintenance Procedure						
	Winter	Spring	Summer	Fall	At 2 Years	At 5 Years	At 10+ Years
Ornamental Grasses							
Planting	x	x			Grasses may be divided.	Replace dead clumps. Remove dead strands.	Replace dead clumps.
Fertilization		April	June	Sept.			
Mulch		x					
Pest Control		x	x				
Trimming				x			
Weed Control		x					
Lawn							
De thatching	x	x			Regrade sections that may have subsided. Remove invasive grass types, clover, etc. (Chamomile may be desireable). Remove lawn from area around trunk.		Complete major rennovation of lawn areas designated for more active sports such as those in Lakeside Park, Eastshore Park, 12th Street Shoreline Park, and Snow Park.
Aeration		April	June	Sept.			
Mowing		x					
Re-sodding		x	x				
Re-seeding				x			
Park Naturalized Areas							
Mixed Understory and Marsh Planting							
Planting	x			x	Weeding and landscape management is critical during the first two years of establishment with the goal of minimizing efforts in subsequent years. As a wildlife habitat zone, human intrusion for maintenance pourposes hsould be carefully balanced with nest	Species selection should be modified based on success rate of plant species according to the unique conditons present in soil, salt, wildlife use, water level, maintenance, and irigation. A major thinning or mowing should occure as requred to reduce that	Long term management should consider the habitat quality. Plant species should be further modified to improve foraging, nesting, and aesthetic qualities. Plants should be replaced or reseeded as required due to die-back.
Weed Control	x	x	x	x			

Aquatic Zones

Planting Type	Annual Maintenance Procedure						
	Winter	Spring	Summer	Fall	At 2 Years	At 5 Years	At 10+ Years
Trash Removal	x	x	x	x	Ongoing removal of trash from windblown, storm drain, and direct sources. Current removal practices benefit highly from volunetter efforts. Organized volunteer activities such as regular lake clean up programs and special lake cleanig events should be promoted in the		
Dredging Operations					The dredging of sediment material from lake arms near the major storm outfalls should be conducted as required or on an ongoing basis if a dredge machine is purchased by the City. Past frequency has been about every 12 years. The next scheduled date is 2009.		
Algae Harvesting		x	x		During the spring and summer months, high nutrient loads coupled with increased sunlight yeilds massive growth of algae. The matts float to the surface. Algae is generall a problem in the shallow and still water within 50 feet of shore. Other water quality programs should also focus on reduction of algae, however direct removal by harvester is required.		
Widgeon Grass Harvesting		x	x		During the spring and summer months, widgeon grass growth is accelerated. The grass roots in the more shallow water. Its blades reach the surface where they lay over and interfer with boating. In areas of boating use, direct removal by harvester is required.		

Table VI. 2 Guidelines for Furnishings

Landscape Element	Maintenance Procedure	Frequency			
		Bi-Weekly	Monthly	Bi-Annually	Yearly
Park Vehicle Roads	Includes Bellevue Ave in Lakeside Park				
Maintenance	Sweep with street sweeper machine. Patch cracks with tar.		x		
Repair	Saw-cut or lift portions to be removed. Replace with matching asphalt or unit pavers. Avoid uneven conditions.				
Replacement	See "Repair"				20 yrs
Concrete sidewalks					
Maintenance	Power wash, remove gum. Check for uneven or lifting sections. Re-caulk expansion joints as required.			x	
Repair	Saw-cut along existing score lines. Replace with matching concrete only. Score new concrete to match				
Replacement	See "Repair"				50 yrs
Decomposed Granite					
Maintenance	Rake surface to smooth any uneveness. Moisten as required.		x		
Repair	See "Maintenance"				
Replacement	Excavate effected area. Re-mix material with binder. Add new material to match as reqiured. Re-compact in place.				15 yrs

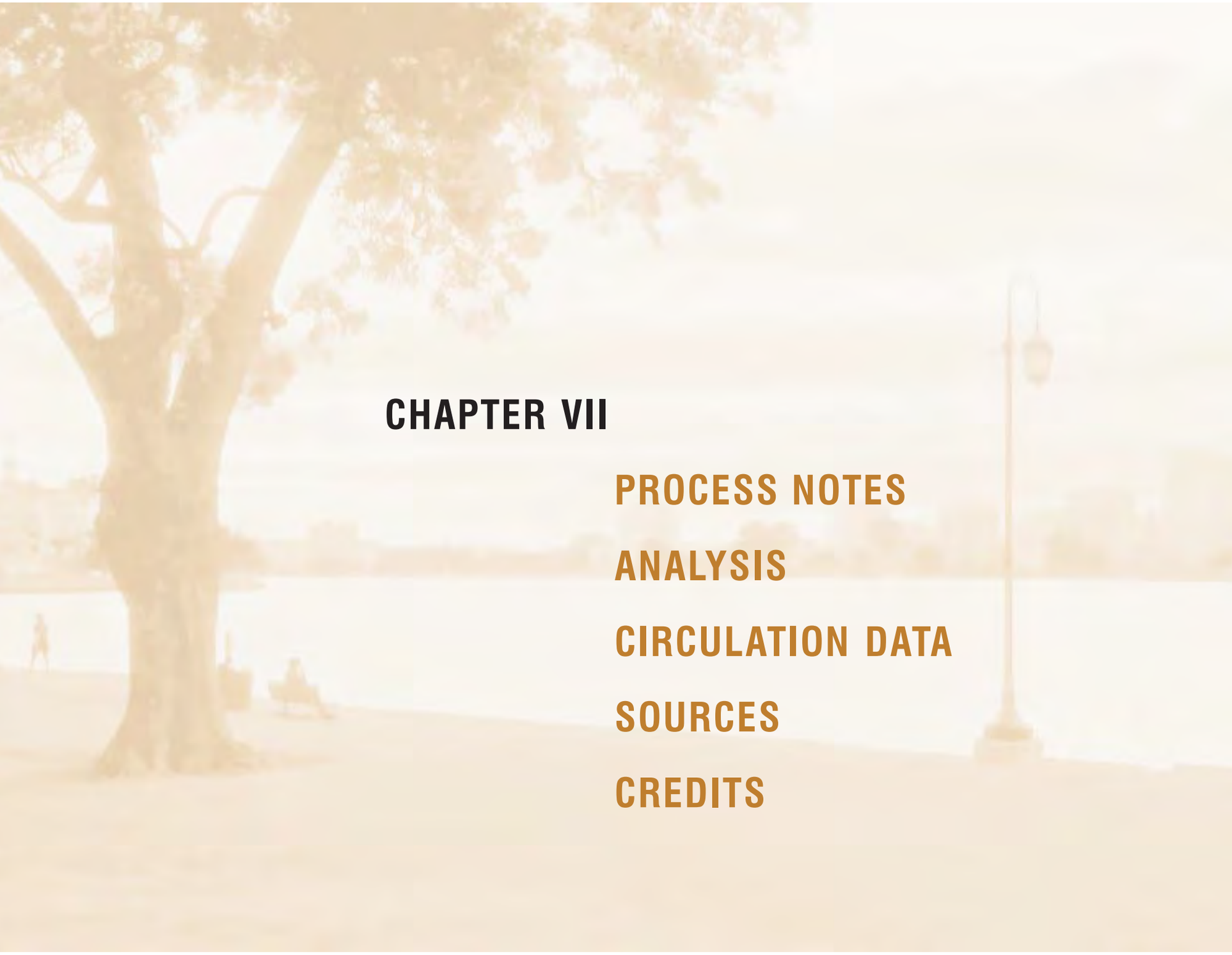
Landscape Element	Maintenance Procedure	Frequency			
		Bi-Weekly	Monthly	Bi-Annually	Yearly
Stone Seat Walls	Includes neighborhood nodes				
Maintenance	Power wash stone facing and wall caps			x	
	Inspect for and remove marring, graffitti	x			
Repair	Check for loose stones, re-mortar and re-point where necessary.				
	Clean grafitti proof coating per manufacturer's specification. Apply light sand-blast to untreated stone/concrete to remove graffiti when necessary. Do not paint over graffiti unless it is a painted surface.				
Replacement	Replace irreparable art tiles, stones and caps with the same type of material. Match grout color.				
Special Metal Fencing	Includes fencing at botanical garden, Fairyland, etc.				
Maintenance	Inspect for rust, dents, and potential security breaches.		x		
Repair	Repaint with matching rust inhibiting paint. Grind rust spots clean and prime before painting.				
Replacement	Replace sections or whole fence as required to match exisitng or per design direction of City landscape architect.				
Decorative Water Fountains	Includes historic fountains				
Maintenance	Remove debris from pool, clean drain of debris, clean tile surfaces	x			
	Empty filter monthly or more often if req'd. (Bi-weekly may be necessary in fall)				
	Ensure proper mechanical function as per manufacturer's instructions.				
Repair	Replace broken elements with tiles with matching tiles/relief, oprnament, etc.. Match grout color and technique. Repair fountain mechanical systems per manufacturer's instructions.				
Replacement	See "Repair"				

GUIDELINES FOR CARE

Landscape Element	Maintenance Procedure	Frequency			
		Bi-Weekly	Monthly	Bi-Annually	Yearly
Standard Furnishings	Includes benches, bollards, bike racks, and trash receptacles.				
Maintenance	Clean tables, benches, etc. with water or mild, non-phosphorous soap as required to remove food, gum, grafitti, bird feces, and dirt.	x			
	Inspect for chipped or cracked paint and rust spots			x	
	Re-apply wood treatment on any exposed wood.				x
Repair	Replace fixtures and other components per manufacturer or replace item alltogether. Repaint where necessary with matching color				
Replacement	Replace irreparable furnishings with the same make and models.				
Drinking Fountains					
Maintenance	Clean and polish drinking fountain bowls and fixtures	x			
	Check for water pressure and adjust according to manufacturer's instructions			x	
Repair	Repair per manufacturer's instructions				
Replacement	Replace with the same make and model				
Custom Furnishings	Includes creek node benches				
Maintenance	Inspect all hardware and tighten if necessary. Inspect metal parts for chipped paint and rust spots. Re-galvanize and re-paint as req'd.			x	
	Re-apply wood treatment on arbors and benches.				x
Repair	Replace hardware with same type. Re-weld, re-galvanize and repaint or powdercoat broken custom metal fabrications in shop specializing in metal work.				
Replacement	Replace damaged wooden parts with same type of material, including stone and metal parts.				

Landscape Element	Maintenance Procedure	Frequency			
		Bi-Weekly	Monthly	Bi-Annually	Yearly
Beaches	Includes bandstand and 12th Street shoreline park area.				
Maintenance	Remove trash, bird feathers, feces, sticks, and other materials potentially harmful to people and children from sand and wading area.	x			
	Rake sand by hand or with a mechanical tractor to keep friable and free of objects.		x		
Play Areas					
Maintenance	Remove grafitti, trash, feces, and other materials potentially harmful to people and children from play structures and area surfacing.	x			
	Check structure for dangerous conditions such as worn equipment, sharp edges, rust, and loose bolts.		x		
Lake Dredging					
Maintenance	Remove sediment from lake bottom and dispose per Regional Water Quality Control Board regulation.				10-12 Yrs.
	Remove sediment from lake bottom at Glen Echo and Trestle Glen areas. Dispose per Regional Water Quality Control Board regulation.				2-3 Yrs.

APPENDIX



CHAPTER VII

PROCESS NOTES

ANALYSIS

CIRCULATION DATA

SOURCES

CREDITS

PROCESS NOTES

The appendix section contains various summaries, documents, and ancillary information essential to understanding this plan. Other information generated during the Master Plan process such as public opinion surveys, have been assembled separately.

Stakeholder Participation

A Stakeholder committee was formed from community leaders. Local business groups, Oakland neighborhood associations, advocacy groups, and park-based programs, and user groups were represented by individuals with a good understanding of Lake Meritt and its parks. Three meetings were held over the course of the master plan. Most attended the public open house events as well.

The input from the stakeholders served to direct the planning team and City towards visions and solutions that met the criteria of those who regularly use the park. Early discussions set a vision for the park to continue to serve a wide audience: age, ethnicity, activity, and accessibility. Stakeholders such as Children's Fairyland worked to ensure park facilities would continue to serve their guest's needs. Environmental concerns were given high priority. Local advocates for the Park gave direction to resolve the problems of pedestrian and bicycle access in the existing 12th Street roadway area.

Over the course of the plan, additional ideas and input were provided to the planning team. At each critical point of the plan-analysis, alternatives, and preferred plan-a presentation/ workshop was held to review the team's progress. Special meetings were occasionally held to review design concepts with stakeholders to ensure the program needs were fully understood.

Participating Stakeholders

Nancy Stark	Director, Children's Fairyland
Sandy Threlfall	Waterfront Coalition
Robert Kidd	Lake Merritt Breakfast Club/Merritt Lakesiders/Coalition of Homeowners Around the Lake
Ron Morra	Adams Point Preservation Society
Barbara Neustader	Adams Point Preservation Society
Aziz Khatri	Grand Avenue Business Association
Donna Reynolds	Glen Echo Neighborhood Association
Ellen Oldham	Camron Stanford Preservation Association
Paul E. Garrison	Haddon Hill Neighborhood Association
Harry Jacobs	Lake Merritt Business Association
Tamara Katsikas	Junior Center for Arts & Science
Nona Smith	Lakeshore Business Association
Carol Ellis / Claudia Skapik	Lakeshore Homes Association
Ruth Cumings	Rose Garden Neighborhood Preservation Association
John E. Klein	Coalition of Advocates for Lake Merritt (CALM)
Chris Roberts	Brooklyn Neighborhood Preservation Association
David Flack	Greater Mandana Action Coalition
Elain Schiano	Laney Neighborhood Association
Michael Gabriel	Glen View Neighborhood Association
Karen Mary	St. Paul's Episcopal Church & School
David Stein	Friends of Oakland Parks and Recreation
Don Davenport	San Antonio Community Development Corporation
Joshua Simon	East Bay Asian Local Development Corporation
Helen Shor	East Lake Merchants Association
Pamela Magnusson-Peddle	Oakland Heritage Alliance
Jose Arredondo	Spanish Speaking Citizen's Foundation
Dennis Powers	Oakland Museum of California, Kaiser Conv. Center,Camron Stanford House
Dr. Richard Bailey	Lake Merritt Institute
Ray King	Chinatown Central Community Dev. District Board
Susan Duncan	Peralta Community College District
Sean O'Hara	Mediterranean Plant Society

Public Open Houses

Outreach to the greater Oakland community was essential to the Lake Merritt Master Plan. Three major public events were held at which guests were invited to comment and provide direct input to the consultant team. Surveys asked detailed questions about patterns of park use, issues to be resolved, and favorite places. Importance was placed on the apparent preference of one topic towards another. Comments were recorded, summarized, and distributed to the planning team and City.

Each open house displayed graphics ideas produced to date. According to the project phase, site analysis graphics, alternative concepts, and preferred concepts were respectively presented. Guests engaged in a dialogue by writing additional comments on Post-It notes and placing them directly on the graphics. Special boards were created to record preferences in a visible and participatory means. Dots were distributed and placed by individuals next to the topic of most relevance to the respondent or on a map to make a geographic connection to the topic. The results provided the participants with an understanding of general preference.

The first open house was held in Lakeside Park on a warm Saturday in October. A tent was erected to house project displays and prioritization exercises. The event included activities for children by Oakland-based MOCHA. The park location maximized the Master Plan's exposure to park users not normally inclined to participate in public processes. Other open houses were held in the Sailboat House. Notification for all events was made by direct mail postcard, fax, telephone, flyer, email, and print media. A ticker tape advertisement was provided by KTOP. A web site was established in January to display additional Master Plan graphics.

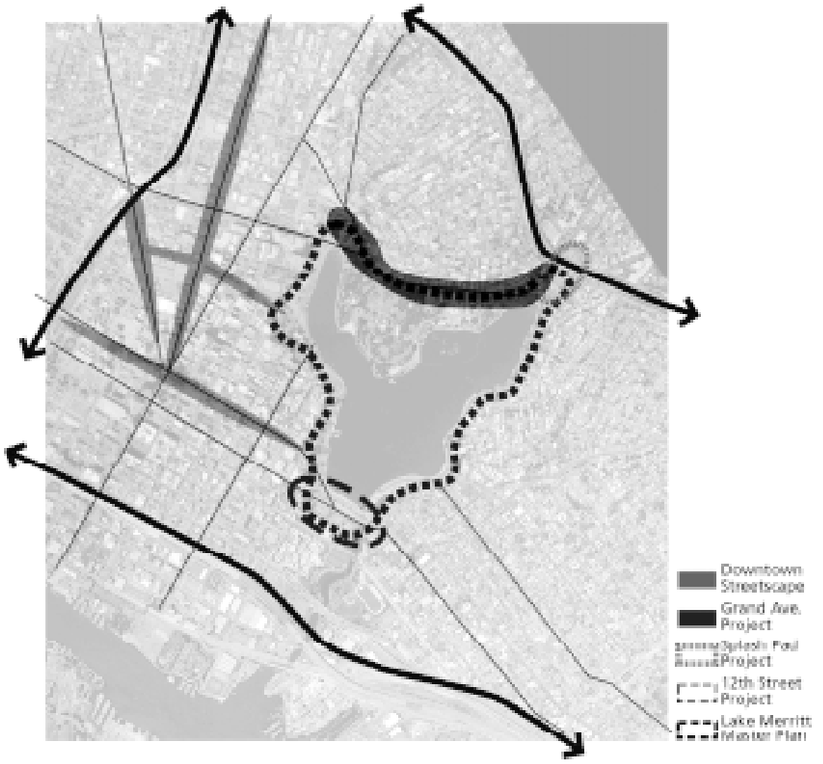
Following the open house, displays were set up in other public locations. Master Plan graphics were shown at City Hall, the Oakland Main Library, and the Veteran's Memorial building to capture a wider audience.

Special presentations were also made to select groups-some were public forums. These included:

Lake Merritt Breakfast Club
Downtown Oakland Rotary Club
Oakland Chamber of Commerce
Port of Oakland Executive Board
Life Enrichment Agency
Oakland City Council

Professional Charette

A collaboration and coordination session for Oakland design professionals working in the Lake Merritt area was held mid-way through the planning process. Each project was introduced and discussed for its broader relevance to the other projects. Common visions for the Lake Merritt district involved pedestrian linkage opportunities, urban connections, future activity centers, and Oakland character. The opportunity for the design teams to coordinate projects was particularly beneficial.



Projects Discussed

Downtown Streetscape Master Plan, Terry Bottomley Associates

Lake Merritt Boulevard (12th Street), CALM

Grand Avenue Streetscape, Design Community Environment

Splash Pad Park, Hood Design

Participants

Kerry Jo Ricketts-Ferris	City of Oakland
Leslie Gould	Planning Director, City of Oakland
John Gibbs	WRT
Steve Hammond	WRT
Ji-In Son	WRT
Adrienne Wong	Adrienne Wong Assoc.
John Nelson	Hansen Murikami Eshima
Tom Krakow	DKS Associates
Norman Hooks	Outreach, Architect
Terry Bottomley	Bottomley Associates (Downtown Streetscape Master Plan)
Gail Donaldson	Bottomley Associates (Downtown Streetscape Master Plan)
Kathy Garret	Patillo & Garrett (CALM plan for Lake Merritt Boulevard)
Tom Ford	DCE (Grand Avenue Plan)
Walter Hood	Hood Design- Splash Pad Park

Technical Advisory Team (TAC)

Monthly progress meetings were held with City staff to review technical issues related to the plan. Various City departments were represented including Public Works, Traffic Engineering, CEDA, Parks and Recreation, Park Ranger, Arts Commission, City Council, and the Coastal Conservancy. Individuals included:

Zac Wald
Catherine Payne
Barry Miller
Kathryn Hughes
Alicia Perez
Niko Letunic
Marge Stanzione
Alex Greenwood
Jim Ryugo
Maxene Spellman
David Skinner
Pat Kernighan
Amanda Brown-Stevens
Athur Yamashita
Sgt. Ron Yelder
Marc Oliver
Dennis Powers
Brian Wiese
Noel Gallo
Libby Schaaf
Dana Riley
Annalee Allen
Roberta Babcock
Jayne Becker
Christine Calabrese
Humberto Castillero
Dwight Chambers
J. B. Chew
Andrew Clark-Clough
Deborah Cooper
Lesley Estes
Natalie Fay
David Ferguson
Gerry Garzon
Justin Horner
Joe LaClair
Angela Joyner
Susan Kovacevic
Jesse Kupers
Ralph Lacer
Patrick S. Lane
Carmen Martinez
Moses Mayne
Iris Merriouns
Theresa M. Navarro
Kenneth W. Parris
Rodney Satterfield
Samee Roberts
Willie Yee
Burl Welton

THIS PAGE INTENTIONALLY LEFT BLANK

Inventory of Park Programs June 2001

Program or Use Area	Description of Use	CAT Area No.	Facility Management	Number of Event Visitors	Wkday Use	Wkend Use	Day Use	Night Use
Lakeside Park								
WILDLIFE REFUGE	Public viewing only- no access to islands or display area	1	OPR/		✷	✷	✷	
CHILDREN"S FAIRYLAND	Learning and Reading Readiness, Entertainment		Non Profit	1000 per weekend day	✷	✷	✷	
ROTARY NATURE CENTER	Eucational Center, Displays, Classrooms,Children After School Programs	2	R.N.C.		✷	✷	✷	✷
ARTS & SCIENCES CENTER	Children After School Programs		A.S.C.			✷	✷	
SHAKESPEARE IN THE PARK	Free presentations of Shakespeare to the Public, Open Lawn Area		PRIVATE	150-300	✷	✷	✷	
TOLL BOOTH	CHARGES FOR WEEKEND PARKING		OPR			✷	✷	
SAILBOAT HOUSE- Upstairs	Open room, balconey, restrooms, and kitchen available for rent.	3	OPR	100-150 seated				
RECEPTIONS	Weddings, Luncheons, Birthdays, Special Club Events, Etc..		OPR			✷	✷	✷
PUBLIC MEETINGS	Workshops for City Employees, Homeowners, Meetings: Ladies of the Lake, Oakland Womens's Rowing, Club meetngs.		OPR		✷		✷	✷
SAILBOAT HOUSE- Downstairs and Area								
REGATTAS	Annual event on lake.		PRIVATE			✷	✷	
PUBLIC BOAT RENTALS	Sailboats, Paddleboats, Canoes		OPR		✷	✷	✷	
Girl Scouts, YMCA, Schools, etc..	KAYAKS, PONTOONS, WHALEBOATS		PRIV/OPR		✷	✷	✷	
BOAT STORAGE			OPR					
GONDOLA CONCESSIONAIRE	Gondola rides on lake from Sailboat house docks at lunchtime and twilight. Some excurions include dinner.		PRIVATE	2-4 per boat	✷	✷	✷	Eve
	AND EARLY EVENINGS							
MC ELROY FOUNTAIN	NO SCHEDULED USES	4	OPR	NA	✷	✷	✷	
LAWN BOWLING GREENS	BOWLING & CROQUET CLUBS	6		40	✷	✷	✷	
GREENS	GREENS MAINTAINED BY OPR		PRIVATE		✷	✷	✷	
CLUB HOUSE BUILDING	Building		PRIVATE		✷	✷	✷	

Program or Use Area		Description of Use	CAT Area No.	Facility Management	Number of Event Visitors	Wkday Use	Wkend Use	Day Use	Night Use
GARDEN CENTER- Outdoor Area		HORTICULTURE CENTER	7						
	BONZAI CLUB	SHOWS		PRIV/OPR	10-50P	*	*	*	
	PALM GARDEN			CLUB?		*	*	*	
	FIRESCAPE			OPR		*	*	*	
	FRAGRANCE + HERB GARDEN			OPR		*	*	*	
	MEDITERRANEAN GARDEN	Active Club, meetings, display		OPR		*	*	*	
	DAHLIA GARDEN			CLUB?		*	*	*	
	ORCHID SHOWS	BIG DRAW, FUNDRAISERS, KEEP PROFIT			30-100 P		*	*	
GARDEN CENTER- BUILDING		3 MAIN ROOMS W/ KITCHEN		OPR					
	MEETINGS	Community special events, Montclaire Womens Club			To 150P	*	*	*	*
	RECEPTIONS	Weddings, Luncheons, Birthdays, Special Club Events, Etc..			To 150P	*	*	*	*
PLAYGROUND @ ROTARY		Well used by children		OPR	30-50C-P	*	*	*	
CHILDREN'S FAIRYLAND			8	PRIVATE		*	*	*	*
EDOFF BANDSTAND		Music, Weddings, Children Events	9	OPR	50-400P	*	*	*	
FESTIVAL OF THE LAKE		No longer held. had been located in Lakeside Park with an enterance on Grand Ave.	10	PRIV/OPR	10,000-25,000P		*	*	*
ADAMS PARK			11	OPR					
VETERANS MEMORIAL BLDG.		Private events scheduled by center. Seniors. Parking on premises.	12	Veterans	?	?	?	?	?

Park Programs

Program or Use Area	Description of Use	CAT Area No.	Facility Management	Number of Event Visitors	Wkday Use	Wkend Use	Day Use	Night Use
Kaiser Building								
LAKE MERRITT PLAZA		14						
SNOW PARK	Casual use, formal office picnics, music concerts, golf putting, volleyall	15	OPR		✸	✸	✸	
LAKE MERRITT HOTEL	Private Hotel across Lakeside Drive from Lake		PRIVATE		✸	✸	✸	✸
Parks and Recreation Area								
MUNICIPAL BOAT HOUSE- Office of P&R	Offices, equipment storage, public restrooms, parking	17	OPR		✸	✸	✸	
ROWING FACILITIES	Two docks, hull and equipment storage		PRIV/OPR		✸	✸	✸	
MERRITT QUEEN BOAT	No longer in operation	18	OPR					
CAMERON STANFORD	Non-profit management, Law firm rental space, activities include receptions, meetings	19	PRIV/OPR		✸	✸	✸	✸
Program or Use Area	**Description of Use**	**CAT Area No.**	**Facility Management**	**Number of Event Visitors**	**Wkday Use**	**Wkend Use**	**Day Use**	**Night Use**
12th STREET CIVIC AREA & CHANNEL								
OAKLAND PUBLIC LIBRARY	Main Library. History Room, Children's Room, General, central administration, service / deliveries	20	LIBRARY		✸	✸	✸	✸
ALAMEDA COUNTY COURTHOUSE		21	COUNTY		✸	✸	✸	✸
KAISER CONVENTION	SPECIAL EVENTS	22	PRIV/OPR	10,000+P	✸	✸	✸	✸
OAKLAND MUSEUM	Rental space, museum showns, special events	23	PRIV/OPR		✸	✸	✸	✸
PERALTA PARK	Playground, jogging, estuary connection to lake	25	OPR		✸	✸	✸	
CHANNEL PARK	Sculpture garden, events, jogging	26	OPR		✸	✸	✸	
LANEY COLLEGE	Regional Community College		LANEY		✸	✸	✸	✸

Program or Use Area	Description of Use	CAT Area No.	Facility Management	Number of Event Visitors	Wkday Use	Wkend Use	Day Use	Night Use
Grand Lake Green Link								
LAKEVIEW LIBRARY		34			✷	✷	✷	
LAKESHORE PARK- SPORTS FIELD	Single backstop, open lawn area, no league games, non-lighted, used by Lakeview School	34			✷	✷	✷	
PLAY AREA	Renovated in 1990's, restoroom				✷	✷	✷	
Lakeshore Drive Area								
EMBARCADERO PERGOLA	WEDDING PICTURES, GATEWAY	33	OPR		✷	✷	✷	✷
ATHOL PLAZA	TENNIS COURTS, PARK/PICNIC	29	OPR	8-25P	✷	✷	✷	
18th St. BOAT LANDING		30	OPR					
PINE KNOLL	Sunbathing, picnics, restrooms	31	OPR		✷	✷	✷	
CLEVELAND CASCADES	EXERCISE, MID-BLOCK CONNECTOR	32	OPR		✷	✷	✷	✷
CHURCH - LOUVRES	WEDDING CEREMONIES		PRIVATE		✷	✷	✷	✷
18TH STREET DOCK	No programmed use. Gateway to business district and neighborhood							
General Park Activities								
Activity	**Description**		**Programming**	**Number of Event Visitors**	**Wkday Use**	**Wkend Use**	**Day Use**	**Night Use**
ACTIVE RECREATION								
SPORTS - FRISBEE, BALL	Open lawn areas.		NON-PROGRAM	NA	✷	✷	✷	
JOGGING	Lake edge, lawn, perimeter sidewalk. Asphalt or dirt surface preferred		NON-PROGRAM	NA	✷	✷	✷	✷
BICYCLING	Perimeter streets and sidewalks		NON-PROGRAM	NA	✷	✷	✷	✷
SAILING	By rental only		PROGRAM	NA	✷	✷	✷	
ROWING	Selected routes for maximum run length		PROGRAM	NA	✷	✷	✷	
SWIMMING	No body contact allowed, health and safety			NA	NA	NA	NA	NA
PASSIVE RECREATION								
STROLLING	SPORTS ACTIVITY		NON-PROGRAM	NA	✷	✷	✷	✷
PICNICS	No tables available, most lawn areas fouled by geese		NON-PROGRAM	NA	✷	✷	✷	
DOG WALKING	Perimeter sidewalks only- discontinuous		NON-PROGRAM	NA	✷	✷	✷	✷

Park Use Analysis

Circulation Analysis

Visual Analysis

Opportunities Diagram

Existing Conditions

1.1 Lakeshore Avenue

Lakeshore Avenue is the minor arterial serving the neighborhoods east of Lake Merritt. It parallels the east shore of Lake Merritt with all access on the east side. It connects I-580 and El Embarcadero on the east end with 12th Street on the west end. Local traffic uses Lakeshore Avenue to either El Embarcadero or 12th Street to get around Lake Merritt into downtown. It may serve as an alternate route between I-580 and lower downtown. Lakeshore Avenue has two main sections. Upper Lakeshore Avenue is between El Embarcadero and East 18th Street. Lower Lakeshore Avenue is between East 18th Street and 12th Street.

1.1.1 Traffic

The Lakeshore Avenue serves as the major roadway link between the east Lake Merritt neighborhoods, downtown and Interstate 580. Lake Merritt is a major barrier to travel in Oakland. It separates the southeastern neighborhoods from downtown. There are no bridge crossings for one mile. All traffic must go around the northern or southern ends of the lake. Lakeshore Boulevard is the only multilane boulevard to connect I-580 and 12th Street east of Lake Merritt until 14th Avenue. Traffic is fairly even on upper Lakeshore Boulevard because it collects and distributes traffic from the neighborhood south to 12th street and north to I-580. Traffic varies between 500 to 1000 vehicles in the morning and 700 to 1100 vehicles in the evening. By 2021 traffic volumes are projected to rise to between 600 to 1100 vehicles in the morning and 800 to 1200 vehicles in the evening. The main travel patterns on lower Lakeshore Boulevard are southwest in the morning and northeast in the evening. In the morning traffic from upper Lakeshore Avenue traffic merges with heavy traffic from East 18th Street and Foothill and travels down to the 12th Street dam using Lakeshore. Currently about 1600 southwest trips and 600 northwest trips are made in the morning. Southwest AM peak traffic is expected to grow to 1900 vehicles per hour by 2021. In the evening traffic from 12th Street travels up 1st Avenue to Lakeshore Avenue. Traffic disperses onto East 15th Street, East 18th Street and upper Lakeshore Avenue. Currently about 1400 northwest trips and 800 southwest trips are made in the morning. Southwest PM peak traffic is expected to grow to 1600 vehicles per hour by 2021.

1.1.2 Roadway

Lakeshore Avenue is a four lane street between El Embarcadero and East 18th Street, with left turn bays at the intersections. It is six lanes between East 18th Street and Foothill Boulevard. Between Foothill Boulevard and 12th Street, Lakeshore Avenue splits between 'lower' Lakeshore Avenue and 1st Avenue. Lakeshore Avenue is two lanes westbound and one lane eastbound. 1st Avenue is one lane westbound and two lanes eastbound. Currently there are signals at the intersections of Lakeshore with El Embarcadero, Brooklyn, East 18th Street and Foothill Boulevard. There is a signal now being installed at Hanover. There are signals at the intersections of 15th Street and International Boulevard. There is parking on both sides of Lakeshore Avenue, with a few exceptions. There is no parking between East 18th Street and Foothill Boulevard.

1.1.3 Transit

Upper Lakeshore Boulevard is minor bus transit route. The 13 and K AC Transit bus routes use it. There are bus stops at Brooklyn and Hanover. These bus routes serve as transit access between the east Lake Merritt neighborhoods and downtown Oakland. The 13 serves southern downtown around 14th Street. The K serves northern downtown around Grand Avenue as well as providing access to Lakeside Park.

Lower Lakeshore Boulevard is bus transit route. It is used by the 13, 14, 15, 40, 40L, 43, and K AC Transit bus routes. There are bus stops at 1st/International and Lakeshore/E.15th. These

bus routes serve as transit access between the east Lake Merritt neighborhoods and downtown Oakland. The 40 and 40L, which serves 12th Street, 11th Street, East 15th Street and Foothill Boulevard, carries 22,600 riders a day.

First Avenue is used by the 13, 14, 15, 40, 40L, 43, and 618 AC Transit bus routes.

1.1.4 Bikes

Currently there are no bike lanes on Lakeshore Boulevard or First Avenue.

1.1.5 Pedestrian

Lakeshore Avenue has six foot sidewalks on both sides of the street. There are five pedestrian crosswalks on Lakeshore Avenue between El Embarcadero and East 18th Street. There are four pedestrian crosswalks between 18th Street and 12th Street. At 18th Street there are two signalized crosswalks. There is one signalized crosswalk at the intersection of Foothill Boulevard on the north leg. However there is no crosswalk on Lakeshore Avenue at either 15th Street or 12th Street. There is one mid block crosswalk between 15th Street and 12th Street. It is on a curve. At 12th Street there is an underground pedestrian crossing tunnel. It is steep, narrow and littered. There are signalized crosswalks on 1st Avenue at both the 15th Street and International Boulevard intersections.

1.2 12th Street - "Frickstad Viaduct"

The 12th/14th Street Highway serves as the major roadway link between downtown and the east Lake Merritt neighborhoods. Lake Merritt is a major barrier to travel in Oakland. It separates the southeastern neighborhoods from downtown. There are no bridge crossings for one mile. All traffic must go around the northern or southern ends of the lake. On the southern side of the lake there is a river channel as well. The first crossing on the southern side is the 12th/14th Street Highway. The next is 10th Street which is only a two lane one way street with very limited capacity. Blow that there is 7th Street which is a two way four lane street. But it is at the very southwestern edge of the neighborhoods and goes southwest of downtown. Below 7th Street is Interstate 880. This is a major access to downtown for the southern suburbs of Oakland. However there are no access ramps to the freeway until 22nd Street. This makes it unusable to the east Lake Merritt neighborhoods. International Boulevard (E. 14th St.) and East 12th Street run parallel one block apart. Residents of the east Lake Merritt neighborhoods use 12th and 14th Streets to access the major employment centers downtown.

1.2.1 Traffic

Currently 4200 vehicles cross 12th street in the PM peak hour. In the morning peak 3000 vehicles travel westbound on 12th street. By 2021 it is anticipated that up to 4800 vehicles will cross 12th street in the PM peak hour. There are forecasted to be 3300 westbound peak AM trips by 2021.

1.2.2 Roadway

Currently there is one twelve lane divided highway over the dam. It is type A weaving section with grade separated movements. It connects 14th Street, 13th Street, 12th Street and 11th Street on the northwestern downtown side with Lakeshore Avenue, 1st Avenue, International Boulevard (E. 14th St.) and East 12th Street on the southeastern suburban side. Currently on the downtown side 14th Street is the only two way street with two lanes each way. The rest are one way streets with 13th Street being 3 lanes eastbound, 12th Street being four lanes westbound and 11th Street being three lanes eastbound. Eleventh Street emerges from a tunnel underneath Oak Street and the Oakland Museum. Currently on the suburban side 1st Avenue, International Boulevard and East

12th Street are two way four lane streets. Lakeshore Avenue is odd with two southbound lanes and only one northbound lane. It has only right-in right-out access to westbound 12th/14th Street. The right-in northbound lane is for local access only. Lakeshore acts as a one way two lane street for regional traffic. All the northwest traffic from Lakeshore Avenue, 1st Avenue, International Boulevard and East 12th Street are combined and then distributed to 14th Street and 12th Street on the downtown side. All the southeast traffic from downtown are combined and then distributed to 1st Avenue, International Boulevard and East 12th Street. Traffic is collected and distributed via grade separated ramps. There are two grade crossings, one on each side of the dam.

1.2.3 Transit

The 12th/14th Street Highway is a major bus transit route. It is used by the 13, 14, 15, 40, 40L, 43, 82, 82L and 618 AC Transit bus routes. There are bus stops at either end. There is one little used bus stop on the structure. It is a southeast bound stop just outside of the 11th Street tunnel. It serves the 14, 15 and 40 routes. These bus routes serve as transit access between the east Lake Merritt neighborhoods and downtown Oakland. The 82 and 82L, which serves 14th Street and International Boulevard, carries 22,600 riders a day. The 40 and 40L, which serves 12th Street, 11th Street, East 15th Street and Foothill Boulevard, carries 22,600 riders a day. There are 26 busses an hour that cross the 12th/14th Street Highway in the peak weekday hours.

1.2.4 Bikes

Currently there are no bike lanes on 12th Street.

1.2.5 Pedestrian

12th Street has a twelve foot sidewalk on the lake side, from Lakeshore to Oak Street, and a six foot sidewalk on the Convention Center side, between Oak and East 12th Street. There are no crosswalks on 12th Street between 2nd Avenue and Oak Street. There are three pedestrian tunnels. They provide a pedestrian crossing of the street separate from traffic. The tunnels currently have problems with minor flooding, insufficient lighting, trash, graffiti, and a perception of being unsafe. The tunnels do not provide assess for the disabled. Two have only steep stairs. One has a ramp but it is not Americans with Disabilities Act compliant.

1.3 Lakeside Drive

Lakeside Drive is a major arterial street. It parallels the west shore of Lake Merritt. It is divided into two different sections. The upper section is from 20th Street to 19th Street. The lower section is from 19th Street to 14th Street. Lakeside Drive serves as the major downtown roadway link on the southwestern coast of Lake Merritt. It connects north downtown with Interstate 880. The lower part of Lakeside Drive is part of a one way couple that includes Madison Street.

1.3.1 Traffic

Lakeside Drive is part of the downtown street system. A large amount of traffic exits I-880 freeway onto Lakeside Drive and then proceeds up Lakeside Drive into upper downtown (Keiser area). Slightly less vehicles proceed down Lakeside Drive to Madison Street, and then take Madison Street to the I-880 freeway. Therefore Lakeside Drive has heavy AM peak hour traffic, but it is lighter in the PM peak hour. The existing AM peak hour volumes are 890 to 790 northeast bound and 530 southwest bound. The existing PM peak hour is 750 to 1050 northeast bound and 720 southwest bound. The 2021 AM peak hour volumes are 1190 to 1040 northeast bound and 530 southwest bound. The existing PM peak hour is 860 to 1140 northeast bound and 840 southwest bound.

1.3.2 Roadway

Most of Lakeside Drive is four lanes. Upper Lakeside Drive has two lanes each way. There is some parking on this section. Lower Lakeside Drive is four lanes northbound with parking on both sides, except at the bend where it is three lanes with parking only on the lake side.

1.3.3 Transit

Currently AC transit runs the 59 and 59A on Lakeside Drive, between Jackson and Harrison Street.

1.3.4 Bike

Currently there is no bike lane on the street.

1.3.5 Pedestrian

Lakeside Drive has six foot sidewalks on both sides of the street. There are five crosswalks on Lakeside Drive between 14th Street and 20th Street. There are signalized crosswalks on all four legs of the Lakeside Drive and 14th Street intersection. There is an unsignalized mid-block crosswalk, across four lanes, at the entrance of the Scottish Rite Center (between 14th and 17th). A "Senior Crossing" warning sign is posted at this crosswalk. There is an unsignalized crosswalk, across three lanes at the intersection of 17th street. There is one signalized crosswalk on the western leg of Lakeside Drive and 19th Street with an island between the two. There are signalized crosswalks across all three legs of Jackson Street. There are no crosswalks art the intersection of Lakeside Drive with 20th Street. Second Section

1.4 Harrison Street

Harrison Street is a major arterial street. It is a two way street. Between 20th and Grand Avenue it parallels the west shore of the Glen Echo arm of Lake Merritt. Harrison Street serves a major downtown roadway link. It connects downtown with Piedmont and Interstate 580. A lot of traffic from I-580 uses Grand Ave. to Harrison Street to 20th Street.

1.4.1 Traffic

The main travel patterns on Harrison Street are even in the morning and north in the evening. Currently about 1200 southbound trips and 1100 northbound trips are made in the morning. By 2021 AM peak traffic is expected to grow to 1500 southbound and 1300 northbound vehicles per hour. Currently about 900 southbound trips and 2100 northbound trips are made in the morning. By 2021 AM peak traffic is expected to grow to 1100 southbound and 2300 northbound vehicles per hour.

1.4.2 Roadway

Harrison Street is eight lanes north of 20th Street, with four lanes each way.

1.4.3 Transit

Harrison Street is bus transit route. It is used by the 11 and 58X AC Transit bus routes. There is only one bus stops on Harrison Street between Grand Avenue and 20th Street. It is at 21st Street on the west side. However one is proposed for the east side of Harrison between Lakeside Drive and 21st Street.

1.4.4 Bike

Currently there is no bike lane on the street.

1.4.5 Pedestrian

Harrison Street has six foot sidewalks on both sides of the street. There are signalized crosswalks at the intersections of Harrison Street with 20th Street, Lakeside Drive, 21st Street and Grand

Avenue. The intersection of Harrison Street with 20th Street has crosswalks on the west leg of 20th, the south leg of Harrison and the east leg of 20th, but not the north leg of Harrison. The intersection of Harrison Street with Lakeside Drive only has on crosswalk on the south leg, crossing Lakeside Drive. The intersection of Harrison Street with 21st Street has crosswalks on the west leg of 21st and the south leg of Harrison, but not the north leg of Harrison. There are crosswalks on all legs of Harrison and Grand.

1.5 Belleview Avenue

Belleview Avenue has two different sections. The section in Lakeside Park is a controlled Park access road and linear parking lot. It can only be accessed after paying a fee during the weekends. The section outside the park is a local residential street. It is always open and free.

1.5.1 Traffic

Approximately two thousand vehicles a day travel on Belleview Avenue through Lakeside Park. Currently there are 360 parking spaces available on Belleview Avenue and in the Sailboat House parking lot. On an average day about 260 parking spaces are used (70%). Some people back up into the park from Perkins in order to park for free. It also may be faster than going through the park. This causes a safety hazard as this is in the congested Rotary Nature Center Area. It also causes a loss of revenue.

1.5.2 Roadway

Belleview Avenue is a two lane one way eastbound street with parking on both sides. In Lakeside Park there is diagonal parking on the lakeside and parallel parking on the landside. The exception is parallel parking on both sides near the Rotary Nature Center. There is parallel parking on both sides of the street outside of the park. There is a parking lot fee collection booth located at the entrance to Lakeside Park, the western end. The parking is limited to two hours. There is a $2 fee to park all day on weekends. There is a large asphalt parking lot next to the Lake Merritt at the Sailboat House. The boat launch ramp is located on the edge of this parking lot. Currently there are 378 spaces located within Lakeside Park. There is a narrow service road that shortcuts Belleview Avenue, from the Lawn Bowling are to the educational Center. It is restricted to maintenance vehicles.

1.5.3 Transit

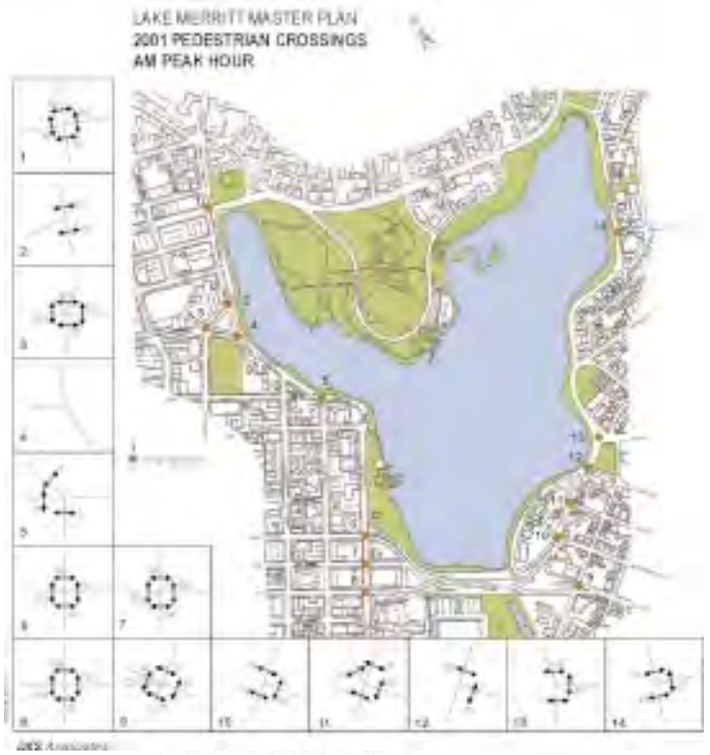
There is no regularly scheduled bus service on Belleview Avenue. Bus access is provided on Grand Avenue, which is one block away.

1.5.4 Bike

There are currently no bike lanes on Belleview Avenue.

1.5.5 Pedestrian

There are seven pedestrian crosswalks on Belleview Avenue. The two signalized crossings are on Grand Avenue at either end of Belleview. There is an unsignalized crossing at Perkins Avenue. There are no crosswalks at Ellita Avenue and Staten Avenue. Perkins is the major gateway into Lakeside Park from the Adams Point Neighborhood. It is signalized on Grand Avenue. Parkview Terrace, Staten Avenue and Belleview Avenue are minor gateways into Lakeside Park from the Adams Point Neighborhood. Parkview Terrace and Belleview Avenue are signalized on Grand Avenue. There are four pedestrian crosswalks on Belleview Avenue in Lakeside Park. The first is the crossing for the service road between the Fairyland and the maintenance building. The second is on the path between the bandstand and the garden center building. The third is on a path between the botanical gardens and the sailboat house. There is one very wide crosswalk next to the science center.


LAKE MERRITT MASTER PLAN
2001 PEDESTRIAN CROSSINGS
AM PEAK HOUR


LAKE MERRITT MASTER PLAN
2001 PEDESTRIAN CROSSINGS
PM PEAK HOUR


LAKE MERRITT MASTER PLAN
2001 TURNING MOVEMENTS
AM PEAK HOUR


LAKE MERRITT MASTER PLAN
2001 TURNING MOVEMENTS
PM PEAK HOUR

CIRCULATION DATA


LAKE MERRITT MASTER PLAN
EXISTING GEOMETRY


LAKE MERRITT MASTER PLAN
PROJECT GEOMETRY


LAKE MERRITT MASTER PLAN
EXISTING BIKE FACILITIES 2001


LAKE MERRITT MASTER PLAN
PROJECT BIKE FACILITIES 2021

Effect of Traffic Diversion

Downtown Park Edge

The diversion of traffic from 20th Street to Harrison Street, from Lakeside Drive to Harrison Street, might lower the level of service and increase delay on Harrison Street. However with the roadway changes that the master plan proposes, and signal timing improvements, these negative effects can be mitigated. In fact the level of service could improve at the intersection of Harrison and 20th because the intersection becomes a three-leg intersection instead of a four-leg intersection. The intersection is also a spit phase signal. Therefore eliminating one leg eliminates one phase and reduces lost time. Allowing left turns from Lakeshore to Harrison, and the reverse right turns, can easily accommodate the very low volume of redirected 20th street traffic. The close proximity of the 20th and Lakeside intersections could cause problems but this can be minimized by signal coordination.

Lakeshore Park Edge

The diversion of southbound traffic from Lakeshore Avenue to First Avenue, from East 15th to East 12th Street, might normally lower the level of service and increase delay on First Avenue. However with the roadway changes that the master plan proposes, and signal timing improvements, these negative effects can be mitigated. In fact the level of service could improve at the intersections along First Avenue, although the travel time for southbound vehicles would increase. This is because southbound Lakeshore Avenue traffic does not currently cross any intersections between Foothill and 12th Street. Therefore it experiences no signal delay. When the Lakeshore traffic is rerouted to First Avenue it must pass through two signals it did not pass through before. This will increase travel time and delay. The level of service improves because optimized signal timing and coordination can reduce signal delay. With the increase in volumes being in the coordinated direction, the average delay for all vehicles is reduced.

The diversion of southbound Lakeshore Avenue traffic destined to points east from East 15th to East 18th and East 12th might cause some travel time delay to those vehicles. However some vehicles might have their travel time reduced because the access to East 12th Street provides them a more direct route to their destination. Currently this movement is not allowed. The increase in left turn traffic will cause some more signal delay at the intersections of East 18th and East 12th. However this can be mitigated by optimized signal timing. The signal delay at East 15th Street is virtually eliminated because there are no longer conflicting traffic movements.

Growth in Travel Volumes

Vehicular

Future traffic volumes were calculated using the Alameda County model. The 2005 and 2025 models were compared to get a twenty year growth in traffic. This growth was added to the existing volumes to get 2021 volumes. At the request of the City the project volumes from the "Lakepoint Tower" EIR were added to the 2021 volumes. These volumes were analyzed with current roadway configuration and signal timing to establish a baseline level of service. In the different alternatives volumes were adjusted to meet the new roadway configurations.

Pedestrian

This study does not predict future growth is pedestrian volumes. The travel demand models that were used to develop future vehicular volumes do not provide roadway specific pedestrian volume projections. There are no land use changes as part of this project that are expected to produce larger peak hour pedestrian volumes. There may be some increase in pedestrian traffic to the park due to improved facilities, however this would tend to be on weekends or during special events. This would have no significant impact on peak hour intersection level of service and therefore does not need to be studied.

Estimates of pedestrian volumes for new intersections were made only to estimate their effect on increasing right turn delay. The typical estimate of 15 per hour for a low pedestrian traffic area was used because the new intersections are surrounded by park, not an urban shopping or business area.

Bicycle

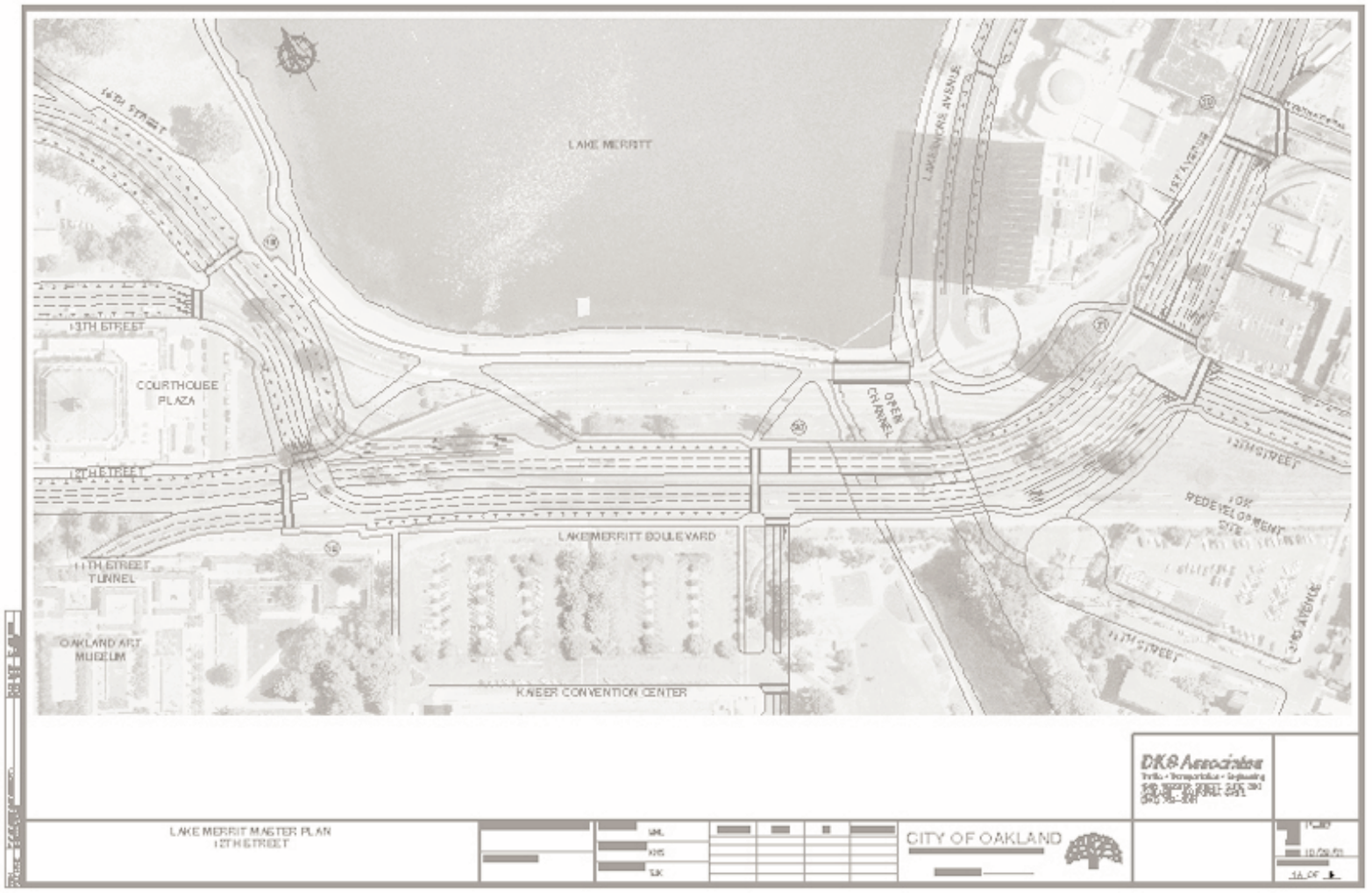
This study does not predict future growth is bicycle volumes. The travel demand models that were used to develop future vehicular volumes do not provide roadway specific bicycle volume projections. There are no land use changes as part of this project that are expected to produce larger peak hour bicycle volumes. There may be some increase in bicycle traffic to the park due to improved facilities. Higher bicycle volumes in bike lanes would not interfere with vehicular traffic flow. In fact removing bikes form vehicle lanes would reduce bicycle blockage of vehicles. This would reduce vehicular delay. Increase bicycle volumes should have no significant impact on peak hour intersection level of service and therefore do not need to be studied.

Parking

This study does not predict future growth is vehicle parking volumes. The travel demand models that were used to develop future vehicular volumes do not provide roadway specific parking volume projections. There are no land use changes as part of this project that are expected to produce larger peak time parking volumes, on a regular daily basis. There may be some increase in parking volume in the park due to improved facilities, however this would tend to be during special events when nearby parking garages can be opened to increase the parking supply. There are over 2000 spaces available near Lakeside Park.

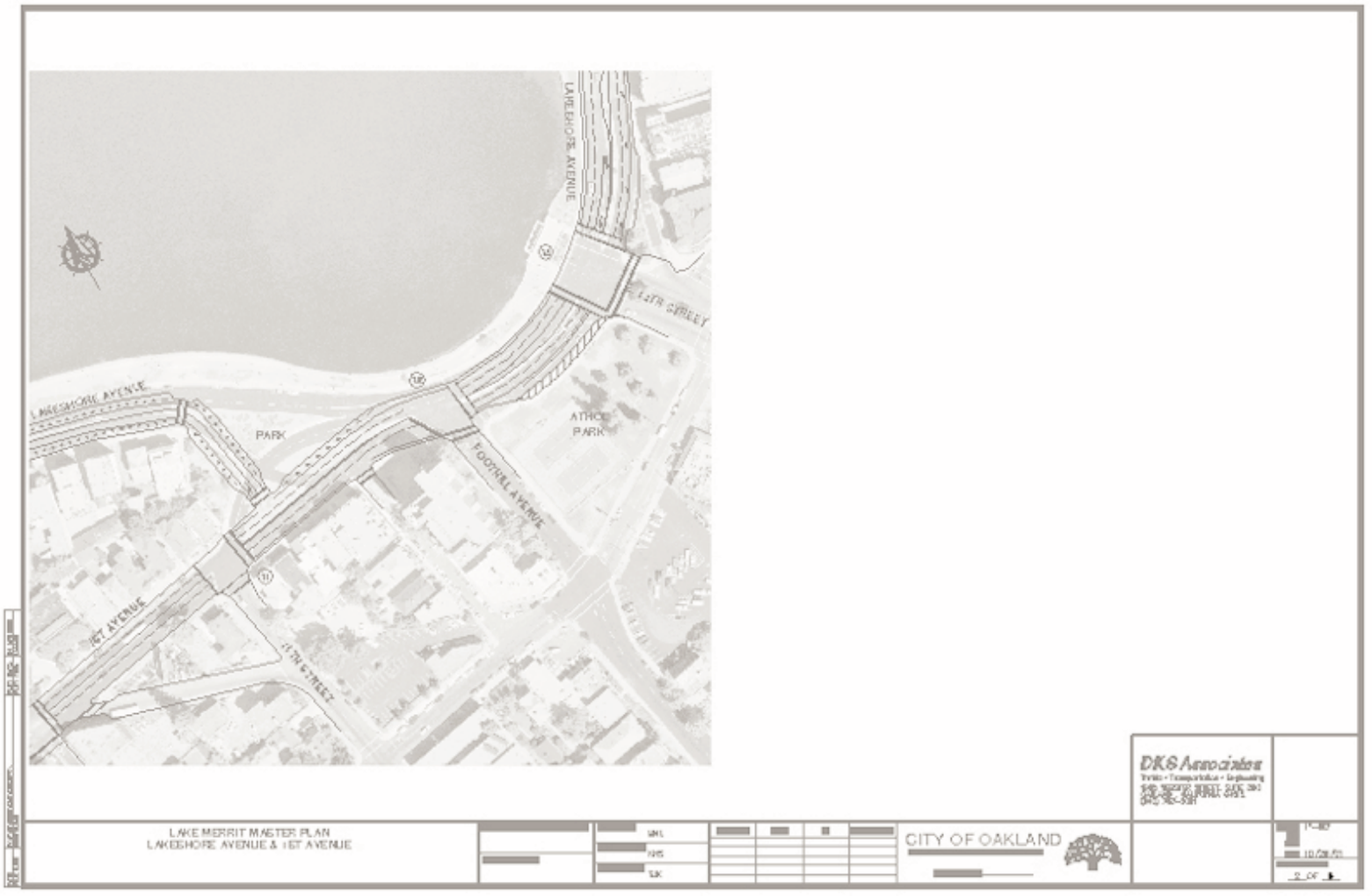
A rough estimate could be made that the increase in normal parking volumes would not exceed the increase in Oakland's population. The population of Oakland is projected to increase by 9% in the next 20 years according to ABAG projections (2000). With 28% of spaces in Lakeside Park and 34% of spaces all around the lake open even during the peak hours of normal weekends, there is enough spare capacity to handle a 9% increase in parking demand.

CIRCULATION DATA



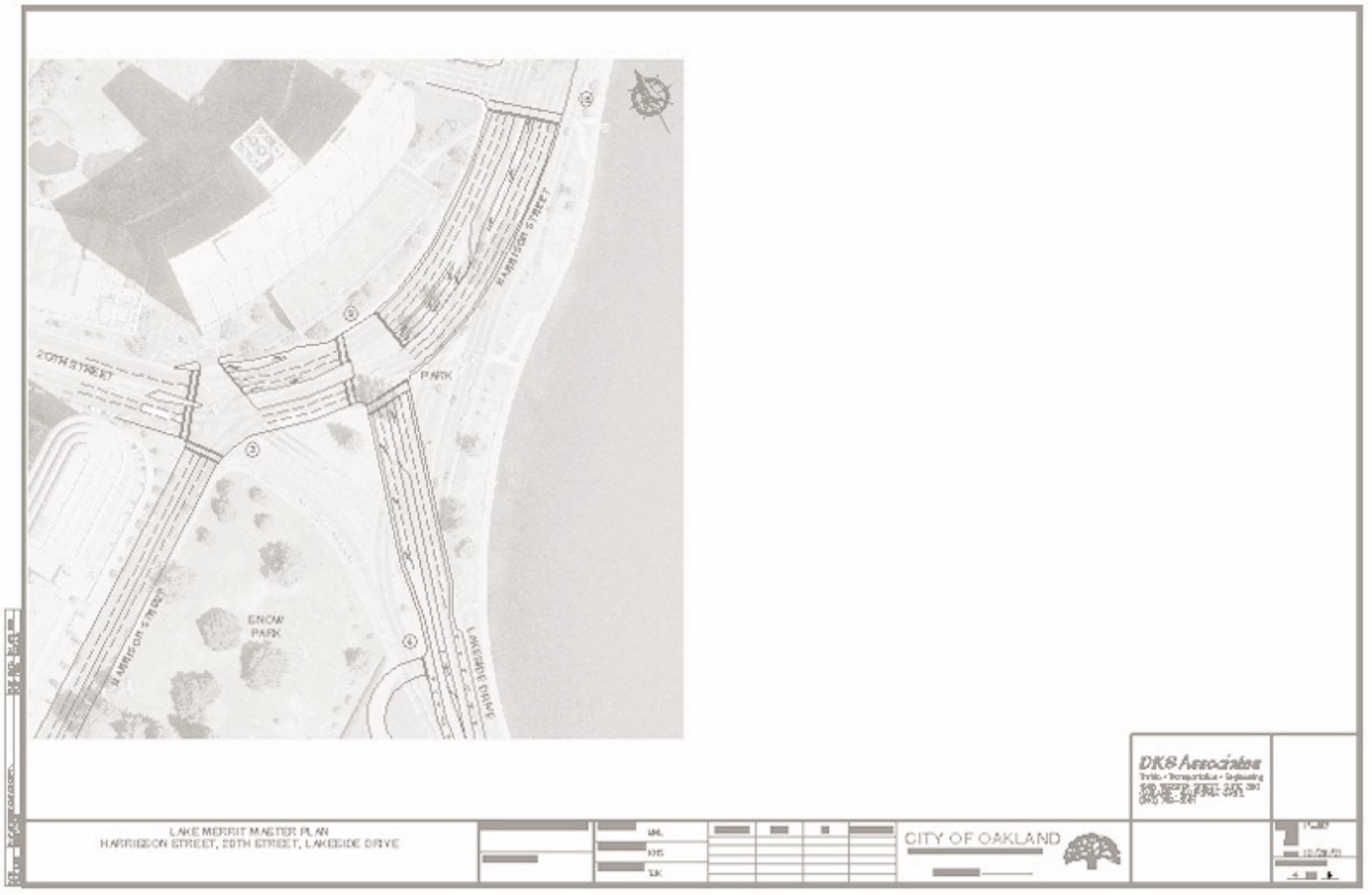
General Design Guidelines

The final plans should not reduce the amount of on street parking in total, and on Lakeshore Avenue (including 1st Avenue) and Lakeside Drive individually. Parking should not be moved more than one block. Travel lanes should be 11 feet wide, parking lanes 8 feet wide, bike lanes next to parking 5 feet wide and bike lanes without parking 4 feet wide. Curb radii should satisfy the needs of the type of traffic turning on the street. Bulb outs should not inhibit the turning of AC transit busses.


LAKESHORE AVENUE
PARK
ATHOL PARK
FOOTHILL AVENUE
1ST AVENUE
14TH STREET
LAKE MERRIT MASTER PLAN
LAKESHORE AVENUE & 1ST AVENUE
CITY OF OAKLAND
DKS Associates

APPENDIX

CIRCULATION DATA



Intersection			BASE 2001		BASE 2021		PROJECT 2021	
#	Main Street	Cross Street	AM	PM	AM	PM	AM	PM
1	Harrison	Grand	D	E	D	E	D	E
15	Harrison St.	21th St. [1]	B	B	C	B	D	C
2	Harrison St.	Lakeside Dr.	A	A	A	A	B	B
3	Harrison St.	20th St.	D	E	E	F	C	C
4	Lakeside Dr.	20th St.	A	A	A	A	NA	NA
16	Lakeside Dr.	Jackson St. [2]	A	B	B	B	B	C
5	Lakeside Dr.	19th / Madison St.	A	A	A	A	A	A
6	Lakeside Dr.	14th St.	A	A	A	A	A	B
7	Oak Street	13th Street	A	A	A	A	A	A
8	Oak Street	12th Street	B	B	B	B	B	B
9	2nd Ave.	East 12th Street	B	B	B	B	B	B
10	1st Ave.	International	B	A	B	D	B	C
11	1st Ave.	East 15th St.	A	B	A	E	B	A
12	Lakeshore Ave.	Foothill Blvd.	A	A	A	B	B	A
13	Lakeshore Ave.	East 18th St.	A	B	B	E	C	D
17	Lakeshore Ave.	Hannover [3]	B	B	B	A	C	D
14	Lakeshore Ave.	Brooklyn Ave. [4]	B	B	C	B	C	C
18	13th Street	14th Street	NA	NA	NA	NA	A	B
19	12th Street	14th Street	NA	NA	NA	NA	A	B
20	12th Street	Keiser Convention	NA	NA	NA	NA	C	B
21	12th Street	East 12th Street	NA	NA	NA	NA	A	B

Note 1: Used counts from Lakepoint Tower EIR, by Korve
Note 2: Estimated counts by difference in volumes between intersections (4-5)
Note 3: Used 1999 counts provided by City, by PC-HC
Note 4: Analysis done using simplified timing plan, observed plan to complex to analyze.

Existing Conditions analysis (Base) was done using field observed real timing plans. Project timing developed by Synchro.

2021 projections calculated by adding change in volume from the Alameda County 2005 base and 2025 base model to the base 2001 counts, then adding the Lakepoint Tower EIR

		Existing				Future			
Street	Section	Street Width	Travel Lanes	Parking Lanes	Bike Lanes	Street Width	Travel Lanes	Parking Lanes	Bike Lanes
HARRISON	all	122	8	0	0	98	7	0	2
LAKESIDE	Harrison to 19th	60	4	2	0	50	2	2	2
LAKESIDE	19th to 14th	60	4	2	0	50	3	2	1
12TH STREET	typical section	144	12	0	0	110	6	2	2
1ST AVENUE	E. 15th to International	50	3	2	0	50	4	0	0
BELLEVUE	Grand to Grand	45	2	2	0	56	2	2	0
GRAND AVE	Harrison to El Embacadero	80	4	2	2	80	4	2	2
LAKESHORE	El Embacadero to E. 18th	60	4	2	0	50	2	2	2
LAKESHORE	E. 18th to E. 15th	varies	6	0	0	64	4	1	2
LAKESHORE	E. 15th to 12th	60	3	2	0	50	2	2	2
		feet	#	#	#	feet	#	#	#

Image Sources

Image page III.52, IV.35 used by permission from Mary Miss.

Image page II.11 used by permission from Mira Engler.

Imge page III.31 used by permission from Daniel D'Agostini

City of Oakland

Mayor and City Council

Jerry Brown, Mayor
Jane Brunnerc, District 1
Danny Wan, District 2
Nancy Nadel, District 3
Dick Speese, District 4
Ignacio De La Fuente, District 5
Moses L Mayne, Jr., District 6
Larry Reid, District 7
Henry L. Chang Jr., At Large
Robert C. Bobb, City Manager

Leslie M. Gould, Planning Director

Kerry Jo Ricketts-Ferris
Project Manager and Waterfront Open Space
Community & Economic Development Agency
(CEDA), Planning & Zoning Division

Niko Letunic
Interim Project Manager
Community & Economic Development Agency
(CEDA), Planning & Zoning Division

Planning Consultant Team

Team Leader, Planning and Design

Wallace Roberts & Todd, Inc.

James Stickley, ASLA, Project Director

John R. Gibbs

Ji-In Son

Landscape Architecture

Adrienne Wong & Associates

Adrienne Wong, Principal Landscape Architect, Urban Designer

Dah-win Sheu, Landscape Architect

Daniel Bandini, Architectural Designer

Traffic Engineering

DKS Associates

Tom Krakow, P.E., Project Director

Kevin Stankiewicz

Architecture

Hansen Murakami Eshima, Inc.

John Nelson, Senior Architect

Zachary D. Goodman, Architect

Public Outreach

Norman Hooks, Architect

Environmental Liaison

Dr. Richard Bailey, Water Quality Associates

The planning team would like to note our appreciation of the contributions many have made to this master plan including Scott Medbury, the Lake Merritt Breakfast Club, the professional charette participants, the Oakland Chamber of Commerce, CALM, and Wolfe Mason & Associates.