

Background Information -
Conservatory of Flowers

To Liana Schiller
From Wilbur de Souza
Re Conservatory of
Flowers
December 11, 1998 event

CLINTON LIBRARY PHOTOCOPY

PHOTOCOPY
PRESERVATION

Memorandum

To: Laura Schiller
Christy Macy
Noah Meyer

From: Leela de Souza (x62006)

Date: November 30, 1998

cc: Ellen Lovell
Lisa McCann

Re: DECEMBER 11-Conservatory of Flowers

• Attached is a first draft of the talking points for the Conservatory of Flowers event in San Francisco on December 11, 1998. As additional relevant information comes in, I will send it along.

• I have also included a file of background information on the Conservatory of Flowers.

• The **primary contact** for the Conservatory of Flowers is **Donna Ernstson**, Executive Director of Friends of Recreation & Parks, McLaren Lodge, Golden Gate Park, San Francisco, CA 94117; Tel: 415-750-5107; Fax: 415-221-5996; email: friend@frp.org

• **Two other important contacts** who will be most helpful regarding specific details on the botanical research and/or the building itself are: **George Marcopulos**, Director of the Conservatory, phone 415-666-7017; and **Debra Learner**, Department Planner, phone 415-831-2741. He would be most helpful regarding technical information on the botany collection and the building's history. She would be best to call regarding restoration plans and structural details about the building.

• As we get closer to the event, and know the specifics on who will be attending/contributing, I will also provide the list of acknowledgments.

• Please call me (x62006) if you have questions or need any additional information.

Memorandum

To: Laura Schiller
Christy Macy
Noah Meyer

From: Leela de Souza

Date: November 30, 1998

cc: Ellen Lovell
Lisa McCann

Re: DECEMBER 11-TREASURE'S EVENT: **FIRST DRAFT**
CONSERVATORY OF FLOWERS TALKING POINTS

- **What is the Conservatory of Flowers?**

-The Conservatory of Flowers is the oldest building (and dominant image) in Golden Gate Park, and the oldest municipal wooden conservatory in the nation. Erected in 1878, the building's stunning Victorian architecture has made it a landmark that has served to create a sense of community throughout San Francisco for generations.

-Made of glass and redwood, the Conservatory's elaborate construction was modeled after London's Royal Conservatory of Kew Gardens. Its central dome and two wings are composed of an intricate grid pattern of white-painted Gothic tracery and over 30 tons of glass.

-The Conservatory hosted the public in many ways--both as a major landmark of community activity as well as a botanical research center. However, since 1995, it has been closed to the public due to severe weather damage. When the 1995 storms forced the building to close the Conservatory received thousands of letters from San Francisco families about the significant role it had played in generations of their family histories. [*Have requested specific anecdotes from these letters.*]

-The full botanical collection is every bit as historic and rare as the building (architecture) itself. The collection includes many rare and endangered plant species, whose ancestry date back to prehistoric times. Many of the plants carry a history from millennia to millennia--there is actually an Old World and New World section within the collection. Many plants come from the rainforests of Central and South America and the Pacific Islands, where the destruction of their native habitats have endangered their survival. The Conservatory houses over 700 of the 1000 existing high-altitude wild orchids of Central and South America, including a 200-year old *Philodendron*.

- The Conservatory maintains a plant conservation program and has been designated by the US Department of the Interior as a refuge for endangered plants seized at border crossings. As the Conservatory is also highly respected as a plant research facility, botanists at the California Academy of Sciences *[have asked for details on some of the research, as well as names of other botanists.....possible that CA Academy of Sciences should not be highlighted over other institutions/ researchers]* conduct research on flora from various eras for exhibit purposes. Offsite educational programs are also conducted to inform the public on the scientific and economic value of plants.

-The Conservatory is a City and County of San Francisco Landmark, a Historic Civil Engineering Landmark of the American Society of Civil Engineers, and it also is listed on the National Register of Historic Places, and the California Register of Historic Places.

- **What are the preservation needs?**

-Both age and natural causes are responsible for the deterioration of the Conservatory. The humid environment of a working greenhouse has caused the wood elements to deteriorate. The earthquake in 1989 loosened the glazing compound that surrounds the glass panes, causing many to slip. Winter storms (which in 1995, wiped out 40% of the Conservatory's plants) and the devastating earthquake in the Bay Area caused heavy damage, forcing the Conservatory to close to the public in 1995.

-Extensive restoration plans include an expanded role in education, where the conservatory will serve to engage the community to understand urban horticulture as well as the other plant research and history. The plans include educational programs, seminars, volunteer opportunities, docent tours and collaborative ventures with other cultural institutions.

-Part of the restoration plans include upgrading the building operations to be more environmentally friendly. There will be a built-in water recycling program.....*[waiting on more information here.]*

-While many believe that the building's significance as an architectural masterpiece is reason enough for restoration, the plans to create an educational center will serve an important function to create a place that ties people to their community. That is, a place where memories can be built for generations to come.

-The Conservatory does not meet requirements of the Americans with Disabilities Act. A 1995 condition assessment found that the Conservatory has significant deficiencies which, with the absence of seismic strengthening, pose a life-safety risk in the event of future earthquakes or storms.

-Estimated cost of restoring the main building: \$15-\$20 million. Restoration of the outbuildings: an additional \$4 million.

-Friends of Recreation & Parks, the non-profit agency which supports the parks, open spaces, recreational programs, and facilities of the Department, recently committed to raising the funds necessary for complete rehabilitation. Operating under the auspices of the Friends, the Golden Gate Park Conservancy is a public-private partnership between the San Francisco Recreation & Park Department and Friends of Recreation and Parks.

-The Golden Gate Park Conservancy was established to leverage the resources of San Francisco and to ensure the future of the Park, with the express purpose of raising funds for capital improvements, visitor services, education, community involvement and maintenance activities. Funds committed to date include \$250,000 appropriated by the Board of Supervisors toward the design phase and over \$50,000 in donations from the public.

-The Goldman family has given a \$5 million challenge grant for the restoration of the building. The grant must be matched 2 to 1.

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

PH0065897

STATE: California	
COUNTY: San Francisco	
FOR NPS USE ONLY	
ENTRY NUMBER 711006-0066	DATE 10/14/71

1. NAME	
COMMON: Golden Gate Park Conservatory	
AND/OR HISTORIC: Golden Gate Park Conservatory	

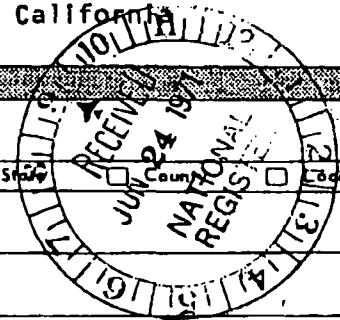
2. LOCATION			
STREET AND NUMBER: Mount Lick, north of John F. Kennedy Drive, east end of Golden Gate Park			
CITY OR TOWN: San Francisco			
STATE California	CODE 06	COUNTY: San Francisco	CODE 075

3. CLASSIFICATION			
CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☒ Building ☐ Site ☐ Structure ☐ Object	☒ Public ☐ Private ☐ Both Public Acquisition: ☐ In Process ☐ Being Considered	☒ Occupied ☐ Unoccupied ☐ Preservation work in progress	Yes: ☐ Restricted ☒ Unrestricted ☐ No
PRESENT USE (Check One or More as Appropriate)			
☐ Agricultural ☐ Commercial ☒ Educational ☐ Entertainment	☐ Government ☐ Industrial ☐ Military ☒ Museum	☒ Park ☐ Private Residence ☐ Religious ☒ Scientific	☐ Transportation ☐ Other (Specify) Comments

4. OWNER OF PROPERTY			
OWNER'S NAME: City and County of San Francisco (under jurisdiction of Recreation and Park Commission)			
STREET AND NUMBER: McLaren Lodge, Golden Gate Park			
CITY OR TOWN: San Francisco		STATE: California	CODE 06

5. LOCATION OF LEGAL DESCRIPTION			
COURTHOUSE, REGISTRY OF DEEDS, ETC.: Bureau of Engineering (Division of Recreation and Park Engineering) Department of Public Works			
STREET AND NUMBER: City Hall			
CITY OR TOWN: San Francisco		STATE: California	CODE 06

6. REPRESENTATION IN EXISTING SURVEYS			
TITLE OF SURVEY: Historic American Buildings Survey			
DATE OF SURVEY: ☒ Federal ☐ State ☐ County ☐ Local			
DEPOSITORY FOR SURVEY RECORDS: Federal Building (Room 14321)			
STREET AND NUMBER: 450 Golden Gate Avenue			
CITY OR TOWN: San Francisco		STATE: California	CODE 06



STATE: California	COUNTY: San Francisco	ENTRY NUMBER 711006-0066	DATE 10/14/71
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FOR NPS USE ONLY

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☐ Good	☒ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)			(Check One)		
	☐ Altered	☒ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The Conservatory measures two hundred and fifty feet wide and seventy-five feet deep. It is constructed in three parts with the emphasis concentrating on the center of the structure, suggestive of an old tradition of Baroque focus. The main part of the building is an elongated octagon topped with a dome; this is flanked on two sides with an "L" shaped wing (east and west of the central space). The smaller rooms at the end of each wing resemble the center room on the exterior in that they each contain a modified gable window and a "spire". The foundations are of brick, laid with several rows of stretchers topped by a single row of headers directly beneath the wood superstructure. This superstructure is an ingenious 19th Century modification of extremely old, medieval traditions of wood arch construction, with iron bands and tie rods to interlock and extend arches over large spaces.

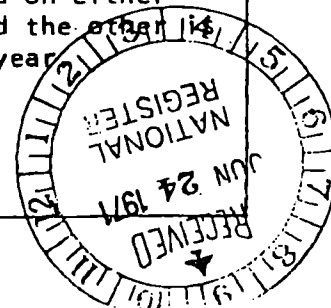
The multiple and rigid glass plates which form the basic character of the building are cleverly lapped over each other like shingles or tiles to form a continuous down curving surface with non-curved materials. These are set into the simple wood framework, and held together where necessary by putty. A small percentage of the glass is tinted and forms a simple band of color above the transparent walls.

The style of the architectural detail is basically a mixture of later Victorian Gothic and Italianate, which can be seen most clearly on the exterior of the building. In this ornamental melange, classical anthemia emerge along with spiky quasi-Gothic finials. Some of the details are closely related to then fashionable Eastlake patterns of turned and faceted forms. The overall effect is of some delicately opulent Oriental palace.

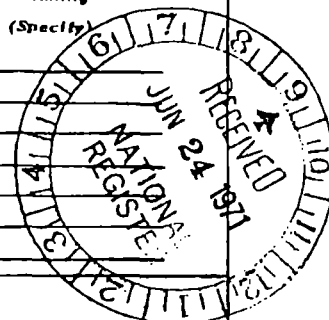
A glassed-in vestibule leads into the main rotunda, where rare palms from tropical and semi-tropical countries are present. Some other plants include giant Brazilian Philodendrons. The east wing contains ferns and palms from the jungle countries. The last room of the east wing known as the "Pond Room", houses ferns, other small plants, and a small pool stocked with goldfish. In the center room or hallway of the west wing, semi-tropical plants grow. Permanent plants include huge Bird of Paradise clumps and a small orchid case. The last room of the west wing offers rotating seasonal exhibits of potted, flowering plants. In the years that the Conservatory has been in use, the arrangement in the rooms has changed very little.

The Conservatory is located north of Main Drive in San Francisco's Golden Gate Park. It is situated above the lawns of the shallow Conservatory Valley where formal flower beds bloom all year long. A broad flight of stairs leads to the Conservatory, and these stairs are bound on either side by two floral plaques; one plaque is a simple clock and the other is used to greet conventions and honor holidays throughout the year.

SEE INSTRUCTIONS



SIGNIFICANCE			
PERIOD (Check One or More as Appropriate)			
☐ Pre-Columbian	☐ 16th Century	☐ 18th Century	☐ 20th Century
☐ 15th Century	☐ 17th Century	☒ 19th Century	
SPECIFIC DATE(S) (If Applicable and Known) 1879			
AREAS OF SIGNIFICANCE (Check One or More as Appropriate)			
☐ Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☒ Engineering	☐ Religion/Philosophy	☐ Other (Specify)
☐ Historic	☐ Industry	☒ Science	
☐ Agriculture	☐ Invention	☐ Sculpture	
☒ Architecture	☐ Landscape Architecture	☐ Social/Humanitarian	
☐ Art	☐ Literature	☐ Theater	
☐ Commerce	☐ Military	☐ Transportation	
☐ Communications	☐ Music		
☐ Conservation			
STATEMENT OF SIGNIFICANCE			
This "exquisitely anachronistic Victorian conservatory" was constructed between 1878 and 1879. The Conservatory is one of the largest in the United States, covering 12,533 square feet. The great glass building was the first municipal greenhouse in California and the first and most important building in Golden Gate Park. The building's 33 tons of glass are supported by a wood and iron framework and three tons of putty. The Conservatory combines in a handsomely restrained manner the fantasy of the Brighton Pavillion and the stately soaring majesty of a simple Gothic church, all expressed in half-modern technical forms in a Baroque silhouette. The Conservatory utilizes fully the principles of assemblage and the reuse of elements made possible by the early techniques of mass production, and thus reflects not only the period of architecture in which it was built, but also some proto-modern technical features. Although constructed late in its period due to the death of James Lick, the Conservatory actually was far advanced for the time, taking into consideration the prefabrication of elements, the vast use of glass, and its placement in a functional framework of great structural simplicity. William Hammond Hall, planner of Golden Gate Park, had included the idea of a conservatory in his original concept and had chosen a site near the northwest corner of the park known as Plateau Mound (renamed Mount Lick in 1874). There was considerable opposition to a conservatory, however, primarily on the basis of estimated cost. However, Hall helped engineer an appropriations bill through the State Legislature in 1873, which included funds for the Park and Conservatory (expenditures and responsibility for Golden Gate Park were not placed under the jurisdiction of the City until 1900). Built by Lord and Burham, greenhouse manufacturers, at Irvington, New York, upon order of San Francisco magnate James Lick, the building was shipped in crates to California around Cape Horn in a vessel chartered for that purpose. Lick had intended to have the structure erected on his estate near San Jose, and there is evidence that he considered giving it to the City of San Jose, but no actual construction was begun on the project by the time of Lick's death in 1876.			



NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

STATE California	
COUNTY San Francisco	
FOR NPS USE ONLY	
ENTRY NUMBER 41-10-06-0066	DATE 10/14/71

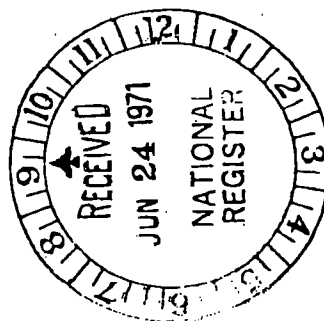
8. Significance (Continuation Sheet)

(Number all entries)

The Conservatory, still in crates, was put up for sale by the executors of James Lick's estate on behalf of the Society of California Pioneers. A group of 27 prominent San Franciscans, including Charles Crocker, William Alvord, William Franklin Whittier, James Irvin, Claus Spreckels and Leland Stanford contributed equally to the purchase of the building and gave it to the park. Lord and Burham, the original builders, were hired by the City to finally erect the structure at its current site.

The Conservatory was partly destroyed by fire in 1883, but was rebuilt the following year with the aid of \$10,000 donated from Charles Crocker.

The Golden Gate Park Conservatory has been designated a California Registered Historic Landmark.



9. MAJOR BIBLIOGRAPHICAL REFERENCES

Baird, Joseph A., Jr., Time's Wondrous Changes San Francisco
California Historical Society, 1962.
Federal Writers' Program (American Guide Series) San Francisco
The Bay and Its Cities, New York, 1947.
Griffin, Guy and Helen, The Story of Golden Gate Park San Francisco
Society of California Pioneers, 1949.
Gibson, Richard M., "Golden Gate Park", Overland Monthly, Vol. XXXVII
March, 1901.
Gilliam, Harold, Natural World of San Francisco New York, Doubleday, 1967.

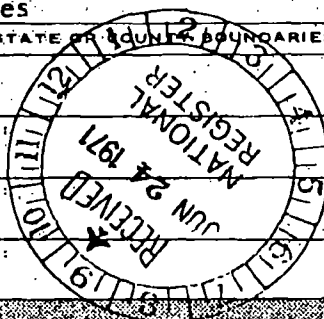
10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
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NE	° ' "	° ' "				
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 2 acres

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE



UTM
10/547621
4180520

SEE INSTRUCTIONS

11. FORM PREPARED BY

NAME AND TITLE:
Ralph A. Mead, Secretary

ORGANIZATION: San Francisco Landmarks Preservation Advisory Board DATE: April 5, 1971

STREET AND NUMBER:
100 Larkin Street

CITY OR TOWN: San Francisco STATE: California CODE: 06

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☐ Local ☒

Name

Title

Date

State Liaison Officer

June 21, 1971

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Ernest A. Grumally
Chief, Office of Archeology and Historic Preservation

OCT 14 1971

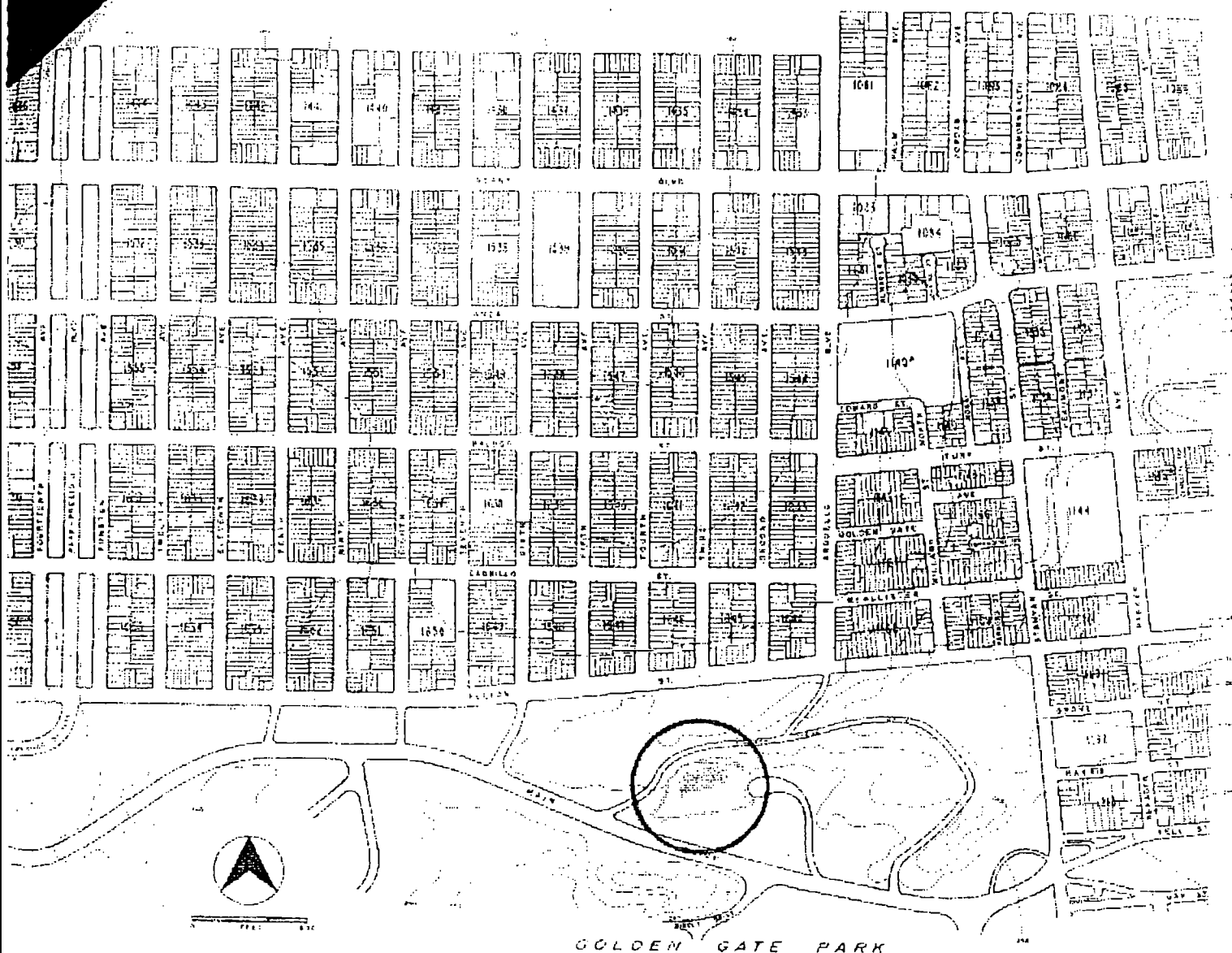
Date

ATTEST:

William J. Montoya
Keeper of The National Register

Date

AUG 6 1971



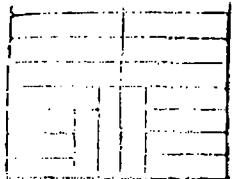
COMMUNITY AREA LAND USE STUDY

ARGUELLO

COMMUNITY 2 - PLANNING AREA 3

GOLDEN GATE CONSERVATORY

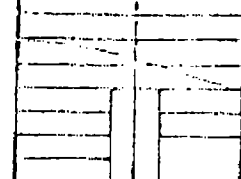
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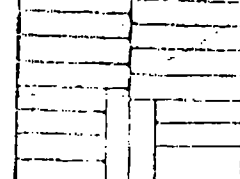
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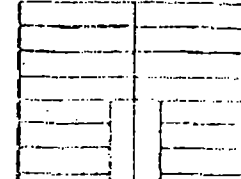
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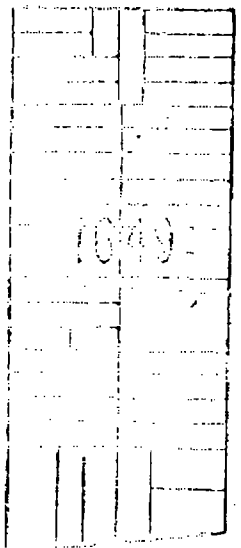


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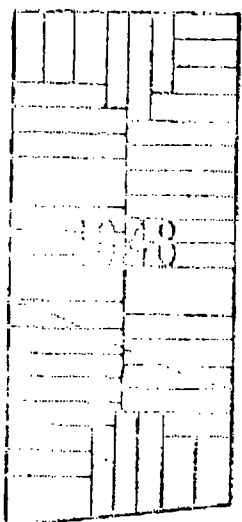


CABRILLO

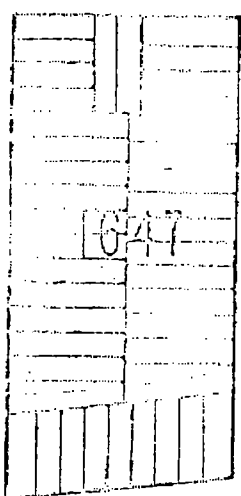
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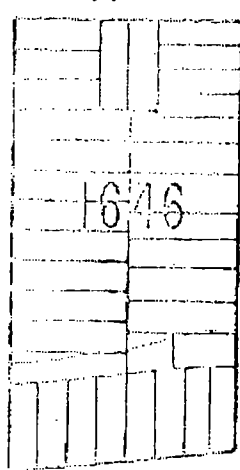
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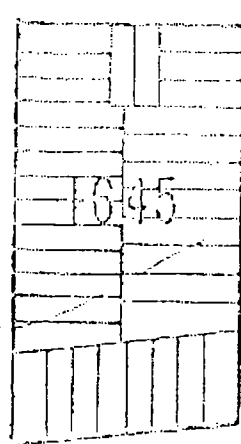
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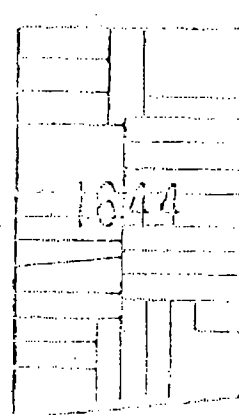
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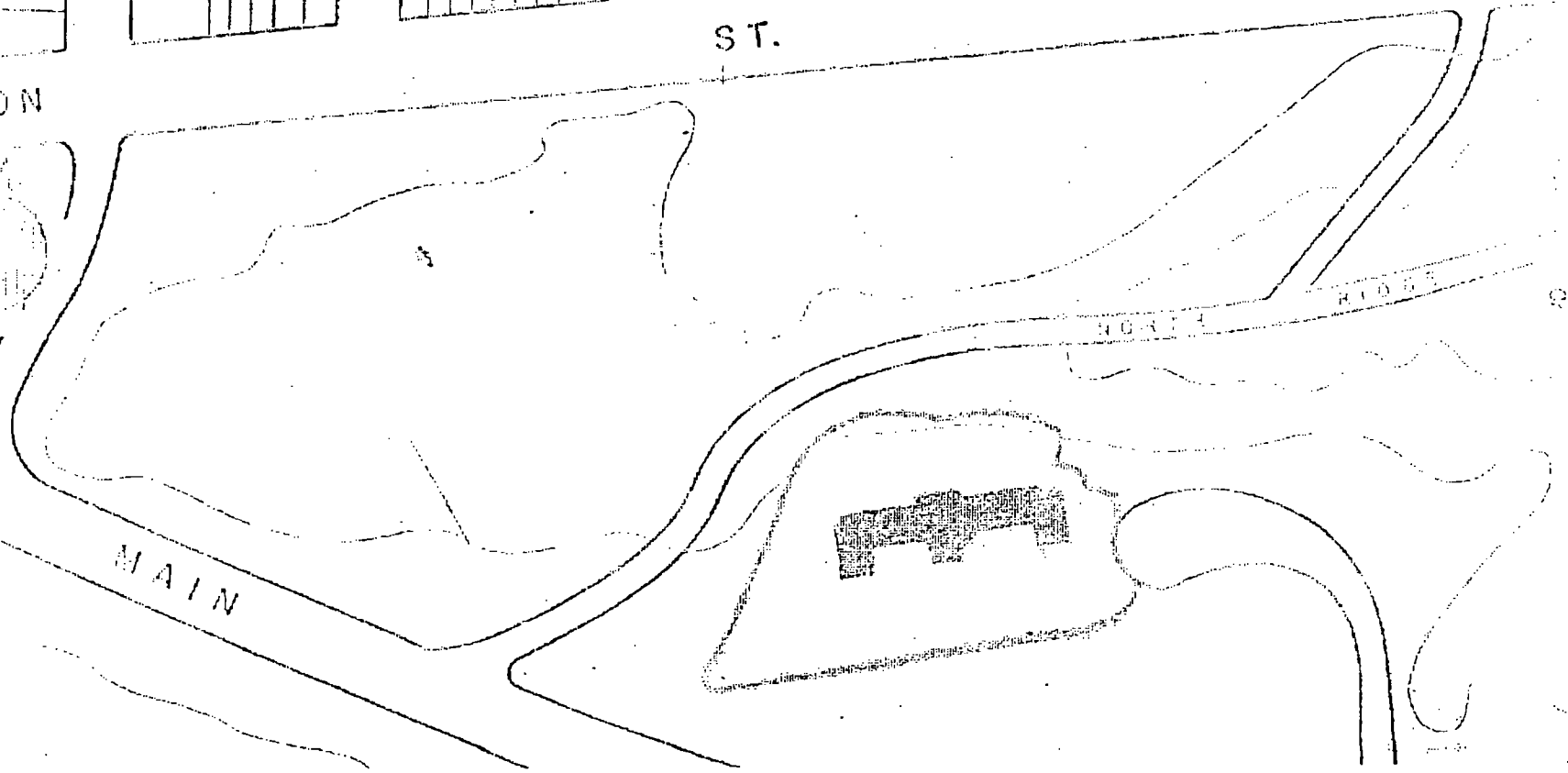
CU

ST.

FULTON



1643



MAIN

NORTH

HIGGS



This is a detailed black and white map of San Francisco, California, showing the city's layout, including the Presidio, Golden Gate Park, and various districts like Lincoln Park and the Richmond District. The map includes labels for landmarks such as Fort Scott, Mount Lake, and the University of San Francisco, as well as numerous streets and parks. The map is oriented with North at the top. The Presidio is located in the upper right, featuring Fort Scott and the Presidio Military Reservation. To the west of the Presidio is the city of San Francisco, with the Golden Gate Bridge visible in the lower left. The map shows a grid of streets and numerous parks, including Golden Gate Park, Lincoln Park, and the Presidio. Key landmarks include the University of San Francisco, the San Francisco City Hall, and the San Francisco Public Library. The map also shows the San Francisco Bay and the Golden Gate. The map is labeled with various streets, parks, and landmarks, providing a comprehensive view of the city's geography and infrastructure.

THE CONSERVATORY OF FLOWERS IN GOLDEN GATE PARK

The Conservatory of Flowers is the oldest building in Golden Gate Park, and the oldest municipal wood conservatory in the United States. Made of glass and redwood, and modeled after the greenhouse in Kew Gardens, its 12,000 square feet include a central dome and two wings. It opened in 1878 and is listed on the National Register of Historic Places, the California Register of Historic Places, is a City and County of San Francisco Landmark, and is a Historic Civil Engineering Landmark of the American Society of Civil Engineers.

The building houses a botanical collection which includes many rare and endangered plant species, including spectacular high mountain orchids and plants whose ancestry date back to prehistoric times. Many plants in the collection come from the rainforests of Central and South America and the Pacific Islands, where the destruction of their native habitats have endangered their survival. The Conservatory maintains a plant conservation program and has been designated by the U.S. Department of the Interior as a repository for endangered plants seized at border crossings. More than a showcase for exotic plant species, the Conservatory is a highly respected research facility.

The 1989 earthquake and the winter storms of 1995 severely damaged the structure, causing its closure and posing an extreme safety risk. After exploring the possibility of public funding, including Federal FEMA funds, a municipal bond initiative, and State bonds, the Recreation and Park Department and Friends of Recreation and Parks have concluded that a private funding campaign is the most efficient and cost effective way to accomplish a restoration.

Working with the Office of the Mayor, the National Trust for Historic Preservation and its "Save our American Treasures" project, the World Monuments Fund and many other groups and individuals, we have created an excellent campaign which will engage Corporate, Foundation and Individual giving. The focus of the campaign is on a national level. We are currently in the process of finalizing agreements for lead gifts, and hope to announce the campaign publicly very soon. We have engaged an expert consulting team, Fitzgerald and Graves, and are developing campaign materials and images.

Friends of Recreation and Parks have committed to raising the funds necessary to restore the main building. While an exact cost estimate has not been finalized, we believe that this work can be done for between 15 and 20 million dollars. We anticipate raising the funds over a period of two to three years, although we will start work as soon as we receive substantial donations to begin construction.



Conservatory of Flowers at Golden Gate Park Fact Sheet

The Building

- Opened in 1878, the Conservatory of Flowers is the oldest building in Golden Gate Park and the oldest public greenhouse in California. A glass and wood construction of Victorian design, its 12,000 square feet include a central dome room and flanking wings, similar in appearance to Kew Gardens in London.
- The Conservatory is a designated City Landmark and a California Historical Landmark, and is listed in the National Register of Historic Places.
- A 1995 condition assessment found that the Conservatory has significant structural deficiencies which, with the absence of seismic strengthening, pose a life-safety risk in the event of earthquakes or storms such as occurred in March and December 1995.
- The Conservatory does not meet Americans with Disabilities Act requirements.
- The hot and humid environment of a working greenhouse has caused deterioration of wood elements. Periodic wood replacement has occurred over the years.
- The 1989 earthquake loosened the dry and brittle glazing compound, and many window panes have slipped.
- Winter storm damage has made it clear that repair will not do the job. The Conservatory must undergo restoration.
- The Recreation and Park Department will make decisions regarding restoration, in accordance with the U.S. Secretary of Interior Standards for Historic Preservation Projects, following substantial public input.

The Collection

- The Conservatory houses an important and valuable botanical collection.

The collection includes more than 700 of the 1,000 known species of high altitude orchids, the only such collection in the world.

- Many plants in the collection come from the rainforests of Central and South America and the Pacific Islands where destruction of their native habitats for logging and farming have endangered their survival.

- The U.S. Department of the Interior designated the Conservatory as a repository for endangered plants seized at border crossings.
- The Conservatory maintains its plant conservation program while economic constraints have forced many other conservatories to abandon them in favor of more commercial displays.
- The Conservatory trades plants with other major private and public collections, such as the New York Botanical Gardens, Missouri Botanical Gardens and the Atlanta Botanical Garden.
- Botanists at the California Academy of Sciences do research at the Conservatory on flora from various eras for exhibit purposes.
- The Conservatory provides educational services to many communities. Tours and programs demonstrate the economic value of plants and explain why some species are endangered and why they are important in plant evolution.

What Will It Cost and Who Will Pay For It?

- The estimated cost of restoration is \$12 million (~~\$13 million~~ including the outbuildings). The Recreation and Park Department has applied for \$9 million from the Federal Emergency Management Act (FEMA) Hazard Mitigation Grant fund, which would require the City to provide matching funds. *Q15 - 20 million more body \$24 million Dept Just work Estimates*
- The Board of Supervisors appropriated \$250,000 toward the design phase of the Conservatory rehabilitation, which counts toward the FEMA matching funds requirement. *not come through*
- Publicity following storm-damage generated over \$50,000 in donations, mostly in small amounts, from the public, to a fund held by the Friends of Recreation and Parks. Local foundations have also responded with donations.
- The Recreation and Park Department continues a "people's campaign" to encourage donations, fundraising efforts, and publicity for the rehabilitation project.
- Several local organizations and individuals have begun to raise funds toward the match: The San Francisco Orchid Society, the San Francisco Garden Club, Macy's, Westin St. Francis, KABL have all offered help.

How Can You Help?

Send donations to *Conservatory Fund, Friends of Recreation and Parks*
501 Stanyan Street, San Francisco, CA 94117.

Call us with your fundraising ideas at (415) 666-7024.

The Conservatory of Flowers Complex in Golden Gate Park Historic Structures Report

[Selected
Sections]

Prepared for
Recreation and Park Department

Bureau of Architecture
Department of Public Works
City and County of San Francisco

Prepared by
Tennebaum, Morgan & Partners
in association with
Architectural Resources Group

May 11, 1998

EXECUTIVE SUMMARY

The association of Tennebaum-Manheim Engineers and Architectural Resources Group (TME/ARG) was contracted by the City of San Francisco to evaluate the condition of the Conservatory of Flowers in Golden Gate Park, research its history, and develop plans for its rehabilitation. This process was necessitated by significant damage caused by a series of storms during the winter of 1995-1996 and the ongoing deterioration of the wood and glass structure by the high humidity within the building.

The project goals for the Conservatory of Flowers rehabilitation are as follows. First, it is necessary to clearly understand the development and importance of the Conservatory of Flowers as a building, a collection of plants, and a historically significant landmark. Second, the problems and issues confronting the preservation of the plants and structure will be identified. Third, requirements will be assessed for rehabilitation of the greenhouses and other structures which surround the Conservatory of Flowers and support its function. Fourth and finally, schematic designs will be developed for the rehabilitation of the Conservatory of Flowers, and support structures, and to provide estimated costs to accomplish this work.

Historical Background

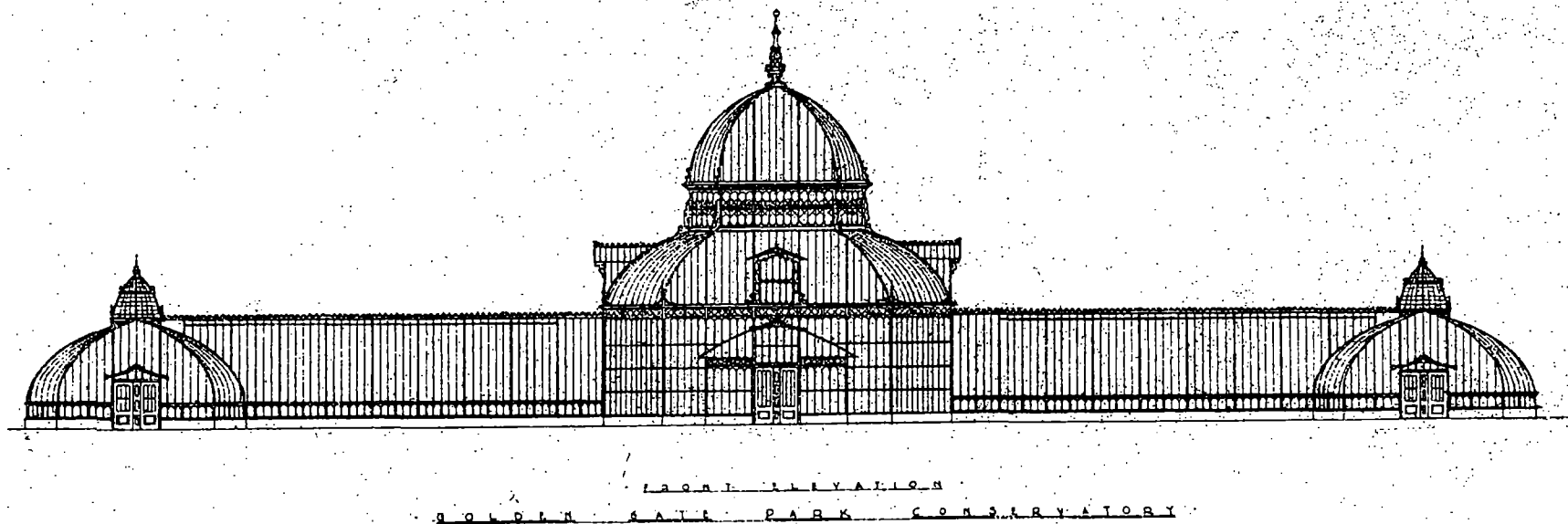
The Conservatory of Flowers is an elaborate Victorian greenhouse constructed of glass and wood. It was erected in Golden Gate Park in 1878, becoming one of the country's first municipal buildings of its type. Today, it is one of the last remaining municipal wood greenhouses of the Victorian period in the United States. The material for the conservatory was purchased by James Lick prior to his death in 1876. Lick died before constructing the conservatory on his estate, and it was put up for sale by his trustees. The material was purchased by a group of prominent San Franciscans who offered it to the City of San Francisco for use in Golden Gate Park. The gift was accepted by the Parks Commission who hired Lord & Burnham, a greenhouse manufacturing company from New York, to supervise the erection of the structure. Once open, it contained a large variety of rare and tropical plants, including a giant water lily, called *Victoria Regia*, described as the only known specimen in the United States at that time. The Conservatory of Flowers immediately became the most visited site in the Park, a distinction it still holds today.

There are many theories regarding the origin of the Conservatory of Flowers. Different sources have stated that it was imported from England, France, or Ireland, but there is no primary record to confirm these statements. Visual inspections and materials testing by the project team indicate that the building's structure is composed largely of redwood, a material indigenous to the West Coast of North America. It seems unlikely that this material would have been shipped outside of California for milling. There were many local mills which were fabricating components from framing and ornamentation for use in building construction. We believe that it is very possible that the Conservatory of Flowers was fabricated on the West Coast of locally grown redwood.

It is also unclear who designed the Conservatory of Flowers. There is no primary document that discusses this topic; however, the building components found on Lick's estate were accompanied by plans. It is possible that these plans were produced by Lord & Burnham, the major manufacturer of greenhouses at this time. The Conservatory of Flowers bears resemblance to many of Lord & Burnham's other contemporary structures, one of which was purchased by D.O. Mills, a trustee of James Lick, in 1872.

Rehabilitation Recommendations

Through its life, the Conservatory of Flowers has undergone several repair campaigns. The Palm Room, located in the center of the building, was seriously damaged in a fire in 1883. Its dome was completely reconstructed at this time. After a second fire damaged the structure in 1918, repairs were made as needed but were not thoroughly documented. No significant documented repairs to the building took place again until sometime after World War II when certain portions of the wood work, including structural elements, were replaced. In 1959, wood windows at the base of the glazed walls at the building's perimeter were infilled with concrete panels which were cast to match the profiles of the original construction. In 1964-65, the clerestory of the Palm Room dome underwent reconstruction. The columns, lintels, and sills in this area were replaced by pressure-treated redwood. Five hundred lineal feet of the exterior cap molding, which covers the arches, was replaced at this time as well. Between 1978 and 1982, major repairs were performed on deteriorated woodwork. The areas that were repaired during this time did not overlap the 1960s repairs to the clerestory. Of the areas repaired between 1978 and 1982, only the wood sills of the glazed walls require replacement today.



The Conservatory of Flowers is again in need of repair. The most frequent occurrence of deteriorated wood is at the base of the glazed walls. Throughout the building, the ends of arches and muntins and the wood sills are frequently rotted. The exposed ends of the arches and muntins readily absorb water, causing decay. The sills frequently have standing water which has run down the wall onto their surface. The ventilators, which run along the ridge of the wings are severely deteriorated. Their constant movement has weakened the joints between the stiles and rails and allowed moisture to penetrate the joints, causing decay. There is also decay occurring at random locations on the arches and muntins. Capillary action has apparently pulled water deep into the joints in the arches' assembly, causing decay.



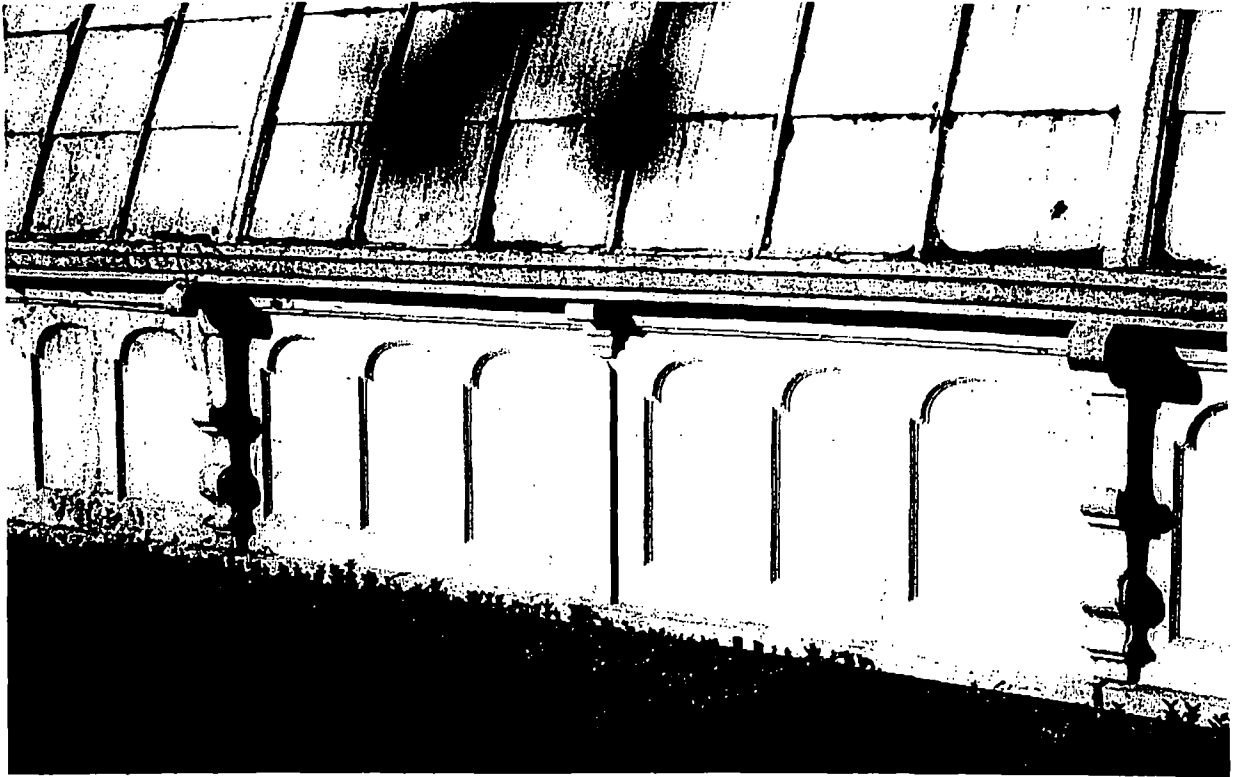
Detail at base of glazed wall where ends of arches and muntins meet the sill. Muntins intersecting a purlin are visible in the top of the photo. *Photo source: Architectural Resources Group.*

The deterioration of wood has occurred at typically vulnerable areas, such as the exposed end grain of arches and muntins and where wood members intersect. The humidity in the building appears to be a contributing factor to wood deterioration. Furthermore, the level of moisture in the building has been exacerbated by two conditions. First, the building's natural ventilation system is compromised by modifications made in 1959. The ventilators that were originally located in the low wall area at the perimeter of the building were infilled. Some of the ridge ventilators are presently inoperable as well. The air flow through the ventilators, which assists in the evaporation of water, is not occurring. Second, the penetration of rain water from the exterior of the building, caused by inadequate or deteriorated waterproofing, has increased the level of moisture in the wood. It is reported that flashing, which would have protected the arches, was removed during the 1981 repairs campaign.

Our recommendation for repairing the Conservatory of Flowers is to disassemble the glazed portions of the structure, to remove all of the deteriorated components, which are estimated at 20% of the building components, to mill components to replace the deteriorated components, to pressure-treat the sound original wood and replacement components with



Operable ventilators located on both sides of the ridge beam. *Photo source: Architectural Resources Group.*



Concrete panels located at the base of the glazed wall. *Photo source: Architectural Resources Group.*

Ammoniacal Copper Zinc Arsenite (ACZA), a preservative treatment, and to reassemble the structure. The wood components, which are approximately 1 1/4-inch thick, will be pressure-treated through their entire thickness and, therefore, protected through their entire thickness. This approach will allow us to survey the surfaces of each component and remove all the deteriorated elements. If the building were to remain in place and only visible deterioration replaced, as in the past, hidden pockets of deterioration would remain following the restoration, and repair would be likely again in twenty years.

We feel this approach logically follows the methods used to construct the arches originally. Each arch is made up of approximately twenty-four separate pieces. This will allow for the building to be easily disassembled and for replacement components to be fabricated and shipped easily. According to independent testing results, pressure-treating the existing and new wood will give the components a life of roughly sixty years. Proper maintenance and improved detailing may extend the life of the structure even longer. This approach allows us to retain the building's historic fabric and, at the same time, to improve that fabric using modern materials.

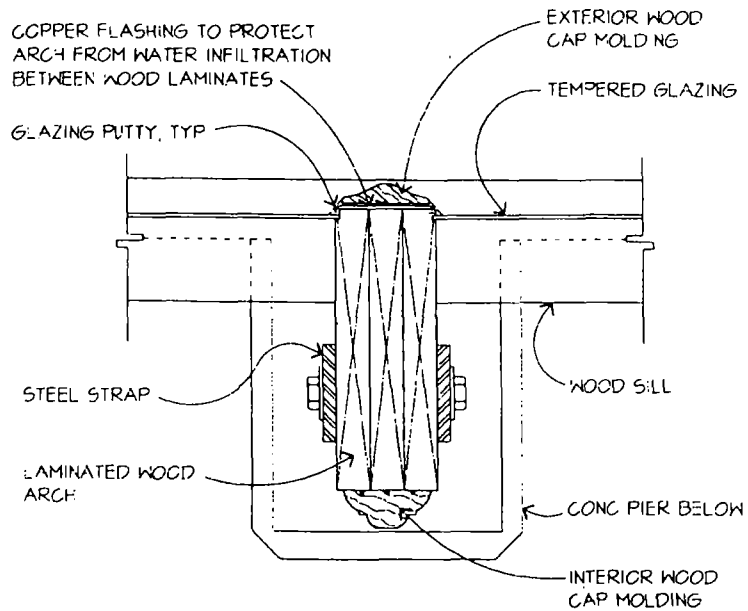
The existing glazing, which is mostly replacement glass, will be replaced with tempered glazing to meet building safety code requirements. Historic glazing remains in two locations: in the clerestory of the central dome and the colored glazing in the sash in the Palm Room and Vestibule. This glazing will be salvaged and reinstalled with a protective coating. The building's woodwork will be painted with a biologically resistant coating that has been tested in high humidity environments and that will allow moisture to pass through. The paint coatings are critical so that moisture is not trapped and subsequently causing decay from within.

The concrete panels that were installed in 1959 compromised the building's original natural ventilation system. These panels will be replaced with operable fiberglass ventilators which match the original in order to restore the ventilation system to its proper function. Fiberglass has been chosen for the construction of the panels since these will incur a great amount of use; if they were constructed in wood, the panels would be very susceptible to rot. Fiberglass is less likely to warp than wood and, therefore, is a more appropriate material substitution. The ventilators which run along the ridge of the wings and the dome's clerestory, many of which are currently inoperable, will also be replaced with fiberglass components to match the original.

Waterproofing systems will be added to the building at the most vulnerable locations. Flashing will be installed along the exterior of the arches to prevent water from penetrating between the components similar to flashing which was installed originally. In addition, flashing will also be installed over the wood sills at the base of the glazed walls to prevent sill deterioration.

In addition, the Conservatory of Flowers will be provided with new mechanical systems, including state-of-the-art environmental control systems, an upgraded electrical system, modifications to meet disabled access codes, and seismic strengthening. The total construction cost, including soft costs, for this project is estimated at 26.5 million dollars.

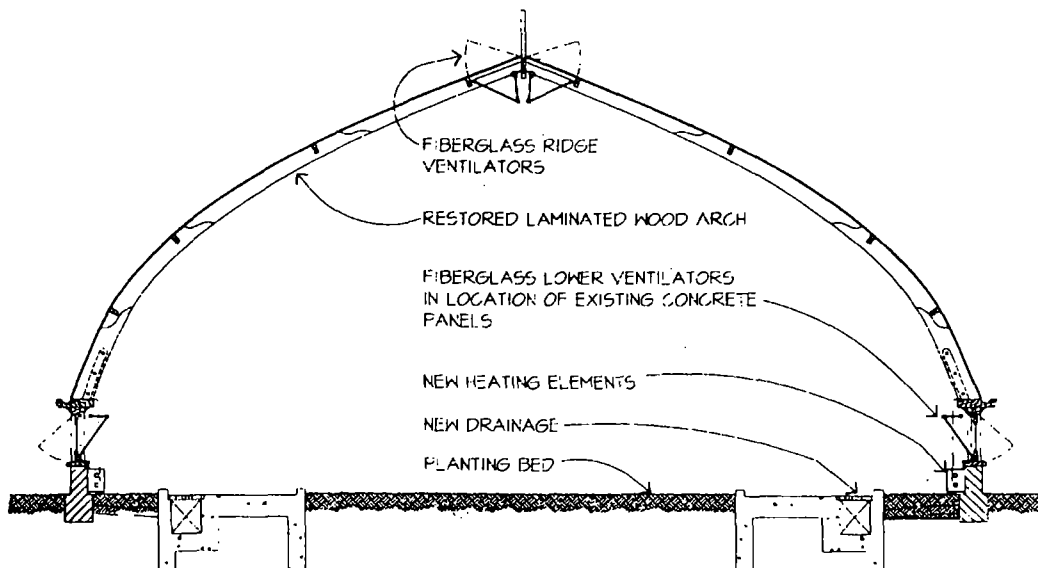
The solution of replicating the Conservatory of Flowers in an alternate material was also researched. Aluminum was selected because of its successful record for use in conservatories. It is possible to match the profiles of the wood components fairly closely in aluminum, however, there are negative impacts of taking this approach. First, the building would likely lose both its City of San Francisco Landmark and National Register of Historic Places status.



TYPICAL ARCH @ WING
NOT TO SCALE

Above: Plan detail of arch assembly showing new flashing to prevent water from infiltrating the joints between the wood laminates which make up the arch. *Drawing source: Architectural Resources Group.*

Below: Section through Wing indicating components of restoration plan. *Drawing source: Architectural Resources Group.*



SECTION @ TYPICAL ARCH @ WING
NOT TO SCALE

Second, FEMA (Federal Emergency Management Agency) funding is not likely to be approved if it loses its historic designation. Third, the building will be required to meet current codes, which will require the installation of additional exits from the Conservatory of Flowers, and the construction of area separation walls between various structures on the site. Finally, the aluminum components will be dependent on their coating for protection. Unlike the wood, which is protected through its entire thickness by the preservative treatment, the aluminum's durability will be compromised if its coating is scratched. When the aluminum is exposed to the moist environment, it will be highly susceptible to corrosion. Glazing, mechanical, electrical, and disabled access issues would be handled in a fashion similar to the previous approach. The total construction cost, including soft costs, for this project is estimated at 31.5 million dollars.

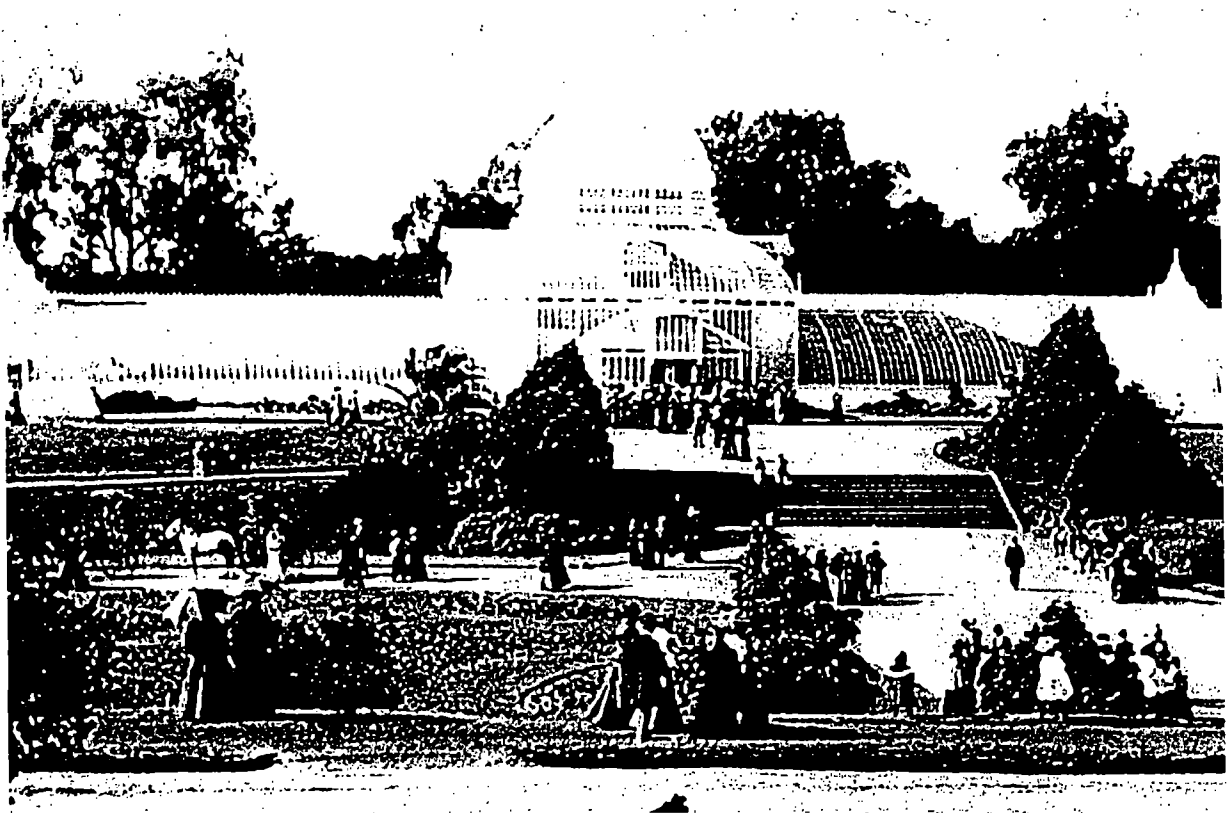
Support Structures

There are nine structures behind the Conservatory of Flowers which are used to propagate plants to be displayed in the Conservatory of Flowers. These structures include four greenhouses, one of which is the historic Orchid House. There are also Public and Employees Restrooms, two retaining walls, and the Lath House. Two of the support greenhouses are severely deteriorated and will be replaced with prefabricated greenhouse structures in the same locations. The third greenhouse required minor repairs, and the Orchid House, which has recently undergone a minor rehabilitation, will receive additional repairs to items overlooked in the recent work. The two restroom buildings will be demolished and replaced with new buildings that meet the requirements of the Americans with Disabilities Act and current building codes. New retaining walls will be constructed in front of the existing distressed retaining walls. The Lath House will also be demolished. A new Education and Multi-Use Center will be constructed in its current location. The total construction cost, including soft costs, for these projects is estimated at 5.2 million dollars.

Each of the above topics is discussed in greater detail in this report.

INTRODUCTION

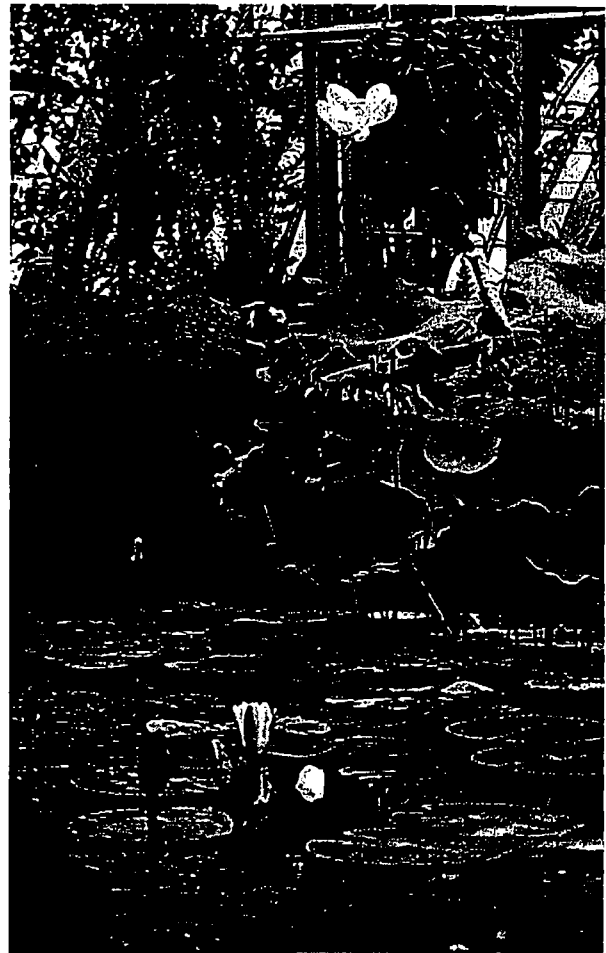
Attracting much public attention throughout its history, the Conservatory of Flowers in Golden Gate Park is one of San Francisco's most beloved architectural landmarks. This elaborate Victorian greenhouse of glass and wood was erected in 1878. Similar conservatories were constructed across Europe, on both private estates and in urban parks, starting in the early 1800s. These structures were enjoyed by a broad cross-section of the public. Following European fashions, wealthy Americans began to construct conservatories in the mid-1800s on private estates. James Lick, a wealthy Californian, purchased a conservatory for his Santa Clara Valley estate but died before it could be erected. This conservatory was subsequently given to the Commissioners of Golden Gate Park for public use. The building became one of the first municipal conservatories constructed in the United States. It houses an important collection of plants, some of which are quite rare. As it remains today, the Conservatory of Flowers is one of the last remaining municipal wood greenhouses of its period.



Golden Gate Park visitors enjoying Conservatory Valley and the Conservatory of Flowers circa 1900.
Photo source: The Museum of the City of San Francisco.

There are many theories regarding the origin of the Conservatory of Flowers. It is widely believed that the building was fabricated in England and shipped around Cape Horn to California. However, other sources have stated that it originated in France, Germany, and Ireland.

Currently, the Conservatory of Flowers is in need of repairs. It was damaged in the winter storms of 1995-96 and has suffered from ongoing deterioration of the wood due to the high humidity within the building. This Historic Structure Report will discuss the historical and architectural context of the Conservatory of Flowers, its history in Golden Gate Park, the theories that have developed regarding its origins, the building's current condition, and recommendations for its repair.



The Conservatory of Flowers houses a collection of rare and high altitude orchids and a lily pond. *Photo source: Architectural Resources Group.*



Exterior view of the Conservatory of Flowers overlooking Conservatory Valley. Photo source: Architectural Resources Group.

Statement of Significance

Erected in 1878, the Conservatory of Flowers is the oldest building in Golden Gate Park and is the oldest municipal wood conservatory extant in the United States. The Conservatory of Flowers in Golden Gate Park was one of the country's first public structures of its type erected in the country. For these distinctions and for its associated historical, architectural and engineering merits, the Conservatory of Flowers is listed on the National Register of Historic Places, the California Register of Historic Places, is a City and County of San Francisco Landmark, and is a Historic Civil Engineering Landmark of the American Society of Civil Engineers.

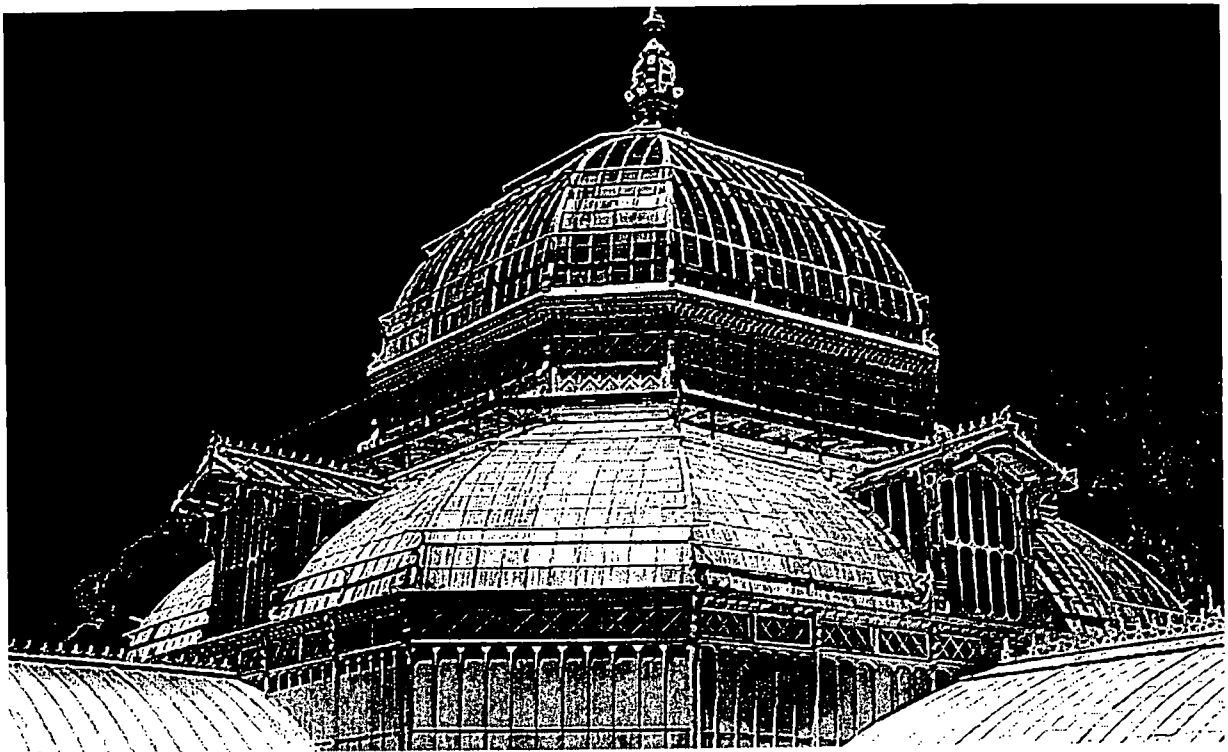
Description

The Conservatory of Flowers is elegant in its overall design, its siting, and its innovative structural system. It is an elaborate Victorian greenhouse with a central dome rising nearly 60 feet high, arch-shaped wings extending from the central dome for an overall length of 240 feet, colorful stained glass, and abundant ornamental woodwork. It sits at the top of a gentle slope overlooking Conservatory Valley. The ultimate appeal of the building rests in the



Above: Interior view of the East Wing (Cycad Room). Tudor arches are the predominant form in the structure. *Photo source: Architectural Resources Group.*

Below: Exterior view of central domed pavilion. *Photo source: Architectural Resources Group.*



articulation of its structure. The use of one predominant form, a four-centered or Tudor arch, is repeated throughout the building. The rhythmic repetition of this pleasing and well-proportioned visual structural element is largely responsible for the building's beauty and attractiveness.

The Conservatory of Flowers consists of a wood structural skeleton with glass walls set on a raised masonry foundation. The entire structure has a shallow E-shaped plan that is oriented along an east-west axis. The central 60-foot high pavilion is entered through a one-story, glassed-in vestibule with gable roof on the south side of the pavilion. Flanking the rotunda to the east and west are one-story, symmetrical wings framed by wood arches. Each wing is L-shaped in plan, with cupolas adorning the intersection of the two segments.

The octagonal pavilion is defined at its perimeter by wood posts rising to support an arched roof that is, in turn, surmounted by a clerestory and dome. The clerestory is supported by eight, free-standing, wood-clad, cast iron columns located within the rotunda and grouped in pairs. Above the clerestory is a dome that terminates in a large, turned finial, braced with scroll-shaped brackets. Projecting from the pavilion roof on the east, west, and south elevations are dormer windows with peak roofs.

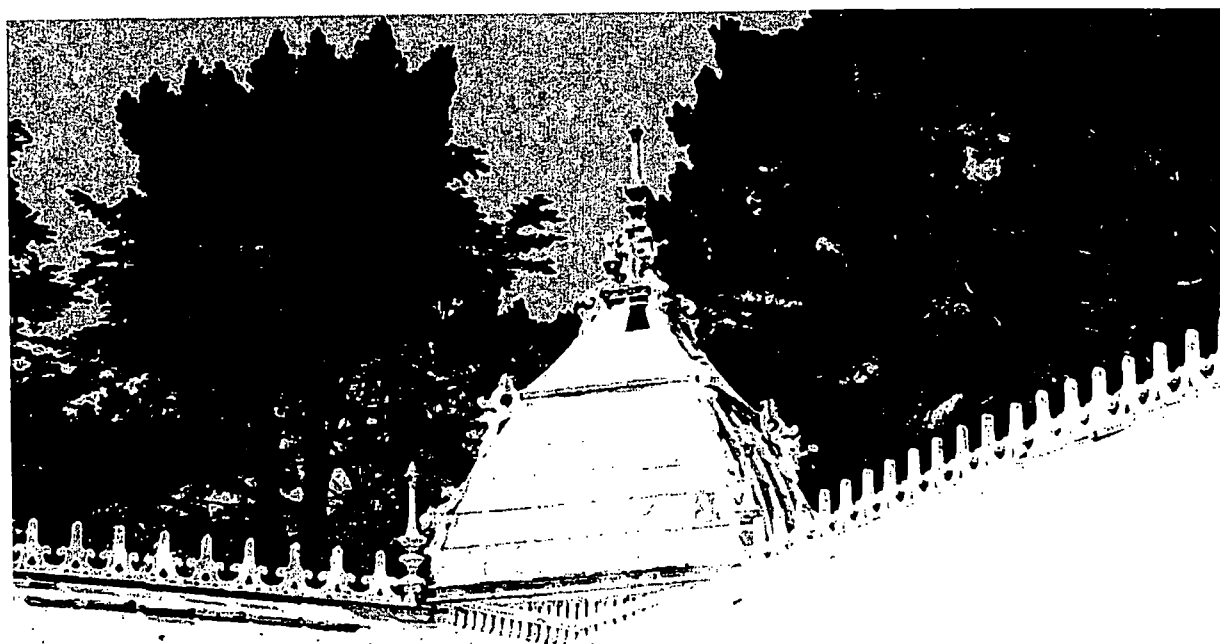
Between the major arched structural framing members are wood muntins that hold the glass lites on their sides. The lites are lapped over one another like shingles and follow the curve of the arches. Operable ventilators with wood sash are located in the clerestory of the main dome and run along the ridge of each wing. There are also ventilators in the low masonry foundation wall that supports the wood arches in the west wing.

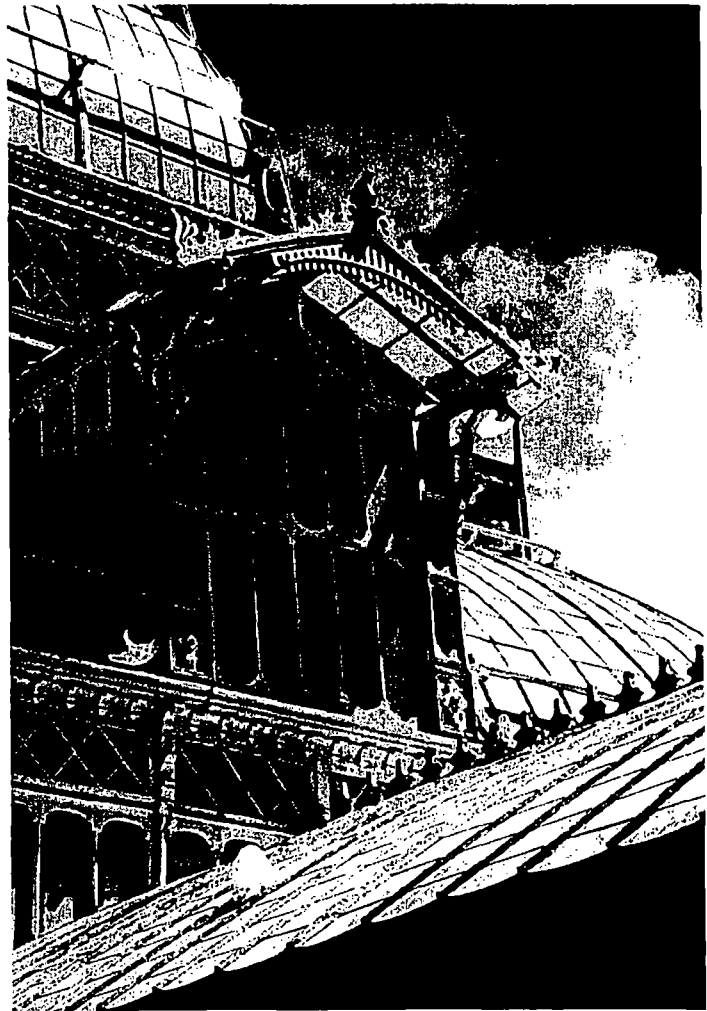
The structure is embellished with abundant decorative mill and scrollwork. A partial list of the woodwork includes cresting that runs along the ridge of each wing and finials that adorn the central dome and the cupolas. The entrances are accentuated with canopies composed of a tracery of latticework, supported by turned posts. The structural arches are covered with molded caps, and the muntins also have a decorative profile. Arched windows which ran along the perimeter of the building, since replaced by a concrete knee wall, were grouped in threes and separated by scrollwork. Large brackets rest at the corners of the octagonal pavilion.



Above: Detail of fan-shaped ornament at the top of the columns in the central pavilion. *Photo source: Architectural Resources Group.*

Below: Detail view of cupola at 90-degree turn in wings. Cresting runs atop the ridges. *Photo source: Architectural Resources Group.*

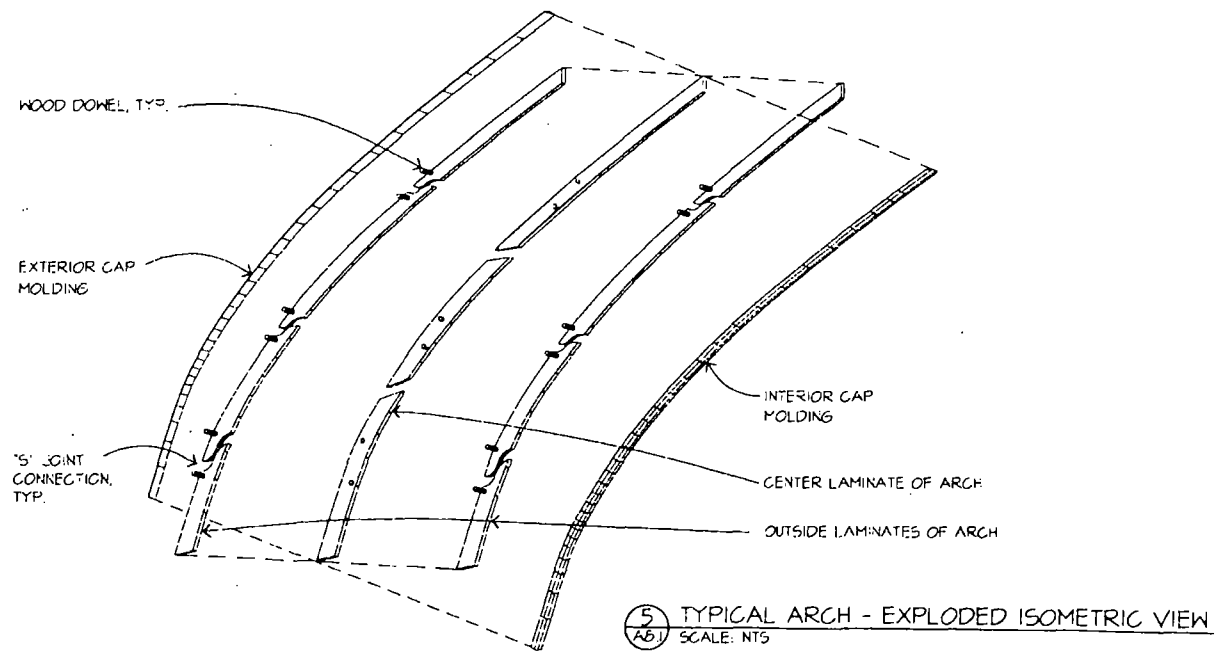




Detail view of dormer at central pavilion.
Photo source: Architectural Resources Group.

The structural wood arches are elegant, not only in their shape but in their method of construction. The arches are assemblies of several pieces of wood. In a section view, the arches are similar to a modern wood laminate, consisting of three, one-inch thick members secured to one another with wood dowels. Each of the three laminates is also divided lengthwise into three sections with scarf joints in the shape of an elongated "S" connecting them. The scarf joints of the inner laminate are staggered so that all three joints do not occur at the same location. The exterior and interior surface of each arch is covered with a wood cap molding that protects the joints between the laminates.

The method used to connect the laminates is another interesting facet of this building's construction. The use of hardwood birch dowels was likely a deliberate act to minimize the use of metal fasteners which could corrode in the humid interior environment of the Conservatory of Flowers.



Exploded isometric view of arch assembly. *Drawing source: Architectural Resources Group.*

The construction of each arch is appealing in its simplicity, but also clever in that it takes maximum advantage of wood as a building material while overcoming its inherent structural shortcomings. From a structural perspective, the arch design utilizes the mechanical properties of the material. Wood is strongest along the length of the grain and weakest along the end grain. The use of short arch components with shallow radii minimized the amount of weaker end grain exposed to structural forces. The assembly of the arch with several small pieces of wood, the shapes of which are identical from arch to arch, is efficient. It allowed the fabricator to set the machines with guides and templates so that cutting the multiple-arch components was a simple task. Furthermore, there was little waste of material since each individual arch component has only a shallow radius. Moreover, by using relatively narrow widths of lumber, the chance of warping was minimized. Finally, there was an efficiency realized in transportation, as the small size of the arch components allowed them to be easily stored and shipped.

These structural wood arches and their method of construction, along with the decorative woodwork and unique lapped glazing, define the character of the Conservatory of Flowers and contribute to its significance and beauty.

The Conservatory of Flowers overlooks Conservatory Valley which is defined on its southern boundary by John F. Kennedy Drive. A broad flight of stairs leads from the Conservatory of Flowers and descends into the Valley. Flanking the stairs are gently sloped hillsides with turf and flower beds. Behind the Conservatory of Flowers is a service yard. Within the yard is a complex of greenhouses which are used to propagate plants for display in the Conservatory of Flowers. The yard is bordered on the north by a hillside.

Historic Character and Character Defining Elements

The standard preservation guidelines within the field of historic preservation are the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. The Preservation of a structure is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. During the process of Preservation, historic building materials and character-defining features are protected and maintained. It is assumed, however, that some damaged or deteriorated historic fabric will require repair or even replacement.

The overall historic character of a property is the sum of all visual aspects, features, materials, and spaces associated with a property's history. Character defining elements are those features of a structure that are essential to the perception or understanding of the historic resource. The character defining elements contribute to the special quality of the resource, and without them the uniqueness of the structure is lost.

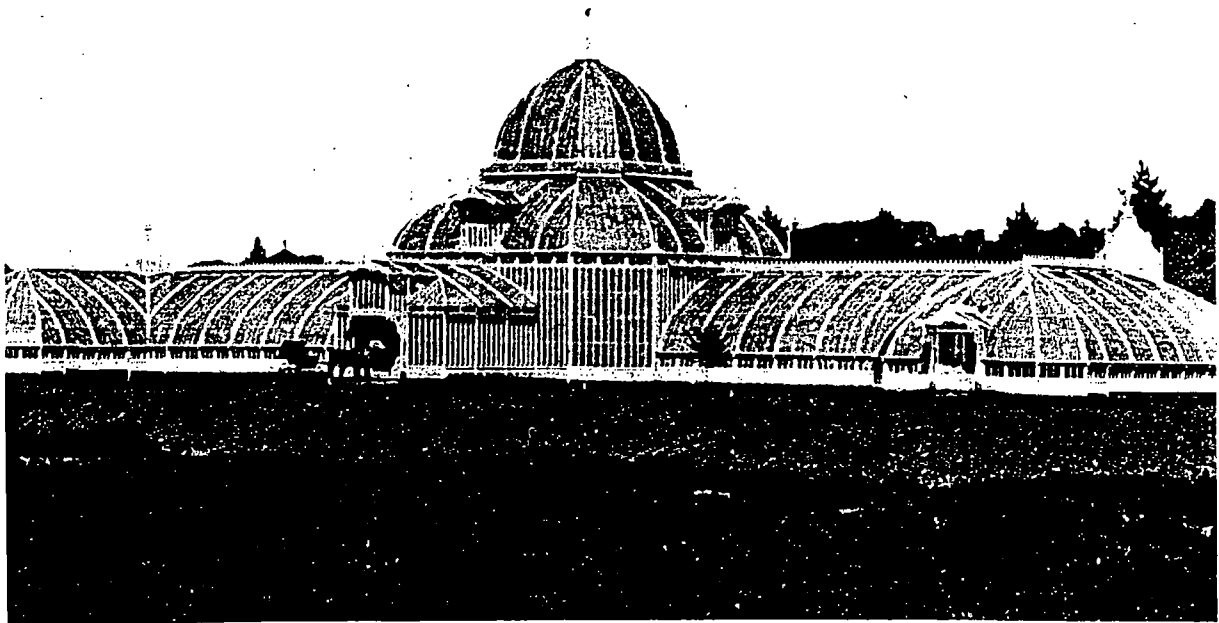
The overall historic character of the Conservatory of Flowers is intrinsically linked to the materials used to construct the structure: wood and glass. Although it appears that portions of these materials have been replaced and repaired throughout the years, the structure has retained its overall character and integrity. Integrity, in relation to historic resources, is defined as the quality or state of being complete, uncompromised, and whole. Historic integrity is defined as the extent to which the original features of a building remain unchanged. National Register properties must retain integrity of location, design, setting, materials, workmanship, feeling, and association.

The process of Preservation begins with the identification of the forms and detailing of those architectural materials and features that are important in defining the building's historic

character and which must be retained in order to preserve that character. The major character-defining elements associated with the Conservatory of Flowers consist of ornamental and structural woodwork, including the method of fabrication used for the arches, the lapped glazing system, the ventilation system, and the building's siting and exterior landscaping.

CONSERVATORY OF FLOWERS HISTORIC OVERVIEW

In both Europe and America, the nineteenth century brought increased urbanization and industrialization. In response, city governments began providing city-dwellers with open spaces and natural settings for public use.¹ The profession of Landscape Architecture expanded during the later part of the nineteenth century, and park design became a large part of the repertoire of this new profession. In addition, a significant outgrowth of the need for natural surroundings in urban contexts was an increase in the study of plant sciences during this period, both by professionals and amateurs. A building type called the glasshouse or conservatory took shape in which the city-dweller could view masterpieces of the plant world otherwise unavailable in urban environments. Municipalities and individuals spent a great deal of time and money to construct these building types that became known as "theaters of nature." In the 1860s and 1870s, not unlike other American cities, San Francisco developed a vast urban park in which was later erected one of the nation's first municipal conservatories.



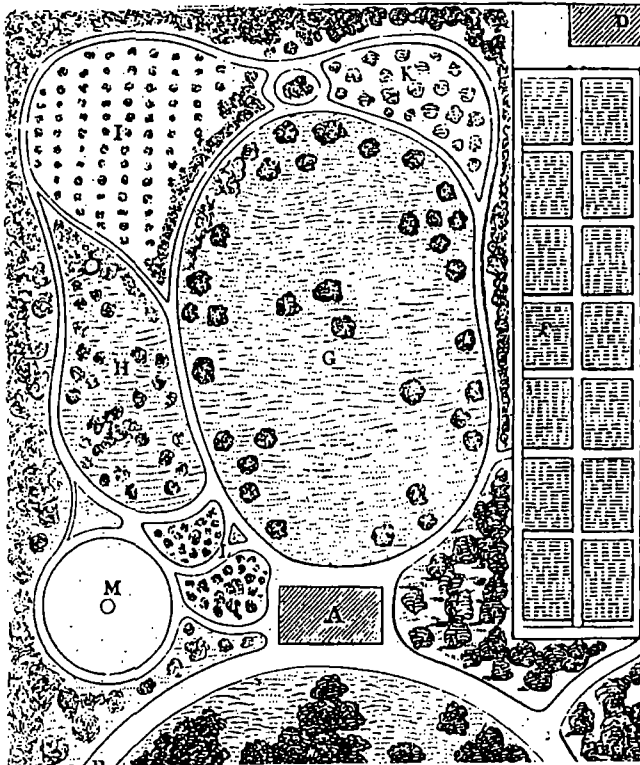
Conservatory of Flowers just after completion c. 1878-80. Note the lack of landscaping around the structure and the configuration of the original dome. *Photo source: The Society of California Pioneers.*

American Development of the Urban Park

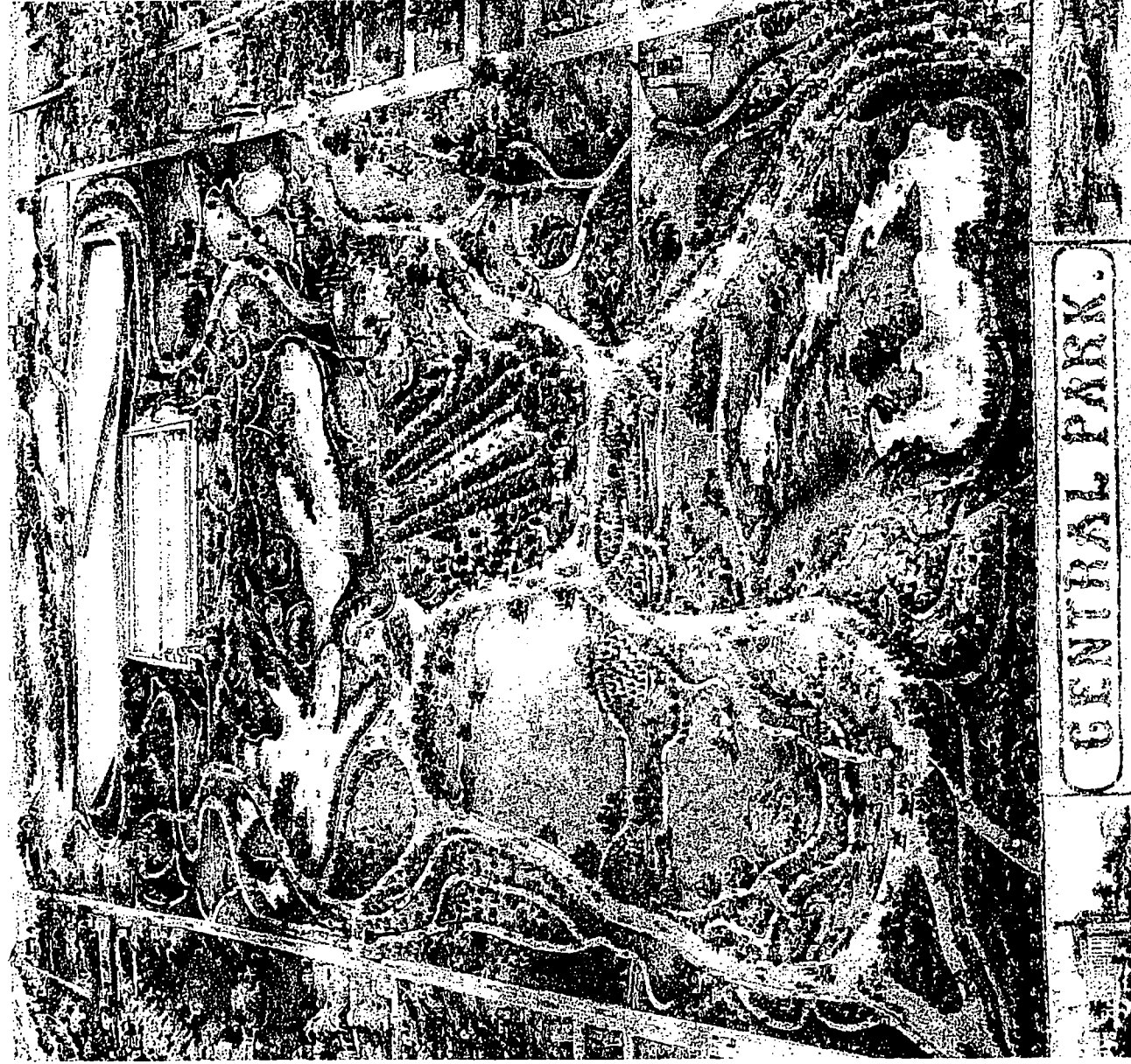
America's interest in the urban park was a direct result of the increased urbanization and industrialization that occurred in the United States just before and upon the conclusion of the Civil War. Parks became identified with the health of the city's inhabitants and the city itself. Indeed, the park increasingly was referred to as the "lungs of the city."² Designed in what became known as the "picturesque" style, urban parks such as Central Park in New York City (1858); Fairmount Park in Philadelphia (1865); Forest Park in St. Louis (1876); Como Park in St. Paul (1870s); Volunteer Park in Seattle (1878); and Golden Gate Park in San Francisco (1870) gave citizens access to "designed" open and woodland spaces.³ These informal, picturesque urban parks provided city dwellers with an environment in direct opposition to the artificial, urban landscape by which they were surrounded.

Proponents of Urban Parks in America

The first real proponent of urban parks was Andrew Jackson Downing (1815-1852). A landscape gardener and architectural critic, Downing published several architectural pattern books that advocated picturesque design within the landscape. Downing's designs included advice on the placement of houses within the natural landscape and ideas for garden spaces. He was an eloquent spokesman for the movement to create more beautiful cities and to



A drawing of Andrew Jackson Downing's suburban residence showing his interest in the interaction of buildings and the landscape. *Drawing source: Andrew Jackson Downing, Victorian Cottage Residences.*



Plan of Central Park, New York City, showing the intent of Olmsted and Vaux to create a picturesque park for city dwellers. *Drawing source: John Reys, The Making of Urban America.*

provide public parks within urban contexts. Downing's impact on the American park system would have been far greater had he not died at a young age.

Other important contemporaries of Downing included Andrew J. Davis (1803-1892), H. W. S. Cleveland (1814-1900), and Calvert Vaux (1824-1895), but the most well known individual to advocate parks and landscape architecture in the United States was Frederick Law Olmsted (1822-1903).⁴ Born in Hartford, Connecticut, in 1822, Olmsted studied at Yale University in New Haven, Connecticut. Upon completion of his degree, Olmsted farmed for several years and then embarked on a tour of Europe. While in Europe, he visited the great parks of France, Germany, and Great Britain, studying the art of park making and management. After his return from abroad, Olmsted entered a partnership with Calvert Vaux, an English-born architect of reputation, with whom he submitted a design for the creation of a large urban park in New York City. Their design won the competition, and Olmsted was selected as the Superintendent of the newly formed Central Park. This position was the first in Olmsted's long career in the profession that became known as Landscape Architecture.

Olmsted came to California in 1863 as the head of the first commission to study the natural beauty of the Yosemite Valley. During his two year tenure in California, Olmsted was engaged by San Francisco Mayor H. P. Coon to report on the possibility of a park for the city.⁵

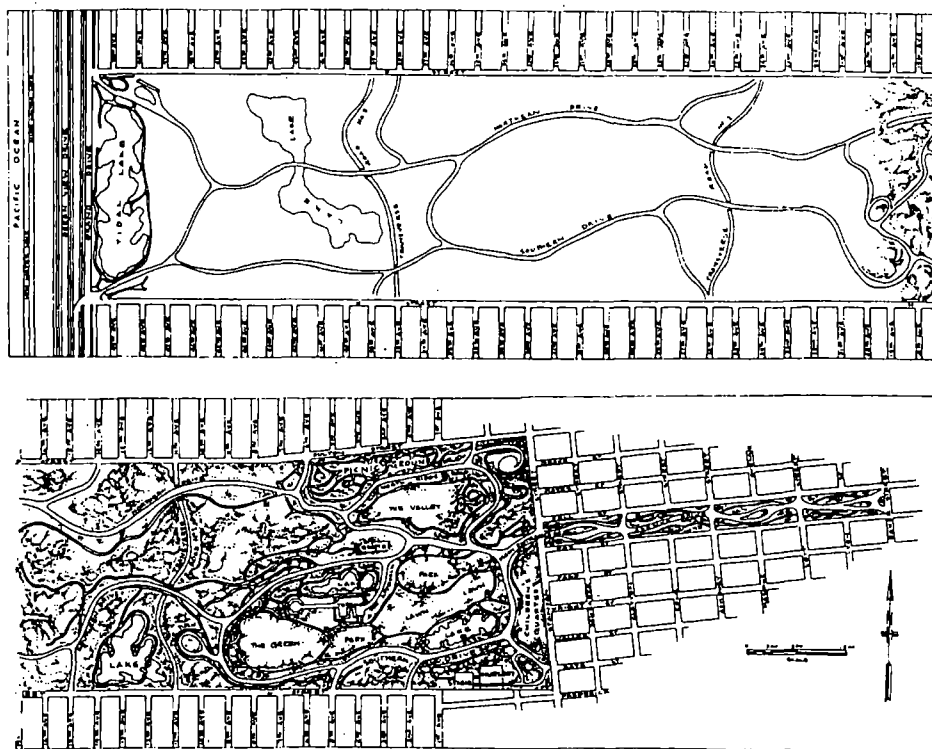
In 1866, Olmsted proposed a public park for San Francisco to "enhance the health and morality of the citizenry, and attract capital and investment of the business community."⁶ Olmsted's vision was not for one large park, as he believed the city could not accommodate one, but for a series of parks that would include a promenade from the interior of the city to the bay, parade grounds, and a pleasure ground near Hayes Valley. This plan for a sheltered inland park and promenade was abandoned for economic reasons.

The Municipal Reports of 1865-66 quote Olmsted as saying:

It must, I believe, be acknowledged, that, neither in beauty of greensward, nor in great umbrageous trees, do these special conditions of the topography, soil, climate of San Francisco allow us to hope that any pleasure ground it can acquire will ever compare in the most distant degree with those of New York or London.

There is not a full-grown tree of beautiful proportions near San Francisco, nor have I seen any young trees that promised fairly, except perhaps, of certain compact, clumpy forms of evergreens, wholly wanting in grace and cheerfulness. It would not be wise nor safe to undertake to form a park upon any plan which assumed as a certainty that trees which would delight the eye can be made to grow near San Francisco.⁷

While initially skeptical, Olmsted happily admitted, during an 1886 visit, that he had been wrong about the prospects of city parks in San Francisco. In fact, *The Municipal Report* for 1886-87 indicates that the Park Commission was "indebted to Hon. Frederick Law Olmsted landscape architect for his timely and much valued report on Park Forestry within the past year."⁸ He served as an informal advisor to the San Francisco Park Commission for development of parks in the city and continued to visit and work in California for the duration of his career.⁹ While Olmsted's involvement with Golden Gate Park was short-lived, and somewhat indirect, his designs for Central Park influenced the Park Commission and William Hammond Hall's initial designs for San Francisco's park.



A map depicting the early configuration of Golden Gate Park. Note "The Valley" which became the location of the Conservatory of Flowers. Drawing source: Raymond Clary, *The Making of Golden Gate Park The Early Years: 1865-1906*.

San Francisco's Golden Gate Park

After two decades of incredible growth, it became clear in the 1860s that San Francisco was in need of more public open spaces to provide refuge from the increased urban density.¹⁰ In 1868, San Francisco's Board of Supervisors approved a measure that set aside a strip of barren land, three miles long and half a mile wide, at the western tip of the city for future open spaces. The area was selected because it was sparsely populated and there was access to Pacific beaches. Known as the Outside Lands, this part of the city had been claimed for years by squatters. The inhabitants of the Outside Lands were forced to relocate and discussions concerning the future layout, design, and features of the park began.

In April of 1870, the state legislature passed an act to provide for the improvement of Public Parks in the City of San Francisco. A Park Commission was formed, and William Hammond Hall was hired to survey the Outside Lands. Hall completed his report in February of 1871 and was subsequently appointed Park Engineer. The desolate area chosen for the park was known for its blowing sand and high dunes which made the first gardeners' attempts at landscaping difficult. The initial design ideas for Golden Gate Park were to create a woodland park, with curved and winding roads, avoiding a formal plan. The park, as we know it today, is almost completely a man-made landscape. By the spring of 1872, as many as 22,000 hardy and quick growing trees had been planted; grading, fencing, drainage, and irrigation work had commenced; a park nursery was under development; and numerous park roads had been constructed. Visitors began to arrive by the thousands.¹¹

From its inception, the park was immensely popular. Park use increased steadily every year with varied recreational activities including strolling, picnicking, equestrian activities, bicycling, band concerts, croquet, tennis, and carriage racing. *The Municipal Report* for the year ending June 30, 1890, summarized the success of San Francisco's largest park: "The visitor to the Golden Gate Park enters a scene of loveliness. . . . A trip through the park in a carriage and especially on foot, is one of pleasant surprises. There is something to arrest and delight the eye at every step."¹²

Two Park Superintendents had more to do with the early development of the park than any others: William Hammond Hall (1846-1934) and John McLaren (1846-1943). Hall, a Maryland-born engineer, was the initial surveyor and designer of Golden Gate Park. In August of 1870, Hall submitted the lowest bid to survey and make a topographical map of the newly established park. He was awarded the contract and began a long association with the

park, serving as Park Superintendent from 1871 to 1876 and acting as a consultant from the years 1886 to 1890.

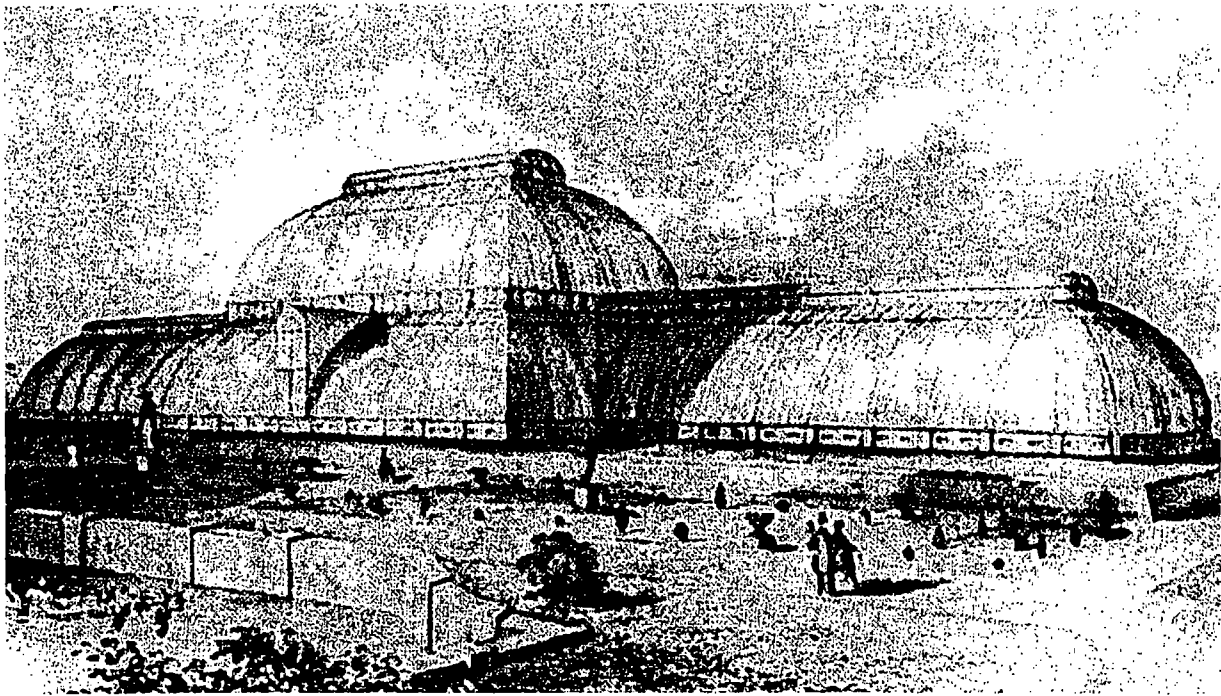
John McLaren became Assistant Superintendent of Golden Gate Park in 1887.¹³ Three years later, McLaren was appointed Superintendent of Parks for the City of San Francisco. McLaren held this post for over half a century until his death in 1943. Having a strong background in horticulture and landscape architecture, McLaren worked at some of the Bay Area's largest estates, including the properties of General Maglee and James Lick.¹⁴ McLaren became a legend in San Francisco with his many accomplishments including the landscaping plan for the 1915 Panama-Pacific International Exposition.

The city continued to construct new facilities throughout the park to attract visitors and to accommodate their varied interests. These new park structures included stables (1870s), various bridges across creeks and ravines, picnic shelters, a Casino (1874), a Music Stand (1882), the children's playground (1888), and one of the park's finest attractions, the Conservatory of Flowers. Erected in 1878, the Conservatory of Flowers' first major exhibit, consisting of the *Victoria Regia*, was in place by May of 1879.¹⁵

The Nineteenth-Century Glasshouse

The nineteenth-century conservatory or glasshouse building type grew out of the city-dweller's desire to bring nature and the natural into urban life.¹⁶ In Europe, the glasshouse was first the luxury of those individuals who lived on large estates with both the land and the financial resources necessary to build garden follies. Soon, however, these structures became popular in urban, public, and semi-public settings. Perhaps the most well known of these is the Palm Stove House in the Kew Royal Gardens in London. This structure was constructed between 1845 and 1847 by Richard Turner and Decimus Burton.

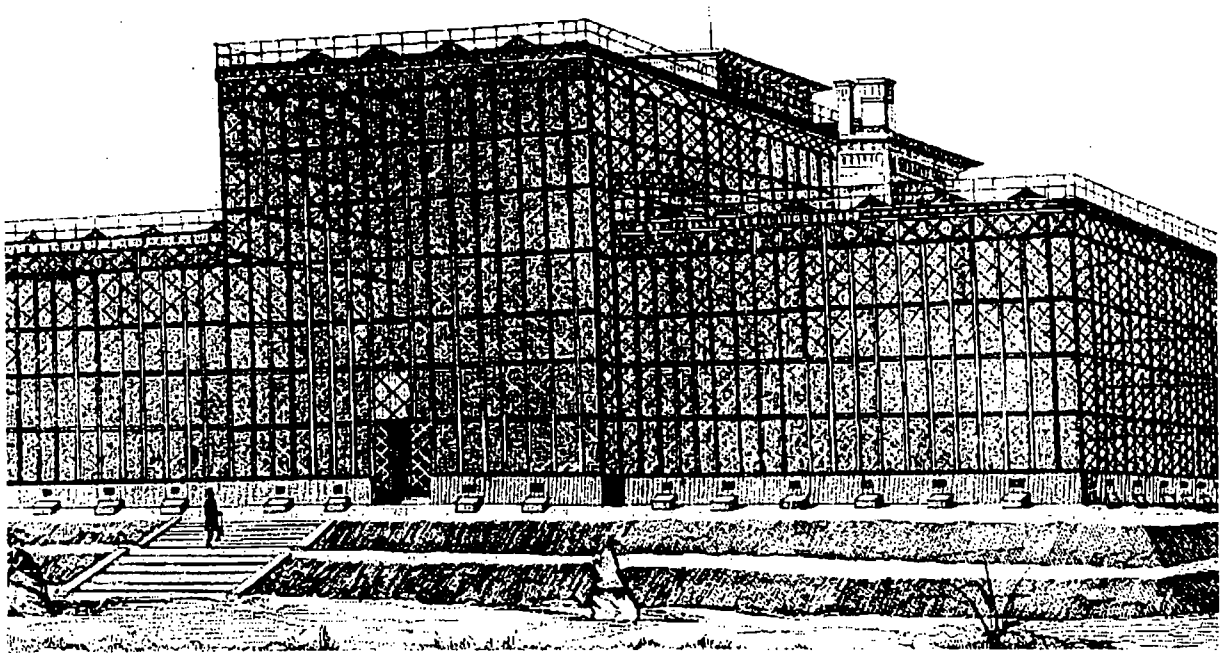
Joseph Paxton (1803-1865) was one of the first to design large greenhouses in England. As superintendent of gardens at Chatsworth, in Devonshire, England, he designed a 300-foot long greenhouse on that estate in 1837-40. Paxton's design made use of a new system of glass and metal roof construction. In 1850, Paxton expanded his greenhouse design and entered a competition for a glass and iron palace to be built at the world's first International Exhibition, held in London. The Crystal Palace of the May 1851 Exhibition was viewed by many as a giant greenhouse. This structure, and Paxton's many smaller structures for estates, had enormous effect on the development of the glasshouse or conservatory building type.¹⁷



An engraving of the palm house at Kew Royal Botanical Gardens, London, England. *Drawing source: Kohlmaier and Von Sartory, Houses of Glass: A Nineteenth Century Building Type.*

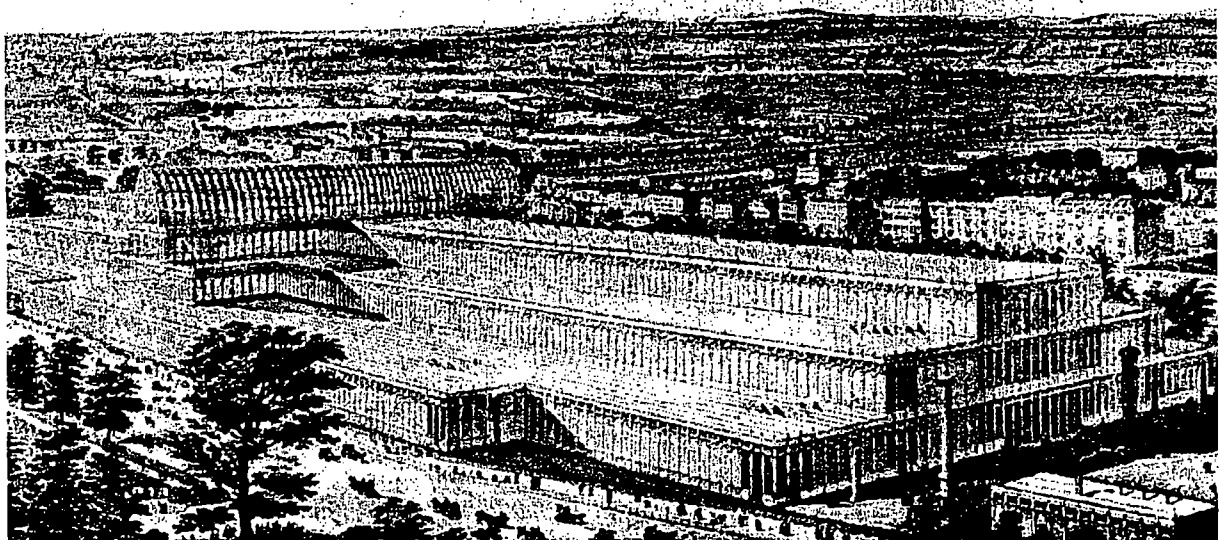
Elsewhere in Europe, Hector Horeau designed several conservatories of glass and iron, such as the Lyons, France, Conservatory, erected in 1847. In Germany, August von Voit designed Munich's Great Palm House in 1860, and the Royal Botanical Garden at Berlin-Schoneberg was constructed in 1859 by the team of Bouche, Herter, and Nietz.

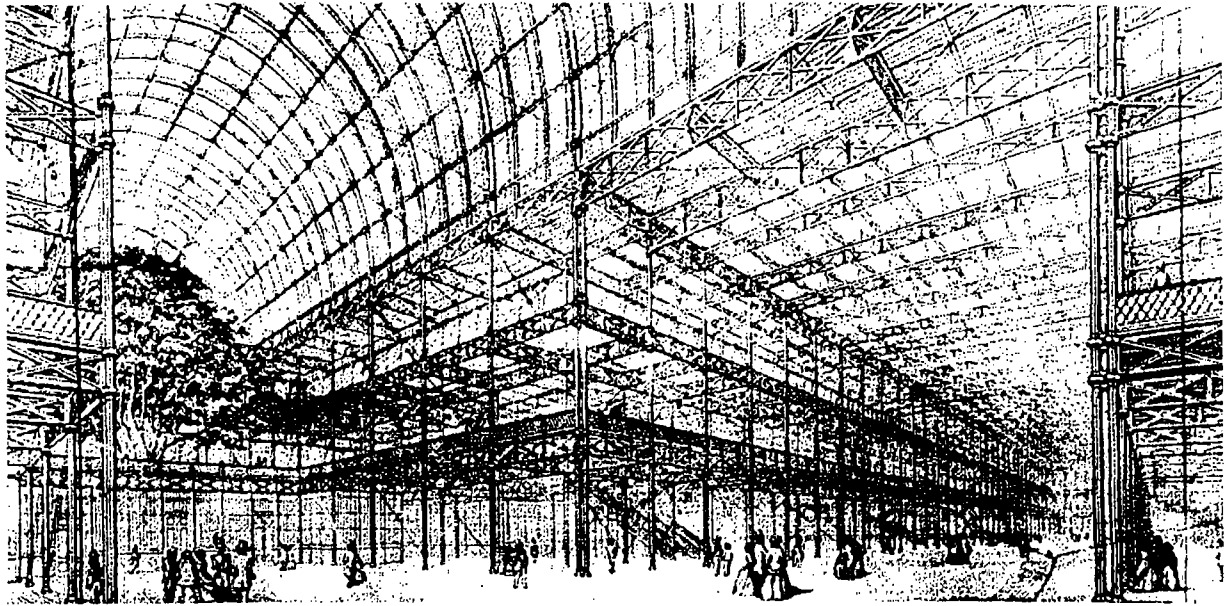
The increased use of glass and iron as building materials also impacted the development of the glasshouse. With Paxton's Crystal Palace came a new interest in the strength of iron as a building material and with the fascination of prefabricated units of construction. After the debut of the Crystal Palace, the remaining decades of the nineteenth-century saw numerous building types constructed throughout Europe and America that made use of structural iron in association with glass including libraries, market halls, other exhibition structures, department stores, railroad stations, and museums.¹⁸ By the 1870s, wood structural members were infrequently used to construct large European greenhouses or conservatories. Indeed, many manufacturers had found that the humid heat necessary to successfully propagate numerous plant varieties often destroyed wood structural members in short periods of time.¹⁹



Above: Great Palm Stove, Berlin-Schöneberg. Drawing source: Kohlmaier and Von Sartory, *Houses of Glass: A Nineteenth Century Building Type*.

Below: Exterior of Joseph Paxton's Crystal Palace of 1851. Note the scale of the structure in relation to the individuals standing outside. Drawing source: Kohlmaier and Von Sartory, *Houses of Glass: A Nineteenth Century Building Type*.

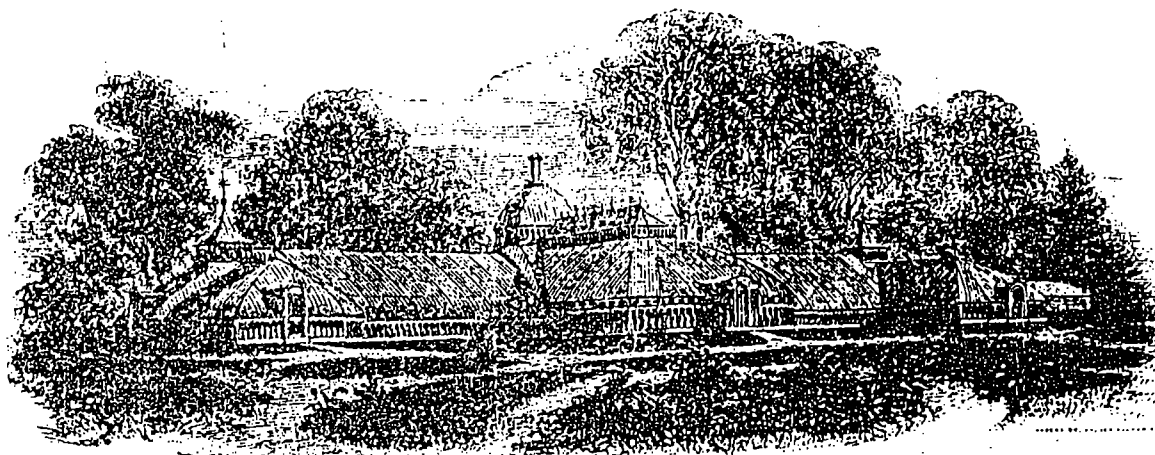




An interior view of Joseph Paxton's Crystal Palace of 1851. *Drawing source: Kohlmaier and Von Sartory, Houses of Glass: A Nineteenth Century Building Type.*

Constantly looking at what was fashionable in Europe, Americans soon began their own experiments with the glasshouse or conservatory building type. As in Europe, the first glasshouses were built for the most wealthy of society who could afford to construct such indulgences on their private estates. Precedent for large conservatories on American private estates included the conservatory at Lyndhurst in Tarrytown, New York. Constructed by Lord & Burnham, one of two large conservatory manufacturers in the United States, this structure was originally of wood but was subsequently rebuilt of iron after a fire in 1880.²⁰

The catalogs of Lord & Burnham of Irvington, New York, and Hitchings and Company of New Jersey were used by numerous wealthy individuals to order conservatories, including Warren Delano, Jr., John D. Rockefeller, John A. Roosevelt, William K. Vanderbilt, and John P. Morgan.²¹ The conservatory erected in San Francisco's Golden Gate Park during the 1870s and the Volunteer Park Conservatory in Seattle, Washington, constructed in 1912, were both of wood. One likely explanation for this departure from the European model for the Conservatory of Flowers may be the ready availability of decay resistant woods, namely redwood and cedar, on the West Coast. A strong wood-frame building tradition had developed on the West Coast, specifically in the San Francisco region after 1849, in order to accommodate the rapid increase in population. It is, therefore, not surprising that independent Californians would develop their own version of construction methods for greenhouse structures.



A view of the Lord & Burnham designed conservatory on Jay Gould's Lyndhurst estate in Terrytown, New York, constructed in 1881. Drawing source: National Trust for Historic Preservation, *The Greenhouse at Lyndhurst*.

California Conservatories

Like wealthy easterners, numerous Californians developed greenhouses or conservatories on private estates. According to the historian Elinor Richey, a conservatory was part of the typical East Bay Victorian home. In fact, Oakland quickly gained a reputation for having the finest and most elaborately stocked conservatories in California. These structures were of various sizes and shapes, ranging from an attached and glassed-in wing for a residence, to a great domed or compartmentalized, detached glasshouse.²²

A. K. P. Harmon had several private conservatories on his Oakland Lake Merrit Estate, one of which he later gave to the City of Oakland as an attraction for Lakeside Park. Harmon's conservatories were described in *The California Horticultural and Floral Magazine* in November 1879: "The largest conservatory is built like the crystal palace, having a dome which the tallest of bananas would consider too much of a height to attain, and four wings, two cut off by doors and devoted to grapes, while the other two are also under the reign of the large and stately plants which properly belong to a conservatory."²³ Frederick Delger, Oakland's first multi-millionaire, and magnate Frank M. Smith also had large conservatories on their elaborately designed East Bay estates.²⁴

A large conservatory was part of the landscape at the Peninsula estate of Darius Ogden Mills in Millbrae. This conservatory was a large structure located in the vicinity of the main house.

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 *about us*

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What is the Golden Gate Park Conservancy?

The Golden Gate Park Conservancy is a public-private partnership between the San Francisco Recreation & Park Department and Friends of Recreation & Parks, (the nonprofit agency which supports the parks, open spaces, recreational programs, and facilities of the Department). The Conservancy has been established to leverage the resources of San Francisco and to ensure the future of the Park. Its express purpose is to raise funds for capital improvements, visitor services, education, community involvement, and maintenance activities. The Conservancy develops projects which are consistent with the GOLDEN GATE PARK MASTER PLAN but which are not currently funded by the City. The Master Plan, developed through an extensive public process, lists many Park needs. Current funding cannot possibly cover all of them. The Conservancy is helping to bridge this gap between needs and existing funds.



Why does Golden Gate Park need a Conservancy?

Golden Gate Park is the centerpiece of San Francisco's park system and a valued treasure to the City's citizens. Although well loved, it faces an uncertain future as public funding for its upkeep declines. The deterioration of urban parks can take many forms, including a lack of capacity to restore over-used areas, physical degradation of the landscape and structures, and the emergence of unhealthy or illicit activities. If present conditions in the Park are not corrected quickly, they will be so exacerbated as to be a major threat to its integrity and health by the next century.

Doesn't the Golden Gate Park Infrastructure Bond cover the Park's budget?

The \$76.3 million allocated by the bond, passed in 1992 by a 73% majority of voters, helps cover the cost of repairing portions of the Park infrastructure over the course of a decade, yet it constitutes merely one-third of the money needed to properly repair the Park over the bond's duration. Not covered by the bond are the day-to-day maintenance expenses, much-needed repairs and capital improvements, the purchase and conditioning of equipment, and the cost of responding adequately to such time-sensitive issues as renovation of playgrounds and turf areas.

How does the Conservancy operate?

The Conservancy operates under the auspices of Friends of Recreation and Parks, with its rich history of assisting in Park projects. Friends is a nonprofit organization (like the Friends of the Library), generating funds for capital and programmatic undertakings in the Park. Although independent of City government agencies, the Conservancy operates under the same guidelines of public policy endorsed by the City's governing bodies. In its role to raise funds to help restore, maintain and preserve the Park, the Conservancy supports the Department and assumes the financial responsibility for mutually agreed upon projects and capital improvements. This collaborative endeavor has been endorsed by the Mayor, the Recreation & Park Commission and the Recreation & Park Department. It accomplishes the task of creating coordinated efforts between private entities and public concerns, while engaging community opinion. It also helps build an educated constituency among the City's residents. Projects undertaken by the Conservancy are developed in tandem with the Department, using the Golden Gate Park Master Plan as a guide, and are subject to public process and approval by the Commission.

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CONSERVATORY OF FLOWERS, GOLDEN GATE PARK

San Francisco, California

The Conservatory of Flowers, erected in 1878-79, is one of the most significant extant Victorian greenhouses in the United States. Its design was modeled after the Royal Conservatory of Kew Gardens in London. The structure consists of an intricate grid pattern of white-painted Gothic tracery supporting over 30 tons of glass. The Conservatory is listed on the National Register and is one of the most visible buildings in Golden Gate Park.

Deferred maintenance and natural forces such as storms and earthquakes have taken a devastating toll on the building so that, after 116 years of operation, it is now closed to the public. The Conservatory was recently included in the World Heritage Watch, a list of 100 endangered sites around the globe compiled by the World Monuments Fund.

A challenge grant from the Save America's Treasures Program would kick-off a major capital campaign to save this landmark.

N: Sites project.doc

SAVING OUR AMERICAN TREASURES

The Conservatory of Flowers, sitting in a valley filled with fog and exotic blossoms, gives the appearance of a visitor from another age. This fragile old building, patched and shuttered to the public since 1995, still manages to evoke the mood of a time past, filled with images of horse drawn carriages and idle Sunday afternoons.

Monuments such as this are emblems of our history, both through their architectural significance and in the manner in which they foster a sense of belonging to successive generations. The Conservatory of Flowers has played a part in the lives of San Franciscans since the 1880's, and is arguably the dominant image for Golden Gate Park. It has hosted weddings and parties and countless classes of schoolchildren, and as such has become a part of many family memories.

To save this building and its tremendous legacy, Friends has committed to raising the funds needed for a full restoration. We have prepared, in concert with the Recreation and Park Department, the Office of the Mayor, and many collaborative groups and individuals, a fully private capital campaign. After spending more than two years researching the potential for federal, state and city funding, we have concluded that a private campaign will be the most effective and efficient way to rebuild this national treasure.

future You will certainly hear more about our campaign in the coming weeks and months. We expect it to be an exciting time, an opportunity to bring this beautiful glass house and its rare botanical collection back to health, to be shared and enjoyed by the public once again. Once restored, we plan educational programs, seminars, volunteer opportunities, docent tours and collaborative ventures with other cultural institutions. The Conservatory and its new educational center will become a magnet of vibrant activity.

Through this project, we hope to once again create a sense of place within the fragile glass walls, the kind of place which ties people to their community. The building's significance as an architectural masterpiece is reason enough for its restoration. But every bit as important is its significance as a place where memories can be built for generations to come.

Donna Ernstson
Executive Director

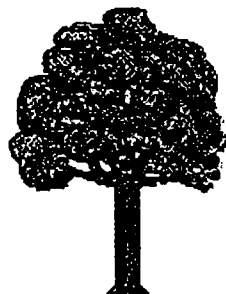
To donate to the restoration of the Conservatory, please send your generous gift to: Save the Conservatory of Flowers, Friends of Recreation and Parks McLaren Lodge, Golden Gate Park, San Francisco, CA 94117.

News Flash:

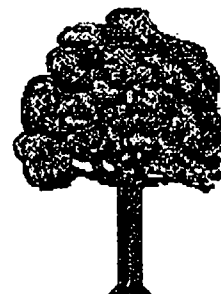
**Proposition A
defeated!**

Contents

- Our pre-election web site
- Problems with Garage
- Historic Streetcar
- G-Line Solution
- Writing letters to the editor
- Official Prop J Wording
- Endorsements
- Credits
- Feedback



Alliance for Golden Gate Park



POST ELECTION PRESS RELEASE

Contact: Paul Dorn/Leah Shahum 431-2453, ext. 2

Defeat of Proposition A Represents an Opportunity to Rethink Parking Garage in Golden Gate Park

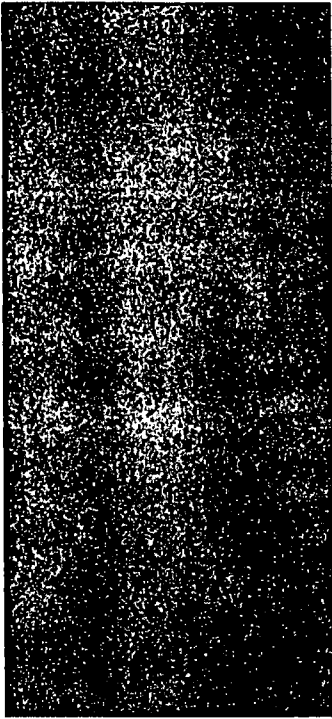
SAN FRANCISCO, June 4, 1998 -- Activists with the Alliance for Golden Gate Park (AGGP) expressed their desire to improve the park in cooperation with the M.H. de Young Memorial Museum, Mayor Willie Brown, the Board of Supervisors, the Recreation and Park Department and proponents of Proposition A (de Young Museum Bond) and Proposition J (Garage Authorization). AGGP activists are requesting meetings with all interested parties to discuss the future of the park.

"We are all relieved that this long, expensive and divisive campaign is now behind us," said Jennifer Clary, San Francisco Tomorrow board member and AGGP activist. "Now we should focus on those things that we all agree will improve Golden Gate Park. This would include expedited adoption of the Golden Gate Park Master Plan, and the development of transit improvements and traffic calming measures."

The Alliance for Golden Gate Park also reaffirmed their opposition to an underground parking garage in the park. "We agree with the proponents of Propositions A and J, that the garage and the de Young are linked," said Clary. "The necessity of this garage should be examined in any future discussions on the rebuilding of the de Young Museum."

The Alliance defeated Proposition A despite being outspent 100-1 by the initiative's proponents. Proposition J won with just over 58 percent of the vote. "After years of neglect by City Hall resulting in serious deterioration of Golden Gate Park, San Francisco voters were grateful to have an initiative that even remotely resembled a 'park revitalization' measure," said Jon Rainwater, membership director for San Francisco League of Conservation Voters and AGGP activist. "A garage in and of itself would likely have failed. We hope the language in Proposition J about landscaping, traffic calming and transit improvements was sincere and not merely an attempt to 'greenwash' the measure."

"An important point is that 42 percent of the electorate did not want J— even though it was FREE—nearly half of the citizens of SF did not want a gift garage," said Pinky Kushner of the AGGP. "Who would want to give a gift of that monetary magnitude to the public when nearly half of them don't want it. Warren Hellman should try floating a gift to the Conservatory of Flowers to see what kind of response that would get!"



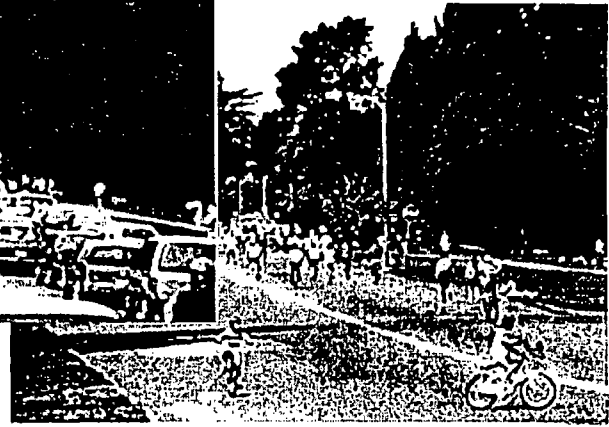
For more information call 415/957-3686.

After all, what would you like to see:

More cars looking for fewer
free parking spaces?



Or fewer cars in the park in
general?



Our Statement of Purpose:

The Alliance for Golden Gate Park is a consortium of environmental, recreational and neighborhood organizations concerned about the presence of automobiles in the park. Golden Gate Park was created to provide a sylvan, pastoral respite from the pressures of urban life. Many City residents, who often can't afford to travel to remote natural areas or private resorts, depend on Golden Gate Park for family recreation. Excessive automobile traffic diminishes the experience of visiting Golden Gate Park.

Our goal is a Golden Gate Park that is open and welcoming to all, accessible by a variety of transportation means. We support the immediate implementation of the Golden Gate Park Master Plan, which was developed through more than five years of extensive public process. We also support the development of transit improvements to the park, such as an extension of the MUNI historic streetcar line, to bring people into the park and as a shuttle connecting the park with existing parking facilities. We are concerned in this "Transit First City" about transportation policy that overwhelmingly favors automobiles.

The Alliance for Golden Gate Park has recommended to its constituent organizations that they oppose both Proposition A and Proposition J, having determined that these ballot initiatives are contrary to our goals for a safer, more enjoyable park for everyone. The defeat of these initiatives will demonstrate that San Francisco voters want well-reasoned, environmentally sensitive and responsive solutions to the transit issues confronting the park, instead of continued reliance on the automobile.

Proposition J

Our opposition to Proposition J, which will provide for the construction of an underground 800-1,000 space parking garage in the Music Concourse, is based on three principal concerns:

1) Parking Garage

A parking garage is a violation of Golden Gate Park and of the City's Transit First policy. It is no solution to the real problems confronting the park, which include inadequate transit options to and within the park. A garage would benefit only motorists, offering no access

improvement for city residents who don't drive. It would significantly increase traffic, disrupt park routine, and lead to toxic contamination and other environmental effects.

2) Golden Gate Park Concourse Authority

Proposition J would create a new public benefit authority, which would have extensive power over traffic, transit, landscaping, institutional expansion and other park features. Similar "public-private partnerships" in San Francisco and elsewhere have demonstrated a reduction in public accountability, financial management and attractiveness.

3) Political Process

The garage proposal is motivated by the promised financial contribution of wealthy individuals and organizations. Proposition J is being rushed to an early vote with the goal of avoiding extensive public scrutiny. Money should not dictate public policy. Special interests should not control our political process.

Proposition A

The Alliance for Golden Gate Park is also opposed to Proposition A, the bond measure to rebuild the M. H. de Young Memorial Museum in the park. Museum administrators have linked the success of their institution to an underground parking facility. Their proposal includes an underground 31,000 square foot "loading dock" (almost as large as a football field), which could potentially be used for staff or event parking.

Administrators of the de Young have continually demonstrated a resistance to sustainable transportation solutions, preferring to rely on increased automobile traffic to deliver their audience. A plan that did not include a garage would free up more private funding for the museum, thus costing the public less. Their current proposal requests \$17 million more than their proposal in 1996, nearly 25 percent more in less than two years. A low-cost museum retrofit, instead of total demolition and rebuild, will accomplish both goals of environmental sensitivity and financial responsibility.

A "no" vote on Proposition A is the only thing that will encourage museum administrators to show greater sensitivity to the needs of Golden Gate Park.

The Alliance For Golden Gate Park consists of:

Bay Area Inline Racers, Coalition for Golden Gate Park, Free the Park! Coalition, San Francisco Green Party, Haight Ashbury Neighborhood Council, Harvey Milk Lesbian-Gay-Bisexual Democratic Club, Hayes Valley Neighborhood Association, Roller Divas, San Francisco Bicycle Coalition, San Francisco League of Conservation Voters, San Francisco Tomorrow, UC Blades

This site was not paid for by any committees. It was not organized by paid political consultants.
Instead it was created by volunteers who are trying to save the park.

DESTINATIONS

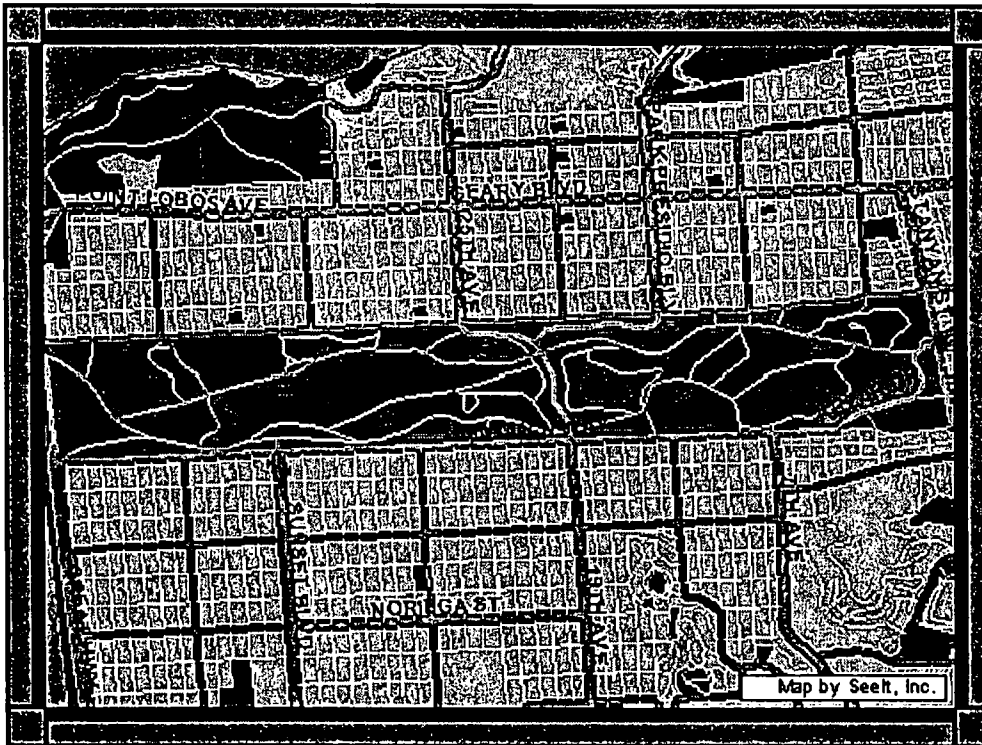
Golden Gate Park

EVENTS

ORGANIZATIONS

DOCUMENTS

IMAGES



Brief History (see Archives for more):

Golden Gate Park, one of the largest man-made parks in the world, was developed on a site consisting mostly of sand dunes. In 1870, when the 1017 acre area was selected, few people were in favor of its location. At that time San Francisco was only a fraction of its present size, and the park lay far beyond the city's developed limits.

The lush landscaping that characterizes the park today bears little resemblance to the former state of drifting sand and stiff winds. An entirely new ecological system had to be developed and sustained within the dunes; a monumental task thought by many to be impossible.

The initial design for Golden Gate Park was created by a young civil engineer named William Hammond Hall. He had been retained to prepare a survey and topographic map of the park site in 1870. The following year he became its first superintendent and remained in that position for five years. Innovative sand reclamation techniques were applied to the dunes and gradually they were brought under control. By 1876 when William Hammond Hall resigned, Golden Gate Park had already become

Basketball: Practice courts are located on the Panhandle. Free play.

Bicycling: 7.5 miles of designated paved trails extend from the tip of the Panhandle through Golden Gate Park to Lake Merced. Bicycle trails within the park are indicated on the map. In addition, some park roads are available for bicycling on Sundays when they are closed to vehicular traffic. A bicycle racing track is located at the Polo Fields. Bicycles can be rented at many locations adjacent to the park and at Stow Lake. Bicycling is allowed on designated paths only.

Boating: Pedal, electric, and row boats are available for rent at Stow Lake, opposite 17th Avenue. No private launching ramps. For information and rates, phone 752-0347.

Fly Fishing: Casting pools are located adjacent to Angler's Lodge opposite the Bison Paddock. Free, bring your own equipment. For information call 386-2630 on Saturdays.

Handball: There are two indoor and two outdoor handball courts located north of the "Big Rec" baseball field opposite 7th Avenue. No reservations required. Free. Bring your own equipment

Petanque: A court is located opposite 38th Avenue. Bring your own equipment. No reservations required. Free.

Directions:

From the Bay Bridge (westbound, Hwy. 80), take Hwy. 101 North (Golden Gate Bridge). Take the Ninth Street exit and follow the detour signs to Fell Street. Take Fell Street to the Park (where Fell crosses Stanyan Street and becomes John F. Kennedy Jr. Drive). The Recreation and Park Department Administrative Offices will be on your right as you enter the Park.

From Marin County

From the Golden Gate Bridge (southbound, Hwy. 1), take the Golden Gate Park/19th Avenue exit. Eventually, this will become Park Presidio Blvd. Follow the signs to Golden Gate Park (if you don't, you will end up on a road going through the Park; you will not be able to get off this road to get into the Park).

From the Peninsula

Take Hwy. 101 north towards the Golden Gate Bridge. Take the Fell/Laguna Street exit; continue straight coming off the exit and this will put you onto Fell Street. Take Fell Street to the Park (where Fell crosses Stanyan Street and becomes John F. Kennedy Jr. Drive). The Recreation and Park Department Administrative Offices (McLaren Lodge) will be on your right as you enter the Park.

Address:	Stanyan & Great Highway	Acres:	1,017.0
Phone:		Date Purchased:	1870
Type:	<i>Major Parks</i>		
Activities:			



SAN FRANCISCO

HOME

RECREATION AND PARKS

FEEDBACK

DOCUMENTS

Relative to the Conservatory

Date: 12/29/1877 **Author:** N/A
Type: Historical
Location:
Organization:

MEMORANDUM PREPARED FOR LORIS DI GRAZIA, President, and MISS MARY CONNELLY, Secretary
Recreation and Park Commission San Francisco, California

The following are excerpts from the minutes of the Board of Park Commissioners relative to the Conservatory:

December 29, 1877 Messrs. E. L. Sullivan, Wm. Alvord and Louis McLane: Gentlemen:

The late James Lick, in his lifetime, at heavy cost imported and prepared the materials now stored at his homestead in San Jose, where they were designed to be erected, two large and beautiful conservatories, modeled after those in the Kew Gardens, London.

These, after his death, were offered for sale by his trustees and have been purchased by the following gentlemen, : Wm. Alvord, A. J. Pope, Wm. F. Whittier, James Irvine, Charles Main, W. P. Fuller, J. G. Kittle, M. P. Jones,, J. McDonald., Adam Grant, Wm. F. Babcock, R. N. Graves, Samuel Crim, Isaac E. Davis, Charles Lux, George C. Hickox, Milton S. Latham, W. W. Montague, A. P. Hotaling, Robert C. Johnson, Charles Crocker, A. L. Tubbs, J. G. Eastland, S. L. Jones., C. Spreckels, Leland Stanford and G.A. McDonald, who desirous of giving what they believed will be a very desirable addition to the Golden Gate Park, and which will contribute to the future pleasure of the inhabitants of this City, have each contributed In equal amount toward the purchase and for that purpose.

Acting as a committee for and in behalf of the purchasers, we respectfully ask you, as the representatives of that great public trust, to accept for the park this gift exacting only the condition that the conservatories shall be erected in the park within 18 months from this date, put in good order and so maintained thereafter for the use and benefit of the public.

Very respectfully,

James Irvine
W. F. Whittier

Letter in reply.

San Francisco, December 29, 1877

Messrs. Jas. Irvine and W. F. Whittier

Gentlemen:

We have the pleasure to acknowledge the receipt of your communication of this date., tendering to the people of San Francisco through the Park Commissioners, two conservatories imported from England by the late James Lick. On behalf of the public we thank you and the generous subscribers to the purchasing fund for so valuable a donation to Golden Gate Park and if sufficient appropriations are made, the buildings will certainly be erected within the time you prescribe.

Very respectfully,

/s/-W. L. Sullivan

Wm. Alvord

Louis McLane

Chairman of the Board authorized to communicate with San Francisco delegation in the Legislature and ask for funds. Question of location was deferred.

February, 1878 -- President of the Board reported that he had had a conference with the Chairman of the S. F. Delegation concerning the Conservatories and as a result, the bill appropriating \$40,000 was passed by the Legislature.

May, 1878 - Board of Supervisors authorized the Park Commissioners to expend \$40,000 on conservatories.

May 28, 1878 - Mr. F. A. Lord of Lord and Burnham Co. submitted a proposal to erect conservatories for \$2,050.00. Proposal adopted with the provision being made that all materials be purchased at the lowest possible price and that all benefits usually allowed to contractors be credited to the Park Commissioners. Work to be pushed to completion without delay, on a site selected by the Park Commissioners.

Concerning the Golden Gate Park Conservatory which was originally the property of Mr. James J. Lick, a wealthy resident of San Francisco and later of San Jose, it is a replica of one in the Royal Botanic Gardens at Kew, near London, England. It was imported at great expense by Mr. Lick, brought around the Horn and was taken to his estate in San Jose. Mr. Lick died before it could be erected and the Society of California Pioneers fell heir to it.

The State Legislature appropriated \$40,000 for grading the site and erecting the building. The heating apparatus was shipped to San Francisco on the steamer "Georgia" and the ship was lost at sea. The Commissioners paid \$4,419.48 for the material since it was shipped at the risk of the buyer. Some of the cargo was salvaged and sold with proceeds going into the Park Fund. The building was completed in 1879.

On June 5, 1883 at 9:30 p.m., a fire broke out, supposedly due to a faulty heating arrangement. Chief Acannel with Sergeant Nichols hurried out with Hose Company No. 2, but they could do nothing for there were no fire hydrants in the Park. The garden hoses in the conservatory were of little help because of low pressure and before the fire could be stopped the central dome was destroyed.

After many months,, Charles Crocker donated \$10,000.00 and the building was restored to its former beauty in 1884.

1911, In Lewis Francis Byington's The History of San Francisco, on page 397 appears the statement: ". . . the conservatory. . . as added in 1877, . . . presented to the city after his (Lick) by the trustees of his will."

In the Municipal Reports, San Francisco, 1878-79, page 87, appears: "It is one of the largest and most admirably appointed structures of its kind in the United States."

In a recent book, San Franciscols Architectural Heritage, a Junior League of San Francisco publication (1968) mentioned:

"When the Conservatory was erected in 1879, it was one of the largest in America with its 15,000 square feet of floor space".

On March 26, 1970, at the 420th regular meeting of the Recreation and Park Commission, the following resolution(No. 8286) was adopted:

RESOLVED, that this Commission does hereby recommend that the Conservatory in Golden Gate Park be registered as a State of California Landmark, and that an application for same be filed with the California Historical Landmarks Advisory Committee for the approval of the Director of Parks and Recreation of the State of California; and

FURTHER RESOLVED., that placement of a plaque with the following suggested wording:

"THE CONSERVATORY

The first large municipal greenhouse in California is a replica of a conservatory in the Royal Botanic Gardens, Kew, England. Gift to the City by public-spirited citizens from James Lick's estate. Structure erected in 1879.

California Historical Landmark No. Plaque placed by the Recreation and Park Commission with the cooperation of the California Historical Society.

Dated

Additional Information Located at Bottom of This Page

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Additional Information
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DOCUMENTS

Conservatory of Flowers Restoration Fact Sheet

Date:

Author:

Type: General Information

Location:

Organization:

The Conservatory of Flowers in Golden Gate Park is one of the most magnificent examples of Victorian architectural design in the world. This building, listed as a San Francisco Landmark, a California Landmark, and a National Register Landmark, has served as a working greenhouse for the Recreation and Park Department since 1878, housing an extensive collection of rare and endangered plants.

The wood and glass Conservatory has survived 117 years of heat and high humidity, and, in recent years, limited maintenance. As a result, much of the wooden skeleton is rotted, and the glazing around the glass panes has become brittle and loose. The Conservatory has undergone piecemeal restoration in 1958, 1966, 1978 and 1982. The late winter storms of February 1995 and the recent storms of December 1995 have destroyed major sections of the dome room of the greenhouse and approximately 15% of the plant collection. Most of the sensitive plant material that remains has been moved to the wings or to off-site greenhouse storage. There are a few extremely rare plants that were planted in the 1880s that cannot be moved and have been gravely affected by the cold weather.

The Building

Opened in 1878, the Conservatory of Flowers is the oldest building in Golden Gate Park and the oldest public greenhouse in California. A glass and wood construction of Victorian design, its 12,000 square feet include a central dome room and flanking wings, similar in appearance to Kew Gardens in London.

The Conservatory is a designated City Landmark and a California Historical Landmark, and is listed in the National Register of Historic Places.

A 1995 condition assessment found that the Conservatory has significant structural deficiencies, which with the absence of seismic strengthening pose a life-safety risk in the event of earthquakes or storms such as occurred in March and December 1995.

The Conservatory does not meet Americans with Disabilities Act requirements.

The hot and humid environment of a working greenhouse has caused deterioration of wood elements. Periodic wood replacement has occurred over the years.

The 1989 earthquake loosened the dry and brittle glazing compound, and many windowpanes have slipped.

Winter storm damage has made it clear that repair will not do the job. The Conservatory must undergo

restoration.

The Recreation and Park Department will make decisions regarding restoration, in accordance with the U.S. Secretary of Interior Standards for Historic Preservation Projects, following substantial public input.

The Collection

The Conservatory houses an important and valuable botanical collection.

The collection includes more than 700 of the 1,000 known species of high altitude orchids, the only such collection in the world.

Many plants in the collection come from the rainforests of Central and South America and the Pacific Islands where destruction of their native habitats for logging and farming have endangered their survival.

The U.S. Department of the Interior designated the Conservatory as a repository for endangered plants seized at border crossings.

The Conservatory maintains its plant conservation program while economic constraints have forced many other conservatories to abandon them in favor of more commercial displays.

The Conservatory trades plants with other major private and public collections, such as the New York Botanical Gardens, Missouri Botanical Gardens and the Atlanta Botanical Garden.

Botanists at the California Academy of Sciences do research at the Conservatory on flora from various eras for exhibit purposes.

The Conservatory provides educational services to many communities. Tours and programs demonstrate the economic value of plants and explain why some species are endangered and why they are important in plant evolution.

What Will It Cost and Who Will Pay For It?

The estimated cost of restoration is \$12 million. The Recreation and Park Department has applied for \$9 million from the FEMA Hazard Mitigation Grant fund, which would require the City to provide at least \$3 million in matching funds, in cash and in-kind services.

The Board of Supervisors appropriated \$250,000 toward the design phase of the Conservatory rehabilitation, which counts toward the FEMA matching funds requirement.

Publicity following storm-damage generated over \$45,000 in donations, mostly in small amounts, from the public, to a fund held by the Friends of Recreation and Parks.

The Recreation and Park Department continues a "people's campaign" to encourage donations, fundraising efforts, and publicity for the rehabilitation project.

Several local organizations have begun to raise funds toward the match: The San Francisco Orchid Society has hosted a benefit preview of its 44th Annual Show and Sale; the Conservatory Foundation has held a Chocolate Extravaganza fundraiser; Macy's has held a benefit preview of its Spring Flower Show; Rod McLellan Orchid Nursery has conducted a benefit auction of orchids from Eva Gabor's estate.

Additional Information Located at Bottom of This Page

Recovery in Bloom



PHOTOS BY FREDERIC LARSON/THE CHRONICLE

The Conservatory of Flowers, extensively damaged by storms, is undergoing restoration.

Golden Gate Park shedding its bedraggled look

About this time last year, some rather unfriendly folks were doing their best to burn down a little city garden spot known as Golden Gate Park.

KEN GARCIA

The group was part of a vast homeless collective that had set up house near the very center of the park. As many as 80 campers had begun calling the site home, and some personal skirmishes led one disgruntled group to start lighting fires.

One of the blazes grew so big that it almost got away from the San Francisco Fire Department,

which needed nearly 70 firefighters and a dozen pieces of equipment to put it out. The fire ignited a number of Chronicle columns and news reports on the state of the fabled park — stories that produced a much-publicized confrontation between the media and the mayor and generated a flurry of activity in the West's largest urban retreat.

But what a difference a year makes.

Today, the fire site has been cleared and graded. There's not a trace of the makeshift homeless

BLOOMING: Page A6 Col. 1



The redone entrance at Stanyan Street.

SF Chronicle

DOMING: Golden Gate Park Rejuvenation

Page 1

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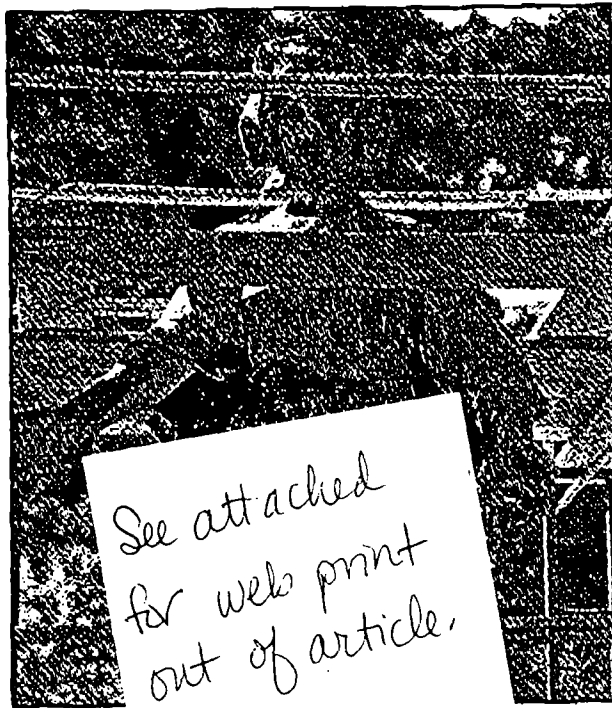
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The character of the park has been improved," said super-



See attached for web print out of article.

A monument to pioneer mothers of California near Stow Lake that features a woman and her two children is getting a face-lift.

CHRONICLE

30-year veteran ship park clear out a been run-down still have something like it was

Still, a number of major hurdles remain, not the least of which is that all the park's capital campaigns may end up competing with each other and with numerous other fund-raising drives around San Francisco.

"It's not like a bunch of rich people woke up today and said, 'Boy, I haven't contributed to an underground parking garage lately,'" said financier Warren Hellman, who is co-chairing the "Heart of the Park" campaign along with George Hume.

And the park has problems that money cannot address. The forested preserve suffers from the ravages of age, disease, chronic overuse and years of political neglect. It remains subject to the whims of the Recreation and Park Commission, one of the weakest oversight panels in San Francisco.

And it has been hurt by the efforts of special interest groups, including so-called homeless advocates and others who have fought the park's cleanup and rebuilding plans.

The Rec and Park Commission recently voted to close a number of roads in the park to cars at the strident behest of bicycle and skating groups — even though commissioners acknowledged that

visible effects of those closures and those groups have to fight for more limited cars — even though a vast majority of city residents supports keeping the park's roads open.

Also, Mayor Willie Brown, whose initial tirade set off much of the action to clean up the park, has not shown the same interest in the park's rejuvenation as he did when it was in crisis — such as offering up one of his flighty ideas to use helicopters with heat-seeking infrared cameras to spot homeless enclaves.

As with other civic problems, the mayor still tends to shoot from the hip, like when he announced this year that he was initiating a national search for a new parks director — even though his acting general manager, Joel Robinson, has earned high marks for reorganizing the department and soliciting ideas from the community for the renovation of a number of neighborhood parks.

So while the park's turnaround has begun, it is not guaranteed. But at least it is no longer ignored, certainly not by city residents — and definitely not by City Hall.

"It's long, slow journey, but the park has become the focus of a huge amount of attention in both political and private circles," said Donna Ernston, executive director of Friends of Recreation and Park. "It's just amazing how much more focus there is on city parks in gen-

The revival of Golden Gate Park — as well as the city's other 190 neighborhood parks — has become a litmus test for every politician in the city. The mayor and supervisors increased the budget for Golden Gate Park by \$1.2 million to \$12 million, this year — the first spending increase in almost 10 years. The increase has been matched by a surge in private donations, with Ernston's nonprofit group generating almost \$3 million and attracting nearly 2,000 new members in the past 12 months.

There's been no clearer example of the shift in the park's focus than the decision by trustees of the M.H. de Young Memorial Museum and the California Academy of Sciences to remain as cornerstones of the 1,017-acre treasure, when once appeared all but certain that one or both institutions would move downtown.

"The museum's board has been all over the map in the past two years, but I think they've finally realized that they need to capitalize on the public's desire for them to remain in their longtime home," one museum docent said. "If the trustees can prove that they're listening, they'll offset some of the will they generated by treating the museum as if it were a private plaything. San Franciscans clearly want the museum in the park."

The board's announcement comes at a time when fund raising for the park has reached an all-time high. The campaigns are expected to address a number of long-term needs in the park, including:

- The rebuilding of the conservatory area and the addition of an underground parking garage that voters approved in June. The campaign being co-chaired by Hellman has raised \$8 million so far toward its goal of \$40 million.

- Restoring the storm-damaged Conservatory of Flowers, which is now listed on the World Monuments Fund's 100 most endangered cultural heritage sites.

local philanthropist, who has asked to remain anonymous, has pledged \$5 million toward rebuilding the conservatory — if park officials can match it with \$10 million in private contributions.

Recovery in Bloom Golden Gate Park is shedding its bedraggled look

KEN GARCIA

Tuesday, November 3, 1998

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URL: <http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/1998/11/03/MN83353.DTL>

About this time last year, some rather unfriendly folks were doing their best to burn down a little city garden spot known as Golden Gate Park.

The group was part of a vast homeless collective that had set up house near the very center of the park. As many as 80 campers had begun calling the site home, and some personal skirmishes led one disgruntled group to start lighting fires.

One of the blazes grew so big that it almost got away from the San Francisco Fire Department, which needed nearly 70 firefighters and a dozen pieces of equipment to put it out. The fire ignited a number of Chronicle columns and news reports on the state of the fabled park -- stories that produced a much-publicized confrontation between the media and the mayor and generated a flurry of activity in the West's largest urban retreat.

But what a difference a year makes.

Today, the fire site has been cleared and graded. There's not a trace of the makeshift homeless condominiums. A few dozen new Torrey pine trees have been planted.

If there is one site that offers signs of Golden Gate Park's slow but steady turnaround, this is it.

Perhaps symbolically, park officials are planning to turn the former burning ground into a picnic area.

"It's hard to believe it's only been a year," said Dan McKenna, a former urban forester who was recently named assistant park superintendent as part of a large reorganization in the Recreation and Park Department. "Some of the changes in the park have been pretty dramatic."

In fact, longtime gardeners, police officers and others who work in the park each day say Golden Gate Park is in the best shape it has been in in more than a decade.

The telltale homeless encampments along Stanyan Street and parts of the west end of the park are memories. The notorious Alvord Lake area has been rebuilt, with a new entrance and amphitheater. The junkies and gutter punks who once called the area home have moved on

--to parks unknown.

And although there is not enough money to complete the more ambitious plans of rebuilding the Children's Playground and Sharon Meadow, a number of capital campaigns have begun to bring at least some of the park's institutions back to their past glory.

A \$15 million fund-raising drive has started to rebuild the historic Conservatory of Flowers, and the trustees of the M.H. de Young Memorial Museum recently announced that they plan to raise money privately to fix their earthquake-damaged structure. Another park campaign is raising money to rebuild the band concourse and construct an underground parking

garage that is expected to boost attendance at the de Young and the California Academy of Sciences.

The park's west end has also undergone a quiet transformation, with the reopening of the historic Beach Chalet and newly renovated soccer fields. In the works are bicycle and pedestrian paths and a community center.

"The character of the park has definitely improved," said supervising gardener Kevin Shea, a 30-year veteran of the city's flagship park. "We've managed to clear out a lot of areas that had been run-down, and though we still have some problems, it's nothing like it was."

Still, a number of major hurdles remain, not the least of which is that all the park's capital campaigns may end up competing with each other and with numerous other fund-raising drives around San Francisco.

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- if park officials can match it with \$10 million in private contributions.

- The Alvord Lake area -- home of the largest visible homeless encampments in the park last year -- has been refurbished with a new entrance and outdoor amphitheater area. However, park officials are waiting for another infusion of funds before they begin renovation of the Children's Playground and surrounding areas.

"We have had what could only be described as a banner year, especially (compared with) where we were at this point last year," Robinson said. "We're slowly bring the park back to the standard at which it ought to be. And I can assure you that it will never again fall into the state that it was in."

GOLDEN GATE PARK IMPROVEMENTS

A few areas in Golden Gate Park have shown dramatic improvement during the past year. Among the sites are:

BEACH CHALET: The land around the historic Willis Peck building has been replanted, with new trails, gardens and picnic areas. Construction for a community center will begin soon, as will improvement to the sand dunes landscaping, pathways, signage and lighting.

ALVORD LAKE: The Stanyan Street entrance to the park has been completely redone, with the addition of new outdoor lighting, walkways and an amphitheater. Until more repairs are done, however, the section that had the largest concentration of homeless in Golden Gate Park is still fenced off.

CONSERVATORY VALLEY: The departure of the larger homeless camps have allowed

PANHANDLE: The oldest part of the park has been cleared of many old and dying trees and a number of new flower beds have been planted. Gardeners say the Panhandle hasn't received as much attention in years.

©1998 San Francisco Chronicle Page A1

1. James Liche, a native of San Jose, built the original greenhouse. Mr. Liche was a very eccentric man and when the San Jose Mercury made disparaging comments about him he pledged that he would never leave anything to the city of San Jose. That is why the Greenhouse is located in San Francisco. The greenhouse, which now houses all sorts of rare plants, was originally used by Mr. Liche to hybridize peas.
2. People have been found swimming in the conservatory's pools before.
3. People have dropped their snakes in the conservatory's gardens so they will have a "good" home.
4. In 1982 when the Academy of Sciences was remodeling their alligator facilities, the alligators temporarily lived in the Conservatory's lily pond. Although the conservatory staff shut the door the lily pond, people often wandered in and were surprised to find alligators there.
5. A prehistoric plant called the *Zamia Lindennii*, from Ecuador is housed at the Conservatory. From 1898 until 1984, the Conservatory thought that the plant was a fairly common South African one called *Encephlartos*. It was not until 1984 that an American taxonomist discovered this mix-up. The *Zamia Lindennii* is the only such plant in the United States.
6. The conservatory has the only high altitude orchid collection in the United States. Because of the mild San Francisco climate the orchids can easily survive there. The first shipments of (120 lbs) of orchids that the conservatory received had a very interesting trip to San Francisco. The orchids, coming from Columbia, somehow got lost by the Columbian airlines, and went from Columbia to Atlanta to Houston to L.A. and finally to San Francisco. Amazingly the orchids survived all of these "hot" cities (the orchids aren't supposed to be exposed to heat over 72 degrees) and customs.