

CITY OF BEVERLY HILLS

**STAFF REPORT** 

Meeting Date:	July 24, 2007	
То:	Honorable Mayor & City Council	
From:	Ken Pfalzgraf, Urban Forest Supervisor	
Subject:	Canary Island Date Palm Street Tree Master Plan	

### EXECUTIVE SUMMARY

To address problems in the City of Beverly Hills street tree palm trees, namely loss and decline in the aging Canary Island Date Palm street tree population and looming challenges with the safe maintenance of very tall Mexican Fan Palms, a Street Tree Master Plan phase has been developed.

Replacement tree theme and tree type recommendations for the 15 affected streets were developed by a consultant. Criteria for tree type selection for the recommendations were based on considerations of theme and scale of the individual streets, tree type appropriateness to the parkway widths and availability of nursery stock of appropriate size for the foreseeable future.

After being accepted by the Recreation and Parks Commission, replacement tree theme and tree types for the individual streets were presented to property owners on affected streets in a series of 5 community meetings, followed by a balloting of property owners on affected streets to determine their preference for replacement tree theme and tree type. Ballot response rates were low overall, leading to a Recreation and Parks Commission recommendation to staff to re-ballot property owners that did not respond to the original balloting. The second balloting effort improved overall response rates to 50 percent or more on the majority of the 15 affected streets.

The replacement tree theme and tree type recommendations included in this report are based on the ballot responses of affected property owners. On the majority of affected streets, a majority of responding property owners opted to retain a palm tree theme for their street.

The "Canary Island Date Palm Street Tree Master Plan" is a two phase project. To summarize this project:

- In the first phase, currently vacant Canary Island Date Palm sites will be filled, with streets with the highest loss/infection rates given the highest priority. By prioritizing the project in this manner, uniformity will be built into the replacement tree canopy. Therefore, it may not prove prudent to fill currently vacant sites on streets with low loss rates until such time as overall loss rates for the street exceed 50 percent. Additional replacement trees will be installed in the future as additional Canary Island Date Palms are lost. The replacement of odd type trees will occur as outlined in the plans described in this report for the individual streets. It should be anticipated that the majority of Canary Island Date Palm replacements will occur within the next 25 years. The anticipated cost for Phase I of the Canary Island Date Palm Street Tree Master Plan is \$5,379,200.00.
- The second phase of the project, the removal and replacement of Mexican Fan Palms that cannot be safely maintained, will occur over the next 35 years. The removal of palms will scheduled as safe working heights (over 110 feet tall) are exceeded on individual streets. The anticipated cost for Phase II of this project is \$4,383,400.00.

The Canary Island Date Palm Street Tree Master Plan is a two-phase, 25-35 year project, with an anticipated total cost of \$9,762,500.00, based on current market prices.

Attachment: Comprehensive staff report

# **INTRODUCTION**

The community outreach process for the Canary Island Date Palm Street Tree Master Plan has been completed. Following a series of community meetings with property owners affected by problems with aging palm trees on 15 streets in the City, staff balloted affected property owners to determine their preferences regarding replacement tree theme and tree types. Based on the results of this balloting, staff has formulated this report of replacement tree recommendations, along with fiscal considerations, for each of the affected streets. Property owners on affected streets were advised of proposed staff recommendations for their street in a mailing prior to these recommendations being presented to, and accepted by, the Recreation and Parks Commission during May of 2007.

# BACKGROUND

In response to several decades of escalating levels of loss due to disease and structural deficiency in the aging Canary Island Date Palm street tree population, staff conducted a tree by tree data based assessment in 2001. After being computerized and sorted electronically, the data was presented as part of a staff generated population dynamics study publication titled "The Activity of Fusarium Wilt in the City of Beverly Hills Canary Island Date Palm Street Tree Population" (Pfalzgraf. 2002). In addition to identifying historic loss and infection trends ranging from 15% to 83% on the 15 streets affected, the publication identified issues of causality, outlined best management practices for preserving remaining Canary Island Date Palms and reviewed several palm tree types that could be considered as replacements for lost Canary Island Date Palms in the interest of preserving the "palm lined" image of affected streets.



Figure 1- Fusarium infected Canary Island Date Palm, N. Canon Drive

Prior to its release, the document was peer reviewed by a panel including Dr. M. Baaziz, an International Foundation of Science award recipient for his work with genetic improvement of date palm to limit Fusarium susceptibility. The peer review group agreed with the publication finding that the use of the Canary Island Date Palm as a replacement tree would prove futile considering what is known about the Fusarium disease (see Fig. 1) and its residual tendency at infected sites and that replacement tree options seem limited to palm types that are not susceptible to the Fusarium disease or non-palm type trees.



Figure 2- Deflection of tall Mexican Fan Palm stem caused by weight of climber

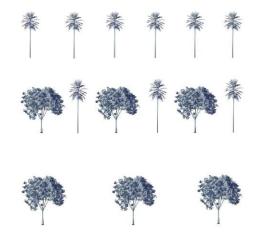
The publication also called attention to looming challenges with the safe maintenance of very tall Mexican Fan Palms (see Fig. 2) that had been interplanted with Canary Island Date Palms on many of the palm lined streets in the City.

After reviewing a report on the technical aspects of problems with aging palms in the City and some preliminary reforestation solution models in an October 25, 2005 report, City Council supported a staff recommendation to begin the Canary Island Date Palm Street Tree Master Plan community outreach process. The goal of this process was to identify property owner sentiment regarding replacement trees for affected streets.

The Recreation and Parks Commission Urban Forest liaison assisted staff in selecting consultant North East Trees from a panel of urban forestry consulting firms to assist with the development of this Street Tree Master Plan phase. The role of the consultant was to provide a set of replacement tree theme models and tree type recommendations for each affected street. Scale, tree type appropriateness to parkway width and future availability of replacement trees in the size and quantity needed were included in the criteria for replacement tree selection. The consultant included anticipated project cost data based on a survey of industry pricing for applicable work.

A series of replacement tree theme and tree type models for each affected street was presented at the December 2006 meeting of the Recreation and Parks Commission. The Commission moved to accept the following solution model themes to be presented to property owners as applicable:

- A uniform planting of Mexican Fan Palms
- An alternating planting of Mexican Fan Palms and a hardwood tree type to be selected through the ballot process
- A uniform planting of a hardwood tree type to be selected through the ballot process

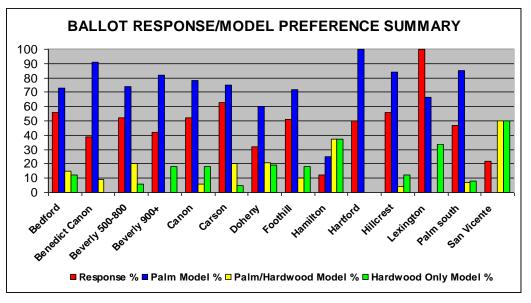


These models were subsequently presented at a series of five community meetings held in January of 2007. Property owners were invited to the meetings based on a combination of their geographical location and the rate of palm loss/infection on affected streets. At each meeting, attendees were advised of the technical aspects of the problems facing the aging palm trees, followed by a presentation of the theme and replacement tree type models for the individual streets. Turnout to the community meetings was low, with approximately 2% of invited property owners attending (21 of 890).

The community meetings were followed with the balloting of property owners on the 13 of 15 affected streets. The mailing contained technical information on problems facing palms on the streets, information on the replacement tree themes and tree types being presented for the street and a ballot for residents to return to the City to define their preference on replacement tree theme and tree type. On the other 2 streets, residents were asked to present any objections they have to a continuation of the planting of tree types that were made as test plantings in the past. Property owners were asked to respond by March 10, 2007.

While no objections were received regarding a recommendation to continue the planting of the test tree types on the 2 streets where planting had been made in the past, ballot response rates from the other 13 streets were low, averaging 32% overall. When presented with these results at the March 2007 meeting, the Recreation and Parks Commission moved 5-0 to recommend that staff re-ballot property owners that did not respond to the first balloting in hopes that a response rate of 50% or more would be achieved.

The second balloting improved overall response rates to 45%, with the majority of the streets reaching or exceeding the desired 50% response rate. The ballot response rates and replacement tree model preference results for affect streets are seen at Chart 1.



Property owners on affected streets were advised of the results of the balloting and provided with pending staff recommendations for their streets in an early May 2007 mailing. Property owners were encouraged in this mailing to attend the May 22, 2007 Recreation and Parks Commission meeting if they wished to address the Commission regarding the pending recommendations for their street.

Three property owners attended the meeting to address the Commission on this issue. One property owner suggested that, when replacing palm trees, the City consider decreasing the number of palms on the streets to improve line of site problems for residents exiting their driveways and also to improve the overall aesthetic of the streets. Another property owner was pleased to hear that his street was receiving a high priority rating since it had lost many palm trees in the past. The final resident expressed a concern that the loss of palm trees would have a detrimental effect on the image of the City and was pleased to hear that the property owners on a majority of streets had opted to retain a palm tree theme.

After hearing the staff report and considering public comment, the Commission moved 5-0 on May 22, 2007 to forward the staff report on replacement tree recommendations and project fiscal considerations for the Canary Island Date Palm Street Tree Master Plan to City Council.

## **REPLACEMENT TREE RECOMMENDATIONS**

The following. by street. ballot summaries and replacement tree recommendations are based on the results of balloting of property owners on affected streets. The order the recommendations are presented in is based on the severity of loss/current decline symptoms affecting Canary Island Date Palms<sup>\*</sup>, by street. The reforestation effort should be implemented in this order in the interests of servicing property owners who have been without trees the longest first. A secondary benefit of this approach is that greater uniformity in the tree canopy of the future will be best achieved by planting trees on streets with the highest vacancy/infection rates first. If one were to begin planting on streets with low loss rates, there would ultimately be a notable disparity in the overall heights of the trees in the future, especially when the replacement tree type is a palm.

Fiscal impact data is given for; the replacement of currently vacant sites where Canary Island Date Palms have been lost in the past, the cost to remove and replace Canary Island Date Palms that will be lost in the future and the cost to remove and replace Mexican Fan Palms that become too tall to maintain (110 feet) with standard sized tree trimming booms (95 foot height) at a point referenced for each street in the future. This data is based on current tree industry cost estimate data provided by consultant North East Trees.

<sup>\*</sup>For reference, City-wide historic loss/current decline rates for Canary Island Date Palms average 40 percent on the 15 affected streets, with by-street rates ranging from a low of 15% to a high of 83%. Priority rating recommendations based on historic loss/current decline rate severity where 70% or more = High, 35%-69% = Medium, 34% or less = Low.

The total cost for Phase I of the project (filling of currently vacant Canary Island Date Palms and removal/replacement of Canary Island Date Palms that decline in the future) is \$5,379,200.00.

The total cost for Phase II of the project (removal and replacement of tall Mexican Fan Palms with same of shorter height) is \$4,383,400.00. It is plausible to anticipate that, considering that there will be an established canopy of Mexican Fan Palms on most streets as part of the Canary Island Date palm replacement project (Phase I), property owners may not see the value in replacing the tall Mexican Fan Palms with an additional canopy of smaller Mexican Fan Palms. If this proves true, the cost of Phase II of the project would be reduced to \$1,830,900.00, a savings of \$2,541,600.00.

Street	I. Replacement of CIDP	II. Remove/replace tall MFP*	Total Project
Lexington	\$59,900.00	\$63,000.00	\$122,900.00
Benedict Canon	\$365,500.00	\$441,000.00	\$806,500.00
Tower	\$66,000.00	\$0.00	\$66,000.00
Hartford Way	\$39,500.00	\$81,000.00	\$120,500.00
Gale	\$168,000.00	\$0.00	\$168,000.00
San Vicente	\$112,300.00	\$0.00	\$112,300.00
Canon	\$529,000.00	\$462,000.00	\$991,000.00
Hillcrest	\$406,300.00	\$598,200.00	\$1,004,500.00
Foothill	\$606,400.00	\$573,000.00	\$1,179,400.00
Hamilton	\$355,200.00	\$0.00	\$355,200.00
Bedford	\$767,500.00	\$615,000.00	\$1,382,500.00
Beverly	\$801,100.00	\$591,000.00	\$1,392,100.00
Carson	\$146,600.00	\$111,000.00	\$257,600.00
Doheny	\$409,000.00	\$455,100.00	\$864,100.00
Palm	\$546,900.00	\$393,000.00	\$939,900.00
Total	\$5,379,200.00	\$4,383,400.00	\$9,762,500.00

Whole project fiscal data is seen at Chart 2.

Chart 2

The total anticipated cost for this project is \$9,762,500.00. The timeframe for this project is anticipated to be 25-35 years.

Ballot result summaries, replacement tree recommendations and fiscal impact data for affected streets are as follows:

## Lexington Road (1700 block)

Priority rating based on Canary Island Date Palm combined historic loss/currently infected rate of 83%: High

Ballot response percentage: 100% (3 responses from 3 addresses balloted)

Replacement tree preference (based on ballot responses):

Mexican Fan Palm only- 66.6%

Hardwood Canopy tree only-33.3%

### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of MFP installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 10 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (7) with MFP - \$12,600.00

Future removal/replacement of CIDP (11) with MFP - \$47,300.00

CIDP total: \$59,900.00

II. Remove and replace tall MFP (21) with MFP - \$63,000.00

Total reforestation cost for Lexington Road: \$122,900.00

## Benedict Canon

Priority rating based on Canary Island Date Palm combined historic loss/currently infected rate of 77%: High

Ballot response percentage: 43% (12 responses from 28 addresses balloted)

Replacement tree preference (based on ballot responses):

Mexican Fan Palm only- 92%

Alternating Mexican Fan Palm/hardwood canopy tree-8%

Hardwood Canopy tree only-0%

#### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 10 years).

#### Fiscal impact:

I. Fill existing CIDP vacancies (43) with MFP - \$77,400.00

Future removal/replacement of CIDP (67) with MFP - \$288,100.00

CIDP total: \$365,500.00

II. Remove and replace tall MFP (147) with MFP - \$441,000.00

Total reforestation cost for Benedict Canon Drive: \$806,500.00

## Tower Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 77%\*: High

Ballot response percentage: no objections presented to continued use of Red Iron Bark Eucalyptus tree as a replacement for lost Canary Island Date Palms (0 objections from 14 addresses noticed).

### Recommendation:

Install 36 inch box size Red Iron Bark Eucalyptus (RIBE) trees into vacant sites where Canary Island Date Palms (CIDP) have been lost in the past. In interest of long term uniformity in the street tree canopy, replace existing California Fan Palms (CFP) with RIBE trees when current vacancies are filled. Install additional 36 inch box size RIBE trees as replacements for CIDP that are lost in the future.

#### Fiscal impact:

I. Fill existing CIDP vacancies with RIBE (4) - \$6,000.00

Remove CFP/replace with RIBE (4) -\$16,000.00

Future removal/replacement of CIDP with RIBE (11) - \$44,000.00

Total reforestation cost for Tower Drive: \$66,000.00

## Hartford Way

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 73%\*: High

Ballot response percentage: 50% (3 responses from 6 addresses balloted)

Replacement tree preference (based on ballot responses):

Mexican Fan Palm only- 100%

Alternating Mexican Fan Palm/hardwood canopy tree-0%

Hardwood Canopy tree only-0%

Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 10 years).

Fiscal impact:

I. Fill existing CIDP vacancies (10) with MFP - \$18,000.00

Future removal/replacement of CIDP (5) with MFP - \$21,500.00

CIDP total: \$39,500.00

II. Remove and replace tall MFP (27) with MFP - \$81,000.00

Total reforestation cost for Hartford Way: \$120,500.00

## Gale Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 70%\*: High

Ballot response percentage: no objections presented to continued use of Southern Magnolia tree as a replacement for lost Canary Island Date Palms (0 objections from 38 addresses noticed).

### Recommendation:

Install 36 inch box size Southern Magnolia (SM) trees into vacant sites where Canary Island Date Palms (CIDP) have been lost in the past. In interest of long term uniformity in the street tree canopy, replace existing California Fan Palms (CFP) with SM trees when current vacancies are filled. Install additional 36 inch box size SM trees as replacements for CIDP that are lost in the future.

### Fiscal impact:

I. Fill existing CIDP vacancies with SM (8) - \$12,000.00

Remove CFP/replace with SM (13) - \$52,000.00

Future removal/replacement of CIDP with SM (26) - \$104,000.00

Total reforestation cost for Gale Drive: \$168,000.00

## North San Vicente Boulevard

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 64%\*: Medium

Ballot response percentage: 22% (2 responses from 9 addresses balloted)

Replacement tree preference (based on ballot responses):

Alternating Mexican Fan Palm/hardwood canopy tree-50%

Hardwood Canopy tree only-50%

Mexican Fan Palm only- 0%

#### Recommendation:

Based on low ballot response rate, lack of clear property owner sentiment and site conditions (i.e. high traffic boulevard, narrow building setbacks), staff recommends installation of 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of MFP installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height.

#### Fiscal impact:

I. Fill existing CIDP vacancies (17) with MFP - \$30,600.00

Future removal/replacement of CIDP (19) with MFP - \$ 81,700.00

CIDP total: \$112,300.00

Total reforestation cost for North San Vicente Boulevard: \$112,300.00

## North Canon Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 54%\*: Medium

Ballot response percentage: 53% (33 responses from 62 addresses balloted)

Replacement tree preference (based on ballot responses):

Mexican Fan Palm only- 79%

Alternating Mexican Fan Palm/hardwood canopy tree-6%

Hardwood Canopy tree only-15%

### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 10 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (55) with MFP - \$99,000.00

Future removal/replacement of CIDP (100) with MFP - \$430,000.00

CIDP total: \$529,000.00

II. Remove and replace tall MFP (154) with MFP - \$462,000.00

Total reforestation cost for North Canon Drive: \$991,000.00

## Hillcrest Road

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 47%\*: Medium

Response percentage: 58% (52 responses from 89 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 83%

Alternating Mexican Fan Palm/hardwood canopy tree-4%

Hardwood Canopy tree only-13%

#### Recommendation:

Install 12 foot Mexican Fan Palms into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms (MFP) installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 15 years). In interest of uniformity, delay replacement of lost/declining California Fan Palms (CFP) until solution is implemented to replace MFP with heights in excess of 110 feet.

#### Fiscal impact:

I. Fill existing CIDP vacancies (37) with MFP - \$66,600.00

Future removal/replacement of CIDP (79) with MFP - \$ 339,700.00

#### CIDP total: \$406,300.00

II. Remove and replace tall MFP (84) - \$252,000.00

Fill existing CFP vacancies (6) - \$10,800.00

Remove CFP/replace with MFP (78) with MFP -\$335,400.00

FP total: \$598,400.00

Total reforestation cost for Hillcrest Road: \$1,004,500.00

# Foothill Road

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 46%\*: Medium

Ballot response percentage: 53% (52 responses from 99 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 73%

Alternating Mexican Fan Palm/hardwood canopy tree-10%

Hardwood Canopy tree only-17%

Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 15 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (55) with MFP - \$99,000.00

Future removal/replacement of CIDP (118) with MFP - \$507,400.00

CIDP total: \$606,400.00

II. Remove and replace tall MFP (191) with MFP - \$573,000.00

Total reforestation cost Foothill Road: \$1,179,400.00

## Hamilton Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 33%\*: Low

Ballot response percentage: 12% (8 responses from 65 addresses balloted)

Replacement tree preference (based on responses):

Alternating Mexican Fan Palm/hardwood canopy tree-37.5%

Hardwood Canopy tree only-37.5%

Mexican Fan Palm only- 25%

#### Recommendation:

Based on low ballot response rate, lack of clear property owner sentiment and site conditions (i.e. high traffic boulevard, narrow building setbacks), staff recommends installation of 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of MFP installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Replacement of existing Queen Palms (QP) with 12 foot MFP to occur with initial planting of vacant sites to encourage overall uniformity in street tree canopy. Increase heights of MFP installed as additional CIDP are lost in the future to maintain uniformity height.

### Fiscal impact:

I. Fill existing CIDP vacancies (3) with MFP - \$5,400.00

Remove existing QP/replace with MFP (22) - \$66,000.00

Future removal/replacement of CIDP (66) with MFP - \$283,800.00

Total reforestation cost for Hamilton Drive: \$355,200.00

## Bedford Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 26%\*: Low

Ballot response percentage: 59% (64 responses from 108 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 73%

Alternating Mexican Fan Palm/hardwood canopy tree-14%

Hardwood Canopy tree only-13%

Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 10 years).

Fiscal impact:

I. Fill existing CIDP vacancies (37) with MFP - \$66,600.00

Future removal/replacement of CIDP (163) with MFP - \$700,900.00

CIDP total: \$767,500.00

II. Remove and replace tall MFP (205) with MFP - \$615,000.00

Total reforestation cost Bedford Drive: \$1,382,500.00

## North Beverly Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 25%\*: Low

Ballot response percentage: 49% (46 responses from 93 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 76%

Alternating Mexican Fan Palm/hardwood canopy tree-15%

Hardwood Canopy tree only-9%

### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (Santa Monica to Sunset-approximately 5 years, north of Sunset-approximately 10 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (27) with MFP - \$48,600.00

Future removal/replacement of CIDP (175) with MFP - \$752,500.00

CIDP total: \$801,100.00

II. Remove and replace tall MFP (197) with MFP - \$591,000.00

Total reforestation cost North Beverly Drive: \$1,392,100.00

## South Carson Road

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 22%\*: Low

Ballot response percentage: 66% (21 responses from 32 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 71%

Alternating Mexican Fan Palm/hardwood canopy tree-24%

Hardwood Canopy tree only-5%

### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 20 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (5) with MFP - \$9,000.00

Future removal/replacement of CIDP (32) with MFP - \$137,600.00

CIDP total: \$146,600.00

II. Remove and replace tall MFP (37) with MFP - \$111,000.00

Total reforestation cost South Carson Road: \$257,600.00

## North Doheny Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 19%\*: Low

Ballot response percentage: 38% (46 responses from 122 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 58%

Alternating Mexican Fan Palm/hardwood canopy tree-20%

Hardwood Canopy tree only-22%

### Recommendation:

Install 12 foot Mexican Fan Palms into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms (MFP) installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 15 years). In interest of uniformity, delay replacement of lost/declining California Fan Palms (CFP) until solution is implemented to replace MFP with heights in excess of 110 feet.

Fiscal impact:

I. Fill existing CIDP vacancies (17) with MFP - \$30,600.00

Future removal/replacement of CIDP (88) with MFP - \$ 378,400.00

### CIDP total: \$409,000.00

II. Remove and replace tall MFP (113) with MFP - \$339,000.00

Remove CFP/replace with MFP (27) - \$116,100.00

Total reforestation cost for North Doheny Drive: \$864,100.00

## South Palm Drive

Priority rating based on Canary Island Date Palm combined historic loss/current decline rate of 15%\*: Low

Ballot response percentage: 47% (59 responses from 125 addresses balloted)

Replacement tree preference (based on responses):

Mexican Fan Palm only- 85%

Alternating Mexican Fan Palm/hardwood canopy tree-7%

Hardwood Canopy tree only-8%

### Recommendation:

Install 12 foot Mexican Fan Palms (MFP) into sites where Canary Island Date Palms (CIDP) have been lost in the past. Increase heights of Mexican Fan Palms installed as additional CIDP are lost in the future to maintain uniformity in overall street tree canopy height. Review stability of existing MFP as they approach height of 110 feet (approximately 20 years).

### Fiscal impact:

I. Fill existing CIDP vacancies (10) with MFP - \$18,000.00

Future removal/replacement of CIDP (123) with MFP - \$528,900.00

CIDP total: \$546,900.00

II. Remove and replace tall MFP (131) with MFP - \$393,000.00

Total reforestation cost South Palm Drive: \$939,900.00

## <u>SUMMARY</u>

The community outreach process for the Canary Island Date Palm Street Tree Master Plan has been completed. This outreach included 5 informational community meetings in which attending property owners were advised of widespread disease problems with Canary Island Date Palms and looming maintenance issues with tall Mexican Fan Palms on affected streets in the City, as well as solution options to address these problems. These meetings were followed by a balloting of affected property owners on two occasions to determine the majority sentiment of these property owners regarding replacement tree theme and tree type for their particular street. The results of this balloting are the basis for the replacement tree recommendations in this report.

This is a two phase project.

The first phase will focus on the filling of currently vacant Canary Island Date palm sites with the recommended replacement tree type. It is recommended that resources be directed to the planting of replacement trees on streets with the highest loss/infection rates. The removal of additional Canary Island Date Palms in the future will occur only when it is determined that a palm is in obvious decline or has some structural deficit. This phase of the project is anticipated to require 25 years to complete.

The second phase of this project will focus on the removal and replacement of Mexican Fan Palms that are too tall to maintain with the largest industry standard boom trucks certified for tree trimming. Resource allotment priority for this phase of the project will be given to those streets with palms that cannot be safely maintained. Barring the development of standardized tree trimming equipment that allows for the safe maintenance of palms 110 or more in height in the near future, it should be anticipated that the first removals under this phase of the project are likely to occur in approximately 5 years and that additional palm removals will continue for 30 years thereafter. The intended replacement tree is Mexican Fan Palm installed as a 12 foot tall specimen.

## FISCAL IMPACT

The total anticipated cost for the Canary Island Street Tree Master Plan, based on current industry prices, is \$9,762,500.00.

\$175,000.00 of the existing \$800,000.00 annual capital improvement project budget resources for Street Tree Master Plan tree removals and replacements will be directed to addressing the priorities identified in this report. Additional resources will be directed to this project in the future as currently ongoing Street Tree Master Plan phases are completed.

# RECOMMENDATION

Staff recommends that City Council conceptually approve the priorities included in this report and direct staff to implement accordingly.

Ken Pfalzgraf

Pat Agnitch