



## STAFF REPORT

**Meeting Date:** June 30, 2015  
**To:** Honorable Mayor & City Council  
**From:** Donielle Kahikina, Deputy Director of Public Works Services, Operational Support   
Michelle Tse, Senior Management Analyst *mst*  
**Subject:** Demonstration Garden Concepts for Maltz Park and Sunset Reservoir  
**Attachments:** 1. Conceptual Designs for Maltz Park and Sunset Reservoir

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### INTRODUCTION

During the May 18, 2015 Study Session discussion on artificial turf and live plant alternatives, the City Council inquired about the possibility of developing demonstration gardens at Maltz Park and Sunset Reservoir. These demonstration garden sites would serve as destinations for the community to learn and observe how drought resistant landscaping and design can be effectively integrated to maintain the City's garden-like qualities while promoting water conservation.

This report transmits preliminary design concepts and budget forecasts for design and construction for both the Maltz Park and Sunset Reservoir locations.

### DISCUSSION

Staff consulted with Green Gardens Group ("G3") to provide preliminary design and planning level budgets for the Maltz Park and Sunset Reservoir locations. G3 is a landscape professional group that is currently working with the City to provide one-on-one landscape coaching sessions, as well as the development of a Beverly Hills landscape handbook, in support of the City's conservation efforts. G3 is also a conservation program partner with Metropolitan Water District and has also assisted the City of Los Angeles with their conservation programs.

Since Maltz Park and Sunset Reservoir have very different land uses, the former being a recreational area and the latter an active City reservoir, a unique design approach has been taken for each site as further described in the respective sections below, and shown in Attachment 1.

Some common design elements for the preliminary design concepts for both locations were developed with the following objectives in mind:

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- Targeted water use reduction of 70% or greater
- Low maintenance landscapes that provide a continuous learning environment
- Drip or no irrigation required
- The two projects are to complement each other to maximize the public education benefit
- Opportunity to demonstrate techniques from the Beverly Hills landscape handbook
- Opportunity to provide hands-on outreach and training for local professionals and residents

**Maltz Park**

An “active” demonstration garden approach was taken with the Maltz Park site. The site is a recreational area, allowing for a walking experience through the park and the opportunity to experience varied landscape alternatives. The proposed design achieves the following objectives:

- Water reduction >70%
- Stormwater capture >1,000 sq. ft.
- Turf removal
- Permeable hardscape
- Seating and site amenities
- Curb cuts/drainage diversion

A preliminary budget forecast for Maltz Park is included in Table 2, assuming the entire park and adjacent parkways (approximately 48,700 sq. ft.) have been set aside for demonstration garden use.

**Table 2: Preliminary Construction Budget Forecast for Maltz Park & Parkways**

<b>Project Area</b>	<b>Site Total Sq. Ft.</b>	<b>Construction Budget</b>	<b>Construction Price/Sq. Ft.</b>
Parkways	4,200	\$79,800	\$19.00
Active/Groundcover Area	10,500	\$199,500	\$19.00
Contemporary Planters	1,300	\$24,700	\$19.00
Woodland Area	20,000	\$300,000	\$15.00
Hardscape Areas	6,000	\$150,000	\$25.00
Passive Capture	6,700	\$127,300	\$19.00
<b>Totals</b>	<b>48,700</b>	<b>\$881,300</b>	<b>\$18.10</b>

For budgeting purposes, preliminary cost assumptions place the Maltz Park demonstration garden construction cost at approximately \$18 per sq. ft. An additional 10%-20% of the total construction budget would need to be budgeted for design costs. Under these assumed design parameters the Maltz Park total project budget is forecasted to be approximately \$969k-\$1.05 mil.

**Sunset Reservoir**

Given that this site is an active reservoir, a passive design approach was taken for this location. The reservoir is the main feed location from Metropolitan Water District

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("MWD"), the City's water supplier, and therefore should to be protected from recreational use through installation of a perimeter fence. For this location the preliminary design concept for a demonstration garden takes advantage of the sloped perimeter around the reservoir while protecting the 39,000 sq. ft. area at the center of the site that covers the top of the reservoir. The design is intended to demonstrate how to maximize hillside erosion control through planting, while using taller plantings and grasses to discourage access through the site. The sloped perimeter also serves as an ideal model for active stormwater capture. The proposed design achieves the following objectives:

- Water reduction >70%
- Stormwater capture >1,000 sq. ft.
- Turf removal
- Curb cuts/drainage diversion

Preliminary budget estimates for Sunset Reservoir are included in Table 3, assuming 32,000 sq. ft. of the two acre site has been set aside for demonstration garden use.

**Table 3: Preliminary Construction Budget Forecast for Sunset Reservoir**

<b>Project Areas</b>	<b>Site Total Sq. Ft. or Lin. Ft.</b>	<b>Construction Budget</b>	<b>Construction Price/Sq. Ft. or Lin. Ft.</b>
Hillside Planted & Graded Area	28,000	\$560,000	\$20.00
Parkways	4,000	\$80,000	\$20.00
Fencing Per Linear Foot	800	\$61,600	\$77.00
<b>Totals</b>	<b>32,800</b>	<b>\$701,600</b>	<b>\$21.39</b>

For budgeting purposes, preliminary cost assumptions place the Sunset Reservoir demonstration garden construction cost at approximately \$21 per sq. ft. An additional 10%-20% of the total construction budget would need to be budgeted for design costs. Under these assumed design parameters the Sunset Reservoir total project budget is forecasted to be approximately \$770k-\$840k.

Please note that the square footage costs for both locations shown here are for budgeting purposes only. Once a design for the each of the sites is more fully developed more accurate costs estimates can be established. However, in both cases the costs shown are in line with costs for recent demonstration gardens of similar size and complexity that G3 has been involved with.

### **FISCAL IMPACT**

Funds are currently not budgeted for the design and construction of demonstration gardens for these locations. If the City Council directs staff to proceed with design development, staff will begin the Request for Proposal ("RFP") process to seek out landscape design proposals for the work and request a budget appropriation at a future City Council meeting.

City's conservation program in conjunction with MWD provides for rebates for turf removal in the amount of \$3.75/sq. ft. for the first 2,500 sq. ft., and \$2.00 thereafter with

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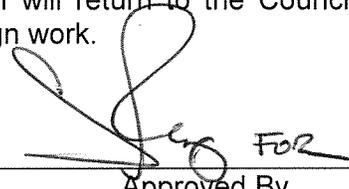
a maximum of \$6,000 per property. Assuming these projects go forward, staff will peruse rebates for these sites.

**RECOMMENDATION**

Staff seeks City Council direction on the following:

1. Confirmation of the general design parameters for Maltz Park and Sunset Reservoir
2. Direction move forward with an RFP for design services for both locations

If the City Council directs staff to move forward with these projects, staff will work with the Public Works Commission Conservation Subcommittee and the Recreation and Parks Commission to develop an RFP for the two locations. It is expected this process will take approximately 3 months at which time staff will return to the Council with a recommendation for an award of contract for the design work.

  
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Approved By  
George Chavez

# **Attachment 1**

# Maltz Park Demonstration Garden



Total Demonstration Area =  
48,700 SF

Parkways – 4,200 SF

Active Garden – 10,500 SF

Contemporary Beds – 1,300 SF

Woodland Garden – 20,000 SF

Hardscape – 6,000 SF

Passive Catchment – 6,700 SF

# Maltz Park Recommendations

Maltz Park is a perfect spot for demonstrating the five plant styles promoted in the Beverly Hills Garden Handbook (Mediterranean, Contemporary, Chaparral, Groundcover Alternatives, and Woodland) as well as providing a large sample of “Beverly Hills” Lawn. This active use demonstration garden is modeled after the City of Santa Monica Airport Park Garden and various Ocean Friendly Gardens.

1. Active Area includes intuitive and experiential demonstrations of
  - a. Walkable/playable groundcover alternatives to cool season grass
  - b. Permeable paving pathways
  - c. Climate-appropriate and CA native evergreen and flowering trees and shrubs
2. Woodland Area demonstration of planting under mature trees
3. Contemporary plant mixes demonstrated in raised planters with edibles
4. Passive rainwater capture seamlessly integrated into the landscaping

# Maltz Park Main Garden



Active Garden

"Beverly Hills" Lawn

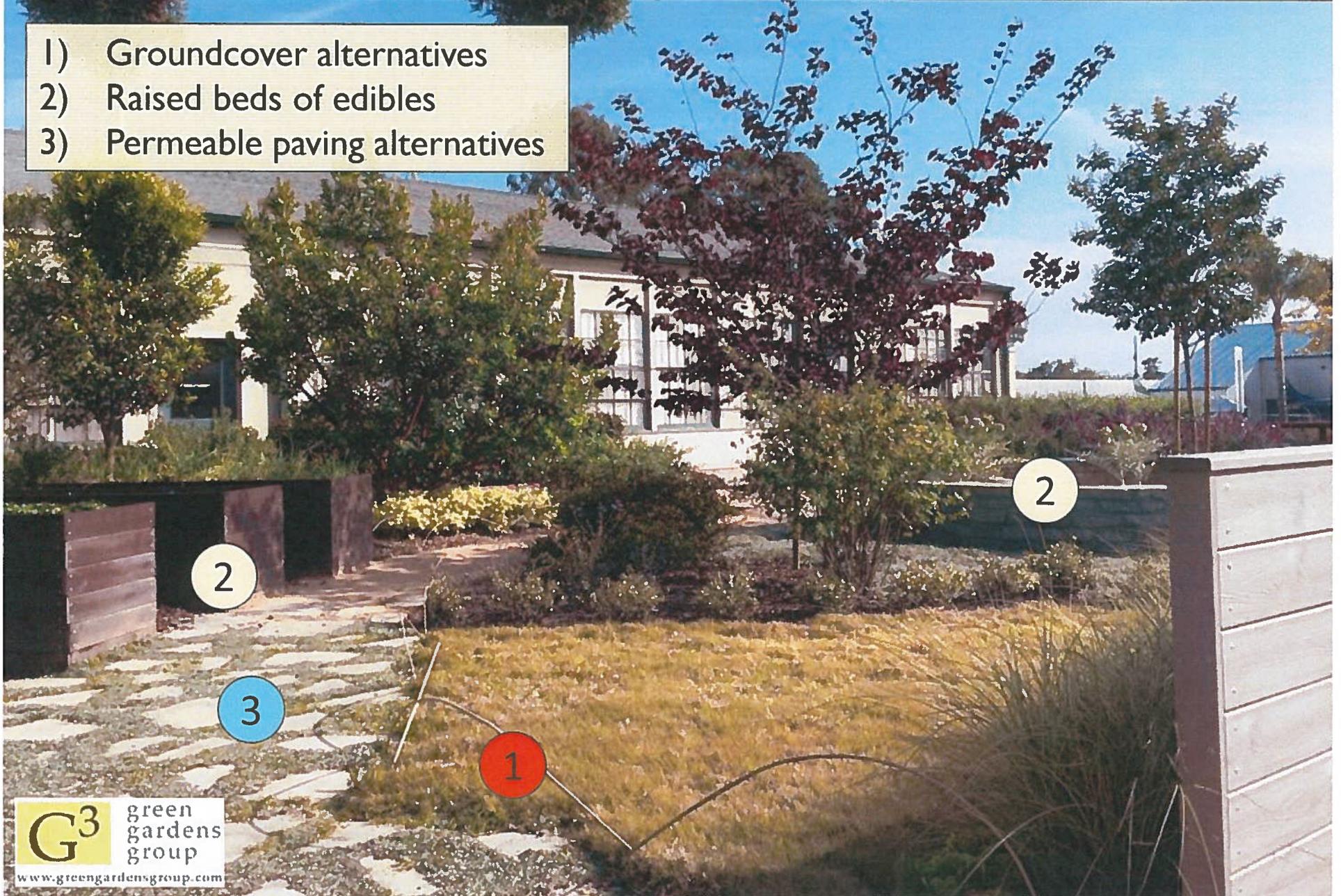
Contemporary  
Mediterranean  
Planters

Passive Rainwater Catchment

Woodland Garden

# Santa Monica Airport Park Garden

- 1) Groundcover alternatives
- 2) Raised beds of edibles
- 3) Permeable paving alternatives



# Santa Monica Airport Park Garden

- 1) Paving alternatives
- 2) Tree and hedge alternatives
- 3) Planting bed alternatives



# Rancho Santa Ana Botanic Garden

## I) Woodland shade planting



# Culver City High School Ocean Friendly Garden

- 1) Woodland shade planting
- 2) Passive rainwater catchment

1

2

# Maltz Park “Beverly Hills” Lawn



Close up of clover and daisies

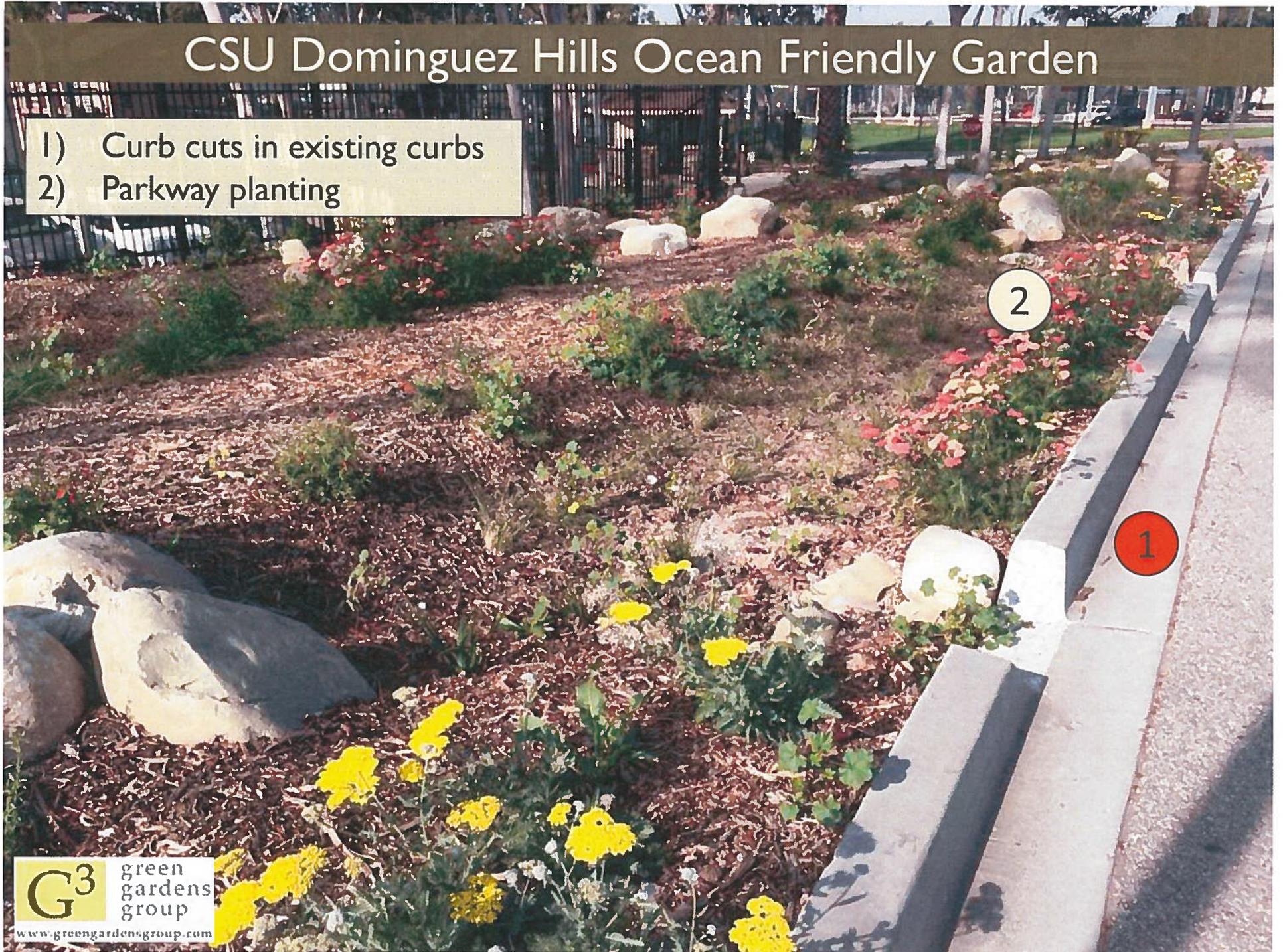
# Maltz Park Parkways



Parkways Are An Opportunity To Demonstrate Curb Cutting And Parkway Planting

# CSU Dominguez Hills Ocean Friendly Garden

- 1) Curb cuts in existing curbs
- 2) Parkway planting



# Santa Monica Garden/Garden

- 1) Step outs and pathways
- 2) Parkway planting demonstration



# Sunset Reservoir Demonstration Garden



Total Demonstration Area  
= 32,000 SF

Perimeter – 28,000 SF  
Parkways – 3,900 SF

Fencing - 800 Linear Ft.

# Sunset Reservoir Recommendations

Sunset Reservoir is a candidate for a more passive hillside demonstration garden that eliminates access to the reservoir cap.

1. 28,000 SF planted hillside gardens with climate-appropriate and CA native evergreen and flowering trees, shrubs and perennial grasses
2. Reservoir cap fenced to limit access
3. Steep hillside on southeast side is graded and covered in erosion control blankets for planting
4. Active and passive rainwater capture adjacent to building on alley demonstrates how to capture and release rainwater
  - a. Above ground cistern plumbed to flow through without filling captures flow from roof and overflows to rain garden area
  - b. Passive capture sponge garden receives overflow from cistern

# Sunset Reservoir Garden



Optional Parkway Planting

Active & Passive Rainwater Catchment

No Pedestrian Access

Planted Hillside

Steep Slope Remediated

# Santa Monica Garden/Garden & Private Residence

## 1) Active rainwater catchment



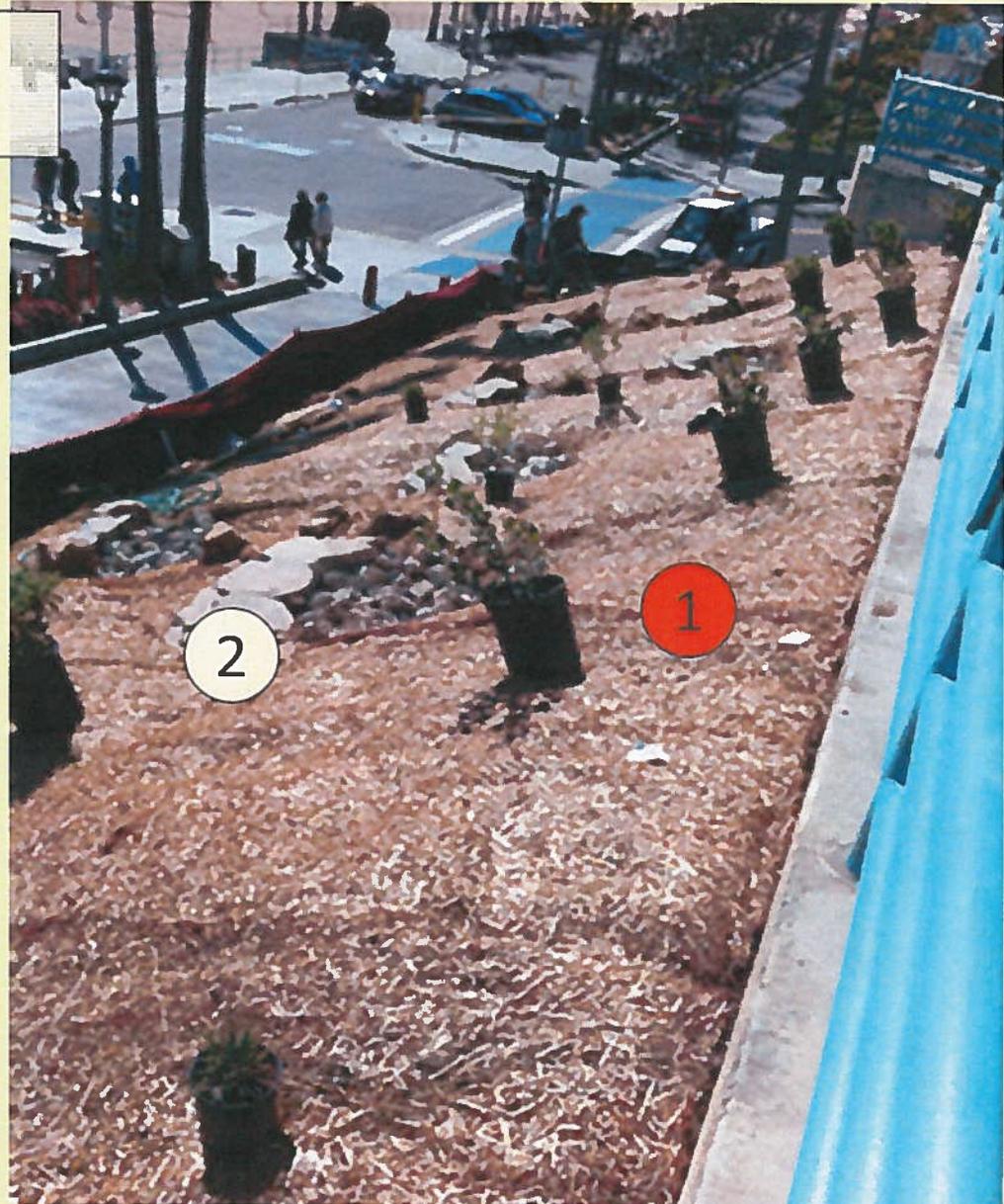
# Santa Barbara Lawn Bowls Demonstration Garden

## I) Passive rainwater catchment



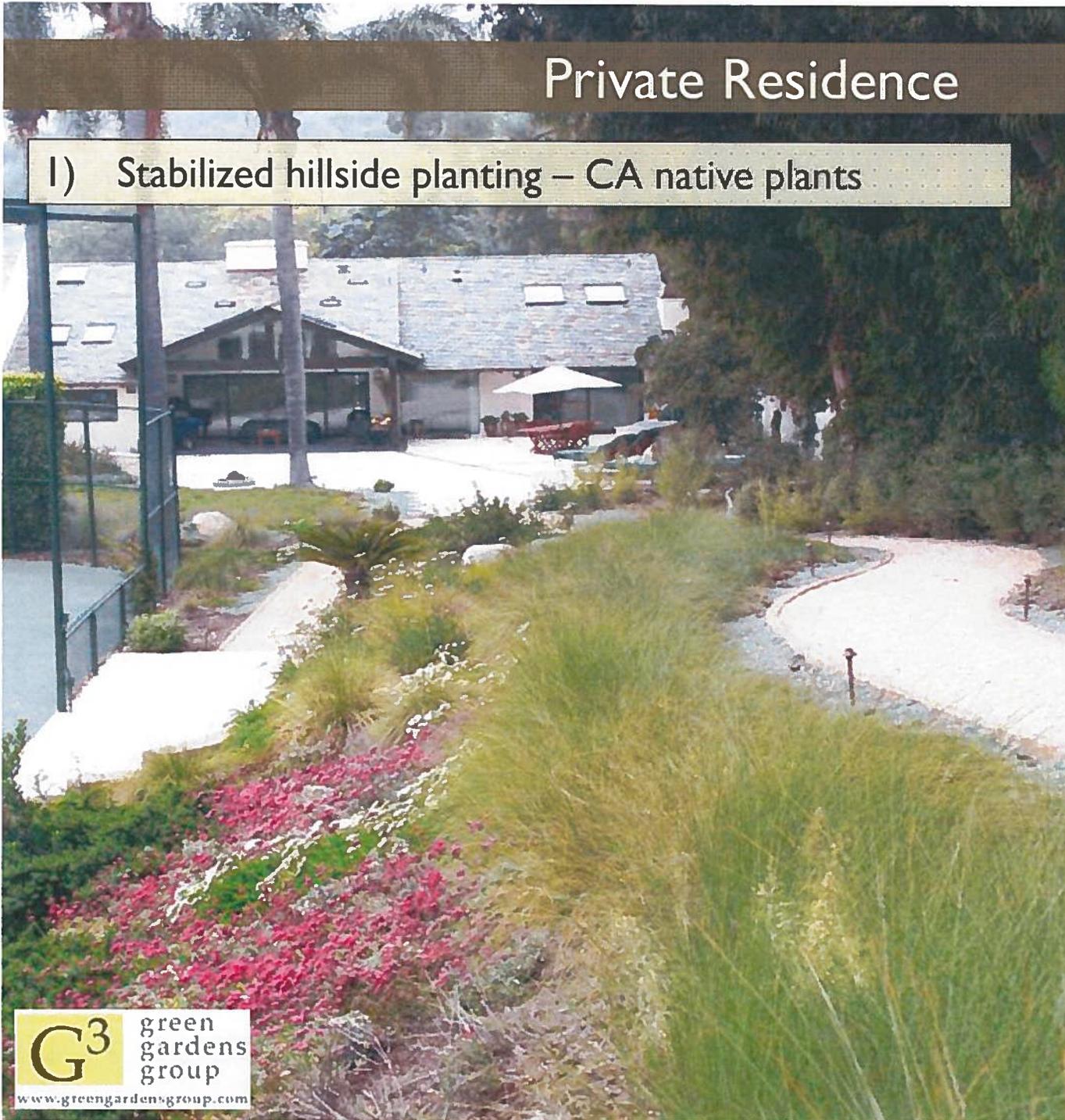
# Manhattan Beach Strand Ocean Friendly Garden

- 1) Steep hillside stabilization
- 2) Passive rainwater catchment



# Private Residence

## 1) Stabilized hillside planting – CA native plants



# Hawthorne City Hall Ocean Friendly Garden

## I) CA native and Mediterranean planting beds

