

Native Plants for Residential Gardens Guidelines for Achieving Successful Plant Groupings

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California Plant Climate Zones (UC Cooperative Extension)

Horticultural Zones - Cold Temperature/Growing Season Basis

Northern Latitude

Climate zones of northern latitudes are marked by colder winter temperatures, fewer growing season days and greater levels of annual precipitation in contrast to southern zones of the state. Precipitation exceeds evapotranspiration loss for several winter months of the year. Summers are cool and moist along the coast; inland valleys and foothills are warm and dry with periods of high temperatures and increased moisture stress.

Pacific Ocean

The Pacific Ocean moderates temperatures along the entire length of California's coast. Winter cold is less extreme than in inland areas; summer heat is milder and less arid. Relative humidity is increased and moisture stress is reduced by the damp and cooling influence of marine air. As a result, Plant Climate Zones 17 and 24 have the lowest evapotranspiration levels in the state.

Topography

California's topography is filled with an abundance of ranges and valleys of diverse size, elevation and character. This diversity leads to many variations in climate conditions in terms of temperature, precipitation and growing season. Plant climate zones fit into this topography; both the diversity and boundaries of these zones are largely a result of the varied topography throughout the state.

Northeastern Interior Latitudes

Continental climate influences dominate much of Plant Climate Zones 1 and 2 throughout northeastern California, resulting in extreme temperature and precipitation ranges. Vast areas have very short growing seasons due to the coldest and longest winter weather conditions in the state; winter precipitation is dominated by snow. In contrast, hot summer temperatures and low relative humidity also result in high summer evapotranspiration rates.

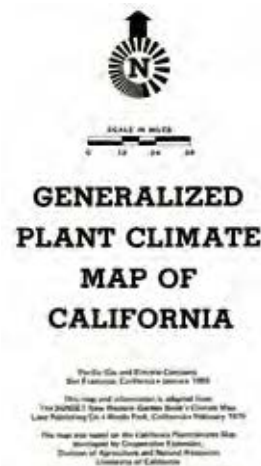
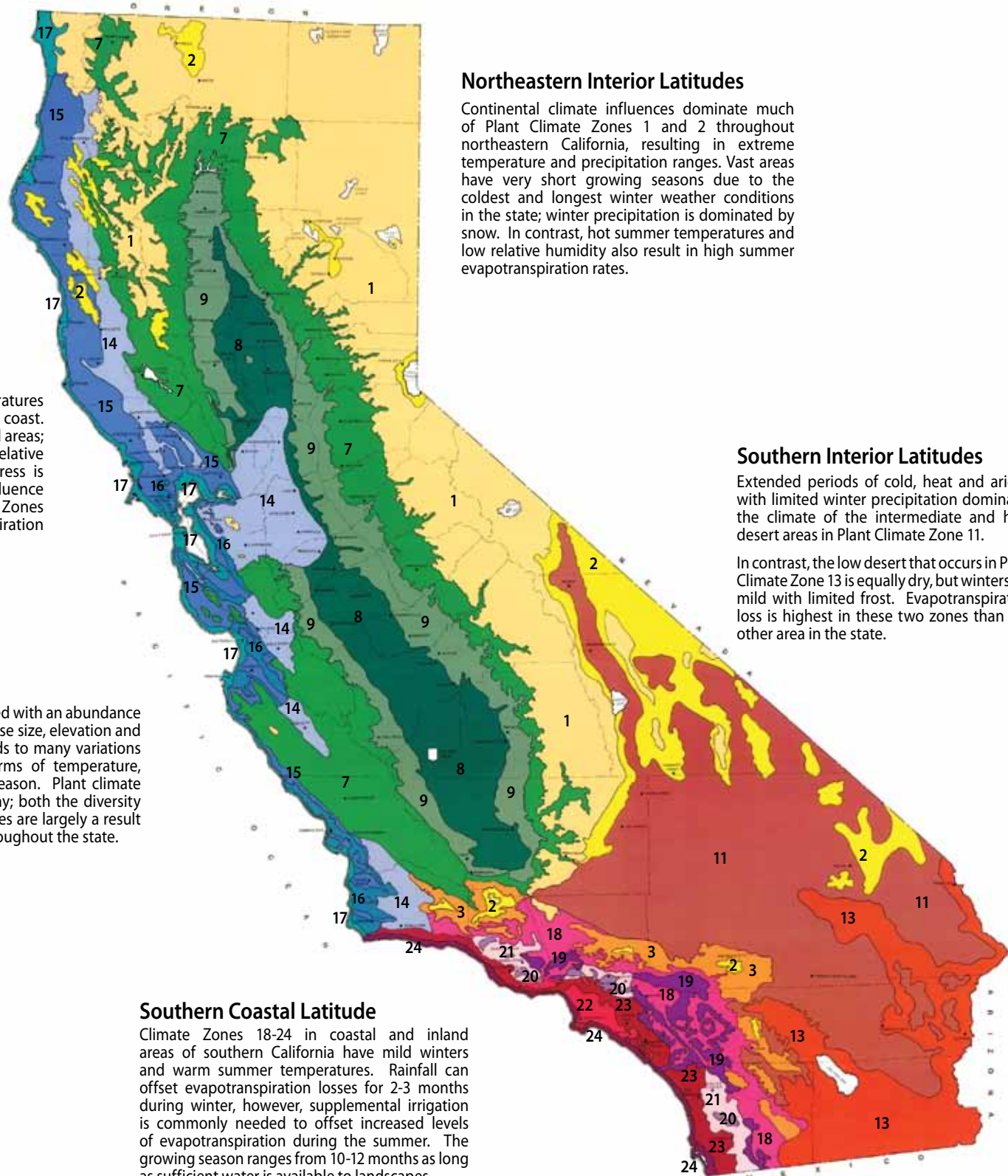
Southern Interior Latitudes

Extended periods of cold, heat and aridity with limited winter precipitation dominates the climate of the intermediate and high desert areas in Plant Climate Zone 11.

In contrast, the low desert that occurs in Plant Climate Zone 13 is equally dry, but winters are mild with limited frost. Evapotranspiration loss is highest in these two zones than any other area in the state.

Southern Coastal Latitude

Climate Zones 18-24 in coastal and inland areas of southern California have mild winters and warm summer temperatures. Rainfall can offset evapotranspiration losses for 2-3 months during winter, however, supplemental irrigation is commonly needed to offset increased levels of evapotranspiration during the summer. The growing season ranges from 10-12 months as long as sufficient water is available to landscapes.



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Reference Evapotranspiration Zones (Dept. Water Resources)

California Evapotranspiration Map - Annual Moisture Loss

California Irrigation Management Information System (CIMIS) REFERENCE EVAPOTRANSPIRATION ZONES



The California Landscape

Over 5,800 Species + 1,150 Subspecies & Varieties: Over 2,150 Endemic Species



Redwood Forest - Northern California

Coast Redwood Plant Community



Coastal Foothills - Cambria

Grassland, Oak Woodland and Riparian Plant Communities



Inland Foothills - San Gabriel Mountains

Southern California Chaparral Plant Community



Palm Springs - Coachella Valley

Low Desert Plant Community



King Way Residence

Southwestern, Chaparral, Sage Scrub

Plant Palette Southwestern Chaparral

This palette combines a diverse mixture of plants that are native to the dry climates and habitats found in many parts of southern California and the southwestern United States. The result is a list of drought tolerant plants that are rich in character, attractive to wildlife and suggestive of the chaparral, sage scrub and low desert plant communities.

The effort to identify and select plants from dry climate zones for use in ornamental landscapes and gardens has been a long standing goal of many people and organizations. This reflects a full range of values associated with sustainable landscapes. These include the protection and conservation of natural habitats and species, efficient and appropriate use of water, celebration of species diversity and desire to use plants from the region.

This landscape example reflects these values and illustrates one of many planting possibilities for use in southern California. It features several spectacular flowering species such as the flannel bush, our Lord's candle and bush poppy. It also relies on the use of boulders, stone walls, decomposed granite and topography for additional interest and spatial definition. Rainfall provides all moisture during winter; drip irrigation is used to provide low amounts of supplemental moisture to selected plants during summer. A wide variety of birds, butterflies, native honeybees and lizards are seen in this landscape.

California Plant Climate Zones



This chart shows the common plant climate zones for this palette; individual plants may grow in other zones.

Below: *Hesperoyucca whipplei*



Above: *Trichostema lanatum* (front) *Fremontodendron* 'California Glory' (behind)

Trees		PF	IG
<i>Acacia farnesiana</i>	Sweet Acacia	L/VL	2
<i>Ornithostaphylos oppositifolia</i>	Palo Blanco	L/VL	2
<i>Parkinsonia</i> species + cvs	Palo Verde	M/L	2

Shrubs		PF	IG
<i>Arctostaphylos glauca</i>	Bigberry Manzanita	M/L	2
<i>Arctostaphylos</i> 'Howard McMinn'	McMinn Manzanita	M/L	2
<i>Arctostaphylos</i> 'John Dourley'	John Dourley Manzanita	M/L	2
<i>Arctostaphylos</i> 'Lester Roundtree'	Lester Roundtree Manzanita	M/L	2
<i>Arctostaphylos manzanita</i> 'Dr. Hurd'	Parry Manzanita	M/L	2
<i>Arctostaphylos</i> 'Sunset'	Sunset Manzanita	M/L	2
<i>Artemisia californica</i> + cvs	California Sagebrush	L/VL	2
<i>Artemisia californica</i> 'Montara'	Montara California Sagebrush	L/VL	2
<i>Baccharis pilularis</i> + cvs	Coyote Brush	M/L	2
<i>Ceanothus</i> 'Concha'	Concha Ceanothus	M/L	2
<i>Ceanothus</i> 'Dark Star'	Dark Star Ceanothus	M/L	2
<i>Ceanothus</i> 'Frosty Blue'	Frosty Blue Ceanothus	M/L	2
<i>Ceanothus</i> 'Gentian Plume'	Gentian Plume Ceanothus	M/L	2
<i>Ceanothus</i> 'Joyce Coulter'	Joyce Coulter Ceanothus	M/L	2
<i>Ceanothus</i> 'Julia Phelps'	Julia Phelps Ceanothus	M/L	2



Above: *Fremontodendron* 'California Glory'

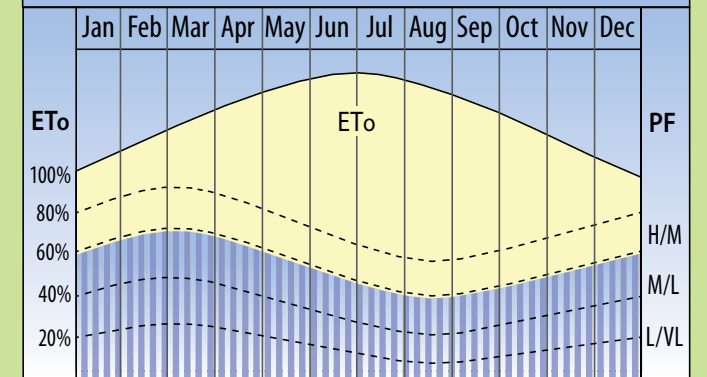
Horticultural Preferences

This palette is adapted to Plant Climate Zones 18-24 with plants showing a high tolerance to sun and heat. The best growth occurs in well-drained soils with little organic matter. Most plants need very little summer moisture; plants with moderate water needs can be grouped into microclimates and hydrozones, and be sustained with drip irrigation. Surfaces can be covered with decomposed granite and gravel to help control weeds.

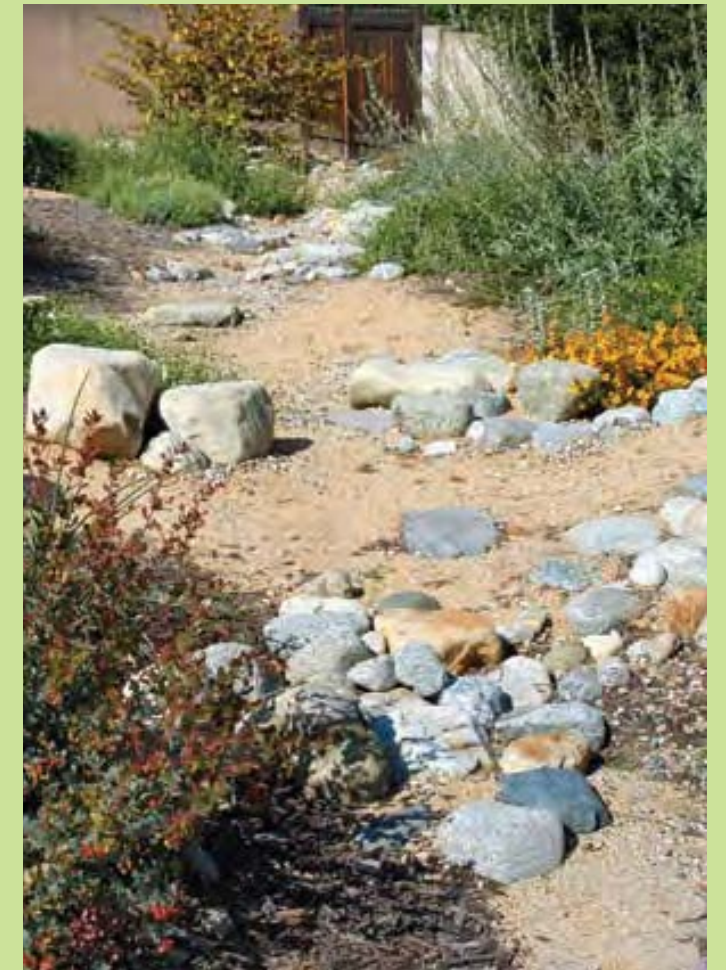
Below: *Arctostaphylos* 'Lester Roundtree'



Irrigation Group 2 - Southwestern Chaparral



Below: A seasonal streambed to collect and infiltrate rain water



King Way Residence

Southwestern, Chaparral, Sage Scrub



King Way Residence

Southwestern, Chaparral, Sage Scrub



King Way Residence

Boulders, Stone Walls, Decomposed Granite



King Way Residence

Fremontodendron 'California Glory' - Flannel Bush



King Way Residence

Trichostema lanatum - Woolly Blue Curls



King Way Residence

Hesperoyucca whipplei - Our Lord's Candle



King Way Residence

Seasonal Wash



King Way Residence

Mimulus aurantiacus (M. longiflorus), *Dudleya pulverulenta*



King Way Residence

Ceanothus 'Concha' - Concha Ceanothus



King Way Residence

Ceanothus 'Ray Hartman' - Ray Hartman Ceanothus



King Way Residence

Arctostaphylos 'Howard McMinn' - McMinn Manzanita



King Way Residence

Arctostaphylos 'Lester Rowntree' - Lester Rowndtree Manzanita



Wess Residence - Site Inventory/Analysis

Space: Several areas, No spatial enclosure or circulation



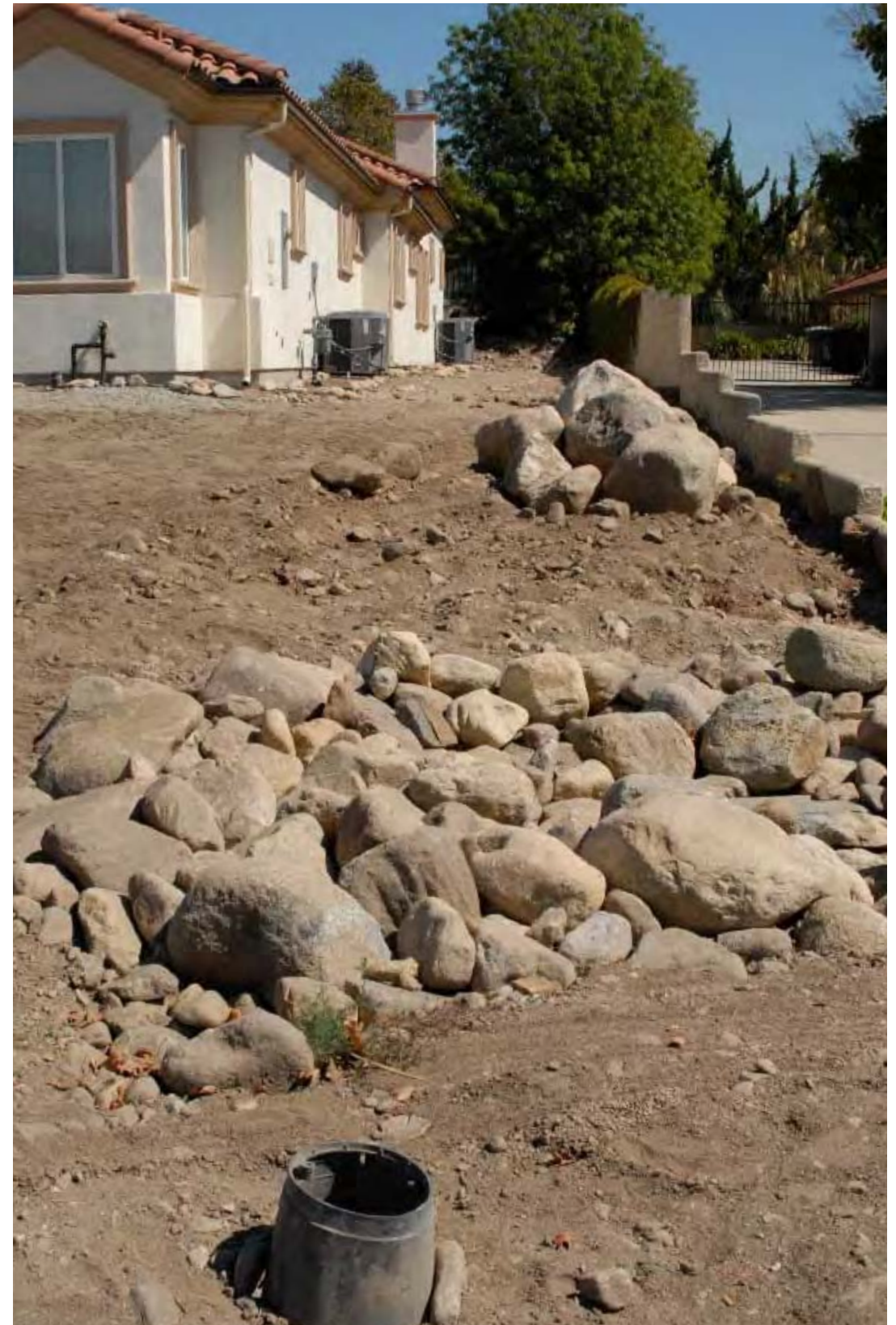
Wess Residence - Site Inventory/Analysis

Mediterranean Climate, Plant Climate Zone 18; Frost 10-12/Year



Wess Residence - Site Inventory/Analysis

Microclimate: Deep Shade to excessive sun - Dual Plant Palette



Wess Residence - Site Inventory/Analysis

Site Issues: Large Driveway, Tight Planting Areas



Wess Residence - Site Inventory/Analysis

Soils: Excellent Drainage, Low Organics + Nutrients



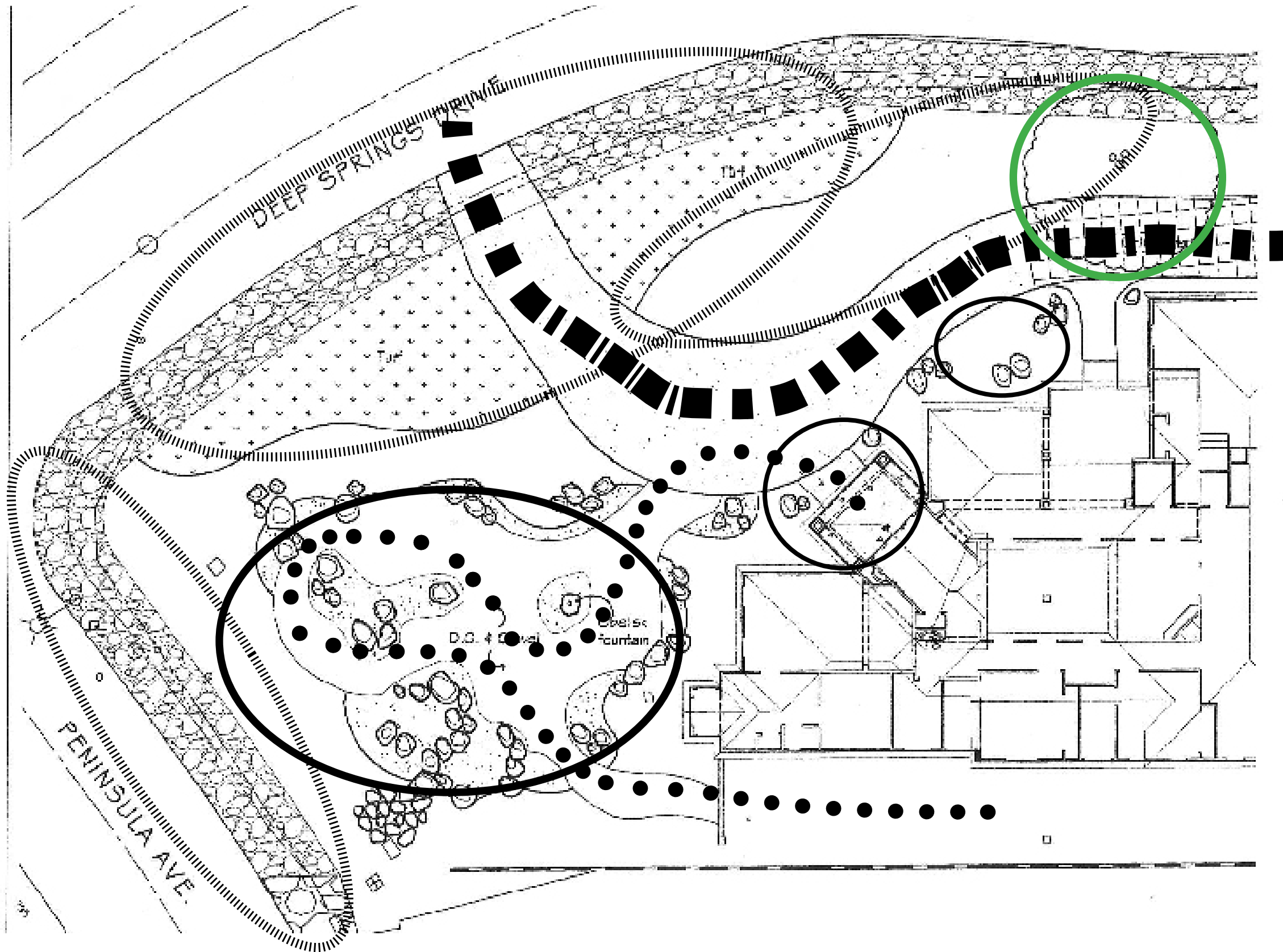
Wess Residence - Site Inventory/Analysis

Topography: Flat, Sloping Away from House



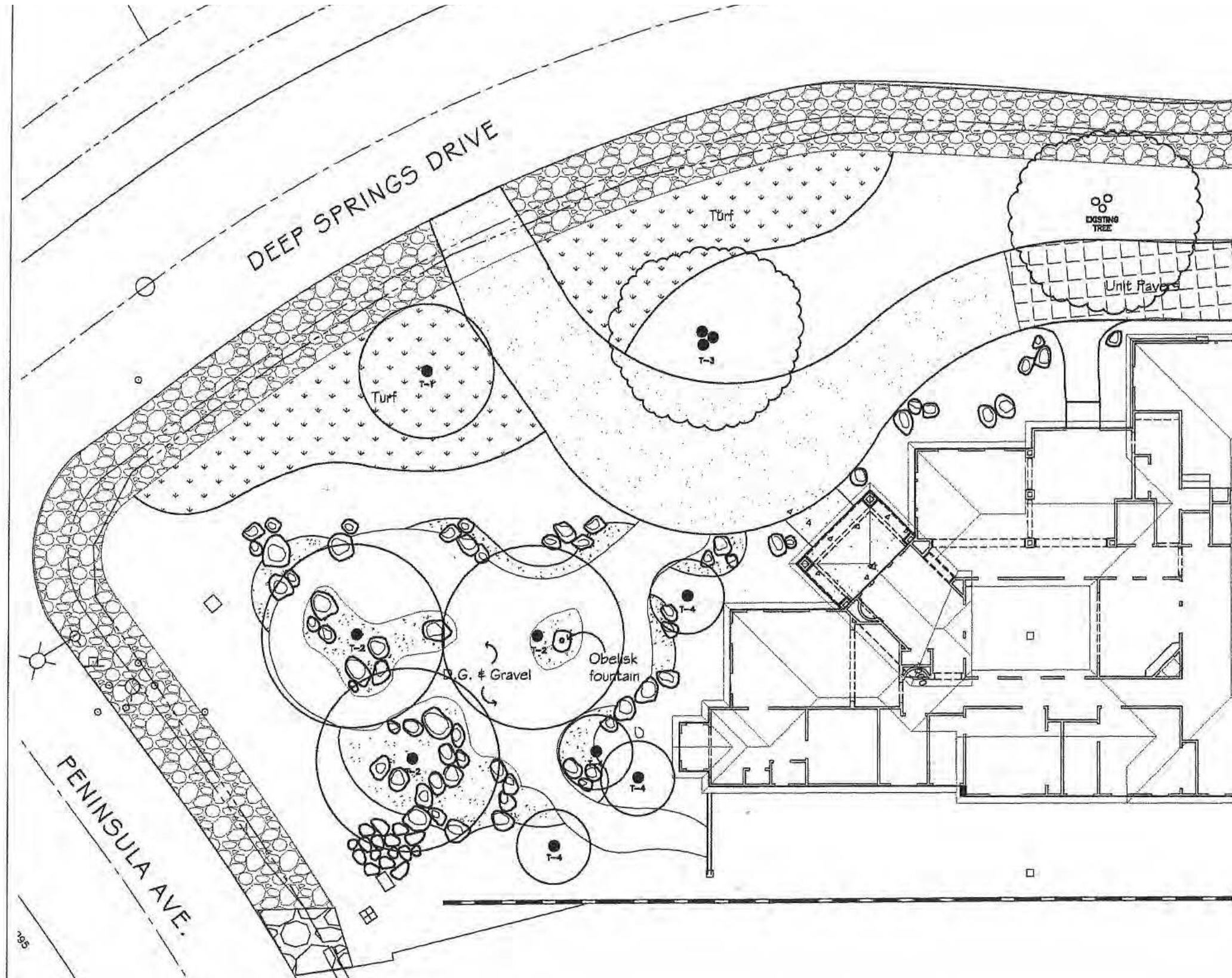
Wess Residence - Planting Design

Define Spaces, Circulation and Hydrozones



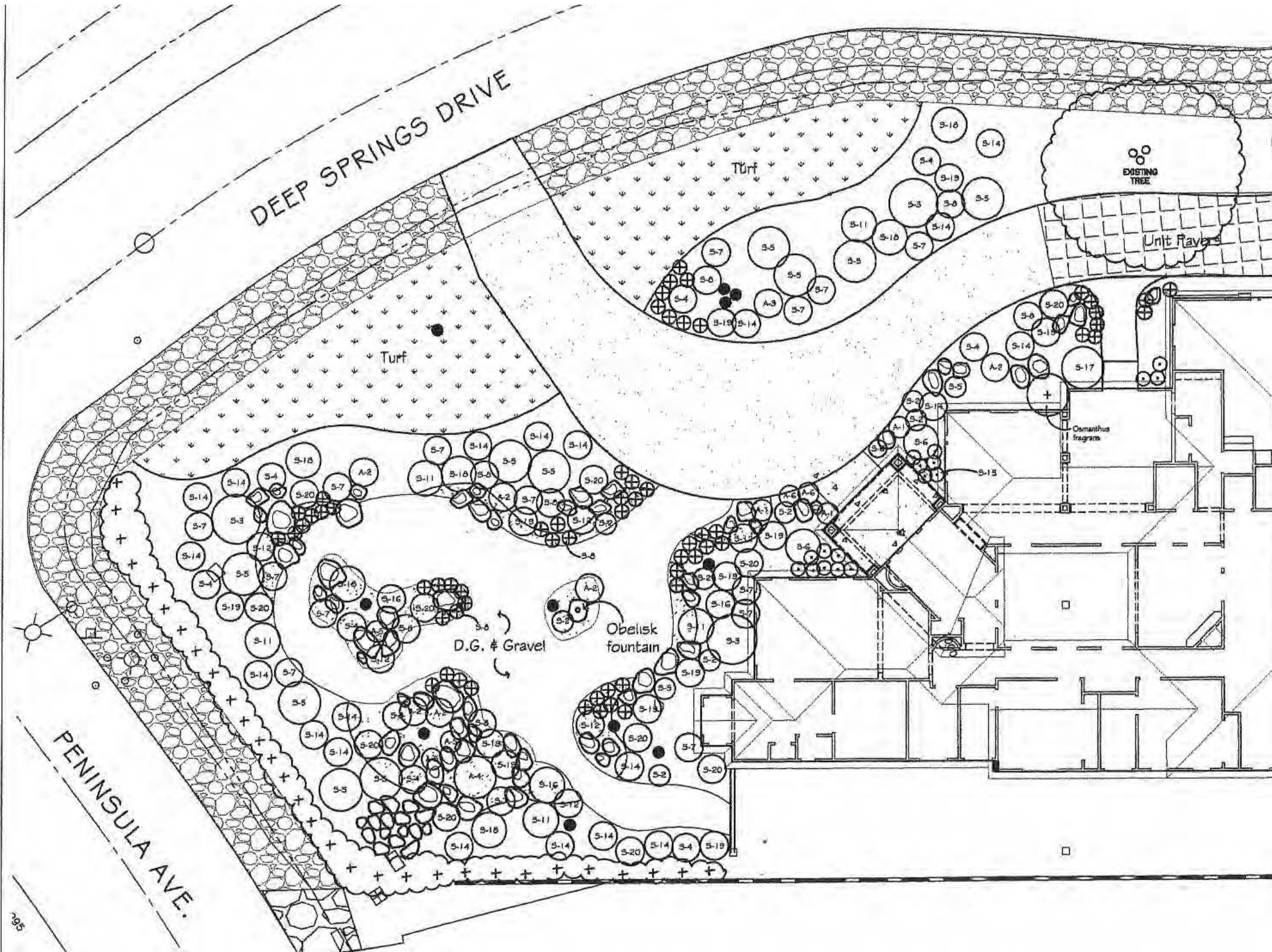
Wess Residence - Planting Design

Trees: Add Structure, Climate Mitigation, Anchor Spaces



Wess Residence - Planting Design

Shrubs: Reinforce Outdoor Spaces and Circulation



Wess Residence - Planting Design

Installation: Define Spaces and Circulation - May 2008



Wess Residence - Planting Design

Installation: Grading and Soil Preparation - May 2008



Wess Residence - Planting Design Installation: Grading and Stone Placement



Wess Residence - Planting Design

Installation: Placing Plants - June 2008



Wess Residence - Planting Design

Installation: Placing Plants - June 2008



Wess Residence - Planting Design

Installation: Placing Plants - June 2008



Wess Residence - Planting Design

Installation: Installing Plants and Drip Irrigation - June 2008



Wess Residence - Planting Design

Installation: Installing Plants and Drip Irrigation - June 2008



Wess Residence - Planting Design

Installation: Installing Decomposed Granite - June 2008



Wess Residence - Planting Design

Installation: Installing Decomposed Granite & Gravel - June 2008



Wess Residence - Planting Design

Installation: Installing Decomposed Granite & Gravel



Wess Residence - Planting Design

Site Review - 4 Months following installation - November 2008



Wess Residence - Planting Design

Site Review - 4 Months following installation - November 2008



Wess Residence - Planting Design

Installation: Placing Plants - June 2008



Wess Residence - Planting Design

Finished Landscape - November 2008



Wess Residence - Planting Design

Site Review - 18 Months after installation - March 2010



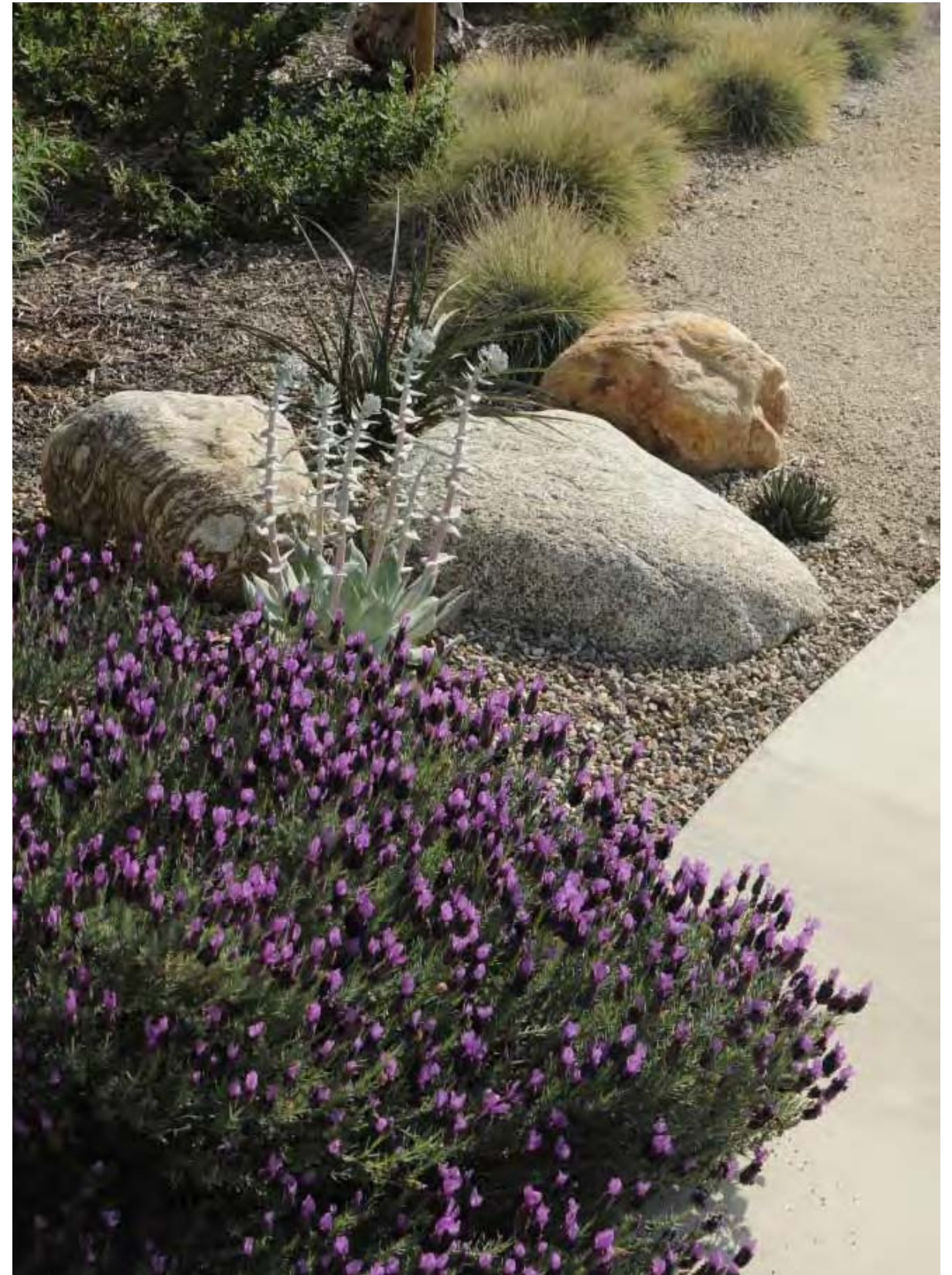
Wess Residence - Planting Design

Site Review - 4 Months following installation - November 2008



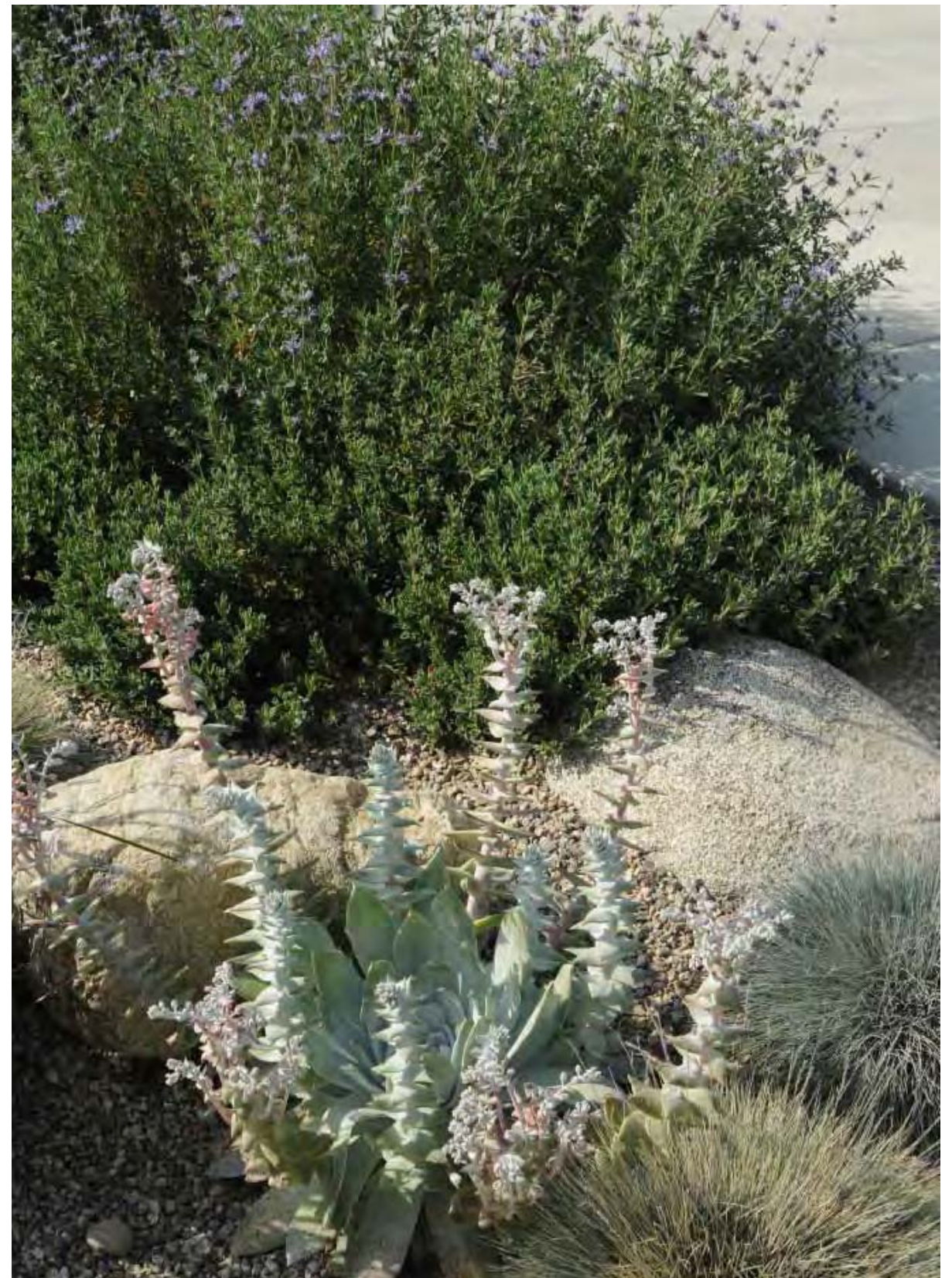
Wess Residence - Planting Design

Site Review - 18 Months after installation - March 2010

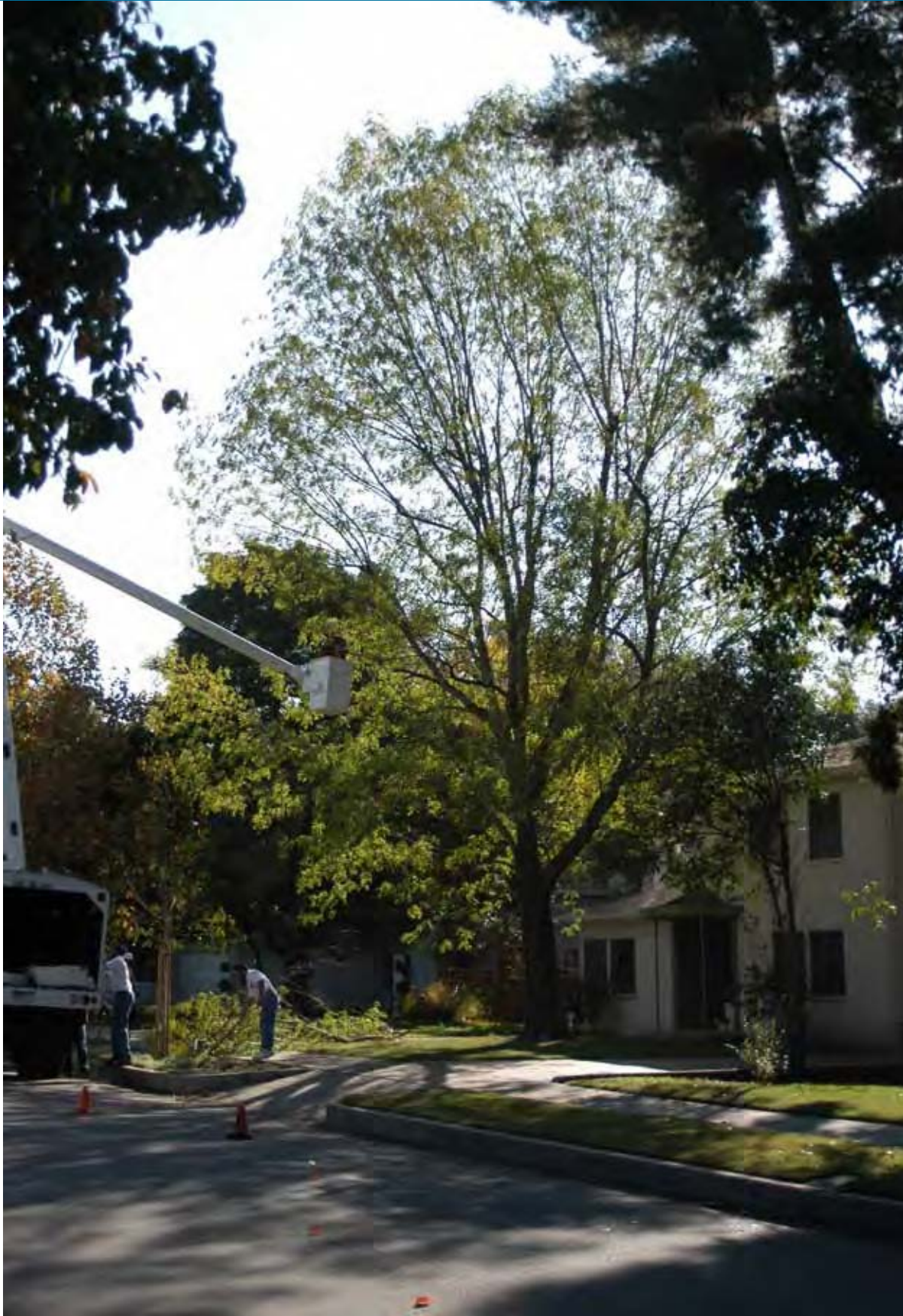


Wess Residence - Planting Design

Site Review - 18 Months after installation - March 2010



Perry Residence - Conversion to Native and Mediterranean Plants



Perry Residence - Conversion to Native and Mediterranean Plants



Perry Residence

Native Annuals - California Poppies



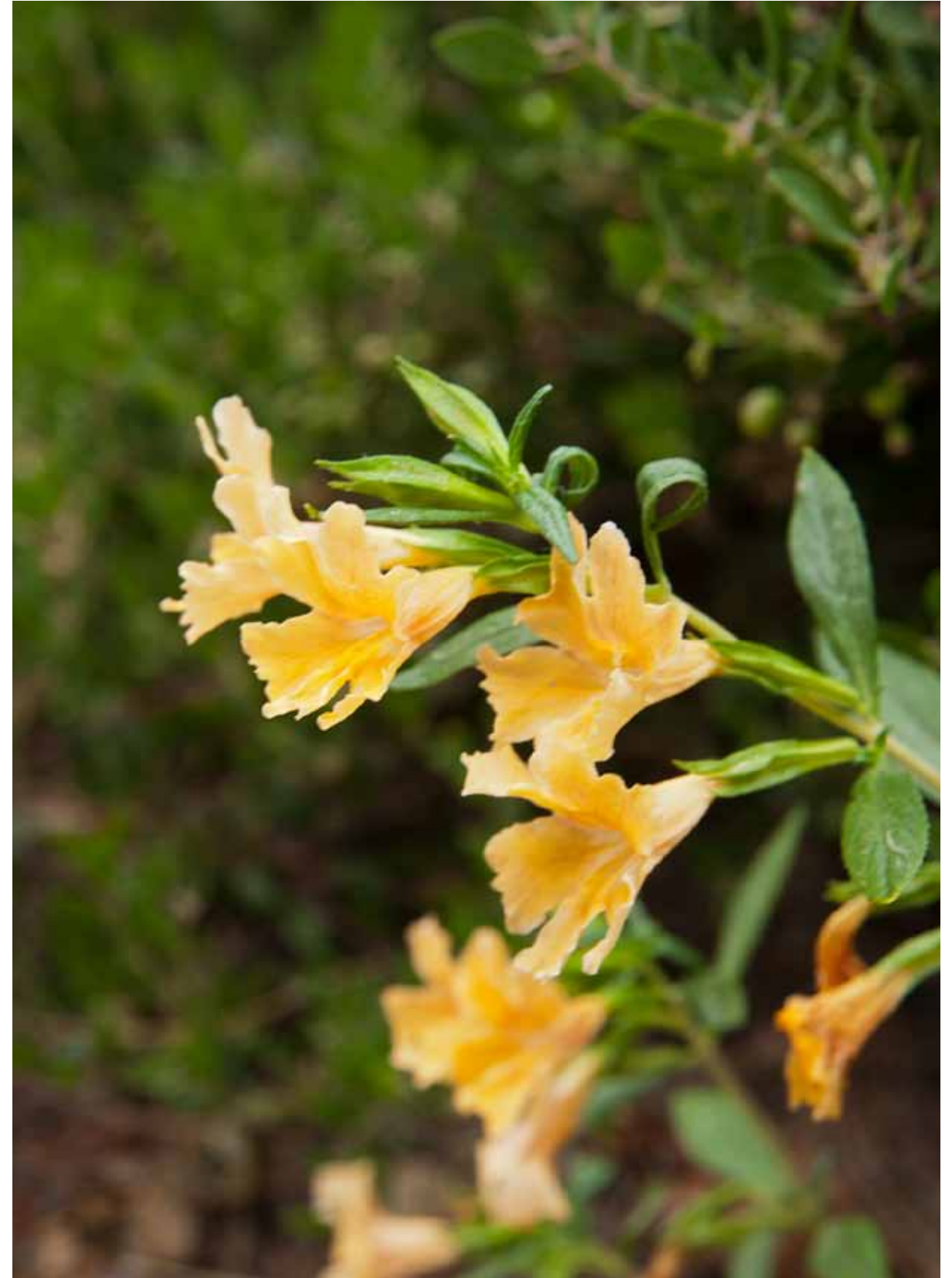
Perry Residence

Mediterranean Biennials - Tower of Jewels



Perry Residence

Native Perennials - Lilac Verbena + Monkeyflower



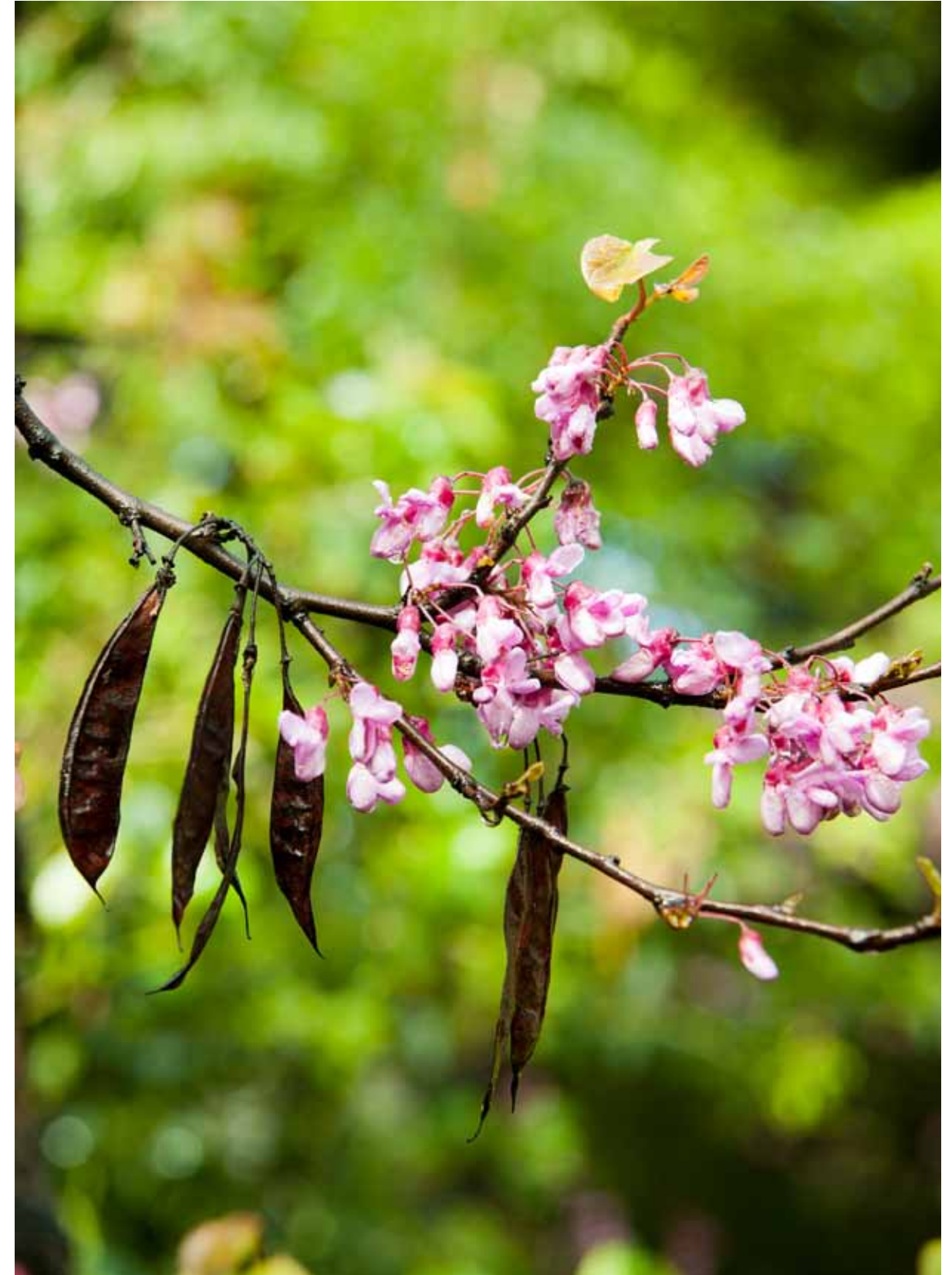
Perry Residence

Native Shrubs - Island Bush Poppy



Perry Residence

Natives - Western Redbud



Perry Residence

Natives - *Ribes sanguineum* var. *glutinosum*



Perry Residence

Back Yard - Cutting Garden



Perry Residence

Back Yard - Citrus Trees



Perry Residence

Back Yard - Vegetable Garden



Perry Residence

Back Yard - Studio, Recycled Concrete

Calabanus hookeri - Pot Planting

