

LANDSCAPE DESIGN 5: PLANTING DESIGN
UCLA EXTENSION
SPRING 2024

AGOURA HILLS WELLNESS CENTER OUTDOOR OASIS

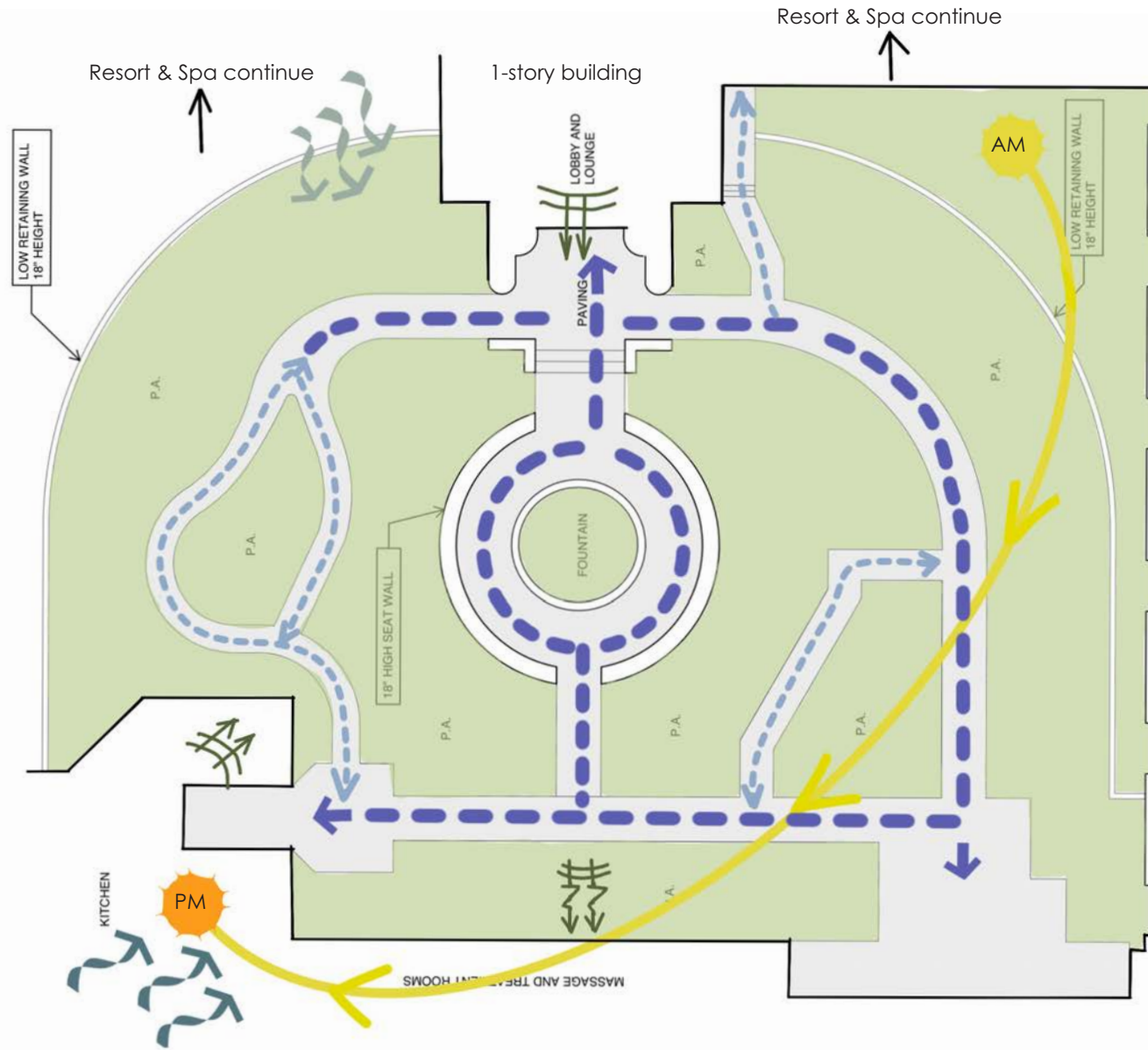
STUDENT: AMY WHITE
PROFESSOR: PAMELA BRIEF



The **five senses** come alive in this garden oasis. A flow of calming **fragrances**, muted **colors**, **sweet fruits**, and contrasting **textures**, **gracefully** awaken the senses, allowing for a deeper **connection** to **nature** and **ourselves**. The keystone species, the **Valley Oak**, dazzles in the fall with shades of orange and yellow, offering rays of sunshine in the winter and cool shade in the summer. The sages, Mexican Marigolds, and citrus trees fill the air with their **tantalizing** perfumes, while seasonal pops of creams, violets, pinks and oranges blanket the space throughout the year.

RECONNECTING WITH THE SENSES

SITE ANALYSIS



NOTES:

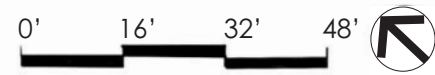
Location: Agoura Hills, CA

USDA Hardiness zone:
10b (35-30° F)

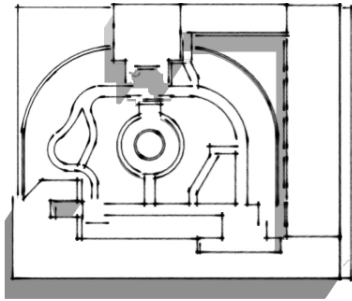
Sunset Western Garden Book zone:
21

Warm season: July 1-October 1
Cold season: November 27- March 21

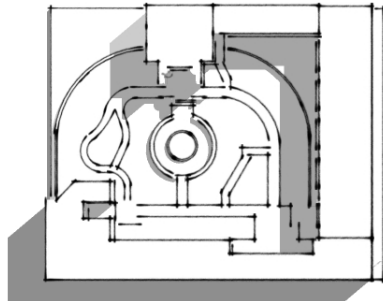
- LEGEND:
- Primary circulation
 - Secondary circulation
 - Prevailing winds from March to Oct.
 - Winds from the North (Oct. - March)
 - Obstruct views
 - Enhance views
 - Planting design area



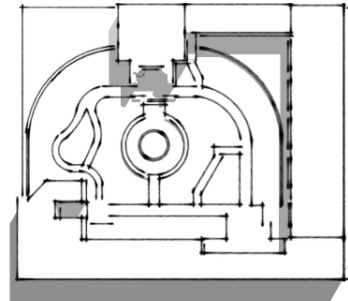
SITE ANALYSIS - SHADE STUDY



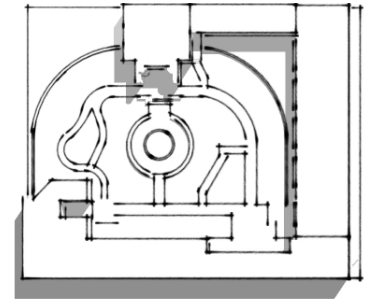
September 21, 9AM



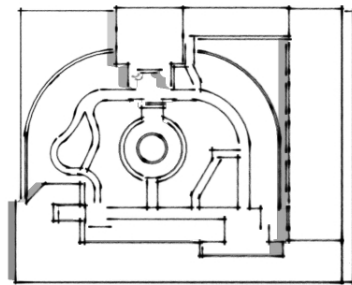
December 21, 9AM



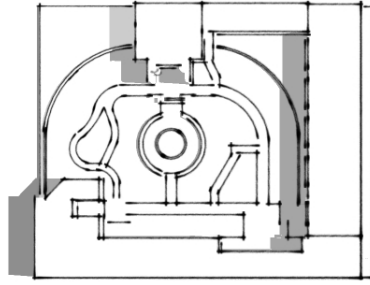
March 21, 9AM



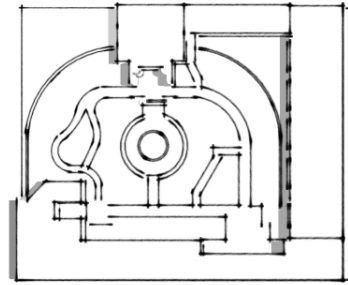
June 21, 9AM



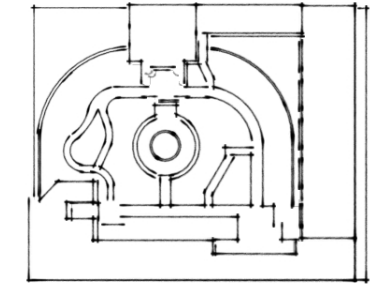
September 21, 12PM



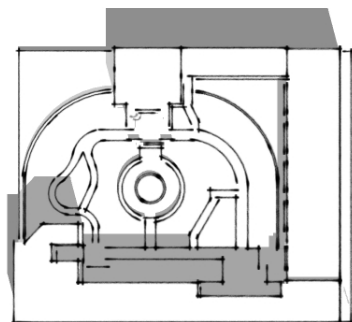
December 21, 12PM



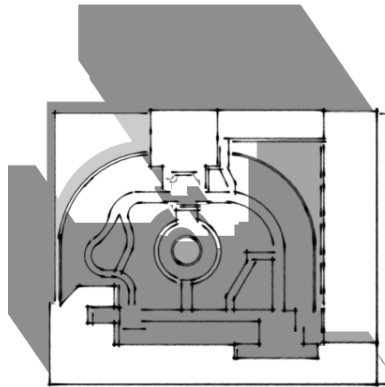
March 21, 12PM



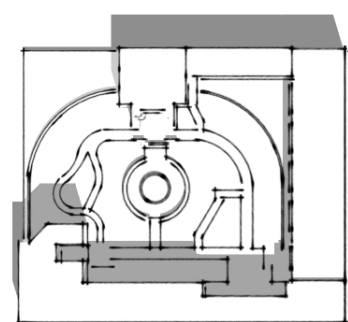
June 21, 12PM



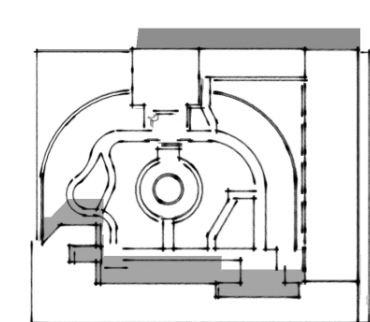
September 21, 4PM



December 21, 4PM



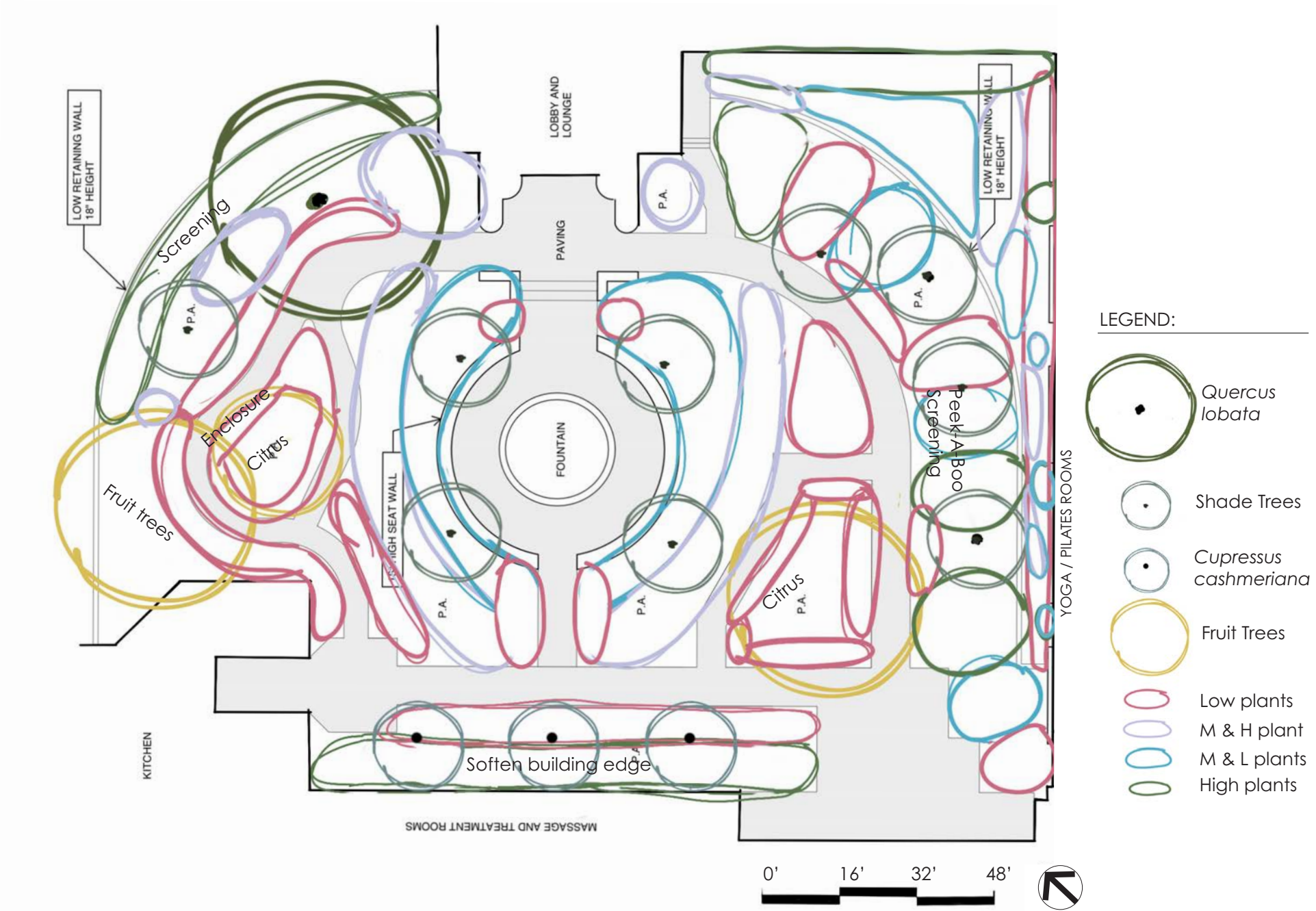
March 21, 4PM



June 21, 4PM



BUBBLE DIAGRAM



FULL TO PART SUN - LOW WATER USE



UNDER THE VALLEY OAK - LOW TO MODERATE WATER USE



PART SUN - MODERATE WATER USE



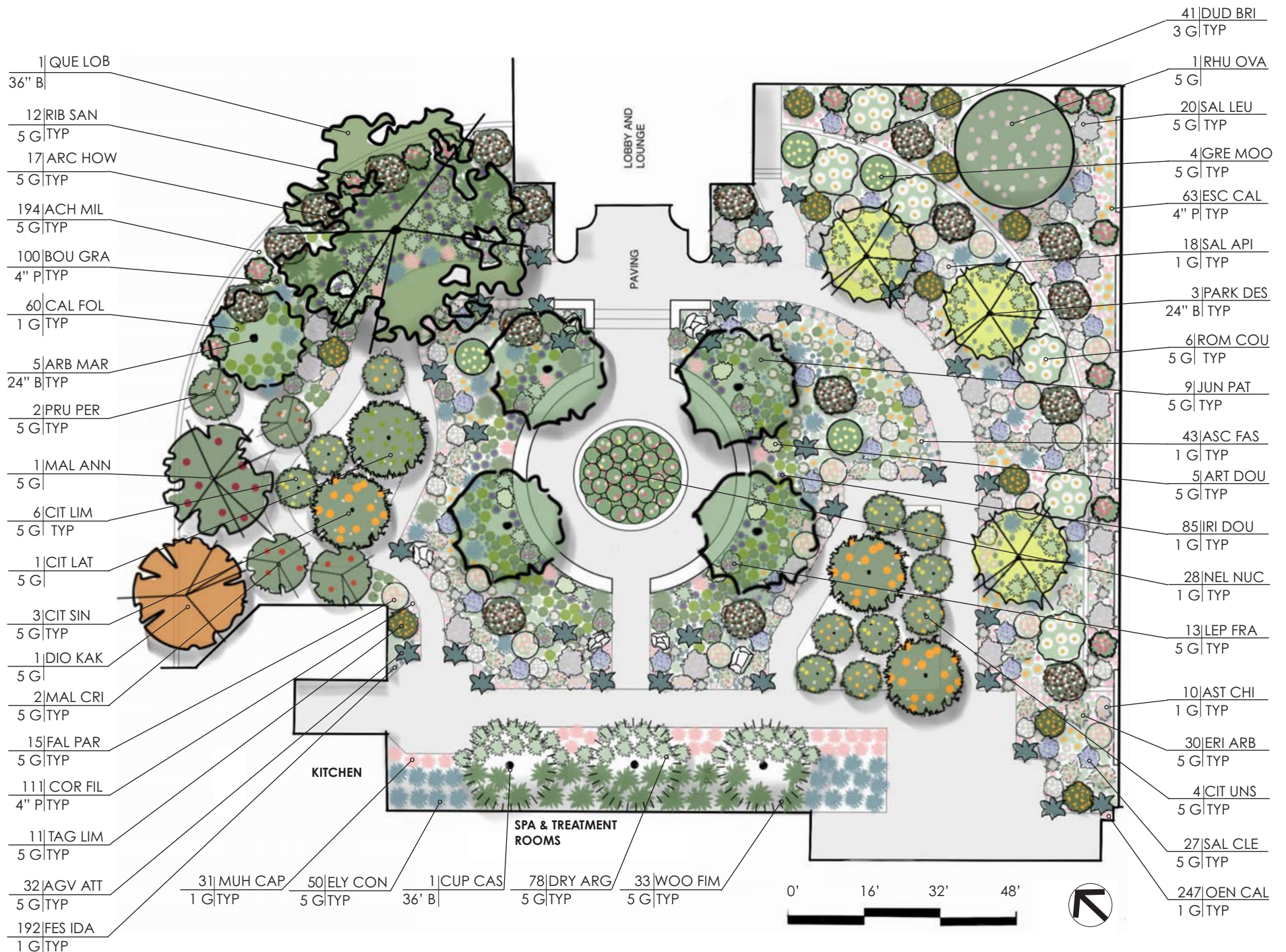
IN AND AROUND THE FOUNTAIN - LOW TO MODERATE WATER USE

























FULL SUN FRUIT TREE ORCHARD - MODERATE WATER USE



CONCEPT PLANTING PLAN



Plant Legend & Specifications

	PLANT SYMBOL	ABBRV.	SIZE	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANT FAMILY	MATURE SIZE (HEIGHT & WIDTH)	WUCOLS (P.F. 3)	BLOOM COLOR / SEASON / FRUIT	BLOOM COLOR	MAINTENANCE / NOTES
1		ACH MIL	5 G	194	<i>Achillea millefolium</i> 'Calistoga' CA	Calistoga Yarrow	Asteraceae	6"-12" h; 2-3' w	Low	White / Spring, Summer		Low
2		AGV ATT	5 G	32	<i>Agave attenuata</i> 'Nova'	Foxtail Agave Nova	Asparagaceae	3'-4' h; 3'-4' w	Very Low	Yellow-green flower stalks when mature		Low; remove spent flower stalks
3		ARB MAR	24" BOX	5	<i>Arbutus</i> 'Marina'	Strawberry Tree	Ericaceae	40' h; 8'-30' w	Low	Pink, white / Year- round Fall, Winter berries		Low
4		ARC HOW	5 G	17	<i>Arctostaphylos</i> 'Howard McMinn' CA	Howard McMinn Manzanita	Ericaceae	5'-7' h; 8'-10' w	Low	White, pink / Winter, Spring		Low
5		ART DOU	5 G	5	<i>Artemisia douglasiana</i> CA 	Mugwort	Compositae	3'-5' h; 3'-4' w	Moderate, High	Cream, white, yellow / Spring, Summer		Cut to ground in fall or winter (Winter deciduous)
6		ASC FAS	1 G	43	<i>Asclepias fascicularis</i> CA	California Milkweed; Narrow Leaf Milkweed	Apocynaceae	2'-3' h; 1' w	Low	Pink, Lavender, Cream / Spring, Summer, Fall		Low. Self-seeding, no need to cut back.
7		AST CHI	1 G	10	<i>Aster chilensis</i> 'Purple Haze' CA	Purple Haze Coast Aster	Asteraceae	1'-3' h; 3'-6' w	Low	Yellow, lavender / Spring, Summer, Fall		Low, deadhead flowers
8		BOU GRA	4" POT	100	<i>Bouteloua gracilis</i> CA	Blue Grama Grass	Poaceae	4"-16" h; 2' in bloom; 2' w (root depth: 6.5')	Low	Inflorescence / Spring, Summer		Light mowing if desired; cut back during winter dormancy
9		CAL FOL	1 G	60	<i>Calamagrostis foliosa</i> CA	Cape Mendocino Reed Grass	Poaceae	1' h; 2' w	Moderate	Silver heads / Spring		rake vigorously through the tufts (no shearing)
10		COR FIL	4" POT	111	<i>Corethrogyne filaginifolia</i> 'Silver Carpet' syn. <i>Lessingia</i> CA	Silver Carpet Aster	Asteraceae	6"-12" h; 5'- 8' w	Very Low	Light pink, purple / Spring, Summer		Low
11		CUP CAS	36" BOX	3	<i>Cupressus cashmeriana</i> 	Kashmir Cypress	Cupressaceae	60' h; 15-20' canopy	Moderate	Fragrant flowes in Spring (dioe- cious)		Low root damage potential and strong branch strength
12		DRY ARG	5 G	78	<i>Dryopteris arguta</i> CA	Coastal Wood Fern	Dryopteridaceae	2'-3' h; 2'-3' w	Low, Moderate	Dark brown sori appear on fertile fronds.		More drought toler- ant than other ferns. Prefers partial shade or full shade
13		DUD BRI	3 G	41	<i>Dudleya brittonii</i> CA	Giant Chalk Dudleya	Crassulaceae	1'-2' h; flower up to 3'h; 3' w	Very Low	Dark pink, yellow, orange / Spring		Remove spent stalks as needed
14		ELY CON	5 G	50	<i>Elymus condensatus</i> (syn. <i>Leumus</i>) 'Canyon Prince' CA	Canyon Prince Wild Rye	Poaceae	5' h; 4'-5' w	Low	Powdery blue flower stalks / Summer		Low, remove spent flowers

 Strong Fragrant Species
CA California Native Species



Small plant (0-3')



Medium plant (3'-6')



High plant (6'-12')



Tree

Plant Legend & Specifications (cont.)

	PLANT SYMBOL	ABBVR.	SIZE	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANT FAMILY	MATURE SIZE (HEIGHT & WIDTH)	WUCOLS (Region 3 P.F.)	BLOOM COLOR /SEASON / FRUIT	BLOOM COLOR	MAINTENANCE
15		ERI ARB	5 G	30	<i>Eriogonum arborescens</i> CA	Santa Cruz Island Buckwheat	Polygonaceae	2'-5' h, 2'-7'w	Low, VL	Magenta, cream, pink, rust / Summer, Spring, Fall		Low; can handle pruning as needed
16		ESC CAL	4" POT	63	<i>Eschscholzia californica</i> CA	California Poppy		2"-24" h; 1'-2' w	Low	Orange / Spring, Winter, Summer, Fall		annual; gently remove spent stalks
17		FAL PAR	5 G	15	<i>Fallugia paradoxa</i> CA	Apache Plume	Rosaceae	5'-6' h; 6' w	Low, VL	White flowers and pink plumes, May-Dec		Low; remove spent flowers
18		FES IDA	1 G	192	<i>Festuca idahoensis</i> 'Siskiyou Blue' CA	Idaho Fescue Siskiyou Blue	Poaceae	1-2.6'h, .5' w	Low, Mod, High	Yellow, Green / Summer		Low; rake or prune annually
19		GRE MOO	5 G	4	<i>Grevillea</i> 'Moonlight'	Grevillea Moonlight	Proteaceae	8'-12' h; 6'-8' w	Low	White / Year-round		Low
20		IRI DOU	1 G	85	<i>Iris douglasiana</i> CA	Douglas Iris	Iridaceae	1-3' h; 1'-2' w	Low	Purple, blue, lavender, white, yellow / Winter, Spring		Low
21		JUN PAT	5 G	9	<i>Juncus patens</i> 'Occidental Blue' CA	Wire Grass, Common Rush	Juncaceae	1'-2' h, 4'-6' w	Low, Moderate, High	Red, brown / Spring		Low
22		LEP FRA	5 G	13	<i>Lepechinia fragrans</i> CA *	Pitcher Sage	Laminaceae	3'-5' h; 3'-5' w	Low	Lavender, purple / Spring, Summer, Fall		Low
23		MUH CAP	1 G	31	<i>Muhlenbergia capillaris</i>	Pink Muhly Grass	Poaceae	2'-3' h' 2'-3' w	Moderate	Red, pink / Fall		Cut back in late winter to encourage growth
24		NEL NUC	1 G	28	<i>Nelumbo nucifera</i> *	Sacred Lotus Flower	Nelumbonaceae	3'-6' h (petioles); 3'-4' wide	Moderate, High	Pink, white, violet / April -September		Low
25		PARK DES	24" BOX	3	<i>Parkinsonia x</i> 'Desert Museum' CA	Desert Museum Palo Verde		20' h; 20-25'w	Very Low	Yellow, Spring, Summer		
26		OEN CAL	1 G		<i>Oenothera californica</i> CA	California primrose	Onagraceae	5" h; 1' w	Low, VL	Pink, White / Spring, Summer		
27		QUE LOB	36" BOX	1	<i>Quercus lobata</i> CA	Valley oak	Fagaceae	70'h; 30'-70' w	Low, Moderate	Inconspicuous / Spring / Acorns / Fall, Winter		Low
28		RIB SAN	5 G	12	<i>Ribes sanguineum</i> var. glutinosum 'Claremont' CA *	Pink Flowering Currant		8'-10' h; 4'-6' w	Low	Bright light pink / Spring leaves: fall color		Low, edible fruit
29		RHU OVA	5 G	1	<i>Rhus ovata</i> CA	Sugar Bush	Anacardiaceae	7-33' h; 30'w	Very Low	White, pink / Spring, Summer		Low, remove spent flowers

* Strong Fragrant Species
 CA California Native Species

Small plant (0-3') Medium plant (3'-6') High plant (6'-12') Tree

Plant Legend & Specifications (cont.)

	PLANT SYMBOL	ABBVR.	SIZE	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANT FAMILY	MATURE SIZE (HEIGHT & WIDTH)	WUCOLS (Region 3 P.F.)	BLOOM COLOR / SEASON / FRUIT	BLOOM COLOR	MAINTENANCE
30		ROM COU	5 G	6	<i>Romneya coulteri</i> CA	Matilija Poppy	Papaveraceae	4'-7' h; 10'-20'w	Vey Low	White and yellow /Spring, Summer		Annual pruning in the fall
31		SAL API	1 G	18	<i>Salvia apiana</i> var. <i>compacta</i> CA *	Compact White Sage	Lamiaceae	2'-3' h; 2'-4'' w	Very Low	white, lavender / Spring		Remove spent flowers
32		SAL CLE	5 G	27	<i>Salvia Clevelandii</i> CA *	Cleveland Sage	Lamiaceae	3-4' h; 8'w	Very Low	Blue, purple, lavender / Spring, Summer		Remove spent flowers
33		SAL LEU	5 G	20	<i>Salvia leucophylla</i> CA *	Purple Sage	Lamiaceae	4-6' h; 6'w	Very Low	Blue, lavender, white / Winter, Spring, Summer		Remove spent flowers as needed
34		TAG LIM	5 G	11	<i>Tagetes limonii</i> *	Mexican Marigold	Asteraceae	4-6' h; 6'w	Low	Yellow, Orange / Spring, Fall		Prune back 2x / year
35		WOO FIM	5 G	33	<i>Woodwardia fimbriata</i> CA	Giant Chain Fern	Blechnaceae	4'-6' h ; 4'-6' w	Low, Moderate	n/a		Prune dead fronds if needed

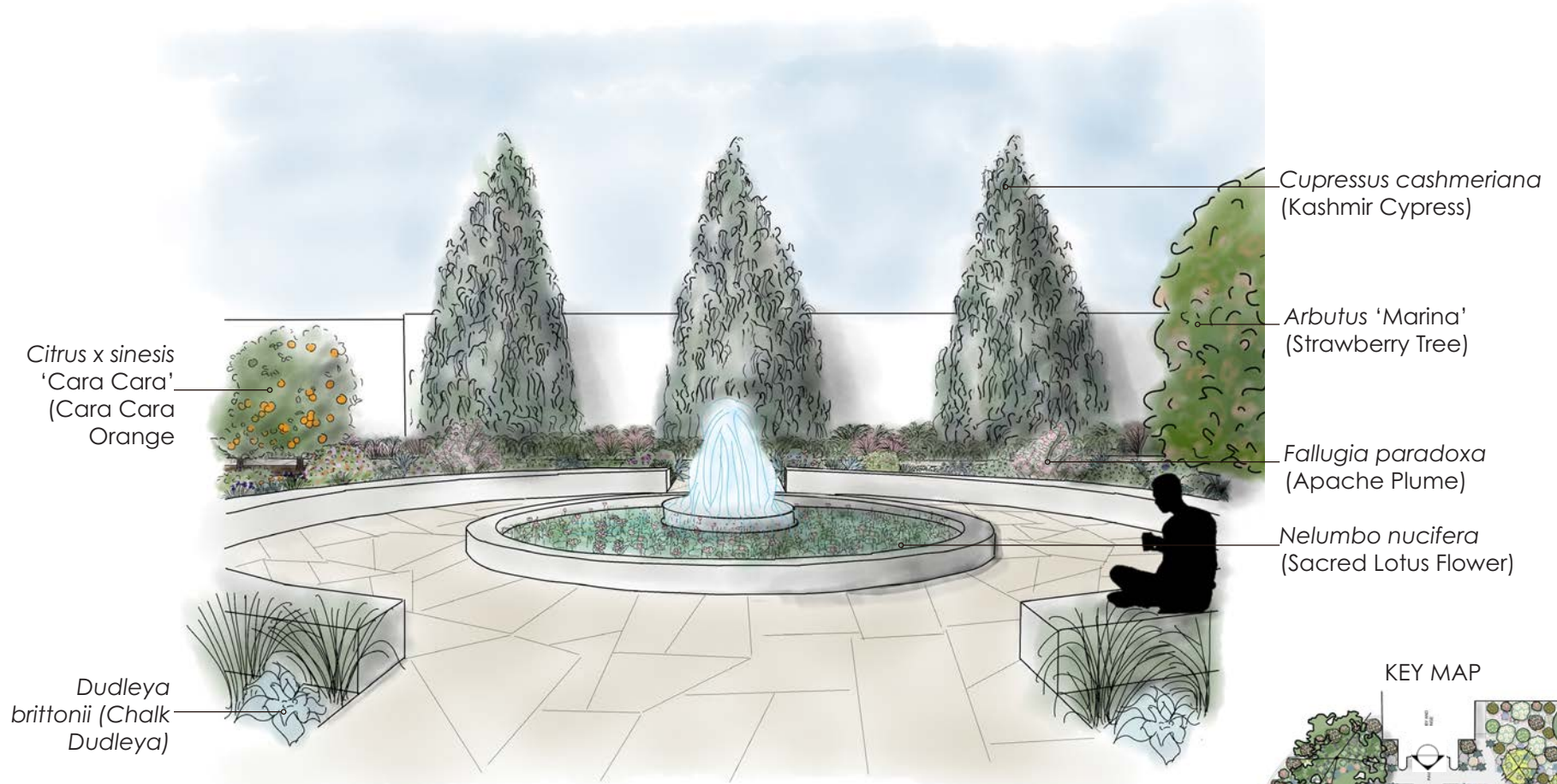
Fruit Tree Legend & Specifications

36		CIT LAT	5 G	1	<i>Citrus latifolia</i> 'Tanaka' *	Bearss Lime, Tahitian Lime, Persian Lime	Rutaceae	15'-20' h; 10-15' w	M	White / Early Spring / Seed-less limes / fall winter	Prune dead or diseased branches to increase air circ.
37		CIT LIM	5 G	6	<i>Citrus limon</i> 'Eureka Lemon' *	Eureka Lemon	Rutaceae	10'-20' h; 6'-8' w	M	White / Early Spring / Large sour yellow fruits / fall, winter (year-round)	Prune dead or diseased branches to increase air circ.
38		CIT UNS	5 G	4	<i>Citrus unshiu</i> *	Satsuma Mandarin	Rutaceae	12'-20' h; 6-8'w	M	White / Early Spring / Seed-less, easy to peel mandarins / ealry winter	Prune dead or diseased branches to increase air circ.
39		CIT SIN	5 G	3	<i>Citrus x sinensis</i> 'Cara Cara' *	Cara Cara Orange	Rutaceae	8-20' h, 8-20'w	M	White / Early Spring Sweet oranges, fall, winter	Prune dead or diseased branches to increase air circ.
40		MAL ANN	5 G	1	<i>Malus domestica</i> 'Anna'	Anna Apple	Rosaceae	20'25' h, 20'25' w	M	White /Spring / Red apple / June-Sept / 200 chill hrs	Low; slight pruning during dormancy
41		MAL CRI	5 G	2	<i>Malus domestica</i> 'Cripps Pink'	Pink Lady Aple	Rosaceae	12'-15' h; 12'-15' w	M	White/ Spring / Crisp apple / Oct-Nov / 300-400 chill hours	Low; slight pruning during dormancy
42		PRU PER	5 G	2	<i>Prunus persica</i> 'Eva's Pride'	Eva's Pride Peach	Rosaceae	10'-12'h; 10'w	M	Pink, white / Early Spring / Yellow Fruit / June-July / 100-200 chill hours	Pruning during dormancy
43		DIO KAK	5 G	1	<i>Diospyros kaki</i> 'Fuyu'	Fuyu Persimmon	Ebenaceae	20'-30' h; 20'-30' w	L, M	White, green yellow / Spring, Summer / Orange fruit / Fall, Winter	Low; Remove root suckers

* Strong Fragrant Species
CA California Native Species

Small plant (0-3') Medium plant (3'-6') High plant (6'-12') Tree

SKETCH VIEW FROM THE LOBBY



Citrus x sinensis
'Cara Cara'
(Cara Cara
Orange)

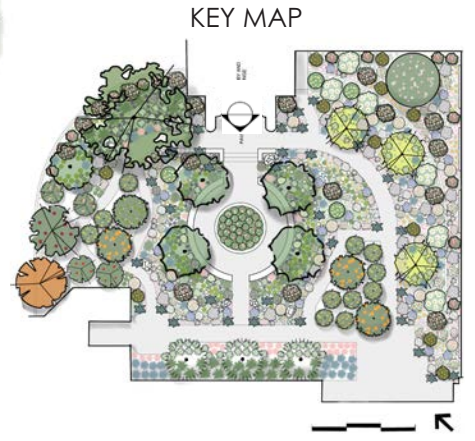
Dudleya
brittonii (Chalk
Dudleya)

Cupressus cashmeriana
(Kashmir Cypress)

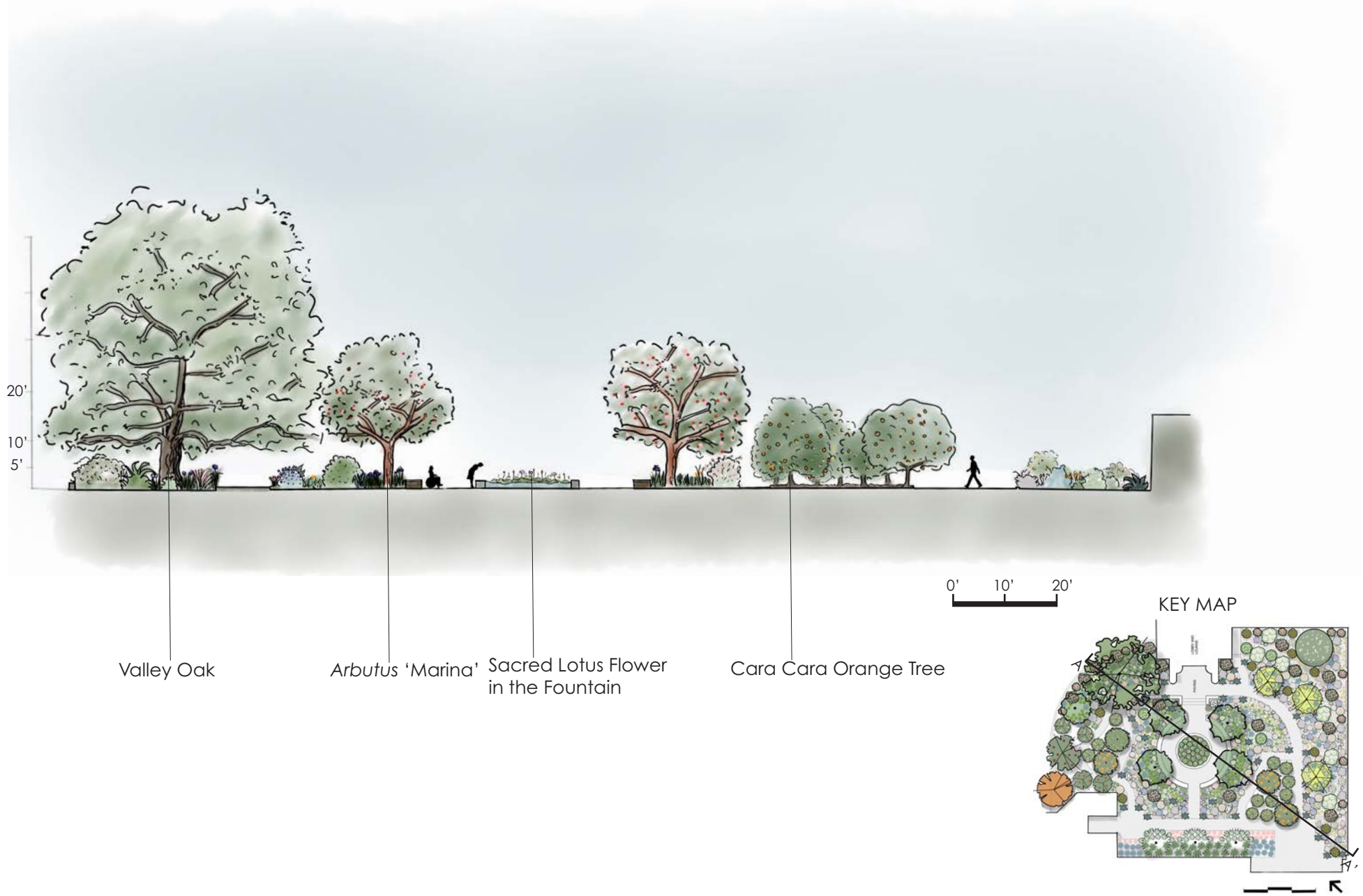
Arbutus 'Marina'
(Strawberry Tree)

Fallugia paradoxa
(Apache Plume)

Nelumbo nucifera
(Sacred Lotus Flower)



DIAGONAL SECTION ACROSS THE GARDEN



Tree Palette:



Blooming almost year-round this wildlife magnet is a feast for the eyes.



Eye-catching foliage and the conical shape of this one-of-a-kind conifer bring elegance and romance to the garden.



The Desert Museum is a CA native drought tolerant tree with seasonal interest and extremely high wildlife value.



This drought tolerant majestic oak can live for several hundred years, offering a critical habitat and food source for wildlife. It's stunning fall foliage and architectural branches create a dramatic effect in the garden.

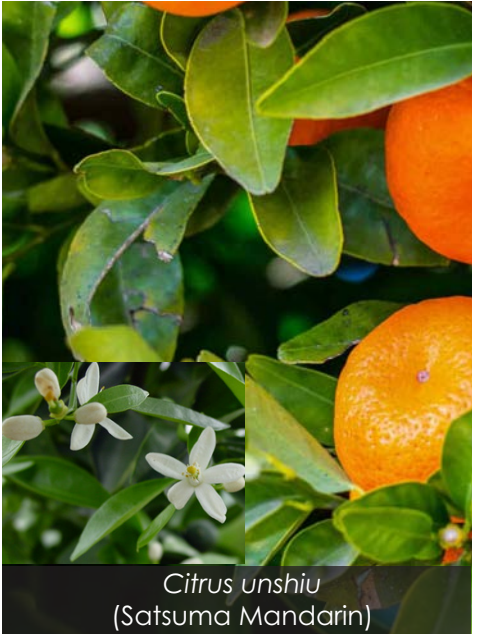
Shrub and Groundcover Palette:



Shrub and Groundcover Palette (cont.):



Full Sun Fruit Tree Orchard



RECOMMENDATIONS

SOIL PREPARATION SPECIFICATIONS:

A soil test will be conducted to determine the quality and water holding capacities of the soil. To decompact and create a well-draining soil, we recommend to breakup hardpan layers that may still exist in the ground. We'd follow this with light tilling by mixing in several inches of organic material - ideally compost and/or worm castings. The organic matter will add nutrients and beneficial microorganisms, which will improve the soil structure. The organic material will increase the drainage in the soil by binding the fine clay particles together into larger aggregates. We will mound some of the native soil into berms and add gravel to increase the drainage if needed.

For the fruit tree orchard, we will amend with extra compost and worm castings to create a rich soil with nutrients needed to feed the fruit trees year-round. Once a year, we recommend adding additional worm-castings, compost and mycorrhizal fungi (beneficial organisms in the roots of most plants) to boost the health of the soil. Keep the organic matter fresh in the soil.

Organic matter and very light tilling will be used to prepare the soil in all hydrozones. Some time should be allotted for the organic matter to blend into the soil. During planting, we will add additional mycorrhizal fungi (beneficial organisms that exist in the roots of most plants) to boost the health of the soil.

Once all the plants are in the ground, mulching, especially in the fruit tree orchard, will help keep moisture in the soil (and weeds out), and will continue to help break down particles to increase drainage capacity and keep the soil rich. As the plants grow, less mulch will be needed in the high-planted areas.

IRRIGATION RECOMMENDATIONS:

Rain is the best water, as it is free and it is pure. We will build swales and check dams to direct and retain the rainfall as much as possible. However, during the establishment period or periods of drought, all plants will require extra water. It is best for plants to receive water first thing in the morning. Depending on the season of initial planting, it is recommended to water every few days, or once a week for California native plants until the plants are established (up to 2 seasons for most California native plants). For optimal success, it is recommended to plant a new garden between fall and spring.

Deep watering less frequently is the preferred method of irrigating plants. During the rainy season (November through April), all plants - other than the fruit trees - won't require additional irrigation once established (unless we're under severe drought conditions).

The plants in **Hydrozone 1** are the most drought tolerant and will need the least amount of water once established. Mainly California native plants, this palette will require watering about once or twice a week for the first year or 2, depending on the season and the weather. Additional watering in the summer after establishment may be recommended.

The fruit orchard in **Hydrozone 2** will require moderate water throughout the year, particularly the stone fruit and apple trees. A drip irrigation system for this hydrozone is recommended.

Hydrozone 3 requires low to moderate water in the area under the *Quercus lobata* and the *Cupressus cashmerianas*. A drip system is recommended in this zone as well, to avoid any direct spraying on the trunks of the trees. The area closest to the fountain has the same water needs.

A combination of MP rotors and drip irrigation is recommended throughout the garden. Drip is recommended for the fruit and regular trees, while the MP rotors are advised for the other planted areas. A weather-based irrigation controller that can be adjusted remotely will make the system most efficient. Periodic monitoring of the soil in the different hydrozones is strongly recommended, especially during the growing period, as it will ensure plants are growing at their best.



THANK YOU!