

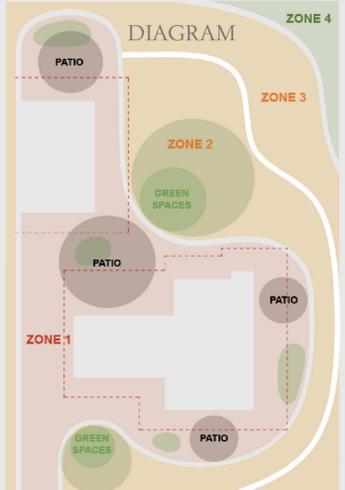
SERPENTINE LAYERS FOR FIRE PROTECTION



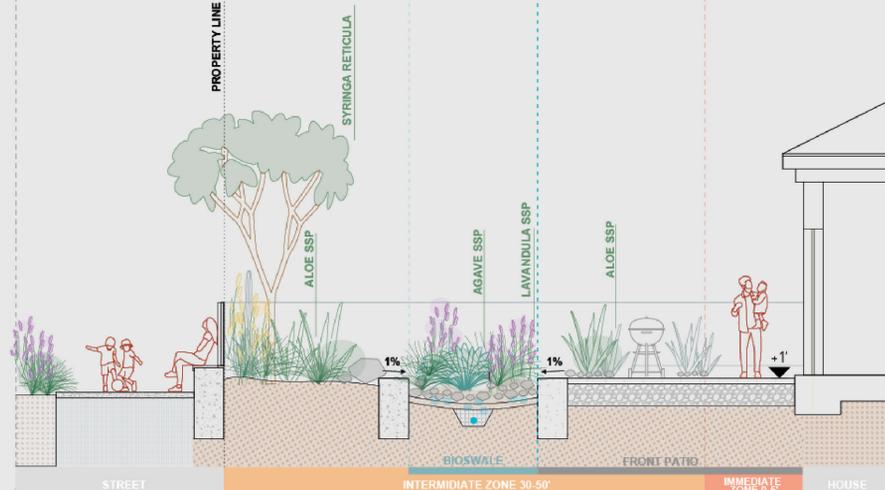
BIRD-EYE VIEW FROM THE STREET



Sinuous Edges Paviments Textures Delimited Zones Gravel and Stones Bio-Swale Color Rings Replicable System Xerophyte



DIAGRAM



SECTION A-A

ZONE 01
MEDITERRANEAN COURTYARD.
Contains "Immediate zone" (0-5 ft) and extra space for Patios adjacent to the buildings.
No flammable materials

- Aeonium / tree houseleek
- Agave americana / century plan
- Echeveria elegans / mexican snow ball
- Senecio / groundsel
- Mesembryanthemum / ice plant
- Aloe ferox / bitter aloe

ZONE 02
BIO-SWALE / INFILTRATION GARDEN
Surrounding Zone 01
Well-drainage soil/gravel or mowed lawn.
Fire-resistant plants

- Ceanothus 'Ray Hartman' / wild lilac
- Festuca glauca / blue fescue
- Lavandula / french lavender
- Artemisia californica / california sagebrush
- Monardella linoides / Willowy Mint
- Penstemon pinifolius / Pineleaf

ZONE 03
MIDDLE-GARDEN
Intermediate Vegetation:
Schrubs and medium size trees
Fire-resistant plants

- Mimulus aurantiacus / sticky monkey
- Ceanothus 'Frosty Blue' / california lilac
- Poa labillardieri / Suggan Buggan
- Achillea millefolium / common yarrow
- Cercocarpus betuloides / m. Ironwood
- Senegalia nigrescens / Knob thorn

ZONE 04
LARGE GARDEN
After extended zone (more than 30 ft from buildings)
Big species allowed, maintenance required: Pruned and cleared of dead grass/vegetation.

- Quercus agrifolia / coast live Oak
- Salix purpurea / willow bush
- Syringa reticulata / japanese tree lilac
- Platanus racemosa / california Sycamore
- Celtis occidentalis / common hackberry
- Fraxinus spp / ash



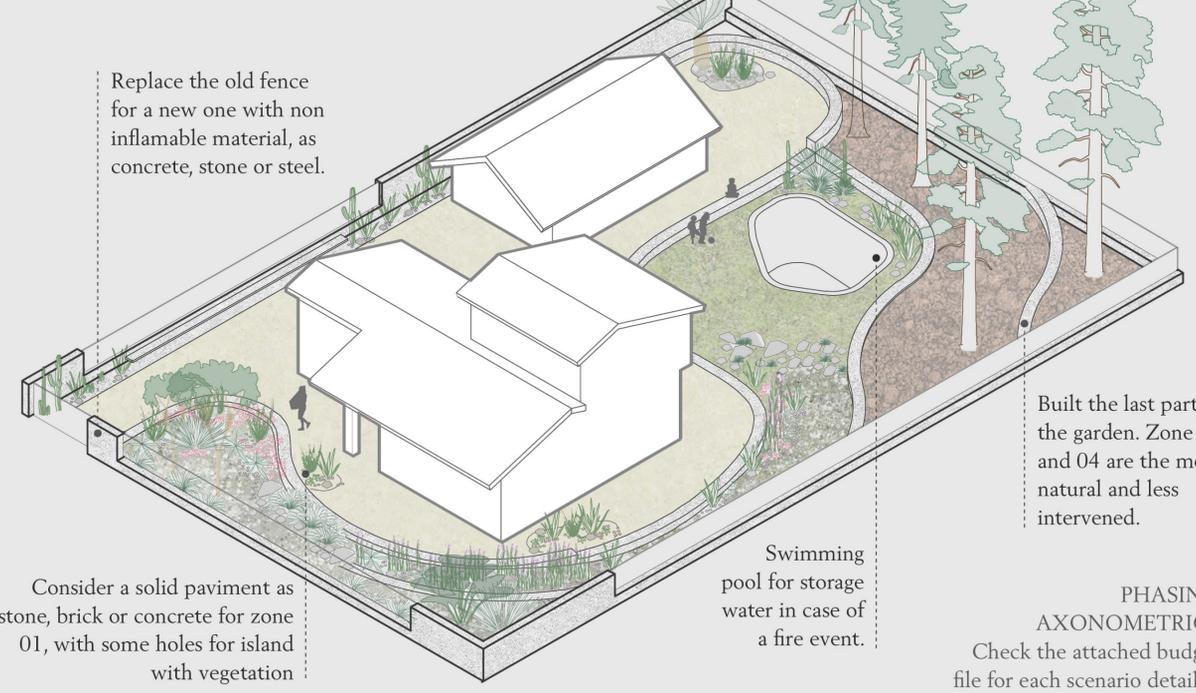
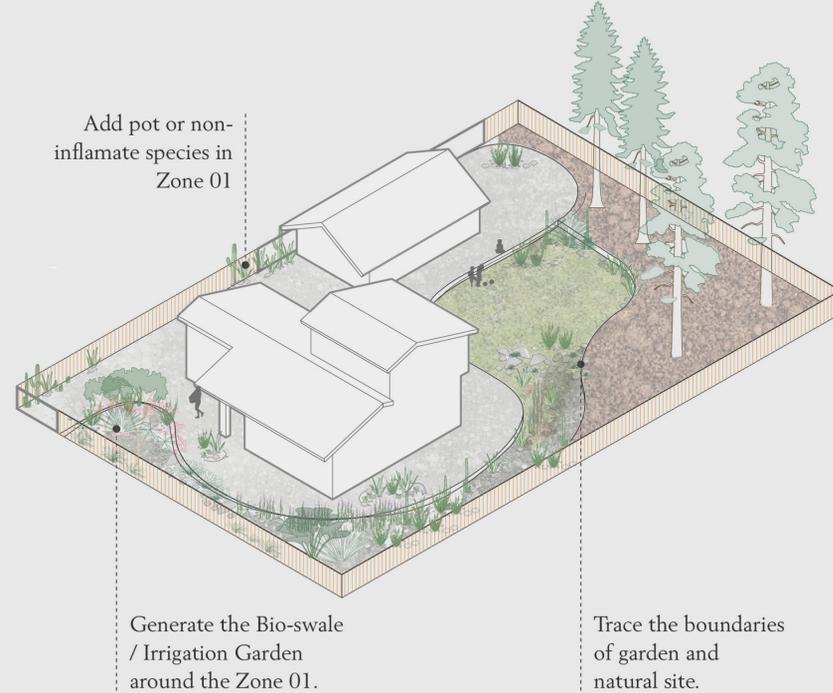
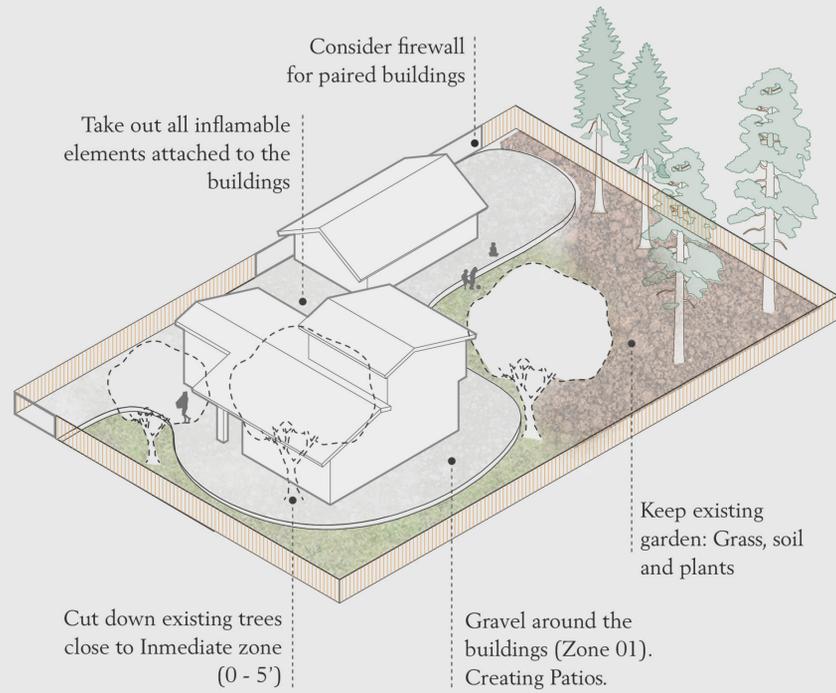
SITE PLAN

INCREMENTAL LANDSCAPE DESIGN

PHASE A
BUDGET \$5,000
Construction of Zone 01 and maintenance of existing surroundings

PHASE B
ADD OTHER \$5,000 = TOTAL BUDGET \$10,000
Set up Second Layer and delimitate Zones 3 and 4.

PHASE C
UNLIMITED BUDGET
Consolidation of the final Fire Resistant Garden, with definitive material selection for each zone and adding last group of species.



PHASING
AXONOMETRICS
Check the attached budget file for each scenario detailed



PROPOSAL OPTION 1

Removal of existing vegetation, construction of the first zone with gravel and, if wanted, partial replacement of the fence to be non-combustible instead of wood.

ITEM	DESCRIPTION	UNIT	QUANTITY	PRICE	P.TOTAL
1	REMOVAL OF EXISTING VEGETATION	un	124		
2.1.1	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
2.1.3	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
2.1.4	removal medium tree (2 a 3,5 m.)	un	1	\$700	\$700
				SUBTOTAL 1	\$1,700
2	PAVEMENT				
2.1	Gravel	sqft	4150	\$3,735	
				SUBTOTAL 2	\$3,735
	TOTAL COST (WITHOUT FENCE)				\$1,700
OPTIONAL					
3	FENCE & DOOR				
3.1	Stain steel fence	lft	95 ft	\$570	
				SUBTOTAL 3	\$570
	TOTAL COST WITH FENCE				\$2,270

Partial replacement of the fence to be non-combustible instead of wood. In the case study, the entrance door and the fence closest to the garage, are the ones close to the immediate zone protection (it would be approx 95 ft of the fence and it would be highly recommended)

PROPOSAL OPTION 2

Removal of existing vegetation, introduction of new plants to zones 01 and 02, construction of Bio-swale and irrigation system, and construction of the first zone with gravel and partial replacement of the fence to be non-combustible instead of wood.

ITEM	DESCRIPTION	UNIT	QUANTITY	PRICE	P.TOTAL
1	REMOVAL OF EXISTING VEGETATION	un	124		
1.1	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
1.2	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
1.3	removal medium tree (3,5 a 5 m.)	un	1	\$700	\$700
				SUBTOTAL 1	\$1,700
2	PLANT SPECIES SUPPLY				
2.1	SHRUBS AND HERBACEOUS PLANTS (ZONE 01)				
	Aeonium/tree houseleek	un	100	\$600	
	Echeveria elegans/mexican snow ball	un	100	\$180	
	Agave americana/century plan	un	50	\$400	
	Senico/groundsel	un	50	\$300	
	Mesembryanthemum/ ice plant	un	10	\$120	
	Aloe ferox/ bitter aloe	un	50	\$1,250	
				SUBTOTAL 2.1	\$2,850
	BIO-SWALE ZONE				
2.2	SHRUBS AND HERBACEOUS PLANTS (ZONE 02)				
	Ceanothus 'Ray Hartman'/wild lilac	un	10	\$200	
	Festuca glauca/ blue fescue	un	50	\$500	
	Lavandula/ french lavender	un	100	\$500	
	Artemisia californica/ california sagebrush	un	30	\$330	
	Monardella linooides/ willow mint	un	100	\$500	
	Penstemon pinifolius/Pineleaf	un	10	\$80	
				SUBTOTAL 2.2	\$2,110
3	ROCKS SUPPLY				
	medium boulder (40-60lbs0	un	10	\$400	
				SUBTOTAL 3	\$400
4	PAVEMENT				
	Gravel	sqft	0.9\$ x 4150	\$3,735	
				SUBTOTAL 4	\$3,735
5	FENCE & DOOR				
	Stain steel fence	lft	95 ft x \$6=	\$570	
				SUBTOTAL 5	\$570
6	TOTAL COST				\$11,365

PROPOSAL OPTION 3

Consolidation of the final Fire Resistant Garden: removal of existing vegetation, introduction of new plants to all zones of the garden (01,02,03,04), replacement of old fence to a noninflammable material one (concrete and stain steel fence), construction of Bio-swale and irrigation system, and construction of the first zone with stone, brick or concrete instead of gravel. If wanted, proposal for a new swimming pool as water storage in case of fire event.

ITEM	DESCRIPTION	UNIT	QUANTITY	PRICE	P.TOTAL
1	REMOVAL OF EXISTING VEGETATION	un	124		
1.1	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
1.2	removal small tree (2 a 3,5 m.)	un	1	\$500	\$500
1.3	removal medium tree (3,5 a 5 m.)	un	1	\$700	\$700
				SUBTOTAL 1	\$1,700
2	PLANT SPECIES SUPPLY				
2.1	SHRUBS AND HERBACEOUS PLANTS (ZONE 01)				
	Aeonium/tree houseleek	un	100	\$600	
	Echeveria elegans/mexican snow ball	un	100	\$180	
	Agave americana/century plan	un	50	\$400	
	Senico/groundsel	un	50	\$300	
	Mesembryanthemum/ ice plant	un	10	\$120	
	Aloe ferox/ bitter aloe	un	50	\$1,250	
				SUBTOTAL 2.1	\$2,850
	BIO-SWALE ZONE				
2.2	SHRUBS AND HERBACEOUS PLANTS (ZONE 02)				
	Ceanothus 'Ray Hartman'/wild lilac	un	10	\$200	
	Festuca glauca/ blue fescue	un	50	\$500	
	Lavandula/ french lavender	un	100	\$500	
	Artemisia californica/ california sagebrush	un	30	\$330	
	Monardella linoides/ willow mint	un	100	\$500	
	Penstemon pinifolius/Pineleaf	un	10	\$80	
				SUBTOTAL 2.2	\$2,110
2.3	SHRUBS AND MEDIUM SIZE TREES (ZONE 03)				
	Mimulus auranticus/stickey monkey		10	\$70	
	Cranohus'Frosty Blue'/california lilac		20	\$200	
	Poa labillardieri/Suggan Buggan		50	\$150	
	Achillea millefolium/ common yarrow		10	\$200	
	Cercocarpus betuloides/m.Ironwood		10	\$100	
	Senegalia nigrescens/Knob thorn		2	\$400	
				SUBTOTAL 2.3	\$1,120
2.4	SHRUBS AND MEDIUM AND BIG SIZE TREES (ZONE 04)				
	Quercus agrifolia/ coast live oak	8 ft	1	\$250	
	Salix purpurea/ willow bush		25	\$45	
	Syringa reticulata/ japanese tree lilac	2-3 ft	4	\$80	
	Platanus racemosa/ california Sycamore	6 ft	2	\$300	
	Celtis occidentalis/ common hackberry	3-4 Ft	2	\$400	
	Fraxinus spp/ ash	4 ft	4	\$200	
				SUBTOTAL 2.4	\$1,275
3	ROCKS SUPPLY				
3.1	medium boulder (40-60lbs0	un	10	\$400	
				SUBTOTAL 3	\$400
4	PAVEMENT				
4.1	Gravel	sqft	3600	\$3,240	
4.2	Stone pavers	sqft	4150	\$20,000	
				SUBTOTAL 4	\$23,240
5	CONCRETE BORDERS (RING)				
5.1		lft	691	\$13,820	
				SUBTOTAL 5	\$13,820
6	FENCE & DOOR				
6.1	Stain steel fence	lft	335	\$1,000	
6.2	Concrete fence 5ft	lft	183	\$2,745	
6.3	Concrete fence 2ft	lft	335	\$6,700	
				SUBTOTAL 6	\$10,445
	TOTAL COST				\$56,960
OPTIONAL					
4	POOL				
				\$25,000	
				SUBTOTAL 4	\$25,000
	TOTAL COST WITH POOL				\$81,960