

## PLANTING PLAN

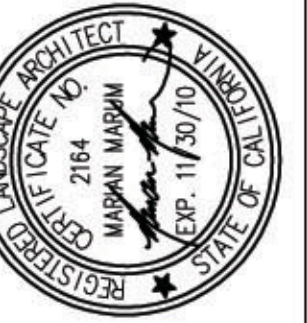
1/8" = 1'-0"



## PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	WATER USAGE
<b>TREES</b>					
	ARBUTUS MARINA	MARINA STRAWBERRY TREE	24" BOX		M
	BRACHYCHITON ACERIFOLIUS	AUSTRALIAN FLAME TREE	24" BOX		M
	ARECASTRUM ROMANZOFFINUM	QUEEN PALM	8' BTH		M
	CITRUS OR STONE FRUIT TREE	-	15 GAL		M
	CERCIDIUM 'DESERT MUSEUM'	PALO VERDE 'DESERT MUSEUM'	24" BOX		VL
	PUNICA GRANATUM	POMGRANITE	15 GAL		M
<b>SHRUBS</b>					
	AGAVE ATTENUATA 'NOVA'	BLUE FOXTAIL AGAVE	5 GAL		L
	BOUGAINVILLEA ROSENKA	BOUGAINVILLEA	15 GAL		L
	BOUGAINVILLEA 'TORCH GLOW'	BOUGAINVILLEA	15 GAL		L
	SALVIA LEUCANTHA	MEXICAN SAGE	5 GAL		L
	AEONIUM SCHWARZKOFF	BLACK AEONIUM	5 GAL		L
	CALANDRINIA GRANDIFLORA	ROCK PURSLANE	5 GAL		L
	LAVATERA MARITIMA	MALLOW	5 GAL		L
	KALANCHOE LUCCA	FLAPJACK PLANT	1 GAL		L
	PHORMIUM TENAX 'EVENING GLOW'	NEW ZEALAND FLAX	5 GAL		L
	SENECIO BARBERTONICUS	SUCCULENT BUSH	5 GAL		L
	PHLOMIS FRUTICOSA	JERUSALEM SAGE	5 GAL		L
	CEONOTHUS 'YANKEE POINT'	MOUNTAIN LILAC	5 GAL		L
<b>VINES</b>					
	BIGNONIA VINES	RED/VIOLET TRUMPET VINE	15 GAL		M
	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	15 GAL		M
<b>GROUND COVER</b>					
	ARMERIA MARITIMA	SPENDTHRIFT	6" POT	12" O.C.	M
	BULBINE FRUTESCENS	BULBINE	1 GAL	12" O.C.	L
	COREOPSIS 'SUN RAY'	COREOPSIS	1 GAL	18" O.C.	L
	DYMONDIA MARGARETAE	DYMONDIA	1 GAL	12" O.C.	L
	ECHEVERIA ELEGANS	HENS AND CHICKS	1 GAL	6" O.C.	L
	KALANCHOE BLOSSFELDIANA	CHRISTMAS KALANCHOE	1 GAL	6" O.C.	L
	SEDUM 'AUTUMN JOY'	SEDUM 'AUTUMN JOY'	1 GAL	18" O.C.	L

ABBREVIATIONS:  
M MODERATE L LOW VL VERY LOW



MARUM PARTNERSHIP  
LANDSCAPE ARCHITECTURE - URBAN DESIGN -  
PLANNING  
4010 GOLDFINCH STREET  
SAN DIEGO, CA 92103  
PHONE: 619-992-9533

PET FRIENDLY WATER SMART GARDEN

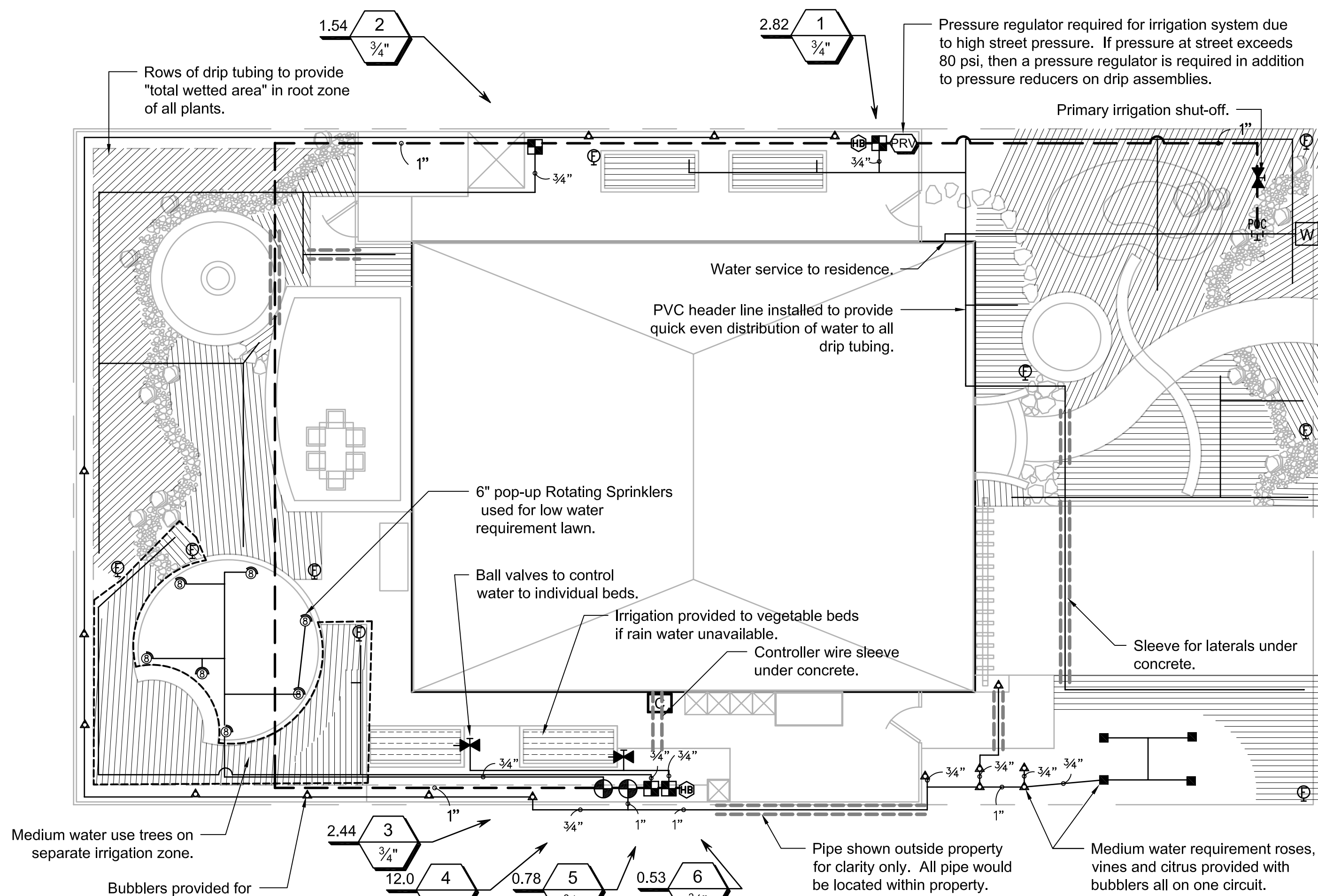
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DATE 06-09-10  
REVISIONS

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PLANTING  
PLAN

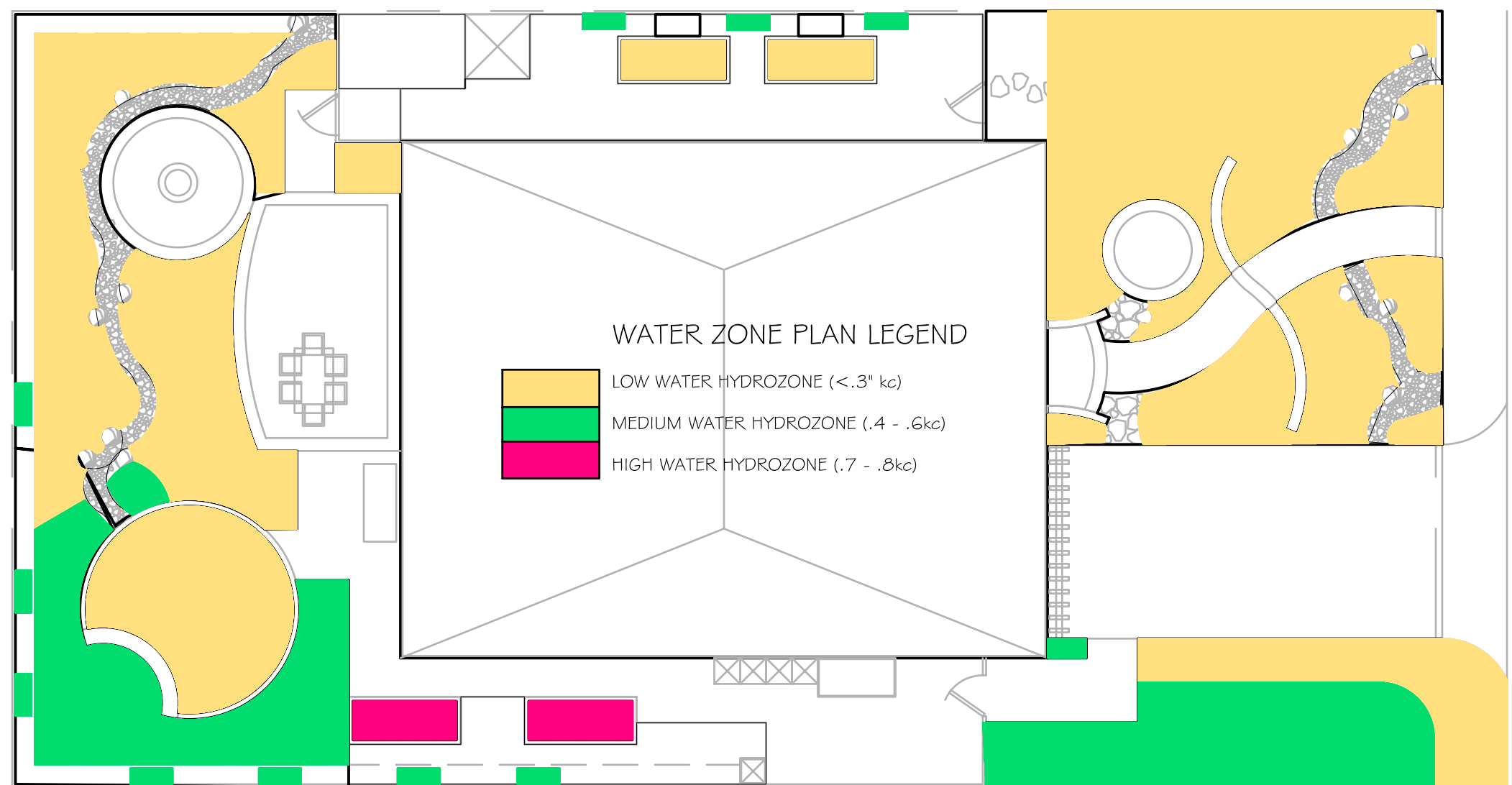
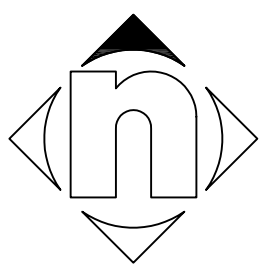
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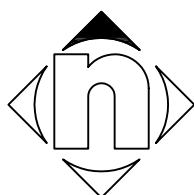
## IRRIGATION PLAN

1/8" = 1'-0"



## WATER ZONE PLAN

3/16" = 1'-0"



### IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
⊙	Hunter INST-06-CV 8" radius	1	180	25	0.38	8'
⊙	Hunter INST-06-CV 8" radius	2	90	25	0.19	8'
⊙	Hunter INST-06-CV 8" radius	4	120	25	0.29	8'
▲	Rain Bird 1806-SAM-PRS-1400 Flood	16	360	30	0.25	1'
■	Rain Bird 1806-SAM-PRS-1400 Flood	4	360	30	2.00	1'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
⊞	Rain Bird XACZ-075-PRF Drip Control Kit, 3/4" Low Flow Anti-Siphon Valve, 3/4" pressure regulating RBY Filter, and 30psi pressure regulator, for above grade installation.
⊞	Flush Valve

⊞	Area to Receive Dnpline Netatim TLCV4-18-18 Landscape Dnpperline with 0.4gph emitters at 18" o.c. with check valve, pressure compensation, 14.7psi min. to 50psi max. Dnpperline laterals spaced at 18" apart, with emitters offset for triangular pattern.
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⊞	Area to Receive Dnpline Netatim TLCV6-12-12 Landscape Dnpperline with 0.6gph emitters at 12" o.c. with check valve, pressure compensation, 14.7psi min. to 50psi max. Dnpperline laterals spaced at 12" apart, with emitters offset for triangular pattern.
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SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
⊞	Rain Bird ASVF Electric Remote Control Valve, with Atmospheric Backflow Preventer
⊞	Champion B-402 Garden Valve Install on nser staked to 4x4 redwood post.

⊞	KBI LT-5 PVC Scheule 80 Ball Valve, Slip X Slip
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⊞	Rain Bird ESP-SMT4 with (1) ESP-SM3 7" station, wall mount, outdoor controller with tipping bucket rain sensor
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⊞	Wilkins 500 HLR Series Pressure Reducing Valve
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⊞	Point of Connection 1" Tie in at water service line.
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⊞	Irrigation Lateral Line: PVC Schedule 40
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⊞	Irrigation Mainline: PVC Class 315 SDR 13.5
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⊞	Pipe Sleeve: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.
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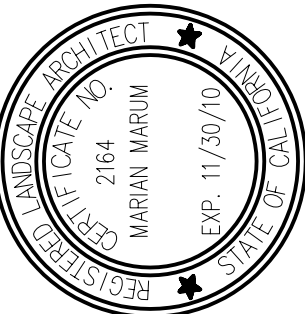
⊞	Valve Callout Valve Number Valve Flow Valve Size
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Pet Friendly Water Wise Garden	
Water Budget Calculations	
<b>Maximum Applied Water Allowance (MAWA)</b>	
MAWA = (Eto)(0.62)(0.7xLA)	
46.6 x 0.62 x 0.7 x 2939	
29	2057
	59440 Gallons per Year
MAWA	79 Units (100cf) per Year
<b>Estimated Total Water Use (ETWU)</b>	
ETWU = [(Eto)(0.62)(PFxHA)]/IE	
Hydrozone 1	55.1 x 0.62 x 0.3 x 175 = 2242
Rotating Sprinklers	0.8
Hydrozone 2	55.1 x 0.62 x 0.6 x 336 = 7652
Med. Req. Drip	0.9
Hydrozone 3	55.1 x 0.62 x 0.3 x 1389 = 15817
Low Req. Drip	0.9
Hydrozone 4	55.1 x 0.62 x 0.6 x 394 = 10095
Bubblers	0.8
Irrigated Landscape	2294
	35806 Gallons per Year
ETWU	48 Units (100cf) per Year
Maximum Allowable Water Use	59440
Total Estimated Water Use	35806
Difference	23633
	60% Of Allowance
Assumes Eto of 55.1 inches (CIMIS Zone 9 South Coast Marine to Desert Transition)	
Where: Eto = Evapotranspiration in inches per year	
0.62 = Conversion factor to gallons per square foot	
0.7 = ET adjustment factor (plant factor x irrigation efficiency)	
LA = Landscaped Area	
PF = Average plant factor for each hydrozone (WUCOLS)	
HA = Hydrozone area in square feet	
IE = Irrigation efficiency of irrigation method used in hydrozone	

### NOTES:

- All irrigation shown is diagrammatic only. All pipe and drip tubing would be laid in planter areas.
- Vegetable garden was not zoned or scheduled as planting requirements would vary depending on planting.
- Irrigation schedules are for reference purposes only. Actual schedule would be based on performance observations of run-off, local weather conditions and plant health/stress and would be regulated by Controller Weather Sensor system.
- All pvc pipe to be sch. 40 with mainline buried 18" and laterals buried 12".

Establishment Schedule	Post-Establishment Schedule
Hydrozone 1 (Station 3) PF=0.3 Rotating Sprinklers 0.6 Inches per Week Days On 6 Cycles 2 Runtime 4 Minutes	Weekly Eto 0.48 Adj. Eto 0.14 Jan 0.14 Feb 0.19 Mar 0.27 Apr 0.34 May 0.39 Jun 0.44 Jul 0.50 Aug 0.45 Sep 0.38 Oct 0.27 Nov 0.18 Dec 0.41 Days On 1 Cycles 1 Runtime 10 Min./Wk 10
Hydrozone 2 (Station 5) PF=0.6 Drip Med. 1.1 Inches per Week Days On 6 Cycles 1 Runtime 42 Minutes	Adj. Eto 0.29 Jan 0.29 Feb 0.37 Mar 0.54 Apr 0.68 May 0.79 Jun 0.88 Jul 0.99 Aug 0.91 Sep 0.76 Oct 0.54 Nov 0.36 Dec 0.25 Days On 2 Cycles 1 Runtime 32 Min./Wk 64
Hydrozone 3 (Stations 1, 2) PF=0.3 Drip Low 0.6 Inches per Week Days On 6 Cycles 1 Runtime 20 Minutes	Adj. Eto 0.14 Jan 0.14 Feb 0.19 Mar 0.27 Apr 0.34 May 0.39 Jun 0.44 Jul 0.50 Aug 0.45 Sep 0.38 Oct 0.27 Nov 0.18 Dec 0.12 Days On 2 Cycles 1 Runtime 16 Min./Wk 32
Hydrozone 4 (Station 4) PF=0.6 Bubblers 1.1 Inches per Week Days On 6 Cycles 1 Runtime 5 Minutes	Adj. Eto 0.29 Jan 0.29 Feb 0.37 Mar 0.54 Apr 0.68 May 0.79 Jun 0.88 Jul 0.99 Aug 0.91 Sep 0.76 Oct 0.54 Nov 0.36 Dec 0.25 Days On 2 Cycles 1 Runtime 4 Min./Wk 7



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PHONE: 619-992-9533

## PET FRIENDLY WATER SMART GARDEN

JOB: .....  
DATE: 6-2-2010  
REVISIONS

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IRRIGATION  
PLAN

L-2



# WATER SMART DESIGN STATEMENT

THIS GARDEN DESIGN IS FOCUSED ON CREATING AN ENVIRONMENT THAT ENHANCES THE QUALITY OF LIFE FOR ALL MEMBERS OF THE FAMILY, INCLUDING THE PETS! IT IS CONDUCIVE TO A VARIETY OF OUTDOOR EXPERIENCES AND PROMOTES REWARDING INTERACTIONS BETWEEN PEOPLE, ANIMALS, AND NATURE. dROUGHT TOLERANT PLANTS, A SMART IRRIGATION SYSTEM, PAVED PATIO AREAS FOR OUTDOOR LIVING, AND PET FRIENDLY AMENITIES COMBINE TO FROM A GARDEN FOR ALL SEASONS.

## PREPARING YOUR SOIL

HEALTHY SOIL IS VITAL TO WATER CONSERVATION AND A HEALTHY ENVIRONMENT

SOIL CONDITIONING WITH ORGANIC AMENDMENTS USES LESS WATER, LESS FERTILIZER, LESS PESTICIDES. INDEPENDANT GARDEN CENTERS ARE EXTREMELY KNOWLEDGABLE ABOUT SOIL ADDITIVES AND TESTING.

## SITE ARCHITECTURE/ OUTDOOR ROOMS

FIREPIT PATIO:

CREATES ATTRACTIVE OUTDOOR ROOM; FLAGSTONE OR PERMEABLE PAVING REDUCES NEED FOR WATER AND ALLOWS FOR SLOW DRAINAGE

MORNING PATIO:

OFFERS 'VARIETY', A DIFFERENT PERSPECTIVE ON THE GARDEN, A VENUE FOR SOCIALIZATION WITH THE NEIGHBORS

SUNSET PATIO:

FAMILY MEALS CAN BE ENJOYED IN OUTSIDE 'DINING ROOM'

LANDSCAPE WALLS:

ARCHITECTURAL ELEMENT IN THE LANDSCAPE, ADDS TO 'CURB APPEAL', CHARM, AND SENSE OF PRIVACY

GRACIOUS ENTRY STOOP:

CURVED LOW WALLS WELCOME GUESTS WITH 'OPEN ARMS'

CURVED GUEST ENTRY WALK:

CURVED WAYFINDING ELEMENT INVITES GUESTS TO 'STROLL' THROUGH GARDEN SPACE FROM STREET PARKING SPACE TO FRONT DOOR

STORAGE YARD:

SIDE OF GARAGE (NO WINDOWS) IS PERFECT FOR UTILITY SHED AND GARDEN STORAGE

## BOTANICAL ELEMENTS

1. ACCENT TREES:

PROVIDES SHADE, VISUAL INTEREST, AND COLOR

2. ACCENT SHRUBS:

ROSES:

ADDS SEASONAL BEAUTY TO GARDEN AND CUT ROSES ADD 'SENSE OF CONNECTION' TO NATURE INSIDE THE HOME

3. SUCCULENT DISPLAY/MOUND

RAISED SOIL MOUND LET'S YOU 'SHOW OFF' YOUR FAVORITE SUCCULENTS

4. ACCENT VINES

VINE ON TRELLIS OVER GARAGE DOOR:

ADDS CHARM AND CURB APPEAL YEAR ROUND

VINE ON FENCE:

SOFTENS THE VIEW



## SUSTAINABLE MEASURES

SOLAR PANELS ON ROOF:

MAKES THE MOST OF NATURE'S GIFTS

WATER HOG RAIN BARRELS:

COLLECTS RAINFALL AND GRAVITY FEEDS WATER TO GARDEN

COMPOST BIN:

COFFEE, BANANA PEELS, KITCHEN GREENS CAN BENEFIT GARDEN SOIL THROUGH NATURAL ENRICHMENT, BOOST PRODUCTIVITY AND REDUCE NEED FOR FERTILIZERS

GRAVEL OR BARK MULCH (2" LAYER):

ORGANIC MULCH HOLDS MOISTURE IN SOIL, DECOMPOSES, ADDS NITROGEN TO SOIL NATURALLY

RAISED BED (VEGETABLES/HERBS):

USE SPECIAL SOIL FOR CULTIVATION OF ORGANIC VEGETABLES AND HERBS

## GARDEN TEXTURE AND PATTERNS

STEPPING STONES:

PROVIDES INTEREST AND A VISUAL CLUE THAT PATH IS LESS 'IMPORTANT' THAN A SOLID WALKWAY

DECORATIVE PATTERN IN CONCRETE DRIVEWAY:

PATTERN CAN BE 'CUT' INTO EXISTING CONCRETE FOR LOW COST WAY TO ADD TEXTURE AND INTEREST

BOULDERS:

ADDS NATURAL INTEREST AND PROVIDES 'FOCAL POINT/PUNCUATION IN THE LANDSCAPE COMPOSITION

DRY 'RIVERBED':

'UNITES' THE LANDSCAPE WITH A 'RIBBON' OF TEXTURE

## PET FRIENDLY ELEMENTS

PESTICIDES THAT ARE PET FRIENDLY ARE BECOMING MORE COMMON. cHECK WITH PET STORES AND GARDEN CENTERS

K-9 GRASS:

SMALL PATCH OF ARTIFICIAL TURF OFFERS SOFT AND DURABLE BEDDING FOR 'NAPS'

DOG RUN:

LOCATED ON NORTH SIDE OF HOUSE TO PROVIDE SHADE. VISUALLY OPEN FENCE ALLOWS PET TO SEE ENTIRE BACKYARD

DOG HOUSE:

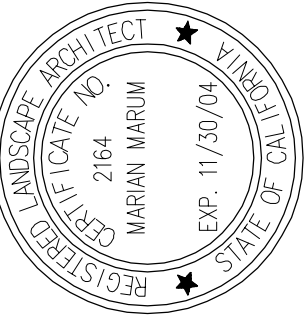
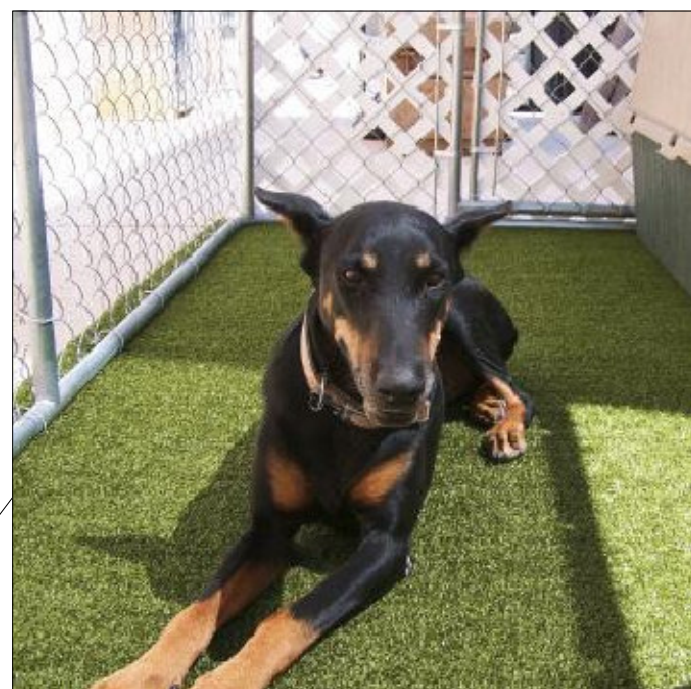
PROVIDES SENSE OF SECURITY, COMFORT, AND PROTECTION FROM WEATHER

RAISED PLANTER BOX:

RAISED PLANTERS TO MINIMIZE DAMAGE TO PLANTS FORM PETS DIGGING

CANINE 'PATROL' PATH:

CANINES 'PATROL' THE PERIMETER OF THEIR TERRITORY SO BY KEEPING A PATH THAT IS PLANT FREE REDUCES DAMAGE TO THE LANDSCAPE



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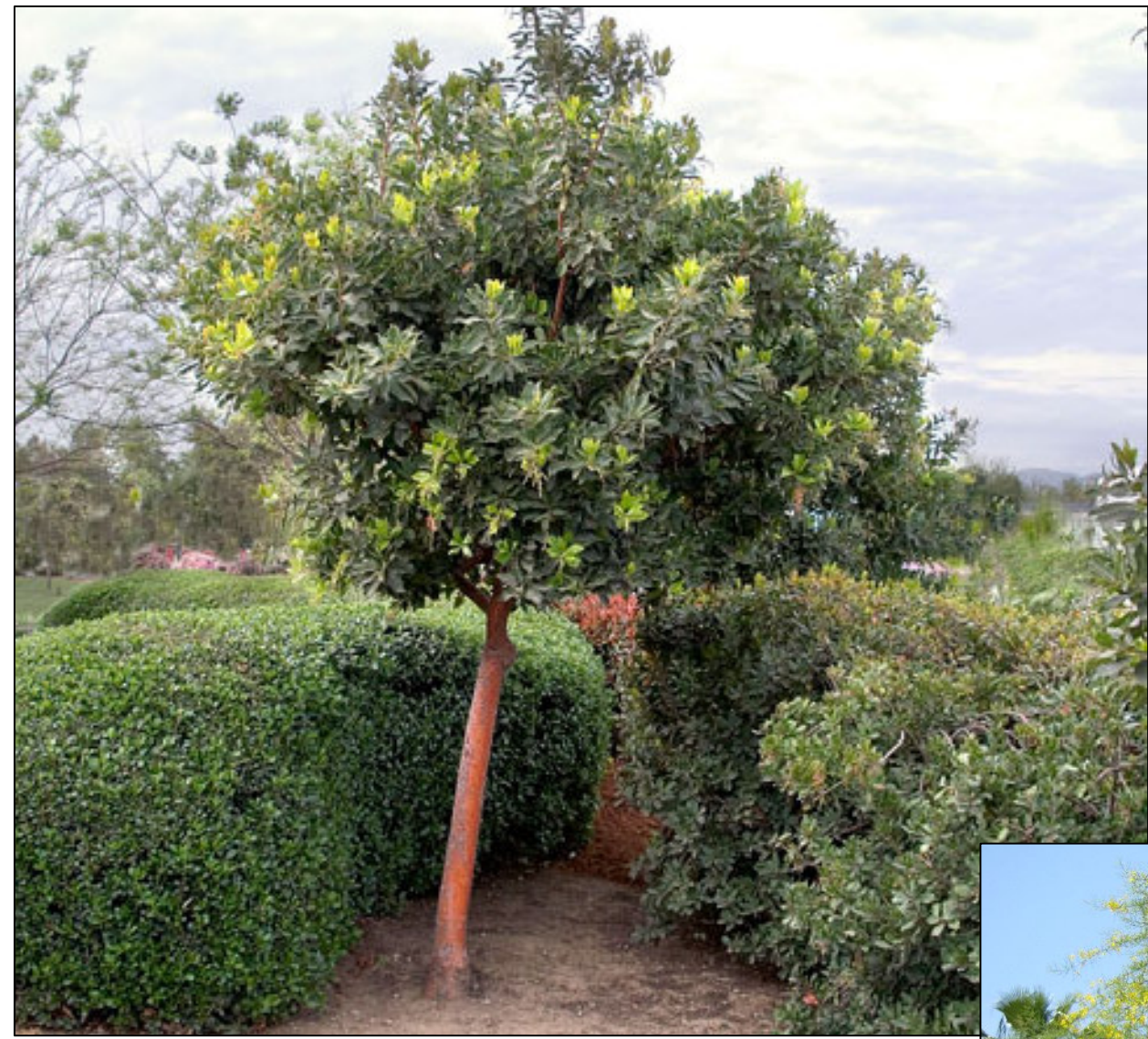
## PET FRIENDLY WATER SMART GARDEN

JOB . . . . .  
DATE . 6-9-2010 . . . . .  
REVISIONS

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BASIS  
OF DESIGN





ARBUTUS MARINA  
MARINA STRAWBERRY  
TREE



ARECASTRUM  
ROMANZOFFINUM  
QUEEN PALM

## TREES



CERCIDIUM 'DESERT MUSEUM'  
PALO VERDE 'DESERT MUSEUM'



BRACHYCHITON  
ACERIFOLIUS  
AUSTRALIAN FLAME TREE



EUPHORBIA TIRUCALI  
STICKS ON FIRE



AGAVE  
ATTENUATA 'NOVA'  
BLUE FOXTAIL AGAVE

## SUCCULENTS



KALANCHOE  
THRYSIFOLIA  
FLAPJACK PLANT



AEONIUM  
SCHWARZKOPF  
BLACK AEONIUM

SENECIO  
BARBERTONICUS  
SUCCULENT BUSH

PUNICA GRANATUM  
POMGRANITE



CEONOTHUS  
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MOUNTAIN LILAC



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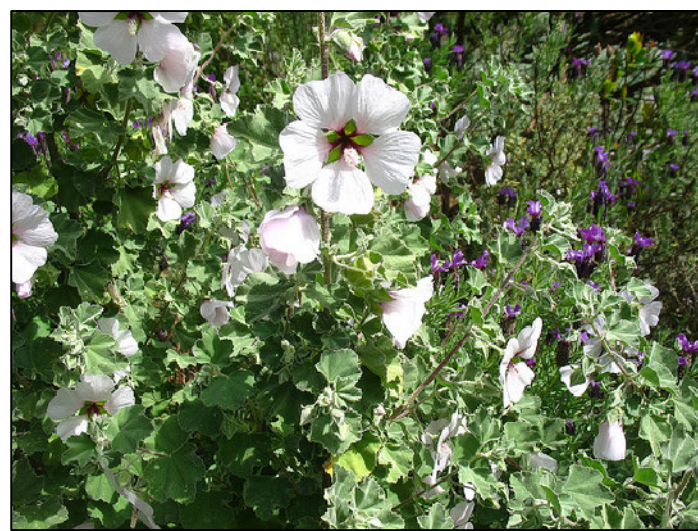


SALVIA LEUCANTHA  
MEXICAN SAGE

## SHRUBS



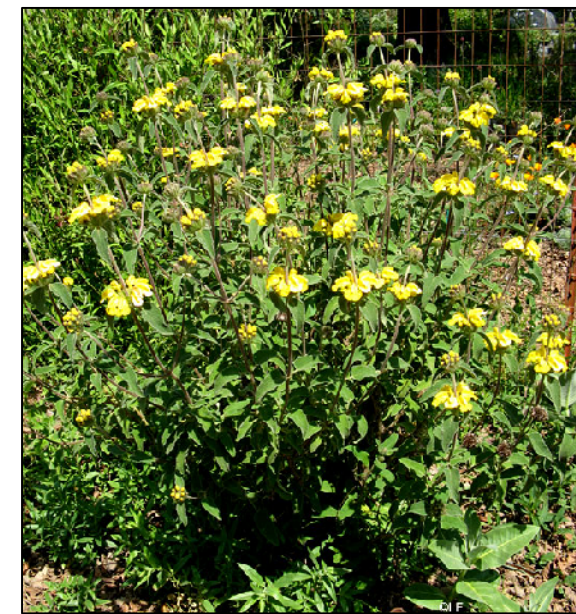
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SPECTABILIS  
ROCK PURSLANE



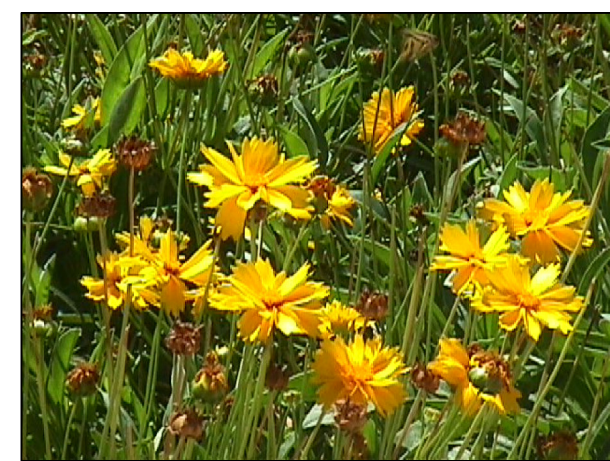
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MALLOW



BOUGAINVILLEA  
'TORCH GLOW'  
BOUGAINVILLEA



PHLOMIS FRUTICOSA  
JERUSALEM SAGE



COREOPSIS  
GRANDIFLORA  
SUNRAY COREOPSIS



KALANCHOE  
BLOSSFELDIANA  
CHRISTMAS  
KALANCHOE



ECHEVERIA ELEGANS  
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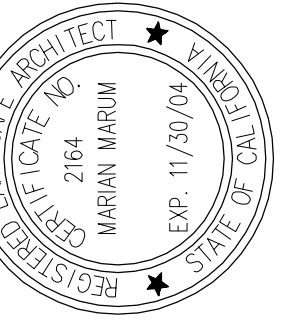


ARMERIA MARITIMA  
SPENDTHRIFT



BULBINE  
FRUTESCENS  
STALKED BULBINE

## GROUND COVERS



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PLANT  
PHOTOS

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