### FRONT YARD LANDSCAPE EXAMPLES

#### **UNDESIRABLE**



#### DESIRABLE













# CITY OF ROCKLIN CODES AND DESIGN GUIDELINES

#### TREE SETBACKS

- 6' DISTANCE FROM CONCRETE WALKS AND 7' HEIGHT CLEAR
- 10' DISTANCE FROM DRIVEWAYS/FIRE HYDRANTS
- 4' DISTANCE FROM UTILITIES

#### LANDSCAPE COVERAGE

- 75% PLANTING COVERAGE IS REQUIRED AT MATURITY.
- ONE TREE PER RESIDENTIAL LOT IS REQUIRED.

#### FRONT YARD LANDSCAPING DESIGN INTENT

- CREATE ATTRACTIVE STREETSCAPES AND INTEREST USING A VARIETY OF PLANT SIZES AND TEXTURES.
- CREATE SHADE, SOFTEN HARDSCAPES AND PROVIDE SEASONAL COLOR.
- REDUCE CREATION OF HEAT ISLANDS IN SUBURBAN ENVIRONMENTS.

### TURF / GROUNDCOVER FOOTPRINT

	BOTANICAL NAME	COMMON NAME	WATER USE		
TURF					
	FESTUCA	DWARF BONSAI BLEND	HIGH		
GROUNDCOVERS					
	DYMONDIA MARGARETAE	DYMONDIA	LOW		
	LIPPIA NODIFLORA 'KURAPIA'	CAPE WEED	LOW		
BLENDED GRASSES FOR HILLSIDE CONDITIONS ONLY (NOT FOR USE IN STANDARD FRONT YARDS)					
	AGROSTIS PALLENS	BENTGRASS	LOW		
	FESTUCA RUBRA	CREEPING RED FESCUE	MEDIUM		
	KOELERIA MACRANTHA	JUNE GRASS	LOW		
	NASSELLA CERNUA	NODDING NEEDLEGRASS	VERY LOW		
اعلعلا	NASSELLA PULCHRA	PURPLE NEEDLEGRASS	VERY LOW		



lient/Project



TYPICAL LANDSCAPE LOT SIZE = 800 S.F.

■ LOW WATER USE PLANTS WITH PRESSURE COMPENSATING DRIP IRRIGATION

■ HIGH WATER USE TURF WITH LOW FLOW STREAM ROTARY SPRAYS

WATER USE CALCULATION:

TOTAL LANDSCAPE AREA = 800 S.F. 100%

LOW WATER USE AREA (PLANT FACTOR 0.3) = 600 S.F. 75% HIGH WATER USE AREA (PLANT FACTOR 0.8) = 200 S.F. 25%

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA) = 14,240 GALLONS PER YEAR

■ ESTIMATED TOTAL WATER USE (ETWU) = 14,100 GALLONS PER YEAR = 99% OF MAWA

### WATER USE CALCULATIONS

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = 0.55 FOR RESIDENTIAL LANDSCAPES LANDSCAPE AREA = SQUARE FEET

ESTIMATED TOTAL WATER USE (ETWU)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = PLANT FACTOR / IRRIGATION EFFICIENCY LANDSCAPE AREA = SQUARE FEET

### WATER USE CALCULATION FACTORS

ANNUAL EVAPOTRANSPIRATION (ETo) RATE:

IRRIGATION EFFICIENCY:

PLANT FACTOR\*:

ROCKLIN

CALIFORNIA

52.2 = CITY OF ROCKLIN

REGION: ROCKLIN = WUCOLS CENTRAL VALLEY

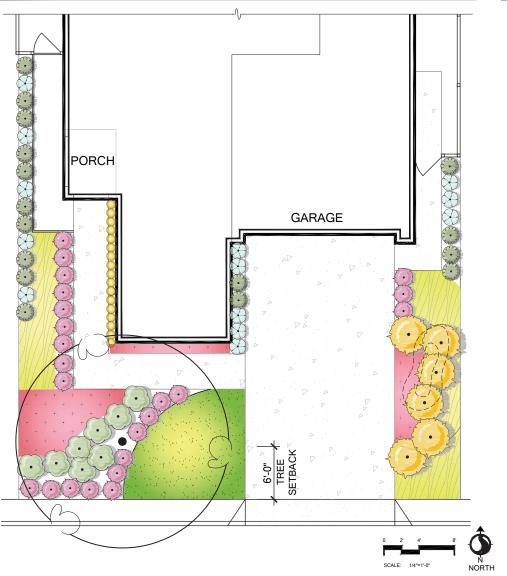
0.75 = STREAM ROTARY SPRAYS

0.0 to 0.1 = VERY LOW WATER USE 0.1 to 0.3 = LOW WATER USE 0.4 to 0.6 = MEDIUM WATER USE 0.7 to 1.0 = HIGH WATER USE

0.81 = PRESSURE COMPENSATING DRIP

\*FOR THE PURPOSES OF DEVELOPING WATER USE OPTIONS, THE HIGHEST PLANT FACTOR HAS BEEN SELECTED FOR SHRUBS, TREES AND GROUNDCOVER. A PLANT FACTOR OF 0.8 HAS BEEN SELECTED FOR TURF (BONSAI FESCUE BLEND). FINAL PLANT SELECTION MAY AFFECT CALCULATION AND WATER USE OUTCOME.

### **PLAN**



#### **LEGEND**

SYMBOL	DESCRIPTION	WATER USE
	TREE	LOW
	3' - 4' TALL SHRUB	LOW
	2' - 3' TALL SHRUB	LOW
<b>O</b> • •	12"-18" TALL ACCENT SHRUB	LOW
+ + + + + + + + + + + + + + + + + + + +	FLOWERING GROUNDCOVER	LOW
	EVERGREEN GROUNDCOVER	LOW
	TURF / SOD	HIGH
	HEADER	
	WOOD FENCE AND GATE	
	CONCRETE	







CITY OF ROCKLIN

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) FRONT YARD LANDSCAPE CONCEPTS





#### PLAN 2 - WATER USE

TYPICAL LANDSCAPE LOT SIZE = 800 S.F.

■ LOW WATER USE PLANTS WITH PRESSURE COMPENSATING DRIP IRRIGATION

■ HIGH WATER USE TURF WITH LOW FLOW STREAM ROTARY SPRAYS

WATER USE CALCULATION:

TOTAL LANDSCAPE AREA =

800 S.F. 100%

LOW WATER USE AREA (PLANT FACTOR 0.3) = 600 S.F. 75% HIGH WATER USE AREA (PLANT FACTOR 0.8) = 200 S.F. 25%

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA) = 14,240 GALLONS PER YEAR

■ ESTIMATED TOTAL WATER USE (ETWU) = 14,100 GALLONS PER YEAR = 99% OF MAWA

### WATER USE CALCULATIONS

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = 0.55 FOR RESIDENTIAL LANDSCAPES LANDSCAPE AREA = SQUARE FEET

ESTIMATED TOTAL WATER USE (ETWU)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = PLANT FACTOR / IRRIGATION EFFICIENCY LANDSCAPE AREA = SQUARE FEET

### WATER USE CALCULATION FACTORS

ANNUAL EVAPOTRANSPIRATION (ETo) RATE:

52.2 = CITY OF ROCKLIN

REGION: ROCKLIN = WUCOLS CENTRAL VALLEY

0.75 = STREAM ROTARY SPRAYS

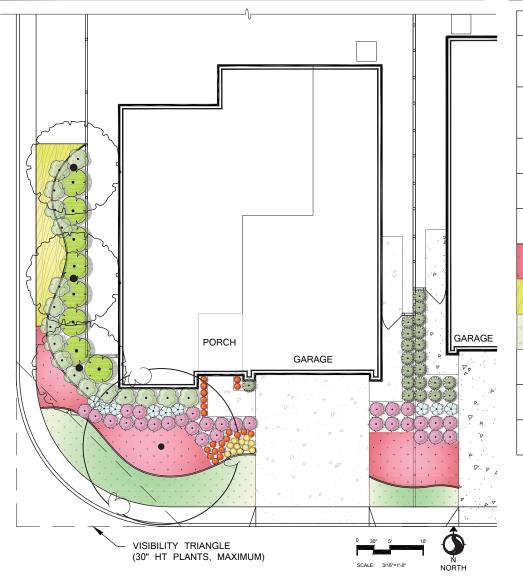
0.81 = PRESSURE COMPENSATING DRIP

PLANT FACTOR\*: 0.0 to 0.1 = VERY LOW WATER USE

0.1 to 0.3 = LOW WATER USE 0.4 to 0.6 = MEDIUM WATER USE 0.7 to 1.0 = HIGH WATER USE

\*FOR THE PURPOSES OF DEVELOPING WATER USE OPTIONS, THE HIGHEST PLANT FACTOR HAS BEEN SELECTED. FINAL PLANT SELECTION MAY AFFECT CALCULATION AND WATER USE OUTCOME.

### **PLAN**



#### **LEGEND**

SYMBOL	DESCRIPTION	WATER
STIVIDOL	DESCRIPTION	USE
	TREE	LOW
	SMALL ACCENT TREE	LOW
	4' - 5' TALL SHRUB	LOW
000	3' - 4' TALL SHRUB	LOW
<b>O</b>	12"-18" TALL ACCENT SHRUB	LOW
· + + + + + + · · · · · · · · · · · · ·	FLOWERING GROUNDCOVER	LOW
	EVERGREEN GROUNDCOVER	LOW
V V V V V V V V	TURF / SOD	HIGH
	HEADER	
	WOOD FENCE AND GATE	
V . V .	CONCRETE	

#### **UNDESIRABLE**



#### DESIRABLE





IRRIGATION EFFICIENCY:

### CITY OF ROCKLIN



#### PLAN 3 - WATER USE

TYPICAL LANDSCAPE LOT SIZE = 800 S.F.

- LOW WATER USE PLANTS WITH PRESSURE COMPENSATING DRIP IRRIGATION
- MEDIUM WATER USE PLANTS WITH LOW FLOW STREAM ROTARY SPRAYS

WATER USE CALCULATION:

TOTAL LANDSCAPE AREA =

800 S.F. 100%

LOW WATER USE AREA (PLANT FACTOR 0.3) = 475 S.F. 60% MEDIUM WATER USE AREA (PLANT FACTOR 0.6) = 325 S.F. 40%

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA) = 14,240 GALLONS PER YEAR

■ ESTIMATED TOTAL WATER USE (ETWU) = 14,100 GALLONS PER YEAR

= 99% OF MAWA

### WATER USE CALCULATIONS

MAXIMUM ALLOWED WATER ALLOWANCE (MAWA)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = 0.55 FOR RESIDENTIAL LANDSCAPES LANDSCAPE AREA = SQUARE FEET

ESTIMATED TOTAL WATER USE (ETWU)

ETO x 0.62 x (ETAF x LANDSCAPE AREA) = GALLONS PER YEAR

ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR) 0.62 = CONVERSION FACTOR (TO GALLONS PER SQUARE FOOT) ETAF = ET ADJUSTMENT FACTOR = PLANT FACTOR / IRRIGATION EFFICIENCY LANDSCAPE AREA = SQUARE FEET

### WATER USE CALCULATION FACTORS

ANNUAL EVAPOTRANSPIRATION (ETo) RATE:

52.2 = CITY OF ROCKLIN

ROCKLIN = WUCOLS CENTRAL VALLEY REGION:

IRRIGATION EFFICIENCY: 0.81 = PRESSURE COMPENSATING DRIP

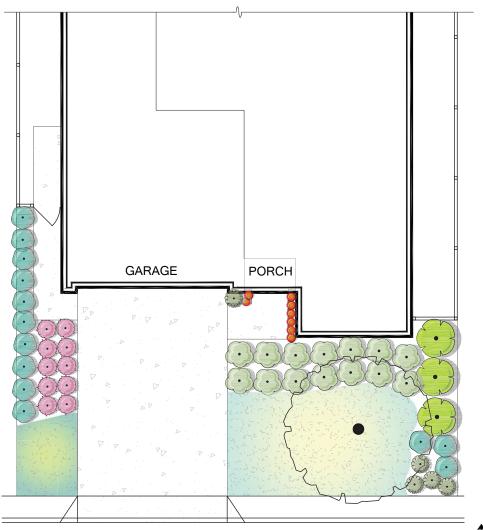
0.75 = STREAM ROTARY SPRAYS

PLANT FACTOR\*: 0.0 to 0.1 = VERY LOW WATER USE

0.1 to 0.3 = LOW WATER USE 0.4 to 0.6 = MEDIUM WATER USE 0.7 to 1.0 = HIGH WATER USE

\*FOR THE PURPOSES OF DEVELOPING WATER USE OPTIONS, THE HIGHEST PLANT FACTOR HAS BEEN SELECTED. FINAL PLANT SELECTION MAY AFFECT CALCULATION AND WATER USE OUTCOME.

### **PLAN**



### **LEGEND**

SYMBOL	DESCRIPTION	WATER USE
	TREE	LOW
	4' - 5' TALL SHRUB	LOW
00	2' - 3' TALL SHRUB	LOW
000	12"-18" TALL ACCENT SHRUB	LOW
	GROUNDCOVER	MEDIUM
	WOOD FENCE AND GATE	
	CONCRETE	









### BEST LANDSCAPE PRACTICES FOR WATER CONSERVATION

#### CITY OF ROCKLIN

- LANDSCAPE SHOULD NOT BE WATERED DURING THE MONTHS OF DECEMBER JANUARY, FEBRUARY AND MARCH.
- WATER ONLY BETWEEN THE HOURS OF 9:00 PM AND 9:00 AM.
- REPAIR IRRIGATION LEAKS PROMPTLY.
- APPLY 3-INCHES OF MULCH AROUND TREES AND PLANTS TO REDUCE EVAPORATION.

#### STATE OF CALIFORNIA

- USE AN IRRIGATION CONTROLLER WITH A RAIN SHUT-OFF DEVICE.
- PERFORM SOILS TEST TO DETERMINE REQUIRED FERTILIZERS.
- GROUP PLANTS IN LIKE WATER USE ZONES (HYDROZONES).
- MINIMUM 8' WIDE PLANTER REQUIRED FOR TRADITIONAL HIGH VOLUME SPRAYS.
- USE 6-INCH DEPTH AND 4-CUBIC YARDS/1000 SF ORGANIC COMPOST IN ALL PLANTERS.

### POINT SOURCE DRIP IRRIGATION EXAMPLES

#### DRIPPER / EMITTER



MULTI-OUTLET EMITTER





SUB-SURFACE DRIP IRRIGATION



**BUBBLER** 



### TURF IRRIGATION EXAMPLES



LOW FLOW STREAM ROTARY



### MEDIUM WATER USE PLANTS

#### **BOTANICAL NAME**

#### **TREES**

ACER **CELTIS SINENSIS** CERCIS CANADENSIS **CORNUS CUPRESSUS** CYCAS REVOLUTA

**FRAXINUS** GINKGO (MALE ONLY)

KOELREUTERIA LEPTOSPERMUM SCOPARIUM

MAGNOLIA PITTOSPORUM **PODOCARPUS PYRUS** 

**ULMUS AMERICANA** ZELKOVA

#### SHRUBS

ARCTOSTAPHYLOS EDMUNSII **BERBERIS** BUXUS **CAMELLIA COLEONEMA COPROSMA CUPHEA** 

**EURYOPS** ILEX **JASMINUM** LANTANA

MAGNOLIA NANDINA DOMESTICA **OSMANTHUS** PHOTINIA

**PODOCARPUS PITTOSPORUM RHAPHIOLEPIS** RHODODENDRON ROSA HYBRIDS BUSH

SALVIA DORII **VIBURNUM GROUNDCOVER** 

**ARCTOSTAPHYLOS** COTONEASTER SPP LANTANA CAMARA PELARGONIUM **TRACHELOSPERMUM** 

#### PERENNIALS & GRASSES

**AGAPANTHUS CANNA** CAREX BUCHANANII **DIANTHUS HEMEROCALLIS** IRIS PACIFIC COAST HYBRIDS LIMONIUM PEREZII LIRIOPE PELARGONIUM PENSTEMON

#### COMMON NAME

**MAPLE** CHINESE HACKBERRY EASTERN REDBUD **DOGWOOD CYPRESS** SAGO PALM ASH MAINDENHAIR TREE CHINESE FLAME TREE NEW ZEALAND TEA TREE **MAGNOLIA PITTOSPORUM** 

YEW PINE PEAR AMERICAN ELM **ZELKOVA** 

MANZANITA

**BOXWOOD CAMELLIA** BREATH OF HEAVEN MIRROR PLANT MEXICAN HEATHER

JAPANESE BARBERRY

**EURYOPS** HOLLY **JASMINE** LANTANA **MAGNOLIA** HEAVENLY BAMBOO SWEET OLIVE PHOTINIA YEW PINE **PITTOSPORUM** INDIAN HAWTHORN **AZALEA** ROSE

MANZANITA COTONEASTER **LANTANA GERANIUM** JASMINE

PURPLE SAGE

**VIBURNUM** 

LILY-OF-THE-NILE **CANNA** 

CURLY TOP SEDGE PINK DAYLILY

PACIFIC COAST HYBRIDS

STATICE LILYTURF **GERANIUM PENSTEMON** 

### LOW WATER USE PLANTS

#### **BOTANICAL NAME**

COMMON NAME

#### **TREES**

CEDRUS DEODARA CERCIS OCCIDENTALIS CELTIS OCCIDENTALIS JUNIPERUS LAURUS NOBILIS LEPTOSPERMUM LAEVIGATUM **MELALEUCA** OLEA **PINUS** PISTACIA CHINENSIS

PRUNUS CAROLINIANA **QUERCUS** 

RHAPHIOLEPIS 'MAJESTIC BEAUTY'

#### **SHRUBS**

**ACACIA ARCTOSTAPHYLOS ARTEMISIA BACCHARIS** CALLISTEMON 'LITTLE JOHN' CEANOTHUS CISTUS **GREVILLEA JUNIPERUS LAVANDULA** LEPTOSPERMUM LIGUSTRUM MYRTUS COMMUNIS NANDINA DOMESTICA PINUS MUGO

**RIBES ROSMARINUS SALVIA XYLOSMA** 

#### **GROUNDCOVER**

**ACACIA BACCHARIS** COTONEASTER DAMMERI 'LOWFAST' **JUNIPERUS** LANTANA HYBRIDS LIPPIA NODIFLORA 'KURAPIA' **OSTEOSPERMUM ROSMARINUS** 

#### **PERENNIALS & GRASSES**

CAREX DIVULSA **DIETES** FESTUCA CALIFORNICA IRIS DOUGLASIANA KNIPHOFIA LIMONIUM VULGARE PENSTEMON PHORMIUM TENAX STACHYS **TULBAGHIA** 

**VERBENA** 

DEODAR CEDAR WESTERN REDBUD COMMON HACKBERRY

**JUNIPER** SWEET BAY

AUSTRALIAN TEA TREE FLAX LEAF PAPER BARK

OLIVE PINE

CHINESE PISTACHE CAROLINA LAUREL CHERRY

INDIAN HAWTHORN

**ACACIA** MANZANITA CALIFORNIA SAGEBRUSH DWARF COYOTE BRUSH LITTLE JOHN BOTTLEBRUSH **CEANOTHUS** ROCKROSE **GREVILLEA** JUNIPER **LAVENDER** AUSTRALIAN TEA TREE JAPANESE PRIVET MYRTLE HEAVENLY BAMBOO MUGO PINE CHAPARRAL CURRENT ROSEMARY SAGE

#### ACACIA

DWARF COYOTE BRUSH BEARBERRY COTONEASTER

JUNIPER LANTANA CAPE WEED AFRICAN DAISY ROSEMARY

SHINY XYLOSMA

## SEDGE

FORTNIGHT LILY CALIFORNIA FESCUE DOUGLAS IRIS RED HOT POKER SEA LAVENDER **PENSTEMON** NEW ZEALAND FLAX LAMB'S EARS SOCIETY GARLIC VERBENA



CITY OF ROCKLIN

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) FRONT YARD LANDSCAPE CONCEPTS

IRRIGATION AND PLANT EXAMPLES

