

LANDSCAPE PLANS PREPARED FOR:

DESIGN FOR EMPTY NESTER/ENTERTAINER

TYPICAL RESIDENTIAL PLOT

LOW-WATER-USE LANDSCAPE DESIGN STATEMENT EMPTY NESTER/ENTERTAINER

THE LANDSCAPE DESIGN FOR THIS RESIDENTIAL YARD IS BASED AND STRUCTURED ON THE NATURE OF THE HOMEOWNERS ACTIVITIES. THE HOMEOWNERS ARE EMPTY NESTERS THAT ENTERTAIN OFTEN. THE LANDSCAPE DESIGN SERVES AS A BACKDROP TO ENHANCE THEIR ENTERTAINMENT ACTIVITIES.

HARDSCAPE ELEMENTS, SUCH AS BUILT-IN BBQ, FIREPLACE, A WINE COVERED WOOD TRELLIS, AND INFORMAL FLAGSTONE PAVING, HELP TO CREATE AN INVITING ATMOSPHERE. A SMALL RECREATING WATER FEATURE IS AN ACCENT TO THE GARDEN WHICH IS LOCATED ON A BACK BASED PLANTER WALL. THE WATER FEATURE IS CENTERED ON THE BACKYARD DOORS AND PLANTS THE SCENE OF THE EXTENDED PLAYING AREA. ALSO PROVIDES THE GARDEN WITH THE PLEASANT SOUND OF RUNNING WATER. THE LANDSCAPE DESIGN PROVIDES THE GARDEN WITH TOILET PLANT MATERIAL, SHALL COMPLY WITH THE LANDSCAPE DESIGN AS WATER CONSERVATION IS OF UTMOST IMPORTANCE. DROUGHT TOLERANT PLANT MATERIAL SHALL BE USED EXCLUSIVELY THROUGHOUT THE PROPERTY.

PLANTING CONCEPT:

- Low Maintenance: Because the homeowners are empty nesters, the landscape was designed so that little maintenance is required.
- Drought Tolerant: The planting concept was developed using a drought tolerant plant palette. This will help conserve water and keep the yard attractive when the homeowners are away.

IRRIGATION CONCEPT:

- This irrigation design utilizes three different irrigation systems to give the homeowner a choice.
- Drip Irrigation: This system uses the lowest amount of water, and shall be recommended for the raised planter area.
 - Low Precision Spray Heads: (such as those manufactured by Toro) Most areas that are less than 10' in width will get low precision spray heads. These heads use much less water than conventional spray heads.
 - MP ROTATOR HEADS: (such as those manufactured by Hunter) All areas that are larger than 10' in width shall be installed with MP Rotator heads. MP Rotator heads fall somewhere between drip irrigation and precision nozzle spray heads in terms of amount of water used.
 - SMART CONTROLLER: A smart controller shall monitor the outside weather conditions and limit the irrigation system to water only when it is needed by the plants. For example, when it is raining, the controller will shut off the entire irrigation system. It will turn the system back on when the soil becomes dry and moisture is needed.
 - o Adjusts watering to changes in climatic condition
 - o Most economical solution to weather-based control
 - o Simple to program and install
 - o Reduces water usage and improves plant health
 - o Great for residential installations and water conservation rebate programs
 - o Reduces water use and saves water



BACK YARD VIEW

NOT TO SCALE



FRONT YARD VIEW

NOT TO SCALE

SHEET INDEX:	LANDSCAPE TITLE SHEET
L-1	PLANTING PLAN
L-2	PLANT PHOTOS
L-3	IRRIGATION PLAN
L-4	PLANTING AND IRRIGATION DETAILS
L-5	

PREPARED FOR:
HELIX WATER DISTRICT
OTAY WATER DISTRICT
PADRE DAM MUNICIPAL WATER DISTRICT
SWEETWATER AUTHORITY

PREPARED BY:
TESHIMA DESIGN GROUP
Contact: Mark Stempliak
9903 Businesspark Avenue, Suite 100
San Diego, CA 92131
858.693.8824

MAXIMUM APPLIED WATER ALLOWANCE CALCULATION - MAMA
MAMA = (ET0)(0.2)(7.14 + 0.13 x SLA)
MAMA = (46.5)(0.2)(7.14 + 0.13 x 0)
MAMA = 6.631 (Gallons per Year)
MAMA = 58.121 (Hundred-Gallic-Feet per Year)
MAMA = 58.121 / 748 = 0.0776 (Hundred-Gallic-Feet per Year)

ESTIMATED TOTAL WATER USE CALCULATION - ETWU

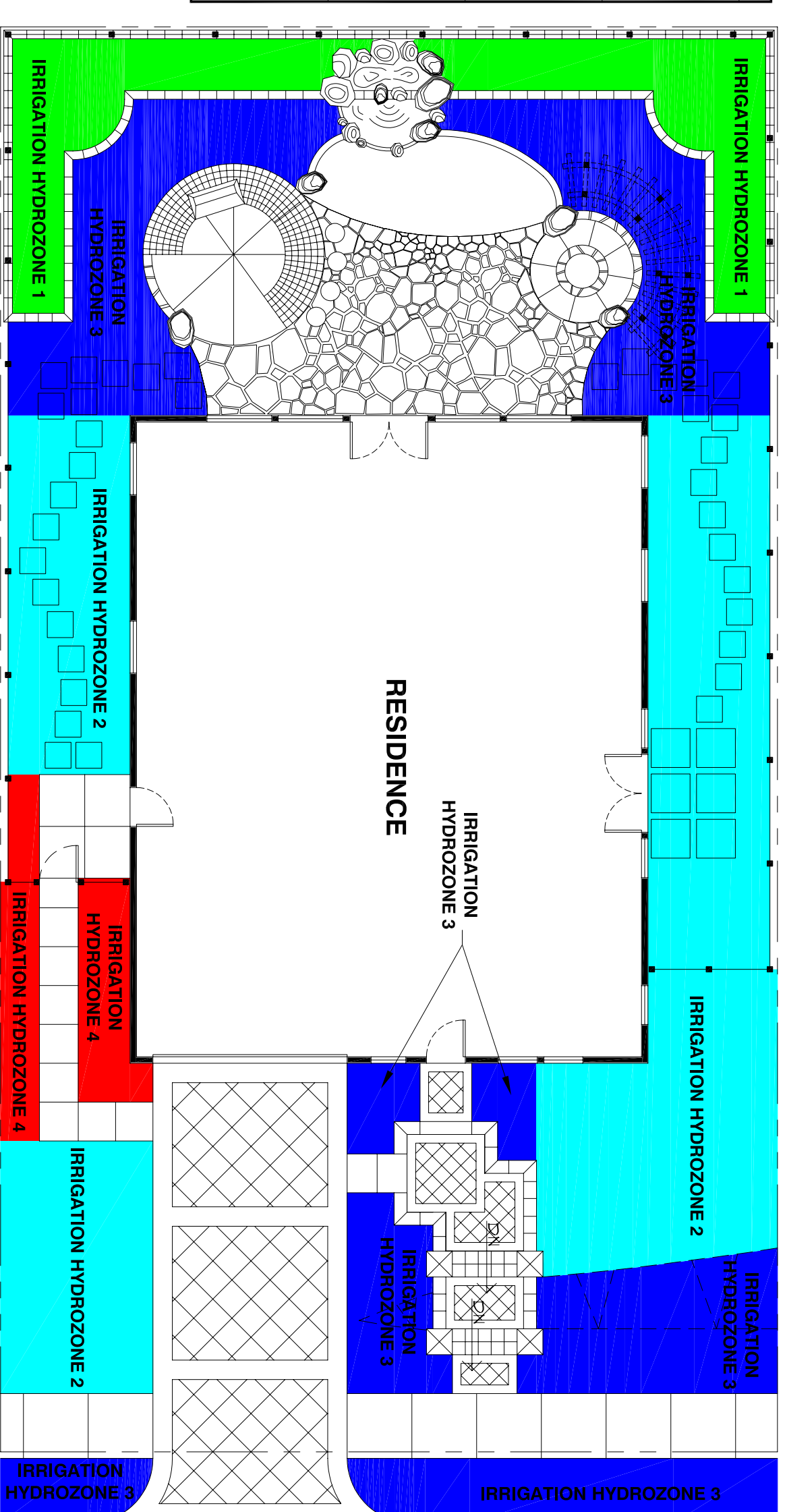
IRRIGATION HYDROZONE 1	ETWU = (ET0)(0.2)(PF1)(A1) / (E1 + SA1)
ETWU = (46.5)(0.2)(0.2)(1,253) / (0.8 + 0)	ETWU = 2,270.7748 = 4 HCF (Hundred-Gallic-Feet per Year)
IRRIGATION HYDROZONE 2	ETWU = (ET0)(0.2)(PF2)(A2) / (E2 + SA2)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 3	ETWU = (ET0)(0.2)(PF3)(A3) / (E3 + SA3)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 4	ETWU = (ET0)(0.2)(PF4)(A4) / (E4 + SA4)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 5	ETWU = (ET0)(0.2)(PF5)(A5) / (E5 + SA5)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 6	ETWU = (ET0)(0.2)(PF6)(A6) / (E6 + SA6)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 7	ETWU = (ET0)(0.2)(PF7)(A7) / (E7 + SA7)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 8	ETWU = (ET0)(0.2)(PF8)(A8) / (E8 + SA8)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
IRRIGATION HYDROZONE 9	ETWU = (ET0)(0.2)(PF9)(A9) / (E9 + SA9)
ETWU = (46.5)(0.2)(0.2)(2,125) / (0.75 + 0)	ETWU = 2,570.0202 (Gallons per Year)
TOTAL FOR ALL IRRIGATION HYDROZONES	ETWU = IRRIGATION 1 + IRRIGATION 2 + IRRIGATION 3 + IRRIGATION 4
ETWU = 2,270.7748 + 2,570.0202 + 2,570.0202 + 2,570.0202	ETWU = 10,000.8354 (Gallons per Year)
ETWU = 10,000.8354 / 748 = 13.37 (Hundred-Gallic-Feet per Year)	ETWU = 23.118 / 748 = 0.031 (Hundred-Gallic-Feet per Year)

CONCLUSION

The ETWU (10,000.8354 gallons per year) is less than MAMA (58.121 gallons per year). The water budget for the residential lot complies with MAMA.

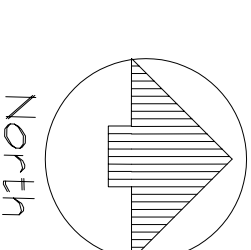
SYMBOL	DESCRIPTION
IRRIGATION HYDROZONE 1	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 1,253 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.80
IRRIGATION HYDROZONE 2	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 3	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 4	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 5	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 6	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 7	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 8	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75
IRRIGATION HYDROZONE 9	Plant Material - Drought-tolerant water use plants Plant Coefficient (Pf) - 0.2 Annual Water Evapotranspiration for City of San Diego (ET0) - 46.5 Landscape Area (A) - 2,125 Sq. Ft. Irrigation Type - Drip Irrigation Irrigation Efficiency (E) - 0.75

LEGEND



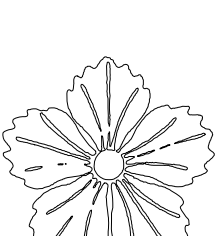
PLAN VIEW

NOT TO SCALE



STREET

STREET



TESHIMA DESIGN GROUP
LANDSCAPE ARCHITECTURE • LAND PLANNING
9903 BUSINESSPARK AVE. SUITE 100 • SAN DIEGO, CA 92131
PH: (858) 693-8824 FAX: (858) 693-1182

LANDSCAPE TITLE SHEET

DESIGN FOR EMPTY NESTER/ENTERTAINER
TYPICAL RESIDENTIAL PLOT

Date: 4-30-10
Scale: AS SHOWN
Drawn: MS
Job: COOP. COMM.
Sheet: L-1

REVISIONS

BY