## FINAL WATER SAVINGS PROGRESS REPORT DUE TO MODIFICATION OF SPRINKLER HEADS WITH "LITTLE VALVES" IN MEDIAN STRIP ANAHEIM, CALIFORNIA

## TRIAL NO. 1 – BALL ROAD

#### TRIAL PERIOD: MAY 20, 2008 – JUNE 12, 2009

On May 20, 2008, Mike Leggett, Landscape Inspector for the City of Anaheim, California, arranged for and participated in changing out approximately 64 sprinkler heads in a median strip located on Ball Road, starting one block west of Walnut Street, said median strip about one block long. The strip is all turf with a few small to medium-sized trees.

The heads are triangularly spaced about 9 feet apart. The median strip is about 9 feet wide. The 64 heads are controlled by 3 valves, with an ET based Hydro Point controller, which was detached from its satellite connection in April of 2008. The meter providing the water supply is dedicated to only the 3 valves that water this strip.

The bulk of the existing sprinklers in this strip were Rain Bird 4" pop-ups (Model No. 1804). There were 4 - 6" pop-ups that were changed to 4". The nozzles were 10' Rain Bird nozzles. All the nozzles are  $\frac{1}{2}$  circle except for the four at each end corner, which are  $\frac{1}{4}$  circle.

The pop-up riser stems on 59 of the sprinklers were changed out with Valvette Systems' LittleValve replacement riser stems – Model No. POP410, its replacement stem for Rain Bird's Model No. 1804. The easterlymost 5 heads were changed out completely to Valvette System's Little Tuffy pop-up sprinklers – Model No. TUF4, with the LittleValve already built-into the stem.

After the conversion, it was immediately noticeable that all misting had been eliminated and that overspray onto the adjacent roadway had been severely curtailed.

Although the change-out occurred on May 20, 2008, the period covered by the first complete water bill was from June 12 – August 12, 2008.

## TRIAL NO. 1 – BALL ROAD

# TRIAL PERIOD: MAY 20, 2008 – JUNE 12, 2009

All figures are in HCF (748 gallons)	D = Decreas	se
	I = Increase	e

Period	This Period's Usage	Usage in Prev. Year's Corresponding <u>Period</u>	Difference	Percentage Results
6/12 - 8/12/08	.475/day 61 days (29 HCF)	.627/day 59 days (37 HCF)	152	24.2% D
8/12 - 10/10/08	.475/day 59 days (28 HCF)	.483/day 60 days (29 HCF)	008	2% D
10/10 - 12/12/08	27 HCF 63 days	13	+ 14	100% I
12/12 - 2/13/09	10	17	- 7	41% D
2/13 - 4/15	14	17	- 3	18% D
4/15 - 6/15/09	32 61 days .525/day	47 59 days .797/day	- 15 .272	34% D
TOTALS:	140 HCF = 104,720 gallons	160 HCF = 119,680 gallons		A Decrease of <b>14,960 gallons</b> of water

Net result: Year over Year Water Savings of 12.5%