# **CASE STUDY**

## Villaggio Apartments, Kirkland, WA

#### The Situation

Villaggio on Yarrow Bay is a luxury, waterfront apartment complex in Kirkland, WA with an emphasis on quality and community. Sam Mullen, the Property Manager, was very interested in the economical and technical benefits of converting the lighting in the bollards from metal-halide type to LED bulbs. The bulbs and ballasts failed as predicted. But, replacing a bulb or ballast was very time consuming and expensive. Additionally, the residents complained of the harsh color and intensity of the metal-halide lighting that was located near bedroom windows.

#### The Solution

Because of his interest in both saving money and improving the quality of the lighting in the apartment complex, Sam considered the financial scenario offered by LED Light Technology that would produce an 83% reduction in the electrical load for the bollards, increase the life of the bulbs, eliminate the maintenance, lower the carbon footprint of the complex, and improve the overall lighting quality of the apartment complex.

LED Light Technology proposed to convert the metal-halide bulbs to PAR30 LED bulbs, from LED Light Technology, and eliminate the existing ballasts. The rated life of the bulbs would increase from 20,000 hours to 50,000 hours or almost 12 years.

When the rebate from Puget Sound Energy was applied, the payback period was approximately 6 months. Maintenance expenses would be eliminated for almost 12 years. The net project cost to the apartment complex was approximately \$750.

Installation of the bulbs was on a bulb-for-bulb basis and each ballast was disconnected. No new wiring or conduit was required to install the LED bulbs.

#### The Result

Over \$14,000 in total savings.

Electricity savings of over \$1,000 per year.

No maintenance expenses for almost 12 years.

Over \$1,300 in annual savings.

Owner's return on investment of 1909%

### **EQUIMCO**

Representatives for LED Light Technology



### **Solution Overview**

Company: Villaggio on Yarrow Bay

Profile: Luxury, waterfront apartments in Kirkland, WA

Challenge: Convert the metal-halide light bulb in each bollard to energy efficient LED bulbs from LED Light Technology.

Solution: New LED bulbs from LED Light Technology reduced annual power consumption by 83% and paid for themselves in 6 months.

Result: A dramatic reduction of overall lighting expense, a ROI of 1909%, no new bulbs or maintenance for almost 12 years, and overall annual savings of over \$1,300.

