TRANSITION FROM TRADITIONAL LIGHTING TO LED LIGHTING CASE STUDY | VILLAGIO AT TEMPE

TEMPE, ARIZONA 2018

SCENARIO

The Villagio at Tempe is a large condominium complex located in Tempe, Arizona. Due to the size of the Association, there were numerous exterior building lights used to illuminate the common areas. With the light usage, the Association's annual electricity bill was averaging $255,000.00. In an effort to reduce these costs, AAM assisted the Association in researching the cost to replace the current non-energy efficient light fixtures with energy efficient LED light fixtures.

RESEARCH PREPARED

The first step was to research different sustainable lighting companies that could provide a commercial solution to the Association. Three companies were identified and were asked to provide cost proposals for the work.

PROPOSED SOLUTION

The proposed solution was to replace the 1,422 exterior non-energy efficient light fixtures with energy efficient LED light fixtures. The bids for the work were presented to the Board for consideration.

EXECUTION

The Villagio at Tempe Board of Directors chose to proceed with the recommendation to replace the non-energy efficient light fixtures with energy efficient LED light fixtures and selected one of the companies to complete the work. The total for the work was $367,000.00.

OUTCOME/INCLUDING COST REDUCTION TO COMMUNITY

Upon completion of the work, the Association on average now experiences an annual savings of $41,000.00, which equates to a 16% savings annually from before the replacements were installed (this figure does not take into account annual increases in electrical costs from the provider). With the annual savings of $41,000.00, it was determined that it will take nearly nine years for the savings to bypass the initial cost of the replacements. Given that the average life expectancy of LED bulbs is between 10-17 years, the Association should also expect to see significant savings throughout the life of the energy efficient LED light fixtures.