## School District Scores Energy Savings with MaxLite LED Flood Lights

## A NEW WAVE OF LIGHT

## CASE STUDY



Photos: Jordan Smith/Vue Now Media



"The new stadium lighting has provided a dramatically improved experience for our student athletes and musicians. The new lighting really enhances the look of our new turf field, and it is significant that we have realized this improvement while reducing energy costs. These savings can now be used to improve the District athletic program."

> - Joe Belmonte, Superintendent of Schools

The Tenino, Washington school district sought to install new LED lights in Beaver Stadium, the home turf of the high school football, soccer and track teams. There were outages in the existing metal halide system and maintaining the lights was both labor intensive and costly for the district. A boom lift had to be rented each time a light had to be replaced, which was every 3,000 hours. Maintenance staff typically had to wait until several lights were out to make repairs cost-effective, which had a negative impact on the overall consistency and quality of light on the field. The district worked with University Mechanical Contractors and Northwest Edison to replace the metal halide fixtures with MaxLite StaxMax LED Flood Lights. StaxMax was selected for the project because of the product's superior, 75,000-hour lumen maintenance, light output and efficiency.

In addition to lowering maintenance and energy costs, the district also sought to improve the light output and distribution on the field, which was recently converted from grass to black turf. The incumbent 1,500-watt metal halide lights were mounted in groups of 10 on four poles, for a total of 60,000 watts and 40 fixtures, but the fixtures distributed light unevenly and delivered only 15 foot-candles across the field. Installing and aiming 13 StaxMax 540-watt fixtures on each pole achieved illuminance levels of 25 to 30 footcandles and a more uniform distribution. In addition, the 52 StaxMax fixtures consume just 28,080 watts, reducing energy consumption on the field by more than 50 percent.







"The new lighting not only provides more consistent lighting due to the new design with three more fixtures per pole, but the fixtures also have a much longer life (75,000 hours vs. 3,000 hours), which means that a higher percentage of fixtures will remain on for a longer period of time during evening events," noted Ryan Carter of University Mechanical Contractors.

The renovation was one of several energy projects that University Mechanical Contractors helped the district complete to leverage energy and operational savings with available grants and utility incentives. In addition to the stadium lighting project, the district installed a solar PV system for the high school.

The new LED lights will save the school district approximately 45,000 kWh and \$8,500 in energy and maintenance costs annually. In addition, the district

secured a grant from TransAlta that offset 75 percent of the lighting project cost, resulting in a payback period of less than seven years.





## MaxLite

MaxLite has been committed to providing energy-efficient lighting products since 1993. One of the first movers into LED technology in the industry, MaxLite offers an extensive line of quality, certified indoor and outdoor LED lamps and luminaires. A five-time recipient of the ENERGY STAR Partner of the Year Award for its industry leadership, MaxLite continues to be at the forefront of energy-efficient technologies through the innovative research and development capabilities of its teams and facilities in New Jersey, California and Indiana.

