CASE STUDY: UPGRADED LIGHTING & CONTROLS

NORTHBROOK PARK DISTRICT, IL

Northbrook Park District Upgrades Lighting and Controls For Its Facilities

The Northbrook Park District was formed in 1927. At that time, the park district encompassed an area of about six square miles, including the village of Northbrook and parts of surrounding unincorporated areas.

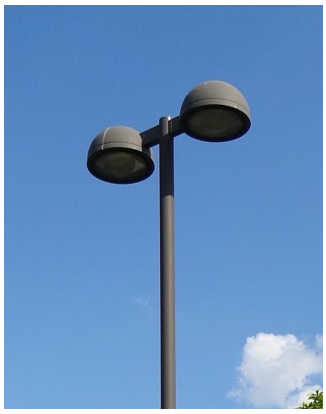
Since then, the park district has expanded its boundaries to include 12 parks offering a variety of amenities and activities, such as playgrounds, sports fields, walking paths, picnic areas, and more.

NEED FOR NEW LIGHTING SOLUTION

After years of using older, high-maintenance lighting technology, it was time time for an upgrade. Lead Electric brought forward a proposal for an innovative new lighting strategy.

The proposal outlined a one-for-one replacement that would be easy to install and did not require extra wiring, all while matching and exceeding the existing light levels in each of the park's areas. This resulted in a green initiative that included not only energy savings but also maintenance savings, greater control of individual locations via Networked Lighting Control and enhanced safety and security.

After seeing the positive difference these fixtures made during a lighting test in one area of the district, Northbrook made a commitment to enhance the lighting for all of their facilities.



Old fixtures in Techny Park before updating

THE LIGHTING

The key fixtures used in the lighting upgrade were Stadium Lights (for illuminating the athletic fields and other sports areas) and Flood/Area Lights (to address parking lots, trail areas and skate parks).

Lead Electric selected EiKO's SIG Stadium Lights and their VERT Area/Flood Lights for the job. In total 1,387 Stadium Lights were installed (a mix of 450W and 600W Stadium Lights replacing existing 1500W fixtures) and 521 Flood Lights (150W Flood Lights replacing existing 300W fixtures).

Each fixture features the ability to easily add Networked Lighting Control, which allows each fixture to be programmed using multiple lighting control strategies throughout an environment. This customization provides the most energy efficient solution.

THE RESULT (Techny Park)

Before *After*

Parking Lot
31 – 400W MH
$3,597 Annual Energy Cost

Parking Lot
31 – 150W LED
$1,140 Annual Energy Cost

Athletic Fields
174 – 1500W MH
$19,010 Annual Energy Cost

Athletic Fields
174 – 600W LED
$7,085 Annual Energy Cost

The difference is remarkable. Lighting improved dramatically in all areas—from the athletic fields, to the skate park and parking lots. This contributes to better visibility, safety, and accuracy during games and practices and enhancing the safety and visibility of pathways and parking areas for visitors.

The project not only exceeded the lighting expectations of the Northbrook Park District—it was also a financial success, as Lead Electric helped to leverage the benefits of the available ComEd rebates to deliver a cost-effective project for its customer. The entire project (all 12 park combined) resulted in a green initiative and overall estimated savings of $136,000 annually, cutting energy costs by more than 50%.