

# Cost of Ownership Analysis Worksheet

Soccer Fields  
Wellfield Park  
12/22/2015

## Compare existing lighting system to Musco LED

Enter analysis period 10

Enter Annual Hours of usage 400

Enter Rate per kWh \$0.150

(Obtain from utility company)

Musco Light Structure Green Metal Halide			
	Number of fixtures		<u>28</u>
<i>multiplied by</i>	Kilowatt consumption / fixture	x	<u>1.564</u>
<i>equals</i>	Electrical consumption per hour (kwh)	=	<u>43.792</u>
<i>multiplied by</i>	Estimated hours of annual operation	x	<u>400</u>
<i>equals</i>	Annual energy consumption (kW)	=	<u>17,517</u>
<i>multiplied by</i>	Rate per kWh (Obtain from utility company)	x	<u>\$0.150</u>
<i>equals</i>	Annual estimated energy cost	=	<u>\$2,627.52</u>
	Lamp replacement life	=	<u>5,000 hours</u>
	Cost to replace all lamps/year	=	<u></u>

Musco LED Lighting System			
	Number of fixtures		<u>40</u>
<i>multiplied by</i>	Kilowatt consumption / fixture	x	<u>0.597</u>
<i>equals</i>	Average electrical consumption	=	<u>23.88</u>
<i>multiplied by</i>	Estimated hours of annual operation (80% on low, 20% on	x	<u>400</u>
<i>equals</i>	Annual energy consumption (kW)	=	<u>9,552</u>
<i>multiplied by</i>	Rate per kWh (Obtain from utility company)	x	<u>\$0.150</u>
<i>equals</i>	Annual estimated energy cost	=	<u>\$1,432.80</u>
	Lamp replacement life	=	<u>10,000 hours</u>
	Cost to replace all lamps	=	<u></u>

Annual kW Reduction with Upgrade to Green Generation Lighting 7,964.80

Metal Halide System Annual Energy Cost \$2,627.52

Less Musco LED Annual Energy Cost \$1,432.80

Annual Energy Cost Savings with Musco \$1,194.72

10 Yr Energy Savings \$11,947.20

