

COST ANALYSIS

Schain Mold & Engineering

Rochester Hills, MI 48309

Interior and Exterior

Project Cost

\$45,431.85

DTE Incentive

\$23,373.13

Retrofit Costs (With Rebates)

\$22,058.72

Annual Energy Savings

\$29,840.68

Project Pay Back Period

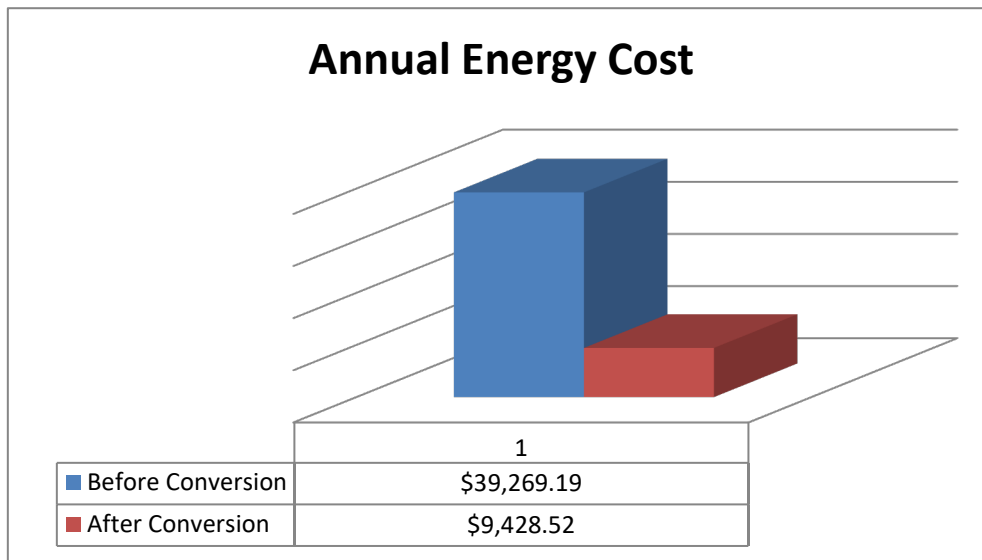
9 Months

Return on Investment Thru 5 years

519.54%

Project pay back period equal to $\frac{\text{Project Cost} - \text{DTE Incentive}}{\text{Annual Energy Savings}}$

Project Cost less DTE Incentive divided by Annual Energy Savings



Reduction in Annual Energy Cost

76%

EcoAdvantage: CO2 Emissions Reduction

352662.554 Lbs. or 29 SUV's off the road



91 High bays, 400w MH - 120 watt LED
 8 Wall pack, 400w MH - 80w LED
 9 High bays, 400w MH - 18.5 watt LED



Schain Mold & Engineering

Power Usage Sheet

3/4/2015

Interior and Exterior

DTE
rate/kw

0.11

Presently installed lighting plant

DTE REF	QTY	DESCRIPTION	Watts Per	DTE watts per	Watts Used	DTE watts Used	Annual Hours	Annual KWH	DTE Annual KWH	Annual energy cost	Data Reference	Page
8-18	7	400w MH lamp/ballast M400MLTAC4M	458	458	3206	3206	4380	14042.3	14042.3	\$1,544.65	Sect_5_HID.pdf	20
8-13	91	400w MH lamp/ballast M400MLTAC4M	458	458	41678	41678	7488	312085	312085	\$34,329.34	Sect_5_HID.pdf	20
8-14	9	400w MH lamp/ballast M400MLTAC4M	458	458	4122	4122	7488	30865.5	30865.5	\$3,395.21	Sect_5_HID.pdf	20
					41.678							
107 Units						Totals		356993	356993	\$39,269.19		

Proposed lighting plant

DTE REF	QTY	DESCRIPTION	Watts Per	DTE watts per	Watts Used	DTE watts Used	Annual Hours	Annual KWH	DTE Annual KWH	Annual energy cost	Data Reference	Page
8-18	7	80w 6700k LED CRN-80-HO	88	88	616	616	4380	2698.08	2698.08	\$296.79	CRN-80-HO.pdf	
8-13	91	120w 6700k LED CRN-150-HO	120	120	10920	10920	7488	81769	81769	\$8,994.59	CRN-120-HO.pdf	
8-14	9	18.5w 5000k PAR30 LED 36°	18.5	18.5	166.5	166.5	7488	1246.75	1246.75	\$137.14	soraa-00807-spec.pdf	
					10.92							
107 Units						Totals		85713.8	85713.8	\$9,428.52		

Measure cost DTE Allowed KWH Savings
Proposed lighting plant 271279

Actual Kw savings 271279
Total Annual Savings \$29,840.68

Before Conversion \$39,269.19
After Conversion \$9,428.52



Schain Mold & Engineering Scope of Work Interior and Exterior

DTE REF

Interior High Bays
Main Shop

8-13 Qty (76) 400 watt Metal Halide fixture retrofitted to 120 watt LED CRN lamp

Side Shop

8-13 Qty (15) 400 watt Metal Halide Fixture retrofitted to 120 watt LED CRN lamp

Lobby

8-14 Qty (9) 400 watt Metal Halide Fixture retrofitted to 18.5 watt PAR30 LED 36° lamp

Exterior Wall Packs

8-18 Qty (7) 400 watt Metal Halide fixture retrofitted to 80 watt LED CRN lamp

		Hours
Monday		24
Tuesday		24
Wednesday		24
Thursday		24
Friday		24
Saturday		24
Sunday	Closed	
Weekly		144
Annually		7488