

## Atlas Tube Recreation Centre



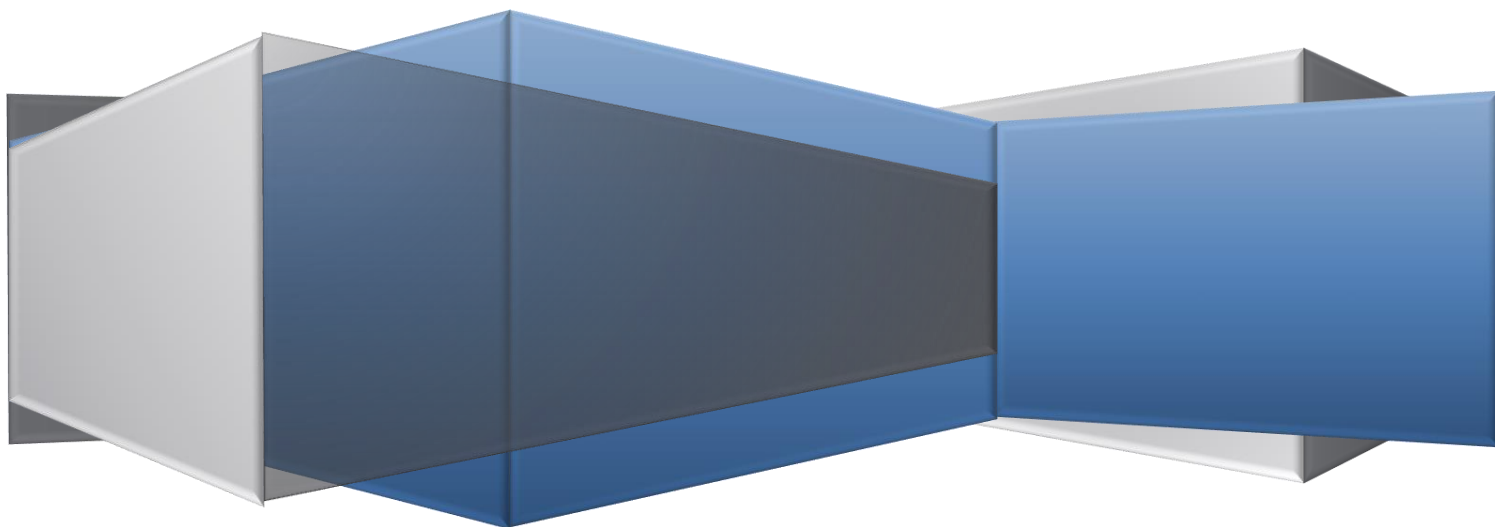
## Lighting Retrofit Project

Financial Analysis

November 2021

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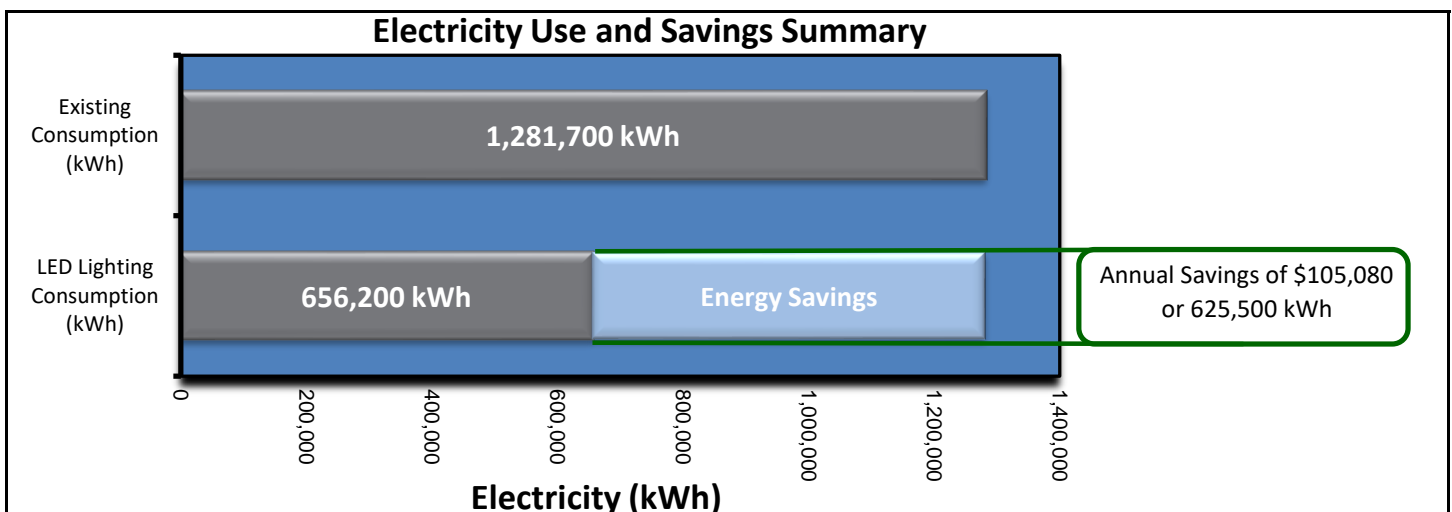
## 40% Lower Energy Cost for Atlas Tube Recreation Centre at 447 Renaud Line

### GOAL: Reduce Operating and Maintenance costs, Save Electricity and install ENERGY EFFICIENT, LONG LASTING LED TECHNOLOGY

- To reduce lighting operating and maintenance costs by \$124,100 annually (10 year NPV of over \$571,000)
- To capture \$62,400 in SaveOnEnergy incentives.

The existing lighting being used in the original section of the recreational complex is fluorescent T8 or T5 tubes, along with some fluorescent pot lights. Due to recent increases in maintenance costs of the existing lights, LED technology is being investigated.

This retrofit will be eligible for incentives from the IESO. An applicant representative will apply for the SaveOnEnergy incentives before starting the project. It is expected that the incentive will be approximately \$62,400.



### FINANCIAL:

The NET project cost\* is estimated at \$282,180 after applying the SaveOnEnergy incentive of \$62,480. A 10 year analysis yields a net present value of \$571,920 and a savings to investment ratio of over 3.

Simple Payback	2.3 years	Net Present Value <sup>1</sup>	\$571,900.00
Return on Investment	44%	Savings to Investment Ratio	3.02
Internal Rate of Return	46%	Modified Internal Rate of Return	23%

<sup>1</sup> NPV assumes 10 year analysis term, 3% inflation, and 10% discount rate

<sup>2</sup> MIRR assumes 10% finance rate and 10% reinvestment rate

\* final project cost is based on the lowest bid.

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The financial estimates listed include the lighting controls system being installed at ATRC. The energy savings without the lighting controls would only be **552,400kWh** with an ROI of **2.6 years** and an annual savings of **\$93,000**.

**STATUS:** An RFT was issued in October 2021, with the results of the bidding shown below.

**ACTION:** Frank Jeney and Bill Quinlan are seeking authorization to award the Tender to the lowest bidder.

Energy Network Services		Master In Electric		Dynamic Energy Services		Vollmer	
Material + Labour (Daytime Hours) + Disposal Cost	Material + Labour (Evening / Weekend Hours) + Disposal	Material + Labour (Daytime Hours) + Disposal Cost	Material + Labour (Evening / Weekend Hours) + Disposal	Material + Labour (Daytime Hours) + Disposal Cost	Material + Labour (Evening / Weekend Hours) + Disposal	Material + Labour (Daytime Hours) + Disposal Cost	Material + Labour (Evening / Weekend Hours) + Disposal
\$ 344,665.80	\$ 344,665.80	\$ 384,570.00	\$ 571,180.00	\$ 382,207.03	\$ 399,654.32	\$ 501,469.53	\$ 518,178.78

### DISCLAIMER

Information contained within this report are for informational purposes only and are not to be solely relied upon to project actual cost savings, energy savings or incentives. Actual cost savings, energy savings and incentives will be finalized as the projects are initiated, and will be determined by third parties (i.e. vendors, engineers, technical reviewers). Tandem Engineering Group disclaims any liability for any other use of the information supplied herein.