Sample Retrofit Site

Breakdown of energy usage (existing vs. LED retrofit)

2 illuminated sign faces

- **Sign 1**) 4’ 3” x 37”
- **Sign 2**) 4’ 3” x 12’ 4”

Existing Illumination	LED Retrofit
Sign 1 Ballasts) - 5 x 696 - **Total of 3000 Watts**	Sign 1 PS) - 629 modules/ 80 p/ PS - 8 PS @ 60 Watts - **Total of 480 Watts**
Sign 2 Ballasts) - 1 x 696 = 600 Watts - 1 x 672 = 480 Watts - **Total of 1080 Watts**	Sign 2 PS) - 212 modules/ 80 p/PS - 3 PS @ 60 Watts - **Total of 180 Watts**
4080 Watts	**660 Watts**

Savings on energy each year

Existing lighting

- 4,080/ 1,000 = 4.08 KW
- 4.08 KW x 12 hours per day x 365 days p/year **= 17,870 kWh** **drawn each year**

LED lighting

- 660/ 1,000 = 0.66 KW
- 0.66 x 12 hours per day x 365 days p/year **= 2,891 kWh** **drawn each year**

Energy Cost Savings

17,870 kWh - 2891 kWh **= 14,979 kWh saved each year**

14,978 kWh x $0.10 p / kWh **= $ 1,497.90** **saved on energy costs each year**

Government Estimated Rebate

14,979 kWh savings x $0.05 p/ kWh saved **= $749.00** **incentive rebate**

Total Return on Investment

Total Cost of Retrofit – government rebate – service cost for next five years / hydro savings per annum = **number of years to payback investment**

Cost Analysis

ESTIMATED COST TO SERVICE EXISTING SIGNS

- RELAMP (35 LAMPS)
- ALLOW FOR 2 REPLACEMENT BALLASTS (TOTAL OF 7 AT SITE)

PRICE……$1,735.00

ESTIMATED COST TO SERVICE AND REPLACE LIGHTING WITH LED

- ESTIMATED NUMBER OF LED : 840
- ESTIMATED NUMBER OF POWER SUPPLIES: 11

PRICE……$4,112.00

DIFFERENCE IN COST FROM SERVICING TO RETROFIT……$2,377.00
ESTIMATED REDUCTION IN HYDRO COSTS FOR YEAR 1……$1,497.00
ESTIMATED HYDRO REBATE……$749.00
ACTUAL COST……$131.00

****PAYBACK: 1 YEAR**
*****1 YEAR WARRANTY ON PARTS & LABOR, 5 YEAR MANUFACTURER WARRANTY ON PARTS**