

New Hampton High School

LED Lighting Proposal

- LED linear lamps do not require a ballast – thus eliminating the maintenance cost of ballast replacements*
- 5000k light spectrum will increase the ability to read words more clearly than fluorescent lighting
- Brighter, whiter light environments decrease eye strain and fatigue among staff and students
 - In many cases, schools are seeing a decrease in sick days
- LED linear lamps have a 5 year replacement warranty and are rated for 50,000 hours

Financial Impact: Project Cost \$41,664.00

- Energy reduction 45%
- Energy savings of \$7,865.00**
- Simple payback period 64 months
- Internal rate of return 19%
- 5 year energy savings \$39,325.00
- 10 year energy savings \$78,650.00
- Lifetime energy savings of lamps \$156,041.60***

Budgetary Impact:

- Cost of project can be paid for using PPEL monies
- All savings including maintenance cost reduction and utility savings remain in general budget account

Installation

- Installation can be completed within 90 days of accepting the proposal

*National average for maintenance cost on T8 light and ballast is \$6 per light per year. With Iowa's lower labor costs, we expect that cost to be \$3. With this being said, the school can expect to see an additional \$7,728.00 in savings annually

** Annual savings based on 2,520 hours of lighting run time per year and kWh rate of 8.5 cents

** Lamps are rated for 50,000 hours

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- Brighter, whiter light environments decrease eye strain and fatigue among staff and students
 - In many cases, schools are seeing a decrease in sick days
- LED linear lamps have a 5 year replacement warranty and are rated for 50,000 hours

Financial Impact: Project Cost \$58,790.00

- Energy reduction 45%
- Energy savings of \$7,865.00**
- Simple payback period 90 months
- Internal rate of return 13%
- 5 year energy savings \$39,325.00
- 10 year energy savings \$78,650.00
- Lifetime energy savings of lamps \$156,041.60***

Budgetary Impact:

- Cost of project can be paid for using PPEL monies
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