

FALL 2012 PROPOSAL

Thank you for your interest in the Student Green Energy Fund. Please fill out this form, which you can save to your computer. When you are ready to submit, please email the proposal by 5 pm on October 5th, 2012 to Shawna Neckar at shawnaneckar@usf.edu. You also have the option to include up to 10 MB of attachments to support your proposal.



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Proposal Title: Multiple Garage Retrofit/Replacement 175 watt fixtures with energy efficient LED fixtures. Funding request for Phase II re-lamping Crescent Hill Garage

Organization Parking and Transportation Services

(if applicable)

Description (1,000 words)

Describe the project, including goals and objectives, methods to be used to assess the outcome of the project, and how the results of the project will be communicated to the USF community.

Project: Original proposal submitted Spring 2012 was for over a four (4) year time frame retrofit/replace 2128 175 watt metal halide lamps with energy efficient 40 to 80 watt LED fixtures that meet or exceed the lighting requirements in each garage.

Goal:

To substantially reduce yearly energy consumption and costs for lighting in each of the four (4) parking garages on the Tampa Campus.

Awarded:

- April of 2012 Parking and Transportation Services was awarded \$78,000.00 partial funding to begin retrofitting the university's first parking structure; the Crescent Hill Garage.
- Project total is based on \$252,000.00 based on contractor bids received May 30, 2012.
- Phase I started August 2012, replacement of 220 175watt Metal Halide bulbs and ballast levels 1, 2, 3 and approximately 27% of level 4.
- Approved fund to date for Phase I is \$158,000.00 (Student Green Funds \$78,000.00 & Parking and Transportation matching funds \$80,000.00).
- Phase I completed Sept. 2012 and pending final inspection and approval for payment.

Requesting funding for Phase II.

Amount Requested

The total amount of funding to complete the project

- Phase II; \$94,175.00

Budget Justification (1,000 words)

Detail all expenditures for the project, including a brief statement describing the nature and necessity of the expense.

Phase II Funding break down to complete Crescent Hill:

- \$29,635.00 level 4 approximately 73%, 51 of 70 fixtures)
- \$36,100. level 5
- \$22,800.00 level 6
- \$1,328.00 Bond
- \$5,312.00 FPC Service

Total: \$95,175.00 (Less \$388.00 remaining initial fund; \$94,787.00)

Resource Matching (500 words)

Describe additional sources of funding that have been applied for and/or received for this project.

Consideration to use Parking and Transportation Services funds for labor installation depending on budgetary availability.

Timeline & Milestones (500 words)

Provide a schedule for the project from start to finish; noting the general dates of major milestones and accomplishments.

Phase I addressed the initial installation schedules developed and collaborative and compliance requirements with University Facilities Planning, Purchasing and Financial services bidding protocol and state and University permitting requirements.

Phase II will involve scheduling and installation of the remaining light fixtures on levels 4, 5 and 6. If funding is approved by end of Oct. projected completion date will be Dec. 2012.

Evaluation Metrics (500 words)

Provide a plan describing how the project will be assessed for effectiveness, noting how each goal or objective will be evaluated.

As previously outlined in the original Spring Proposal, a before and after photometric studies will be conducted to match or exceed current lighting levels. From the install date of Aug to Sept. 12, 2012 completion of phase I replacement of 220 HLD bulbs and ballast with LED fixtures , based on estimated KWH savings for one month, the estimated saving for one year is \$25,061.00.

Phase II will be the final installment of the remaining 125 fixtures with an estimated 30 day savings of \$15,066.00. Estimated projected saving for 1 year based on phase I and Phase II savings is \$40,127.00.

Previous utility billing costs for the last 5 years will be compared to first and subsequent years with the LED replacements; evaluate actual payback scheduled and return on investment to projections.

Plan for Sustainability (500 words)

Describe how the project will be sustainable over the long term, including any institutional commitments received for assistance in maintaining the project after its completion.

Using the Crescent Hill Garage as our model, the goal is to

- Demonstrate significant energy reduction,
- Eliminate yearly lamp and ballast replacements along with associated labor maintenance costs
- Reduce hazardous waste and associated disposal fees on incandescent lamps and ballasts.
- Increase usage of recyclable materials by reusing existing lamp housing

And implement these changes in the remaining 3 parking structures within the next 3 year.

Annual Energy Savings: For Crescent Hill Garage 472085 kWh

For help, please contact Shawna Neckar at shawnaneckar@usf.edu.