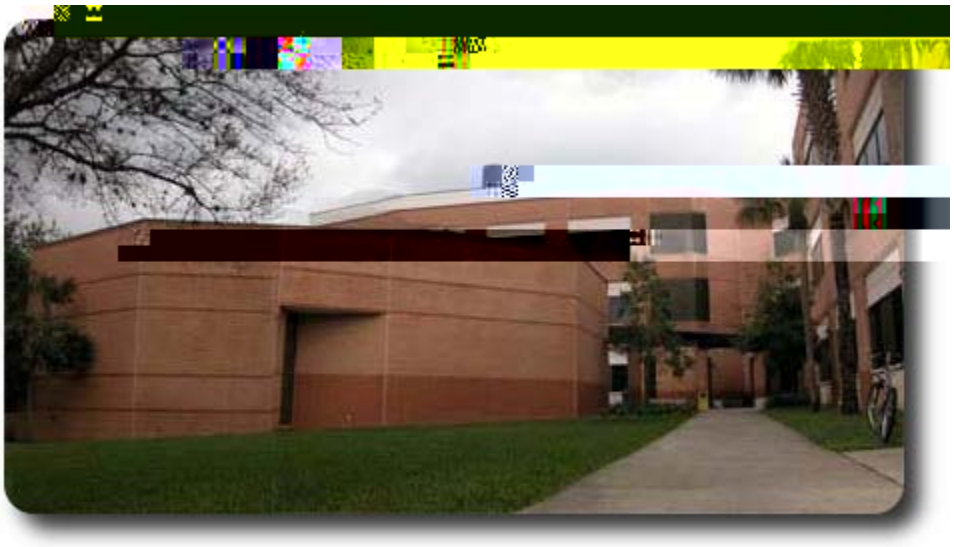
PROJECT PROPOSAL
GREEN ENERGY FUND



4/19/2016

Green and Gold Lighting Project-I

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ABSTRACT

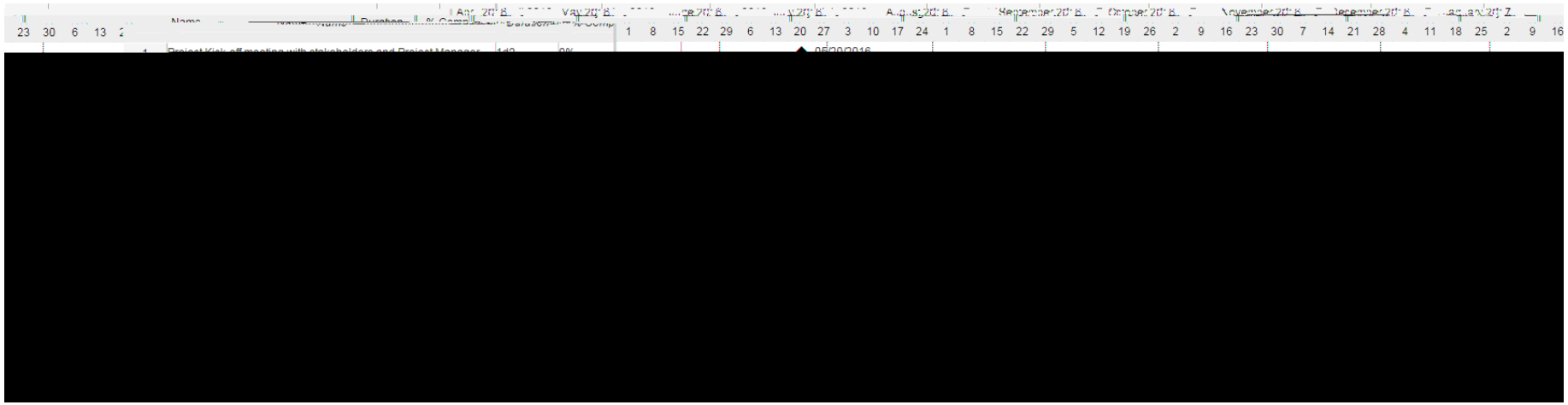

FIGURE 4. PROJECTED TIMELINE

PROJECT COST

Student Engagement

In the first phase of this project, two students will be engaged to carry out the project along with USF facilities management. We propose the following costs:

Students hire rate≈ $20/hr
For BSF building =2 students for 6 months

Capital investment

Items	Cost
Cost of the materials:	$ 29292
Cost of inspection:	$ 500
Cost of labor:	$ 32730
Recycling cost:	$ 723
Total cost	$ 63245
Student engagement:	$ 20000
Total Project Cost	$ 83245

Matching Grant

Facilities management has agreed to cover the cost of resources assigned for project management during the entire project. Facilities Management will cover the cost of replacing/upgrading special incandescent lamps for large lecture hall #100. About 45 such lamps ranging between 250 - 100 Watt in capacity will be upgraded in the entire BSF building.

The current project has the following financial highlights:-

One time rebate from TECO = $ 4,620
Annual savings in electricity cost = $ 10,646
Payback period = 5 years
Return on Investment = 20%
Net present value of savings= $ 69,125 assuming 12 year of life of the bulbs

PROJECTED RESULTS

Sustainability

This project uniquely aims to reduce the energy consumption on campus by targeting its major component, campus lighting, as a low hanging fruit. LED lights consume less energy than fluorescent and incandescent lights while providing the same illumination levels. Utilizing LED lighting throughout campus will reduce the lighting energy demand by about 40%. Thus, the project will enable the university to reduce economically GHG's along with total electricity consumption. The proposed LED bulbs will be selected with a lifetime of over 50,000 hours. The 100% lighting upgrade to LED lights for BSF building would result in an annual energy saving of 128,735

ANNEXURE