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## MTSU Clean Energy Initiative Project Funding Request

There are five (5) sections of the request to complete before submitting. See <http://www.mtsu.edu/~sga/cleanenergy.shtml> for funding guidelines. Save completed form and email to [cee@mtsu.edu](mailto:cee@mtsu.edu) or mail to MTSU Box 57.

1. General Information	
Name of Person Submitting Request Dr. Rita Whitaker	
Department/Office Building Services	Phone # (Office) 615-898-2393
MTSU Box # 32	Phone # (Cell) 615-478-4662
E-mail <a href="mailto:rita.whitaker@mtsu.edu">rita.whitaker@mtsu.edu</a>	Submittal Date 9/27/2023

2. Project Categories (Select One)	
Select the category that best describes the project.	
<input checked="" type="checkbox"/> Energy Conservation/Efficiency	<input type="checkbox"/> Sustainable Design
<input type="checkbox"/> Alternative Fuels	<input type="checkbox"/> Other
<input type="checkbox"/> Renewable Energy	

3. Project Information	
<p>a. Please provide a brief descriptive title for the project.</p> <p>b. The project cost estimate is the expected cost of the project to be considered by the committee for approval, which may differ from the total project cost in the case of matching funding opportunities. <b>Any funding request is a 'not-to-exceed' amount. Any proposed expenditure above the requested amount will require a resubmission.</b></p> <p>c. List the source of project cost estimates.</p> <p>d. Provide a brief explanation in response to question regarding previous funding.</p>	
3a. Project Title	Murphy Center Auxiliary Gym 1 LED Lighting Project
3b. Project Cost Estimate	\$32,013.92
3c. Source of Estimate	Carter Electric Services, LLC
3d. If previous funding from this source was awarded, explain how this request differs?	N/A

#### 4. Project Description

(Completed in as much detail as possible.)

- a. The scope of the work to be accomplished is a detailed description of project activities.
- b. The benefit statement describes the advantages of the project as relates to the selected project category.
- c. The location of the project includes the name of the building, department, and/or specific location of where the project will be conducted on campus.
- d. List any departments you anticipate to be involved. Were any departments consulted in preparation of this request? Who? A listing may be attached to this form when submitted.
- e. Provide specific information on anticipated student involvement or benefit.
- f. Provide information for anticipated future operating and/or maintenance requirements occurring as a result of the proposed project.
- g. Provide any additional comments or information that may be pertinent to approval of the project funding request.

##### 4a. Scope: Work to be accomplished

1. Remove 55 existing high bay fixtures and dispose.
2. Furnish and install 55 High Bay Lights
3. Parts and materials include conduit, boxes, supports, wire, and devices.

##### 4b. Scope: Benefit Statement

Currently, the lights are 400 watts per fixture for 55 fixtures, burn 22,000 watts. The new LED light will be 100 watts per fixture for 55 fixtures, and will burn on 5,500 watts when they are. If we change the current fixtures to LED, we will save energy. Currently, these lights stay on 20 hours a day. With the new fixtures, we would be saving energy and money ( $22,000w \times 20hrs = 440,000$ ) ( $5,500w \times 20hrs = 110,000$ ).

<b>4. Project Description (continued)</b>
<p><b>4c. Location of Project (Building, etc.)</b> Murphy Center Auxiliary Gym 1</p>
<p><b>4d. Participants and Roles</b> Boniface Amuzu - Murphy Center Complex Director Daryl Simpson - Associate Athletic Director Dr. Chandra Story - Health &amp; Human Performance Chair Forrest Higginbotham - Building Services Dr. Rita Whitaker - Building Services</p>
<p><b>4e. Student participation and/or student benefit</b> Health and Human Performance Activity Classes, MTSU Athletics, future events scheduled by MTSU and External Departments.</p>
<p><b>4f. Future Operating and/or Maintenance Requirements</b> There will be no maintenance required for these lights for the next five years. These lights will not lose any lumens when they are turned on, and will turn on immediately, without having to warm up like current metal halide fixtures in the gym.</p>
<p><b>4g. Additional Comments or Information Pertinent to the Proposed Project</b> Each year before the fall semester starts, Facilities Services (FSD) replaces and repairs the lights in this gym for Health and Human Performance classes and before the three commencement ceremonies. FSD is over there in August, December, and May. We are taking the lift over there and replacing and repairing the same lights over and over again. These new lights will not give off the heat that metal halide lights give off.</p>

### 5. Project Performance Information

Provide information if applicable.

- a. Provide information on estimated annual energy savings stated in units such as kW, kWh, Btu, gallons, etc.
- b. Provide information on estimated annual energy cost savings in monetary terms.
- c. Provide information on any annual operating or other cost savings in monetary terms. Be specific.
- d. Provide information about any matching or supplementary funding opportunities that are available. Identify all sources and explain.

5a. Estimated Annual Energy Savings (Estimated in kW, kWh, Btu, etc.)

115,500 kWh

5b. Annual Energy COST Savings (\$)

\$8,532.15 for a Return on Investment (ROI) which is 3.8 years.

5c. Annual Operating or Other Cost Savings. Specify. (\$)

These lights will have a 5 year warranty on them.

5d. Matching or Supplementary Funding (Identify and Explain)

N/A

**Middle Tennessee State University  
Electrical Maintenance and Repair**

**Attachment A - Pricing Template - Job Estimate**

**Instructions:**

Estimates (for all non-emergency jobs):

Part 1: Company Information/Job Information

Part 2: Job Estimate; providing an estimate for each line for labor and parts as applicable

Part 3: Specialty Job Requirements

Part 5: Contractor Signature

**PART 1: COMPANY INFORMATION / JOB INFORMATION (required)**

<b>Company Name:</b>	<b>CARTER ELECTRICAL SERVICES, LLC</b>	<b>Company Contact Name:</b>	Greg Carter
<b>Contact Email:</b>	<a href="mailto:gcarter@c-e-s-llc.net">gcarter@c-e-s-llc.net</a>	<b>Contact Phone Number:</b>	615-970-0793
<b>Date of Estimate/Quote:</b>	9/15/2023	<b>Requesting Agency:</b>	Construction & Renovation Department
<b>Contract #:</b>		<b>Job Order #:</b>	
<b>Job Location:</b>	<b>County:</b> Rutherford	<b>Requesting Agency Contact Name &amp; Number:</b>	Dr. Rita Whitaker
	MTSU - AUX GYM #1 & #2		
<b>Job Description:</b>	MTSU - AUX GYM #1 & #2 - HIGH BAY LIGHTS		
<b>Detailed Description of the Work to be Performed:</b>	Electrical Installation - AUX GYM #1 (1) Remove (55) Existing High Bay Lights and Dispose. (2) Furnish and Install (55) High Bay Lights Installation - AUX GYM #2 (1) Remove (55) Existing High Bay Lights and Dispose. (2) Furnish and Install (55) High Bay Lights		Electrical
<b>Estimated Days to Start Job (after receipt of request):</b>		<b>Estimated Days to Complete Job:</b>	

**PART 2: JOB ESTIMATE (required for Estimate ONLY)**

ITEM	CONTRACT ITEM ID #	QUANTITY	UNIT	PRICE PER UNIT	EXTENDED PRICE
<b>AUX GYM #1</b>					
Technician, Regular Time	Electrician	126	HR	\$ 42.00	\$ 5,292.00
Helper, Regular Time	Apprentice	126	HR	\$ 25.00	\$ 3,150.00
Parts & Materials (See attached)	Conduit, Boxes, Supports, Wire & Devices	1	LOT	\$ 23,571.92	\$ 23,571.92
<b>AUX GYM #2</b>					
Technician, Regular Time	Electrician	126	HR	\$ 42.00	\$ 5,292.00
Helper, Regular Time	Apprentice	126	HR	\$ 25.00	\$ 3,150.00
Parts & Materials (See attached)	Conduit, Boxes, Supports, Wire & Devices	1	LOT	\$ 23,571.92	\$ 23,571.92
					\$ -
<i>Add additional lines as needed in attachment</i>					
<i>**Add breakdown of parts and materials list in attachment**</i>				<b>Total Estimated Price for Job: \$ 64,027.84</b>	

**PART 3: SPECIALTY JOB REQUIREMENTS (required)**

<b>Will job require use of specialized equipment?</b>	No	<b>Will job require use of a Subcontractor?</b>	No
<b>Will job require specialized work?</b>	No	<b>Will job require off-site work?</b>	No
<i>If you answered "yes" to any questions in Part 3, attach a detailed explanation.</i>			

**PART 4: JOB FIRM QUOTE (required for Firm Quote ONLY)**

<b>BRIEF DESCRIPTION OF WORK TO BE PERFORMED</b>	<b>JOB PRICE</b>
Electrical Installation - AUX GYM #1 (1) Remove (55) Existing High Bay Lights and Dispose. (2) Furnish and Install (55) High Bay Lights Installation - AUX GYM #2 (1) Remove (55) Existing High Bay Lights and Dispose. (2) Furnish and Install (55) High Bay Lights	Electrical \$ 64,027.84
<b>Number of days Firm Quote is valid:</b>	30

**PART 5: CONTRACTOR SIGNATURE (required)**

<b>Contractor's Printed Name:</b>	Greg Carter
<b>Contractor Signature &amp; Date:</b>	9/15/23

**AUX GYM #1**

Description	Quantity	Total Material	Total Hours
1/2 OR 3/4" CONDUIT+BOX SUPPORT - S	55	264.93	9.67
WIRE CONN YEL	165	21.42	11.80
WIRE CONN RED	165	28.79	14.16
Demo - High Bay Fixtures	55	919.81	42.47
SO Cord & Cord Cap	55	201.76	2.95
4" SQ BLANK COVER	55	107.38	2.95
GROUND SCREW W/ INSUL #12 LEAD	55	158.38	3.54
FIXTURE HANGER WIRE	110	129.79	0.00
#14/3C - 6' FIXTURE WHIP	55	396.58	29.49
Man Lift	2	2228.70	4.40
Hi Bay Light	50	16518.60	117.98
Hi Bay Light EMERG	5	2595.78	11.80
Totals		23571.92	251.20

**AUX GYM #2**

Description	Quantity	Total Material	Total Hours
1/2 OR 3/4" CONDUIT+BOX SUPPORT - S	55	264.93	9.67
WIRE CONN YEL	165	21.42	11.80
WIRE CONN RED	165	28.79	14.16
Demo - High Bay Fixtures	55	919.81	42.47
SO Cord & Cord Cap	55	201.76	2.95
4" SQ BLANK COVER	55	107.38	2.95
GROUND SCREW W/ INSUL #12 LEAD	55	158.38	3.54
FIXTURE HANGER WIRE	110	129.79	0.00
#14/3C - 6' FIXTURE WHIP	55	396.58	29.49
Man Lift	2	2228.70	4.40
Hi Bay Light	50	16518.60	117.98
Hi Bay Light EMERG	5	2595.78	11.80
Totals		23571.92	251.20