

**DESCRIPTION OF INTERIM CAPITAL PROJECTS FOR CONSIDERATION**

September 1, 2016

**MEDICAL UNIVERSITY OF SOUTH CAROLINA**

**PROJECT NAME:** Psych Institute Chiller #1 Replacement  
**REQUESTED ACTION:** Establish Construction Budget  
**REQUESTED ACTION AMOUNT:** \$1,576,750  
**INITIAL CHE APPROVAL DATE:** 4/21/2016

<b><u>Project Budget</u></b>	<b><u>Previous</u></b>	<b><u>Change</u></b>	<b><u>Revised</u></b>
Professional Service Fees	\$23,250	\$36,750	\$60,000
Renovations - Utilities	\$0	\$1,467,000	\$1,467,000
Labor Costs	\$0	\$15,000	\$15,000
Contingency	\$0	\$58,000	\$58,000
<b><i>Total</i></b>	<b><i>\$23,250</i></b>	<b><i>\$1,576,750</i></b>	<b><i>\$1,600,000</i></b>

<b><u>Source of Funds</u></b>	<b><u>Phase I (Pre-Design)</u></b>	<b><u>Phase II (Construction)</u></b>	<b><u>Total Proposed Budget</u></b>
Institutional Deferred Maintenance	\$23,250	\$1,576,750	\$1,600,000
<b><i>Total</i></b>	<b><i>\$23,250</i></b>	<b><i>\$1,576,750</i></b>	<b><i>\$1,600,000</i></b>

**DESCRIPTION:**

The Medical University of South Carolina has completed the design work on the Psych Institute Chiller #1 Replacement project. MUSC requests to establish the construction budget to replace the chiller at the Psychiatric Institute Building. The existing chiller is beyond its useful life, undersized, and needs replacement. The existing 150-ton chiller will be replaced with a 350-ton chiller. Existing pumps and cooling tower will also be upgraded to match the new chiller capacity. This project will include work on the water piping, ductwork, exhaust fans and vents. Control systems, electrical, lighting and selective building demolition to install the chiller and cooling tower is included in this project.

The projected date for execution of the construction contract is March 2017, and for completion of construction is December 2017.

**E&G MAINTENANCE NEEDS:**

The project will alleviate a portion of the existing maintenance needs of \$3,993,879 for the Psych Institute.

**ANNUAL OPERATING COSTS/SAVINGS:**

There are no additional annual operating costs associated with this project.

**RECOMMENDATION:**

Staff recommends approval of this project as proposed.

FOR DEPARTMENT USE ONLY	
CHE	_____
JBRC	_____
SFAA	_____
JBRC Staff	_____
ADMIN Staff	_____
A-1 Form Mailed	_____
SPIRS Date	_____
Summary	_____

(For Department Use Only)
SUMMARY NUMBER
FORM NUMBER

**PERMANENT IMPROVEMENT PROJECT REQUEST**

1. AGENCY  
 Code H51 Name Medical University of South Carolina (MUSC)  
 Contact Person Phil Mauney Phone (843) 792-2490
2. PROJECT  
 Project # 9834 Name Psych Institute Chiller #1 Replacement  
 Facility # 750 Facility Name Psychiatric Institute

County Code	10 - Charleston
New/Revised Budget	\$1,600,000.00

Project Type	4 - Replace Existing Facilities/Systems
Facility Type	3 - Health Care/Medical

3. CPIP PROJECT APPROVAL FOR CURRENT FISCAL YEAR  
 CPIP priority number \_\_\_\_\_ of \_\_\_\_\_ for FY \_\_\_\_\_.

4. PROJECT ACTION PROPOSED (Indicate all requested actions by checking the appropriate boxes.)

Establish Project	<input type="checkbox"/>	Decrease Budget	<input type="checkbox"/>	Close Project	<input type="checkbox"/>
Establish Project - GPIP	<input type="checkbox"/>	Change Source of Funds	<input type="checkbox"/>	Change Project Name	<input type="checkbox"/>
Increase Budget	<input checked="" type="checkbox"/>	Revise Scope	<input type="checkbox"/>	Cancel Project	<input type="checkbox"/>

5. PROJECT DESCRIPTION AND JUSTIFICATION  
 (Explain and justify the project or revision, including what it is, why it is needed, and any alternatives considered. Attach supporting documentation/maps to fully convey the need for the request.)

This project will replace chiller #1 at the Psychiatric Institute Building. This existing chiller is beyond its useful life, undersized, and needs replacement. The existing 250 ton chiller will be replaced with a 350 ton chiller. Existing pumps and cooling tower will also be upgraded to match the new chiller capacity. This request is for approval to proceed with full design and construction.

6. OPERATING COSTS IMPLICATIONS  
 Attach Form A-49 if any additional operating costs or savings will result from this request. This includes costs to be absorbed with current funding.

7. ESTIMATED PROJECT SCHEDULE AND EXPENDITURES

Estimated Start Date: June 2016 Estimated Completion Date: December 2017  
 Estimated Expenditures: Thru Current FY: \$500,000.00 After Current FY: \$1,100,000.00

8. ESTIMATES OF NEW/REVISED PROJECT COSTS

<b>PROJECT #</b>	9834
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- 1. \_\_\_\_\_ Land Purchase ---->
  - 2. \_\_\_\_\_ Building Purchase ---->
  - 3. 60,000.00 Professional Services Fees
  - 4. \_\_\_\_\_ Equipment and/or Materials ---->
  - 5. \_\_\_\_\_ Site Development
  - 6. \_\_\_\_\_ New Construction ---->
  - 7. \_\_\_\_\_ Renovations - Building Interior ---->
  - 8. 1,467,000.00 Renovations - Utilities
  - 9. \_\_\_\_\_ Roofing - \_\_\_\_\_ Roof Age
  - 10. \_\_\_\_\_ Renovations - Building Exterior
  - 11. \_\_\_\_\_ Other Permanent Improvements
  - 12. \_\_\_\_\_ Landscaping
  - 13. \_\_\_\_\_ Builders Risk Insurance
  - 14. \_\_\_\_\_ Other Capital Outlay
  - 15. 15,000.00 Labor Costs
  - 16. \_\_\_\_\_ Bond Issue Costs
  - 17. \_\_\_\_\_ Other: \_\_\_\_\_
  - 18. 58,000.00 Contingency
- \$1,600,000.00 TOTAL PROJECT BUDGET

Land: \_\_\_\_\_ Acres  
 Floor Space: \_\_\_\_\_ Gross Square Feet  
 Information Technology \_\_\_\_\_  
 Floor Space: \_\_\_\_\_ Gross Square Feet  
 Floor Space: \_\_\_\_\_ Gross Square Feet

ENVIRONMENTAL HAZARDS	
Identify all types of significant environmental hazards (including asbestos, PCB's, etc..) present in the project and the financial impact they will have on the project.	
Type:	_____
<u>Cost Breakdown</u>	
Design Services	\$ _____
Monitoring	\$ _____
Abate/Remed	\$ _____
Total Costs	\$ _____ 0.00

9. PROPOSED SOURCE OF FUNDING

Source	Previously Approved Amount	Increase/Decrease	Original/Revised Budget	Transfer to/from Proj. #	Rev Object Code	Treasurer's ID Number	Rev Sub Fund	Exp Sub Fund
(0) CIB, Group			0.00 0.00		8115		3043	3043
(1) Dept. CIB, Group			0.00 0.00		8115		3143	3143
(2) Institution Bonds			0.00 0.00					3235
(3) Revenue Bonds			0.00 0.00					3393
(4) Excess Debt Service			0.00 0.00					3497
(5) Capital Reserve Fund			0.00 0.00		8895		3603	3603
(6) Appropriated State			0.00 0.00		8895	68800100	1001	3600
(7) Federal			0.00 0.00			78800100		5787
(8) Athletic			0.00 0.00			88800100		3807
(9) Other (Specify) Institution Deferred Maintenance	23,250.00	1,576,750.00	1,600,000.00 0.00 0.00		2802	98800100	3035	3907
<b>TOTAL BUDGET</b>	<b>\$23,250.00</b>	<b>\$1,576,750.00</b>	<b>\$1,600,000.00</b>					

10. SUBMITTED BY:

*Juse Edung*  
 Signature of Authorized Official and Title

7/27/16  
Date

11. APPROVED BY:

(For Department Use Only) \_\_\_\_\_  
 Authorized Signature and Title

\_\_\_\_\_  
Date

**ADDITIONAL ANNUAL OPERATING COSTS / SAVINGS  
RESULTING FROM PERMANENT IMPROVEMENT PROJECT**

1. AGENCY Code H51 Name Medical University of South Carolina (MUSC)

2. PROJECT Project # 9834 Name Psych Insitute Chiller #1 Replacement

3. ADDITIONAL ANNUAL OPERATING COSTS / SAVINGS. (Check whether reporting costs or savings.)

COSTS       SAVINGS       NO CHANGE

4.

TOTAL ADDITIONAL OPERATING COSTS / SAVINGS				
Projected Financing Sources				
(1)	(2)	(3)	(4)	(5)
Fiscal Year	General Funds	Federal	Other	Total
1)	\$	\$	\$	\$ 0.00
2)	\$	\$	\$	\$ 0.00
3)	\$	\$	\$	\$ 0.00

5. If "Other" sources are reported in Column 4 above, itemize and specify what the other sources are (revenues, fees, etc.).

6. Will the additional costs be absorbed into your existing budget?  YES       NO  
If no, how will additional funds be provided?

7. Itemize below the cost factors that contribute to the total costs or savings reported above in Column 5 for the first fiscal year.

	<u>COST FACTORS</u>	<u>AMOUNT</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
	TOTAL	\$0.00

8. If personal services costs or savings are reported in 7 above, please indicate the number of additional positions required or positions saved. \_\_\_\_\_

9. Submitted By: *Jesse Edwards*      7/27/14  
Signature of Authorized Official and Title      Date

**PERMANENT IMPROVEMENT PROJECT INFORMATION FORMAT  
FOR PHASE II CONSTRUCTION BUDGET**

1. What is the total projected cost of the project and what is it based on? Please attach a summary of the costs prepared during the A&E pre-design phase to support the total cost.

\$1,600,000. Engineer cost estimate.

2. What is/are the source(s) of funds for the construction? If any private or federal funds are included, please attach a letter guaranteeing the availability of the funds.

Investment Fund - Deferred Maintenance

3. What is your agency/institution's definition of each fund source to be used for construction? (If any type of fee makes up a portion of the source, what is the fee called, what is the fee amount, and when it was put in place. If there is a statutory authority authorizing the use of the funds for capital projects, please cite the code section.)

MUSC earmarks \$4MM in operational funds on an annual basis to address deferred maintenance needs.

4. What is the current uncommitted balance of funds for each source listed in 3 above?

All funds in the account were committed to deferred maintenance projects during the FY17 capital budget process.

5. If institution or revenue bonds are included as a source, when were the bonds issued? If not issued yet, when is the bond resolution expected to be brought for State Fiscal Accountability Authority approval?

Not applicable

6. If a student fee is used to fund debt service, what is the current amount of the fee annually or by semester? Please specify which.

None

7. Will the use of any funds for construction require an increase in any student fee or tuition? If so, please explain in detail.

No

8. Will the project be LEED certified for energy savings and conservation and if so, at what level will it be certified? For projects requiring or using LEED certification, please attach the required cost-benefit analysis and a checklist of items to be used to achieve LEED points or a description of the energy measures to achieve LEED.

Project will not be LEED certified.

9. What energy savings/conservation measures will be implemented within the project if the project will not be LEED certified? For projects that do not require/use LEED, please provide a paragraph on energy savings measures to be implemented as part of the project. If there are no energy savings measures included, please state that and explain why.

Energy efficient motors and integrated digital controls will be installed on the chiller system.

10. What is the projected date (month and year) for execution of the construction contract?

March 2017

11. What is the projected date (month and year) for completion of construction?  
December 2017
12. What program(s) are to be included in the constructed or renovated space?  
Not applicable, equipment replacement
13. What is the total square footage of the building to be renovated or constructed?  
62,300 gsf
14. If a portion of the building is to be renovated, what is the square footage of the portion that will be included in the renovation?  
Not applicable, equipment replacement
15. What is the current age of the building or building systems to be renovated?  
39 years old
16. If any new space is being added to the facility, please provide demand/usage data to support the need.  
No new space is being added
17. What are the estimated numbers of students, faculty, staff and/or clients that are expected to use the space affected by the project or the entire building? (Answer for as many as are applicable.)  
25 faculty/doctors, 50 staff, 30 students, and approximately 75 patients per day
18. If the construction cost increased significantly from the internal estimate (30% or more), what factors caused the cost to increase?  
No significant increase
19. If the contingency is more than 10%, please explain why.  
Contingency is 5%
20. If funds are being transferred from another project, what is the current status of the project from which funds are being transferred?  
Not applicable
21. Has the project been included in a previous year's CPIP? If so, what was the last year the project was included and for which year, 1-5?  
NO. It was originally anticipated that this chiller replacement was under \$1,000,000.
22. What are the economic impacts of the project, including job creation and retention? If there are none, please explain.  
Approximately 10 construction jobs will be maintained during the 8 month construction period. This chiller supports MUSC's main data center which is a critical facility in the economic viable operation of MUSC.
23. How will your agency/institution address and fund maintenance of this facility construction/renovation?  
Since this is a replacement of existing equipment in an existing facility, the maintenance support structure is already in place.

24. If your agency/institution has a deferred maintenance account, what is the name of the account and what is its current uncommitted balance?

Yes the name of the account is "Investment Fund - Deferred Maintenance." All funds in the account were committed to deferred maintenance projects during the FY16 capital budget process.

25. If how maintenance will be addressed and funded for this facility construction/renovation has not been determined yet, what steps are in place to begin to address how your agency/institution will fund maintenance to this and other agency/institution facilities?

Not applicable