UNIVERSITY OF ALABAMA SYSTEM **BOARD RULE 415 BOARD SUBMITTAL CHECKLIST CRITERIA**

BOARD SUBMITTAL CHECKLIST NO. 4 CAPITAL PROJECT - STAGE IV SUBMITTAL /1 (Construction Contract Award)

The University of Alabama **CAMPUS:**

PROJECT NAME: Campus Steam Decommissioning

MEETING DATE: April 13 - 14, 2023

/	1.	Board Submittal Checklist No. 4
~	2.	Transmittal Letter to Chancellor from Campus President requesting project be placed on the agendas for the forthcoming Physical Properties Committee and Board of Trustees (or Executive Committee) Meetings
/	3.	Proposed Board Resolution requesting approval of Construction Contract Award, Construction Budget and Project Budget by the Board of Trustees
V	4.	Executive Summary of Proposed Capital Project with final Contract Construction Budget and Project Budget (include all proposed project funding for movable equipment and furnishings) 12
V	5.	Tabulation of competitive bids – certified by Project Architect/Construction Manager
•	6.	Recommendations for Contract Award by Architect/Construction Manager
V	7.	Campus Map(s) showing project site
П	8.	Final Business Plan (if applicable) /3

Prepared by: Shawn Templeton

Approved by: Tun leepend

^{/1} Reference Tab 3I - Board Rule 415 Instructional Guide

^{/2} Reference Tab 3E - Board Rule 415 Instructional Guide

^{/3} Reference Tab 3V - Board Rule 415 Instructional Guide



March 6, 2023

Chancellor Finis E. St. John IV The University of Alabama System 500 University Boulevard East Tuscaloosa, Alabama 35401

Dear Chancellor St. John:

I am pleased to send to you for approval under Board Rule 415 the attached documents for a Stage IV submittal for the Campus Steam Decommissioning project.

The resolution requests authorization to award the construction contract for Construction - Package A Campus Steam Decommissioning 2023 and approval of the reallocated project budget.

The item has been thoroughly reviewed and has my endorsement. With your concurrence, I ask that it be added to the agenda for The Board of Trustees at their regular meeting on April 13-14, 2023.

Sincerely,

Stuart R. Bell President

Enclosure



THE UNIVERSITY OF ALABAMA

RESOLUTION

APPROVAL OF THE REALLOCATED PROJECT BUDGET; PROVIDING AUTHORIZATION TO EXECUTE A CONSTRUCTION CONTRACT FOR CAMPUS STEAM DECOMMISSIONING

WHEREAS, on November 4, 2022, in accordance with Board Rule 415, the Board of Trustees of The University of Alabama ("Board") approved the Stage I submittal for the Campus Steam Decommissioning project ("Project"); and

WHEREAS, as part of the University's master plan for thermal energy distribution, the University has previously completed the East Quad Energy Plant, the interconnection of the system with the Shelby Energy Plant and numerous building connections and the Campus Energy Delivery Optimization project; and

WHEREAS, this Project will allow for the remaining buildings on the steam system to be served by the addition of local boilers or the connection to the central thermal system as necessary to allow the decommissioning of the steam plant and distribution system; and

WHEREAS, the Project will include scope at multiple locations across the University campus including B.B. Comer Hall, Bureau of Mines #1, Bureau of Mines #2, Bureau of Mines #4, ten Hoor Hall, Foster Auditorium, Reese Phifer Hall, Hardaway Hall, Rowand-Johnson Hall and East Quad Energy Plant; and

WHEREAS, as part of the University's master plan for thermal energy distribution, the University will decommission the B.B. Comer Hall Steam Plant at the completion of this Project as a separate project at that time; and

WHEREAS, the Project has been separated into two (2) construction packages: Package A – Campus Steam Decommissioning 2023 ("Package A"), which will remove B.B. Comer Hall, Bureau of Mines #1, Bureau of Mines #2, Bureau of Mines #4, and ten Hoor Hall from the campus steam system; and Package B – Campus Steam Decommissioning 2024 ("Package B"), which will remove Foster Auditorium, Reese Phifer Hall, Hardaway Hall, and Rowand-Johnson Hall from the campus steam system as well as add a new boiler to the East Quad Energy Plant; and an Owner Furnished Contractor Installed (OFCI) Equipment package to mitigate scheduling impacts of long-lead items; and

WHEREAS, on November 4, 2022, the Board approved a waiver of the Consultant Selection Process, the negotiated design fee and authorized the University to utilize the engineering design services of HHB for the Project; and

WHEREAS, the University negotiated a final design fee of 6.6% of Construction Package A and the OFCI Equipment Package and 6.2% of Package B, plus a 1.14 renovation factor, plus \$37,050 in additional services and reimbursable expenses, and less a discount in the amount of \$20,000, representing a significant savings to the University of approximately 11% of the standard fee; and

WHEREAS, on February 28, 2023, pursuant to Title 39, State Bid Law of Alabama Code, competitive bids were received for Construction Package A – Campus Steam Decommissioning 2023 and Bradley Plumbing and Heating, Inc. of Montgomery Alabama was declared the lowest responsible bidder with a base bid in the amount of \$1,364,000, as referenced on the certified bid tab; and

WHEREAS, the University is requesting approval to award the construction contract for Package A to Bradley Plumbing and Heating, Inc. for a total contract amount of \$1,364,000; and

WHEREAS, the University is requesting approval for a Budget Reallocation to reflect the Package A bid results and the owner purchase of additional equipment to further mitigate the effects of continued supply chain challenges associated with long lead equipment; and

WHEREAS, the Project locations and program have been reviewed and are consistent with the University Campus Master Plan, University Design Standards, and the principles contained herein; and

WHEREAS, the Project will be funded from University Central Reserves in the amount of \$12,610,000; and will address campus deferred maintenance liabilities in the amount of \$80,000,000; and WHEREAS, the reallocated budget for the Project is as stipulated below:

BUDGET:	REALLOCATED
Construction – Package A Campus Steam Decommissioning 2023	\$ 1,364,000
Construction – Package B Campus Steam Decommissioning 2024	\$ 6,978,000
Owner Furnished Contractor Installed Equipment	\$ 1,758,000
Telecommunication/Data	\$ 50,000
Contingency* (10%)	\$ 1,010,000
UA Project Management Fee** (3%)	\$ 333,300
Architect/Engineer Fee*** (~7.4%)	\$ 745,154
Commissioning	\$ 50,000
Other****	\$ 321,546
TOTAL PROJECT COST	\$ 12,610,000

^{*}Contingency is based on 10% of the costs of the Construction Packages and Owner Furnished Contractor Installed Equipment.

Current Package for Contract Award Approval

^{**}UA Project Management Fee is based on 3% of the costs of Construction Packages, Owner Furnished Contractor Installed Equipment and Contingency.

^{***}Architect/Engineer Fee is based on 6.6% of the costs of Construction - Package A and the OFCI Equipment, 6.2% of the costs of Construction - Package B, plus a 1.14 renovation factor for each, plus \$37,050 of additional services and reimbursable expenses, and less a credit of \$20,000.

^{****}Other expenses include Construction Materials Testing, Inspections, Advertising, Printing, and other associated project costs as applicable.

NOW, THEREFORE, BE IT RESOLVED by The Board of Trustees of The University of Alabama that:

- 1. The Budget Reallocation for the Project is hereby approved as stipulated above.
- 2. Stuart R. Bell, President; Matthew M. Fajack, Vice President for Finance and Operations and Treasurer; or those officers named in the most recent Board Resolution granting signature authority for the University be, and each hereby is, authorized to act for and on behalf of The Board of Trustees of The University of Alabama in executing the aforementioned contract with Bradley Plumbing and Heating, Inc., Montgomery, Alabama, for Construction Package A of the Campus Steam Decommissioning project in accordance with Board Rule 415.

EXECUTIVE SUMMARY

PROPOSED CAPITAL PROJECT

BOARD OF TRUSTEES SUBMITTAL

MEETING DATE:	April 13 - 14, 2023	
CAMPUS:	The University of Alabama, Tuscaloosa, Alabama	
PROJECT NAME:	Campus Steam Decommissioning	
PROJECT NUMBER:	UTL-23-3022	
PROJECT LOCATION:	B.B. Comer Hall, Bureau of Mines #1, Bureau of Mines #2, Bureau of Mines #4, ten Hoor Hall, Foster Auditorium, Reese Phifer Hall, Hardaway Hall, Rowand-Johnson Hall, and East Quad Energy Plant	
ARCHITECT:	HHB Engineers, P.C.	
THIS SUBMITTAL:	PREVIOUS APPROVALS:	
☐ Stage I	November 4, 2022	
☐ Stage II - CSPW	November 4, 2022	
☐ Campus Master Plan Ame	endment	
☐ Stage III		
⊠ Stage IV		

PROJECT TYPE	SPACECATEGORIES	PERCENTAGE	GSF
☐ Building Construction			
☐Building Addition	Campus Infrastructure &		
⊠Building Renovation	Utility & Mechanical	100%	N/A
□Equipment			
	TOTAL	100%	N/A

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10,000 \$	1,010,000
33,300 \$	333,300
15,154 \$	745,154
50,000 \$	50,000
21,546 \$	321,546
10,000 \$	12,610,000
3	33,300 \$ 45,154 \$ 50,000 \$ 21,546 \$

^{*}Contingency is based on 10% of the costs of Construction Packages and Owner Furnished Contractor Installed Equipment.

Current Package for Contract Award Approval

ESTIMATED ANNUAL OPERATING AND MAINTENANCE (O&M) COSTS: (Utilities, Housekeeping, Maintenance, Insurance, Other) \$ N/A* Total Estimated Annua O&M Costs: \$ N/A*

* Central utility O&M costs are not assigned at a facility level or by GSF.

FUNDING SOURCE:	University Central Reserves \$	12,610,000
O&M Costs:	Operating Company Expense \$	N/A

NEW EQUIPMENT REQUIRED

Rooftop DX Units High Efficiency Condensing Boilers

Total Equipment Costs: \$ 1,758,000

^{**}UA Project Management Fee is based on 3% of the costs of Construction Packages, Owner Furnished Contractor Installed Equipment and Contingency.

^{***}Architect/Engineer Fee is based on 6.6% of the costs of Construction – Package A and OFCI Equipment, 6.2% of the costs of Construction – Package B, a 1.14 renovation factor, plus additional services and reimbursable expenses of \$37,050, and minus a credit of \$20,000.

^{****}Other expenses include Construction Materials Testing, Inspections, Advertising, Printing, and other associated project costs, as applicable.

PROJECT SCOPE:

The Campus Steam Decommissioning Project ("Project") will improve the teaching, learning, and working environments of campus constituents by providing reliable and efficient thermal energy to facilities by replacing systems which have reached the end of their functional service life. Scope will include the addition of local boilers and the connections of additional buildings in coordination with the support of new facilities prior to the retirement of the existing steam system.

The existing steam distribution system is approximately 60 years old and is at its optimal replacement age. As part of the University's strategic energy plan, the steam system has been incrementally decommissioned as buildings were connected to the Central Thermal System. This project decommissions the balance of the buildings, which have not been connected to the system. Furthermore, the existing steam boiler efficiency is impacted by the current minimal load, therefore overall efficiency will be enhanced. Finally, the steam system operates on a limited basis and is challenging to start up and shut down. When the campus experiences warm periods during the heating season building comfort is compromised due to system start up challenges.

The Project has been separated into two (2) packages: Package A – Campus Steam Decommissioning 2023 ("Package A") which includes the buildings being removed from the campus steam system in 2023 (B.B. Comer Hall, Bureau of Mines #1, Bureau of Mines #2, Bureau of Mines #4, and ten Hoor Hall); and Package B – Campus Steam Decommissioning 2024 ("Package B") which includes the buildings being removed from the campus steam system in 2024 (Foster Auditorium, Reese Phifer Hall, Hardaway Hall, and Rowand-Johnson Hall) as well as the addition of a new boiler to the East Quad Energy Plant; and the Owner Furnished Contractor Installed Equipment package for the Rooftop DX units and High Efficiency Condensing Boilers.

Package A – 2023 Steam Decommissioning will consist of the Northwest Campus Boiler Station connection to B.B. Comer Hall, connecting Bureau of Mines #1 to the central thermal energy system, Bureau of Mines #2 and Bureau of Mines #4 will replace the HVAC systems utilizing electric and/or natural gas heating, and ten Hoor Hall will add a backup boiler. After completion of this package, the steam system will still be in operation for the remaining connected buildings.

Package B - 2024 Steam Decommissioning will consist of connecting Foster Auditorium, Hardaway Hall, and Reese Phifer Hall to the central thermal energy system, Rowand-Johnson Hall to the Northwest Campus Boiler Station, and adding a new boiler to the East Quad Energy Plant.

The Project will purchase long-lead time equipment ahead of the main packages to mitigate continued cost escalations and supply chain challenges.

PROJECT STATUS – Construction Package A – Campus Steam Decommissioning 2023		
SCHEMATIC DESIGN:	Date Initiated	June 2022
	% Complete	100%
	Date Completed	October 2022
PRELIMINARY DESIGN:	Date Initiated	November 2022
	% Complete	100%
	Date Completed	December 2022
CONSTRUCTION DOCUMENTS:	Date Initiated	December 2022
	% Complete	100%
	Date Completed	February 2023
BID DATE:		February 28, 2023

^{*}N/A on Stage I Projects

PROJECT STATUS - Construction Package B - Campus Steam Decommissioning 2024		
SCHEMATIC DESIGN:	Date Initiated % Complete Date Completed	June 2022 100% October 2022
PRELIMINARY DESIGN:	Date Initiated % Complete Date Completed	November 2022 50% May 2023
CONSTRUCTION DOCUMENTS:	Date Initiated % Complete Date Completed	June 2023 0% September 2023
SCHEDULED BID DATE: (Package B)		October 26, 2023

^{*}N/A on Stage I Projects

RELATIONSHIP AND ENHANCEMENT OF CAMPUS PROGRAMS

The Project will improve the teaching, learning, and working environments of campus constituents by providing reliable and efficient thermal energy, local boilers and a new boiler station to facilities by replacing systems that have reached the end of their functional service life. Furthermore, reducing the cost to provide heating to buildings will support The University of Alabama ("University") in reducing annual operating costs.

As part of the University's master plan for steam decommissioning, this proposed Project will address deferred maintenance issues and reduce deferred maintenance liabilities by approximately \$80,000,000 while improving system efficiency and reliability through utilization of the existing East Quad Energy Plant distribution systems and infrastructure.

The work is scheduled to happen over the late spring and summer so as to minimize the impact to building occupants when the heating load is minimal.

TABULATION OF BIDS



Project Name Campus Steam Decommissioning

Bid Due February 28, 2023 3:00 p.m. local time

Architect/Engineer HHB Engineers, P.C. 104 Josie Run Prattville, AL 36066 phone: (334) 358-2707 fax: (334) 358-2120

UA Project No. UTL-23-3022

Bid Location 405 Cahaba Circle Tuscaloosa, Alabama 35404

Two million, nine hundred twenty-two thousand dollars and 00/100 (\$2,922,000.00) **FUNDS AVAILABLE:** Sixty (60) Days BIDS SHALL BE VALID FOR: Ninety-one (91) Days after Notice to Proceed **CONSTRUCTION DURATION:**

	Bradley Plumbing and Heating, Inc.	McAbee Construction, Inc.	P & M Mechanical, Inc.
CONTRACTOR	431 Hackel Drive	5724 21st Street	325 Carson Road N
	Montgomery, AL 36117	Tuscaloosa, AL 35401	Birmingham, AL 35215
	(334) 271-0700	(205) 349-2212	(205) 925-9486
~	GC Lic. #6442	GC Lic. #7738	GC Lic. #19067
Addenda ONE - THREE	_X_YesNo	X Yes No	Addenda 1 - 2
LICENSE # ON ENVELOPE	X Yes No	X Yes No	X Yes No
BONDING COMPANY OR BID DEPOSIT	Cincinnati Insurance Co.	Hartford Fire Insurance Co.	Harco National Insurance Co.
BASE BID ON PROPOSAL	\$ 1,364,000.00	\$ 1,672,142.00	\$ 2,568,995.00
ENVELOPE ADJUSTMENT	-	-	-
TOTAL BID	\$ 1,364,000.00	\$ 1,672,142.00	\$ 2,568,995.00

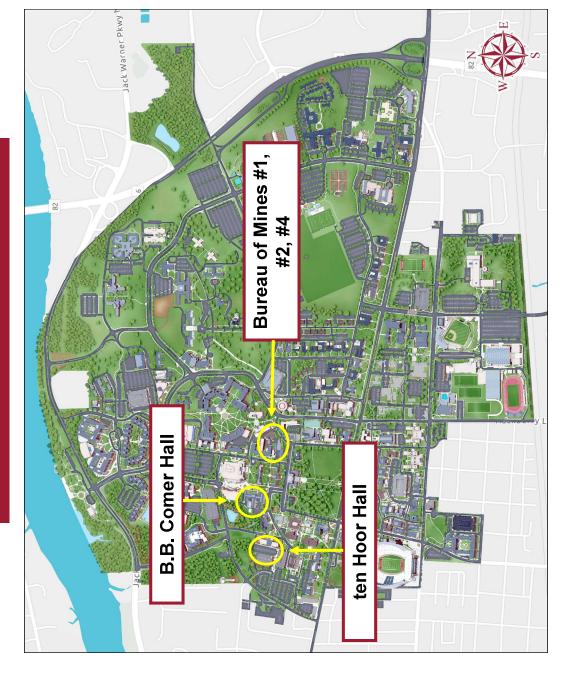
I CERTIFY THAT THE ABOVE BIDS WERE RECEIVED SEALED AND WERE PUBLICLY OPENED AND READ ALOUD AT THE TIME AND PLACE INDICATED AND THAT THIS IS A TRUE AND CORRECT TABULATION OF ALL BIDS RECEIVED FOR THIS PROJECT. I RECOMMEND AWARD OF THE CONTRACT FOR CONSTRUCTION TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER AS SHOWN ABOVE, AS DETERMINED BY THE AVAILABLE FUNDS AND SUBJECT TO THE INSTRUCTIONS TO BIDDERS AND ANY APPLICABLE LAW.

Barbara H. McKrary, PE

President HHB Engineers, P.C. Sworn to and subscribed before me this 28th day of February, 2023.

CAMPUS STEAM DECOMMISSIONING PACKAGE A - 2023

LOCATION MAP



CAMPUS STEAM DECOMMISSIONING PACKAGE B - 2024

LOCATION MAP

