UNIVERSITY OF ALABAMA SYSTEM BOARD RULE 415 BOARD SUBMITTAL CHECKLIST CRITERIA

BOARD SUBMITTAL CHECKLIST NO. 3 CAPITAL PROJECT - STAGE III SUBMITTAL /1 (Architectural Design)

CAMPUS: The University of Alabama

PROJECT NAME: Smart Communities And Innovation Building

MEETING DATE: April 7-8, 2022

- ✓ 1.
 - 1. Board Submittal Checklist No. 3
 - 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 Project Design (Architectural Design and authority to proceed with final construction documents) by the Board of Trustees
 - 4. Executive Summary Proposed Capital Project ^{/2}
 - 5. Architectural rendering of project (Final design prior to the initiation of construction documents on the project)
 - 6. Campus map(s) showing project site

Prepared by: Tommy Alfano

Approved by: Tim Coaper

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

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



Office of the **President**

March 3, 2022

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 which provide information regarding the Smart Communities and Innovation Building to be located on the Peter Bryce Campus.

Please place this item on the agenda for the Physical Properties Committee meeting of the April 7-8, 2022 Board of Trustees meeting, and contact us if you have questions or need additional information.

Sincerely

Stuart R. Bell President

Enclosure



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112

RESOLUTION

SMART COMMUNITIES AND INNOVATION BUILDING

WHEREAS, on June 4, 2020, in accordance with Board Rule 415, The Board of Trustees of The University of Alabama ("Board") approved of the Stage I submittal for the Smart Communities and Innovation Building project ("Project") to be located on the Peter Bryce Campus; and

WHEREAS, the Project will be utilized by the Alabama Transportation Institute (ATI) and strategic partners including the Alabama Department of Transportation (ALDOT) and City of Tuscaloosa; and

WHEREAS, ATI has been extremely successful in obtaining research awards, leveraging existing partner relationships, and increasing general growth of the program; and

WHEREAS, ALDOT's regional Transportation Systems Management Operations collaboration, currently a component of ATI, has been successful and has functionally outgrown its space; and

WHEREAS, the Project will provide critically needed space for transportation related planning, research and cooperative initiatives and will engage community partners, faculty, undergraduate, graduate, and post-doctoral students in those efforts; and

WHEREAS, on November 13, 2020, the Board approved the renderings as submitted; and

WHEREAS, on July 23, 2021, Governor Kay Ivey announced an additional \$16,500,000 Public School and College Authority (PSCA) allocation to the University for the Project and this allocation supports the partnership between the State, the University, Alabama Power Company (APCO), and Mercedes-Benz U.S. International (MBUSI) in establishing the Alabama Mobility and Power initiative (AMP); and

WHEREAS, this partnership seeks to create a world-class research and development hub for creating and sustaining modern mobility and power technologies, development, and deployment of charging infrastructure, and managing power delivery to support large scale growth in electric vehicles; and

WHEREAS, on September 17, 2021 the Board approved a Revised Scope and Budget to include the necessary infrastructure (including medium voltage grid improvements and service to the facility), research technology, and support equipment to fit-out the balance of the building (first and second floor of the west wing) as necessary for AMP service and support including a screened research and support service yard and an approximately 4,000 GSF garage lab addition and all associated lab soft costs; and WHEREAS, on September 17, 2021, in order to facilitate the design and installation of the smart grid components, electrical service relocation to the facility and the conversion of APCO facilities in the area from overhead to underground, the Board authorized the University to complete all necessary agreements with APCO for the aforementioned work; and

WHEREAS, due to other existing commitments and changes in the structure of Ward Scott Architecture, Inc., of Tuscaloosa, Alabama, on September 17, 2021, the Board authorized the University to transition the design of the Project to the qualified firm of Davis Architects of Birmingham, Alabama ("Davis Architects") as the principal design firm for the Project accepting a final negotiated design fee of \$903,600; and

WHEREAS, on September 17, 2021, the Board approved a Revised Budget from \$19,500,000 to \$37,594,500 to reflect the costs of the Revised Architect Fee, Revised Scope, and associated soft costs; and

WHEREAS, on February 28, 2021, pursuant to Title 39, State Bid law of Alabama Code, competitive bids were received for the Demolition Package of the Project and MAK Environmental, LLC, of Northport, Alabama, was declared the lowest responsive and responsible bidder in the amount of \$567,000 which is below the threshold amount requiring Board approval; and

WHEREAS, MAK Environmental, LLC's final contract amount was \$553,132 as reflected in the Project budget below; and

WHEREAS, on August 3, 2021, pursuant to Title 39, State Bid law of Alabama Code, competitive bids were received for the Elevator Package of the Project and Diversified Elevator & Equipment Co., Inc., of Millbrook, Alabama, was declared the lowest responsive and responsible bidder with a base bid in the amount of \$234,220, which is below the threshold amount requiring Board approval; and

WHEREAS, on February 4, 2022, the Board approved the award of the construction contract for the Utilities and Infrastructure Package to Premier Service Company, Inc. for a total contract amount of \$1,627,904; and

WHEREAS, on February 4, 2022, the Board approved a budget reallocation to reflect the contract amounts for the Demolition Package, the Elevator Package and the Utilities and Infrastructure Package; and

WHEREAS, the Construction budget included the smart grid, generator, solar and other related components as included in the September 17, 2021 Budget and Scope Revision and the University now desires to procure these items through the APCO agreement in order to ensure coordination with their requirements and standards and therefore proposes a Smart Grid And Alternative Energy package to distinguish this work from the Construction Package; and

WHEREAS, it is essential to advance the Smart Grid and Alternative Energy package so as to ensure that the construction documents are appropriately coordinated and all necessary support and infrastructure items are included; and

WHEREAS, in order to advance the flexibility and capability of the research mission of the facility the University requests to provide additional generator capacity as part of the Smart Grid and Alternative Energy package; and

WHEREAS, responsible officials at the University have received renderings for the revised Stage III submittal and are recommending approval of said design; and

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

WHEREAS, the University is requesting the Board to consider approval of a Revised Budget from \$37,594,500 to \$38,194,500 to reflect the costs of the of the aforementioned additional generator capacity; and

WHEREAS, the University requests approval of a budget reallocation to reflect the breakout of the Smart Grid and Alternative Energy package from the Construction package; and

WHEREAS, the Project will be funded with 2020 Alabama Public Schools and Colleges Authority Bond in the amount of \$36,000,000, University Central Reserves in the amount of \$1,594,500, and \$600,000 from the Office for Research and Economic Development (ORED) Reserves; and

WHEREAS, the Project will eliminate approximately \$16,000,000 in campus building and infrastructure deferred maintenance liability; and

BUDGET	Revised
Construction	\$ 20,157,079
Demolition	\$ 553,132
Elevator	\$ 234,220
Utilities and Infrastructure	\$ 1,508,138
Smart Grid and Alternative Energy	\$ 5,258,193
Power Line Burial (APCO, Comcast, ATT)	\$ 551,217
Owner Furnished Contractor Install Equipment	\$ 91,483
Landscaping	\$ 250,000
Owner Furnished Equipment – A/V Video Wall	\$ 675,000
Security/Access Control	\$ 250,000
Telecommunication/Data	\$ 550,400
Contingency*(10%)	\$ 2,805,033
UA Project Management Fee**(3%)	\$ 942,255
<i>Architect/Engineer Fee***(~6.5.%/~4.17%)</i>	\$ 1,029,810
Architect/Engineer Fee****(~3.3%)	\$ 903,006
Non-PSCA Eligible Expenses	\$ 1,594,500
Expenses (Geotech, Construction Materials Testing, Inspections)	\$ 668,157
Other Fees and Services (Postage, Advertising, Printing)	\$ 172,877
TOTAL PROJECT COST	\$ 38,194,500

WHEREAS, the Revised and Reallocated Budget for the Project is as stipulated below:

*Contingency is based on 10% of the total costs of Construction, Elevator, Utilities and Infrastructure, Landscaping, Power Line Burial, Smart Grid and Alternative Energy and Owner Furnished Contractor Installed Equipment.

**UA Project Management Fee is based on 3% of the total costs of Construction, Demolition, Elevator, Utilities and Infrastructure, Landscaping, Power Line Burial, Smart Grid and Alternative Energy, Owner Furnished Contractor Installed Equipment, and Contingency.

***WSA Architect/Engineer Final negotiated Fee.

****Davis Architect/Engineer Fee is based on 5.7% of the cost of Construction [less \$3,446,467 for AMP and \$3,309,207 for Smart Grid (both components of the Construction budget)], plus a 1.05 Renovation Factor, less a Credit in the amount of \$746,290, 7.6% of the cost of the AMP, a Transition Fee Lump Sum in the amount of \$79,960, \$5,237 for the Elevator Package, \$136,365 for the Utility Package, \$84,675 for Additional Services, and \$15,000 for Reimbursable Expenses.

Work Completed. Final Contract/Agreement Amount.

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. The revised scope and budget are hereby approved as stipulated above.
- 3. The revised funding for the Project is hereby approved as stipulated above.

BE IT FURTHER RESOLVED that the revised Stage III submittal for the project is hereby approved.

EXECUTIVE SUMMARY PROPOSED CAPITAL PROJECT BOARD OF TRUSTEES SUBMITTAL

MEETING DATE:	April 7 – 8, 2022
CAMPUS:	The University of Alabama, Tuscaloosa, Alabama
PROJECT NAME:	Smart Communities and Innovation Building
PROJECT NUMBER:	430-20-2412
PROJECT LOCATION:	South of Kirkbride Lane and east of Randall Way Former 1 North Building on the Peter Bryce Campus
ARCHITECT:	Davis Architects, Inc.

THIS SUBMITTAL:	PREVIOUS APPROVALS:
□ Stage I	June 4, 2020
□ Stage II, Waiver	June 4, 2020
□ Stage III	November 13, 2020
Revised Stage II, Waiver of Consultant Process	September 17, 2021
\Box Revised Scope and Budget	September 17, 2021
□ Campus Master Plan Amendment	
□ Stage IV (Utility and Infrastructure)	February 4, 2022
⊠ Revised Stage III	
Revised Scope and Budget and Budget Reallocation	

PROJECT TYPE	SPACE CATEGORIES	PERCENTAGE	GSF
\Box New Construction	Office	~43%	31,479
\boxtimes Building Addition	Conference and Meeting Room	~15%	11,275
⊠ Building	Circulation and Support Areas		
Renovation		~32%	23,086
Equipment	Operations Center	~5%	3,660
□ Other	Garage Lab	~5%	3,861
	TOTAL	100%	73,361

BUDGET	 Current	 Revised
Construction	\$ 24,704,009	\$ 20,157,079
Demolition	\$ 513,132	\$ 553,132
Elevator	\$ 234,220	\$ 234,220
Utilities and Infrastructure	\$ 1,627,904	\$ 1,508,138
Smart Grid And Alternative Energy	\$ 0	\$ 5,258,193
Power Line Burial (APCO, Comcast, ATT)	\$ 551,217	\$ 551,217
Owner Furnished Contractor Install Equipment	\$ 91,483	\$ 91,483
Landscaping	\$ 250,000	\$ 250,000
Owner Furnished Equipment – A/V Video Wall	\$ 675,000	\$ 675,000
Security/Access Control	\$ 250,000	\$ 250,000
Telecommunication/Data	\$ 550,400	\$ 550,400
Contingency*(10%)	\$ 2,745,883	\$ 2,805,033
UA Project Management Fee**(3%)	\$ 921,535	\$ 942,255
Architect/Engineer Fee***(~6.5.%/~4.17%)	\$ 1,062,607	\$ 1,029,810
Architect/Engineer Fee****(~3.3%)	\$ 903,006	\$ 903,006
Non-PSCA Eligible Expenses	\$ 1,594,500	\$ 1,594,500
Expenses (Geotech, Construction Materials Testing, Inspections)	\$ 669,927	\$ 668,157
Other Fees and Services (Postage, Advertising, Printing)	\$ 249,677	\$ 172,877
TOTAL PROJECT COST	\$ 37,594,500	\$ 38,194,500

* Contingency is based on 10% of the total costs of Construction, Elevator, Utilities and Infrastructure, Landscaping, Power Line Burial, Smart Grid and Alternative Energy, and Owner Furnished Contractor Installed Equipment.

**UA Project Management Fee is based on 3% of the total costs of Construction, Demolition, Elevator, Utilities and Infrastructure, Landscaping, Power Line Burial, Smart Grid and Alternative Energy, Owner Furnished Contractor Installed Equipment, and Contingency.

***WSA Architect/Engineer Final negotiated Fee.

****Davis Architect/Engineer Fee is based on 5.7% of the cost of Construction [less \$3,446,467 for AMP and \$3,309,207 for Smart Grid (both components of construction budget)], plus a 1.05 Renovation Factor, less a Credit in the amount of \$746,290, plus 7.6% of the cost of the AMP, a Transition Fee Lump Sum in the amount of \$79,960, \$5,237 for the Elevator Package, \$136,365 for the Utility Package, \$84,675 for Additional Services, and \$15,000 for Reimbursable Expenses.

Work Completed. Final Contract/Agreement Amount

ESTIMATED ANNUAL OPERATING AND MAINTENANCE (O&M) CC	STS:	
(Utilities, Housekeeping, Maintenance, Insurance, Other)		
73,361 GSF x ~\$6.19/GSF:	\$	454,827
TOTAL ESTIMATED ANNUAL O&M COSTS:	\$	454,827

FUNDING SOURCE:

2020 Alabama Public Schools and Colleges Authority Bond § 36,000,0	2020 Alabama	Public	Schools	and Colleges	Authority Bond	\$	36,000,000
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University Central Reserves \$ 1,594,500

Office for Research and Economic Development (ORED) Reserves \$ 600,000

O&M Costs: University Annual Operating Funds, Lease Income, \$ 454,827 State Appropriations

NEW EQUIPMENT REQUIRED

Total Equipment Costs:

N/A

PROJECT SCOPE:

The Smart Communities and Innovation Building (formerly Alabama Transportation Center) project ("Project") involves a comprehensive exterior and interior renovation of an approximately 66,500 GSF three (3) story building. The renovation will include the installation of all new building systems including life safety, HVAC, elevator, electrical, information technology, security and access control, and other systems as required to bring the facility in line with The University of Alabama ("University") enterprise systems and current code and to meet the functional needs of the programs. A building envelope assessment will be performed, and issues addressed as appropriate. The roof will be replaced as part of the Project. The Project will eliminate approximately \$16,000,000 in campus building and infrastructure deferred maintenance liability.

A newly established Alabama Mobility and Power initiative (AMP), a partnership between the University, Alabama Power Company (APCO), and Mercedes-Benz U.S. International (MBUSI) will provide the critical research infrastructure needed to transform the transportation industry in Alabama and make the State a national leader in innovation relating to mobility and power and connecting smart and resilient communities. This initiative will have a profound impact on workforce development and economic development in a targeted industry area vital to Alabama. As such, the University will co-locate AMP with the Alabama Transportation Institution (ATI) and ALDOT in the Smart Communities and Innovation Building to appropriately reflect its mission and opportunity. This strategic co-location will also foster unique opportunities for collaboration between operational, research and applied technology partners.

The scope will include all necessary infrastructure work, smart and resilient grid technology planned in conjunction with APCO; small scale alternative electric generation including solar, battery testing equipment, fitting out the balance of the building, constructing new AMP service and support space, and all necessary research and support equipment inclusive of an approximate 3,851 GSF garage lab.

Also, there will be a service yard enclosed with a brick screen wall at the south elevation of the building to visually screen the area from Peter Bryce Boulevard and Randall Way.

Critically needed space for transportation related planning, research and cooperative initiatives is needed to engage community partners, faculty, undergraduate, graduate, and post-doctoral students. To achieve this initiative, students will be co-located with faculty members, researchers, and practitioners from ALDOT.

The research teams are expected to include participants from other colleges such as Engineering, Business, and Arts and Sciences. The integrated setting will help attract and retain top notch students from across the country and globally, which will in turn help increase enrollment and enhance the quality of our academic and research impacts.

ATI has been extremely successful in obtaining research awards, leveraging existing partnerships and increasing general growth of the program and supporting the mission. ATI continues to lead and support regional and state-wide transportation planning initiatives and this project will provide the appropriate environment to support those efforts.

The structure and single column bay layout of the building is ideally suited to open office format. This format provides for flexible future program and space use and yields a lower cost of construction.

Site enhancements will include creating a distinct entrance with a covered drop off and a designated parking area for visitors and accessible spaces for the building in the area immediately northwest of the building along with providing drive access to the loading dock and service area for the building. The site will be landscaped to University standards, all service areas will be appropriately screened, and appropriate pedestrian connectivity and lighting will be included.

The facility will also include significant network infrastructure and connectivity to support research and operational needs including the regional Transportation Systems Management and Operations (TSMO) Center.

The Project also includes an approximate 3,000 GSF addition for an enhanced lobby space and vertical circulation at the main entrance to the building.

Finally, to complement the campus milieu, the building façade will be reworked while addressing building envelope issues.

PROJECT STATUS

SCHEMATIC DESIGN:	Date Initiated % Complete Date Completed	July 2018 100% August 2020
PRELIMINARY DESIGN:	Date Initiated % Complete Date Completed	September 2020 100% December 2021
CONSTRUCTION DOCUMENTS:	Date Initiated % Complete Date Completed (Projected)	December 2021 100% March 2022
SCHEDULED BID DATE:		March 2022

*N/A on Stage I Projects

RELATIONSHIP AND ENHANCEMENT OF CAMPUS PROGRAMS

The University, APCO, and MBUSI, signed a Memorandum of Understanding to establish the AMP. This partnership seeks to create a world-class research and development hub for creating and sustaining modern mobility and power technologies, development of a charging infrastructure, and managing power delivery to support large scale growth in electric vehicles.

AMP will be co-located with ATI and ALDOT in the Smart Communities and Innovation Building. Within five years, AMP is projected to have nearly 100 new employees and bring annually up to 1,000 trainees from all over the globe to the University's campus. Therefore, this initiative will have a profound impact on workforce development and economic development in a targeted industry area vital to Alabama. This strategic co-location will also foster unique opportunities for collaboration between operational, research and applied technology partners.

Critically needed space for transportation related planning, research and cooperative initiatives is needed to engage community partners, faculty, undergraduate, graduate, and post-doctoral students. To achieve this initiative, students will be co-located with faculty members, researchers, and practitioners from ALDOT. The research teams are expected to include participants from other colleges such as Engineering, Business, and Arts and Sciences. The integrated setting will help attract and retain top notch students from across the country and globally, which will in turn help increase enrollment and enhance the quality of our educational and research impacts.

ATI has been extremely successful in obtaining research awards, leveraging existing partnerships and increasing general growth of the program and supporting the mission. ATI continues to lead and support regional and state-wide transportation planning initiatives and this project will provide the appropriate environment to support those efforts.

SMART COMMUNITIES AND INNOVATION BUILDING Vantage Points





SMART COMMUNITIES AND INNOVATION BUILDING View 1 - Looking Southeast from Kirkbride LN



SMART COMMUNITIES AND INNOVATION BUILDING View 1 Alternate - Looking Southeast from Kirkbride LN



SMART COMMUNITIES AND INNOVATION BUILDING View 2 – Looking Northeast from Randall Way



Northeast from Randall Way (Plant Screening Removed) SMART COMMUNITIES AND INNOVATION BUILDING View 2 – Looking Northeast from Randall Way (Plant Screening



SMART COMMUNITIES AND INNOVATION BUILDING View 3 – Looking Southwest From Kirkbride LN



SMART COMMUNITIES AND INNOVATION BUILDING View 3 Alternate – Looking Southwest From Kirkbride LN





SMART COMMUNITIES AND INNOVATION BUILDING View 4 – Looking West From Cyber Hall



SMART COMMUNITIES AND INNOVATION BUILDING View 4 Alternate – Looking West From Cyber Hall



SMART COMMUNITIES AND INNOVATION BUILDING

LOCATION MAP

