# UNIVERSITY OF VIRGINIA BOARD OF VISITORS

Meeting of the Buildings and Grounds Committee

June 6, 2019

### **BUILDINGS AND GROUNDS COMMITTEE**

## Thursday, June 6, 2019 2:30 - 3:30 p.m. Board Room, The Rotunda

## **Committee Members:**

Whittington W. Clement, Chair	Maurice A. Jones
Robert D. Hardie, Vice Chair	James B. Murray Jr.
Robert M. Blue	C. Evans Poston Jr.
Mark T. Bowles	James V. Reyes
Elizabeth M. Cranwell	Frank M. Conner III, Ex-officio
Barbara J. Fried	Derrick Wang

### AGENDA

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### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

<b>BOARD MEETING</b> :	June 6, 2019					
COMMITTEE:	Buildings and Grounds					
AGENDA ITEM:	I. Remarks by the Chair					
ACTION REQUIRED:	None					
<b><u>BACKGROUND</u></b> : The Committee Chair will provide introductory remarks.						

#### UNIVERSITY OF VIRGINIA BOARD OF VISITORS CONSENT AGENDA

#### II. <u>Timeline Inscription at the Memorial to Enslaved Laborers</u>

In June 2017, the Board of Visitors approved the design of a memorial to commemorate the contributions of enslaved workers in building and sustaining the University of Virginia. The memorial consists of a circular stone wall within which a timeline of events related to the history of slavery at the University will be inscribed. A stone bench and ring of water will provide seating and the opportunity for quiet reflection. The center of the memorial will be open lawn for group gatherings and/or performances. The proposed text and timeline, composed by the Timeline Subcommittee of the President's Commission on Slavery at the University and reviewed by members of the University and local communities, read as follows:

#### Statement at entrance to memorial:

As it enters its third century, the University of Virginia remembers the enslaved people whose labor and talents made possible the construction and operation of the Academical Village. Forced labor, incalculable suffering, and the struggle to live with dignity were the daily experience of the enslaved African Americans who shaped the institution's first half century. This memorial is erected as a permanent tribute to them.

#### <u>Timeline</u>

**1619:** First written mention of enslaved Africans in Virginia.

**1705:** Virginia enacts slave codes that formalize race-based slavery in American colonial law.

**1776:** Jefferson writes the Declaration of Independence proclaiming that "All Men Are Created Equal." In his lifetime, he holds over 600 African Americans in human bondage.

**1776-1865:** Virginia holds more enslaved people than any other state.

**1817:** Ten enslaved people begin to clear the land that will become UVA.

**1817-1825:** During UVA construction, enslaved people dig foundations, make bricks, quarry stone, do roofing, carpentry, tinwork, and other tasks.

**1818-1865:** UVA temporarily rents enslaved people from a seventy-mile radius. This separates families and often forces the enslaved to walk long distances.

**1818:** Willis, Warner, Gilbert, Caesar, Abraham, Sam, and other enslaved people live and work at UVA.

**1818:** Sam, a carpenter, leads a group of enslaved laborers constructing roofing for Pavilion VII and other buildings.

**1818:** Gilbert, working for a UVA contractor, runs away. The university overseer captures and returns him.

**1820:** Roda, working at the university for less than two months, becomes gravely ill and dies. She may have been buried in the university's cemetery for the enslaved.

**1820-22**: Sam works for two years at the university as a blacksmith.

**1821:** William Green works as a blacksmith at the UVA construction site. Dick and Ned work as carpenters.

**1821-24:** Willis, Sam, John, Reubin, Nelson, Jefferson, Ben, Barrett, Lewis, Tom, Bob, Dick, Alfred, Moses, Randal, George, Sharper, and other enslaved men mold and fire bricks.

**1822:** Fleming runs away. He is captured a mile from the university and returned.

**1822**: Willis runs away. The UVA overseer pursues and captures him in Louisa County.

**1822-23:** Henry works as a blacksmith, Charles works as a stonemason, Christo works in a brickyard, Sally cooks meals, and Davey works as a carpenter.

**1824:** Carpenter Sam, an enslaved man, supervises the work of three other carpenters: Davey, William, and "young Sam," the last possibly his son.

**1824:** Tom runs away. He is captured fifty miles from Charlottesville and jailed in Louisa County before the UVA overseer returns him to work at the university.

**1825:** UVA opens for its first session with 123 white male students. 90-150 enslaved people also live on Grounds.

**1825-65:** An average of over one hundred enslaved people work annually as blacksmiths, bricklayers, cooks, carpenters, painters, seamstresses, janitors, and domestics.

**1825:** Jim and Moses cut stone at the UVA quarry, Primus works in the blacksmith's shop, and Zebray cuts stone for construction of the Anatomical Theatre.

**1825:** In October, rioting students beat a professor's enslaved servant.

**1826:** Faculty seek stricter control of the enslaved, calling for creation of a licensing system that requires African Americans waiting upon students on Grounds to carry badges.

**1826-27:** Nelson cares for horses at a stable, works as a gardener, chops wood, and makes bricks.

**1826-29:** Thrimston Hern, "a tolerable good stone cutter," does stone work at UVA, including completing the Rotunda steps.

**1826-29:** Several professors purchase enslaved people from Jefferson's estate after his death in 1826. Among the enslaved is Lucy Cottrell, who becomes a cook in Pavilion IV.

**1827:** Prudence cleans bloody linens from the Anatomical Theatre. Humphrey and Peyton Skipwith work as stonemasons.

**1828:** John Edwards chops wood at the university. Cato Cocke excavates bedrock at foundation sites.

**1829:** Disturbed in the night "by a noise made by negroes passing thro the University," a professor proposes that the school institute a regular slave patrol.

**1829:** Zebray trims and shapes quarry stone to enclose the University Cemetery. Alfred lays bricks and whitewashes buildings.

**1830:** 147 enslaved African Americans live and work at the university. 66 people are held by professors, 57 others by hotelkeepers, the remaining 24 by UVA.

**1832:** Three professors purchase Lewis Commodore at public auction for the school's use. They are later reimbursed, and he becomes UVA property.

**1831-32:** In the wake of Nat Turner's slave uprising, the Virginia legislature debates the fate of slavery. They choose to uphold the slave system.

**1837:** Students fire pistols on the Lawn, then violently attack Lewis Commodore.

**1838:** Two students savagely beat an enslaved man named Fielding.

**1839-57**: Lewis, charged with maintaining the Anatomical Theatre, cleans up after cadaver dissections and is forced to rob graves.

**1840:** 143 enslaved African Americans live and work at the university. 55 people are held by professors, 67 by hotelkeepers, and 21 by UVA.

**1843:** Abraham, Shelton, and Kenny lay bricks at the university.

**1846:** Isaac and Nelson work as stonemasons. Washington, Absalom, and Ben lay bricks.

**1848:** Micajah assists a stonemason in cutting and trimming rock while Kennedy repairs paved surfaces by laying new bricks.

**1849:** Ill during her pregnancy, Flora suffers a stillbirth and does not recover for months.

**1849-50:** Abraham, Lewis Commodore, Charles, Dick, Lewis, Margaret, Homer, James, Abraham, Johnson, Thad, Cassandra, and other enslaved people live and work at UVA.

**1850:** Three students attack a twelve-year-old enslaved girl in a field near UVA. The students are expelled.

**1850:** 93 enslaved African Americans live and work at the university. 42 are held by professors, 37 by hotelkeepers, and 14 by UVA.

**1852:** A young man named Charles whitewashes dormitory rooms and cleans lecture rooms.

**1853:** Isabella Gibbons, a cook who works in a Pavilion kitchen, marries William Gibbons, a butler enslaved by another UVA professor. They teach themselves to read and write.

**1853-54:** Dick, Primus, Ryland, Jackson, John, Billy, and other enslaved people live and work at UVA.

**1855**: Lucy suffers from "rheumatism aggravated by her sleeping apartment...the brick floor being always liable to dampness."

**1856:** An enslaved eleven-year-old girl is beaten unconscious by a UVA student. Claiming his right to discipline any slave, he suffers no consequences.

**1857-58:** Nelson, Henry, Norman, George, Bob, William, Garland, and other enslaved people live and work at UVA.

**1859:** Abolitionist John Brown tries to seize a federal arsenal at Harpers Ferry, Virginia, as part of a plan to lead an armed slave uprising.

**1859:** UVA alumnus remembers Lewis Commodore, charged with maintaining Rotunda chemical hearth for decades, as known for his "smart, practical knowledge of chemistry."

**1860:** 104 enslaved African Americans live and work at the university. 55 are held by professors, 36 by hotelkeepers, 11 by the Proctor, and 2 by UVA.

**1860**: Parnil, Willis, Ned, and Albert work as carpenters at the university.

**1861:** Virginia secedes from the Union, invoking the federal government's "oppression of the slaveholding states."

**1861:** Approximately 14,000 enslaved African Americans, over half the population, live in Albemarle County when the Civil War starts. A half million enslaved people reside in Virginia.

**1861:** Enslaved people flee to Union-held Fort Monroe in eastern Virginia. Their wartime flight to Union forces across the South paves the way for Lincoln's emancipation policy.

**1862:** Joshua and Charlotte work as attendants in the university infirmary.

**1862–64**: Nearly 1,000 enslaved local African Americans are forced by Confederate authorities to do work such as building fortifications.

**1863:** Charlottesville Baptist Church's black congregants, including those enslaved at UVA, successfully petition white church leaders to establish separate services for African American members.

**1863-1865:** More than 250 African American men, born in Albemarle County but dispersed by sale, flight, and migration across the South, enlist in the Union army.

**1864:** Aaron chops wood at the university.

**1865:** On March 3, Charlottesville and UVA officials surrender the town to Union forces. On April 9, Confederate forces in Virginia surrender at Appomattox.

**1865:** Local African Americans celebrate both March 3 and April 9 as freedom days.

**1865:** With general emancipation underway and the Civil War over, UVA in September begins to pay wages to those formerly enslaved.

**1866:** Isabella Gibbons, formerly enslaved at UVA, teaches at a freedmen's school in Charlottesville with 42 students. One month later the school has grown to 63 students. It will become the Jefferson School.

**1886:** Baptist minister William Gibbons, formerly enslaved at UVA, dies in Washington, D.C. He is buried in Charlottesville.

**1889:** Isabella Gibbons dies in Charlottesville and is buried alongside William Gibbons.

#### Quote to be inscribed at end of timeline:

Isabella Gibbons, 1867: "Can we forget the crack of the whip, cowhide, whipping-post, the auction-block, the hand-cuffs, the spaniels, the iron collar, the negro-trader tearing the young child from its mother's breast as a whelp from the lioness? Have we forgotten that by those horrible cruelties, hundreds of our race have been killed? No, we have not, nor ever will."

**<u>ACTION REQUIRED</u>**: Approval by the Buildings and Grounds Committee and by the Board of Visitors

### **INSCRIPTION AT THE MEMORIAL TO ENSLAVED LABORERS**

RESOLVED, the Board of Visitors approves the inscription of the text and timeline at the Memorial to Enslaved Laborers as proposed by the Timeline Subcommittee of the President's Commission on Slavery at the University.

#### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

<b>BOARD MEETING</b> :	June 6, 2019
<u>COMMITTEE</u> :	Buildings and Grounds

AGENDA ITEM: III.A. 2019 Multi-Year Major Capital Plan

**BACKGROUND**: The revised multi-year capital plan is presented annually to the Board of Visitors for approval in June. The Buildings and Grounds Committee determines whether a project should be added to the Major Capital Projects Program, and the Finance Committee evaluates whether there is a sound financing plan to pay for the estimated project cost and additional operating costs that are expected once a project is complete.

In June 2018, the Board of Visitors approved the 2018 Major Capital Plan for the Academic Division, Health System, and College at Wise. In accordance with the University's capital planning process, the University updates the Capital Plan annually to add new projects, remove projects that are no longer a priority, and prioritize projects using the following criteria:

- Responds to a legal, compliance, or regulatory mandate; addresses a life safety risk
- Addresses more than one function/unit
- Aligns with the strategic goals of the University
- Provides value to the customer
- Improves current conditions
- Complies with current land use master plans
- Presents a viable funding plan

The revised 2019 Multi-Year Major Capital Plan was vetted by the Space Leadership Committee (SLC) and executive leadership to ensure alignment with institutional priorities, and reviewed with the Buildings and Grounds Committee at the February 2019 meeting.

**DISCUSSION**: The revised 2019 Capital Plan, as shown on the following pages, revises the plan approved by the Board in June 2018 to include current cost estimates, add new projects, and remove projects no longer planned within the next six years. Nine projects are proposed to be added to the Academic Division plan and three to the Health System plan; there are no additions to the College at Wise plan. Since the review with the Buildings and Grounds Committee in February, four projects have been removed from the revised 2019 Capital Plan: Thornton Hall B Wing Renovation (SEAS); North Plant Chillers 6 & 7 Replacement; Engineering Academic/Research Building; and an ambulatory clinic facility.

## Projects under construction

Project (\$ in millions)	B	Budget	Sta	ate GF	G	Gifts		Debt		Cash
Academic Division										
Brandon Avenue - Green Street & Infrastructure	\$	44.5					\$	44.5		
Bond House	\$	66.0					\$	63.8	\$	2.2
Carr's Hill Historic Rehabilitation	\$	7.9							\$	7.9
Gilmer Hall and Chemistry Building Renovation	\$	197.0	\$	146.7			\$	42.5	\$	7.8
Ivy Corridor Landscape and Infrastructure - Phase I	\$	37.3					\$	36.1	\$	1.2
Ivy Mountain Central Utility Plant	\$	20.0					\$	10.6	\$	9.4
Main Heat Plant - New Boiler (#6)	\$	11.0					\$	10.5	\$	0.5
McCormick Rd Residence Halls	\$	104.7					\$	86.5	\$	18.2
Memorial to Enslaved Laborers	\$	7.0			\$	4.5			\$	2.5
Old Ivy Road Office Building	\$	41.0					\$	41.0		
Softball Stadium	\$	25.5			\$	4.0			\$	21.5
Student Health and Wellness Center	\$	100.0			\$	70.0	\$	30.0		
Thornton Hall Clean Room Systems Upgrades	\$	15.2					\$	6.2	\$	9.1
U Hall, Cage, Onesty Hall, Sports Med Decant/Demolition	\$	14.0					\$	14.0		
Academic Division Total	\$	691.2	\$	146.7	\$	78.5	\$	385.8	\$	80.2
Health System										
Biocomplexity Institute	\$	12.9							\$	12.9
Emily Couric Clinical Cancer Center 4th Floor Fit-Out	\$	14.8							\$	14.8
Hospital HVAC Phases III and IV; Emergency Power Phase III (Deferred Maintenance Plan)	\$	17.9							\$	17.9
Ivy Mountain Musculoskeletal Center	\$	164.0					\$	164.0		
Pinn Hall Renovation Phase I	\$	32.0							\$	32.0
University Hospital Expansion	\$	391.6					\$	376.0	\$	15.6
Health System Total	\$	633.1	\$		\$		\$	540.0	\$	93.1
Total under Construction	\$	1,324.3	\$	146.7	\$	78.5	\$	925.8	\$	173.2

## Projects in planning/design

Project (\$ in millions)	B	udget	Sta	ate GF	Gifts		Debt		C	ash
Academic Division										
Alderman Library Renewal	\$	152.5	\$	132.5	\$	20.0				
Brandon Avenue Upper-Class Residence Hall Phase II	\$	95.0					\$	91.0	\$	4.0
Contemplative Sciences Center Facility	\$	75.0			\$	75.0				
McIntire Academic Facility	\$	70.3			\$	70.3				
Physics Building Renewal	\$	50.0	\$	50.0						
Inn at Darden	\$	98.0			\$	7.0	\$	65.0	\$	26.0
Low Temperature Hot Water Conversion	\$	35.0					\$	35.0		
North Grounds Mechanical Plant & Infrastructure	\$	13.0					\$	13.0		
West Grounds Chilled Water Capacity	\$	8.0					\$	8.0		
Academic Division Total	\$	596.8	\$	182.5	\$	172.3	\$	212.0	\$	30.0
Health System										
Comprehensive Breast Center	\$	12.0							\$	12.0
Pinn Hall Building Envelope	\$	22.0							\$	22.0
Health System Total	\$	34.0	\$	-	\$	-	\$	-	\$	34.0
Total in Planning/Design	\$	630.8	\$	182.5	\$	172.3	\$	212.0	\$	64.0

## Projects approved by the Board of Visitors but not yet initiated

Project (\$ in millions)	B	udget	Sta	te GF	Gifts		Debt		(	Cash
Academic Division										
Drama Building Phase II South Addition	\$	17.9			\$	17.9				
Old Cabell Hall Renewal	\$	41.8	\$	41.8						
Fiske Kimball Fine Arts Library Renewal	\$	18.7	\$	18.7						
Batten School Academic Building	\$	60.0			\$	60.0				
Darden Academic Building	\$	85.0			\$	85.0				
Translational Research Building (planning)	\$	1.0							\$	1.0
University Hotel & Conference Center	\$	105.0					\$	105.0		
UVA Museum (planning)	\$	3.0			\$	3.0				
Center for Politics	\$	14.0			\$	14.0				
Pavilion VIII Renovation	\$	7.0			\$	1.0	\$	6.00		
Alderman Road Residence Hall - Building 7	\$	70.0					\$	62.0	\$	8.0
Upper-Class Residence Hall (site TBD)	\$	70.0					\$	69.5	\$	0.5
Student Activities Building	\$	17.0					\$	17.0		
Athletics Complex	\$	180.0			\$	178.0			\$	2.0
Science & Engineering Plant: Replace Chemistry Chillers	\$	23.1					\$	23.1		
Academic Division Total	\$	713.4	\$	60.5	\$	358.9	\$	282.6	\$	11.5
Health System										
Eye Center	\$	60.0							\$	60.0
Multi-Disciplinary Ambulatory Clinic Building	\$	155.0					\$	77.5	\$	77.5
Pinn Hall Nobel Laureate Gallery	\$	12.0			\$	12.0				
Pinn Hall Renovation Phase II	\$	38.0					\$	38.0		
Data Center	\$	23.0							\$	23.0
Health System Total	\$	288.0	\$	-	\$	12.0	\$	115.5	\$	160.5

Project (\$ in millions)	B	Budget	Sta	ate GF	(	Gifts	Ι	Debt	C	ash
College at Wise										
Wyllie Library Renovation and Conversion	\$	12.5	\$	12.5						
Bowers-Sturgill Hall Renovation	\$	5.9	\$	5.9						
Darden Hall Renovation	\$	4.9	\$	4.9						
Music Education Center	\$	24.7	\$	24.7						
Sandridge Science Center Lab Wing Renovation	\$	41.3	\$	41.3						
Technology Classroom Building	\$	32.2	\$	32.2						
Zehmer Hall Renovation	\$	44.4	\$	44.4						
Campus Welcome Center/Public Safety Facility	\$	23.6	\$	23.6						
Athletic Building	\$	15.7			\$	15.7				
College at Wise Total	\$	205.2	\$	189.5	\$	15.7	\$	-	\$	-
Total Projects Approved but not Initiated	\$	1,206.6	\$	250.0	\$	386.6	\$	398.1	\$	172.0

## Projects approved by the Board of Visitors but not yet initiated (continued)

Proposed projects

Project (\$ in millions)	Budget		State GF		Gifts		Debt		C	ash
Academic Division										
Campbell Hall Addition (planning)	\$	3.0			\$	3.0				
Data Science Facility	\$	43.0			\$	43.0				
Virginia Autonomous Systems Testing Facility (SEAS)	\$	10.0	\$	5.0	\$	4.0	\$	1.0		
Center for the Arts (planning)	\$	16.0			\$	16.0				
Environmental Health & Safety Facility	\$	28.0					\$	28.0		
John Paul Jones Arena Performance Center Renovation	\$	8.0			\$	8.0				
Athletics/North Grounds Parking Garage	\$	35.0					\$	35.0		
Fontaine Research Park Infrastructure & Parking Garage	\$	87.0					\$	87.0		
Fontaine Research Park Central Energy Plant & Utilities	\$	35.0					\$	35.0		
Academic Division Total	\$	265.0	\$	5.0	\$	74.0	\$	186.0	\$	-
Health System										
Cancer Center - MRI LINAC	\$	8.0							\$	8.0
Consumer Ambulatory Clinic (tenant fit-out)	\$	15.0							\$	15.0
Focused Ultrasound Expansion	\$	16.5							\$	16.5
Health System Total	\$	39.5	\$	-	\$	-	\$	-	\$	39.5
Proposed Projects Total	\$	306.5	\$	5.0	\$	77.0	\$	189.0	\$	39.5

In addition to projects proposed to be added to the 2019 Capital Program, the University is engaged currently in, or will be initiating, several land-use planning and space needs studies that will inform future capital projects:

- Engineering Integrated Space Plan
- Ivy Gardens Redevelopment
- Observatory Hill Dining Hall Expansion
- Parking and Transportation Replacement Facility
- Public Safety Space Needs
- Technological Village

Ms. Sheehy will review the revised 2019 Multi-Year Major Capital Plan. Write-ups describing proposed additions are included in the written reports beginning on page 30.

**<u>ACTION REQUIRED</u>**: Approval by the Buildings and Grounds Committee and by the Board of Visitors

### 2019 MULTI-YEAR MAJOR CAPITAL PLAN FOR THE ACADEMIC DIVISION, HEALTH SYSTEM, AND COLLEGE AT WISE

WHEREAS, in accordance with the University's capital planning process endorsed by the Buildings and Grounds Committee in November 2015, major capital projects are vetted by the Space Leadership Committee and executive leadership, as well as by appropriate committees of the Board of Visitors, to ensure alignment with institutional priorities; and

WHEREAS, the University proposes adding 12 major capital projects to the 2019 Major Capital Plan including nine for the Academic Division and three for the Health System; and

WHEREAS, the University is also engaging in several planning studies that will inform future projects;

RESOLVED, the 2019 Multi-Year Major Capital Plan for the Academic Division, the Health System, and the College at Wise is approved.

#### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

<b>BOARD MEETING</b> :	June 6, 2019
COMMITTEE:	Buildings and Grounds
AGENDA ITEM:	III.B. Concept, Site, and Design Guidelines: Data Science Facility

**BACKGROUND**: On September 16, 2016, the Buildings and Grounds Committee approved a long-term framework plan to redevelop the Ivy Road Corridor from Emmet Street west to Copeley Road, and authorized further planning to advance the goals adopted by the Board of Visitors in March 2015:

- enhance the safety and connectivity between the redevelopment area and Grounds, while providing an opportunity for interaction with the Charlottesville community;
- identify green space potential;
- accommodate current transportation, parking, and storm water functions;
- optimize economically viable development and University support activities; and
- provide appropriate screening of the parking garage.

To enable the redevelopment of the Ivy Road Corridor, the Cavalier Inn and other structures proximate to the Cavalier Inn were demolished in the fall of 2018. In addition, the President established the Emmet Ivy Task Force, the charge of which was to propose recommendations for uses, activities, and programs on the site. Guided by five principles of purpose, the Task Force identified three nexuses to inform the redevelopment of the Ivy Road corridor: Creativity and Experimental Arts, Discovery, and Democracy. The founding principles of the proposed School of Data Science align directly with the Discovery nexus, making the Ivy Corridor an appropriate site for the future building.

**<u>DISCUSSION</u>**: The Office of the Architect has prepared the concept, site, and design guidelines for the Data Science Facility that Ms. Raucher will review with the Committee.

**<u>ACTION REQUIRED</u>**: Approval by the Buildings and Grounds Committee

### **CONCEPT, SITE, AND DESIGN GUIDELINES FOR THE DATA SCIENCE FACILITY**

RESOLVED, the concept, site, and design guidelines for the Data Science Facility, prepared by the Architect for the University, are approved.

### A) Proposed Project Concept

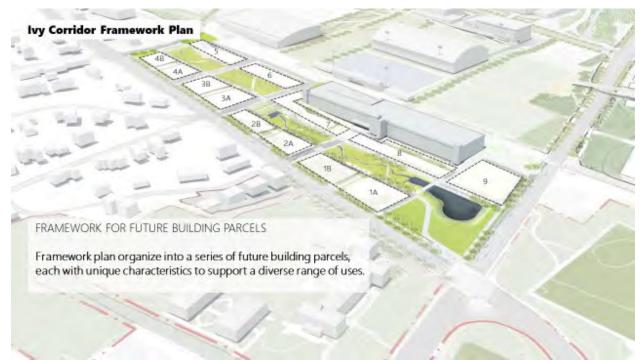
The proposed site for the new Data Science Facility is near the corner of Emmet Street and Ivy Road, identified as Parcel 1A on the approved Ivy Corridor Landscape Framework Plan. The building will face a green park space at the corner of Ivy Road and Emmet Street, and will occupy an important and highly visible site in the newly redeveloped corridor.

### **B)** Siting Criteria

The University of Virginia general siting criteria for all new facilities include the components listed below. Those highlighted are the most pertinent in determining the siting recommendation for the Data Science Facility.

- Conforms with overall land use plan and district/area plans.
- Reinforces functional relationships with other components of the same department or program and is compatible with other neighboring uses.
- Satisfies access requirements pedestrian, bicycle, vehicular, and service.
- Maximizes infill opportunities to utilize land resources and existing infrastructure.
- Minimizes site-development costs including extension of utilities, access, loss of parking, mass grading, etc.
- Minimizes opportunity cost (i.e., value of this use and size versus other alternatives).
- Provides a size that is adequate, but not excessive, for initial program, future expansion, and ancillary uses.
- Allows for incorporating sustainability principles in terms of solar orientation, reuse of historic structures, storm water management, etc.
- Avoids unnecessary environmental impacts including significant tree removal or filling of existing stream valleys.
- Allows site visibility and aesthetic character as appropriate for the intended use and for the neighborhood.
- Minimizes time for implementation of project.

## C) Proposed Site



Ivy Corridor Proposed Landscape Framework Plan



Proposed Site for Data Science Facility

### D) Design Guidelines

## <u>Site Planning</u>

- Sensitivity to context and integration with the larger landscape framework are particularly crucial on this site. Continue to reference the guiding principles and patterns of place-making that have distinguished the University since its founding.
- Locate activities within the building to place the most active spaces adjacent to the central green areas, fostering strong indoor-outdoor relationships.
- Work with the existing grade changes to ensure that the street-side façade has a comfortable and appropriate scale, and that the building frames the green areas in a way that enhances the character of those spaces.
- Recognize that this building is not an isolated object but will form part of a larger grouping of academic, arts, and visitor-oriented buildings that are intended to create a collective sense of community, offer shared resources, and build on the University tradition of placing mixed uses in harmonious relation to the landscape.

### <u>Storm water</u>

 Address storm water quality and quantity requirements by tying the project into the storm water infrastructure planned for the development of the first phase of the Ivy Corridor Landscape Framework Plan.

### Circulation and Parking

- Recognize that the building will face, and need to be entered, from at least three sides, and may offer a passage to pedestrians headed to other facilities along the Ivy Corridor.
- Provide service access to the building in an unobtrusive way given that this building has no "back" side.
- Accommodate pedestrian and bicycle access as designed in the Ivy Corridor Landscape Framework Plan Phase I.

## <u>Architecture</u>

- Consider a stepped building form that screens the garage to the north but reduces the bulk of the structures facing Ivy Road.
- The exterior envelope of the building should be constructed of quality materials that are contextual with other University buildings.
- The façade facing the green space should create an attractive and welcoming entrance.
- Vertical circulation in the building should be designed to provide ADA accessibility from the lower to the upper areas of the larger Ivy Corridor development.
- Integrate basic tenets of sustainable design and attain LEED Certification as a minimum level, with Silver level as a goal.
- Adopt the standards of Charlottesville City zoning codes (by-right height restriction to 60 feet; 80 feet possible with Special Use Permit).

### <u>Landscape</u>

- Planning and design of the project landscape should be consistent with the Ivy Corridor Landscape Framework Plan.
- Provide appropriate and safe levels of lighting in accordance with University standards.
- Provide screening for service areas, dumpsters, and transformers.

### **Review and Compliance**

The Office of the Architect for the University is responsible for the review and approval of project compliance with these design guidelines.

#### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

BOARD MEETING:	June 6, 2019
<u>COMMITTEE</u> :	Buildings and Grounds
AGENDA ITEM:	III.C. Schematic Design Approval: Inn at Darden
PROJECT BUDGET:	\$98.0 million

**BACKGROUND**: The Inn at Darden is a strategic component of the Darden Business School's #1-ranked educational experience, and an enabler of the Darden Worldwide Strategy. The Inn at Darden is an integrated and strategic part of the academic mission, not simply a standalone hotel facility, and is an essential element of the world-class experience offered to executive education learners, executive and other format degree students, and the many other guests of Darden, the North Grounds, and the University – including students, faculty, staff, prospective students, recruiters, Darden's board and alumni leaders, parents, and other guests. It is a central part of the school's brand. The existing Inn no longer supports Darden's mission because of mechanical deficiencies, lack of amenities, and its aged finishes.

The history of the Inn at Darden consists of: (1) the construction of Sponsors Hall Dining and Sponsors Hall East (1978/1981) which served as the original residential facility for Executive Education with 60 guest rooms and approximately 8,000 square feet of meeting space; and (2) the construction of the Gatehouse and Sponsors Hall West (1998/2001) which was part of the development of Darden's new property with 120 guest rooms and approximately 6,000 square feet of meeting space. The facility grew in size and space to accommodate the continued growth in Darden's Executive Education and Executive MBA formats from \$5.2 million in revenue in FY 1978 (Executive Education only) to a combined total of over \$24.9 million in FY 2018.

The redevelopment of the Inn at Darden will support the school's world-renowned residential experience for lifelong learning through Executive Education and the Executive MBA format. It will provide executive students with a modern residential experience that has room accommodations, food and beverage amenities, meeting space, and outdoor experiences that will enhance and activate learning outside of the classroom. Sponsors Hall Dining, Sponsors Hall East, the Gatehouse, and a portion of Sponsors Hall West will be demolished to make room for the facility and arboretum. The remaining portion of Sponsors Hall West will be repurposed from guest rooms to administrative offices and academic facilities, such as flat classrooms and learning team rooms. The redevelopment of the Inn at Darden will reflect space and amenity resources that satisfy the Darden Enterprise needs and also serve as a resource for the community.

**DISCUSSION**: The Buildings and Grounds Committee reviewed the massing, design elevations, site layout, and arboretum for the Inn at Darden at the February 2019 meeting

and provided administration with desired direction. The design team, led by Cooper Carry Architects of Atlanta, GA with Glavé & Holmes of Richmond, VA, and in collaboration with the Darden School Foundation and representatives from the Office of the Architect for the University and Facilities Management, has developed a schematic design that Ms. Raucher will review with the Committee.

### **<u>ACTION REQUIRED</u>**: Approval by the Buildings and Grounds Committee

#### **SCHEMATIC DESIGN FOR THE INN AT DARDEN**

RESOLVED, the schematic design for the Inn at Darden, prepared by Cooper Carry Architects of Atlanta, GA with Glavé & Holmes of Richmond, VA, and in collaboration with the Darden School Foundation and representatives from the Office of the Architect for the University and Facilities Management, is approved for further development and construction; and

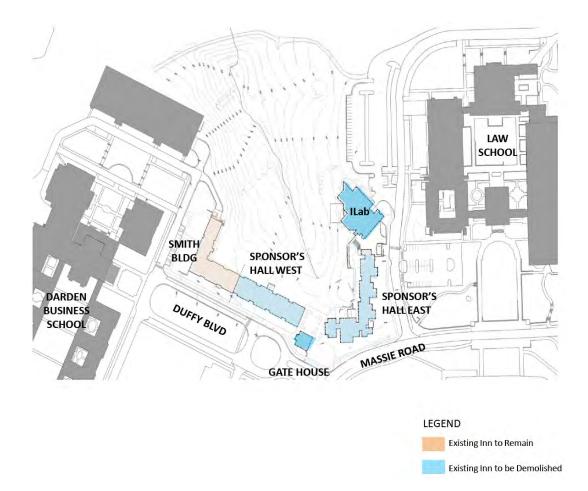
RESOLVED FURTHER, the Board of Visitors approves the demolition of Sponsors Hall Dining, Sponsors Hall East, the Gatehouse, and a portion of Sponsors Hall West pending approval by the Art and Architectural Review Board and the Department of Historic Resources and in compliance with such general laws as may be applicable.



Aerial View of the Inn at Darden and the Darden Arboretum and Botanical Gardens Site



Aerial View of the Existing Inn at Darden





Inn at Darden and the Darden Arboretum and Botanical Gardens Site Plan



Inn at Darden and Conference Center and the Arboretum



Inn at Darden and Conference Center



Proposed Massie Street Elevation



Proposed Main House Elevation from Arboretum

#### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

BOARD MEETING:	June 6, 2019
<u>COMMITTEE</u> :	Buildings and Grounds
AGENDA ITEM:	IV. Schematic Design Review: Brandon Avenue Upper-Class Residence Hall Phase II
ACTION REQUIRED:	None
BUDGET:	\$95.0 million

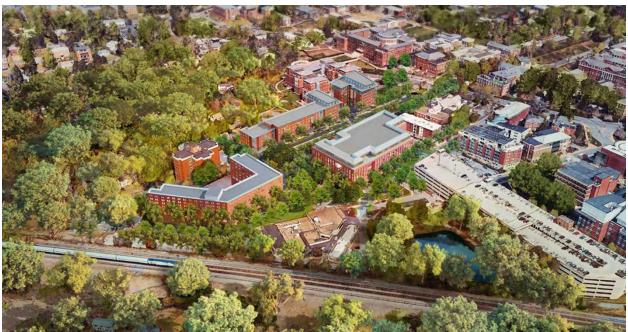
**BACKGROUND**: The 2008 Grounds Plan guides land use planning and physical growth for twenty years and capitalizes on the potential of existing and new facilities to provide superior environments for the University. Adhering to the broad goal of sustainability, the Grounds Plan assures managed growth. By designating Redevelopment Zones, the Grounds Plan targets future development to areas where mixed-used infill and redevelopment of existing facilities will create the greatest possible benefits. These targeted zones include the provision of green space within the redevelopment, improving the health and identity of the University-at-large.

Located in the heart of the Grounds and linking academics and research in the Health System, the College of Arts and Sciences, and the Academical Village, Brandon Avenue was identified in the Grounds Plan as a redevelopment zone. Approved by the Board in September 2016, the Brandon Avenue Master Plan was developed to ensure that the planned projects provide maximum long-term benefit to the University. The redeveloped Brandon Avenue will provide a blend of residential, academic, and other University mixed-use buildings, as well as a Green Street that will incorporate green space amenities, circulation and parking, storm water features, and University utilities. The second phase of student housing on Brandon Avenue will provide approximately 350 beds for upper-class students, informal gathering space, and dining, and will support the continued future redevelopment of the Brandon Avenue district.

**DISCUSSION**: The design team, led by Elkus Manfredi Architects of Boston, MA and in collaboration with representatives from the Office of the Architect for the University, Facilities Management, Business Operations, and Housing and Residence Life, has developed a schematic design that Ms. Raucher will review with the Committee.



Brandon Avenue Green Street



Aerial View Looking North

### UNIVERSITY OF VIRGINIA BOARD OF VISITORS AGENDA ITEM SUMMARY

BOARD MEETING:	June 6, 2019
<u>COMMITTEE</u> :	Buildings and Grounds
AGENDA ITEM:	V. Remarks by the Executive Vice President/Chief Operating Officer and the Senior Vice President for Operations
ACTION REQUIRED:	None

**DISCUSSION:** Ms. Davis and Ms. Sheehy will update the Buildings and Grounds Committee on several capital projects and studies currently in progress.

### WRITTEN REPORTS

Buildings and Grounds Committee University of Virginia

June 6, 2019



# UVA SUSTAINABILITY HIGHLIGHTS: JUNE 2019

UVA Sustainability had a productive and inspiring spring, beginning and expanding initiatives across teaching and research, engagement with the community, and collaborative climate action. The 2018-2019 UVA Sustainability Annual Report, highlighting key initiatives and accomplishments over the academic year, will be released in August 2019. To learn more please visit <u>www.sustainability.virginia.edu</u> or email sustainability@virginia.edu.

# DISCOVER

**Research and Course Development Grants:** In May 2019 the Teaching and Research Subcommittee awarded 10 Course Development Fellowships and 8 Research Development Grants. The awards span 6 schools and include topics such as the psychology of sustainable behaviors, the social and environmental impacts of Amazon's new headquarters, green chemistry, conservation finance, and black environmental thought.

**Student Summer Internship Grants:** For the first time, the Teaching and Research Subcommittee awarded 18 Sustainability Internship grants through the University Career Services Parents Fund Internship Grants program. These \$3000 grants will help support 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year UVA undergraduate students who have been hired for unpaid, sustainability-focused summer internships across the world.

**Environmental Resilience Institute Water Futures Initiative:** In May 2019 the Environmental Resilience Institute kicked off the Water Futures Initiative by bringing together UVA community members from across disciplines to develop working groups focused on three major environmental challenges: Water Security - Justice and Politics, Urban Water, and Coastal Land Margins. Each working group will be co-directed by leading academics at UVA and another collaborating university.

**National Geographic on Campus:** National Geographic partnered with several UVA departments for a series of events over two days in March 2019 to share inspiration and expertise in the power of storytelling, science, and photography to inspire action to address issues related to our planet. National Geographic explorers and UVA faculty who conduct resilience research hosted large keynote addresses and led hands-on student workshops. After the event, National Geographic awarded prestigious fellowships to three UVA students.



# ENGAGE

**Earth Week 2019:** In April 2019 UVA's tenth annual Earth Week included 26 events with estimated involvement of 2,250 students, faculty, staff, and community members with the theme, "Connecting on Climate." In alignment with President Ryan's Building Bridges campaign, this year's Earth Week Expo featured 24 UVA organizations and 24 community groups with whom they work sharing examples of collaboration in service of our shared planet.

**Equity & Environment Fund:** The Civic Engagement Subcommittee awarded \$30,037 to 8 student-driven projects that holistically address challenges at the intersection of equity and the environment. Funded projects include Food Equity Fellowships, LEED Green Associate Trainings, and Interpretive Signage & Protective Landscaping for the Maury Plantation Burial Ground.

# STEWARD

**ACC Conference Champions – Green Power**: The University of Virginia is No. 1 in the Atlantic Coast Conference for its use of green energy, according to the U.S. Environmental Protection Agency.

Since April 2006, the EPA's Green Power Partnership has tracked collegiate athletic conferences with the highest combined green power use. The Individual Conference Champion Award, which UVA recently received, recognizes the school in each qualifying conference that uses the largest amount of green power.

UVA beat its conference rivals by using nearly 71 million kilowatt-hours of green power, representing nearly 21% of its total annual electricity use. – UVA Today, April 26, 2019, by Matt Kelly

**Climate Action Together**: In February 2019 the City of Charlottesville, Albemarle County, and the University of Virginia, building upon a history of commitments on sustainability and climate, embarked on a collaborative community outreach effort as each entity began to update its greenhouse gas (GHG) reduction targets and began developing new climate action plans (CAPs). To enable broad community engagement and participation in informing these commitments, the three organizations are coordinating their outreach efforts across their sustainability offices. Residents, businesses, and area stakeholders are being encouraged to get involved and participate in this collaboration.

The new website <u>www.ClimateActionTogether.org</u> shares specific participation opportunities, previous regional climate action efforts, and more information about each organization's efforts. – *City of Charlottesville press release, February 14, 2019* 



# University of Virginia ATHLETICS/NORTH GROUNDS PARKING GARAGE

#### **Executive Summary**

The University of Virginia parking supply is affected by short-term issues that are reducing supply over the next five years (i.e., Brandon Avenue, Ivy Corridor, and Athletics redevelopment) and longterm trends that are affecting demand (i.e., faculty and staff growth). The result is that the University does not have enough supply to cover daily permit or event parking demand beginning in 2020.

The Athletics Master Plan, approved by the Board of Visitors in September 2018, identified the strategic need for additional structured parking proximate to the existing athletic competition venues. With the upcoming demolition of University Hall and its supporting structures the University has a unique opportunity to reimagine this area of North Grounds.

Key planning goals that were identified in the approved Athletics Master Plan addressed this need for parking:

- The need to maintain or exceed existing inventory of ~2,500 parking spaces;
- The desire to transition from a mostly car-centric inventory of surface parking into efficiently deployed structured parking to free up sites along Massie and Copeley Roads for future mixed-use buildings;
- Leverage existing topographic conditions to incorporate structured parking below future building sites when possible.

This project would involve the site selection and design of a new 1,000 car capacity parking structure in the Athletics Area to ensure projected parking needs are efficiently accommodated while promoting the highest and best use of University land resources.

#### **Project Background**

University Hall opened in 1965 and with it came an extensive inventory of adjacent surface parking to accommodate the 8,457 seat venue. At that time, this development was at the periphery of what was perceived as Grounds. However, with the expansion of our graduate and professional schools to the north in the 1970s this once "edge" condition is now a critical linkage between North Grounds and Central Grounds.

In order to support events at John Paul Jones Arena and other athletic venues, and accommodate daily commuters to Grounds, it is critical that the University maintain parking inventory as it further redevelops this area.

#### **Proposed Time Frames**

Planning/Design: July 2019

Construction: Summer 2020

Projected Occupancy: Summer 2021

#### **Financial Information**

Estimated Project Cost: \$30.0-\$35.0M

Funding Source(s): Debt, Cash



## University of Virginia CAMPBELL HALL SCHOOL OF ARCHITECTURE ADDITION (PLANNING)

#### **Executive Summary**

The School of Architecture is fully utilizing its current facilities and can no longer accommodate the demand for new space by increasing density or reconfiguring the existing facilities. The proposed addition to Campbell Hall will provide 26,000 GSF of office, instructional, and maker spaces to accommodate anticipated enrollment growth and evolving pedagogies.

#### Project Background

The School of Architecture currently occupies three buildings. Campbell Hall, built in 1970 and expanded with two additions in 2008, serves as the School's primary facility. It contains studios, seminar rooms and lecture halls, review spaces, galleries, exhibition, and common spaces. Overflow is currently accommodated in two small buildings located on Rugby Road, across from the Arts Grounds.

In recent years, program growth – primarily in graduate programs - has led to crowded conditions that push the limits of available space. Students, faculty, and staff have been accommodated with renovations that increase the density of occupants in teaching, studio, and office areas. Many spaces have been adapted to serve multiple functions. Concerns about the accreditation of professional programs, functionality, and the quality of space discourage additional crowding.

Like other schools on Grounds, a major driver of increasing space demand is the shift to transformational research and project-based, experiential learning environments. New and emerging pedagogy and research in the areas of computational design and digital fabrication require significantly more space, flexibility, power, equipment, and technology. The School of Architecture's need for additional space ensures that it remains a vital hub, and helps position the School and the University as a national leader in building science, technology research, and advanced modes of fabrication.

#### **Proposed Time Frames**

Planning/Design: Summer 2021

Construction: Summer 2023

Project Occupancy: Summer 2025

#### **Financial Information**

Estimated Project Cost: \$25.0-\$30.0M

Funding Source(s): Debt, Gifts, Cash



# University of Virginia **CENTER FOR THE ARTS (PLANNING)**

#### **Executive Summary**

The Center for the Arts will be developed to support a number of the University of Virginia's strategies including:

- The student experience: both active student leadership and participation in the performing arts, and the student experience of access and exposure to great performing artists from beyond UVA.
- Recruiting and sustaining excellent faculty: both in the arts and other disciplines, who can use firstrate facilities for teaching and research, and can experience the arts performed by local groups and visiting artists.
- Collaborative research: the integration of multiple disciplines which can come to these shared facilities, administered by the Provost, to collaborate in new ways.
- Community Services and Engagement: a regional venue for community members to experience performing arts produced by the University community, by local and regional groups, and by the best performers nationally and globally.

Per the Ivy Emmet Task Force, a new performing arts center would provide a complementary and supplementary space to other University and master plan priorities on the Ivy Corridor, and would be a cornerstone to the Task Force's recommendation for a creativity and experimental arts nexus.

#### Project Background

With support from the Joseph and Robert Cornell Foundation, in 2018 the University commissioned a study to assess the need for a signature performing arts venue on Grounds. Supporting this initiative was a 2017 College and Graduate School of Arts &

Sciences Arts Vision Assessment, which includes the recommendation to assess the need and opportunity for a large-scale performance venue that can accommodate a wide range of performances, as well as identify additional space needs including a recital hall, black box theater, multimedia exhibition spaces, and rehearsal and classroom spaces. The 2018 Performance Hall study confirmed the need for a 1,200 seat hall with acoustical properties and backstage support space to allow types and sizes of artistic performances that are currently not available in the Charlottesville-Albemarle region. Concurrently, the University was engaged in a master plan for the redevelopment of the Ivy Corridor. Emerging priorities for the area include a hospitality and conference facility, an arts complex, and academic and research spaces, compatible initiatives to performance venues as bridges between the University and community.

In early 2019, planning will continue in more detail, and program will be developed for different options: large hall and rehearsal space only, a full service academic center, phased development, and co-locations with other arts entities such as the Fralin Museum and the Kluge-Ruhe Gallery. Business operating models and cost estimates will be developed for each scenario.

#### **Proposed Time Frames**

Planning/Design: 2020-2022

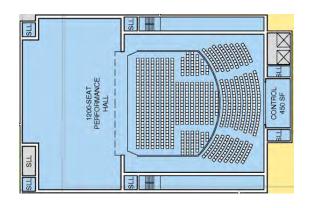
Construction: 2022-2024

Projected Occupancy: TBD

#### **Financial Information**

Estimated Project Cost: \$120.0-\$144.0M

Funding Source(s): Gifts





# University of Virginia DATA SCIENCE FACILITY

#### **Executive Summary**

In January 2019, the University of Virginia announced plans to establish a School of Data Science (SDS). The School of Data Science, UVA's 12th school and the first established since 2007, will position the University as a global leader in efforts to improve society through teaching and research based on the powerful, emerging field of data science. The establishment of the SDS supports the University's mission to advance knowledge and serve the public through research and scholarship while facilitating cross-disciplinary work. It will provide educational experiences that deliver new levels of student engagement for highimpact experiences and meaningful research with faculty members. The desired building size is planned as 70,000 GSF. The SDS is supported by a generous gift from the Quantitative Foundation.

#### **Project Background**

The SDS is in the initial design phase, building on the foundation set in place by the Data Science Institute, a pan-University institute established in 2013, that grants graduate degrees. The new School of Data Science proposes to offer both doctoral and undergraduate degree programs and certificate programs, helping meet the soaring demand for qualified data science professionals in a field that plays a key role in the global information-based economy. The School's establishment comes at a time when the amount of available data in the world is more than doubling every two years, and there is a shortage of qualified data scientists to analyze and interpret the data. UVA's School of Data Science promises to be a new model

for how a school functions within a higher education institution; it will be designed as an open ecosystem that fosters interdisciplinary research, teaching, and partnerships across the University, with the private sector, and with governmental entities.

#### **Proposed Time Frames**

Planning/Design: Fall 2019 Construction: 2020-2022 Project Occupancy: TBD

#### **Financial Information**

Estimated Project Cost: \$43.0M

Funding Source(s): Gifts



# University of Virginia ENVIRONMENTAL HEALTH & SAFETY FACILITY

### **Executive Summary**

Environmental Health & Safety (EHS) supports the University's mission of research, education, patient care, and service through the promotion of safe practices, regulatory compliance, and environmental stewardship. Facilities used by EHS to manage hazardous materials and regulated waste streams generated across Grounds are marginally adequate, and are not equipped or designed to accommodate the increased waste volumes anticipated from growth in research and patient care services. The University's ability to generate sustained excellence in research and patient care, attract a distinguished faculty, and grow outside funding requires a continued commitment to operating in a manner that is safe, efficient, and consistent with requirements defined by federal and state regulations, funding agencies, and accrediting organizations.

Construction of a modern, compliant, and rightsized EHS facility will serve to adequately accommodate the collection, processing, and storage of regulated materials and wastes generated from University research and patient care activities; and house staff dedicated to providing institutional safety support and research compliance services. This investment in infrastructure will strengthen the University's foundational capacity to advance discovery and serve the Commonwealth of Virginia.

#### **Project Background**

The current EHS program is housed in three facilities: Special Materials Handling Facility (SMHF), One Morton Drive, and The Farm. SMHF, located at 515 Edgemont Road, was constucted in three phases from 1984 to 1994. The 12,337 square foot facility houses approximately 18 EHS staff. By 2004, EHS had out-grown the facility and leased overflow space for nearly

20 staff at One Morton Drive. Separation of staff between two buildings presents challenges in communication and efficiency of operations.

EHS transports approximately 15,000 pounds of radioactive waste annually to an off-Grounds storage warehouse referred to as "The Farm", located nearly 10 miles from SMHF on Route 20 South. SMHF, as currently configured, cannot accommodate the amount of radioactive materials stored at The Farm.

In January 2018, a formal needs assessment was conducted by consultants Perkins & Will and Woodard & Curran to assess current waste generating and management activities, assess adequacy of EHS waste management, and conduct a peer review of five institutions. Based on their findings, the consultants recommended the following options:

- Construct one right-sized new EHS facility that is centrally located to provide easy access to the Medical Center, School of Medicine, College of Arts & Sciences, and the School of Engineering and Applied Sciences, or
- Construct or renovate two facilities in close proximity to each other, one for waste management and one for EHS staff.

#### **Proposed Time Frames**

Planning/Design: 2019-2020

Construction: 2020-2022

Project Occupancy: 2022

#### **Financial Information**

Estimated Project Cost: \$25.0-\$28.0M Funding Source(s): TBD



## University of Virginia FONTAINE RESEARCH PARK CENTRAL ENERGY PLANT & UTILITIES

#### **Executive Summary**

The project will provide district energy, electrical infrastructure, and utilities to support the planned development and infrastructure renewal needs in the Fontaine Research Park.

#### **Project Background**

The Fontaine Master Plan proposes that the Research Park could support up to 1.4 million GSF of new and existing space. In the first phase, this could include a new 250,000 GSF research building, a new 250,000 GSF clinical building, and a new 1,300 space parking garage. The Master Plan examined stand-alone energy systems versus a centralized energy approach, recommending the latter as the most economical and sustainable approach for meeting the energy needs of new facilities and renewing existing facilities as their systems reach the end of their useful lives. This project will reexamine the recommendations of the Master Plan, implementing the most economical and sustainable approach to providing energy and utilities to serve the Fontaine Research Park.

#### Proposed Time Frames Planning/

Design: Summer 2020 Construction: Spring 2022 Projected Occupancy: Summer 2024

### **Financial Information**

Estimated Project Cost: \$25.0-\$35.0M

Funding Source(s): Debt



## University of Virginia FONTAINE RESEARCH PARK INFRASTRUCTURE & PARKING GARAGE

#### **Executive Summary**

The Fontaine Parking Garage & Infrastructure Improvements project follows the recommendations outlined in the Fontaine Master Plan, approved by the Board of Visitors in September 2018. The master plan prioritizes the relocation of specific research and clinical programs with the intent of promoting a robust interdisciplinary and translational approach to research and patient care. The initial phase of the planned development calls for approximately 250,000 GSF of research space and 150,000 - 250,000 GSF of clinical space. This development will require several enabling projects including parking, public amenities, utilities, and transportation improvements. The landuse strategies identified in the Fontaine Master Plan first phase developments align with and are informed by several University planning efforts, including the 2016 Health System Integrated Space Plan, the 2017 Board of Visitors' Committee on Research Space Needs Report, and the 2018 University Parking and Transportation plan.

The approved Master Plan positions Fontaine to accomplish the following strategic initiatives:

- Develop the first truly interdisciplinary research building on Grounds to attract and retain the highest-caliber faculty and students.
- Provide for space needs associated with four schools and with major research initiatives such as the UVA Brain Institute, Supporting Transformative Autism Research (STAR), and Engineering in Medicine.
- Enhanced patient experience and environment of care.
- Relocation of clinical visits thereby reducing parking demand and congestion on-Grounds.
- Decanting of research space from the West Complex, Cobb Hall, and MR-4.
- Decanting of clinical space from the West Complex.

### **Project Background**

The parking garage is planned as an initial enabling project to realize the vision of the master plan. The total plan includes a parking garage of approximately 1,300 spaces and improved wayfinding and multimodal infrastructure to encourage walking, biking, and transit options to and within the site. Along with the parking garage, a new transit stop on Ray C. Hunt Drive will provide direct and reliable connections to Grounds and the Health System.

This project also includes a number of utility upgrades to Fontaine including multimodal street improvements, stormwater, sewer, and domestic water. The street improvements include creation of a central green street, adjustment of the intersection at Ray C. Hunt Drive with the addition of a roundabout, and stormwater and pedestrian improvements to the existing perimeter road.

#### **Proposed Time Frames**

Design: Summer 2019

Construction: Summer 2020

Projected Occupancy: Summer 2021

#### **Financial Information**

Estimated Project Cost: \$65.0-\$87.0M

Funding Source(s): Debt



## University of Virginia John Paul Jones Arena performance center renovation

#### **Executive Summary**

The project will focus on the enhancement and modernization of the competitive performance center for the basketball teams in addition to meeting the demands for more space. The project includes the renovation of JPJ first floor spaces to double the size of the men's & women's basketball performance area (strength training) to 7,070SF; enlarge the current lounge space; replace the three visitor locker rooms (2,820 SF); and develop new media storage room (1,850SF).

#### **Project Background**

Athletics will relocate current academic advising space to accommodate the renovations noted above. The three locker rooms are instrumental for hosting NCAA post-season play and concerts and other related programs. The revenue from these events cover the operational costs for JPJ. The media storage will accommodate the implementation of the ACC network and the preservation of sport archives.

#### **Proposed Time Frames**

Planning/Design: Summer 2019 Construction: Fall 2019 Projected Occupancy: Summer 2020

#### **Financial Information**

Estimated Project Cost: \$7.5M-\$8.0M

Funding Source(s): Gifts



# University of Virginia virginia autonomous systems testing facility

#### **Executive Summary**

The University of Virginia's School of Engineering & Applied Science (UVA Engineering) supports various research and student projects which require large-footprint, high-bay space. This particular space type exists in very limited quantities in the UVA academic portfolio. The Virginia Autonomous Systems Testing Facility (VAST) would allow UVA Engineering to serve those needs and provide a unique collaborative opportunity on Grounds.

#### **Project Background**

UVA Engineering's Integrated Space Plan (ISP), completed in 2018, identified a need for 15,000 ASF of high-bay space for research and academic functions. School leadership has further identified this need as a top priority due to the expected return-on-investment for autonomous systems and experiential learning programs. Autonomous systems research is an active area of growth and an opportunity for UVA Engineering to differentiate itself among peer institutions. The School has identified and grown thematic areas of research that cut across departments, one of which is cyber-physical systems. Thirty faculty across five departments are engaged in this research. Eight faculty in particular are directly engaged in autonomous systems hardware research and need access to largescale controlled testing space for aerial, ground, and aquatic robotic systems. Space is currently a limiting factor for these research programs. UVA Engineering is also actively recruiting an internationally-recognized research faculty who specializes in humanautonomous systems interactions. Commitment to this facility will assist the School in continuing to recruit the highest-caliber faculty and students.

Preliminary programming suggests that approximately 8,000 ASF would be dedicated to autonomous systems

and the structural facility. The VAST facility will address the acute need for flexible high-bay space on Grounds and create opportunities for collaborative instruction and research centered around next-generation technologies.

#### **Proposed Time Frames**

Planning/Design: July 2019

Construction: Winter 2020

Projected Occupancy: Summer 2021

#### **Financial Information**

Estimated Project Cost: \$10.0M

Funding Source(s): Debt, Gifts, Cash, State GF



# University of Virginia CANCER CENTER ADDITION OF MRI LINAC

#### **Executive Summary**

The Medical Center proposes the incorporation of MRI LINAC technology into the Emily Couric Clinical Cancer Center (ECCCC) to expand state-of-theart treatment off erings. The construction of the ECCCC included three vaults for linear accelerators (LINAC) used in the treatment of certain cancers. The proposed project would build out the shell vault and surrounding support spaces in the ECCCC lower level to accommodate MRI LINAC technology.

MRI LINAC merges two established medical technologies into one advanced treatment option for tumors of the pancreas, liver, lungs, abdomen, and head & neck.

The advantages of utilizing MRI guidance in the delivery of treatment to patients is the increased precision of the radiation application to the tumor site, limiting exposure to surrounding soft tissue. This technology will increase patient outcomes and off er alternative treatment options.

#### **Project Background**

Offering this cutting-edge treatment option for patients supports both UVA's emphasis on highacuity patient care services and strengthening the Cancer Center's standing in the region and the Commonwealth.

This project is contingent on receiving a certificate of public need from the Commonwealth of Virginia. An application will be filed at the end of May 2019.

#### **Proposed Time Frames**

Planning/Design: Summer 2019 Construction: 2019-2020 Projected Occupancy: Summer 2020

### **Financial Information**

Estimated Project Cost: \$6.5-\$8.0M

Funding Source(s): Cash



## University of Virginia CONSUMER AMBULATORY CLINIC (TENANT FIT-OUT)

### **Executive Summary**

The Medical Center proposes the establishment of a new Consumer-Based Ambulatory Clinic of 18,000 to 19,000 GSF to be leased from a third party developer. The new clinic will house specialty care clinics, with associated procedural and diagnostic services, in a facility designed with convenience and enhanced patient experience at its core. The multi-specialty facility will offer a wide-range of clinical services where patients will receive state-of-the-art laser treatments and rejuvenative procedures that address a wide range of medical conditions.

The new ambulatory clinic will promote mind and body wellness through advanced diagnostic screenings, patient education, and consultation centered on both surgical and non-surgical procedures. The space will be designed to facilitate multiple clinical activities sharing procedural and diagnostic assets that ensure patient privacy and comfort. The clinic will be configured to allow use by varied clinical providers in order to achieve greater overall operational efficiency. The clinic will offer a level of patient convenience in a "one stop shop" not currently available at UVA.

#### **Proposed Time Frames**

Planning/Design: Summer 2019 Construction: 2019-2020 Projected Occupancy: Spring 2020

### **Financial Information**

Estimated Project Cost: \$13.0-\$15.0M Funding Source(s): Cash





# University of Virginia focused ultrasound mri expansion

### **Executive Summary**

The Medical Center proposes the expansion of hospitalbased MRI services, including two new MRI machines located in space currently occupied by Interventional Radiology (IR). IR will be relocated as part of the Hospital Expansion Project allowing renovations to occur and MRI to expand into the vacated space. The two new MRIs are planned to serve different purposes and patient populations.

The first new MRI will be equipped with technology to afford patients the opportunity to receive therapeutic Focused Ultrasound (FUS) treatments to address primary tremors and other neurological disorders currently treated with more invasive procedures.

The second MRI will provide diagnostic imaging for two primary patient populations. The needs of pediatric and cardiology patients, both of which frequently require sedation will be met by this new MRI. The new capacity this machine affords will free up time on the three existing magnets which are currently constrained by the special needs of pediatric and cardiology patients requiring diagnostic imaging.

#### **Project Background**

The expansion of the focused ultrasound provides the clinical capacity to offer cutting-edge treatments that up until recently have only been offered through clinical trials. It furthers the UVA Health System's goal of providing advanced high-acuity tertiary and quaternary care to patients in the Commonwealth and beyond.

This project is contingent on receiving a certificate of public need for the two MRI machines from the Commonwealth of Virginia.

#### **Proposed Time Frames**

Planning/Design: Winter 2020 Construction: Fall 2020 Projected Occupancy: Summer 2021

### **Financial Information**

Estimated Project Cost: \$13.5-\$16.5M Funding Source(s): Cash

# University of Virginia proposed planning studies





## Ivy Gardens Redevelopment

In 2017, the North Grounds Planning Study identified the Ivy Gardens Apartments as a unique redevelopment opportunity given its strategic adjacencies to the Darden School of Business, Miller Center, and the Center for Politics. The 50-year-old housing inventory at this UVA Foundation-owned property is in high demand by the North Grounds professional graduate population in spite of its suboptimal land use and inherently car dependent configuration. The University would like to conduct a detailed needs assessment study for this parcel to explore the redevelopment potential to better accommodate University needs for proximate graduate housing, comprehensive pedestrian and vehicular connectivity, and future needs of adjacent centers such as the Center for Politics and the Miller Center.



## **Engineering Integrated Space Plan**

The Engineering School completed an integrated space plan in 2018, using strategic goals and existing conditions as drivers for a phased approach to meet our program needs for the next ten to fifteen years. The recommendations were grouped into near, mid, and long-term construction and renovations, with the mid-term proposals being the most impactful and with the highest confidence from a planning perspective. This group of projects includes renovations to Thornton Hall B-wing (an existing capital plan item), a new building connecting the existing Mechanical Engineering and Materials Science buildings, a large new collaborative research and academic building on the site of Albert Small Building, and improvements to the circulation and connectivity along Engineer's Way. Together, these pieces leverage each other to make a holistic improvement to the environment along Engineer's Way, as well as contributing significantly to the STEM precinct (Engineering, Chemistry, Gilmer, PLSB, Physics) renovations that are in progress.



## University of Virginia New Cabell Hall POST OCCUPANCY EVALUATION

#### Background

New Cabell Hall was designed by Eggers and Higgins and completed in 1952. The New Cabell renovation, designed by Goody Clancy, addressed systems improvements, including replacing heating and introducing central air conditioning throughout the building, elevator replacement, other mechanical, electrical, and plumbing upgrades, as well as building code and ADA compliance. It included improvements to interior finishes throughout the building, creation of a new building lobby, and new public areas throughout the building.

Information for the New Cabell Hall renovation project post occupancy evaluation was gathered through meetings with Arts and Sciences staff, Facilities Management staff, a facilities maintenance assessment, and a web-based survey distributed to New Cabell faculty, staff and students. Components addressed in the surveys included success in meeting project goals, functionality of work spaces, classrooms and classroom furniture, thermal comfort, safety inside and outside the buildings, and sound privacy.

#### **Key Findings and Recommended Actions**

Survey results show that 98% of New Cabell Hall respondents have an overall positive impression of the building, 96% of respondents think the project was successful in improving flow functionality, 82% of respondents think that the project successfully increased a sense of community, 95% of respondents think that the project successfully provided a pleasant educational and research environment, and 90% of respondents are satisfied with building navigability.

**FINDING:** While 82% and 96% of respondents observed that the renovation was successful in meeting project goals, respondents continue to report a need for more student spaces and study spaces. Among survey takers, 79% are satisfied with the new courtyard. "[The] courtyard provides serenity from my office and gives me a chance to enjoy the outside without walking a great distance," reports one occupant.

**FINDING:** A majority of New Cabell users – 88% - indicated that the project was successful in redesigning classrooms for improved flexibility and performance, with 4% responding negatively. When asked how well the classrooms meet the teaching needs of faculty, 88% responded positively. Classroom furniture received lower positive results, with 18% of survey takers expressing dissatisfaction. Respondents observed that TOP: Barton Malow

classrooms are too small or overcrowded with seating, particularly for active learning, which requires more square footage per student to allow reconfiguration of desks and to allow faculty to move around the room.

ACTION: The recent Strategic Academic Space Study focused on classroom use and needs on Grounds, and provided recommendations that could benefit several schools at the University. The Office of the Architect, the Office of the Provost, the University Registrar's Office, and the Arts & Sciences Dean's Office have worked together to identify classrooms in New Cabell Hall and the South Lawn that can be converted to active learning through scheduling or location changes for classes that have been traditionally taught in these rooms; flexible, re-configurable furniture; and minor technological upgrades. With consensus reached, these recommendations could be implemented for the fall 2019 semester. However, classrooms are almost uniformly deemed too small in New Cabell by A&S Instructional Design staff, and reducing seat counts and adding larger classrooms elsewhere is recommended.

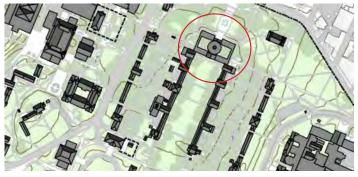
**FINDING:** New Cabell Hall faculty and staff expressed 90% satisfaction with their offices and 13% dissatisfaction with sound privacy. Survey takers report that they can hear conversations from the hallway in their offices and vice versa.

**ACTION:** This is a common problem, which can be improved with door seals and acoustic materials; these options could be considered.

**FINDING:** New Cabell Hall received a 32% negative rating for overall temperature, a 24% negative rating for the impact of building temperature on use, and a 78% positive / 12% negative rating for air quality, with classrooms and offices identified as particularly problematic. Building users observe that the building is often too hot in the winter and too cold in the summer. One user observed that in spite of problems with adjusting the temperature, the current system is a vast improvement over the previous, pre-renovation system.

**ACTION:** The large building windows were improved and re-weather stripped, but remain large, uninsulated, drafty, so occupant comfort in offices is impacted. However, the build-ing HVAC is operating fairly effectively, and temperatures are adjusted on request to Facilities Management. The building would benefit from installation of Low-E film at all South, East, and West windows.





## University of Virginia **THE ROTUNDA** POST OCCUPANCY EVALUATION

#### Background

Completed in 1826, the Rotunda housed classrooms and the University library for nearly 70 years until a devastating fire in 1895. Rebuilt to a design by Stanford White, the building served as the main University library for another 40 years. In the mid-1970s, the interior was rebuilt based on Thomas Jefferson's designs. The renovation completed in 2016 was broken into phases. The first phase focused on renovating the exterior building envelope and roof, repointing the drum, and restoring windows. The second phase consisted of replacement of the marble capitals, landscape, additional repairs to the exterior, renovations to the interior, and the addition of a service/catering elevator and underground mechanical room.

The renovation was also intended to make the Rotunda a student space and a part of the daily life of the University. It now includes three classrooms and several study areas, and study and library space in the Dome Room. The Rotunda also serves as the home to the University's Board of Visitors, the Office of the Vice President and Chief Student Affairs Officer, several meeting rooms, a visitors' center, and event space.

#### **Key Findings and Recommended Actions**

Survey results show that 90% of student respondents and 98% of faculty and staff respondents have an overall positive impression of the Rotunda renovation, 77% of student respondents and 93% of faculty and staff respondents think the project was successful in making the Rotunda more of a student space, and 100% of Rotunda staff occupants provided a positive assessment of their offices, office lighting, and furniture.

**FINDING:** : Some students reported that the use of the building as an event space makes it feel less accommodating to students looking for a space to study, while others observed that they find the building a relaxing and quiet space to study, and love being able to reserve the spaces for events. Several observed that they were not aware of study times or that the building was open to students. Others observed that there is now more of a balance between student use and event use, and that the building is "more alive than it was in the past".

Of the students surveyed, 74% of students who use the Dome Room are satisfied with the room as a study space and 77% are satisfied with the room as an event space. The Dome Room Gallery received an 87% satisfaction rating as a study TOP: John G. Waite Associates space. Faculty and staff expressed 84% satisfaction with the Dome Room as an event space. Some students described the Dome Room as somewhat intimidating to enter and use, but one student observed, "It is inviting after you visit for the first time and see others going there. I could see it is unwelcoming or un-used from an outsider who has never set foot in. After that first visit it is demystified and very welcoming!"

**ACTION:** Availability of the Rotunda for student study space could be more heavily promoted. During the renovation of Alderman, the Rotunda will be a crucial swing space for student study, therefore familiarizing several classes of students with the building as a primary study space and a central part of their UVA experience.

**FINDING:** The Upper West Oval Room received an 86% satisfaction rating from student users. Rotunda custodial and maintenance staff report concern that movement of chairs over the carpet is tearing the edges. The carpet is placed in the center of the room, but does not extend all the way to the periphery, so chairs and tables at the edges of the room are positioned half over the carpet and half on the hardwood floor.

**ACTION:** Eventually, it is likely that a smaller rug will be needed in the center of the room, so that there is no overlap between the tables and chairs at the periphery of the room.

**FINDING:** Facilities Management staff reported that there is damage to the wood paneling in the window alcoves of the Dome Room, consisting of peeling paint, cracked wood panels, and plaster damage. The cause of the damage is under investigation, but poorly installed ductwork appears to be at least one of the issues involved. Cracks are appearing near and on the capitals of a majority of the columns in the Dome Room, where the sections of the capitals were originally joined.

Custodial staff and Rotunda staff also reported that the furniture is holding up well. Felt glides were added to the chairs in the Multipurpose Room and the Dome Room, which work well and keep the floors in good shape. Facilities Management is re-checking and replacing the glides every six months.

A "shadowing" that appears to be mold is appearing on the columns on the north portico and on the eastern arcade columns. The cause of the mold or discoloring needs to be investigated and mitigated.



## University of Virginia Wilson Hall POST OCCUPANCY EVALUATION

#### Background

Wilson Hall, opened in 1969, was designed for the College of Arts & Sciences (A&S) Department of English. It now houses the A&S Media Studies Department, the Institute for Humanities and Global Cultures, a video lab, Virtual Reality studio, a maker space, and Music Department offices. UVA Facilities Management's Project Services completed renovation of the first and second floors of the building in 2016. The project improved circulation, added interior glass to get daylight deeper into the building, and added study lounges.

Information for the Wilson Hall renovation project post occupancy evaluation was gathered through meetings with A&S staff, Facilities Management staff, a facilities maintenance assessment, and a web-based survey distributed to Wilson faculty, staff and students.

#### **Key Findings and Recommended Actions**

With the caveat that survey participation for this post occupancy evaluation was low, with only 20 faculty, staff, and students responding, survey results show that 100% of Wilson Hall respondents have an overall positive impression of the building, 93% of respondents think the project was successful in increasing/improving common and collaborative space, 93% of respondents think that the project successfully brought in more daylight, and 93% of respondents think that the project successfully provided a pleasant educational and research environment.

**FINDING:** While 79% of survey respondents reported feeling safe inside the building, 14% reported feeling unsafe. Nine-ty-three percent of building users reported feeling safer outside the building, and one added that the renovation vastly improved their sense of safety. Two users observed that the building, while locked, is accessible from New Cabell Hall and that it is easy for anyone inside after hours to allow another person to enter. One user noted that the streetlight next to Wilson past the stairs on the Rouss Robertson side of the building flickers on and off, and that the area is dark.

**ACTION:** Wilson provides emergency egress from New Cabell, and vice versa, so they are limited by code from reducing access between the buildings. Security was improved and exterior lighting and cameras have been added to the building. Ruppel Drive, which runs along the side of Wilson, is quiet

and dim at night, but there are opportunities for landscape and lighting improvements as part of or in addition to upcoming projects in the area. Future development will also activate foot traffic in the area.

**FINDING:** A majority of Wilson users surveyed indicated that the project was successful in redesigning classrooms for improved flexibility and performance and 89% agreed that the classrooms are successful in meeting the teaching needs of faculty. Institute of the Humanities and Global Cultures (IHGC) Research Labs received 80% approval, with 0% disapproval. Classroom furniture received 75% positive results. Furniture in the IHGC is viewed as less successful, with a 17% negative rating. One respondent observed that as faculty move tables frequently to accommodate various group needs, tables with wheels would be preferred. Another expressed the desire that the tables in 325 could be broken down so that groups of five or fewer students could sit together.

ACTION: Arts and Sciences plans to replace IHGC tables.

**FINDING:** Wilson Hall occupants expressed 82% satisfaction with their offices and 36% dissatisfaction with sound privacy. Survey takers report that they can hear conversations from the hallway in their offices and vice versa.

**FINDING:** Conference rooms received a 78% positive rating. One survey taker commented that there is a need for more conference spaces for faculty and students to gather and work collaboratively, while another observed that room 133, with glass walls, is not ideal for private meetings and is loud and echoes.

**FINDING:** Wilson Hall received a 20% negative rating for overall temperature and a 10% negative rating for the impact of building temperature on use, with conference rooms and offices identified as particularly problematic. Comments varied, with one occupant noting that offices are hot during winter and cold during the summer, and one stating that their office has a high humidity level during the summer – a problem that hasn't been remedied.

**ACTION:** Facilities Management staff observed that the new HVAC controls do not operate as well as the old controls; the new controls do not allow the staff to easily change or maintain temperature levels. As problems arise, Facilities Management is making adjustments to make conditions better. This effort to maintain comfort and maximize energy use will be ongoing.