UVA Board of Visitors

Buildings and Grounds Committee

September 15, 2022

UNIVERSITY *of* VIRGINIA

Agenda

- Remarks by the Chair

- Action Items
  - Schematic Design: Physics Building Classroom Renovation
  - Darden School of Business Master Plan
  - Demolition of University Gardens
  - Addition to the Major Capital Plan: UVA | NOVA Fairfax (tenant fit out)

- Report by the Senior Vice President for Operations & State Government Relations
  - 2021-2022 Sustainability Report
  - Implementation of Capital Program Recommendations
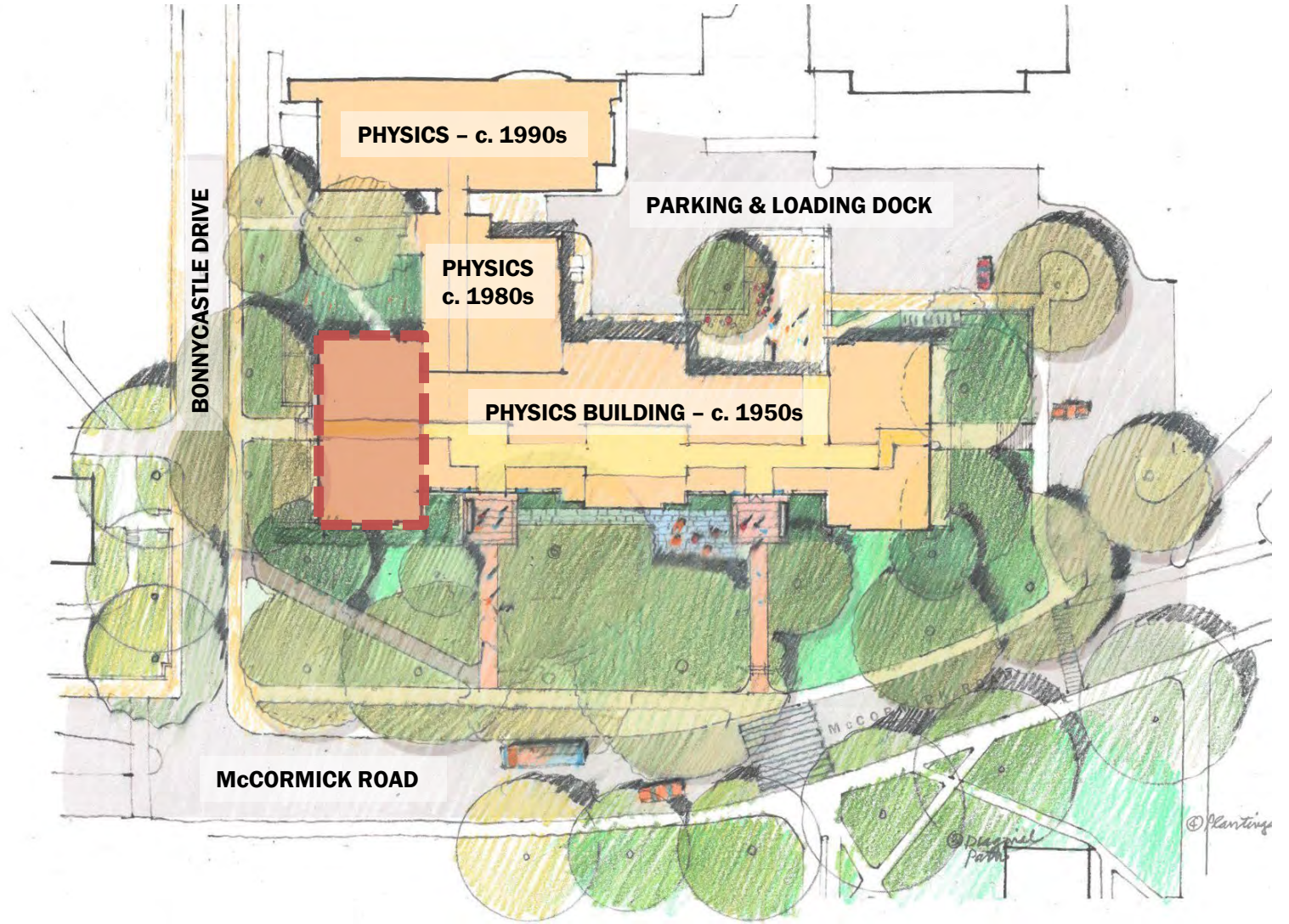
Schematic Design: Physics Building Classroom Renovation

Vicinity Map

PHYSICS – c. 1990s

PARKING & LOADING DOCK

PHYSICS c. 1980s

PHYSICS BUILDING – c. 1950s

BONNYCASTLE DRIVE

McCORMICK ROAD

Site Plan

New Windows (5 Total)
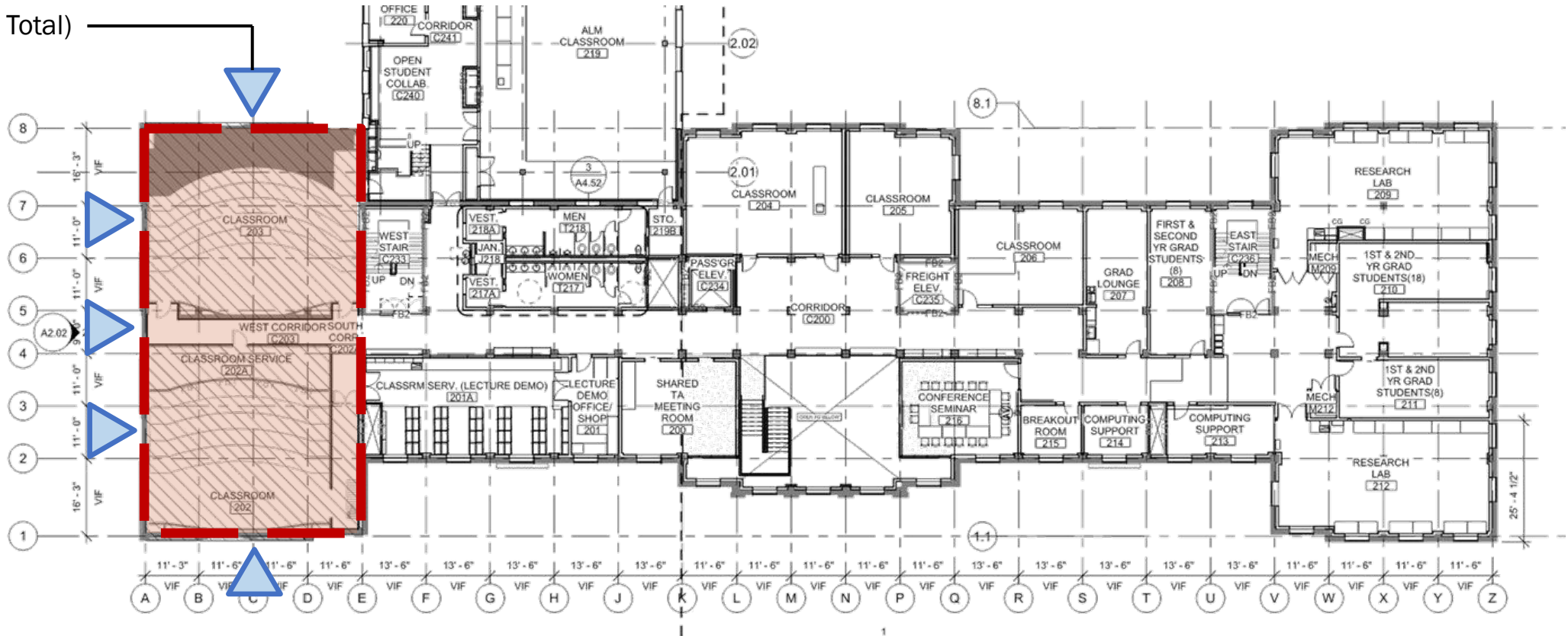
Second Floor Plan (Third Floor Similar)

Decorative Panel

Brick Relieving Arch

Recessed Blank Panel

Aluminum-Clad
Replacement Windows

North Facade

West Facade

South Facade

Decorative Panel

Brick Relieving Arch

Proposed Window

Aluminum-Clad
Replacement Windows

North Facade

West Facade

South Facade

Thornton Hall

New Cabell Hall

Bonnycastle

Existing West Facade

Proposed West Facade

View from Bonnycastle Drive

Existing North Facade

Proposed North Facade

Darden School of Business Master Plan

Charlottesville / UVA Grounds

NORTH GROUNDS

29

The Park

ARLINGTON BLVD

BARRACKS ROAD

29

MASSIE ROAD

COPELEY RD

IVY ROAD CORRIDOR

EMMET ST

CENTRAL GROUNDS

PRESTON AVE

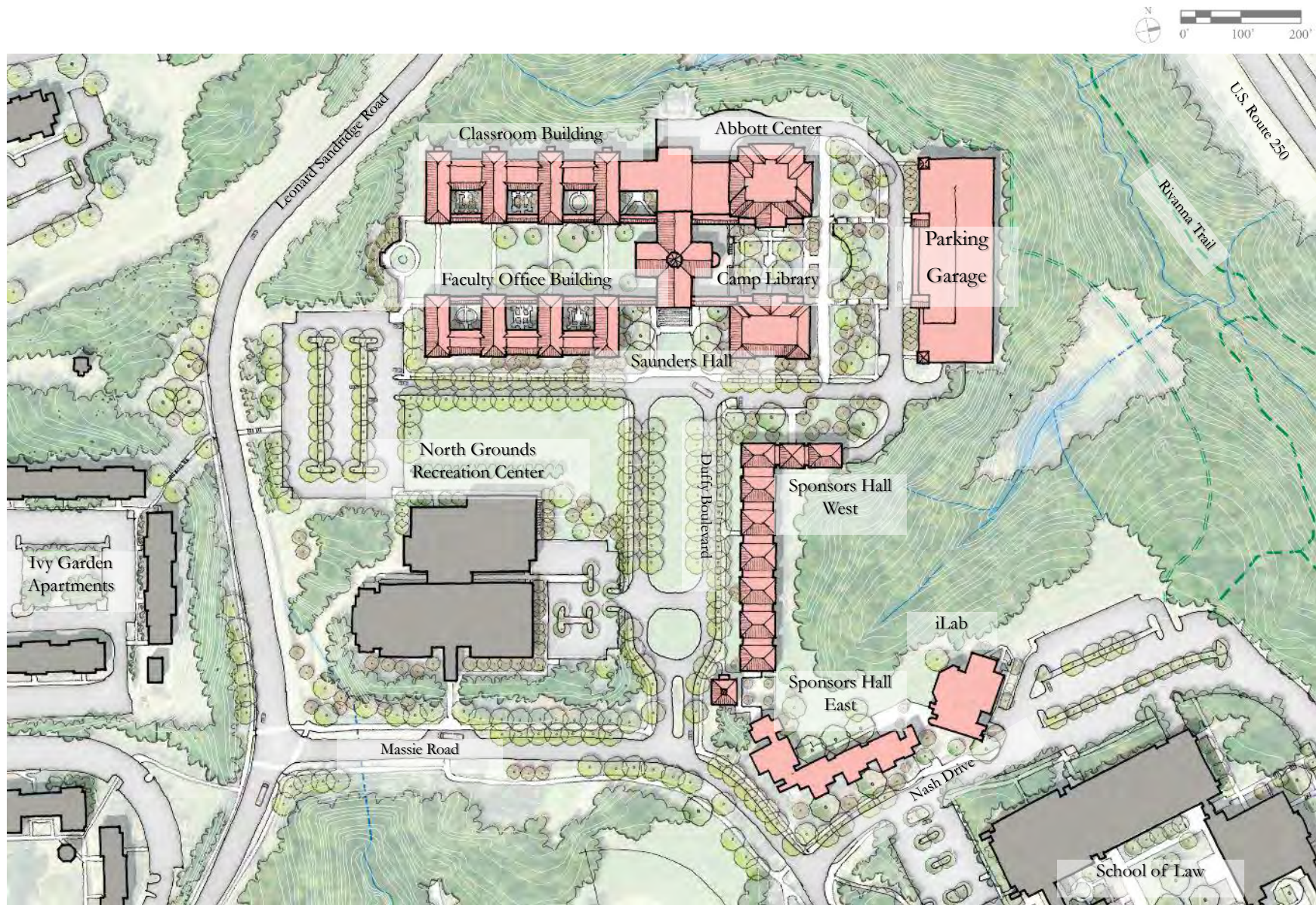W MAIN ST

DOWNTOWN MALL
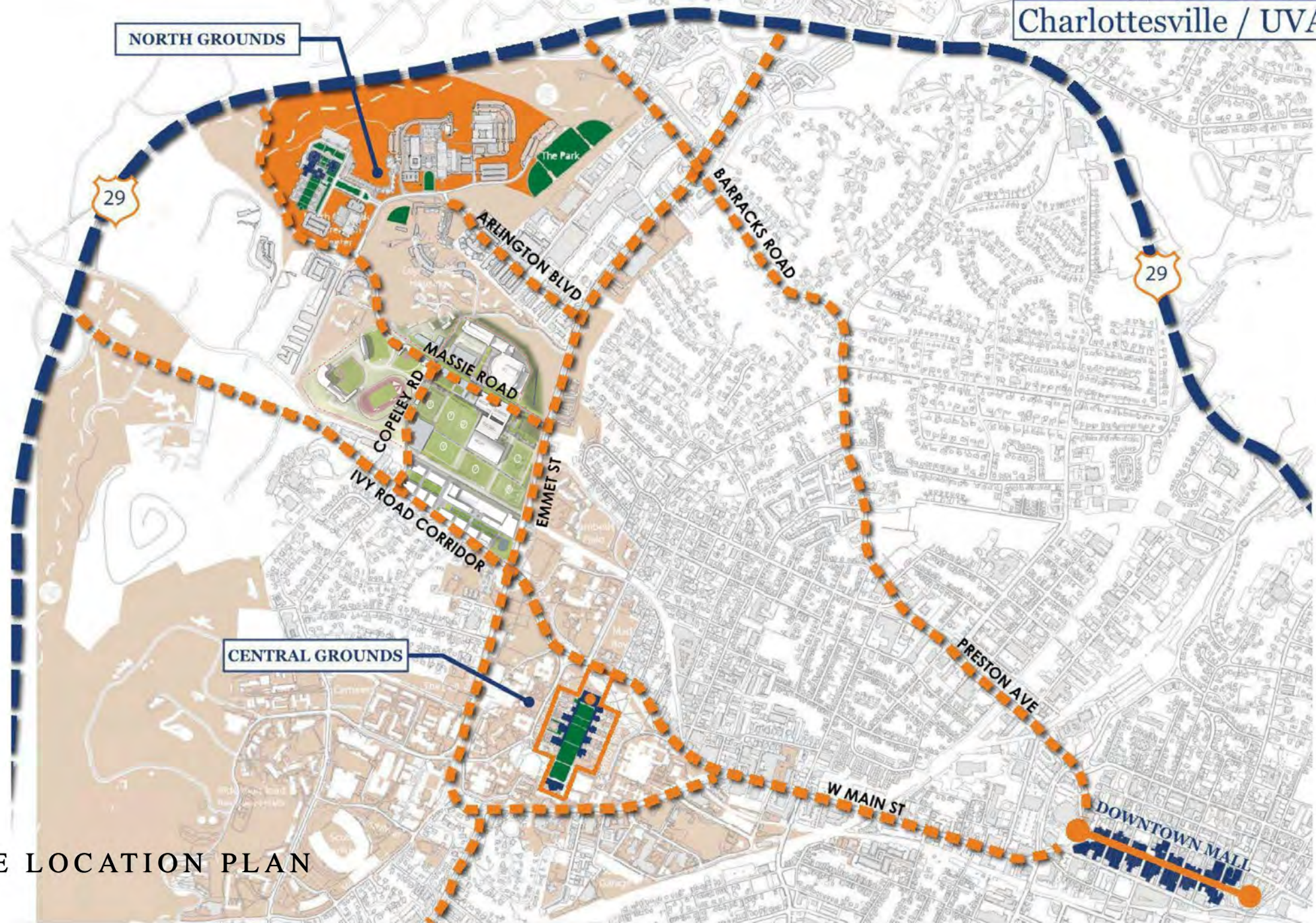
SITE LOCATION PLAN

EXISTING CONDITIONS PRIOR TO NEW INN AND ARBORETUM
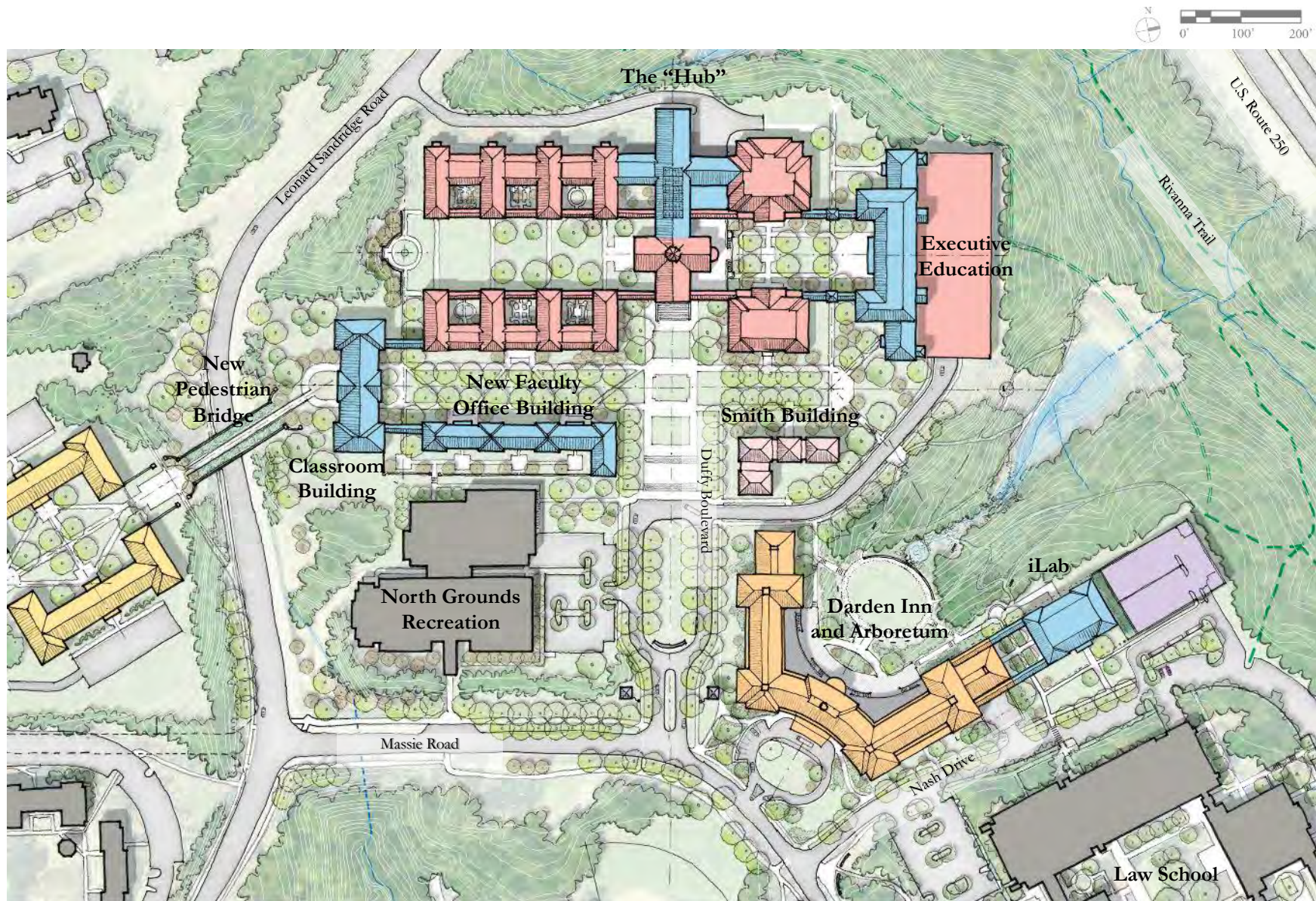
2017 MASTER PLAN

2022 DARDEN VISION PLAN

New Landscape

Student Success/
Innovation Hub

Academic/Residential
Expansion

New Walkways

North Student
Housing

Pedestrian Bridge

Addition to Faculty
Office

Faculty Office
Building North

Access Road

New Athletic Fields
and Single Level
Parking Deck
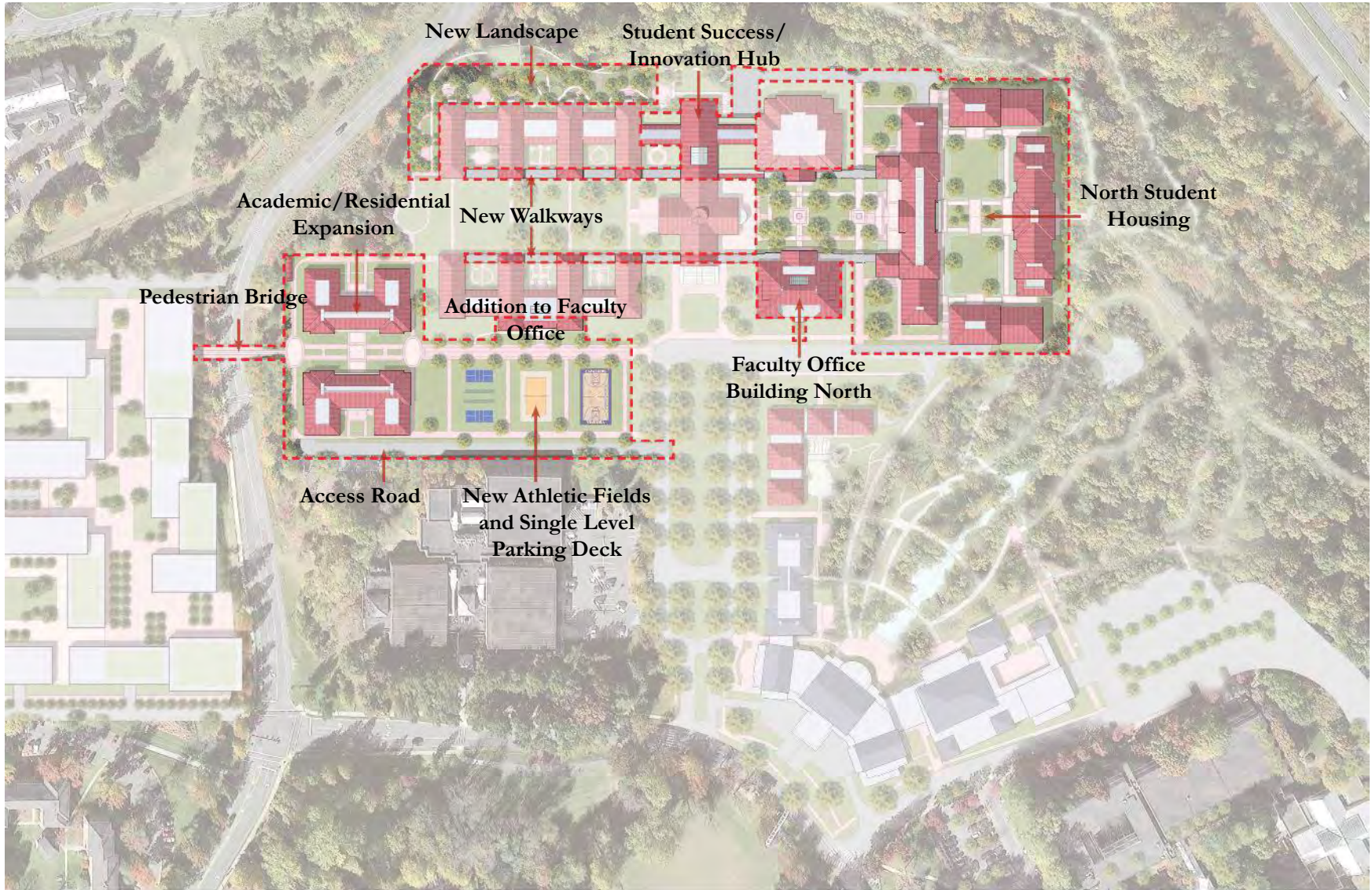
2022 DARDEN VISION PLAN - ADDITIONS

Darden

Ivy Gardens

North Grounds
Recreation

Law School

2022 DARDEN VISION PLAN

2022 DARDEN VISION PLAN WITH IVY GARDENS MASTER PLAN

EXISTING VIEW FROM THE NORTHEAST

PROPOSED VIEW FROM THE NORTHEAST

EXISTING VIEW FROM THE SOUTHEAST

PROPOSED VIEW FROM THE SOUTHEAST

EXISTING SAUNDERS HALL

SAUNDERS HALL WITH PROPOSED "HUB" EXPANSION

AERIAL VIEW FROM THE SOUTHEAST

Demolition of University Gardens

Demolition of University Gardens

- Graduate student housing built in 1948

- 60 apartments in 8 buildings have significant structural and system deficiencies and have reached end of useful life

- Based on current condition, cost to renovate, and ongoing operating costs, recommend demolishing complex

- Will explore options for future use of site

Addition to Capital Plan: UVA | NOVA Fairfax (tenant fit out)
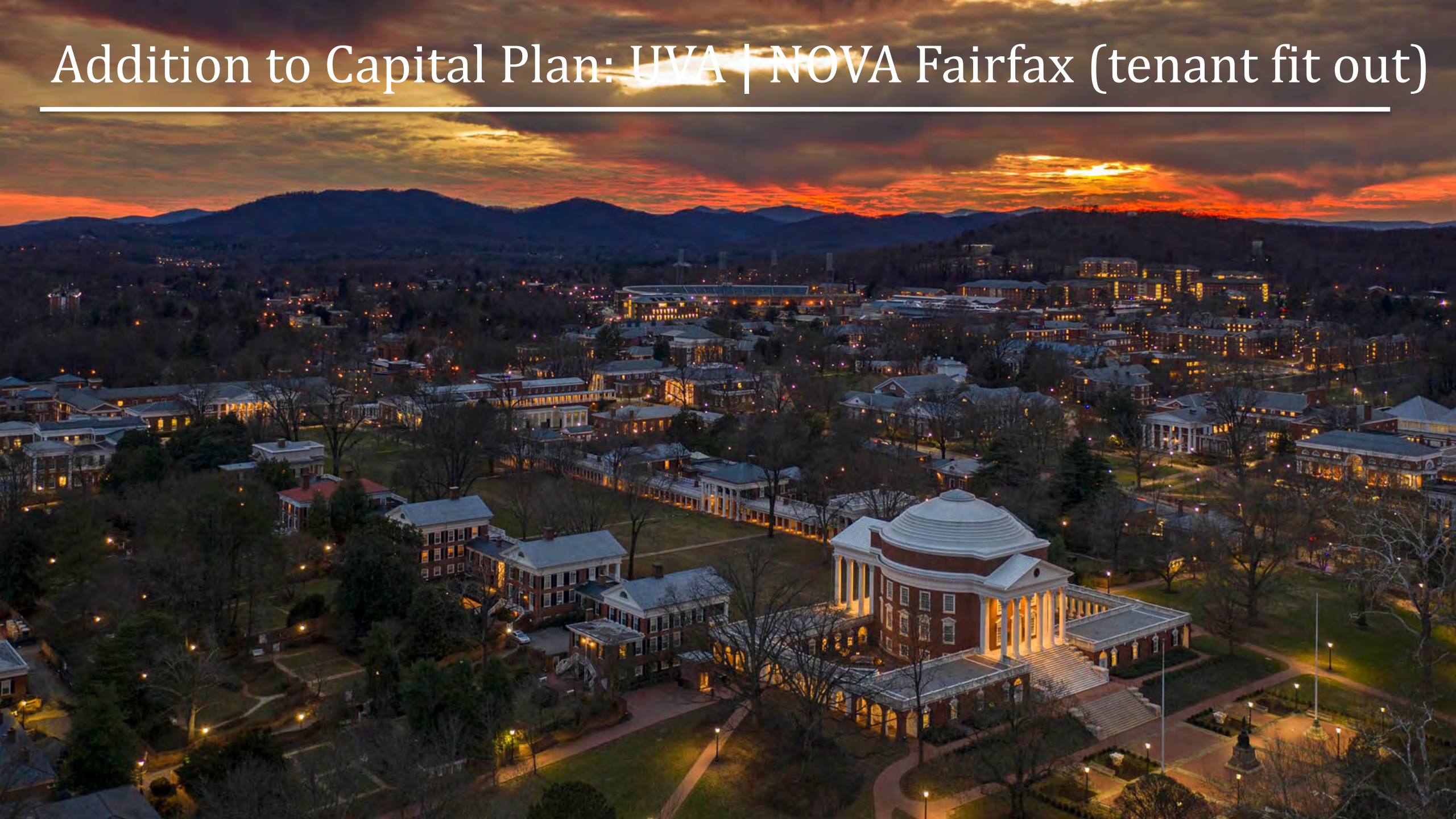
UVA | NOVA Fairfax (tenant fit out)

- Tenant fit out of over 50,000 SF leased space at Inova Center for Personalized Health Campus in Fairfax, VA

- Support educational programming for UVA | NOVA

  – Classrooms, offices, conference rooms, reception space, open work areas

  – Structural and infrastructure enhancements

- Project budget: $20.6M

2021-2022 Sustainability Report

2020-2030 GOALS

Serving our Community & the Environment
(approved by the Board of Visitors, December 2019)

1. **Be carbon neutral by 2030 and fossil fuel free by 2050**

2. Achieve the "30 by 30" goals by 2030 (relative to 2010 levels)
   - Reduce water use and reactive nitrogen losses by 30%
   - Reduce our waste footprint to 30%
   - Increase sustainable food purchases to 30% by 2030

3. Partner with our community to accelerate collaborative initiatives to advance sustainable, equitable, and healthy places for all

4. Enhance sustainability-focused research and curriculum

2020–2030
PLAN PROGRESS

43% REDUCTION IN GREENHOUSE GAS EMISSIONS SINCE 2010

370 SUSTAINABILITY-RELATED COURSES

1 of 70 COLLEGES WORLDWIDE WITH AASHE STARS GOLD (V2.1)

4,000 POUNDS OF COMPOST COLLECTED BY ZERO WASTE AMBASSADORS

78 LEED-CERTIFIED BUILDINGS ON GROUNDS AND AT COLLEGE AT WISE

$21.6M SAVED DUE TO ENERGY EFFICIENCY MEASURES OVER THE PAST 3 YEARS

26.5% REDUCTION IN POTABLE WATER CONSUMPTION SINCE 2010

33% OF UVA DINE'S FOOD AND DRINK BUDGET SPENT ON SUSTAINABLE PRODUCTS

$5M NATIONAL GRANT RECEIVED FOR COASTAL FUTURES HUB

4 BATTERY ELECTRIC BUSES PURCHASED, ARRIVING IN FALL 2023

2020-2030 Plan Progress: Steward

- Since 2010, have reduced greenhouse gases by 43% and potable water consumption by 26.5%

- $21.6M saved over 3 years through energy efficiency upgrades

- 33% of UVA Dine's food and beverage budget spent on sustainable products

- Green fleet (low-emission vehicles, electric buses)

- 78 LEED-certified buildings (4.5 million SF)

UVA 2021 Carbon Footprint

-43.4%

GHG Emissions (*MTCO2e*)

Legend: Direct Transportation | Operations Support | Stationary Fuel | Electricity
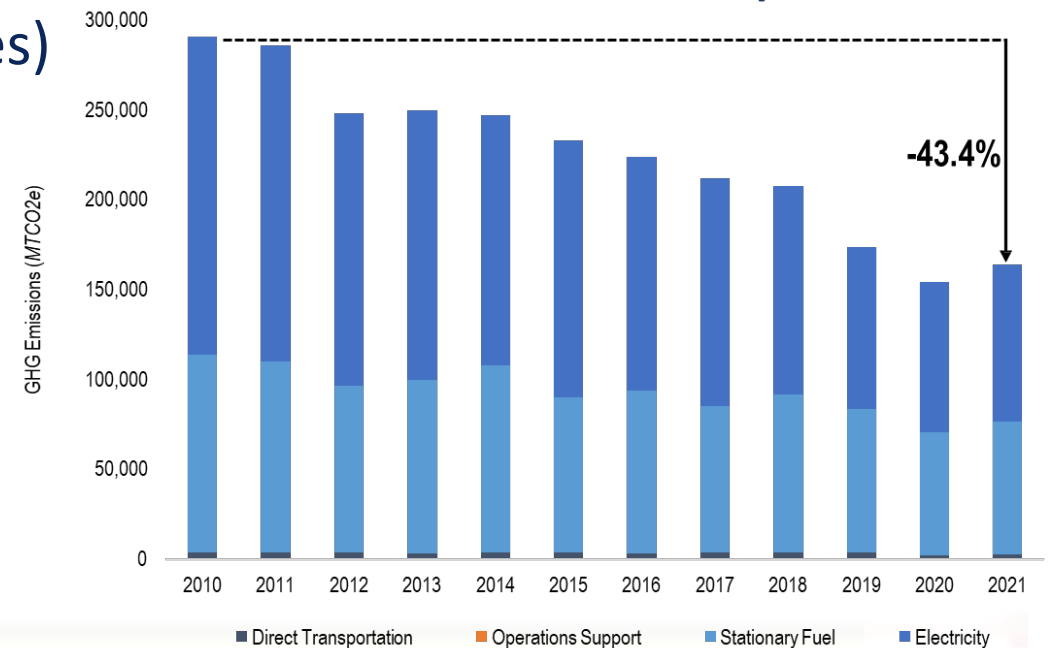
2020-2030 Plan Progress: Engage

- Expanded student volunteer opportunities through Service Learning program

- Reduced waste through Zero Waste Ambassadors and Eco-Leaders programs

- Increased participation in Sustainability Advocates program

- Enhanced engagement with City, County, and other institutions of higher education

35+ SUSTAINABILITY STUDENT ORGANIZATIONS
256 SUSTAINABILITY VOLUNTEERS
100 EVENTS
105 ARTICLES & MENTIONS
5,300+ NEWSLETTER SUBSCRIBERS
7,325 SOCIAL MEDIA FOLLOWERS

2020-2030 Plan Progress: Discover

- Expanded sustainability-related teaching and research offerings (370 sustainability-related courses)

- Environmental change and human well-being research through Environmental Research Institute (ERI)

- Enhanced academic outreach (Climate & Health Conference, Morven Farm, Decarbonization Academy)

16 — EXPERIENTIAL LEARNING PROJECTS SUPPORTED BY ERI

25 — STUDENTS ENROLLED IN FIRST-EVER SUSTAINABILITY ELECTIVE IN SCHOOL OF MEDICINE

40 — PARTICIPANTS IN ERI FELLOWSHIPS, INTERNSHIPS AND EXTERNSHIPS

55 — GRADUATES IN CLASS OF '22 WITH SUSTAINABILITY-RELATED MAJORS

100 — NEW CASES, ARTICLES AND COURSES PLANNED AT DARDEN

$60 million — TO BE INVESTED IN SUSTAINABILITY RESEARCH

SUSTAINABILITY
RECENT RECOGNITION

AASHE STARS – GOLD

PRINCETON REVIEW GUIDE TO GREEN COLLEGES 2022

BEE CAMPUS USA CERTIFICATION XERES SOCIETY

Green Fleet Award, National Association of Fleet Administrators

TREE CAMPUS USA, ARBOR DAY FOUNDATION

Governor's Award for Environmental Excellence 2022 — Waste Minimization

LEAGUE OF AMERICAN BICYCLISTS BICYCLE FRIENDLY UNIVERSITY – SILVER

EPA GREEN POWER PARTNER 2022 — TOP 30 IN U.S. HIGHER EDUCATION

APPA 2022 Award and NAFA "Best Special Project" Award — UVA Mindful Driving Program

2021 IDEA INNOVATION AWARD, INDUSTRIAL DISTRICT ENERGY ASSOCATION

Implementation of Capital Program Recommendations

Goals and scope of work

Primary goals

- Evaluate total cost (i.e., project cost) of major capital projects at UVA

- Identify primary cost drivers and benchmark costs against comparable institutions

- Develop recommendations to address factors that influence cost of capital projects at UVA

Scope of work

- Assessed factors and trends that influence the cost of capital projects

- Conducted interviews with Board members; executive leadership; project sponsors and others involved in capital process; external architects and contractors that have worked on UVA projects

- Provided detailed report of findings and recommendations

Summary of HKA's Findings

- UVA's costs are in line with other institutions and industry norms

  – Key drivers include project scope (program, building size), design processes and standards, and market conditions

- UVA's governance model has many positive elements and is staffed by competent and dedicated professionals

- Several opportunities to improve program

  – Cost savings opportunities

  – Governance improvements

Capital Program Improvements Status Report

	Area	Recommendations	Priority	Timeline/Target Completion	Status
1	Program / Project Ownership	Develop and implement project charter process	High	Begin implementing with capital projects initiated in summer/fall 2022	◑
2	Project Management Processes & Tools	Develop a coordinated set of project management procedures and tools/templates	Medium	Fall 2022	◐
		Devise an oversight strategy to ensure project teams are complying with required processes	Low	Fall 2022	◐
3	Reporting & Communication	Prepare regular program-level dashboard reports	High	Summer/fall 2022	●
		Prepare regular project status reports	High	In progress; full implementation by late fall 2022	◑
		Explore additional e-Builder reporting capabilities	Low	TBD	○
		Develop a Campus Client Guide	Medium	Fall 2022	◐
4	Budget Development & Management	Conduct a more rigorous budget development process that includes applying risk management principles to formally establish, track, and forecast contingency needs	High	Implement with project charter	◑
		Track subsequent adjustments to the approved budget and basis of estimate in a report/log that identifies the cause of any change and how increases will be funded	High	Implement with project charter	◑

Capital Program Improvements Status Report

	Area	Recommendations	Priority	Timeline/Target Completion	Status
5	Design Management	Adhere to a design-to-budget approach	High	Implement with project charter	◑
		Standardize value management logs	Medium	Implement with project charter	◑
6	Design Criteria	Allow more economical design solutions based on building location and function (e.g., housing vs. academic)	Low	Design solution/options to be discussed at initial Project Steering Committee meeting	●
		Review and update Facility Design Guidelines (FDG)	Medium	FDGs reviewed and updated on a three-year cycle (most recent update December 2021)	●
7	Project Delivery Strategy	Consider the optimal project delivery method given a project's goals and constraints (e.g., CM at Risk may not be necessary for straightforward projects)	Low	Delivery method to be discussed at initial Project Steering Committee meeting	●
		When using early packages, ensure the design and CM teams have adequate time and resources to coordinate such work with the balance of design to avoid excessive scope gaps and change orders	Medium	Fall 2022	◐

Capital Program Improvements Status Report

	Area	Recommendations	Priority	Timeline/Target Completion	Status
8	Change Management	Develop and implement a detailed change order management process to promote consistency in the assessment and negotiation of contractor change order proposals	High	Fall 2022	◑
9	Risk Management	Establish a standard risk management process that includes developing and updating a risk register for the duration of a project	High	Implement with project charter	◐
10	Cost & Schedule Management	Regularly monitor and report out on cost and schedule variances and trends	High	Summer/fall 2022	●
11	Lessons Learned	Develop a standard process and format for discussing and documenting lessons learned	Low	Late 2022	◔
12	Staff Development & Training	Develop and enhance in-house scheduling, estimating, and risk management expertise.	Low	Fall 2022	◑