

Committee Minutes
BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Open Session

Board Members Present: Shelley Barlow, Greta Harris, C.T. Hill, Sharon Brickhouse Martin, Chris Peterson, Mehul Sanghani, Dennis Treacy, Horacio Valeiras, Jeff Veatch, Preston White

Board Representatives: Madelynn Todd

Virginia Tech Staff: Jeri Baker, Cyril Clarke, Al Cooper, Elaine Gall, Bryan Garey, Dee Harris, Kay Heidbreder, Chris Kiwus, Brian Kubecki, Sharon Kurek, Heidi Myers, Kim O'Rourke, Patty Perillo, Dwayne Pinkney, Tim Sands, Kayla Smith, Ken Smith, Don Taylor, Dwyn Taylor, Jon Clark Teglas, Tracy Vosburgh, Lisa Wilkes, Sherwood Wilson

1. **Welcome**
2. **Consent Agenda:** The Committee approved and accepted the items listed on the Consent Agenda.
 - a. **Approval of the Minutes from the June 3, 2019 Meeting:** The Committee approved minutes from the June 3, 2019 meeting.
 - * b. **Resolution to Revise the Guidelines for Projects under the Public-Private Education Facilities and Infrastructure Act of 2002:** The Committee approved revisions to the Guidelines for Projects under the Public-Private Education Facilities and Infrastructure Act of 2002.
 - * c. **Resolution for Town of Blacksburg Water Line Easement:** The Committee approved an easement to the Town of Blacksburg to connect with a main water line on university property.
 - * d. **Resolution for Amendment of the NRV Regional Water Authority Water Agreement and Support for Bond Financing by the Authority:** The Committee approved a resolution approving the form of the "Second Amended and Restated Water Agreement" between the NRV Regional Water Authority and its members (the Towns of Blacksburg and Christiansburg, Montgomery County, Montgomery County Public Service

Authority, and Virginia Tech) and supporting bond financing by the Authority to provide water main infrastructure improvements.

- e. **Design Review for Merryman Center Weight Room Renovation and Expansion:** The Committee approved the design review for the Merryman Center Weight Room renovation and expansion.
 - f. **Design Review for Livestock and Poultry Research Facilities Phase I:** The Committee approved the design review for the Livestock and Poultry Research Facilities.
 - g. **Acceptance of the Capital Project Status Report:** The Committee accepted the quarterly capital project status report.
3. **Presentation on Parking and Transportation:** The Committee received a presentation on the university's Parking and Transportation operations from Assistant Vice President for Business Services, Heidi Myers, and Director of Parking and Transportation, Jeri Baker. The presentation provided information on current operations, how mobility was incorporated into the Campus Master Plan process, and how university departments are preparing for the potential parking and transportation disruptions associated with current and near-term capital construction projects. The Committee discussed on-going projects related to identifying available parking, electric scooters, and communications regarding transportation changes for special events and other lot closures. The range of current and planned parking and alternative transportation strategies will position the university well for future university growth and development.
4. **Design Preview for Dietrick Hall Enclosure and Spirit Plaza:** The Committee approved the design preview for Dietrick Hall Enclosure and Spirit Plaza project.
5. **Design Review for Student Wellness Improvements:** The Committee approved the design review for the Student Wellness Improvements project.
6. **Design Review for Undergraduate Science Laboratory:** The Committee approved the design review for the Undergraduate Science Laboratory project.
7. **Future Agenda Items and Closing Remarks:** The Committee discussed potential topics for inclusion on future meeting agendas. Dr. Wilson provided a project status update on the Academic Building at the Innovation Campus and a projected timeline for development of a Comprehensive Agreement for the Smart Construction PPEA project at Falls Church (attached). Board members emphasized the importance of considering housing affordability as part of the

university's planning efforts and requested that an update on the Academic Building at the Innovation Campus be provided at each future meeting.

Joint Open Session with the Building and Grounds Committee

Board Members Present: Ed Baine, Shelley Barlow, Greta Harris, C.T. Hill, Anna James, Ryan King – Graduate Student Representative, Tish Long, Sharon Brickhouse Martin, Melissa Nelson, Mehul Sanghani, Dennis Treacy, Horacio Valeiras, Jeff Veatch, Preston White

Virginia Tech Staff: Mac Babb, Callan Bartel, Bob Broyden, John Cusimano, John Dooley, Juan Espinoza, Ron Fricker, Elaine Gall, Tim Hodge, Chris Kiwus, Nancy Meacham, Heidi Myers, Kim O'Rourke, Charlie Phlegar, Menah Pratt-Clarke, Tim Sands, Dwight Shelton, Ken Smith, Robert Sumichrast, Dwyn Taylor, Jon Clark Teglas, Sherwood Wilson

1. **Consent Agenda:** Update on the 2020-2026 Capital Outlay Plan: At the April 2019 meeting, the Committees approved the university's list of potential projects for inclusion in the 2020-2026 Capital Outlay Plan and authorized the university to develop and submit a final plan to the State in accordance with future guidance from the State and based on the projects in the approved list. The university proceeded accordingly and met the State's July 2019 deadline for submission of the plan. Based on the instructions received from the State, and consistent with the Board approved Six-Year Capital Outlay Plan, the university submitted a list of projects requesting some portion of General Fund resources in their budget. This report provided the list of projects ranked in priority order submitted to the state, state capital budget review and approval process, and the list of Nongeneral Fund Projects included in the Six-Year Capital Outlay Plan for 2020-2026.
- * 2. **Approval of Resolution for a Capital Lease for the Kmart and Ardmore Properties:** The Committees reviewed for approval a Resolution for a Capital Lease for the Kmart and Ardmore Properties to secure space for university functions and for surplus storage and printing services. This capital lease includes a 20-year lease renewal for the 55,552 square foot warehouse space located at 1425 South Main Street (Kmart), contingent upon the execution of a new 20-year term lease of a 9,460 square foot property adjacent to the Kmart space, at 131 Ardmore Street (Ardmore). A provision of the Ardmore lease is that the landlord will gift the Ardmore property to the university at the expiration of the lease.

The cost of the Kmart space is \$7.04 per square foot, which is significantly below local market rates of \$14.00 to \$18.00 per square foot. An alternate space with comparable

size, price, and convenience is unavailable, and the university cannot build a replacement space at a lower cost. Additionally, the rate for the Ardmore space is \$7.50 per square foot, which is also significantly below the market rate.

The university has an amended lease agreement for an additional 20 years at the rates described above with discounted cash flows at a present value of \$6.9 million. This capital lease will provide lower cost storage options and will accrue savings in operation budgets while ensuring convenient, expanded space and uninterrupted operations. The university is prepared to proceed with the Kmart and Ardmore capital lease and has developed a resource plan to support the annual lease.

The Committees encouraged the university to negotiate the inclusion of language in the lease that would allow the university the opportunity to acquire the Ardmore property lease at any time during the lease or at specific points during the twenty-year lease through a negotiated lease payoff.

This request is for authorization to move forward with a \$6.9 million capital lease for the Kmart and Ardmore properties.

The Committees recommended the Resolution for a Capital Lease for the Kmart and Ardmore Properties to the full Board for approval.

3. **Discussion of the Resolution for Funding Supplement to the Student-Athlete Performance Center Capital Project Approved by the Executive Committee on July 18, 2019:** The Committees had an opportunity to discuss the Resolution for Funding Supplement to the Student-Athlete Performance Center Capital Project, which was approved by the Executive Committee during the July 18, 2019 meeting. This resolution was ratified at the full Board meeting on August 26, 2019.

There being no further business, the meeting adjourned at 10:13 a.m.

*** Requires full Board approval.**



Academic Building on the Innovation Campus

Project Status Report

Report Date: August 23, 2019



EXECUTIVE SUMMARY

Building description: The Academic Building on the Innovation Campus is anticipated to meet a programmatic goal of 300,000 gross square feet and provide academic classroom, research, office, and support spaces for primarily graduate programs including, but not limited to, Computer Science and Computer Engineering. Experimental Learning spaces within the building will enhance the “VT Experience” and will include:

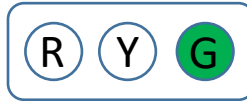
- Multi-purpose spaces - flexible spaces designed to promote entrepreneurship and academic/industry collaboration
- Research and testing spaces that connect multidisciplinary research and entrepreneurship activities
- Maker spaces that support experimentation, fabrication, and prototype development

Site description: The building site is located at the northern end of a 15-acre parcel near Four Mile Run, the creek separating Alexandria and Arlington, VA within the North Potomac Yard mixed use development district. The site is adjacent to Potomac Avenue to the west and a railway and George Washington Memorial Parkway to the east. A Metro stop is proposed nearby within walking distance.

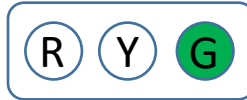
Current project status: Design services for the building are under procurement. A pre-proposal meeting was held in Arlington on August 1st with more than 230 people/100 firms attending. Proposals from architectural/engineering (A/E) firms were due on August 16, 2019 and we received a very high number of them (more than 30).

Project Status Details

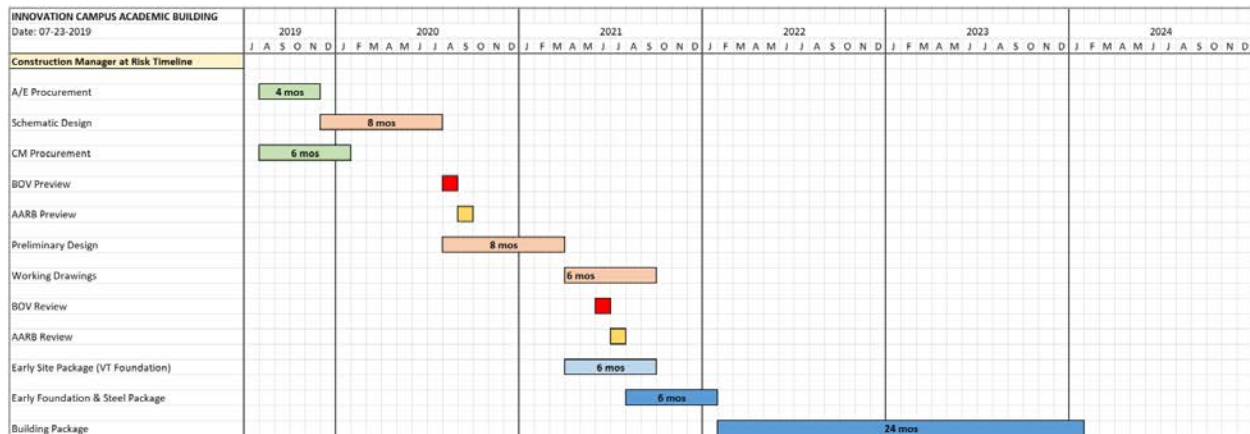
Project Schedule Status (stoplight chart):



Project Budget Status (stoplight chart):



Project schedule:



Next actions:

Action Description

Target Date:

- o Release CMaR Request for Qualifications (RFQ) August 2019
- o Shortlist & Interview A/E firms October 2019
- o Release CMaR Request for Proposals (RFP) October 2019
- o Award A/E contract December 2019
- o Award CMaR contract January 2020

Target Design Complete: October 2021

Design % Complete: (Under procurement)

Target Construction Complete: January 2024

Construction % Complete: ____%

Project procurement method: Construction Manager at Risk (CMaR)

A/E Firm: TBD

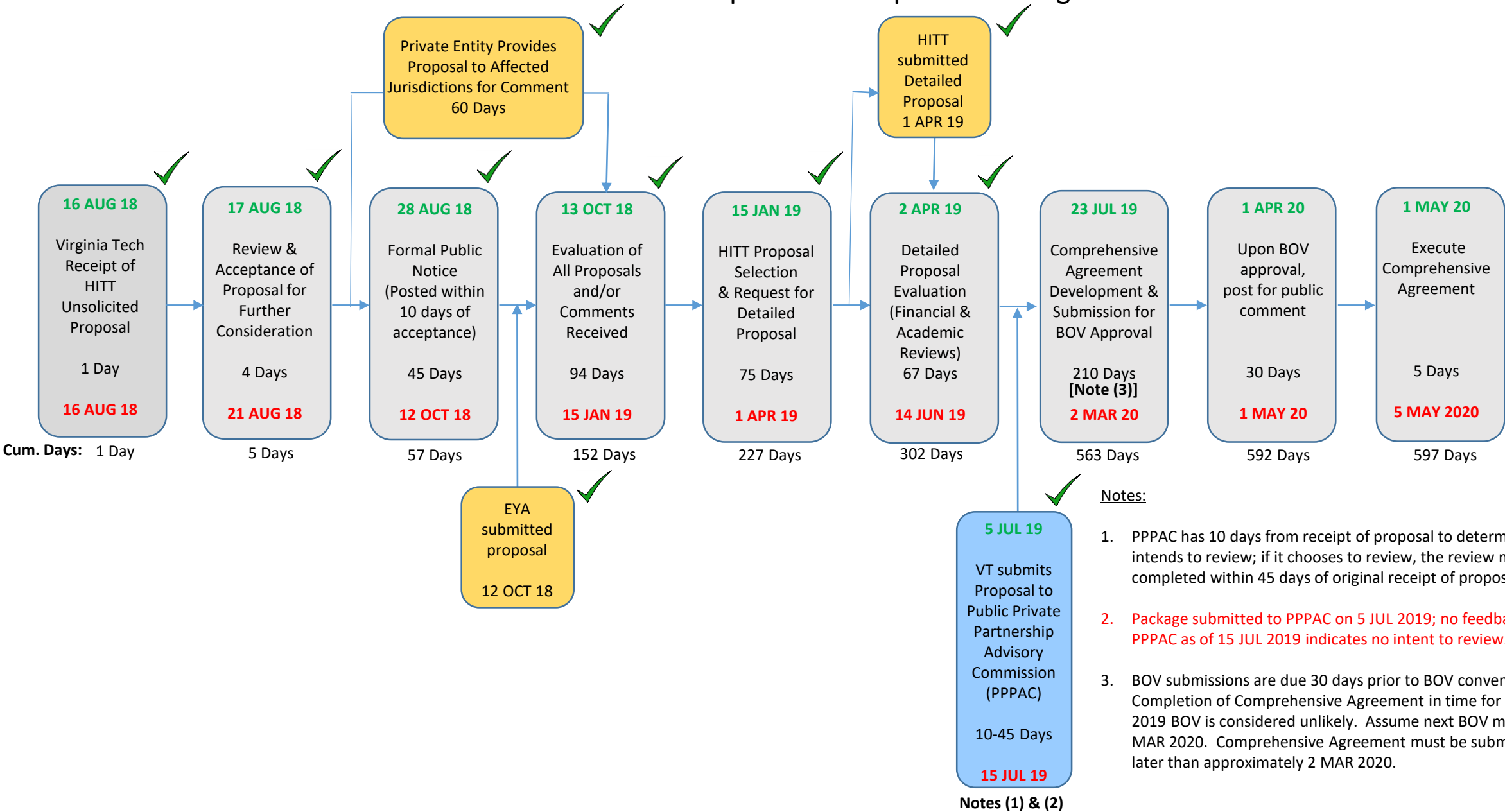
CMaR Firm: TBD

VT Project Manager: Travis Jessee

Building Official: Elaine Gall

Northern Virginia Academic Center Site Redevelopment
PPEA Timeline: Unsolicited Proposal to Comprehensive Agreement

Date prepared: 07/16/2019



Capital Construction Executive Summary

Date Prepared: August 21, 2019

Project Title	Total Project Cost, \$M	New Const (SF)	Renovation (SF)	CY 2019				CY 2020				CY 2021				CY 2022				CY 2023				CY 2024
				Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)	Q1 (Jan-Mar)
Renovate/Renew Academic Buildings --- (COMPLETE)	\$35.0	7,743	56,563																					
VTC Biomedical Research Expansion (PPEA)	\$91.7	139,586	-																					
ACC Network Studio --- (COMPLETE)	\$10.0	4,161	-																					
Undergraduate Science Lab (Renovations - Derring & Hahn Halls)	\$10.0	338	14,781																					
Commonwealth Ballroom -- Squires --- (COMPLETE)	\$3.2	0	13,800																					
New Package Boiler #12	\$6.8	N/A	N/A																					
Creativity & Innovation District Living Learning Community	\$105.5	225,000	-																					
Improve Kentland Facilities (Phase II) -- Various Locations	\$12.5	28,403	-																					
Chiller Plant Phase II	\$41.3	N/A	N/A																					
Holden Hall Renovation	\$72.3	81,000	20,240																					
Student Athlete Performance Center (Jameson Hall)	\$16.7	10,800	15,000																					
Livestock & Poultry Research Facilities (Phase I) -- Various Locations	\$22.5	128,895	-																					
Merryman Center Weight Room Renovations	\$4.9	4,880	17,640																					
Student Wellness Improvements (War Memorial Gym & McComas Hall)	\$58.7	15,315	247,619																					
HITT Hall and New Dining Facility	\$68.0	102,000	-																					
Dietrick Dining Hall First Floor Enclosure & Spirit Plaza	\$8.3	6,298	11,960																					
Corps Leadership & Military Science Building	\$52.0	75,500	-																					
New Upper Quad Residence Hall (Femoyer Hall Replacement)	\$33.0	54,500	-																					
Global Business & Analytics Complex (GBAC) Residence Halls	\$84.0	160,000	-																					
Undergraduate Science Lab (New)	\$74.8	102,000	-																					
Slusher Hall Replacement	\$77.0	196,000	-																					
Data & Decision Sciences Building (D&DS)	\$79.0	120,000	-																					
Multi-Modal Transit Facility	\$34.0	13,606	-																					
Tennis Facility Addition & Renovation	TBD	6,731	150																					
Innovation Campus Academic Building (ICAB)	\$275.0	300,000	-																					
Northern Virginia Center Falls Church (PPEA)	TBD	50,000	-																					
TOTALS	\$1,276.2	1,832,756	397,753																					

Legend:

Design

Construction

DESIGN PREVIEW FOR MERRYMAN CENTER WEIGHT ROOM RENOVATION AND EXPANSION

The Merryman Center Weight Room Renovation and Expansion project represents an additional Virginia Tech resource for student-athlete training and preparation. The project, in combination with the to-be-constructed Student-Athlete Performance Center dining facility, will introduce spaces for a full spectrum of training needs in a centralized location. Practice facilities, strength training, classroom preparation, and dining facilities will all be located adjacent to one another.

With a minor addition, which remains within the footprint of the original building, the Merryman Center will accommodate new program spaces while maintaining the fundamental character of the original facility. Physical preparation (i.e., weight room) spaces are located on the lower level and largely consist of a renovation and reconfiguration. Mental preparation (i.e., classroom/meeting room) space is located on the upper level and will be housed in the newly constructed space.

All project funding will come from private gifts. The total project cost is estimated at \$4.9 million.

Capital Project Information Summary – Merryman Center Weight Room Renovation & Expansion

BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Title of Project:

Merryman Center Weight Room Renovation & Expansion

Location:

Located in the Virginia Tech Athletics District, the Merryman Center abuts Beamer Way between Lane Stadium and Washington Street. The project itself, on the east side of the building, faces the existing outdoor practice field and indoor practice facility.

Current Project Status and Schedule:

The project is currently in working drawings. Design is targeted to conclude and construction to commence in fall 2019. Occupancy is targeted for fall 2020.

Project Description:

The project helps to create an athletic quad-like experience centered on the outdoor practice field. Consisting of an expanded weight room, classroom meeting spaces, and grab 'n go dining, the project adds to a network of support spaces for student-athlete preparation and training. This expanded capacity enhances off-the-field training opportunities necessary for successful performance in competition.

Brief Program Description:

The project consists of seven key program elements. The major element is the renovated weight room (approximately 12,700 square feet). By combining two previously separated spaces, the renovation will expand strength and conditioning opportunities with new workout equipment and stations, as well as improved space for circulation between the stations. Position meeting rooms (approximately 4,400 square feet) will enable position-focused player meetings for game preparation and review. Directly adjacent to the weight room, coaches' offices (approximately 1,250 square feet) will facilitate off-the-field interaction with players. The project will also contain a small grab 'n go food service option (at approximately 650 square feet). Remaining space is devoted to entryway, circulation, and support spaces.

Contextual Issues and Design Intent:

The original late 1990's-era Merryman Center will remain largely intact with no visible signs of modification as viewed from Beamer Way. Renovation includes a

minor expansion to accommodate the position rooms. The new clear anodized storefront system, aluminum composite material column covers and spandrel panels will complement the existing Merryman Center while transparency, modulation, and proportions will knit together the Virginia Tech Athletics District including the proposed Student-Athlete Performance Center addition to the Jamerson Center.

Funding:

All project funding will come from private gifts. The total project cost is estimated at \$4.9 million.

Architect/Engineer:

Colley Architects

General Contractor:

To be determined

August 26, 2019

Merryman Center Weight Room Renovation & Expansion

Board of Visitors Design Review

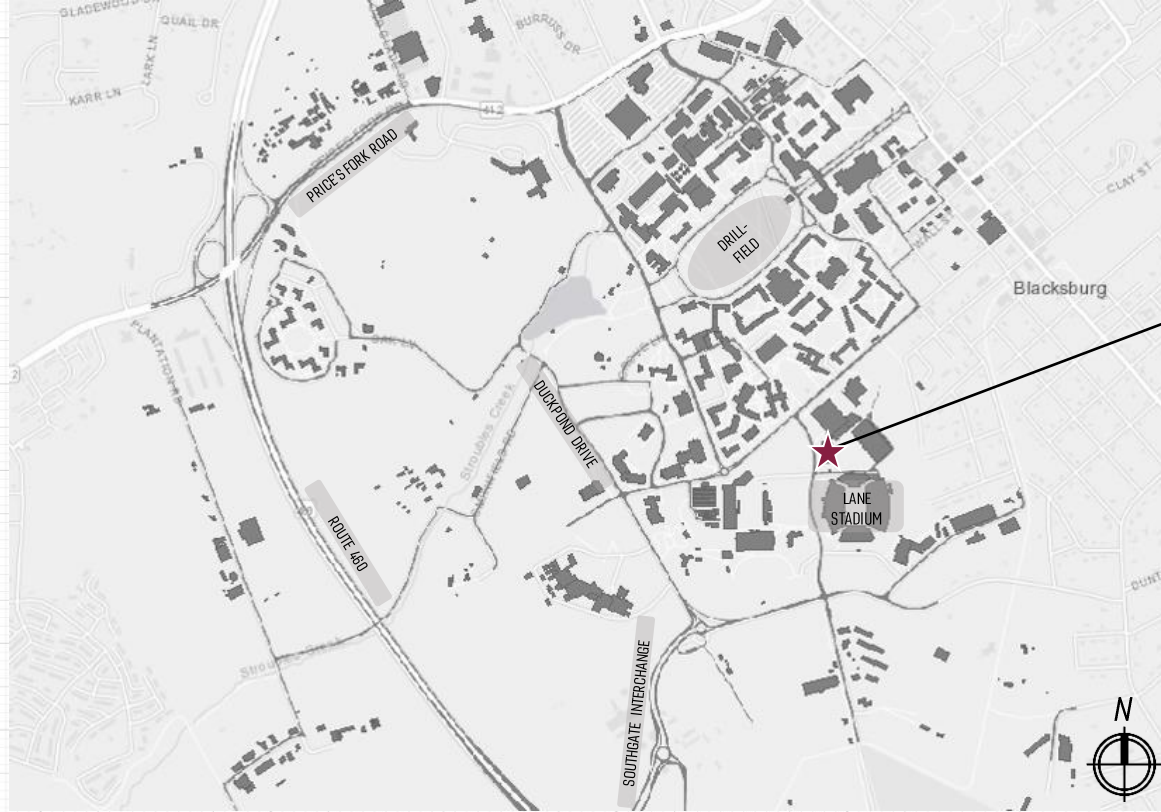
■ Merryman Center Weight Room Renovation & Expansion

Project Information

- Scope:*
 - New construction 22,600 GSF
 - Renovation 2,600 GSF
- Delivery Method: 20,000 GSF
- Total project authorization: Design-bid-build
- Design Phase: \$4.9 million
- Construction Start: Working drawings
- Targeted Occupancy: Fall 2019
- Targeted Occupancy: Fall 2020

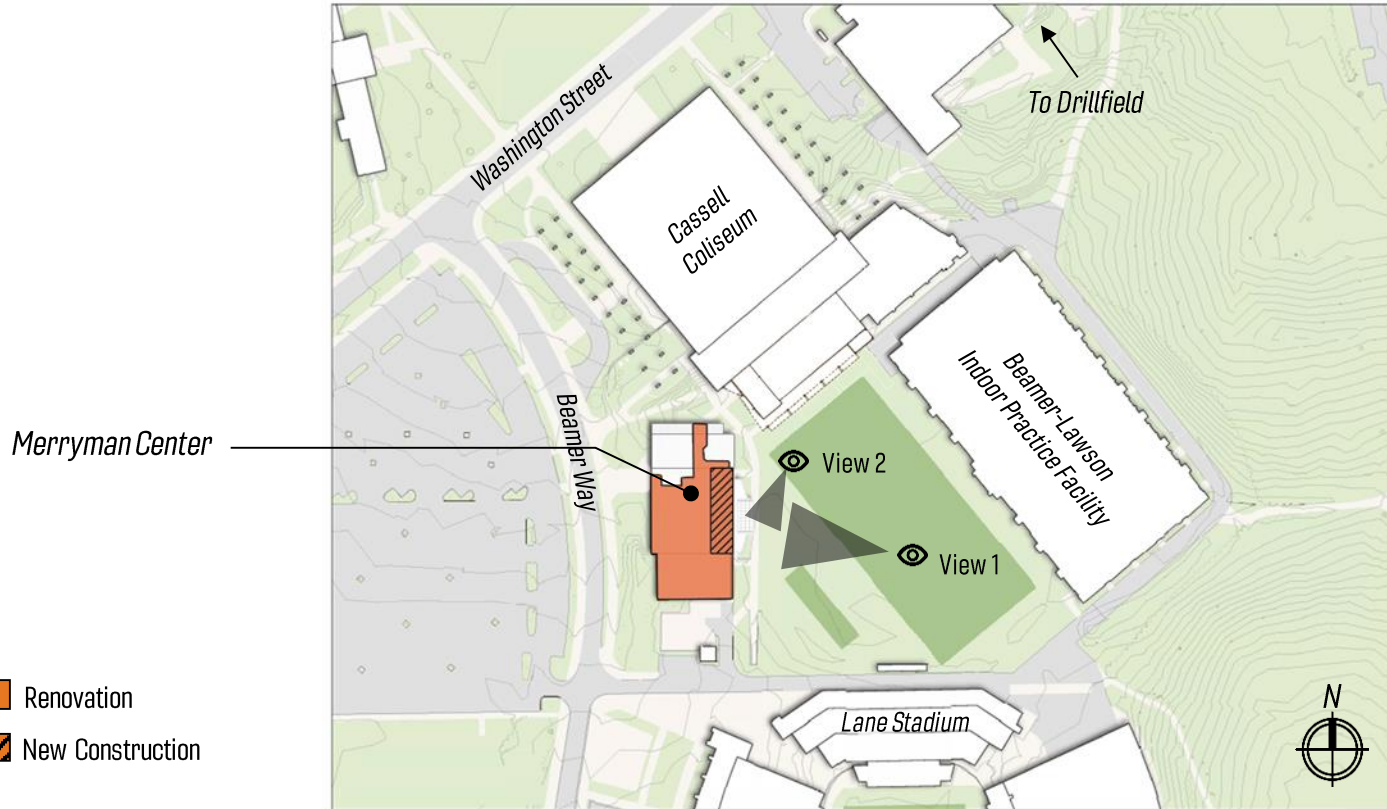
■ Merryman Center Weight Room Renovation & Expansion

Project Location



■ Merryman Center Weight Room Renovation & Expansion

Site Plan



■ Merryman Center Weight Room Renovation & Expansion

View 1 - Existing Condition



■ Merryman Center Weight Room Renovation & Expansion

View 1 – Future Condition

New story

New entryway



■ Merryman Center Weight Room Renovation & Expansion

View 2 - Existing Condition



■ Merryman Center Weight Room Renovation & Expansion

View 2 - Future Condition

*Anodized aluminum
column covers*

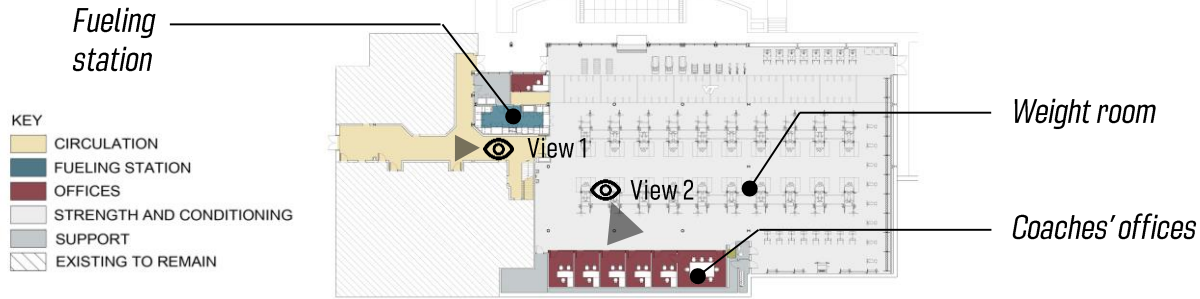


*Storefront glazing
system*

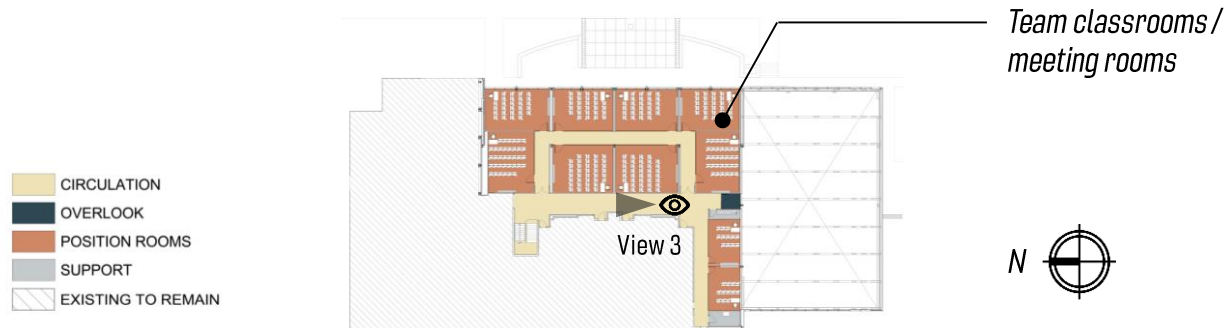
■ Merryman Center Weight Room Renovation & Expansion

Floor Plans

Lower Level

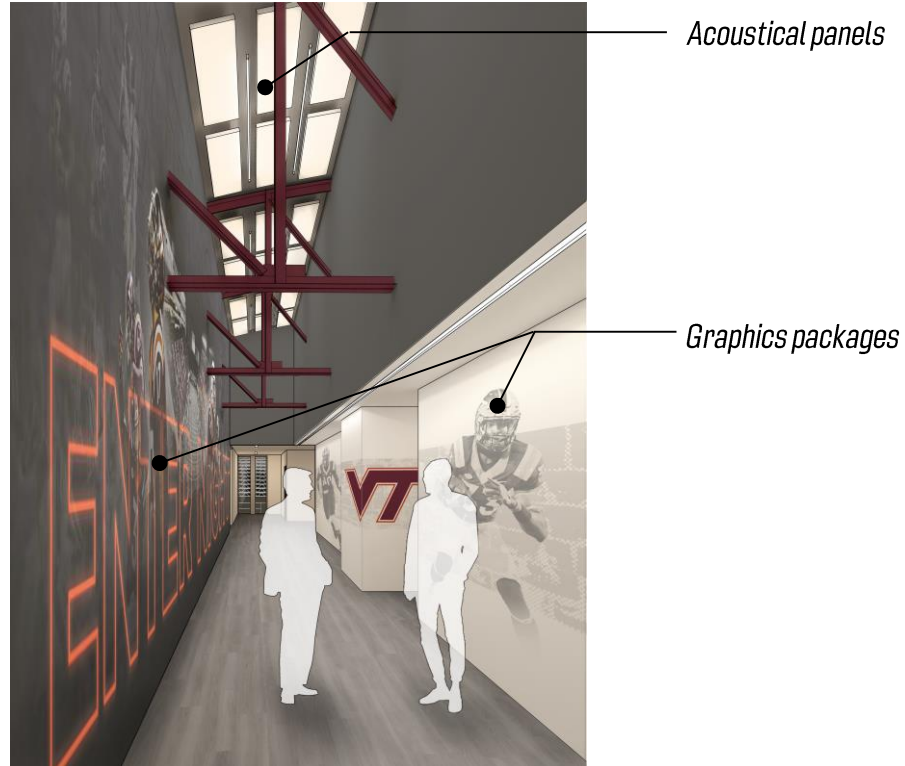


Main Level



■ Merryman Center Weight Room Renovation & Expansion

View 1 - Entry Sequence



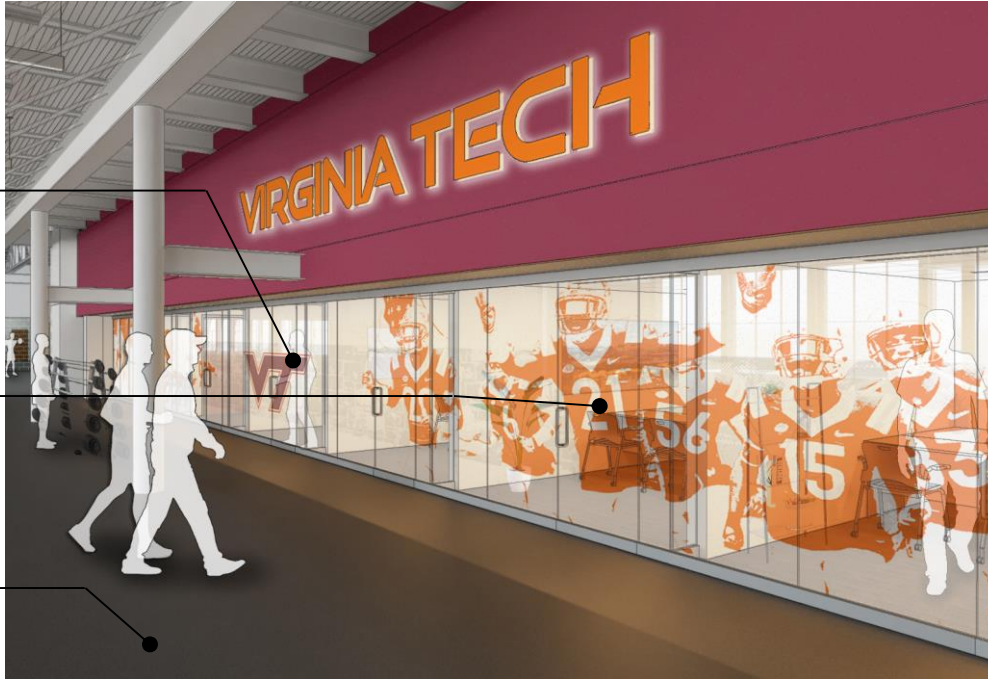
■ Merryman Center Weight Room Renovation & Expansion

View 2 - Weight Room

Coaches' offices

Graphics package

*Weight room
(sports flooring)*



■ Merryman Center Weight Room Renovation & Expansion

View 3 - Position Rooms



■ Merryman Center Weight Room Renovation & Expansion

Recommendation

- That the Design Review graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.

DESIGN REVIEW FOR LIVESTOCK AND POULTRY RESEARCH FACILITIES – PHASE I

The Livestock and Poultry Research Facilities – Phase I project seeks to enhance spaces available to the College of Agriculture and Life Sciences (CALS). CALS currently possesses several existing buildings that are beyond their useful life. Specifically, improvements are targeted to assist the poultry, swine, equine, and beef cattle programs. To this end, the project seeks to newly construct 10 facilities. The buildings are located at existing Virginia Tech sites on the Plantation Road Corridor, Smithfield Horse Center, at Kentland Farm, and the Glade Road Poultry Research Center. Hay barns will also be constructed in meadows located to the west of campus (herein referred to as miscellaneous facilities).

This project provides for approximately 131,200 gross square feet of newly constructed space. To achieve these improvements, the project requires and the Board of Visitors has approved the demolition of seventeen defunct structures.

This approximately \$22.5 million project is the first of two phases and was authorized and appropriated by the Commonwealth of Virginia in July 2016.

Capital Project Information Summary – Livestock and Poultry Research Facilities – Phase I

BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Title of Project:

Livestock and Poultry Research Facilities – Phase I

Location:

Facilities exist across five primary locations. Location 1, the Plantation Road Corridor, is located southwest of the campus core (beyond Route 460). Location 2, Smithfield Horse Center, sits on the southwestern edge of campus (directly adjacent to the Duck Pond Road parking lot). Location 3, Kentland Farm, is located along the New River nine miles to the west of campus and 13 miles to the north of Radford. Location 4, the Glade Road Poultry Research Center is situated approximately three miles to the northwest of campus along the Town of Blacksburg boundary. Location 5, miscellaneous facilities, consists of two sites located to the southwest of the campus core in open meadows.

Current Project Status and Schedule:

The project is currently in preliminary design. The architect of record (Spectrum Design) seeks to conclude the design process in fall 2019. Construction is targeted to begin in spring 2020 with occupancy targeted for summer 2021.

Project Description:

Across all areas, projects focus on increasing research, animal housing, and storage space for CALS use. Work on the Plantation Road Corridor and Smithfield Horse Center focuses on increasing the supply of animal housing and storage space. Projects in the Glade Road Poultry Research Center also focus on animal housing. Projects at Kentland Farm focus on animal housing and research. Miscellaneous projects focus exclusively on hay storage.

The Plantation Road Corridor will see the construction of two new facilities, an equine barn (for horse housing) and an equipment storage building (for related and general use). An equine barn, existing granary, and two silos (all of which are beyond their useful life) will be demolished at this location. Six additional facilities are scheduled for demolition on the southern portion of Plantation Road. However, this group does not include Building 0538. This facility was renovated, with funding from the NIH, for research on genome editing using swine. More details are included in the program description.

New construction at Smithfield Horse Center consists exclusively of a hay barn.

The facility will be constructed on the site of five structures: three barns (with an associated silo), a shed, and a feeder pen.

Efforts at Kentland Farm focus on the new construction of three facilities. These include a swine facility, designed to replicate a commercial swine production building, which provides additional animal housing for CALS pigs. The Beef Nutrition & Physiology Research Facility is designed for the performance of feed studies on cattle. The complex will include a working area for cattle, a small lab space, and commodity storage. A new hay barn will also be constructed adjacent to the facility. No demolitions or renovations will occur at this site.

New construction at the Glade Road Poultry Center consists of two facilities. Broiler and turkey grow-out facilities, these buildings are designed to provide space for the housing of chickens (broilers) and turkeys for CALS. Projects specifically focus on improving conditions for the processing of broilers and turkeys raised for meat production. These new facilities will be constructed on the sites of two existing (to be demolished) facilities. More details are included in the program description below.

New construction of miscellaneous facilities consists of two hay storage barns.

Brief Program Description:

The project groups facilities to be newly constructed into two categories, major facilities and minor facilities, depending on the complexity of the program and the building's location. Buildings with multi-use programs, or that are located near the main campus, are considered major. Buildings with basic programs, not located near the main campus, are considered minor.

The Plantation Road Corridor will see the construction of one major facility and one minor facility. The major facility is the approximately 13,900 gross square foot Equine Barn. It features over 11,000 square feet of animal housing, approximately 300 square feet of office space, and nearly 2,600 square feet of support and circulation space. A new 5,500 gross square foot Equipment Storage Facility will also be constructed. Its program consists exclusively of storage space.

Smithfield Horse Center will receive one major facility. This building is the approximately 10,000 gross square foot Hay Barn. While featuring a simple program of hay storage space, this facility is considered major due to its location near the western perimeter of the campus core.

Kentland Farm will see the construction of two major facilities and one minor facility. The first major facility is the roughly 26,700 gross square foot Beef Nutrition & Physiology Research Facility. It contains over 21,000 square feet of animal housing and approximately 5,700 square feet of support and storage space. The second major facility is the nearly 24,200 gross square foot Swine Facility. The

majority of the program, nearly 16,700 square feet, is devoted to animal housing. It also contains over 900 square feet of office and classroom use and over 6,600 square feet of support, storage, restroom, and circulation space. The minor facility is an approximately 9,000 gross square foot hay barn. Hay storage is its only programmatic element.

The Glade Road Poultry Research Center will receive two new minor facilities. The new minor facilities, broiler and turkey grow-out facilities, will be approximately 12,200 and 11,200 gross square feet (respectively). Programs consist exclusively of animal housing and support space.

The miscellaneous facilities are both minor structures. These are 8,400 and 10,000 gross square feet (respectively) hay barns. Programs consist almost exclusively of hay storage space.

Contextual Issues and Design Intent:

Facility designs seek consistency with typical agricultural farm-use facilities. Coloration, material selection, and building forms seek to mirror the existing conditions at project sites. This approach features significant use of metal panel for roofs and siding, gabled roof forms, roof monitors, and overall coloration to match nearby buildings (typically white siding and white, gray, or green roofs).

Funding:

This approximately \$22.5 million project is the first of two phases and was authorized and appropriated by the Commonwealth of Virginia in July 2016. The second phase was requested as part of the six-year capital outlay submission to the commonwealth in June 2017; however it was not funded as part of the 2018 Governor's budget and remains pending. The Phase II project scope includes 13 buildings, contains 97,000 gross square feet, and projects a total project budget of \$24.3 million.

Architect/Engineer:

Spectrum Design

General Contractor:

To be determined

August 26, 2019

Livestock and Poultry Research Facilities - Phase I

Board of Visitors Design Review

■ Livestock and Poultry Research Facilities - Phase I

Project Information

- New construction:* 131,200 GSF (10 buildings)
- Delivery method: Design-bid-build
- Total project authorization: \$22.5 million
- Design phase: Preliminary design
- Construction start: Spring 2020
- Targeted occupancy: Summer 2021

■ Project Locations



■ Location 1 - Plantation Road Corridor



■ Location 1 - Plantation Road Corridor



■ Location 1 - Plantation Road Corridor

Existing Condition



■ Location 1 - Plantation Road Corridor

Demolitions



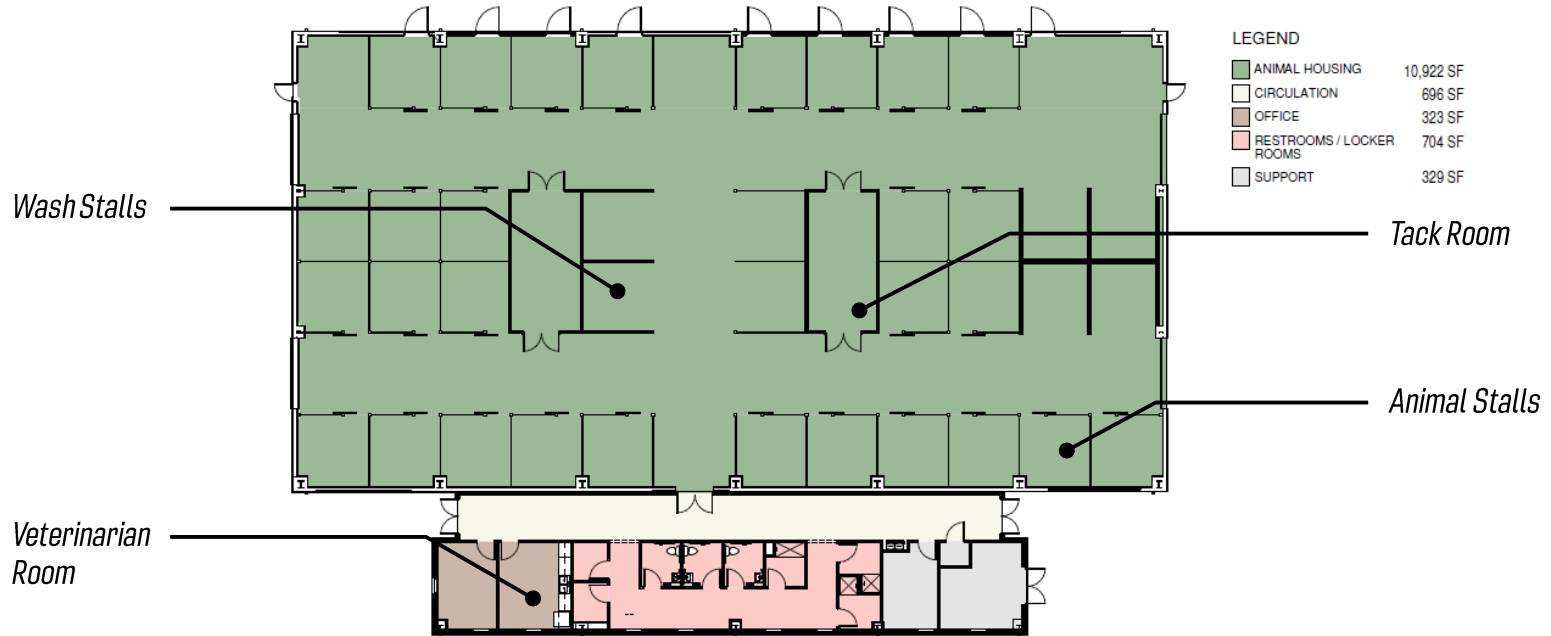
■ Location 1 - Plantation Road Corridor

Future Condition



■ Location 1 - Plantation Road Corridor

Floor Plan – Equine Barn



■ Location 2 - Smithfield Horse Center



■ Location 2 - Smithfield Horse Center



■ Location 2 - Smithfield Horse Center

Existing Condition



■ Location 2 - Smithfield Horse Center

Demolitions

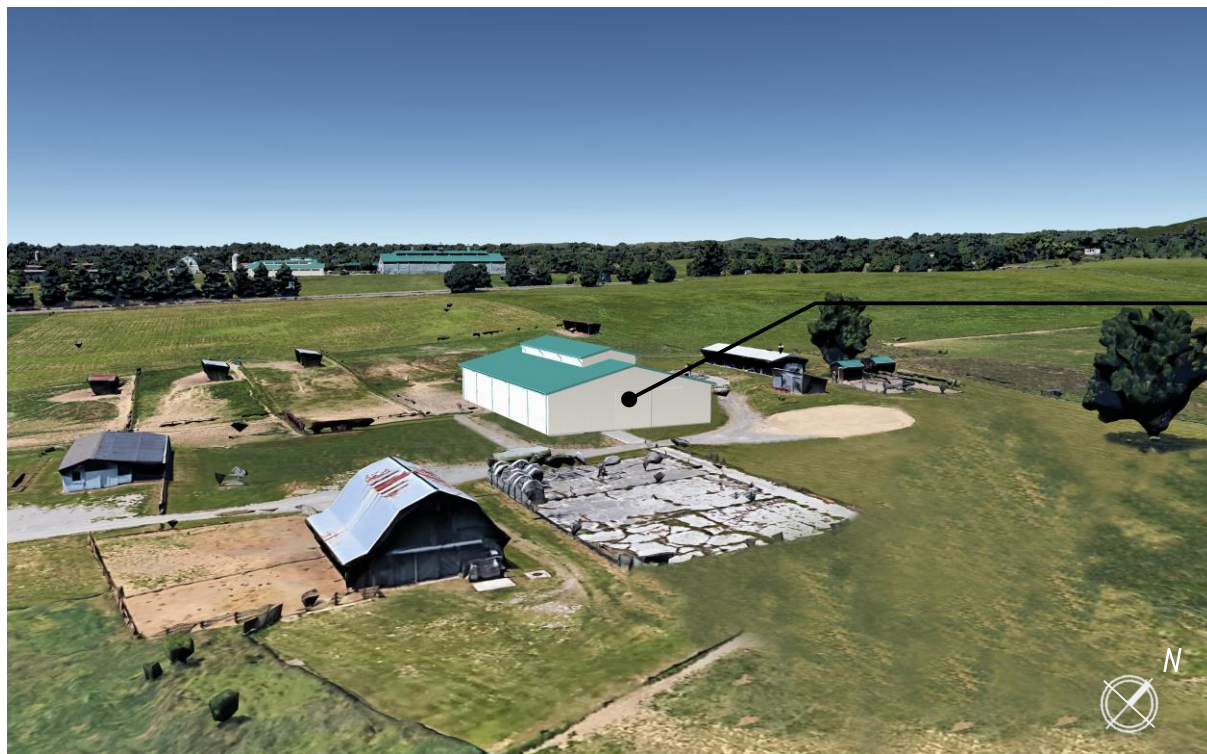


*Feeder barns
and shed*

*Horse barn &
feeder pen*

■ Location 2 - Smithfield Horse Center

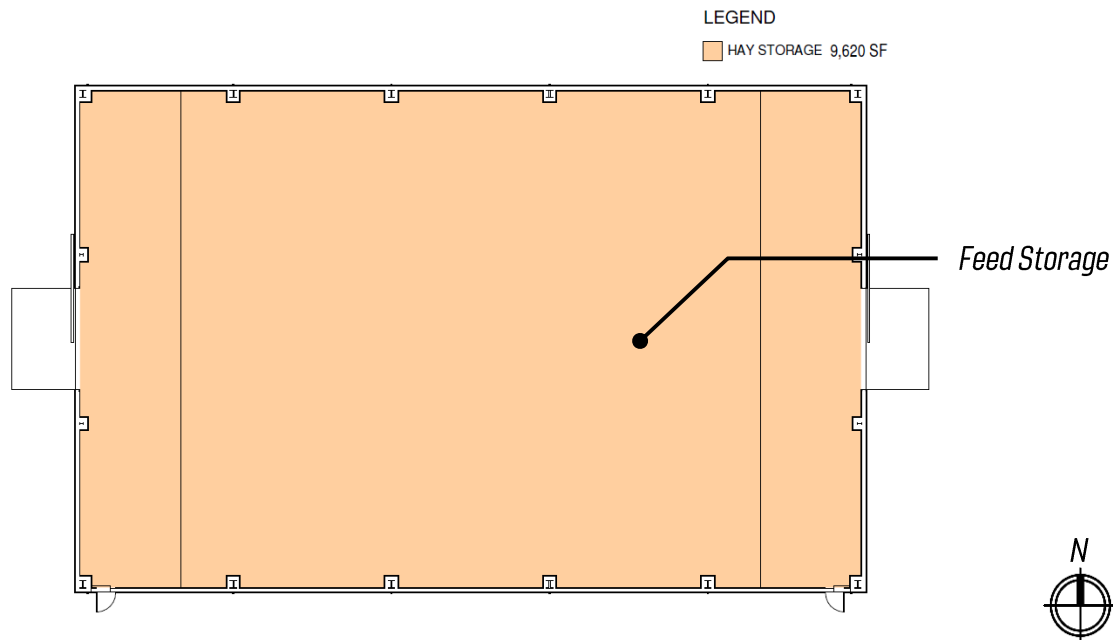
Future Condition



Hay barn

■ Location 2 - Smithfield Horse Center

Floor Plan



■ Location 3 - Kentland Farm



■ Location 3 - Kentland Farm

Swine Facility

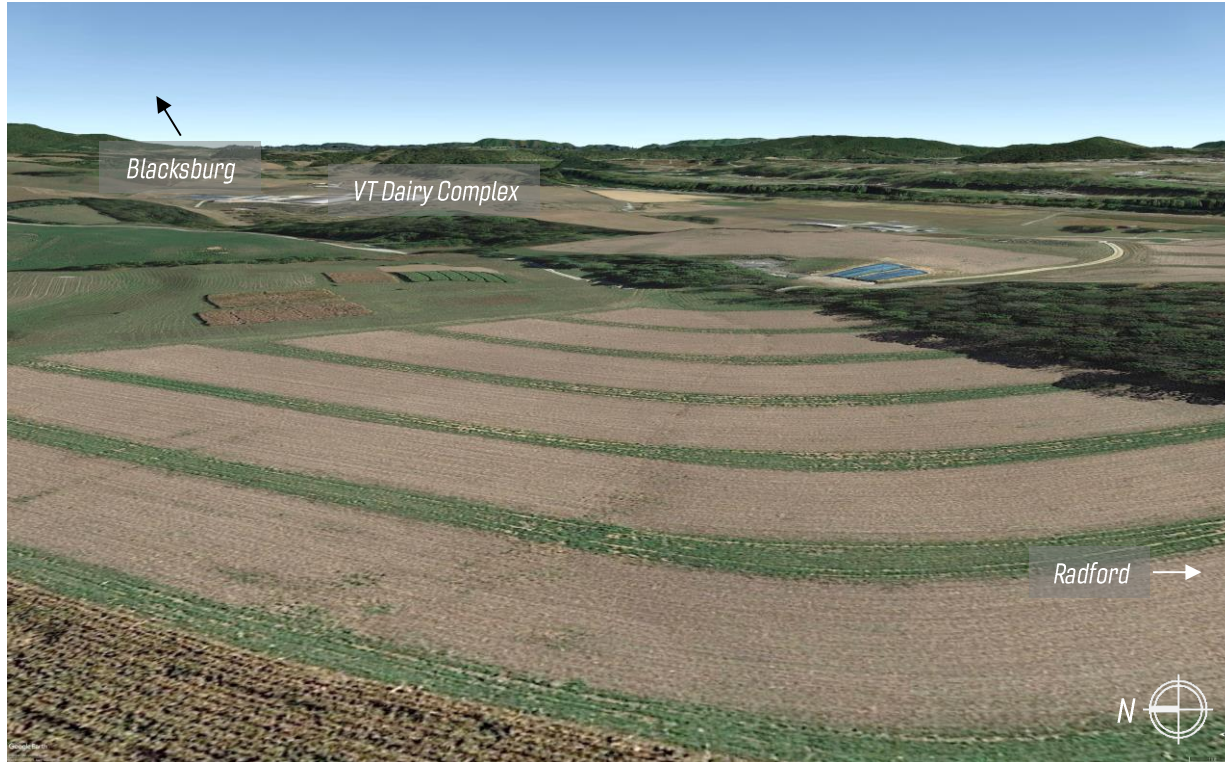
*Beef Nutrition &
Physiology Research
Facility*

★ **Major Facility**
● **Minor Facility**



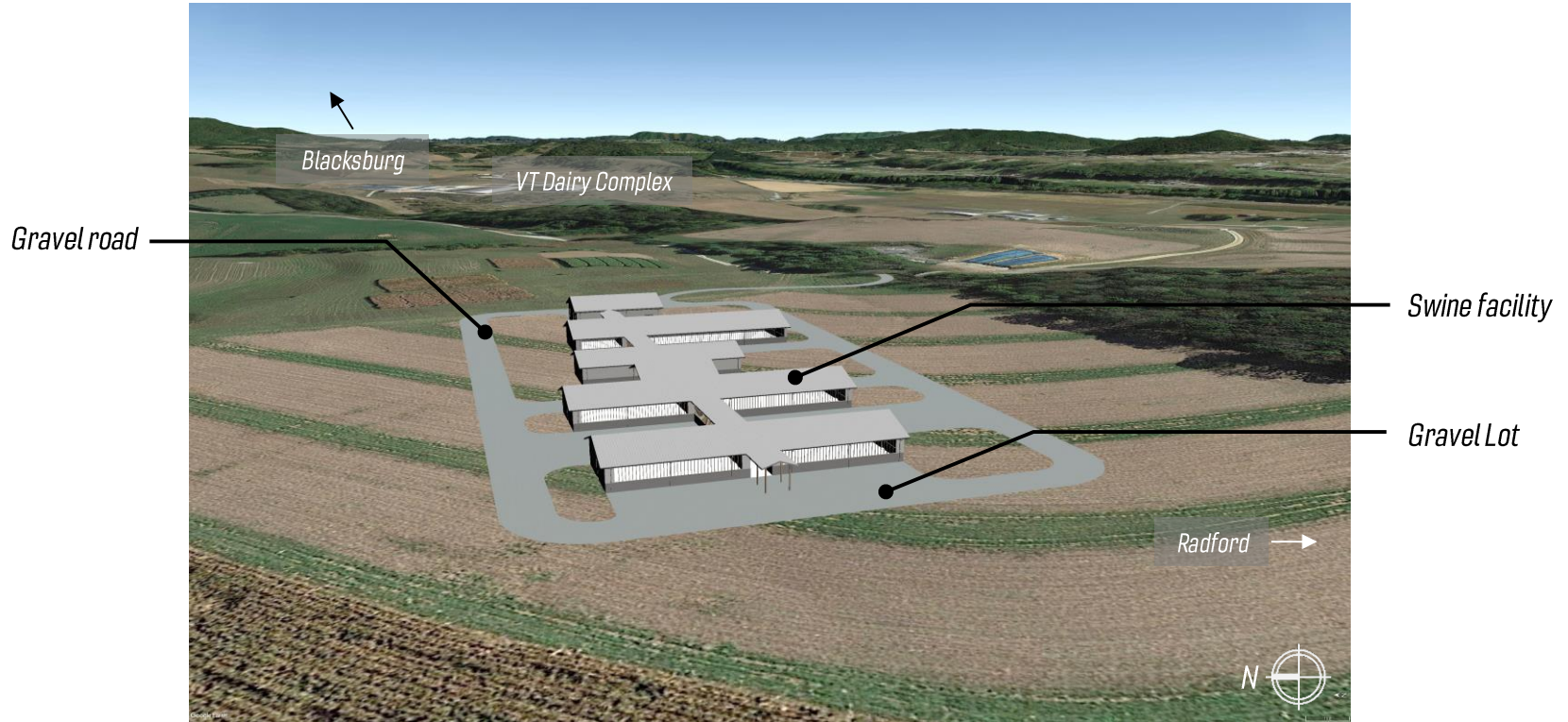
■ Location 3 - Kentland Farm

View 1 - Swine Facility (Existing Condition)



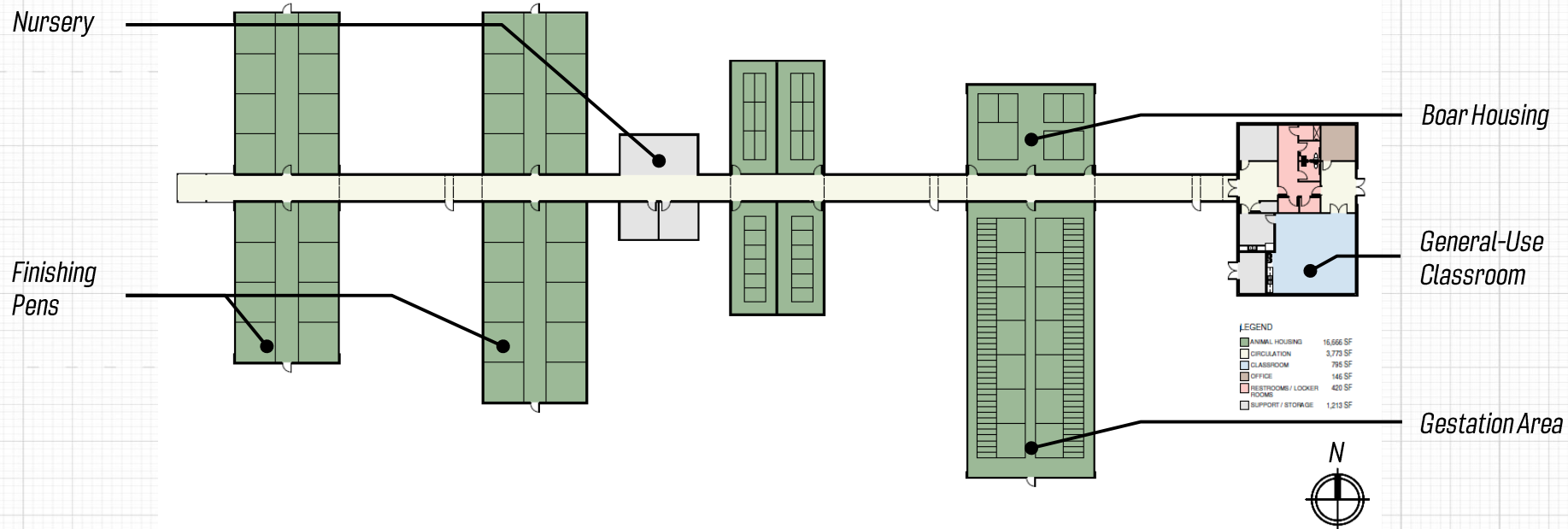
■ Location 3 - Kentland Farm

View 1 – Swine Facility (Future Condition)



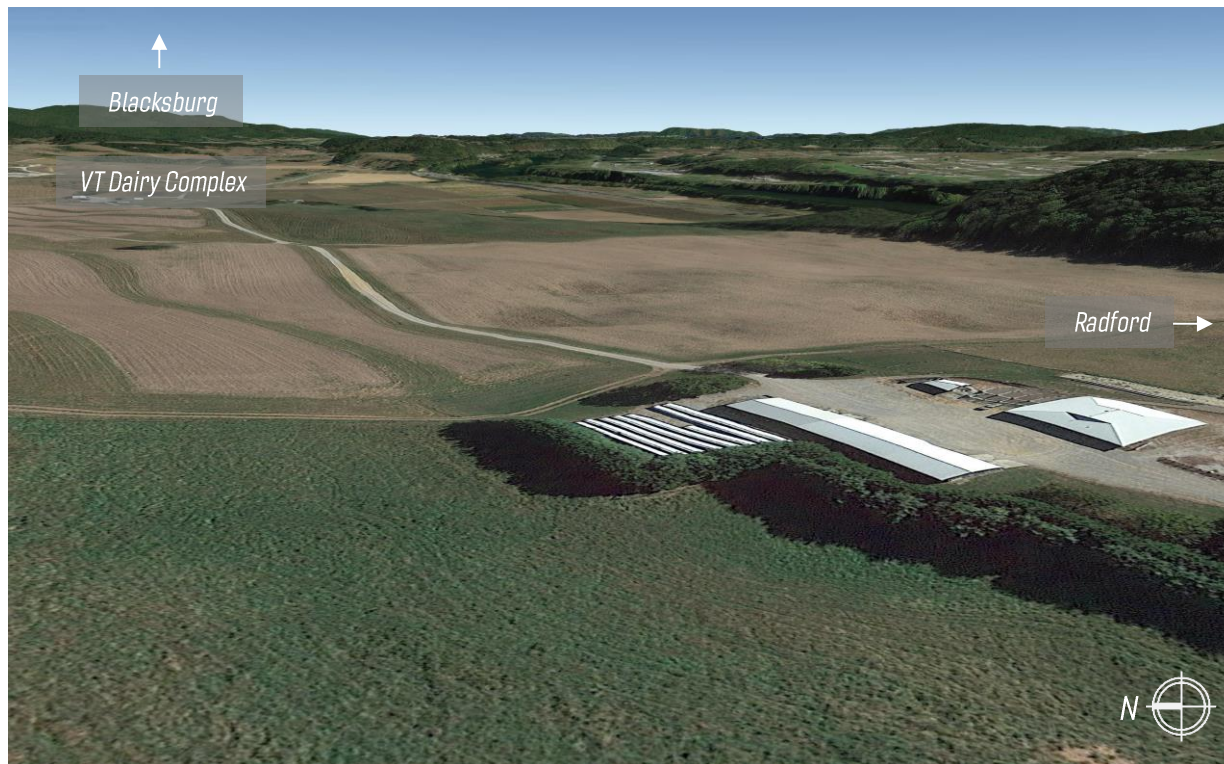
■ Location 3 - Kentland Farm

Swine Facility - Floor Plan



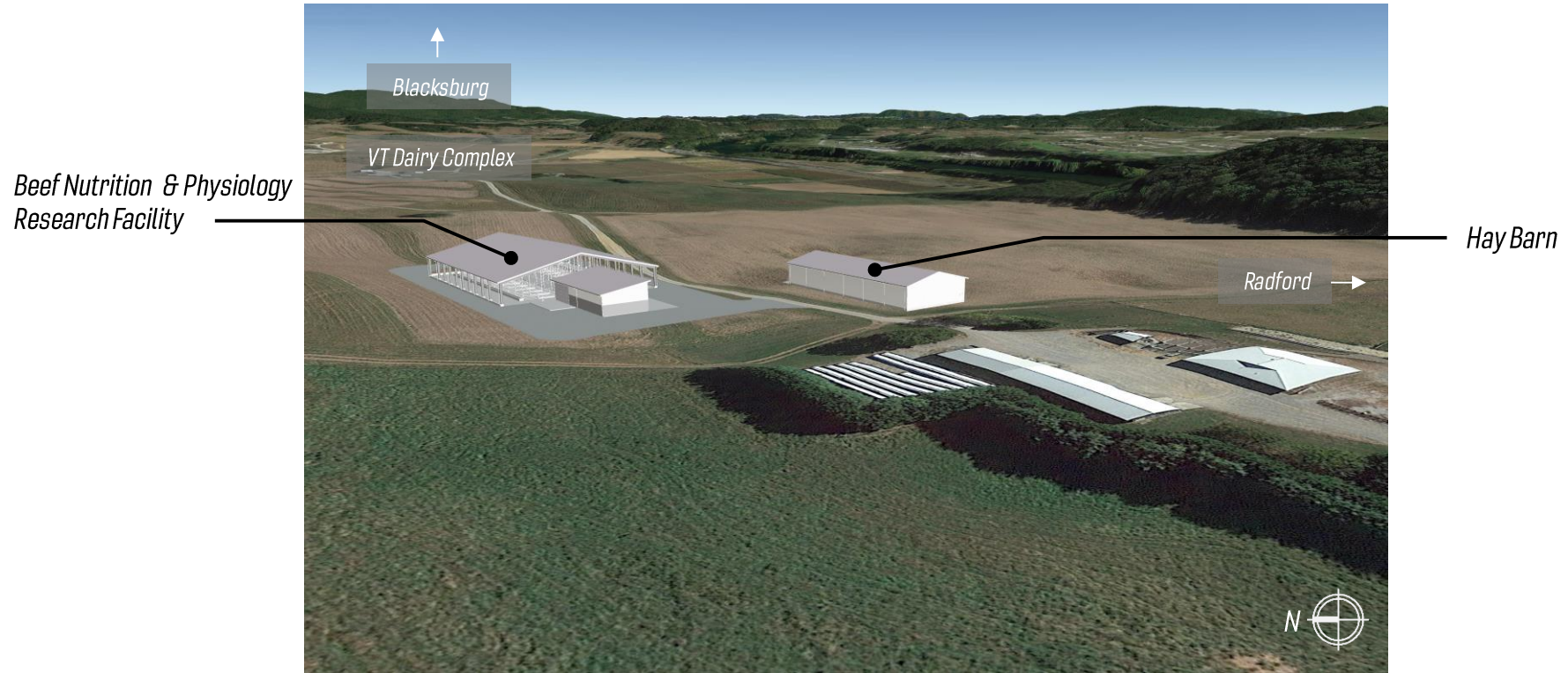
■ Location 3 - Kentland Farm

View 2 – Beef Nutrition & Physiology Research Center (Existing Condition)



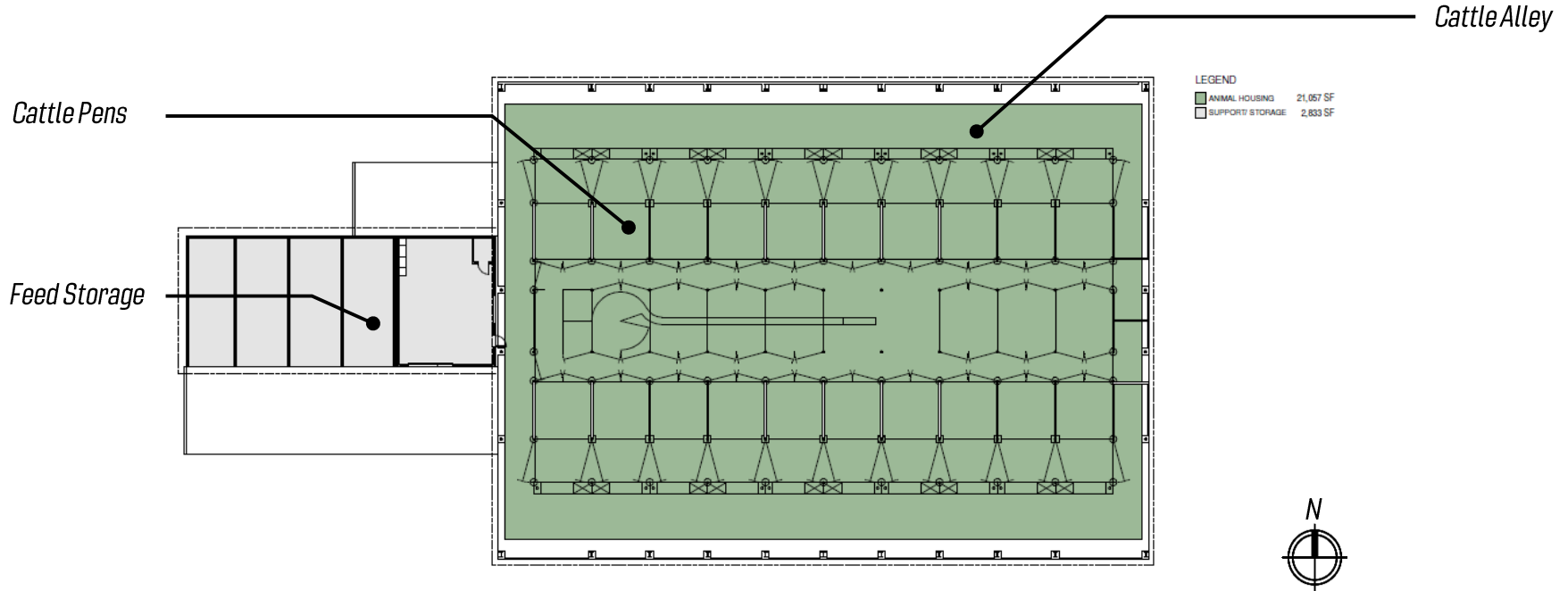
■ Location 3 - Kentland Farm

View 2 – Beef Nutrition & Physiology Research Center (Future Condition)



Location 3 - Kentland Farm

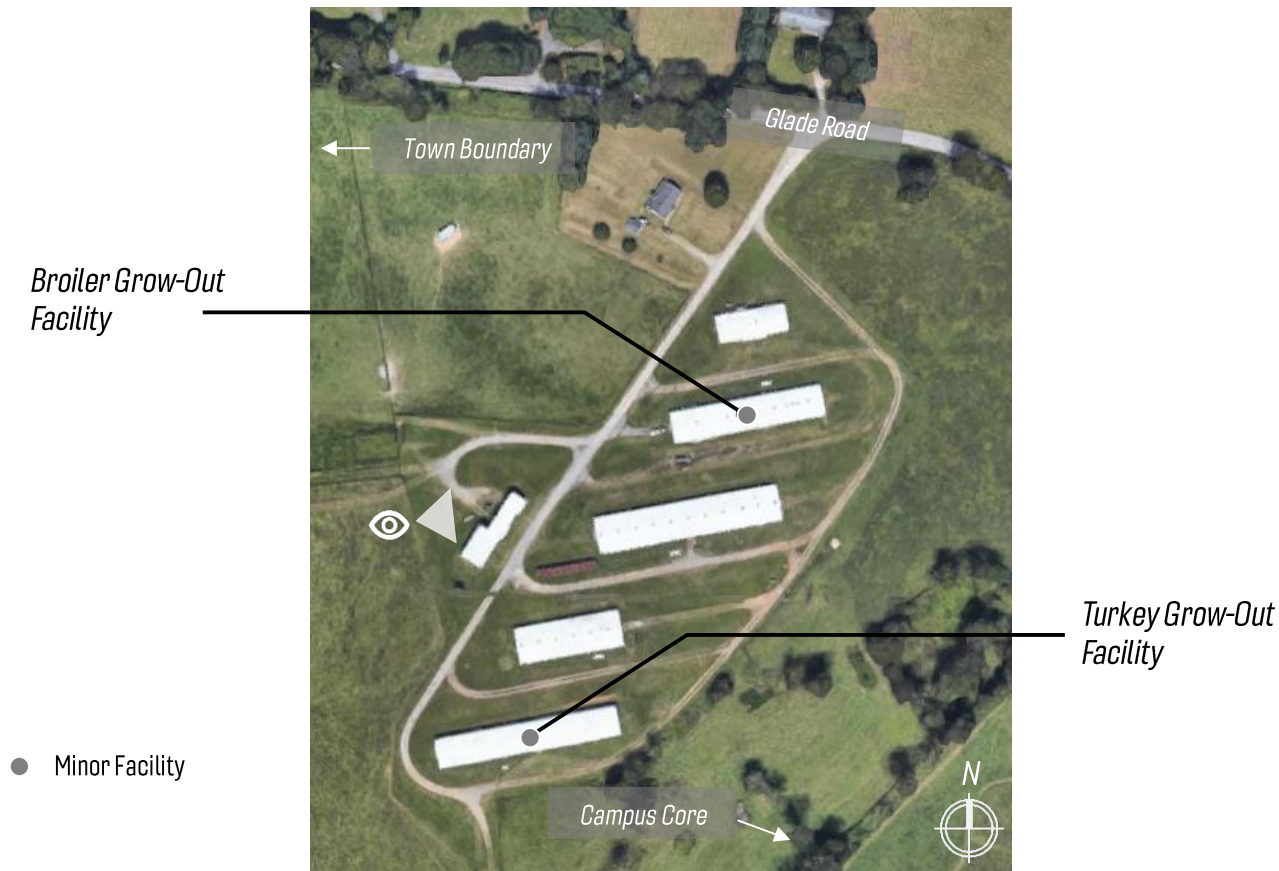
Beef Nutrition & Physiology Research Center – Floor Plan



■ Location 4 - Glade Road Poultry Center



- **Location 4 - Glade Road Poultry Center**



■ Location 4 - Glade Road Poultry Center

Existing Condition



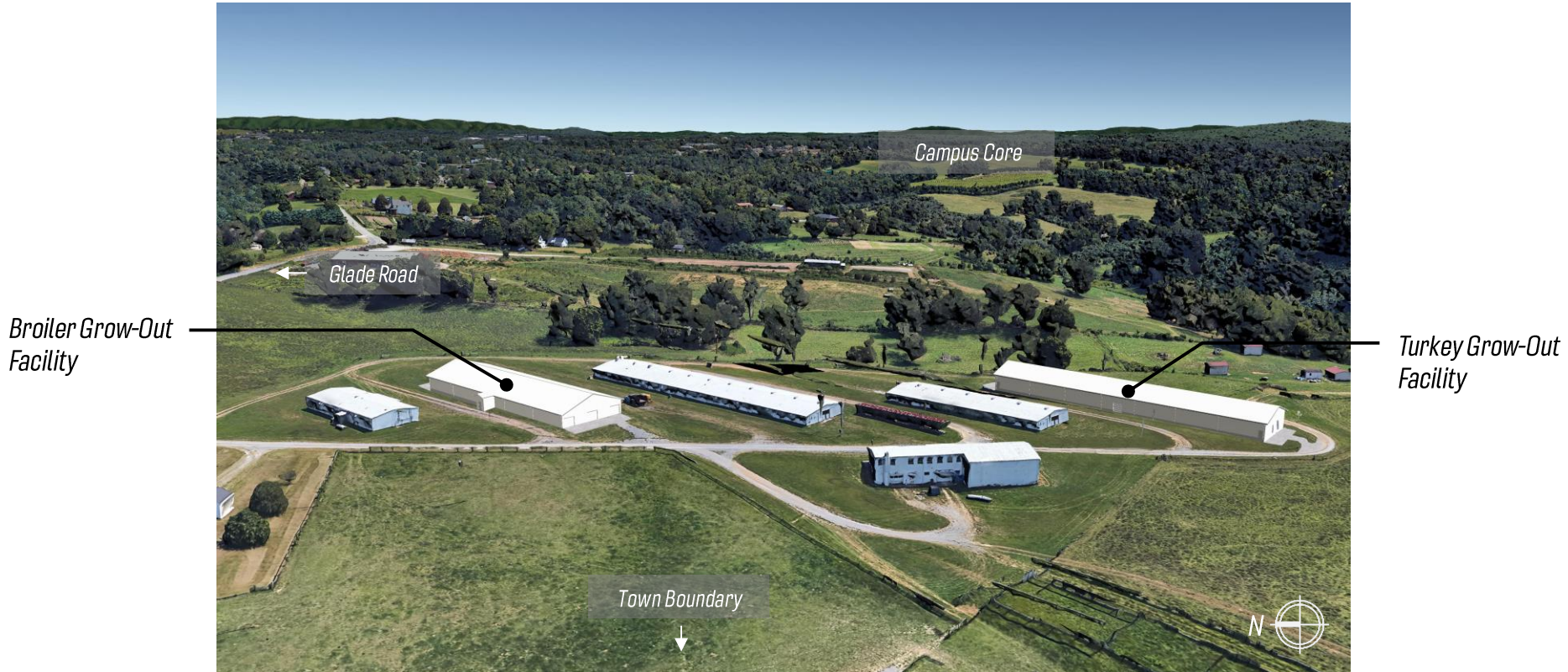
■ Location 4 - Glade Road Poultry Center

Demolitions



■ Location 4 - Glade Road Poultry Center

Future Condition

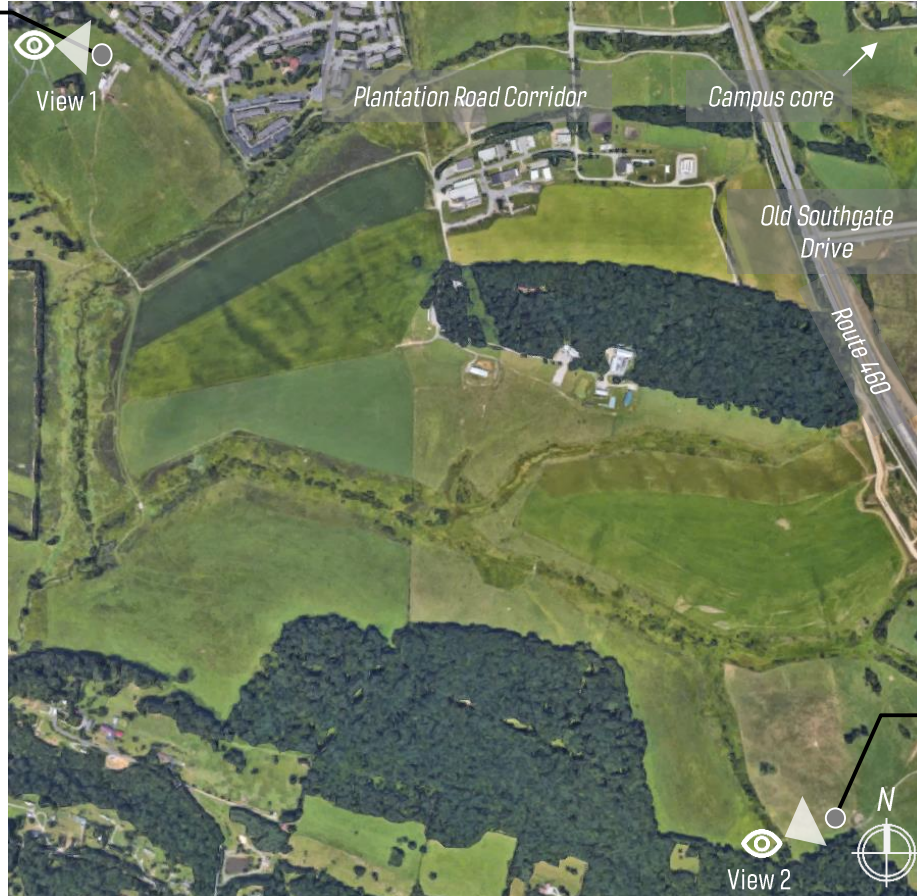


■ Location 5 - Miscellaneous Facilities



■ Location 5 - Miscellaneous Facilities

Hay barn



Hay barn

● Minor Facility

■ Location 5 - Miscellaneous Facilities

View 1 – Hay Barn (Existing Condition)



■ Location 5 - Miscellaneous Facilities

View 1 – Hay Barn (Future Condition)

Hay barn



■ Location 5 - Miscellaneous Facilities

View 2 – Hay Barn (Existing Condition)



■ Location 5 - Miscellaneous Facilities

View 2 – Hay Barn (Future Condition)



Hay barn

■ Livestock and Poultry Research Facilities - Phase I

Recommendation

- That the Design Review graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.

Capital Project Status Report
BUILDINGS AND GROUNDS COMMITTEE
August 26, 2019

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	NON-GENERAL FUNDS	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
PROJECT INITIATED						
Global Business & Analytics Complex Residence Halls	The project includes residence halls with living-learning communities that supplement and enhance the traditional classroom learning environment and are important for supporting the experience for students as part of the Global Business & Analytics Complex program.	\$84,000,000	\$84,000,000	Moseley Architects	Summer 2023	Criteria documents are under development for design/build procurement.
				TBD		
Innovation Campus Academic Building	New classroom/multi-purpose building to provide approximately 300,000 gross square feet to support programmatic needs of the new Innovation Campus in Northern Virginia.	TBD	TBD	TBD	TBD	A/E design services are being procured.
				TBD		
New Upper Quad Residence Hall (Femoyer Replacement)	Fully funded (General Fund) program to provide 300 or more beds to the Upper Quad district of campus. The new residence hall will be built within the footprint of existing Femoyer Hall; 35,500 estimated square feet.	\$33,000,000	N/A	TBD	Summer 2022	A/E design services are being procured.
				TBD		
Northern Virginia Academic Center Redevelopment	An unsolicited Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA) proposal from a team lead by HITT was submitted to the university proposing a mixed-use style redevelopment of the existing Northern Virginia Center in Falls Church.	TBD	TBD	HITT	Fall 2023	A detailed proposal was submitted by HITT Contracting and Rushmark Properties (HITT) and has been accepted by the university. The proposal summary was submitted to the state-level Public-Private Partnership Advisory Commission for review, and no comments have been received. The university has entered negotiations with HITT to develop a Comprehensive Agreement for the project.
DESIGN						
Corps Leadership & Military Science	Three-story structure that will provide a centralized and consolidated home to the Corps of Cadets administration and ROTC programs.	\$52,000,000	\$52,000,000	Clark Nexsen	Summer 2022	Project design efforts restarted.
				TBD		
Data & Decision Sciences	Fully funded (General Fund) program containing approximately 120,000 gross square feet of student and instructional space for engineering, computer science, and statistics programs at the Blacksburg campus. One of four buildings from the aggregate Global Business & Analytics Complex initiative.	\$79,000,000	N/A	Moseley Architects	Spring 2023	Project is in design.
				TBD		
Dietrick Hall Enclosure & Spirit Plaza	This project will provide a "Spirit Plaza" on the north end of Dietrick Lawn and renovations to the first floor of Dietrick Hall that will establish at least 200 additional seats of dining capacity.	\$8,300,000	\$8,300,000	Hanbury Norfolk, VA	Spring 2021	A/E services re-procured. Project design efforts restarted.
				TBD		

Capital Project Status Report
BUILDINGS AND GROUNDS COMMITTEE
August 26, 2019

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	NON-GENERAL FUNDS	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
HITT Hall & the Intelligent Infrastructure Complex	Program elements envision a roughly 28,000 gross square feet addition (Hitt Hall) connected to Bishop-Favrao Hall, 8,000 gross square feet of fusion lab and data visualization space for the Intelligent Infrastructure for Human Centered Communities Destination Area, 22,000 gross square feet of general assignment classroom and collaborative study space, and a 40,000 gross square feet dining facility. Project intent is to showcase technology and innovation as a key component of the Intelligent Infrastructure for Human Centered Communities Destination Area.	\$68,000,000	\$50,000,000	Lord Aeck Sargent (LAS) Atlanta, GA	Summer 2021	Design-Build contract procurement is ongoing.
				TBD		
Holden Hall Renovation	This project includes the renovation of an approximately 21,000 gross square feet portion of Holden Hall fronting the Drillfield. The remaining 21,000 gross square feet of the existing building will be demolished and replaced with approximately 80,000 gross square feet of new engineering instruction and research space for a total building size of 101,000 gross square feet.	\$72,349,000	\$17,500,000	Moseley Architects Virginia Beach, VA	Fall 2021	Construction Manager at Risk (CMaR) is finalizing Guaranteed Maximum Price (GMP) to move forward with construction phase.
				W.M. Jordan Co.		
Livestock & Poultry Research Facilities - Phase I	This project is the first of two phases to renew existing facilities for the College of Agriculture and Life Sciences' livestock and poultry programs. This first phase includes approximately 130,000 gross square feet of new facilities located at existing university sites on the Plantation Road Corridor, at Smithfield Horse Center, at Kentland Farm, and at the Glade Road Poultry Research Center.	\$22,500,000	\$0	Spectrum Design, PC Roanoke, VA	Summer 2021	Project is in design. Procurement of construction contract is targeted for late 2019.
				TBD		
Merryman Center Weight Room Renovation	This project includes the renovation of portions of the first two floors of the Merryman Center and the expansion of the second floor to support Athletic Department programming.	\$4,900,000	\$4,900,000	Colley Architects, P.C. Blacksburg, VA	Fall 2020	Project is in design. Procurement of construction contract is targeted for fall 2019.
				TBD		
Multi-Modal Transit Facility	The Multi-Modal Transit Facility project is a partnership with the Town of Blacksburg under which the town will obtain funding, hold contracts, and own the building that will be located and operated on Virginia Tech land.	\$34,000,000	N/A	Wendel Associates Buffalo, NY	TBD	Town of Blacksburg is finalizing re-design to align project with available budget.
				TBD		
Slusher Hall Replacement	This project envisions the demolition of Slusher Hall and construction of replacement residence hall(s) that will equal or exceed 630 beds.	\$83,000,000	\$83,000,000	Clark Nexsen	Fall 2023	Criteria documents are under development for design/build procurement.
				TBD		
Student-Athlete Performance Center	This project includes a complete renovation and expansion of the fourth floor of the Jamerson Center, construction of balconies cantilevered from the fourth floor, and a new elevator tower. The project will provide approximately 17,000 gross square feet for dining, nutrition, recruiting, donor hospitality, and provide an upgraded corridor to the Cassell Coliseum concourse.	\$16,680,000	\$16,680,000	Hanbury Norfolk, VA	Fall 2020	Executive Committee of the Board of Visitors approved additional funds to award construction contract to lowest bidder in July 2019.
				TBD		
Student Wellness Improvements	The project provides a comprehensive solution for student wellness services through upgrades to McComas Hall and major renovations to War Memorial Hall to meet the programming needs of the Schiffert Health Center, Recreational Sports, College of Liberal Arts and Human Sciences, and the College of Agriculture and Life Sciences.	\$58,000,000	\$58,000,000	CannonDesign Baltimore, MD	Summer 2021	Project is in design. Construction start is targeted for fall/winter 2019.
				Whiting-Turner Contracting Company Richmond, VA		

Capital Project Status Report
BUILDINGS AND GROUNDS COMMITTEE
August 26, 2019

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	NON-GENERAL FUNDS	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
Undergraduate Science Laboratory	The project will construct a new undergraduate science laboratory facility of roughly 102,000 gross square feet to accommodate the growing demand for STEM-H degrees at Virginia Tech.	\$74,172,000	\$0	ZGF Architects Washington, DC	Fall 2022	Project is in design and on track. Funding for construction pending approval by General Assembly.
				Skanska		
CONSTRUCTION						
ACC Network Studio	The project will establish the necessary broadcast facilities including interior renovations to an existing control room; construction of two new controls rooms; installation of fiber, infrastructure, and equipment to support the broadcast of Virginia Tech intercollegiate athletic events on the ACC Network.	\$10,000,000	\$10,000,000	Multiple A/E Firms	Summer 2019	Critical network elements complete: construction completion targeted for summer 2019.
				Multiple Contractors		
Boiler Package 12	Demolition and disposal of decommissioned coal fired boiler (No. 6) and installation of a new 100 lbs./hour natural gas/oil fired packaged boiler (No. 12).	\$8,200,000	\$8,200,000	Affiliated Engineers, Inc. (AEI) Atlanta, GA	Spring 2020	Boiler installation contract awarded; boiler manufacture in progress. Targeting installation late fall 2019.
				Southern Air		
Chiller Plant Phase II	This project includes the replacement and upgrade of plant equipment in the existing campus chiller plants and the expansion of the underground distribution infrastructure to link campus chiller substations and bring additional existing campus buildings online. Improvements include the replacement of two outdated chillers in the North Plant with two new upgraded larger capacity chillers totaling 6,000 tons; and the addition of two new 3,000 ton chillers in the Southwest Plant. The project also includes the replacement and upgrade of ancillary equipment with state-of-the-art, optimally sized pumping and system support equipment.	\$41,286,000	\$9,909,640	Affiliated Engineers, Inc. (AEI) Chapel Hill, NC	Fall 2021	Construction contract awarded and underway. First phase of network installation in progress.
				Faulconer Construction		
Commonwealth Ballroom Improvements	The scope of work includes replacing outdated and nonfunctioning lighting systems, stage systems, ceiling tiles, and air handlers for the Commonwealth Ballroom in Squires Student Center. An acoustical dividing wall will be added to increase usage capabilities by student organizations and the campus community.	\$3,246,000	\$3,246,000	Dewberry Engineers	June 2019	Construction complete. Final report for this project
				Glass & Associates, Inc.		
Creativity & Innovation District Living-Learning Community	This project involves the provision of a new residential life building in the emerging Creativity & Innovation District. The approximately 234,000 gross square foot and 596 bed facility will support the growing living-learning community for this key area of campus and supports the university's Beyond Boundaries initiative.	\$105,500,000	\$105,500,000	VMDO Charlottesville, VA	Summer 2021	Construction is underway and on track for completion summer 2021.
				WM Jordan / Hanbury		
Improve Kentland Facilities - Phase II	This project includes new construction of three buildings totaling approximately 28,900 gross square feet including a Metabolic Research Laboratory, an Applied Reproduction Facility, and a Bovine Extension Teaching & Research facility to serve Agency 229, Virginia Cooperative Extension, and the Virginia Agricultural Experiment Station.	\$12,463,000	\$0	Spectrum Design, PC Roanoke, VA	Summer 2020	Project broken into three contracts; all buildings are under construction.
				MRL - Charles Perry Partners Inc. APR - Snyder Assoc. BETR - Charles Perry Partners Inc.		
Lane Electric Substation Expansion	This project will expand the existing electrical sub-station to add approximately 37 percent additional power capacity to serve the campus Life Sciences and Northwest Precincts and the Corporate Research Center's proposed expansion.	\$6,500,000	\$6,500,000	Appalachian Electric Power and Virginia Tech Electric Service	Summer 2019	Project is administered by Virginia Tech Electric Service in coordination with Appalachian Power Company and Appalachian Electric Power. Construction has reached substantial completion.
				Appalachian Electric Power and Virginia Tech Electric Service		

Capital Project Status Report
BUILDINGS AND GROUNDS COMMITTEE
August 26, 2019

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	NON-GENERAL FUNDS	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
Renovate/Renew Academic Buildings	This project will renovate three existing campus buildings - Sandy Hall, the Liberal Arts Building, and the original portion of Davidson Hall. Collectively, these renovations will increase the functionality of three underutilized building assets, address several deferred maintenance issues, and reduce critical space deficiencies. Small additions are planned for Sandy Hall and the Liberal Arts Building to meet current emergency egress code requirements. New elevators in Sandy Hall and the Liberal Arts Building will provide ADA access.	\$35,029,000	\$0	Glavè & Holmes Architects Richmond, VA	June 2019	Construction complete. Punch list actions being addressed.
				Branch & Associates Roanoke, VA		
Undergraduate Science Laboratories Renovations	The project will repurpose multiple laboratory/teaching spaces in Derring and Hahn Halls to meet growing demand for course sections in biology, chemistry, organic chemistry, and microbiology.	\$10,000,000	\$10,000,000	Studio Twenty Seven Architecture Washington, DC	October 2019	Construction is underway and on track for completion fall 2019.
				Thor Construction, Inc. Roanoke, VA		
Virginia Tech Carilion Biomedical Research Expansion	This project, executed under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA), will construct an approximately 139,000 gross square foot building adjacent to the Virginia Tech - Carilion Research Institute in Roanoke. The new facility will include high intensity biomedical research capable laboratories with surgical-type suites, Bio-Safety Level Three laboratories, and animal imaging facilities that require high-field magnetic resonance imaging. The remaining space will include high-intensity dry laboratory research and training spaces including computational facilities, offices, procedural training rooms, and technical training space.	\$91,696,000	\$40,141,970	AECOM	Spring 2020	PPEA construction is underway and on track for completion in spring 2020.
				Skanska		
CLOSEOUT						
Athletic Facilities Improvements	This is an umbrella project for improvements to multiple athletic facilities, including Rector Field House, Baseball, and Tennis.	\$37,500,000	\$37,500,000	Rector: Cannon Design Baseball: Cannon Design	Rector - March 2018	Sub-projects as follows: 1) Rector Field House - Construction reached Substantial Completion in March 2018. 2) Baseball - Construction reached Substantial Completion in May 2018. 3) Tennis - On hold pending funding.
				Rector: Branch Associates Baseball: Whiting-Turner Contracting Co.	Baseball - May 2018 Tennis - TBD	
O'Shaughnessy Hall Renovation	This project includes major renovation of a 72,000 gross square foot student residence building into a living-learning community. The residence hall originally housed 350 students and upon completion will house 344 students. Construction Complete.	\$21,500,000	\$21,500,000	Moseley Architects Virginia Beach, VA	August 2018	Construction complete. Project closeout underway.
				WM Jordan, Roanoke, VA		
Steger Hall Hokie Stone Repairs & Betterments	The scope of work includes repair of Hokie Stone facade as well as cleaning and removal of efflorescence from the stone, precast, and glass surfaces.	\$0	\$1,100,000	Wiss, Janney, Elstner Associates, Inc.	April 2019	Construction complete. Final report on this project.
				Skanska USA Building		



Parking and Transportation

AUGUST 2019



BRIEF OVERVIEW



PARKING SERVICES

The team manages over 16,000 parking spaces on the Blacksburg campus while serving 33,000 students, 13,000 employees and an estimated 60,000 alumni, parents, and community members that visit campus each year.



FLEET SERVICES

The Fleet Services team manages the university's rental fleet of approximately 200 state vehicles. Employees and students are able to reserve these vehicles for business purposes on a daily or long-term basis.



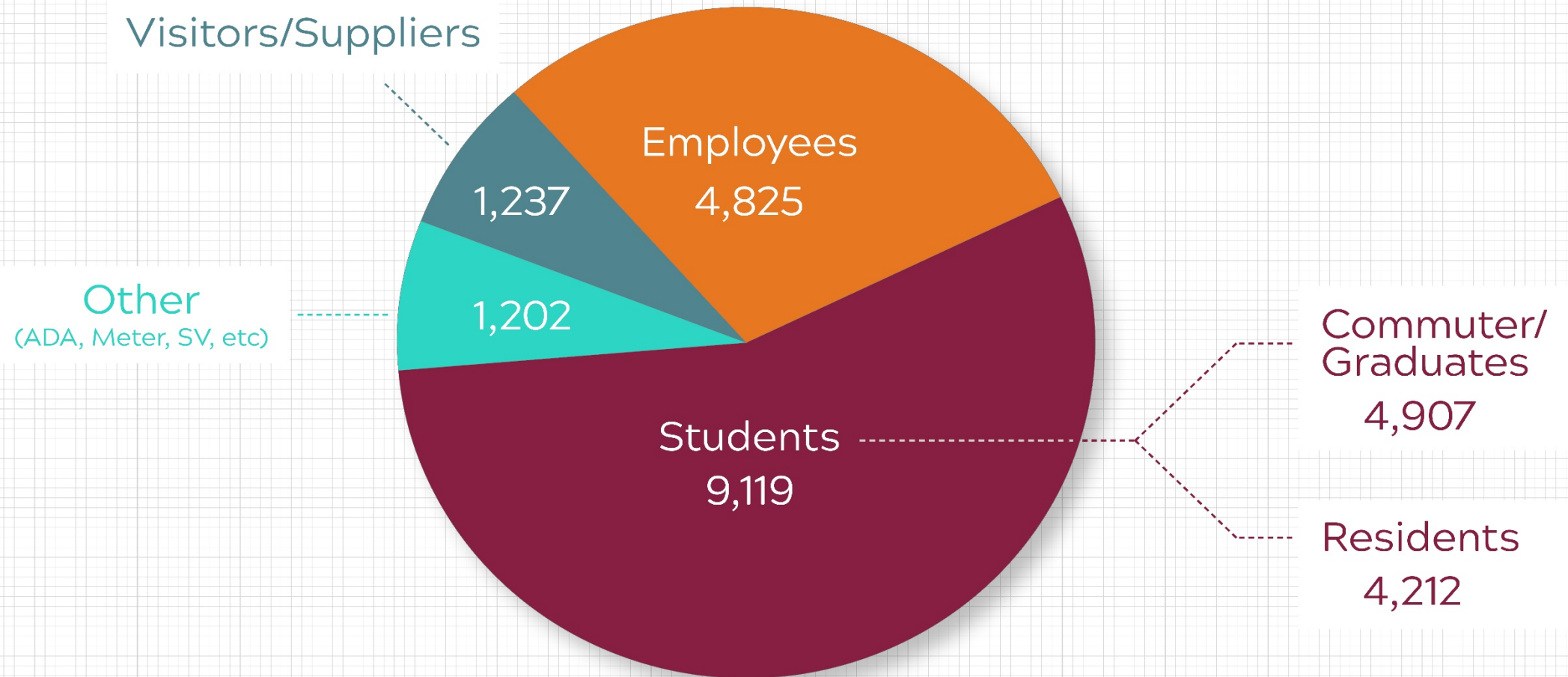
ALTERNATIVE TRANSPORTATION

A portfolio of alternative transportation programs and services including: Bike Hub, Heads Up Hokies, Blacksburg Transit, Zipcar, Mass Transit, Ride Solutions, and Roam NRV Bike Share.

A row of orange bicycles is parked outdoors on a paved surface. The bicycles are branded with the 'Ram' logo and 'VALLEY' text. A white rectangular text box is overlaid in the center of the image, containing the text 'Current State'.

Current State

PARKING SPACES AT BLACKSBURG LOCATION



GRAND TOTAL 16,383

BLACKSBURG TRANSIT



UNIQUE RELATIONSHIP WITH VIRGINIA TECH AND BLACKSBURG TRANSIT.

- Serves Blacksburg & Christiansburg with 69 Buses (6 Buses in 1983)
- 18 Routes
- 200 Full and Part Time Employees
- 4 Million Passengers and 1 Million Miles in FY18
- 4.65 Million Passengers in FY19
- 33% Growth Over Last 4 Years
- 4th Highest Ridership in VA



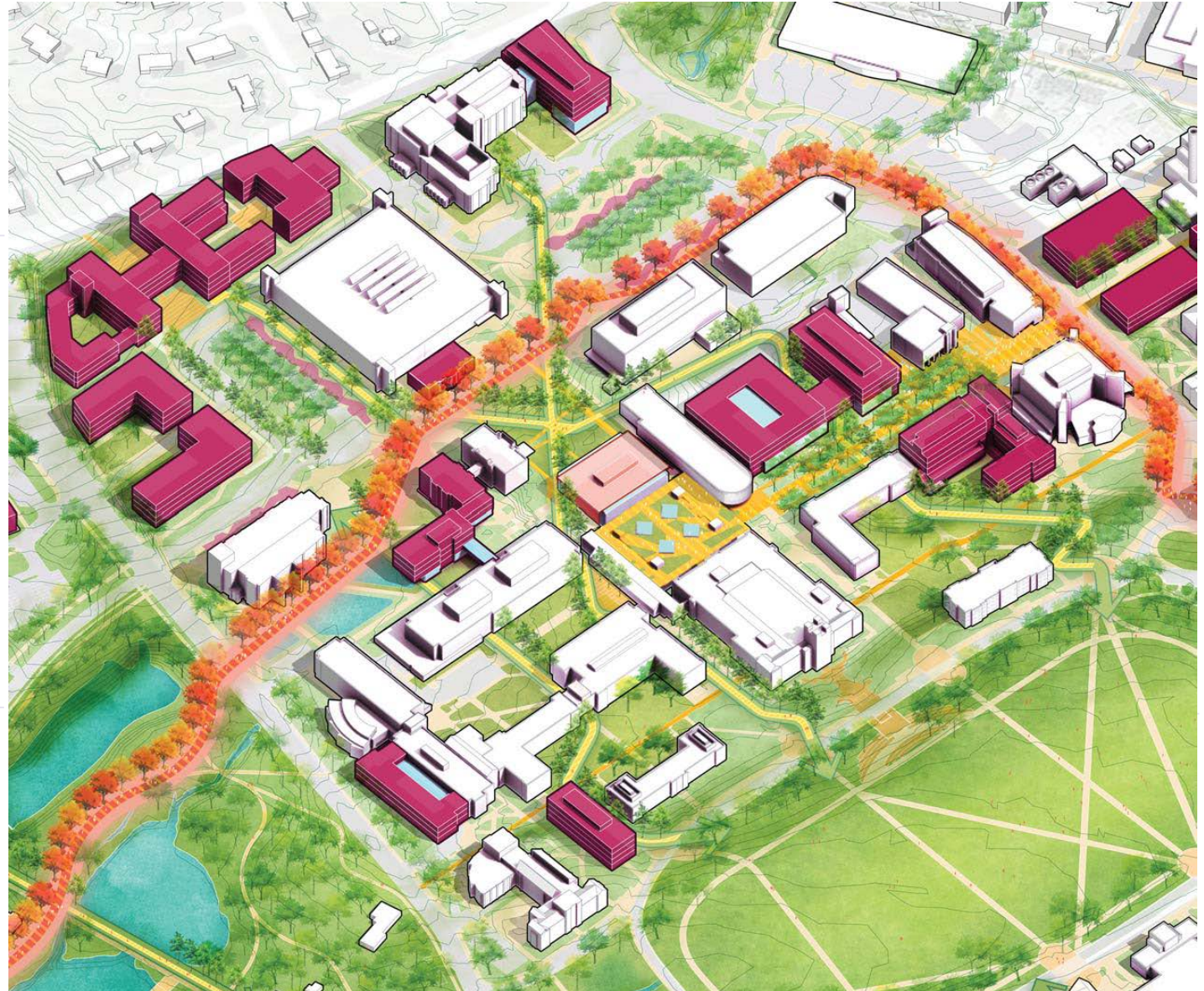


Looking Ahead



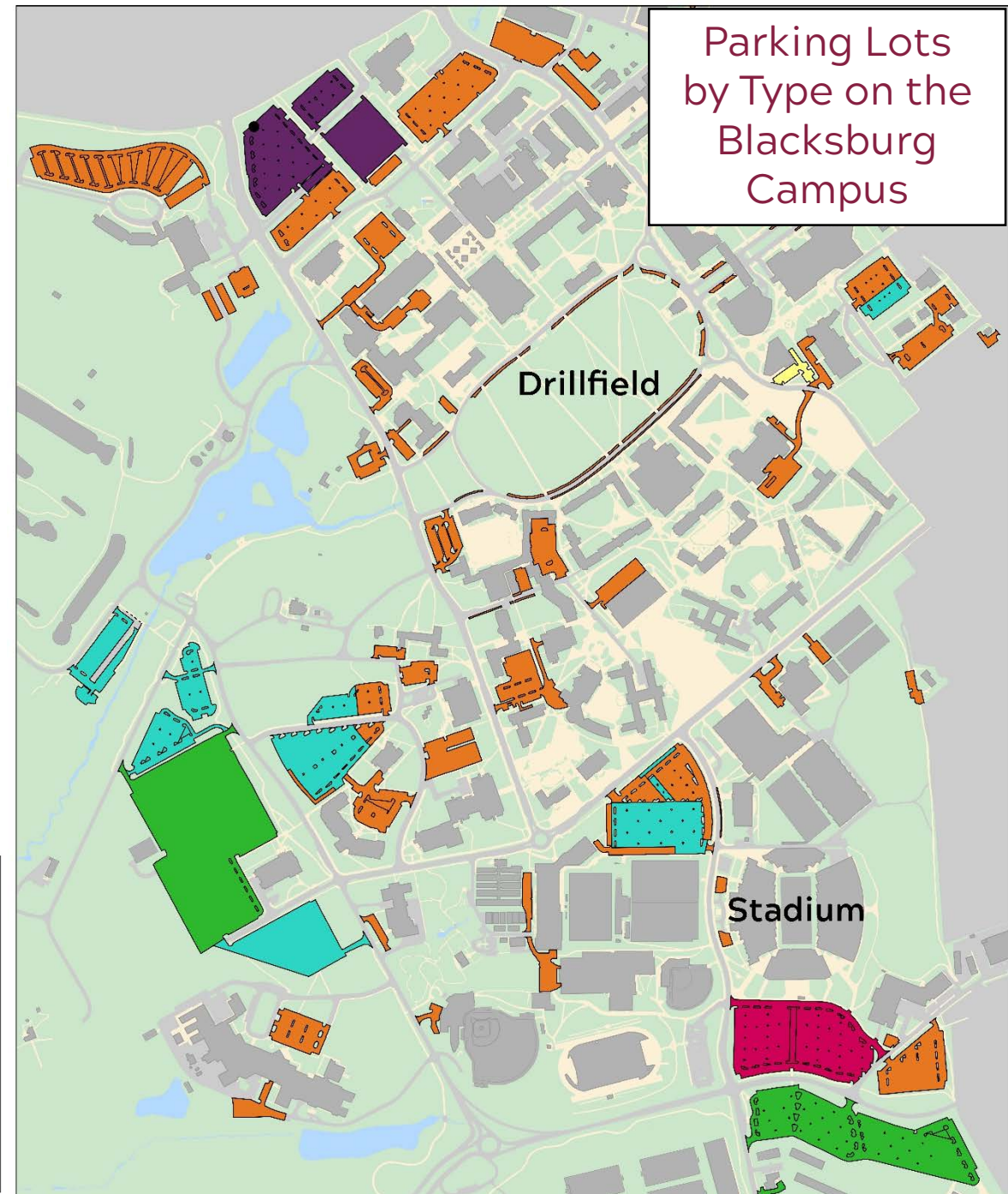
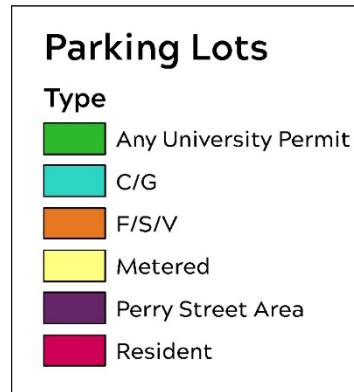
CAMPUS MASTER PLAN

Several new facilities and major renovations to existing buildings are proposed throughout the North Academic District to accommodate expanding academic programming.



PARKING & TRANSPORTATION MASTER PLAN

- A tiered permit pricing system should be implemented on campus to help reduce traffic issues and frustration among users in locating an available space.
- Parking needs to be reallocated to effectively support future demand.
- As parking on the northern end of campus becomes displaced, C/G parkers should be reassigned to the Duck Pond Drive and Smithfield Road Lots.



FUTURE CONSTRUCTION



Hitt Hall & Intelligent
Infrastructure Building (HITT)



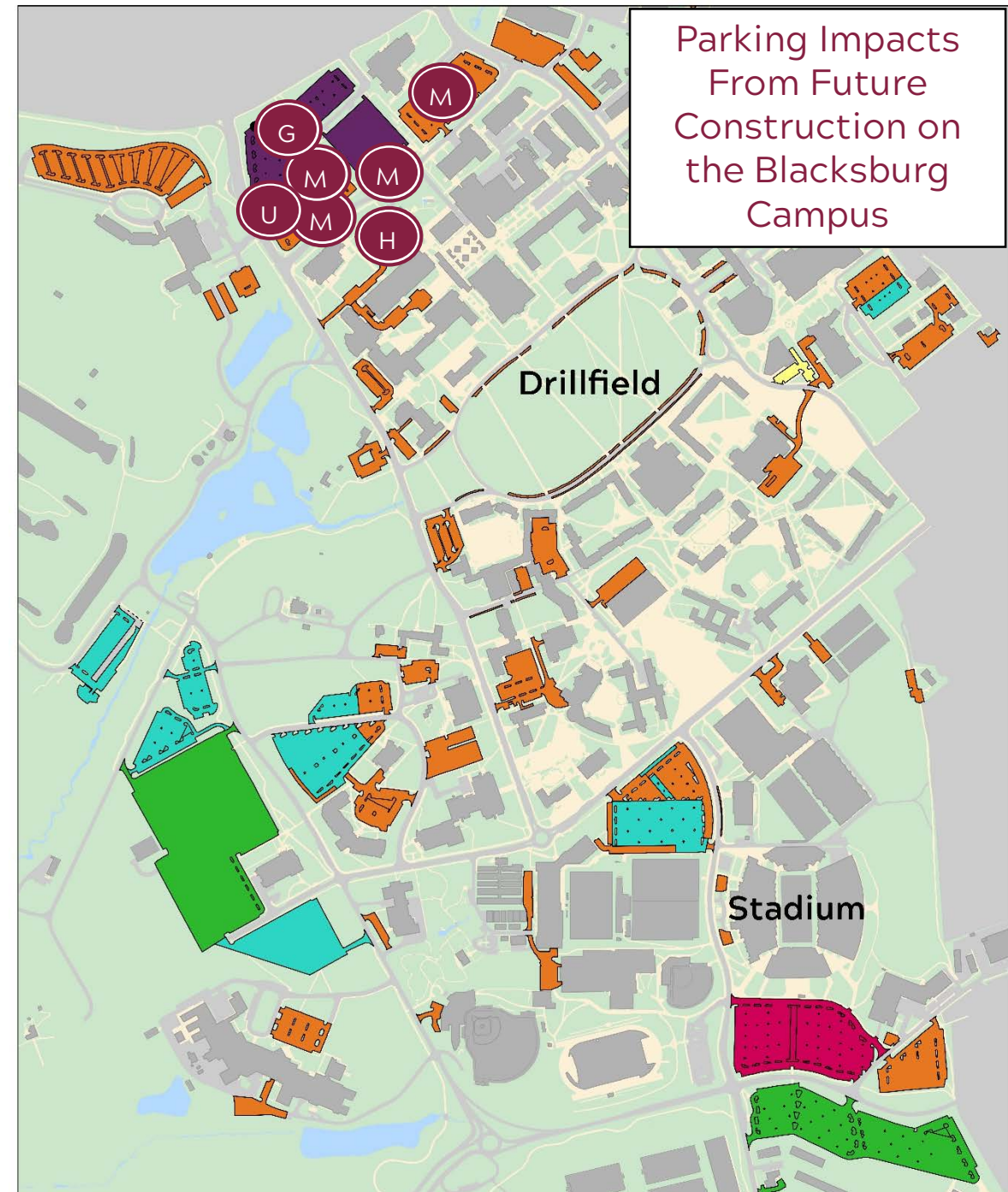
Multi-Modal Transit Facility
(MMTF)



Undergraduate Science Lab
Building (USLB)



Global Business Analytics
Complex (GBAC) and Data
and Decision Sciences
(DADS)



Parking Impacts
From Future
Construction on
the Blacksburg
Campus

IN CLOSING

CURRENT STATE:

- 100% self-supporting unit.
- Unique relationship with Virginia Tech and Blacksburg Transit.
- Affordability and accessibility is a priority with remote lot options.
- Customer focus.
- 2000 available spaces each day.

LOOKING AHEAD:

- Multi-Modal Transit Facility (MMTF).
- Continued focus on alternative transportation programs.
- Movement toward garage parking.

CONTACT PARKING & TRANSPORTATION

parking@vt.edu

540-231-3200

parking.vt.edu/



**PARKING &
TRANSPORTATION**
VIRGINIA TECH™

DESIGN PREVIEW FOR DIETRICK HALL ENCLOSURE & SPIRIT PLAZA

Located near the intersection of the campus student life and athletic districts, Dietrick Hall serves as a nexus of pedestrian circulation for on-campus residents, visitors, and those attending athletic events.

This project will create a vibrant hub of campus activity by augmenting existing outdoor spaces and dining venues at this location. The new Spirit Plaza design will allow for a variety of both large and small-scale outdoor activities such as game day celebrations, food truck rodeos, and outdoor concerts. The project also encloses approximately 5,000 square feet of existing open-air space to add 200 new dining seats to the campus inventory. Served capacity will also be expanded at DXpress and Deet's Place, and a new grab-and-go marketplace will be created.

This \$8.3 million non-general fund project was first proposed as part of the 2018-2024 Capital Outlay Plan. It is a bond-financed project with debt service supported by Student Affairs revenues.

Capital Project Information Summary – Dietrick Hall Enclosure & Spirit Plaza

BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Title of Project:

Dietrick Hall Enclosure & Spirit Plaza

Location:

The project site is located in the Student Life District (the area between Drillfield Drive and Washington Street). The facility is at the intersection of student residences such as Pritchard Hall, academic facilities such as Cheatham Hall, and serves as a transition point to the Athletics District on the southernmost portion of the campus.

Current Project Status and Schedule:

The project is currently in preliminary design with design completion targeted for early 2020. Construction is anticipated to begin in spring 2020 with completion in spring 2021.

Project Description:

The interior renovation and addition will see the addition of 200 seats of dining capacity. In addition, the project will also improve the capacity, circulation, and appearance of multiple existing venues. These include the DXpress grill, a central “grab n’ go” style market and convenience store, and Deet’s Place espresso and coffee shop. The new Spirit Plaza and landscaping will provide areas for student gatherings of a range of sizes and serve as a “stage for everything”.

Brief Program Description:

A majority of the project square footage focuses on exterior spaces. The new Spirit Plaza will cover a total of 35,200 square feet. Interior renovations and enclosure total 18,100 square feet.

Contextual Issues and Design Intent:

New exterior design features focus on the site improvements to the facility. Work on the plaza will include a replacement of all existing site concrete and hardscape, creation of low-sloped routes, campus standard plantings, and unique seating structures. The university’s history and tradition, as well as the core values of inclusivity and *Ut Prosim* will be visibly integrated into the design.

Funding:

This \$8.3 million project was first proposed as part of the 2018-2024 Capital Outlay Plan. It is funded with university resources. The Board of Visitors first approved this expenditure in 2017.

Architect/Engineer:

Hanbury

General Contractor:

To be determined

August 26, 2019



Dietrick Hall and Plaza Renovations



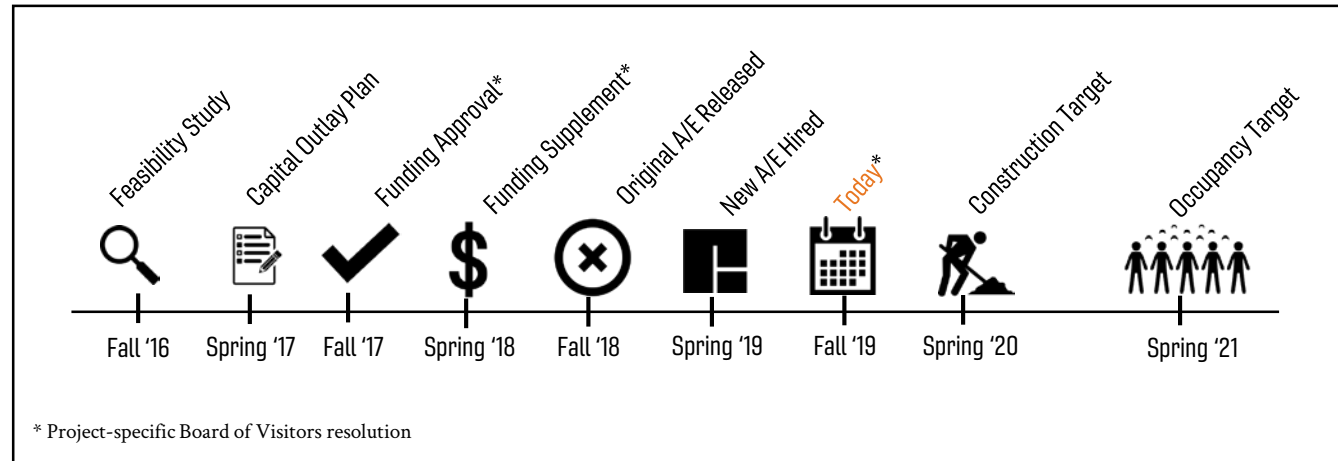
Board of Visitors Design Preview

■ Dietrick Hall and Plaza Renovations

Project History

Challenges & Opportunities

- Important project for enrollment growth, campus life
- Project has experienced cost challenges, and scope has evolved over time
- Operations and Student Affairs collaborating to rectify



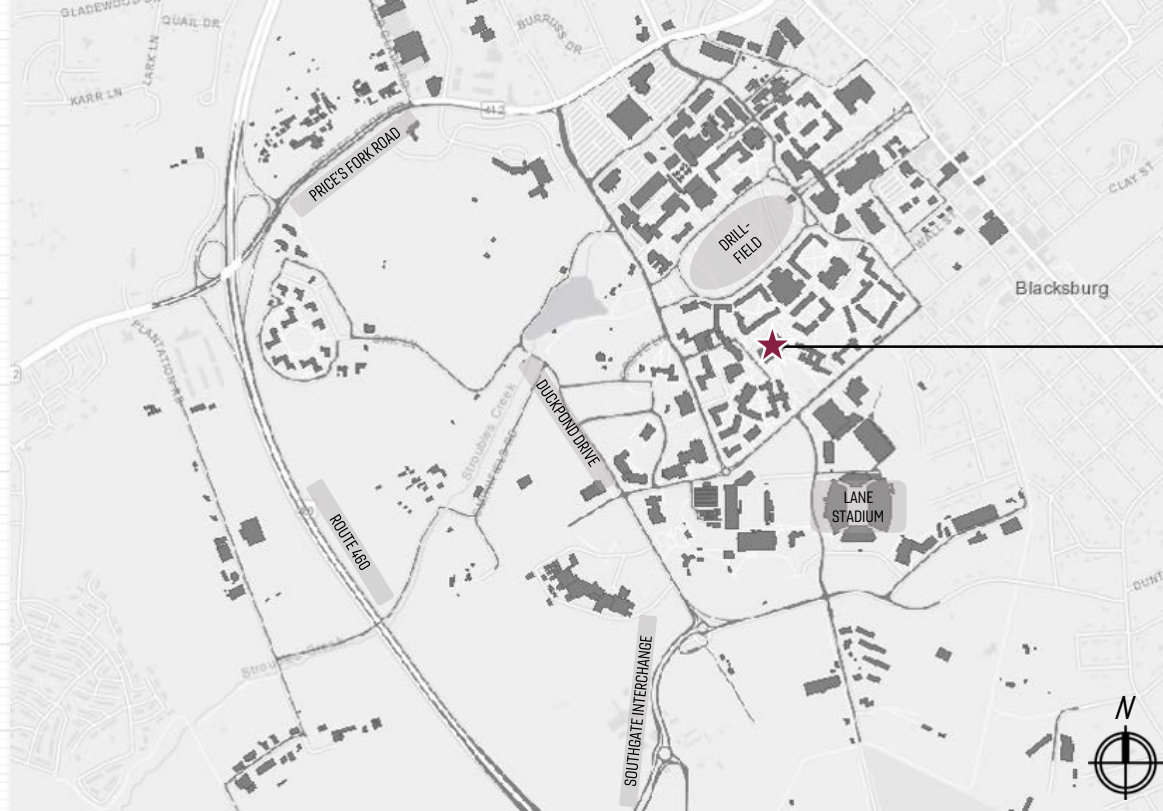
■ Dietrick Hall and Plaza Renovations

Project Information

- Scope: *
 - Interior const. & reno. 18,100 GSF
 - Plaza 35,200 GSF
- Delivery method: Design-bid-build
- Total project authorization: \$8.3 million
- Design phase: Preliminary design
- Construction start: Spring 2020
- Targeted occupancy: Spring 2021

■ Dietrick Hall and Plaza Renovations

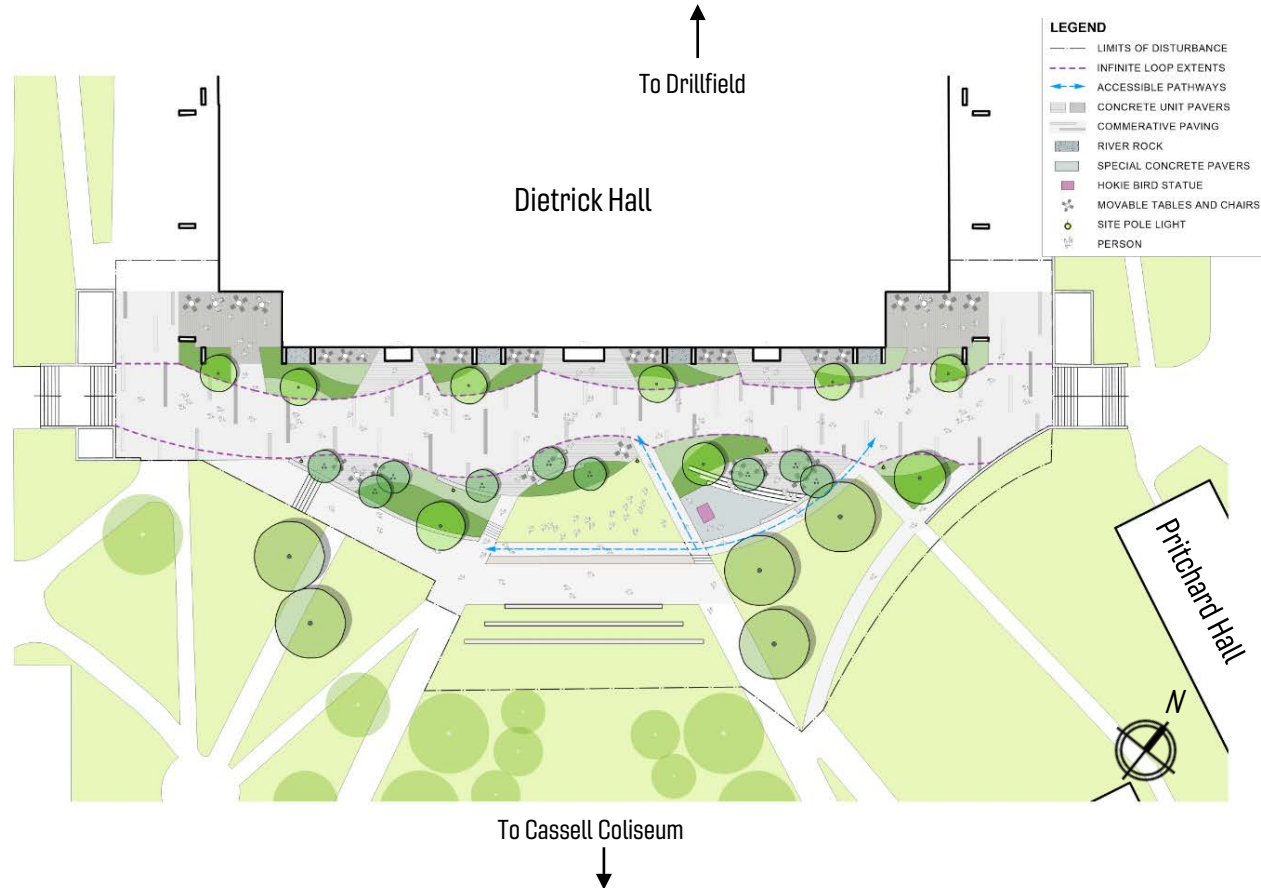
Project Location



Site

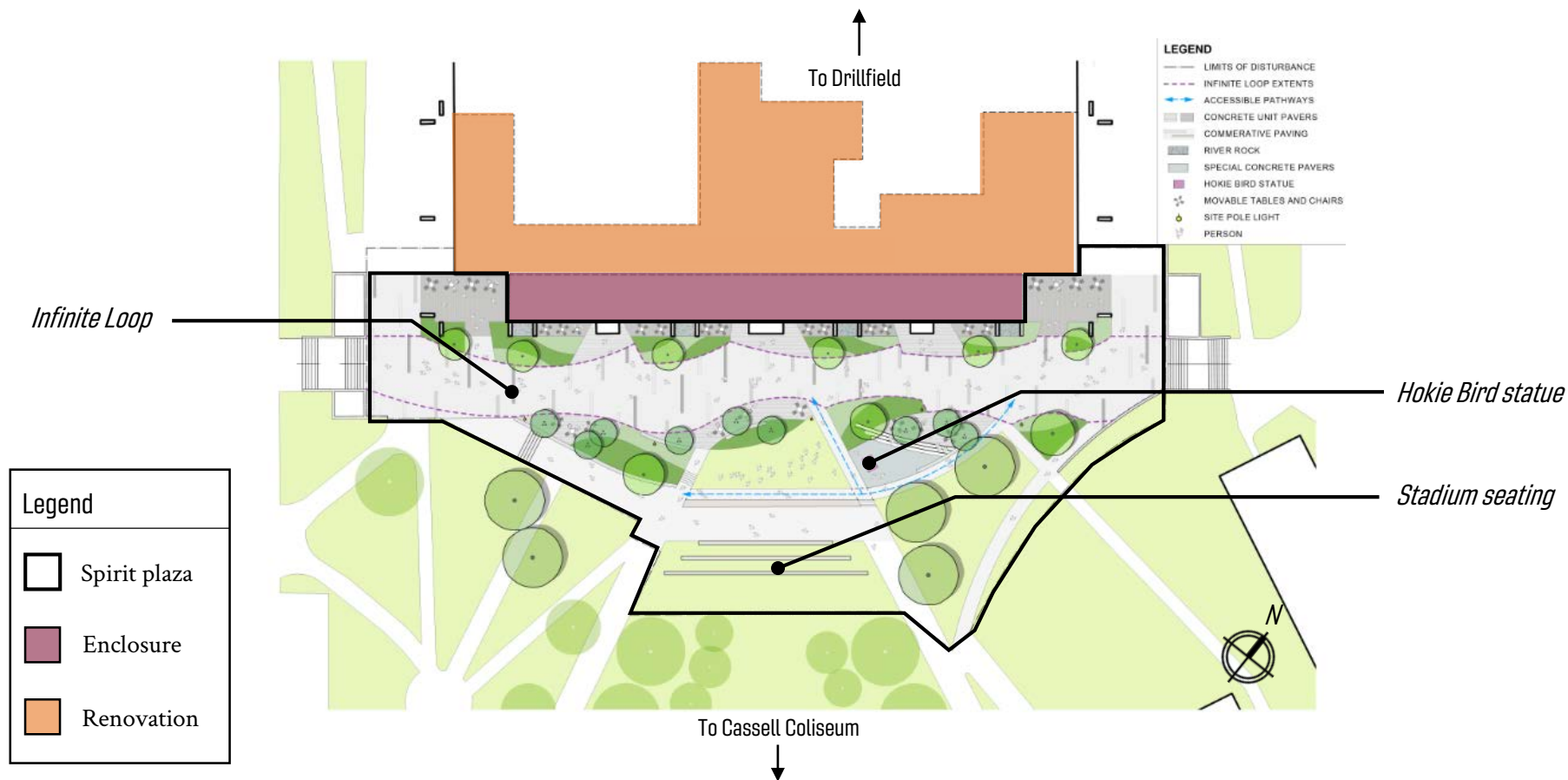
■ Dietrick Hall and Plaza Renovations

Site Plan

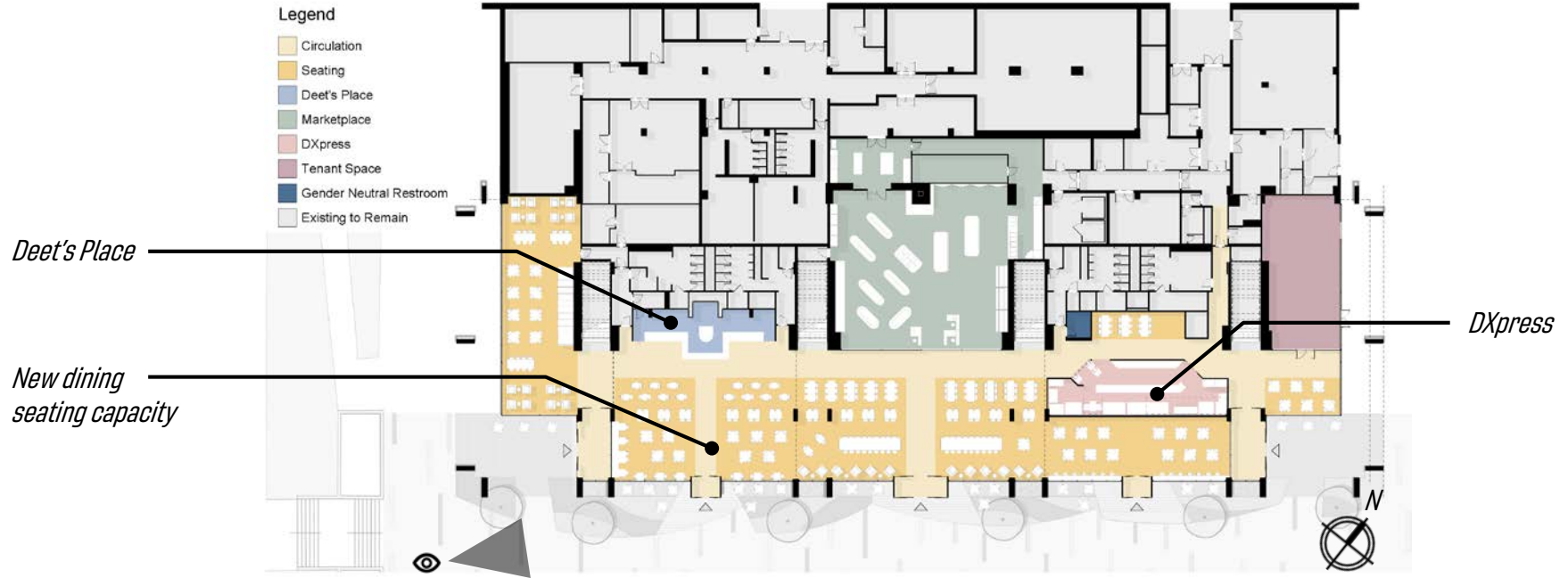


Dietrick Hall and Plaza Renovations

Site Plan



■ Dietrick Hall and Plaza Renovations



■ Dietrick Hall and Plaza Renovations

Existing Condition



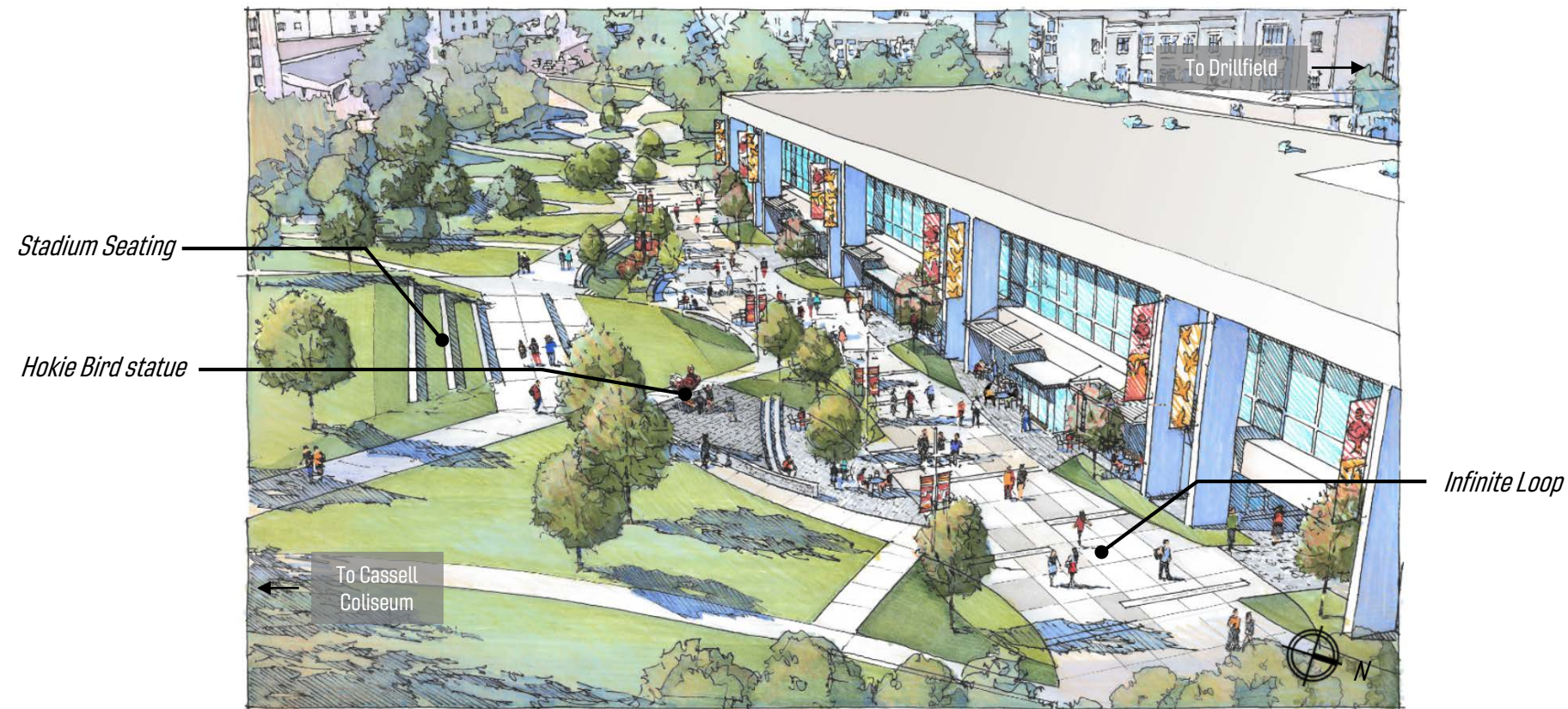
■ Dietrick Hall and Plaza Renovations

Future Condition



■ Dietrick Hall and Plaza Renovations

Three-Quarter Aerial Rendering



■ Dietrick Hall and Plaza Renovations

Recommendation

- That the Design Preview graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.

BOARD OF VISITORS DESIGN PREVIEW FOR STUDENT WELLNESS IMPROVEMENTS

Student health and wellness is a foundational component of academic success. As such, Virginia Tech seeks to further enhance its wellness offerings through approximately 263,000 gross square feet of renovation and new construction at War Memorial and McComas Halls. When completed, the two buildings will provide students with a number of resources for physical and mental well-being. These include improved exercise and recreational sports facilities and renovations to the Schiffert Health Center. The project also provides for improved office spaces for the School of Education and the Department of Human Nutrition, Foods, and Exercise. Improved classroom and collaboration space will be shared. The Cook Counseling Center will be accommodated in leased space.

First proposed as part of the 2012-2018 Capital Outlay Plan, this \$63 million project is funded through university resources. \$58 million will be devoted to the renovations of War Memorial Hall and McComas Hall. \$5 million will be allocated to the establishment of space for the Cook Counseling Center. Funding was initially approved by the Board of Visitors in 2017.

Capital Project Information Summary – Student Wellness Improvements

BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Title of Project:

Student Wellness Improvements

Location:

The project is located in the existing War Memorial Hall on the south side of the Drillfield and at McComas Hall located on Washington Street. The Cook Counseling Center will be accommodated in leased space.

Current Project Status and Schedule:

The project is currently in working drawings with design targeted for conclusion in fall 2019. Construction is anticipated to begin in late fall 2019 with completion targeted for summer 2021.

Project Description:

In War Memorial Hall, the project will provide upgraded exercise facilities for campus use as well as improved office and conference spaces for the Department of Human Nutrition, Foods, and Exercise, and the School of Education. Building systems will also receive an upgrade (including the addition of air conditioning to all areas except the gymnasiums). Shared instructional space will also be created. In McComas Hall, renovations will occur across two floors to provide upgraded facilities for the Schiffert Health Center.

Brief Program Description:

In War Memorial Hall, the School of Education will receive approximately 18,000 square feet of additional office and conference space. The Department of Human Nutrition, Foods, and Exercise will receive approximately 6,000 square feet for similar purposes. Recreational Sports, under whose purview campus exercise space resides, will receive approximately 98,000 square feet of space including basketball courts, squash courts, free weight space, space for cardiovascular exercise, and a number of offices. At McComas Hall, approximately 24,000 square feet of renovations will occur to improve clinic and laboratory spaces for student health services. The total project scope (not including future leased space) is approximately 263,000 gross square feet.

Contextual Issues and Design Intent:

A new link, featuring a highly-transparent glazing system, will address accessibility issues between the floors of the head house and the 1970s addition. New construction across the facility employs the use of this glazing system, precast

concrete, and wood inlays. New plazas on the Drillfield will welcome students to the link and a new plaza on the west side will create an additional entrance for access to a student corridor between the gyms. The project will also restore the south bridge providing access from the Payne Quad through War Memorial to the Drillfield on an accessible route.

Funding:

First proposed as part of the 2012-2018 Capital Outlay Plan, this \$63 million project is funded through university resources. \$58 million will be devoted to the renovations of War Memorial Hall and McComas Hall. \$5 million will be allocated to the establishment of space for the Cook Counseling Center. Funding was approved by the Board of Visitors in 2017.

Architect/Engineer:

Cannon Design

General Contractor:

To be determined

August 26, 2019



Student Wellness Improvements



Board of Visitors Design Review

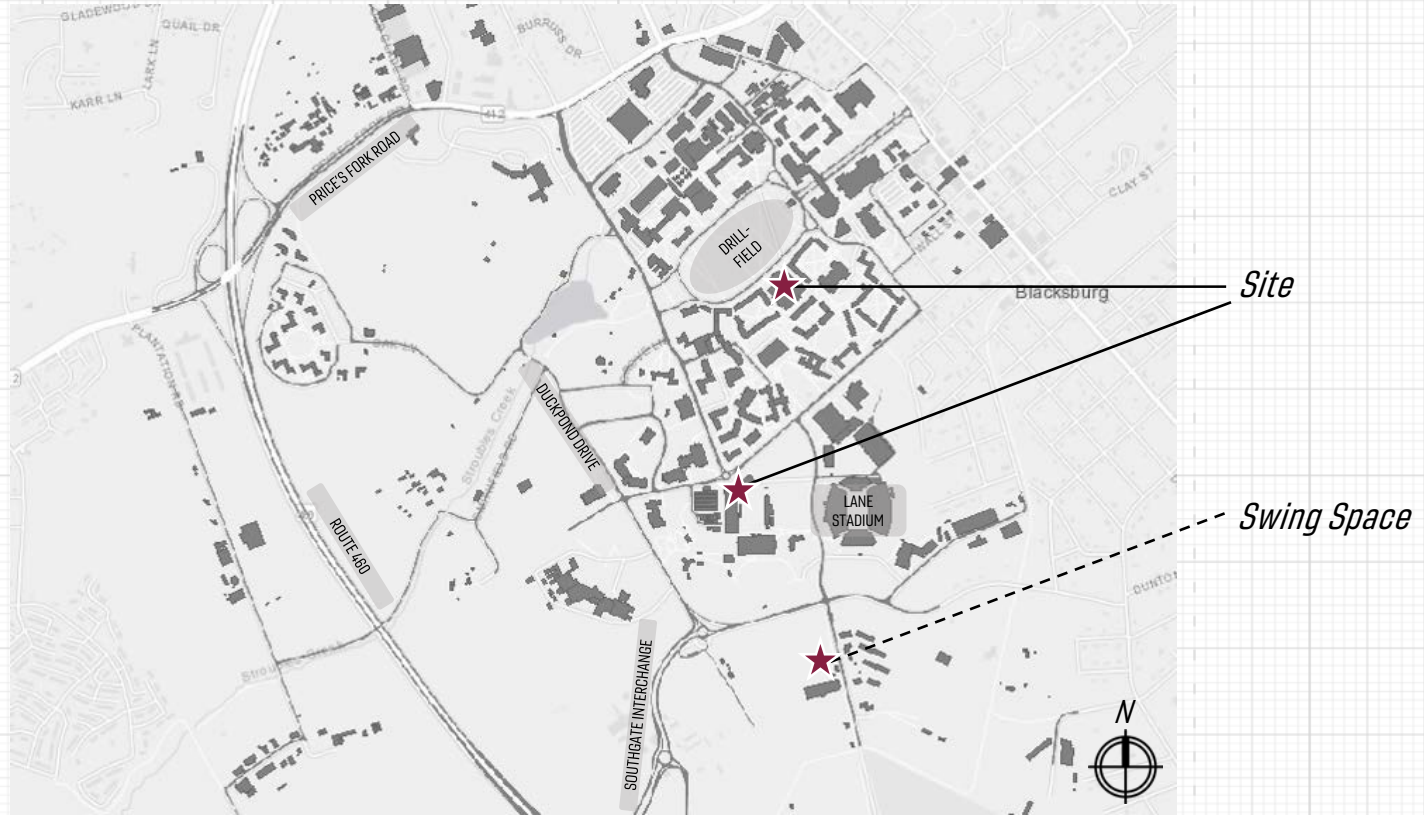
■ Student Wellness Improvements

Project Information

- Scope:*
 - New construction: 15,300 GSF
 - Renovation 247,600 GSF
- Delivery method: CM At-Risk
- Total project authorization: \$63 million
- Design phase: Working drawings
- Construction start: Fall 2019
- Targeted occupancy: Summer 2021

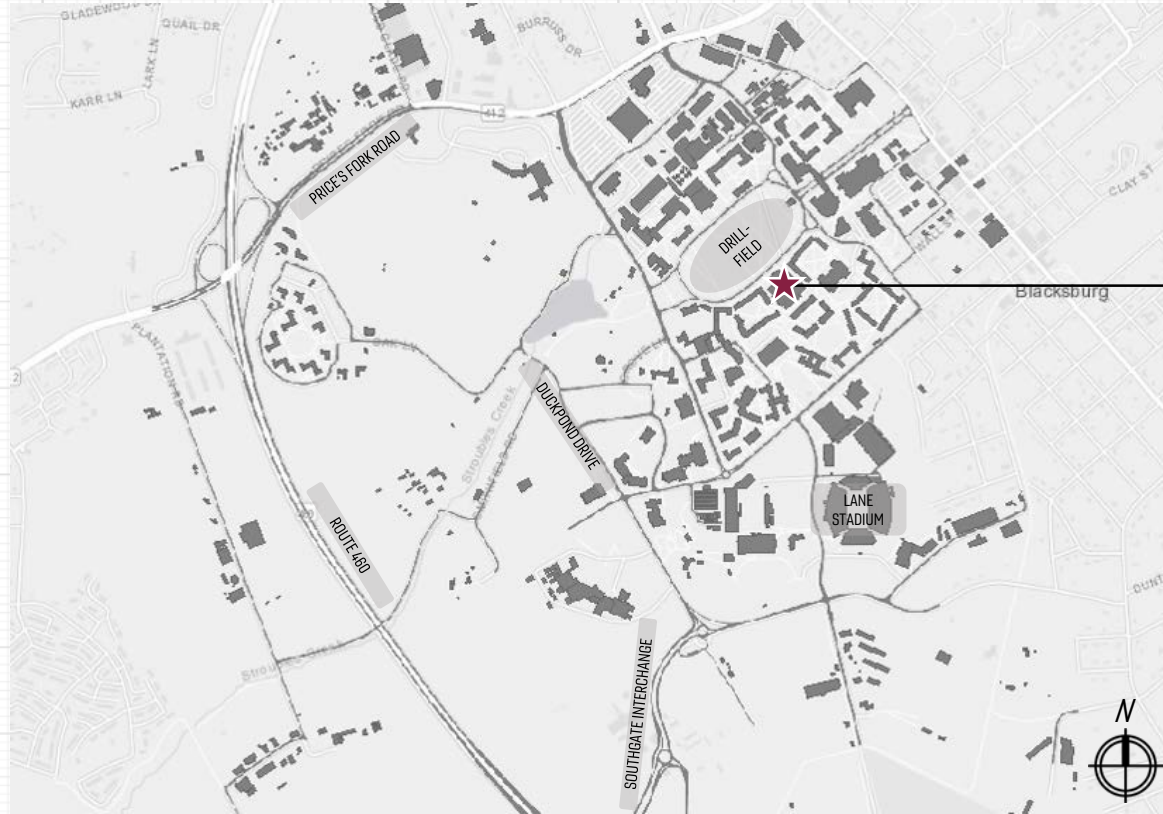
■ Student Wellness Improvements

Project Location



■ Student Wellness Improvements

Project Location
(War Memorial Hall)



Site

■ Student Wellness Improvements

Existing Condition (War Memorial Hall)



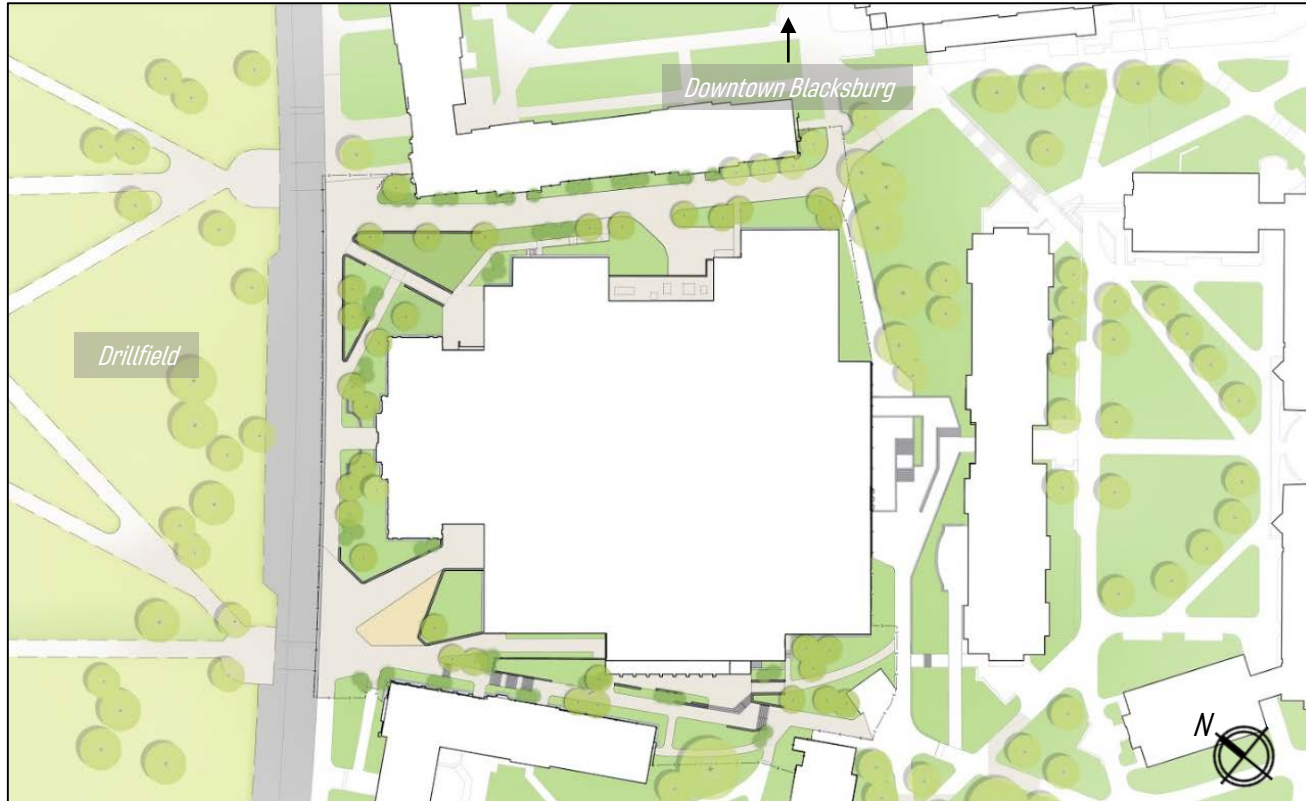
■ Student Wellness Improvements

Existing Condition (War Memorial Hall)



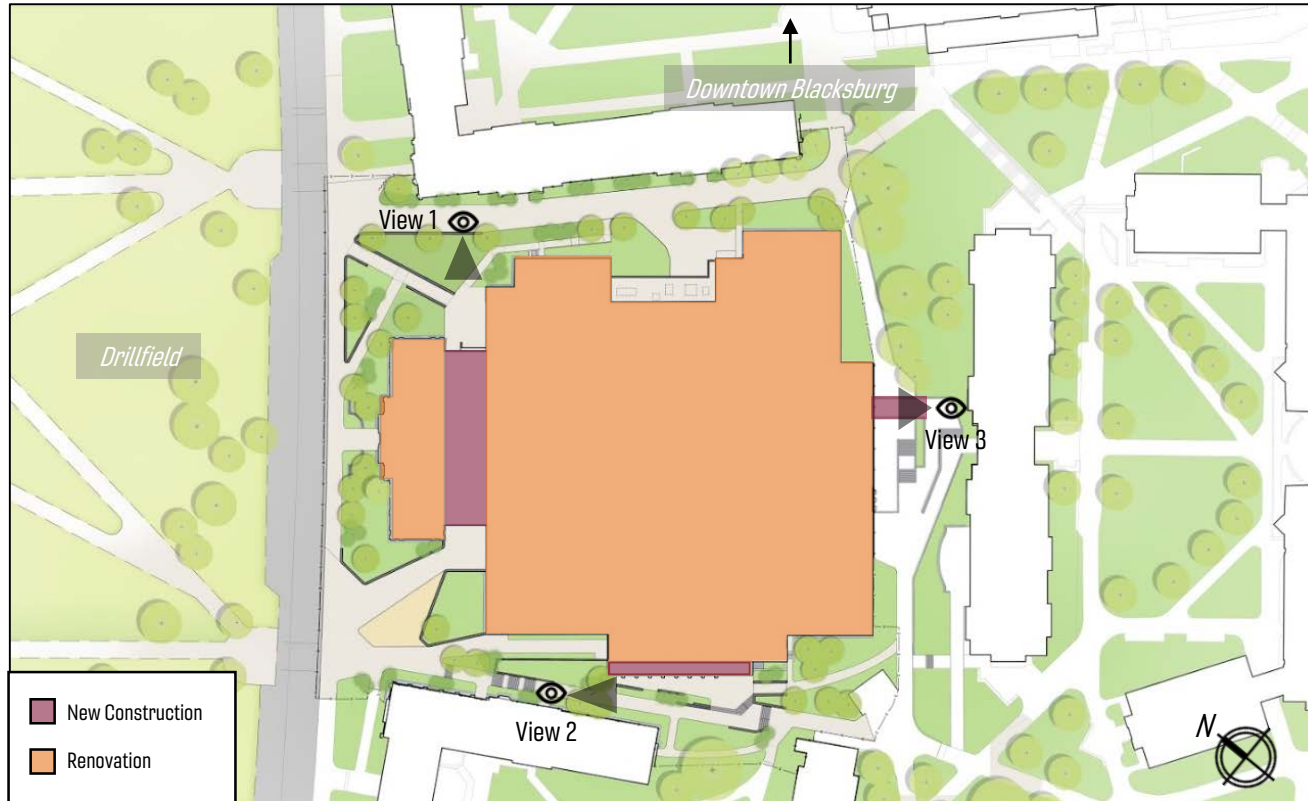
■ Student Wellness Improvements

Site Plan (War Memorial Hall)



■ Student Wellness Improvements

Site Plan (War Memorial Hall)



■ Student Wellness Improvements

View 1 - Exterior Rendering (War Memorial Hall)

Triple-height atrium with wood ceiling



Existing Headhouse
(Interior Renovation)

Existing gymnasium
(interior renovation)

*New accessible
entryway*

■ Student Wellness Improvements

View 2 - Exterior Rendering (War Memorial Hall)



■ Student Wellness Improvements

View 3 - Exterior Rendering (War Memorial Hall)

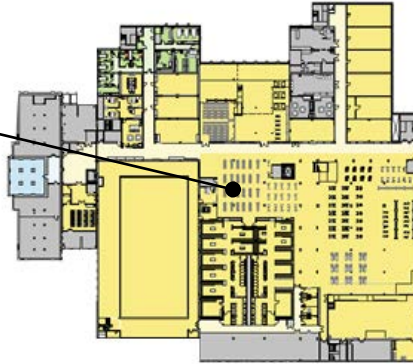


■ Student Wellness Improvements

Floor Plans (War Memorial Hall)

Floor 1 (Basement)

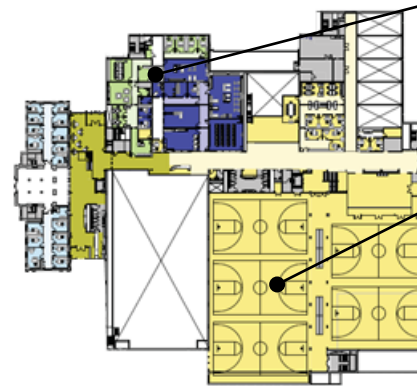
Renovated exercise spaces



Floor 2 (Ground-Level)

Academic and program spaces

Renovated basketball courts



BUILDING SUPPORT

EDUCATION

HNFE

HOKIE WELLNESS

PERFORMANCE CENTER

REC SPORTS

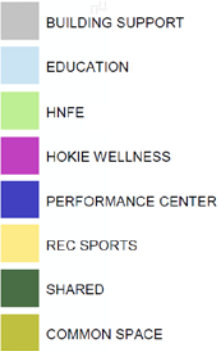
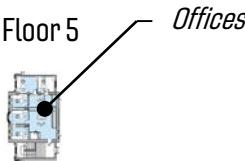
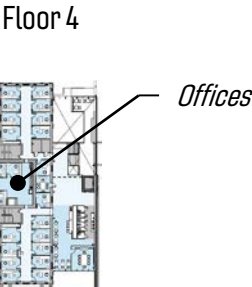
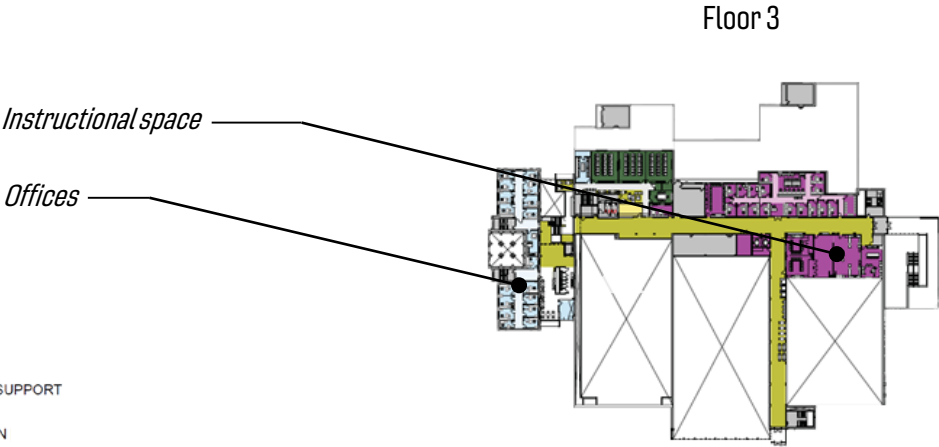
SHARED

COMMON SPACE



■ Student Wellness Improvements

Floor Plans (War Memorial Hall)



■ Student Wellness Improvements

Interior Rendering (War Memorial Hall)

Triple-height atrium with wood ceiling

Circulation and lounge space

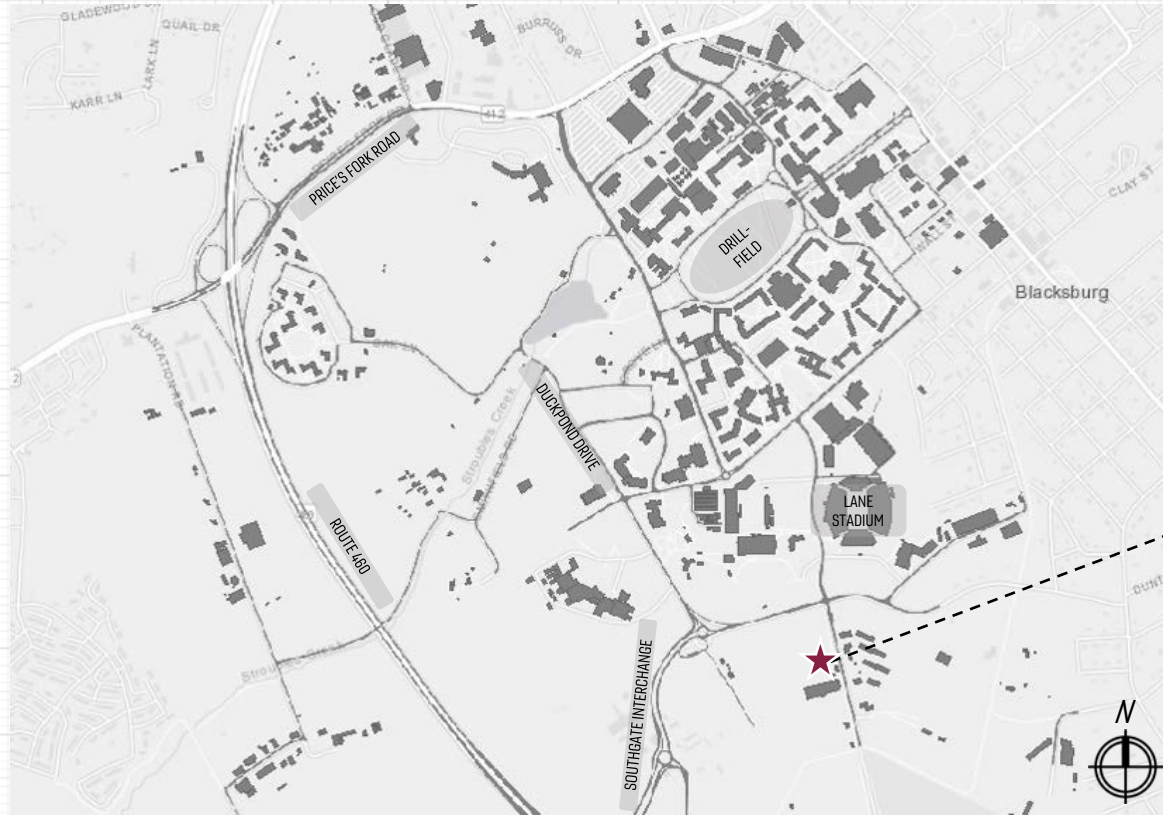


Exposed original Hokie Stone façade



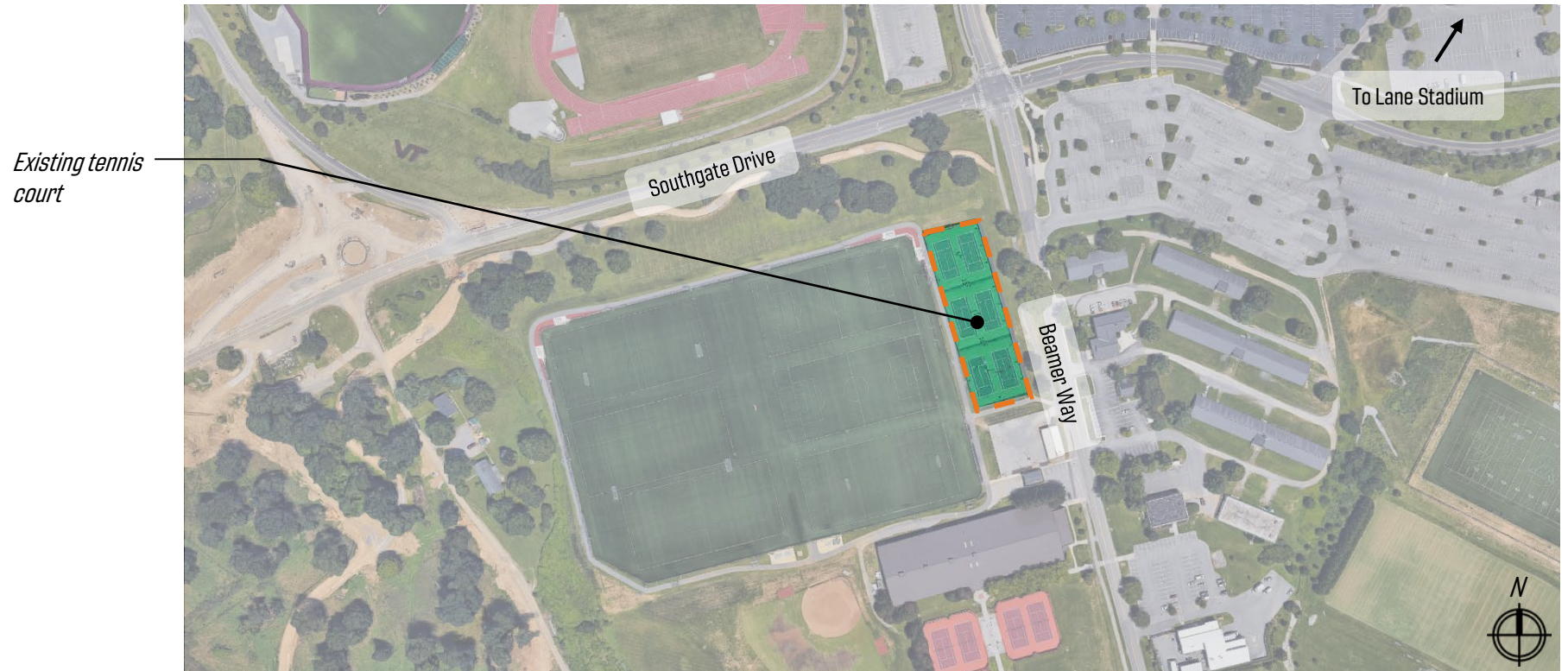
■ Student Wellness Improvements

Project Location
(Swing Space)



■ Student Wellness Improvements

Swing Space (Site)



■ Student Wellness Improvements

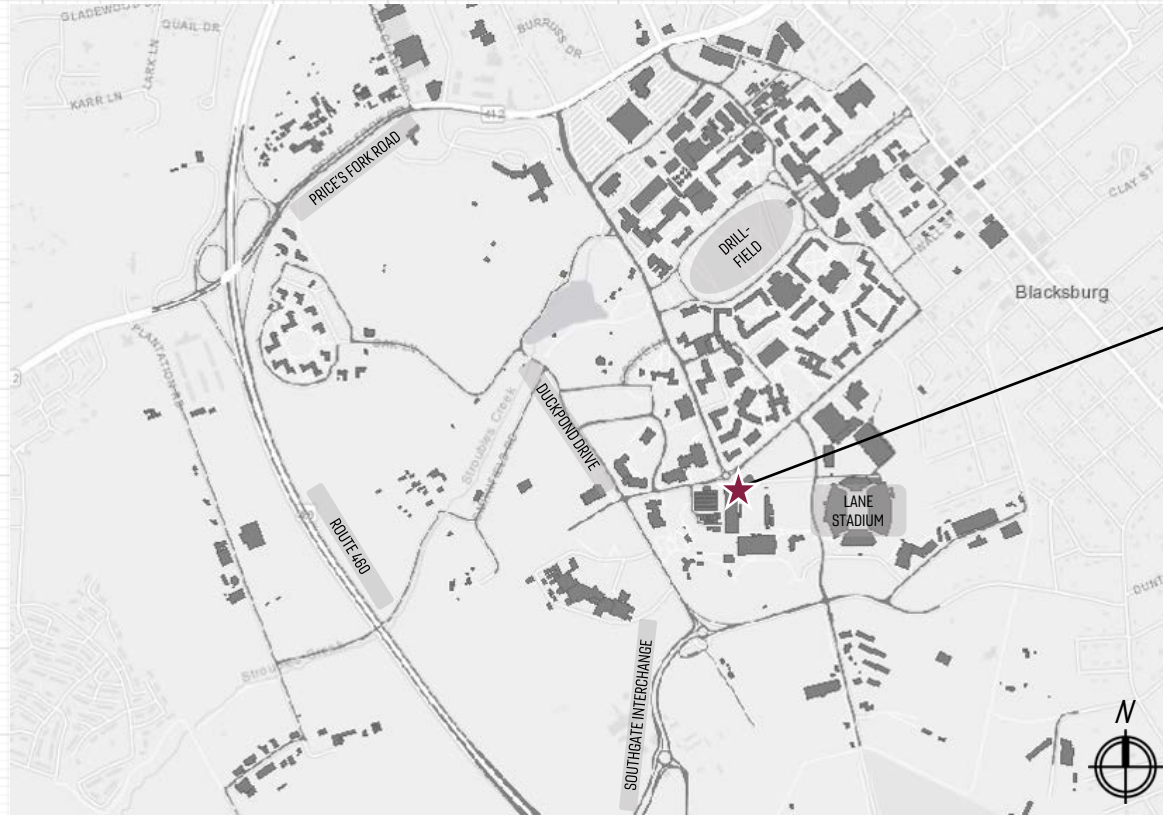
Swing Space (View from Street)

Tensile fabric structure



■ Student Wellness Improvements

Project Location
(McComas Hall)



Site

■ Student Wellness Improvements

Existing Condition (McComas Hall)

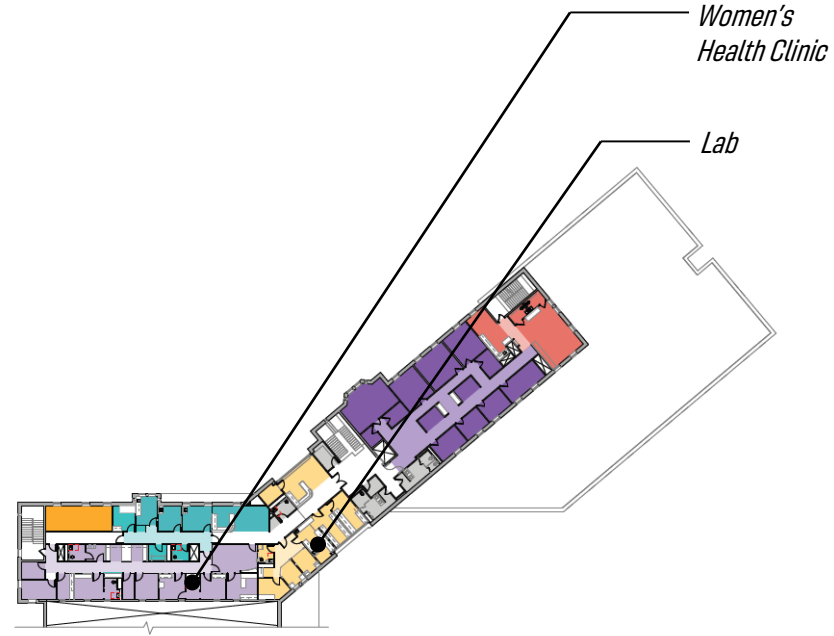


Student Wellness Improvements

Floor Plans (McComas Hall)



Floor 1



Floor 2



* Cook Counseling Center accommodated in leased space

■ Student Wellness Improvements

Recommendation

- That the Design Review graphics be approved and authorization be provided to continue with the project design consistent with the drawings shown.

DESIGN REVIEW FOR UNDERGRADUATE SCIENCE LABORATORY

The Undergraduate Science Laboratory consists of approximately 102,700 gross square feet of new construction at the intersection of West Campus Drive and Perry Street. The purpose of the facility is to provide adequate laboratory and classroom space to support growth in Virginia Tech's undergraduate science programs. Having last constructed a science laboratory building in the early 2000s, the university faces difficulty growing enrollment in these areas with the existing supply of space. The new facility also complements the adjacent New Classroom Building completed in 2016.

First included on the 2014-2020 Capital Outlay Plan, this project will be funded entirely by state resources. However, while the state allocated planning funds of approximately \$3.1 million in the 2016 session of the General Assembly, construction funding has not been allocated. The project is estimated to cost a total of \$74.2 million. Construction funding for this facility is currently the institution's top capital outlay priority.

Capital Project Information Summary – Undergraduate Science Laboratory

BUILDINGS AND GROUNDS COMMITTEE

August 26, 2019

Title of Project:

Undergraduate Science Laboratory

Location:

The project is located in the North Academic District, at the corner of West Campus Drive and Perry Street (across from the New Classroom Building). The building site is currently a paved parking lot.

Current Project Status and Schedule:

Preliminary design is completed. Construction is targeted to begin in summer 2020 with occupancy targeted for fall 2022. However, this schedule is contingent upon the provision of state construction funds.

Project Description:

This facility will support undergraduate students in science, technology, engineering, mathematics, and health sciences (STEM-H) fields. The laboratory will also provide opportunities for undergraduate students to engage in research opportunities typically available only to graduate students.

Brief Program Description:

The new four-story, approximately 102,700 gross square foot facility will support growing science programs by providing flexible teaching labs that support multiple disciplines. The most prominent and central component of the program is the Discovery Suite. Located on the first floor, this space is envisioned as a beacon of creativity and innovation. A place where students, faculty, venture partners, and others can collaborate on exciting and innovative ideas.

Contextual Issues and Design Intent:

Contextually, this facility is an important component of the expansion of the North Academic District proposed in the Campus Master Plan. Additional planned facilities include a research building directly to the north of the Undergraduate Science Laboratory, a new Global Business and Analytics Complex, a Multi-Modal Transit Facility, and the Hitt Hall and Intelligent Infrastructure Building. In terms of design intent, the Undergraduate Science Laboratory is consistent with other campus facilities in its use of Hokie Stone, glazing systems, precast concrete, and metal elements.

Funding:

First included on the 2014-2020 Capital Outlay Plan, this is a state-supported general fund project financed via tax-supported bonds.

Architect/Engineer:

ZGF Architects

General Contractor:

To be determined

August 26, 2019

Undergraduate Science Laboratory

Board of Visitors Design Review

■ Undergraduate Science Laboratory

Project Information

- New construction:* 102,700 GSF
- Delivery method: CM at Risk
- Total project authorization: \$74.2 million
- Design phase: Preliminary design
- Construction start: Summer 2020
- Targeted occupancy: Fall 2022

■ Undergraduate Science Laboratory

Project Location



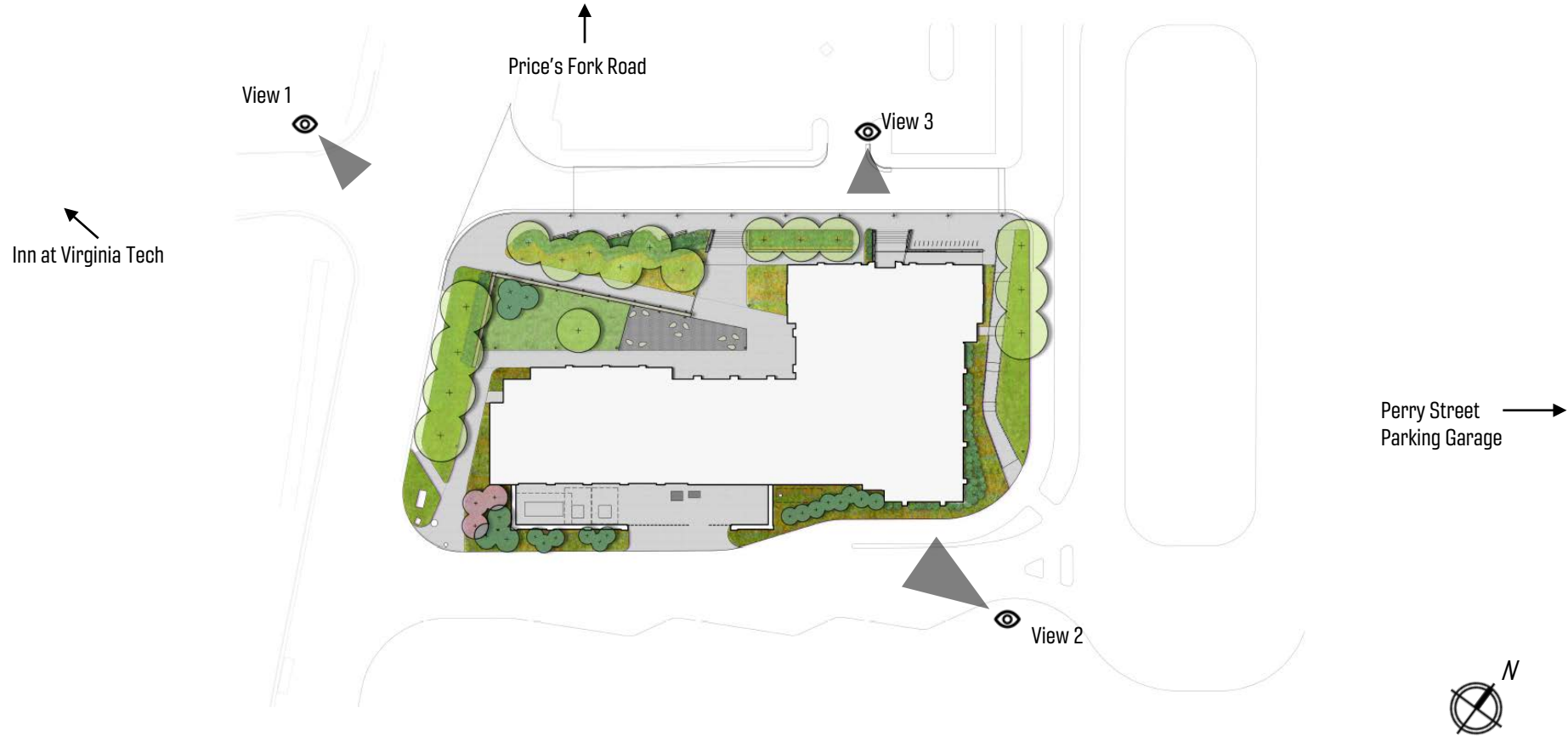
■ Undergraduate Science Laboratory

Existing Condition (View from Perry Street Parking Garage)



Undergraduate Science Laboratory

Site Plan



■ Undergraduate Science Laboratory

View 1 - Exterior Rendering

Glazing System

Entry Courtyard



■ Undergraduate Science Laboratory

View 2 - Exterior Rendering



*Perforated
Metal Screen*

*Heraldry
Opportunity*

Discovery Lab



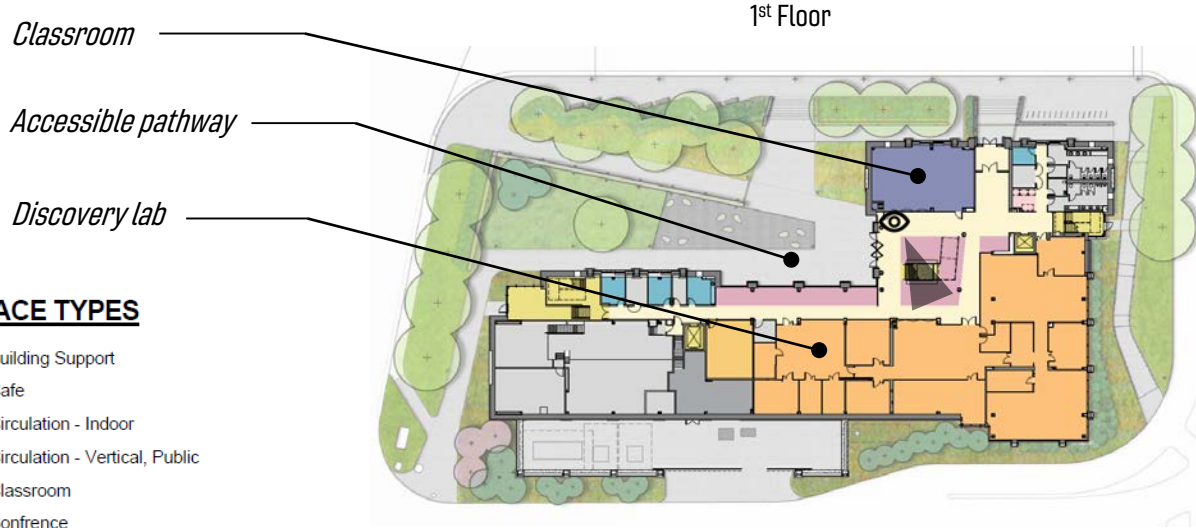
■ Undergraduate Science Laboratory

View 3 - Exterior Rendering
















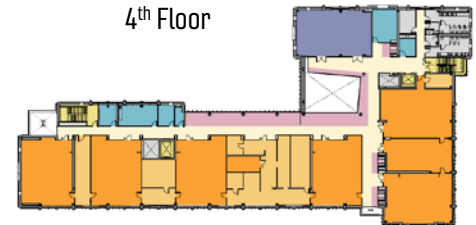
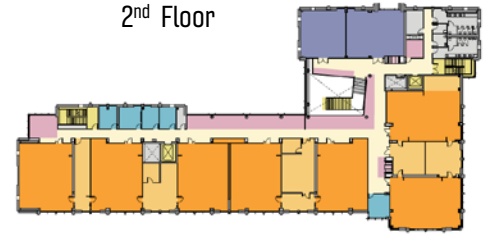
Undergraduate Science Laboratory

Floor Plans*



SPACE TYPES

	Building Support
	Cafe
	Circulation - Indoor
	Circulation - Vertical, Public
	Classroom
	Conference
	Interactive / Breakroom
	Lab Support
	Laboratory
	Laboratory - Discovery Suite
	MEP - Enclosed PH
	Office
	Support



* Basement and roof plans not shown; primarily mechanical and support spaces



■ Undergraduate Science Laboratory

Floor Plan



Discovery lab

Terrazzo flooring

Double-height atrium



■ Undergraduate Science Laboratory

Recommendation

- That the Design Review graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.