Committee Minutes

BUILDINGS AND GROUNDS COMMITTEE

Roanoke Higher Education Center – Room 716

August 27, 2018

Open Session

Board Members Present: C.T. Hill, Robert Mills, Dennis Treacy, Preston White

Undergrad Student Representative: Rachel Iwicki

VPI & SU Staff:  Mac Babb, Van Coble, Joe Crane, Kevin Foust, Lance Franklin, Tom Gabbard, Elaine Gall, Mark Gess, Patrick Hilt, Chris Kiwus, Alexa Magdalenski, Sarah McCoy, Liza Morris, Mike Mulhare, Kayla Smith, Dwyn Taylor, Jon Clark Teglas

1. Welcome

2. Consent Agenda: The Committee approved accepted the items listed on the Consent Agenda:

   a. Approval of the Minutes from the June 4, 2018 meeting: The Committee approved the minutes from the June meeting.


3. Overview of the Buildings and Grounds Committee: The Committee received an overview of Buildings and Grounds Committee oversight and responsibilities.

4. Satellite Location Safety, Security and Preparedness Presentation: The Committee received an overview of safety, security, and preparedness activities at Virginia Tech facilities outside Blacksburg from Mr. Mike Mulhare, Assistant Vice President for Emergency Management, Virginia Tech Police Chief Kevin Foust and Lance Franklin, Assistant Vice President for Environmental Health and Safety.

5. Resolution to Increase the Width of a Virginia Electric and Power Company Easement: The Committee reviewed and approved a request from Virginia Electric Power Company (VEPCO), a subsidiary of Dominion Energy, Inc., to increase the width of VEPCO’s overhead electric transmission lines easement by thirty feet (30’), for a total width of one hundred feet (100’), on Virginia Tech’s Northern Piedmont Center.
6. Resolution on Demolition of University Building No. 0835: The Committee reviewed and approved the university’s request to demolish the Tenant House, Obenshain Building No. 0835, which is a 935 gross square foot (GSF) concrete masonry unit and wooden room structure with a basement on university property located on the Northern Piedmont Center in Orange County, Virginia.

7. Design Preview for Livestock and Poultry Research Facilities – Phase I: The Committee reviewed and approved the design preview for the Livestock and Poultry Research Facilities – Phase 1. This project seeks to improve fourteen (14) facilities through both renovation and new construction. The Rector noted the importance of maintaining the presence of agricultural education facilities on the main campus. Mr. Mills noted the importance of providing modern facilities like those students will encounter in industry upon graduation.

8. Design Review for the Student-Athlete Performance Center: The Committee reviewed and approved the design review the Student-Athlete Performance Center. This approximately 28,800 gross square foot renovation and new construction project is intended to provide a competitive advantage for athletics.

9. November Agenda Discussion: The Committee discussed that the Campus Master Plan Update, the acceptance of the Clery Report, and the annual Sustainability Report will be included on the November meeting agenda.

The division of Operations is coordinating a tour of most of the Agricultural, Research & Extension Centers to facilitate discussions about safety and security support, facility needs, and other opportunities for coordination. This approximately four day bus trip would provide a unique opportunity to see many of the university’s research facilities throughout the state. Any Board of Visitors members who would like to participate in the tour should express their interest to Kim O'Rourke.

Dr. Wilson shared that an unsolicited proposal to redesign the university’s Falls Church site under the provisions of the Public Private Infrastructure Act was received on August 16th. The appropriate process have been initiated and the Board will be briefed as the proposal(s) are reviewed and if the university enters into negotiations regarding a detailed proposal and/or Comprehensive Agreement.

Joint Open Session with the Buildings and Grounds Committee

Board Members Present: Zo Amani – Graduate Student Representative, Ed Baine, Greta Harris, C. T. Hill, Anna James, Robert Mills, Debbie Petrine, Dennis Treacy, Horacio Valeiras, Preston White

VPI & SU Staff: Mac Babb, Callan Bartel, Bob Broyden, Richard Blythe, D’Elia Chandler, Cyril Clarke, David Crotts, John Cusimano, Brian Daniels, John Dooley, Jack Finney, Kevin Foust, Lance Franklin, Tom Gabbard, Mark Gess, Dee Harris, Mary Helmick, Tim Hodge, Katie Hugar, Chris Kiwus, Steve McNight, Nancy Meacham, Ken Miller, Terri Mitchell, Liza Morris, Sally Morton, Mike Mulhare, Mark Owczarski, Charlie Phlegar, Lisa Royal, Tim Sands, Savita Sharma, Dwight Shelton, Ken Smith, Brad Sumpter, Dwyn Taylor, Sherwood Wilson
1. **Approval of Resolution for Planning the Athletics Weight Room Renovation and Expansion:** The Committees reviewed for approval a resolution for planning the capital project for the Athletics Room Renovation and Expansion.

The Merryman Center was built in 1998 and is approximately 42,000 gross square feet. The facility has received few improvements since its original construction, and requires an update to meet the Athletic department’s expectations within the highly competitive environment for NCAA Division I college football. The envisioned renovation and expansion will provide state-of-the-art spaces for weight training, nutrition, team meeting space, circulation, and an updated graphics package.

Based on a feasibility study completed in January 2018, the university has determined that the desired athletics program can be accommodated with an approximately 22,520 gross square foot project. This includes a 17,640 gross square foot renovation of the first two floors of the Merryman Center and a 4,880 gross square foot expansion of the second floor team meeting rooms.

This request is for a $700,000 planning authorization to complete working drawings for the Athletics Weight Room Renovation and Expansion project.

The Athletics program is raising private funds to support the project and has received gifts and commitments sufficient to support the planning phase of the project.

The Committees recommended the Resolution for Planning the Athletics Weight Room Renovation and Expansion to the full Board for approval.

There being no further business, the meeting adjourned at 11:22 a.m.

* Requires full Board approval
### BUILDINGS AND GROUNDS COMMITTEE
#### August 27, 2018
**Capital Project Status Report**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Description</th>
<th>Estimated Total Project Cost</th>
<th>Non-General Funds</th>
<th>Project Teams</th>
<th>Contract Completion Date</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>FEASIBILITY</strong></td>
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<tr>
<td>G. Burke Johnston (GBJ) Student Center Programming Study</td>
<td>The Feasibility Study will provide a high level review of options to repurpose GBJ as a Student Success Center upon completion of the dining facility envisioned for the Intelligent Infrastructure for Human-Centered Communities Destination Area.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>December 2018</td>
<td>Feasibility Study is underway and on track.</td>
</tr>
<tr>
<td>Global Business Analytics Complex (G-BAC)</td>
<td>The Feasibility Study will investigate facility options for up to four buildings comprising a replacement for the Pamplin College of Business, creation of a Data Analytics and Decision Sciences facility, and two living-learning communities.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Feasibility Study is complete. Fundraising efforts by Pamplin College of Business are ongoing. Pro Forma cost analysis for the living/learning communities is under development.</td>
</tr>
<tr>
<td>Global System Sciences</td>
<td>The Feasibility Study will investigate a facility that will support disciplinary and interdisciplinary faculty of the College of Science, College of Natural Resources and Environment, College of Agriculture and Life Sciences, Virginia-Maryland Regional College of Veterinary Medicine, and university research institutes to facilitate education and research focused on solving critical regional and global problems, including environmental, animal, and human health.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>January 2019</td>
<td>Feasibility Study is underway and on track.</td>
</tr>
<tr>
<td>Media Building Feasibility Study</td>
<td>The Media Building is a 2-story structure that was constructed in 1934 at the intersection of Draper Road and Roanoke Street. The purpose of this feasibility study is to evaluate the repurposing of the facility to support and further the work of the Institute for Creativity, Arts, and Technology (ICAT). The study intends to provide an overall vision for the facility with the A/E providing high-level budget and phasing analysis.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>July 2018</td>
<td>Feasibility Study is complete.</td>
</tr>
<tr>
<td>Newman Library Feasibility Study</td>
<td>The Feasibility Study will evaluate the existing building's infrastructure, code compliance requirements for egress, change of building use, and restroom facilities.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>April 2018</td>
<td>Feasibility study is complete. Project is not envisioned to be approved for state funding prior to July 2019.</td>
</tr>
<tr>
<td>Phi Gamma Delta (Fiji) Fraternity House</td>
<td>The Feasibility Study will develop initial programming, exterior renderings, fundraising materials, and a cost estimate of a new fraternity house that can accommodate 30-44 beds.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Feasibility Study is underway.</td>
</tr>
<tr>
<td>Southgate Dining Food Production Center</td>
<td>The Feasibility Study will provide Dining Services with information to determine the most desirable option for the future growth of the Food Processing Facility. Three options being explored are: 1. renovation/additions to existing facility; 2. renovation/addition &amp; new building; 3. new building.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>December 2018</td>
<td>Feasibility Study is underway and on track.</td>
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<td>Slusher Hall Replacement</td>
<td>This project envisions the demolition of Slusher Hall and construction of replacement residence halls that will equal or exceed 630 beds. Planning documents and designs will be developed to execute the project in phases to avoid unnecessary reduction in bed inventory during the project.</td>
<td>$3,500,000</td>
<td>$3,500,000</td>
<td>TBD</td>
<td>TBD</td>
<td>A/E contract procurement initiated; Requests for Proposals (RFP) issued in July 2018.</td>
</tr>
<tr>
<td>Boiler Package 12</td>
<td>Demolition and disposal of decommissioned coal fired boiler (No. 6) and installation of a new 100-bohr natural gas/oil fired packaged boiler (No. 12).</td>
<td>$6,800,000</td>
<td>$6,800,000</td>
<td>TBD</td>
<td>Late Fall 2019</td>
<td>Design is underway and on track. Early procurement of the new boiler is underway. Procurement of the demolition contract to remove the existing decommissioned boiler is underway; demolition is targeted to begin in fall 2018. Targeting installation of the new boiler in summer/fall 2019 to be on line for the winter 2019 heating season.</td>
</tr>
<tr>
<td>Corps Leadership &amp; Military Science</td>
<td>Three story structure that provides a centralized and consolidated home to the Corps of Cadets administration and ROTC programs.</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Preliminary Design (50% design) documents completed. Project on hold pending state authorization for general fund for development of working drawings and construction.</td>
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<td>Creativity &amp; Innovation District Living-Learning Community</td>
<td>This project involves the provision of a new residential life building in the emerging Creativity &amp; Innovation District. The proposed 203,000 gross square feet (GSP) and approximately 600 bed facility will support the growing living-learning community anticipated for this key area of campus and supports the university’s Beyond Boundaries initiative.</td>
<td>$105,500,000</td>
<td>$105,500,000</td>
<td>TBD</td>
<td>TBD</td>
<td>Design-Build project. Criteria/Bridging Document phase is underway and on track. Procurement of the Design-Build team is targeted for fall 2019.</td>
</tr>
<tr>
<td>HITT Hall &amp; the Intelligent Infrastructure Complex</td>
<td>Program elements envision a 30,000 GSF HITT Hall connected to Bishop-Favaro Hall, a 15,000 GSF Fusion Lab, a 5,000 GSF Data for the Masses student activity space, and a dining facility. Project intent is to showcase technology and innovation as a key component of the Intelligent Infrastructure Destination Area.</td>
<td>$50,000,000</td>
<td>$50,000,000</td>
<td>TBD</td>
<td>TBD</td>
<td>Design-Build project. Criteria/Bridging Document phase is underway. Procurement of the Design-Build team is targeted for first quarter of calendar year 2019.</td>
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<td>Livestock &amp; Poultry Research Facilities (Phase I)</td>
<td>This project includes new construction of three buildings totaling approximately 28,900 GSF, 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.</td>
<td>$9,383,000</td>
<td>$0</td>
<td>Spectrum Design, PC, Roanoke, VA</td>
<td>Fall 2019</td>
<td>Re-design is complete. Construction contract procurement/the-bid underway; targeting construction start in early fall 2018.</td>
</tr>
<tr>
<td>Multi-Modal Transit Facility</td>
<td>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.</td>
<td>$44,000,000</td>
<td>N/A</td>
<td>Wendel Associates, Buffalo, NY</td>
<td>Summer 2021</td>
<td>Design is underway with planned conclusion in August 2018. Project faces a budgetary shortfall of $8 million. Construction phase on hold pending outcome of Town of Blacksburg efforts to garner additional project funds via VDOT Smart-Scale Grant. If funds are obtained, construction phase is targeted to begin in spring/summer 2019.</td>
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<tr>
<td>Student Wellness Improvements</td>
<td>The project provides a comprehensive solution for student wellness services through upgrades to McCormick Hall and major renovations to War Memorial Hall to meet the programming needs of the Schiffert Health Center, Cook Counseling Center, Recreational Sports, College of Liberal Arts and Human Sciences, and the College of Agriculture and Life Sciences.</td>
<td>$83,000,000</td>
<td>$83,000,000</td>
<td>CannonDesign, Baltimore, MD</td>
<td>Spring 2022</td>
<td>Design is underway; options to optimize programmatic needs specific to Cook Counseling Center are under consideration. Procurement of Construction Manager at Risk (CMAR) targeted for fall 2018.</td>
</tr>
<tr>
<td>Undergraduate Science Laboratories Renovations</td>
<td>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.</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
<td>Studio Twenty Seven, Architecture, Washington, DC</td>
<td>August 2019</td>
<td>Construction contract awarded in July 2018; construction start targeted to begin in August 2018 with planned completion by August 2019.</td>
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<tr>
<td>Undergraduate Science Laboratory</td>
<td>The project will construct a new undergraduate science laboratory facility of 102,000 GSF to accommodate the growing demand for STEM-H degrees at Virginia Tech.</td>
<td>$71,709,000</td>
<td>$0</td>
<td>ZGF Architects, Washington, DC</td>
<td>Fall 2021</td>
<td>Project is currently in design and on track. Earliest possible date for approval of state funding for working drawings development and construction is July 2019.</td>
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<td>ACC Network Studio</td>
<td>The project will establish the necessary broadcast facilities including interior renovations to an existing control room; construction of two new control rooms; installation of fiber, infrastructure, and equipment to support the broadcast of Virginia Tech intercollegiate athletic events on the ACC Network.</td>
<td>$10,000,000</td>
<td>$0</td>
<td>Multiple A/E Firms</td>
<td>Fall 2019</td>
<td>Demolition of existing spaces in Lane Stadium is complete; procurement of construction contracts to support installation of infrastructure is underway; equipment procurement (via the Department of Athletics) is underway.</td>
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<tr>
<td>Athletic Facilities Improvements</td>
<td>This is an umbrella project for improvements to multiple athletics facilities, including Rector Field House, Baseball, and Tennis.</td>
<td>$37,500,000</td>
<td>$37,500,000</td>
<td>Multiple Contractors</td>
<td>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 - Project on-hold pending funding.</td>
<td></td>
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<tr>
<td>Commonwealth Ballroom Improvements</td>
<td>The scope of work includes replacing outdated and nonfunctioning lighting systems, stage systems, flooring, 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.</td>
<td>$3,246,000</td>
<td>$3,246,000</td>
<td>Dewberry Engineers</td>
<td>March 2019</td>
<td>Construction contract awarded in July 2018; construction start targeted to begin in October 2018 with planned completion in time for Spring 2019 Commencement.</td>
</tr>
<tr>
<td>Fire Alarm Systems &amp; Access</td>
<td>This project provides for critical life safety improvements in several educational and general facilities on campus. Fire alarm systems will be installed or expanded in as many campus buildings as funding allows, including Architecture Annex, Food Science &amp; Technology, Lane Hall, Light-Readex Hall, Norris Hall, Patton Hall, Randolph Hall, War Memorial Hall (Gym), Wallace Annex, and Whittemore Hall.</td>
<td>$4,900,000</td>
<td>$0</td>
<td>Multiple A/E Firms</td>
<td>Fall 2018</td>
<td>Installation of Fire Alarm System completed in all buildings except Norris Hall and Litton Reaves Hall which are scheduled to be completed in August and October 2018, respectively.</td>
</tr>
<tr>
<td>Lane Electric Substation Expansion</td>
<td>This project will expand the existing electrical substation 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.</td>
<td>$6,900,000</td>
<td>$8,500,000</td>
<td>Appalachian Electric Power and Virginia Tech Electric Service</td>
<td>Summer 2019</td>
<td>Project is administered by Virginia Tech Electric Service in coordination with Appalachian Power Company and Appalachian Electric Power. Project is currently on track for completion in summer 2019.</td>
</tr>
<tr>
<td>O’Shaughnessy Hall Renovation</td>
<td>This project includes major renovation of a 72,000 GSF student residence building into a living-learning community. The residence hall originally housed 350 students and upon completion will house 344 students.</td>
<td>$21,500,000</td>
<td>$21,500,000</td>
<td>Mosley Architects</td>
<td>August 2018</td>
<td>Project is on schedule for completion in summer 2018 and occupancy in August.</td>
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<td>Renovate/Renew Academic Buildings</td>
<td>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 these 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.</td>
<td>$36,020,000</td>
<td>$0</td>
<td>Glove &amp; Holmes Architects Richmond, VA</td>
<td>August 2018</td>
<td>Construction is underway on all three buildings. Davidson Hall and the Liberal Arts Building are on track for completion in time for start of Fall Semester 2018. Sandy Hall encountered delays and is targeted for completion in time for start of Spring Semester 2019.</td>
</tr>
<tr>
<td>Steger Hall Hokie Stone Repairs &amp; Betterments</td>
<td>The scope of work includes repair of Hokie Stone façade as well as cleaning and removal of efflorescence from the stone, precast, and glass surfaces.</td>
<td>$1,100,000</td>
<td>$1,100,000</td>
<td>Wiss, Janney, Elstner Associates, Inc.</td>
<td>December 2018</td>
<td>Project is under construction; targeted for completion in late fall 2018.</td>
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<tr>
<td>Unified Communications &amp; Network Renewal Project</td>
<td>This project replaces outdated equipment and upgrades campus communications systems, providing infrastructure and equipment enhancements over a five-year period. The project scope includes upgrades to the Internet Protocol (IP) Network, the cable plant, and equipment rooms in buildings throughout campus.</td>
<td>$16,508,000</td>
<td>$16,508,000</td>
<td>Various Contractors</td>
<td>December 2017</td>
<td>Project is complete. Final report.</td>
</tr>
<tr>
<td>Upper Quad Residential Facilities</td>
<td>This project provides for the demolition and construction of replacements for Brodie and Rasche residence halls to serve the Corps of Cadets. The new residence halls (totaling approximately 110,000 GSF) will provide over 1,000 beds in double and triple rooms sharing hall community bathrooms. These new residence halls will be constructed at the approximate location of the original Rasche Hall and Brodie Hall. Both buildings will provide double and triple occupancy rooms that meet the residence and in-room storage space needs of the cadets. Both residence halls will provide dedicated meeting, community, and group spaces, specifically designed to meet Corps of Cadets program and organization needs. Thomas Hall and Montalvo Hall will also be demolished as part of this project.</td>
<td>$91,000,000</td>
<td>$91,000,000</td>
<td>Barton Malow Company Charlottesville, VA</td>
<td>Pearson Hall - August 2019 New Cadet Hall - April 2017</td>
<td>Project is complete; contract close-out actions underway.</td>
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<tr>
<td>Virginia Tech Carilion Biomedical Research Expansion</td>
<td>This project, executed under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEIA), will construct an approximately 139,000 GSF 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, procedure training rooms, and technical training space.</td>
<td>$89,865,000</td>
<td>$0</td>
<td>AECOM Skanska</td>
<td>January 2020</td>
<td>Project fast-tracked for construction; design completed July 2018. Foundation work is underway and steel erection began July 2018.</td>
</tr>
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CAPITAL PROJECT STATUS REPORT

Christopher H. Kiwus, PE, PhD
Associate Vice President and Chief Facilities Officer
Projects In Feasibility

- G. Burke Johnston Student Center Programming Study
- Global Business Analytics Complex
- Global System Sciences
- Media Building Feasibility Study
- Newman Library Feasibility Study
- Phi Gamma Delta (Fiji) Fraternity House
- Southgate Dining Food Production Center
- Projects Initiated
  - Slusher Hall Replacement
Projects Under Construction

- ACC Network Studio
- Athletic Facilities Improvements
- Commonwealth Ballroom Improvements
- Fire Alarm Systems & Access
- Lane Electric Substation Expansion
- O'Shaughnessy Hall Renovation
- Renovate/Renew Academic Buildings
- Steger Hall Hokie Stone Repairs & Betterments
- Unified Communications & Network Renewal Project

- Upper Quad Residential Facilities
- Virginia Tech Carilion Biomedical Research Expansion
Buildings & Grounds Committee Overview

- Sherwood G. Wilson
- August 27, 2018
... responsible for oversight of campus safety and security, the maintenance and development of the physical plant and infrastructure, land use and planning, and review and development of capital outlay requests.

The university employee designated as the University Building Official when serving in that capacity reports directly to the Board of Visitors through this committee.
Organizational Structure August 2018
- Safety & Security

**University Safety & Security Policy Committee Organizational Structure**

- Board of Visitors
- President
- University Safety & Security Policy Committee
  - Threat Assessment Team
  - Campus & Workplace Violence Prevention Committee
  - Health and Safety Committee
  - Emergency & Risk Assessment Committee

- **University Safety & Security Policy Committee**
- **University Policy 5615**
- **Threat Assessment**
- **Functional offices/entities:**
  - Virginia Tech Police Department
  - Virginia Tech Rescue Squad
  - Office of Emergency Management
  - Environmental Health & Safety
Land Use and Planning

- Master Plan
- Project Siting
- Architecture and Landscape Design
- Transportation Planning
- Space Management
Capital Outlay and Construction Management

SIX YEAR CAPITAL PLAN
CAPITAL ASSETS and FINANCE MANAGEMENT

PROJECT REVIEW AND PRIORITIZATION
Executive Space Committee Approval
Presidential Approval
BDV Approval

Lobbying and/or Fundraising
General Fund (State Funded) Project
State Appropriation Design
Project Initiation

PROJECT DESIGN AND CONSTRUCTION
FACILITIES

PROJECTS OUTSIDE THE SIX YEAR CAPITAL PLAN
FACILITIES

EXECUTIVE SPACE COMMITTEE
Project Identification and Feasibility
University Space Committee Approval
Executive Space Committee Approval
Presidential Approval

PRESIDENTIAL POLICY 289

Construction Begins

Preliminary Design
BDV Design Review (B&G Committee)
Detail Design
BOV Design Review (B&G Committee)
Construction Documents

General Fund (State Funded) Project
Self Funded Project
BDV Fund Authorization Construction
State Appropriation Construction
Physical Plant and Infrastructure

Maintaining and sustaining the built and natural environment

- Includes: buildings, transportation, utilities, electrical/mechanical systems, and the main campus grounds
- Main goal: provide a safe, reliable, efficient, functional, and beautiful setting for the campus community
- Accomplished via: proactive assessment, long-range planning, and collaborative management
  - Certain maintenance, repair, renovation, and housekeeping activities are delegated to Student Affairs and Athletics
  - The Division of Information Technology is responsible for the planning, installation, and maintenance of all communications and data infrastructure (telephones, internet, etc.)
## Summary: BOV B&G Committee Review and Action Items

<table>
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<th>Type</th>
<th>Frequency</th>
<th>Committee</th>
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<tr>
<td>Capital Project Status Report</td>
<td>Every meeting</td>
<td>Buildings &amp; Grounds</td>
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<tr>
<td>Tours of Capital Projects and/or Future Construction Sites</td>
<td>Most meetings – as needed</td>
<td>Buildings &amp; Grounds</td>
</tr>
<tr>
<td>University Building Official Annual Report</td>
<td>Annually in June</td>
<td>Buildings &amp; Grounds</td>
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<tr>
<td>Sustainability Report</td>
<td>Annually in November</td>
<td>Buildings &amp; Grounds</td>
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<td>Clery Report</td>
<td>Annually in November</td>
<td>Buildings &amp; Grounds and Compliance, Audit &amp; Risk</td>
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<td>Design Preview/Reviews</td>
<td>As needed in order to receive Board approval</td>
<td>Buildings &amp; Grounds</td>
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<td>Project Updates (ex: Drillfield Drive Improvements)</td>
<td>As needed to keep the Board informed</td>
<td>Buildings &amp; Grounds</td>
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<td>Regional Public Service Authority Appointments</td>
<td>As needed to maintain full representation</td>
<td>Buildings &amp; Grounds and Full Board</td>
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<td>Demolitions</td>
<td>As needed in order to receive Board approval</td>
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<td>Easements</td>
<td>As needed in order to receive Board approval</td>
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<td>Every four years</td>
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<tr>
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<td>Buildings &amp; Grounds and Finance &amp; Resource Management and Full Board</td>
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<tr>
<td>Funding – Construction and Capital Leases</td>
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<td>Six-Year Capital Plan</td>
<td>Every two years</td>
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<tr>
<td>Master Plan</td>
<td>As needed in order to receive Board approval</td>
<td>Buildings &amp; Grounds and Full Board</td>
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### Notes:

1. Other, less common, items that would come forward for review through the B&G Committee include: Adoptions of and Updates to Regulations (ex: Parking and Weapons), updates to facility-related university policies, updates to construction-related governing documents (ex: PPEA Guidelines, Design Standards, etc.), and litigation briefings.

2. The BOV has delegated authority for approving safety and security-related university policy revisions to the University Safety and Security Policy Committee.
Satellite location safety, security & preparedness

- Mike Mulhare, Assistant Vice President for Emergency Management
- Kevin Foust, Chief of Police & Director of Security
- Lance Franklin, Assistant Vice President for Environmental Health & Safety
Regional/Satellite Based
• Roanoke
• Hampton Roads
• Richmond
• Abingdon
• Danville
• National Capital Region
• Steger Center

Program Elements
• Emergency Action Planning
• Business Continuity
• VT Alerts
• Annual Training and Exercises
Emergency Management - Beyond Blacksburg

Recent Actions

• Joint Exercise with UVA at Falls Church
• Alert Protocol for Health Science & Technology (Roanoke) Campus
• Manage Alerts at Falls Church for UVA
• Support ARECS Directors Meeting
• Develop Additional Emergency Planning Portal Features to Support Satellite Facilities
• Develop Custom Templates for Cooperative Extension Emergency Plans.
• Assist Steger Center with Update of Emergency Action Plans and Notification Procedures
- Security cameras at the Falls Church center
- Visit to the Steger Center
- Ability to send VT Alerts to off-sites from the Security Center
- Efforts at VTCRI and medical school in Roanoke
- Liaison contact with jurisdictional agencies at off-sites
- Joint presentations at Agricultural Research & Extension Centers (ARECs) with OEM
- Full time representation on the FBI’s Joint Terrorism Task Force
**Environmental Health and Safety Off Site Services**

- Occupational Health Services
- Pesticide Management
- Hazardous Waste Management
- Regulated Medical Waste Management
- Personnel safety training
- Farm safety
- Fire and life safety oversight
- Petroleum Storage Management
- Unpermitted Discharge Investigations
- Contaminated Soils Management
- Exposure Control Consultation

**Deliverables (FY 2018)**

- 73 Inspections
- 12,000 Miles Traveled
- 985 Individuals Trained
- 283 Medical Evaluations
- 547 Service Hours
- 206 Medical Surveys
- 143 Respirator Users
- 51 Vaccinations
- 25 Blood/Titer tests
- 35 Tons of Medical & Hazardous Waste
- 7 Investigations/Consultations
- 1 AREC Farm Manager Conference

Attachment E
• Maintaining adequate safety, security & preparedness activities at locations outside the Blacksburg campus requires:
  • Outreach - individualized approaches based on the activities occurring at each location
  • Relationships - build trust and reliability between contacts in each location and central support teams
  • Resources - particularly in time and staffing
DESIGN PREVIEW 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 improve 14 facilities through renovation and new construction. The buildings are located at existing Virginia Tech sites on the Plantation Road Corridor, Smithfield Horse Center, at Kentland Farm, and at the Glade Road Poultry Research Center.

This project provides for approximately 129,600 gross square feet of newly constructed space and 24,500 gross square feet of renovated space. To achieve these improvements, the project requires the demolition of six existing buildings and three grain silos. Several of these facilities have been abandoned due to their condition.

This $22.136 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.
Capital Project Information Summary – Livestock and Poultry Research Facilities

BUILDINGS AND GROUNDS COMMITTEE

August 27, 2018

Title of Project:
Livestock and Poultry Research Facilities – Phase I

Location:
Facilities exist across four 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.

Current Project Status and Schedule:
The project is currently in schematic design. The architect of record (Spectrum Design) seeks to conclude the design process in early 2019. Construction is targeted to begin in spring 2019 with occupancy targeted for summer 2020.

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. Lastly, projects at Kentland Farm focus on animal housing and research.

The Plantation Road Corridor will see the construction of four new facilities. Projects include an Equine Barn, an equipment storage building, and two hay barns. With the exception of the Equine Barn, which is focused on animal housing, all other projects focus on increasing the supply and quality of CALS storage space. An existing granary and two silos, all of which are beyond their useful life, will be demolished. Three existing facilities (Campbell Arena, the Animal Judging Pavilion, and the Beef Barn) will receive renovations. 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 three demolished feed storage buildings and one granary silo.
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 the new construction of two facilities. Referred to collectively as the 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. While designed for the same use, poultry processing, the existing facilities are beyond their useful life. An additional poultry processing facility will also receive a renovation. More details are included in the program description below.

**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 three minor facilities. Three buildings will also receive a renovation. The major facility is the approximately 13,500 gross square foot Equine Barn. It features over 11,300 square feet of animal housing, approximately 300 square feet of office space, and nearly 1,900 square feet of support and circulation space. Minor facilities include two additional, but more remote, hay barns. These facilities are 8,400 and 10,000 gross square feet (respectively). Programs consist almost exclusively of hay storage space. A new 5,600 gross square foot Equipment Storage Facility will also be constructed. Its program consists exclusively of storage space. Renovations, of approximately 22,700 total gross square feet, will also occur to Campbell Arena, the Animal Judging Pavilion, and the Beef Barn. These efforts focus on the upgrading of building systems, structural reinforcement, and other interior modifications.

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. No renovations will occur at this location. The first major facility is the roughly 26,600 gross square foot Beef Nutrition / Physiology Research Facility. It contains over 21,000 square feet of animal housing and approximately 5,500 square feet of support and storage space. The second major facility is the nearly 23,000 gross square foot Swine Facility. The majority of the program, nearly 15,500 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. One facility will also receive a renovation. The new minor facilities, the Broiler and Turkey Grow-Out Facilities, will be approximately 12,300 and 11,200 gross square feet (respectively). Programs consist exclusively of animal housing and support space. One existing poultry facility will receive 1,800 gross square feet of renovation targeted at improving processing spaces and creating two ADA-compliant restrooms.

**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 gray, red, or green roofs).

**Architect/Engineer:**
Spectrum Design

**General Contractor:**
To be determined
LIVESTOCK AND POULTRY RESEARCH FACILITIES - PHASE I

Board of Visitors Design Preview
Livestock and Poultry Research Facilities - Phase I

- New Construction: ~ 129,600 GSF
- Renovation: ~ 24,500 GSF
- Delivery Method: Design-Bid-Build
- Funding (State Maximum): $22.5 Million
- Design Phase: Schematic
- Construction Start: Spring 2019
- Targeted Occupancy: Summer 2020
- Project Locations

- Kentland Farm
- Glade Road Poultry Center
- Plantation Road Corridor
- Campus Core
- Smithfield Horse Center
- Route 460

Attachment E
- Location 1 - Plantation Road Corridor
- Location 1 - Plantation Road Corridor

- Equine Barn
- Equipment Storage Facility
- Hay Barn (Hethwood)
- Hay Barn (Warm Hearth)

- Major Facility
- Minor Facility

Campus Core
Price's Fork Road
Southgate Inn

VIRGINIA TECH
Location 1 - Plantation Road Corridor

- Equine Barn
- Equipment Storage Facility
- Hay Barn (Hethwood)
- Hay Barn (Warm Hearth)
- Major Facility
- Minor Facility

*Attachment E*
Plantation Road Corridor - Existing Conditions
Plantation Road Corridor - Buildings to be Demolished

- Campus Core
- Route 460
- Plantation Road
- Price's Fork Road
- Existing Granary & Silos

Attachment E
Plantation Road Corridor - New Construction

- Equipment Storage Facility
- Equine Barn
- Price's Fork Road
- New Construction
- Campus Core
- Route 460
- Plantation Road

Attachment E
Plantation Road Corridor - Renovations

- Price’s Fork Road
- Campus Core
- Campbell Arena
- Route 460
- Plantation Road
- Animal Judging Pavilion
- Beef Barn

Renovation(s)
Plamation Road Corridor - Minor Facilities

Two Hay Barns & One Equipment Storage Facility

Character Images

Hay Barns:

Equipment Storage Facility:
Location 2 - Smithfield Horse Center
Location 2 - Smithfield Horse Center

- Horse Center
- Hay Barn
- Price’s Fork Road
- Smithfield Plantation

Major Facility

Demolition
Location 2 - Smithfield Horse Center

- Price's Fork Road
- Horse Center
- Hay Barn
- Smithfield Plantation
- Route 460

Major Facility

Demolition
New Construction
Smithfield Horse Center - Existing Conditions
Smithfield Horse Center - Buildings to be Demolished

- Existing Granary & Feed Storage Facilities
- Smithfield Plantation
- Route 460
- Plantation Road
- Price's Fork Road
- Campus Core
Smithfield Horse Center - New Construction: Hay Barn
Smithfield Horse Center - Hay Barn: Elevations

- North Elevation
- West Elevation
- Roof Monitor
- Metal Panel
- Sliding Door
Smithfield Horse Center - Hay Barn: Floorplan

Legend:
- Hay Storage: 10,000 SF

Feed Storage
Location 3 - Kentland Farm
- Location 3 - Kentland Farm
Kentland Farm - Existing Conditions: Swine Facility
Kentland Farm - Swine Facility: Elevations

- West Elevation
- Metal Panel
- Sidewall Curtain
- North Elevation
- Finishing Pens
- Nursery
- Gestation Area
- Classroom

* Image Not to Scale
Kentland Farm - Existing Conditions: Beef Nutrition | Physiology Research Facility
Kentland Farm - New Construction: Beef Nutrition | Physiology Research Facility

Beef Nutrition | Physiology Research Facility

Hay Barn

New Construction

Blacksburg

VT Dairy Complex

Radford

VT TECH
Kentland Farm - Beef Research Facility: Elevations

North Elevation
- Cattle Pens
- Feed Storage

West Elevation
- Metal Panel
- Concrete
- Cattle Pens
Kentland Farm - Minor Facility: One Hay Barn
- Location 4 - Glade Road Poultry Center
Location 4 - Glade Road Poultry Center

Broiler Grow-Out Facility

Turkey Grow-Out Facility

Minor Facility

Campus Core

Town Boundary

Glade Road
Location 4 - Glade Road Poultry Center

- Demolition
- New Construction
- Renovation
Glade Road Poultry Center - Buildings to be Demolished

- Campus Core
- Existing Poultry Processing Facility
- Glade Road
- Demolition
- Town Boundary
Glade Road Poultry Center - New Construction: Poultry Grow-Out Facilities
Glade Road Poultry Center - Renovation: Poultry Processing Facility
Glade Road - Minor Facilities: Two Poultry Grow-Out Facilities
Livestock and Poultry Research Facilities - Phase I

Recommendation

- That the Design Preview graphics be approved and authorization be provided to continue with the project design consistent with the drawings shown.
DESIGN REVIEW FOR THE STUDENT-ATHLETE PERFORMANCE CENTER

The Student-Athlete Performance Center project seeks to create a 200-seat nutrition center centrally located within the athletics area of campus. This approximately 25,500 gross square foot renovation and new construction project is intended to provide a competitive advantage for athletics. Meal offerings will be designed to provide performance-based nutrition. It is designed to serve the existing group of Virginia Tech athletes in close proximity to their training and performance spaces. This arrangement fosters inter-team community, supports athletic performance, and offers a flexible meeting and event space for related uses.
Capital Project Information Summary – Student-Athlete Performance Center

BUILDINGS AND GROUNDS COMMITTEE

August 27, 2018

Title of Project:
Student-Athlete Performance Center

Location:
This facility is a renovation of, and addition to, the existing Gordan D. Bowman Memorial Club Room (Bowman Room). This room is on the fourth floor of the Jamerson Athletic Center, located between Lane Stadium and Cassell Coliseum. Additional light renovation and minor construction will also occur on floors one through three.

Current Project Status and Schedule:
The project is currently in the working drawings phase. Full construction is targeted to begin in spring 2019 with occupancy targeted for fall 2020.

Project Description:
This project supports overall recruitment and branding efforts by the Department of Athletics. Capturing views of the indoor practice facility, outdoor football practice field, and Lane Stadium will provide visual reinforcement of the athletics brand to users of the space. The facility will also be designed to meet best practices for sustainable design and operations. The total project budget is $16.682 million.

Brief Program Description:
This project focuses on a partial renovation of, and addition to, the fourth floor of the Jamerson Athletic Center. On this floor, approximately 3,700 square feet of additional seating (including balconies) will be constructed. This figure also includes a 1,900 square foot enclosure of a portion of the existing roof to widen the entry corridor from Cassell Coliseum and to create limited office space. The approximately 9,200 square foot fourth floor renovation focuses on modification to, and or creation of, additional dining, servery, and kitchen space. The approximately 8,500 square feet of third floor renovations focus on enhancing structural stability to accommodate additional weight on the fourth floor. New elevator-related construction of approximately 1,700 square feet, and renovation of 450 square feet for egress, will also occur on floors one through three.
Contextual Issues and Design Intent:
Primary exterior materials include precast concrete, Hokie Stone, and a glazing system. An opportunity for heraldry will exist on the eastern elevator tower. Finally, the facade of the structure contains four separately-accessible balconies.

Architect/Engineer:
Hanbury

Construction Manager:
To be determined
Student-Athlete Performance Center

- New Construction: ~ 7,300 GSF
- Renovation: ~ 18,200 GSF
- Delivery Method: Design-Bid-Build
- Funding (Total Authorization): $16.682 Million
- Design Phase: Working Drawings
- Construction Start: Spring 2019
- Targeted Occupancy: Fall 2020
■ Student-Athlete Performance Center

Project Location
Student-Athlete Performance Center

Existing Condition (Interior)
Student-Athlete Performance Center

Existing Condition (Exterior)
Student-Athlete Performance Center

Site Plan

- New Construction
- Renovation

Student-Athlete Performance Center

Attachment E
Student-Athlete Performance Center

Interior Rendering (View toward Lane Stadium)
Student-Athlete Performance Center

Interior Rendering (View toward Lane Stadium)
Student-Athlete Performance Center

Fourth Floor Plan

- Access to Cassell Coliseum
- Entry
- Exterior Balconies
- Freight Elevator
- Freight Exterior

Attachment E
Student-Athlete Performance Center

Floor Plans

First Floor

Second Floor

Third Floor

Fourth Floor

New Construction

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