

May 8, 2007

MEMORANDUM

TO: The Buildings and Grounds Committee:

Lewis F. Payne, Chair
Daniel R. Abramson
Alan A. Diamonstein
Susan Y. Dorsey
W. Heywood Fralin
Vincent J. Mastracco, Jr.
Don R. Pippin
Gordon F. Rainey, Jr.
Thomas F. Farrell, II, Ex Officio

and

The Remaining Members of the Board:

A. Macdonald Caputo	Carey J. Mignerey
G. Slaughter Fitz-Hugh, Jr.	Warren M. Thompson
Glynn D. Key	E. Darracott Vaughan, Jr., M.D.
Austin Ligon	John O. Wynne

FROM: Alexander G. Gilliam, Jr.

SUBJECT: Minutes of the Meeting of the Buildings and Grounds
Committee on May 8, 2007

The Buildings and Grounds Committee of the Board of Visitors of the University of Virginia met, in Open Session, at 1:00 p.m. on Tuesday, May 8, 2007, in the Lower East Oval Room of the Rotunda; The Hon. Lewis F. Payne, Chair, presided. W. Heywood Fralin, Daniel R. Abramson, the Hon. Alan A. Diamonstein, Ms. Susan Y. Dorsey, Vincent J. Mastracco, Jr., Gordon F. Rainey, Jr., and Thomas F. Farrell, II, Rector, were present.

Present as well were A. Macdonald Caputo, G. Slaughter Fitz-Hugh, Jr., Ms. Glynn D. Key, Warren M. Thompson, E. Darracott Vaughan, Jr., M.D., and Carey J. Mignerey.

Also present were John T. Casteen, III, Leonard W. Sandridge, Alexander G. Gilliam, Jr., Ms. Colette Sheehy, Arthur Garson, Jr., M.D., James L. Hilton, R. Edward Howell, Ms. Yoke San L. Reynolds, David J. Neuman, and Richard Rice.

The Chair called the meeting to order and asked Ms. Sheehy, Vice President for Management and Budget, to present the Agenda.

Consent Agenda - Architect/Engineer Selection, Lee Street Entry and Connective Elements

Ms. Sheehy said the so-called Lee Street Entry, which is in the Medical Center area, is a project which includes the renovation of the main entry area, the lobby and the related canopy of the University Hospital, together with the development of new pedestrian connectors between the Hospital and the East Parking Structure. From there, connectors would lead to the new North Parking Structure on the other side of the CSX Railroad's tracks.

Because the design of this project is integrated closely with that of the Emily Couric Clinical Cancer Center, the architects for that project - Zimmer Gunsul Frasca Architects of Washington - are recommended for the Lee Street Entry as well.

On motion, the Committee approved the necessary resolution. No action by the full Board of Visitors is required, but the resolution will be entered in the Minutes of the next Board meeting as a matter of record.

APPROVAL OF ARCHITECT SELECTION FOR THE LEE STREET ENTRY AND CONNECTIVE ELEMENTS

RESOLVED that Zimmer Gunsul Frasca Architects of Washington, D.C. is approved for the performance of architectural and engineering services for the Lee Street Entry and Connective Elements at the University of Virginia.

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Consent Agenda - Easement, Emmet Street Duct Bank

The University wishes to request an easement from the City of Charlottesville which would permit the construction of a new duct bank across Emmet Street near the McCormick Road Bridge. The new duct bank will be part of the upgrading of electrical service to Thornton Hall.

On motion, the following resolution was adopted and recommended to the full Board of Visitors for approval:

APPROVAL TO REQUEST A PERMANENT EASEMENT FOR THE UNIVERSITY OF VIRGINIA FROM THE CITY OF CHARLOTTESVILLE

RESOLVED that the request for an easement, from the City of Charlottesville, to permit construction of a new duct bank on and adjacent to Emmet Street for upgraded electrical service to Thornton Hall is authorized; and

RESOLVED FURTHER that appropriate officers of the University are authorized to execute said easement.

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Action Agenda - Project Budget and Scope Reviews: Emily C. Couric Clinical Cancer Center, Hospital Bed Expansion, Crockett Hall Renovation

Ms. Sheehy reminded the Committee that in accordance with a policy adopted by the Board of Visitors in 2004, all capital project budget increases in excess of 10 percent and all capital project scope changes require the approval of the Finance Committee and the Buildings and Grounds Committee. There are changes in three capital projects that require the Committee's attention.

The first of these is the Emily C. Couric Clinical Cancer Center, whose initial budget of \$70.7million was approved by the Board in September, 2004. The Board at that time also approved a building of five floors. Plans were modified in 2006, and on July 7th, the Committee approved a schematic design that included four floors, with a budget of \$59million. It has been determined, however, that it is cost effective to build a shelled fifth floor. Inflation and other costs bring the budget to \$74million, which of course is not greater than 10 percent of the original budget, but the administration wanted the Committee to be aware of the changed scope of the project.

The Board in September, 2005, approved a \$78million budget for the Hospital Bed Expansion project, which included new space for 70 beds. The Medical Center wishes to alter the plans to add space for 72 beds and increased support space. The new budget is proposed at \$80.2million.

In 2001, the Board approved a \$4.75million budget for the planning and renovation of Crockett Hall at The University of Virginia's College at Wise. The renovation is now projected at \$6,900,000.

On motion, the Committee approved the following resolution and recommended it to the Finance Committee and to the full Board for approval:

APPROVAL OF PROJECT SCOPE AND BUDGET MODIFICATIONS

RESOLVED that the scope modifications for the Emily C. Couric Clinical Cancer Center (\$74,000,000) and the Hospital Bed Expansion Project (\$80,178,000) and the budget increase for the Renovation of Crockett Hall (\$2,150,000) are approved.

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Mr. Diamonstein expressed concerns that Virginia architectural and engineering firms are not being used enough for projects at the University and at Wise.

Action Agenda - Concept, Site, and Design Guidelines: Lee Street Entry and Connective Elements

"Lee Street Entry" refers to the main entry area of the University Hospital. Ms. Sheehy asked Mr. Neuman, the Architect for the University, to present the proposed guidelines.

The project includes the renovation and upgrade of the main entry area, the lobby, and related areas of the University Hospital. It includes as well the construction of new pedestrian connectors - to be above-grade - between the Hospital and the East Parking Structure and from there to the new North Parking Structure on the other side of the CSX tracks.

The designs for the project, Mr. Neuman said, are consistent with the 2005-2006 Health System Area Plan, as well as with two other projects in the area - the Emily Couric Clinical Cancer Center and the Hospital Bed Expansion project.

The guidelines were reviewed by the Medical Center Operating Board at its meeting on May 7th.

On motion, the necessary resolution was approved by the Committee. Action by the full Board of Visitors is not required, but the resolution will be entered in the Minutes of the next Board meeting as a matter of record.

APPROVAL OF CONCEPT, SITE, AND DESIGN GUIDELINES FOR THE LEE STREET ENTRY AND CONNECTIVE ELEMENTS

RESOLVED that the concept, site, and design guidelines, dated May 8, 2007, and prepared by the Architect for the University, for the Lee Street Entry And Connective Elements, are approved; and

RESOLVED FURTHER that the project will be presented for further review at the schematic design level of development.

Action Agenda - Schematic Design: University Hospital Bed Expansion

Mr. Neuman continued with a description of the proposed schematic design for the University Hospital Bed Expansion project.

The project will expand the north façade of the Hospital to make room for 72 new rooms, which will be "acuity adjustable," which means that they will be capable of handling intensive care patients. The Concept, Site and Design Guidelines were approved by the Committee on September 16, 2005, and the selection of the SmithGroup of Washington as project architect on December 15, 2005.

The design was reviewed by the Medical Center Operating Board on May 7th.

On motion, the necessary resolution was approved. No further action by the full Board of Visitors is required, but the resolution will be entered in the Minutes of the next Board of Visitors meeting as a matter of record.

APPROVAL OF SCHEMATIC DESIGN FOR HOSPITAL BED EXPANSION

RESOLVED that the schematic design, dated May 8, 2007, and prepared by the SmithGroup of Washington, D.C. for the Hospital Bed Expansion Project, is approved for further development and construction.

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Report by the Vice President for Management and Budget

Ms. Sheehy told the Committee that site work has begun on the South Lawn Project. The work is being done by a local firm and their bid came in under budget.

Ms. Sheehy referred Members to a written report on the Committee's goals and work plan, agreed to at the Board Retreat last July. (This document is attached to these Minutes as Appendix A.)

Report by the University Building Official

Ms. Sheehy told the Committee that the Management Agreement between the Commonwealth and the University, a result of the Restructured Higher Education Financial and Administrative Operations Act of 2005, specifies that the University designate someone to be Building Official, and that this person is to be responsible for building code compliance at the University. The Building Official is to report directly and exclusively to the Board of Visitors.

Accordingly, the President designated Mr. Richard H. Rice, Jr., P.E., as the University Building Official, effective last July 1st. Mr. Rice is responsible for issuing permits for all capital projects required by the Virginia Uniform Statewide Building Code to have a building permit. He also must determine the suitability for occupancy of, and issue certifications for building occupancy, for all capital projects requiring such certification.

Mr. Rice will give the Committee an annual update at the May/June meeting; the first such report is attached to these Minutes as Appendix B.

Ms. Sheehy introduced Mr. Rice, who made brief remarks to the Committee.

Reports by the Architect for the University

Mr. Neuman spoke to the Committee about the project to improve the paving and lighting in the alleys leading to East and West Lawn. He showed examples of both pavings and lighting that could be used, explaining the virtues and faults of each.

There was considerable discussion of the possible pavings.

In view of the fact that work on a prototype alley needs to be done over the summer, the Chair suggested that the Members be polled on their preferences. The polling will take place shortly.

Finally, Mr. Neuman reported on the implementation of the LEED Certification Process.

On motion, the meeting was adjourned at 2:00 p.m.

AGG:lah

These minutes have been posted to the University of Virginia's Board of Visitors website.

<http://www.virginia.edu/bov/buildingsgroundsminutes.html>

ATTACHMENT A

**BUILDINGS AND GROUNDS COMMITTEE
2006-2007 GOALS - MAY 2007 UPDATE**

BUILDINGS AND GROUNDS COMMITTEE
2006-2007 GOALS – MAY 2007 UPDATE

1. Historic asset management: implementation and process

Currently UVa has one of nation's most eminent collections of historic buildings and landscapes, and it is the only UNESCO designated World Heritage Site campus in the United States. A historic resources plan has been developed to ensure that the Academical Village receives preservation treatment which conforms to the highest international standards. The recently completed Historic Preservation Framework Plan has been disseminated recently, and will help to inform decision-making as work is proposed on the post-Jefferson buildings on Grounds.

Objectives and Results through May 2007:

- **Approval of first tax credit application (Varsity Hall); completed outline for second application (Rugby Admin. Building) by June 2007:** Part I of Varsity Hall tax credit application submitted to DHR; Part II being drafted for submission in early May. Authorization to proceed with project for Rugby Administration Building anticipated this month.

- **Completion of Historic Structure Report for Rotunda by April 2007:** Rotunda archival and site research completed in early November; consultants request for five week extension agreed to by University in January, 2007; draft report submitted February 21, 2007; comments provided to consultants on April 9, 2007. Awaiting revised final draft.

- **Completion of restoration study, design drawings and specifications, and cost study for Pavilion X, Lawn Rooms and adjacent Colonnades by June 2007:** Request for Proposal (RFP) for work was issued February 23; contract negotiations almost complete; work projected to begin on May 1, 2007 and to conclude by September 30, 2007.

- **Draft agreement with Thomas Jefferson Foundation regarding a joint building conservation institute and related conservation facility completed by June 2007:** Contact with Thomas Jefferson Foundation initiated, discussion about scope, location and funding to continue in spring.

- **Completion of Historic Structure Report for Hotel A by December 2007:** RFP to be issued in late May 2007.

- **Construction of alleyway and pavilion courtyard paving and lighting prototype area complete by June 2008:** Final draft report for Pavilion Alley and McCormick Road improvements submitted in late November; edits complete, awaiting final report. Report includes recommendations and preliminary cost estimates for paving, drainage, and landscape for the alleys. Proposal received in late February for A/E services through construction is under review. Alley lighting demonstrations performed on October 26th and January 30. Historic

Preservation Advisory Committee reviewed on February 27, 2007; presentation to BOV Buildings and Grounds Committee on March 13, 2007 generated request for additional information to be presented in May.

2. Environmental Sustainability: Evaluation and Process

Given Jefferson's intention that UVA's buildings would serve a didactic, as well as a practical, role in every day life, it would seem appropriate that design of our current buildings do the same in terms of demonstrating principles of environmental sustainability. While many other leading universities have been very active in regard to "green building", we have made only modest efforts to date. Our initial efforts have been directed toward developing a pragmatic set of design guidelines tailored to the UVA context and its natural climatic setting; and identification of best management practices as they relate to the university-at-large.

Objectives and Results through May 2007:

- **Completion of LEED certification criteria checklist and cost benefit analysis with users incorporated into design phase of all major new buildings by December 2006: COMPLETE.** LEED certification criteria checklist completed for Claude Moore Nursing Education Building, Bavaro Hall, Observatory Hill Residence Hall, Hereford Residence Hall, Emily Couric Clinical Cancer Center, Claude Moore Medical Education Building and the South Lawn project. A LEED certification criteria checklist has been incorporated into the project schematic design process. Currently all active building projects in design have submitted a LEED checklist to the Office of the Architect. Cost / benefit analysis continue on most projects, with several projects identified for LEED certification: the Emily Couric Clinical Cancer, Wise Residence Hall III and Wise Dining Hall. The South Lawn and the Wise Science Building Renovation are registered with the USGBC for LEED certification. A draft LEED baseline checklist has been developed for UVA new construction. A LEED baseline checklist for renovation projects is currently in development. At its February 8 -9, 2007 meeting, the full Board of Visitors approved a resolution to require major new and renovation building projects that come before the Building and Grounds Committee to be designed and constructed consistent with the performance standards of the U.S. Green Building Council's LEED rating system and shall achieve, unless extraordinary circumstances apply, a minimum of a LEED Certified rating upon completion.
- **Web-based system for regular communication and information among sustainability proponents established by June 2007:** Sustainability assessment completed, August 2006. Summary findings, analysis and recommendations completed, December 2006. Report publication and roll-out process, including press release planned for early March 2007. An advisory panel comprised of concerned stakeholders has been established to provide guidance for the University's future sustainability planning. The first session was held April 23rd.

3. Land Use: Work Plan, Data Analysis & Enhanced Process

Though UVa owns more than 5,000 acres beyond its Central Grounds, we have only just begun efforts to assess comprehensively the natural systems, current uses, land use constraints, etc., with the long-term goal of more strategic management of existing lands and the acquisition process through a collaborative approach of the Office of the Architect and the University of Virginia Foundation. This in turn will provide for better decision making, stewardship, and future flexibility in the institution's land use and planning.

Objectives and Results through May 2007:

- **Completion of consultant study analysis of UVa natural systems by October 2006: COMPLETE.** Analysis and final written report are complete with analytical model being used for Grounds Plan development.
- **With Institutional Planning, Provost's Office, and Real Estate Management, completion of analysis of programming projections (supply and demand ratio of space needs); analysis needed to develop Grounds Plan carrying capacity options by December 2006: COMPLETE.** Projections completed in December form the basis for alternative land use scenarios to be developed in Spring 2007.
- **Bicycle and pedestrian plans developed in coordination with City and County staff by April 2007:** UVA Bicycle Smart Map complete in January 2007; reviewed by our Transportation Demand Management Consultant; and issued in April 2007.
- **Phase I of UVa Transportation Management Plan developed with Parking & Transportation by June 2007:** The consultant has completed the existing conditions report and a series of focus groups. The planned completion of the work product is on schedule for June 2007.
- **Development of draft Grounds Plan report and appropriate constituent groups engaged in review process by September 2007:** Master Planning Council is fully engaged in review of Grounds Plan elements. Initial draft review of the preferred direction by Buildings and Grounds Committee in Summer 2007.

4. Process Improvement

We are initiating a new goal for 2006-2007 with an interdepartmental Process Improvement emphasis. Within this goal are three new, discrete tasks: implementation of a Grounds Improvement fund; implementation of a collaborative peer review/value management practice into the building design process; and standardization of the cost estimate templates for all new buildings.

Objectives and Results through May 2007:

- **Completion of prototype testing and analyses of revised and improved Value Management Program for all new building designs in concert with Facilities Management by December 2006: COMPLETE.** Meeting with Facilities Planning and Construction (FP&C) (Assistant State Building Official, Project Managers, etc.), Architect for the University staff, and consultant teams have led to continued refinements of the Value Management process. The latest approach was first incorporated for the Emily Couric Clinical Cancer Center reviews. A detailed process outline has been completed and is being distributed with training/support on a project-by-project basis. Facilitator training complete.

Completion of standardized cost estimating format for all new projects in concert with Facilities Management by February 2007: COMPLETE.

Value Management exercises, construction estimates, and bids have been reviewed to ascertain best practices in measuring and costing construction labor and materials. A meeting between FP&C and the Architect for the University staff to consider various estimating formats, to establish consistent measurements and metrics and to develop a data-base for estimates to compare across multiple projects by early next year was held in December. A consensus recommendation was reached to employ the Davis Langdon Component Cost System as a UVa standard. Davis Langdon will assist the Architect for the University staff and FP&C in developing UVa Cost Component guidelines to be used as a project management and cost control tool. A test case project is in the process of being established and final guidelines are expected by July 2007.

- **Approved surcharge system for funding infrastructure and grounds improvement projects by March 2007: COMPLETE.** The Office of the Architect for the University, the Vice President for Management and Budget, and the Budget Office met in October 2006 to initiate the final draft of the plan. Approved by the Board of Visitors' Finance Committee, January 2007.
- **Complete Architect for the University Design Guidelines for the Health System by July 2007:** Preliminary research into the history of the Health System development and design has been gathered to inform the upcoming design guidelines. The schematic design of two projects, the Emily Couric Clinical Cancer Center and the Claude Moore Medical Education Building, have been developed to incorporate siting, massing, architectural articulation, materials and sustainability concerns that have been researched in the

development of the Health System Design Guidelines. Guidance on sustainability practices and environmental design for safety will be included. Draft guidelines will be developed for review by Buildings and Grounds Committee in Summer 2007.

5. Safety and Security

The most important assets of the University are its students, faculty and staff; its facilities and grounds; and its information. These assets are at risk from both natural and man-made disasters. The University must endeavor to discover and to assess its vulnerabilities, to protect its assets with prevention measures, to develop a plan of action to follow if an event does occur, and to ensure resiliency of the organization in the aftermath of such an event. The physical environment plays an enormous role in the development of a comprehensive security plan.

Objectives and Results through May 2007:

- **Security component incorporated into building and landscape guidelines for academic and health system by July 2007:** Completed review of best practices and benchmarking of peer institutions on schedule. Updated Security Design Guidelines have been completed and incorporated into the University Design Guidelines. The updated Security Design Guidelines include the landscape guidelines provided by Crime Prevention Through Environmental Design.
COMPLETE
- Train University Police, Office of the Architect, and Facilities Management staff in "Crime Prevention Through Environmental Design" by October 2006:
COMPLETE.



UNIVERSITY BUILDING OFFICIAL ANNUAL REPORT 2006—2007



Background

The Management Agreement between the Commonwealth of Virginia and the University of Virginia pursuant to the Restructured Higher Education Financial and Administrative Operations Act of 2005 provides that the University designate a Building Official responsible for building code compliance. Effective July 1, 2006, Richard H. Rice, Jr., P.E. was designated the University Building Official, and is responsible for:

- Issuing permits for each capital project required by the Virginia Uniform Statewide Building Code to have a building permit;
- Determining the suitability for occupancy of, and issuing certifications for building occupancy for all capital projects requiring such certification.

Review Unit

Under the terms of the Management Agreement the University is also required to maintain a Review Unit of qualified professionals to review plans, specifications and documents for compliance with building codes and standards, and perform required inspection of work in progress and completed capital projects. The University has maintained a Review Unit since 1991 under delegated authority, and the scope of the Review Unit has included all building reviews except for fire and life safety review for the Academic Division and the College at Wise (Agencies 207 and 246). When the Medical Center (Agency 209) was granted autonomy in 1996, the Review Unit assumed responsibility for all building code functions for its facilities. With the new authority granted through the Management Agreement, the University Building Official and Review Unit have full authority for all three agencies. The Review Unit is staffed by five licensed professionals, four engineers and one architect, and their vitae are provided later in this report.

The University Building Official and the Review Unit work closely with the State Fire Marshal's office and the University Fire Marshal to insure compliance with applicable fire and life safety codes. Further, no certificates for use and occupancy are issued until they have been inspected and approved by the State Fire Marshal.

The Review Unit is taking full advantage of the new authority granted by the Management Agreement, completing fire and life safety reviews sooner than previously experienced when such reviews were conducted in Richmond. In addition, as the Review Unit staff stays in constant communication with the UVA project managers and visits their projects, when a project has progressed to the point where it is ready for occupancy all issues have been resolved and certificates for use and occupancy are issued promptly.

The Review Unit also supports the University community on a variety of technical and code related questions, ranging from helping building trades personnel with code questions for jobs they may have in progress to assisting Athletics with properly installing temporary bleachers for the baseball stadium. On occasion in the past the Review Unit has helped the City of Charlottesville building official with plan review, and will continue to do so when asked and time permits.

Reviews

270 project reviews were complete from July 1, 2006 to April 12, 2007 for a total of 86 projects. Major capital projects included **Arts Grounds Parking Garage** design/build construction documents, **Chancellor's Residence** at Wise, **Clinical Cancer Center**, **College at Wise Dining Hall** and **Student Residence**, **Crockett Hall** including **Water and Access Road Improvements** at Wise, **Drama Building Addition and Renovation** at Wise, **Medical Education Building**, **Nursing School Expansion** (final documents), **Observatory Hill Student Residence Hall** with **McCormick Road Infrastructure**, **South Chiller Plant Expansion**, and the **South Lawn** Project.

The remaining projects include **Health System projects** typically requiring expedient reviews to achieve the tight schedules driven by patient care needs. Notable examples include **Patient Observation Bed Unit**, **Radiology Shell Space Fit-out** (in the expansion building), **MRI Upgrade**, **MRI Replacement**, **Radiology Computer Room** relocation, **Radiation Oncology Tomography**, **Imaging Center** at Fontaine Research and Office Park, **CT Scanner**, **Special Procedures Room**, and **Labor and Delivery OR**. Many of these were accomplished through on-board reviews rather than the formal written comment format.

Several projects reviewed are directly related to research at the University. Notable examples include the **Brodie Lab**, the **Life Sciences Addition** to the Advanced Research Technology building at Fontaine Research and Office Park, and **Thisse Vivarium** in Jordan Hall. These and other research related projects often require on-board reviews to accommodate critical schedules.

As a planned new undertaking under the Virginia Restructuring Act, the Senior Fire Protection Engineer has, since her arrival in September 1, 2006, reviewed all fire alarm and fire protection sprinkler shop drawing submittals for projects under construction

Building Permits and Certificates of Use and Occupancy

55 building permits were processed along with 9 temporary structure (platforms and bleachers) permits from July 1, 2006 to April 12, 2007. A significant number of these required technical assistance by members of the Review Unit.

Final Certificates of Use and Occupancy (CUO) were issues for the **University of Virginia Hospital Expansion** project, the **Carr's Hill Support Facility**, and the **Sports Medicine Facility** at University Hall. The **Cocke Hall Renovation** was inspected jointly with the State Fire Marshal to enable the University to issue a CUO. This is not a requirement for renovations not involving a change in use according to the Virginia Uniform Statewide Building Code, but is deemed important for such major renovations in a historic building for which no original CUO was issued.

Value Management

In conjunction with the Office of the Architect for the University the Review Unit participated in Value Management studies for four capital projects with a fifth study scheduled.

- **Medical Education Building**, at schematic and preliminary design phases
- **Hereford College Residence Hall**, at schematic design phase—project subsequently cancelled.
- **Bavaro Hall** (Curry School of Education), at schematic design phase
- **Wise Science Building Renovations**, at preliminary design phase
- **Wise Dining Hall and Student Residence**, planned for schematic design phase in May-June 2007

In lieu of the former (Bureau of Capital Outlay Management) 40-hour preliminary design Value Engineering process, this evolving joint value management effort with the Architect for the University for projects of \$5 million or greater, begins at the schematic design phase when there is greater opportunity to implement construction cost savings and add value to the functional design. Total potential savings identified during the studies completed this fiscal year is approximately \$20 Million.

Special Issues

The Office of the University Building Official serves to address special issues that require building code resolution. Examples include:

Following issuance of the final Certificate of Use and Occupancy (CUO) by the State Building Official for the **John Paul Jones Arena**, the University Building Official worked with University Business Operations and SMG to resolve temporary vomitory (fire exit access) curtains not included in the CUO. In conjunction with a nationally recognized independent building code consultant, Code Consultants, Inc., a permanent installation design was identified that satisfied operational needs, aesthetic appearance, and code compliance.

A final CUO for the **Sports Medicine Facility** addition at University Hall had not been issued under conditions of the Temporary CUO requiring that a therapy pool be modified for handicapped use. Equal facilities for accessible use have been identified in the nearby McCue Hall sports medicine facility, and the University Building Official issued the final CUO acknowledging this availability.

Support for the University Community

- The Review Unit assists organizations in the University community on code and design issues, performing design services for small projects when the time permits, participating in professional organizations, and when appropriate assisting community governmental administrations or other institutions of higher education.

- Members of the Review Unit have also provided advice and assistance to student projects.
- Rapid response to potential public safety issues such as the evidence of exterior brick veneer support problems, monitoring pre-stressed reinforcement cables at the Law School, structural investigations related to vehicular accidents in parking garages, and maintaining essential fire exit routes from existing buildings affected by nearby construction.
- Serving the community beyond the University. The Review Unit has in the past aided the **City of Charlottesville** with code reviews on major projects, and will continue to do so as requested and time permits.
- As the College of William and Mary was in the process of establishing their Review Unit, members of the UVa Review Unit provided lessons learned and made site visits.

Training and Certification

The Act requires the University Building Official to be a registered professional architect or engineer and be certified by the Department of Housing and Community Development (DHCD), and that members of the Review Unit also be certified by DHCD. Certification with DHCD involves a combination of DHCD sponsored classes and testing with organizations such as the International Code Council. The Virginia Uniform Statewide Building Code requires that the Building Official be certified within one year of appointment, and technical assistants within 18 months of appointment.

All members of the Review Unit and the University Building Official have completed the Core Module of the DHCD Code Academy, and the Building Official and the Senior Review Architect have completed the DHCD Advanced Officials Module. In addition, the Building Official has completed required testing with the International Code Council, and has achieved their Certified Building Official designation. This completes all requirements for DHCD certification and DHCD has been notified.

Of the five Review Unit disciplines (architecture, fire safety, civil-structural, mechanical-plumbing, and electrical) all are pursuing their required certifications. DHCD certificates have been applied for or received to date for mechanical plans examiner, commercial mechanical inspector, commercial electrical inspector and electrical reviewer. The fire safety reviewer is DHCD certified as Building Official, Fire Official, and Fire Protection Plan Reviewer. DHCD Plumbing Inspection module is scheduled in September 2007.

In pursuit of certifications and as on-going continuing education within the last two years, training for the Review Unit has included DHCD Virginia Uniform Statewide Building Code training, DHCD Fire Protection Systems module, National Fire Prevention Association (NFPA) Fire Alarm, NFPA Fire Alarm Interface, American Society of Heating Refrigeration and Air-Conditional Engineers (ASHRAE) LEED Energy Credits, Crime Prevention Through Environmental Design, DHCD non-structural plans review, structural plans review,

plumbing plans examiner, commercial plumbing inspection, electrical plans review, American Institute of Steel Construction Steel Design (using load and resistance factor design), wind analysis, and seismic analysis. Members of the Review Unit are active members in ASHRAE and Institute of Electrical and Electronics Engineers (IEEE); with memberships in International Code Council, NFPA, American Institute of Steel Construction, American Society of Civil Engineers, and American Institute of Architects (AIA) professional organizations.

University Building Official and Review Unit Biographical Information

University Building Official: Richard H. Rice, Jr., PE, Certified Building Official

BS United States Military Academy

MS (Civil Engineering) Stanford University

MS (Ocean Engineering) University of Miami

MBA Golden Gate University

Management Program for Executives, University of Pittsburgh

Over 30 years of facilities management, construction, and engineering experience; having worked at the Smithsonian Institution as the Senior Facilities Services Officer, and numerous facilities planning, construction and management positions in the Department of Defense.

Chief Review Architect: Sandy H. Lambert III, AIA

BS in Architecture, University of Virginia

Member of American Institute of Architects

Member of National Fire Protection Association

Completed Virginia Code Academy Core and Advanced Modules as prerequisite to architectural and building official certifications; and advance training for technical, legal and management building official examination.

- Virginia registered architect, 41 years professional experience, 16 years code review experience at University, (including first Chief Review Architect 1991).
- Primary responsibility is Assistant University Building Official, supervision of Review Unit, document reviews for architectural, ADA accessibility and contract administration requirements, and building code consultation.
- Primary editor of University Facilities Design Guidelines, contributing editor of University Higher Education Capital Outlay Manual (HECOM), and contributing editor of Facilities Management Division 1 Guideline Specifications.
- Building permit supervision and review, temporary event structure permit supervision and review.

Senior Mechanical Engineer: Ronald Herfurth, PE

BS in Mechanical Engineering, Virginia Tech

Continuing education with NFPA fire protection sprinkler training programs

Member of American Society of Heating Refrigeration and Air-Conditioning Engineers

State and International Code Council certified as mechanical plans reviewer and mechanical inspector

Current position since 1991.

- Virginia registered engineer, 28 years of commercial and institutional practice, including 15 years code review experience at the University.
- Primary responsibility is review and in-house consultation for plumbing, heating, ventilation and air conditioning, and energy management and conservation, value management studies, editing of University Facilities Design Guidelines, Certificates of Use and Occupancy inspections.
- Senior administrative assistant to Chief Review Architect and co-editor of University Facilities Design Guidelines.
- Standing member and chairman of interdepartmental Facilities Management HVAC Committee.

Senior Civil/Structural Engineer: Shashi Kavde, PE. (Current position since 1996)

BS in Civil Engineering, National Institute of Engineering, Mysore, India

MS in Structural Engineering: Drexel University, Philadelphia, PA

Registered Professional Engineer in Virginia and New Jersey

Completed Virginia Code Academy Core Module Training as a prerequisite for examination leading to State Certification.

Experience & Responsibility Details:

- 30 years of civil and structural design and construction management for private and government projects (sports, mass transit, industrial, defense, research, environmental facilities, and institutional/residential buildings), plus
- 10 years at the University reviewing Construction Documents for Building Code Compliance and constructability for all projects.
- Additional responsibilities include editing of University Facilities Design Guidelines, HECOM Manual, Value Management Studies, Certificate of Use and Occupancy Inspections, and inter discipline/departmental coordination.
- Expedient inspections and in-house consultation for structural and civil engineering “hot-button” issues for University facilities.

Senior Electrical Engineer: Adrienne Hendrickson, PE

BS in Electrical Engineering, Pennsylvania State University

ME in Electrical Engineering with emphasis in power engineering, University of Idaho

Active member of Institute of Electrical and Electronics Engineers (IEEE) serving as program evaluator for ABET for engineering technology programs and as a reviewer and balloter for standards development.

State and NCPCCI certified as electrical plans reviewer and electrical inspector

Continuing education with NFPA on fire alarm systems (2006)

Current position since 1998.

- Registered professional engineer in Virginia and Ohio, 11.5 years of experience in private consulting firms, federal government, and at another university, 8.5 years code compliance review experience at the University.
- Primary responsibility is review and in-house consultation for electrical, telephone/data and fire alarm systems, editing of University Facilities Design Guidelines, value management studies, Certificates of Use and Occupancy inspections, and interdepartmental consultation.
- Assistant to Chief Review Architect for workload administration.

Senior Fire Protection Engineer: Elaine B. Gall, PE

B.S. in Mechanical Engineering from Virginia Tech

M.S. in Fire Protection Engineering from University of Maryland

Certified Building Code Official, Fire Code Official, Fire Protection Inspector, and Fire Protection Plan Reviewer based on certification tests and attendance of related State and Department of Fire Programs Training Modules.

Member of the Virginia Fire Prevention Association, National Fire Prevention Association. Chair of Virginia Fire Services Board Code Committee.

- Virginia registered engineer, 21+ years professional experience, all of which includes code review and construction inspection experience, including Deputy State Fire Marshal at regional office in Roanoke, VA involved with University of Virginia projects and facilities.
- Primary responsibility is review and in-house consultation for fire suppression systems, fire alarms, construction of fire-resistance rated assemblies, fire safety, review of shop drawings for fire alarms and fire protection systems, editing of University of Virginia Facilities Design Guidelines, and interdepartmental consultation.
- Assistant to Chief Review Architect with lead role in Certificates of Use and Occupancy inspections.