

# Facilities Planning and Construction Annual Report 2012-2013

(July 1, 2012 – June 30, 2013)

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Annette Cyphers, P.E. Director

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## Facilities Planning and Construction

#### **Foreword**

Facilities Planning and Construction (FP&C) is responsible for the execution of the University's Capital Project Program. We provide management of all design and engineering services, management of all construction services, and procurement for all construction contracts and design/engineering professional services contracts for the University community. Our goals is to set the standard for excellence in higher education and healthcare project delivery.

#### We are here to:

- Provide leadership to support the University community in the development and implementation of projects for planning and construction.
- Assure appropriate design and construction standards and criteria established by the University, the state, or other appropriate agencies are followed.
- Identify and implement opportunities to balance quality and cost of construction, focusing on life cycle costs through value engineering and other cost reduction initiatives.
- Continue to develop innovative best practices for professional and construction services procurement and administration to assure continued conformance to the University's restructuring requirements and maximize competition and diversity.
- Maintain in-house design services in support of the University's various renovation programs.
- Encourage the full participation of all stakeholders in the project management process.

The work is accomplished by three production divisions, including: the Academic Division, the Health System Division, and Engineering & Design. They are all supported by a Contract Administration Division and an Administration Division and work in close coordination and cooperation with the Office of the University Building Official, the Office of the Architect for the University, and Facilities Management.

Annette Cyphers, P.E.

Director, Facilities Planning and Construction

# Facilities Planning and Construction

#### **Overview**

This 2012-2013 Annual Report for the Facilities Planning and Construction Department highlights many accomplishments including:

- Completed and occupied several new major facilities. These are highlighted in the Division sections of this report and total \$280,800,165.
- Awarded 83 construction contracts totaling \$83,444,216.
- Processed 406 professional service contracts and service orders totaling \$16,873,811.
- Put in place construction with a value of \$165,800,000.
- Design and construction continues on major new facilities. These are highlighted in the Division sections of this report and total \$605,766,701. Additionally see each Division section for a summary of major projects.

# **Academic Division:**

# Studies and Reports:

- Bayly Building Addition
- Gilmer Hall and Chemistry Renewal
- JAG School Addition

## Planning:

- Center for Contemplative Sciences
- FM Shop Support Office Building
- Gooch-Dillard Residence Halls Renovation
- Historic Preservation Master Plan
- McCormick Road Residence Halls Renovation
- Rugby Road Faculty Housing Building Repurposing
- 4 capital projects in design for a total of \$59,900,000.
- 12 capital projects in construction for a total of \$254,810,000.
- 12 capital projects completed for a total of \$120,398,000.

Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed	
Cemetery Expansion	Alderman Road Residences Building 6	Alderman Road Residences Phase III	
Newcomb Road Chiller Plant	Alderman Road Residences Phase IV	Academical Village Chimney Repair & Sprinkler Installation	
Rotunda Renovations	FM Landscape Shop	Blandy Farm Research Building	
College at Wise: Dam Restoration	New Cabell Hall Renovation	George Welsh Indoor Practice Facility	
	North Grounds Mechanical Plant	Lacy Hall	
	North Grounds Recreation Center	Newcomb Hall Dining Expansion	
	Rotunda Roof Replacement and Exterior Repairs	Newcomb Hall Renovations	
	Ruffner Hall Renewal	Old Cabell Hall Access Ramp	
	Ruth Caplin Theatre	Pavilion X	
	Utility Tunnel Repairs	Track & Field Facility Improvements Phase I	
	College at Wise: Health & Wellness Center	College at Wise: Accessibility	
	College at Wise: Library	College at Wise: Smiddy Hall Renovation and New IT Wing	

# **Academic Division Major Commissions**

# Alderman Road Residences Building 6

Kate Meyer / Richard Sergi

Building 6 continues the multi-phase project begun in 2006 to remove and replace the 1960s era residence halls in the Alderman Road precinct. In the first phase, Kellogg House was completed in August 2008. The second phase buildings, Balz-Dobi and Watson-Webb Houses, and the Erns Commons, were completed in August 2011. Phases III and IV, construction of Lile-Maupin, Tuttle-Dunnington, and Shannon Houses were completed in summer 2013. Construction of Building 6 began in May of 2013 and is scheduled for completion for fall semester 2015.

The new residence hall will offer modern amenities in a configuration that fosters secure, close knit communities. It is designed to create a strong sense of place, and also accommodate a growing student population. In addition to student rooms, study areas and lounges are located on every floor. The entry level floors will be designed to provide and animate gathering places for meeting, recreation, and collaborative learning. In addition, Building 6 will provide approximately 10,000 gsf of office space for the Office of Housing and Residence Life.

The site is located on Alderman Road across from Scott Stadium extending south from the previous phases. The site provides convenient access to the Aquatic and Fitness Center and West Grounds. Dunnington House has been demolished to clear the site. Site development will continue the accessible pedestrian route throughout the complex with future expansion extending to Gooch Dillard Houses and Hereford College. This route provides a strong organizing element for the entire precinct. Outdoor recreation areas both structured and unstructured will be provided.

The project is designed by EYP Architects of Washington DC. The Construction Manager is Donley's LLC Mid-Atlantic Regional Office of Richmond, VA. The working project budget is \$38 million.



#### Alderman Road Residences - Phase III

Kate Meyer / Richard Sergi

The third phase of the master plan to modernize and expand first year housing facilities in the Alderman Road area, this project provides two new residence halls, Lile-Maupin and Tuttle-Dunnington. They will support increasing enrollments and rising student expectations for the first year residential experience. These new facilities have been constructed on the sites of the aging Webb and Maupin Houses, which were demolished to make way for the new construction.

Situated at the foot of a steeply sloping site, the buildings create a gateway to Kellogg House and the Phase II residence halls and complete the courtyards begun in that phase, while preserving the wooded area at the center of the precinct. An accessible ramp will connect the buildings to the Observatory Hill Dining Facility and to the new accessible route to Kellogg House created in Phase II. The residence halls will be five stories in height to mitigate the difference in scale between the Phase II buildings and the Observatory Hill Dining Facility. They will house a total of 356 first year students and 10 to 20 resident advisors in the upper four floors. A one-bedroom apartment with private exterior entrance will be located on the first floor of each building for the area coordinators. The sense of community will be reinforced with common lounges, quiet study areas, and bathrooms dedicated to each 24-student section within the building. First floor spaces including a lobby with casual seating, multi-purpose rooms and a central laundry will further enhance the student experience and encourage interaction among students.

Ayers / Saint / Gross Architects + Planners of Baltimore, MD prepared bridging documents for the project. W.M. Jordan Company of Norfolk, VA and Clark Nexsen Architects of Charlotte, NC, the design/build team for Phase II, comprise the design/build team for this phase as well. The working project budget for Phase III was \$39.5 million. The residence halls achieved approval for occupancy in June 2013, and students have moved in for the 2013 fall semester.





#### Alderman Road Residences - Phase IV

Kate Meyer / Richard Sergi

The fourth phase of the master plan to modernize and expand first year housing facilities in the Alderman Road area, this project will build on the precedent of Kellogg House to provide a new residence hall to support increasing enrollments and rising student expectations for the first year residential experience. The new facility, Shannon House, has been constructed on the former sites of Lile House and Tuttle House, which were demolished to make way for the new construction.

Situated at the foot of a steeply sloping site, Shannon House creates a courtyard with Cauthen House and the newly completed Tuttle-Dunnington House, and will continue the use of native and adaptive plantings, further stabilizing slopes and enhancing the overall site. Accessible routes will connect Shannon House to adjacent buildings and Alderman Road. Intended primarily for pedestrian use, designated routes will be opened to vehicles for move-in days. Treehouse Drive has been realigned horizontally and vertically to improve access and connection to Alderman Road.

The residence hall will house 192 first year students and 8 resident advisors in the four upper floors of this five story building. A one-bedroom apartment with private exterior entrance will be located on the first floor for an area coordinator. The sense of community will be reinforced with common lounges, quiet study areas, and bathrooms dedicated to each 24-student section within the building. First floor spaces include a lobby with casual seating, a multi-purpose room, and a central laundry, further enhancing the student experience by encouraging interaction among students. The first floor will also include classrooms and a post office serving the precinct.

Ayers / Saint / Gross Architects + Planners of Baltimore, MD prepared bridging documents for the project. W.M. Jordan Company of Norfolk, VA and Clark Nexsen Architects of Charlotte, NC, the design/build team for Phase II and III, has been retained for this phase as well. The working project budget is \$28 million. The University accelerated the project schedule for this phase of the master plan in order to take advantage of advantageous construction-market conditions, enabling Shannon House to open in time for fall semester 2013, concurrent with Tuttle-Dunnington and Lile-Maupin Houses.



# Academical Village Chimney Repair & Sprinkler Installation James Zehmer

The Lawn and Range Rooms were designed by Thomas Jefferson as student dormitories. The University of Virginia discovered in 2010 that the flue linings within many of the student room chimneys were failing. Because of the threat of fire posed by this condition, the chimneys were taken out of service. In the summer and fall of 2012, the University repaired the chimneys, fireboxes, and hearths, removing the failed liners and installing new stainless steel liners, all with the goal of having the fireplaces functional in time for winter. As part of this project, sprinklers were installed in all of the student rooms and in the attics above the rooms, in accordance with modern-day fire code requirements and to protect the occupants of these critical buildings in our World Heritage Site.

Facilities Management roofers, carpenters, masons, and fire safety personnel joined a multi-disciplinary team that also included Black Goose Chimney Sweep, Virginia Sprinkler Company, and A.G. Dillard as sub-contractors to Martin Horn. Both Sunbelt and Scaffold Solutions were engaged to provide access to the attics and chimneys, which meant that more scaffolding was installed within the Academical Village during this project than in any other year in the University's history. This project represented a concentrated effort of over 200 tradespeople working together to ensure success during a tight, 5-month schedule.

Construction was completed in November, 2012. This project's budget was \$3.7 million and was funded by The Commonwealth of Virginia, the Housing System, the Alumni Association, and private donors.



# Blandy Farm Research Building

Dave Paley

With the June 2012 completion of the Blandy Experimental Farm Field Lab, all three ecosystems of Virginia are served by recently upgraded field labs affiliated with the University's Department of Environmental Sciences. Blandy Farm, in the Piedmont Region, joins the Mountain Lake Biological station, in the Appalachian Mountains, and the Anheuser Busch Coastal Research Center, in the Tidewater and Coastal regions, with its new lab building. Blandy Experimental Farm has operated as a biological and environmental sciences field station since 1927. Blandy also hosts the State Arboretum of Virginia. At peak demand the research community numbers over 30.

The Blandy Field Lab provides approximately 4,260 gsf of flexible and efficient field lab space. The lab building includes warm and cold temperature controlled rooms, a fume hood room, outdoor processing areas, an equipment room, write up areas, a large shared laboratory and two private laboratories, a conference room, and basic support spaces. It can accommodate up to six principal investigators, twenty graduate students, twenty undergraduate students, six technicians, and three permanent Blandy staff principal investigators. The building itself is similarly simple, flexible and efficient. The design is in keeping with typical farm buildings in the area: a one-story, slab on grade, stick built frame, prefab wood truss, standing seam metal roofing, with a hardiplank exterior. The large shared lab and the conference room have storefront glazing. The mechanical system includes one fume hood initially with the potential to add another. The building runs on high efficiency split system heat pumps for heating and cooling. One pass air has been limited to the fume hood room to keep the building energy use and costs lower. The project was designed to achieve LEED Silver; submittal and review are pending.

The project was supported by the College of Arts and Sciences and a grant from the National Science Foundation. It was designed by Train & Partners of Charlottesville, VA, and the construction manager was Lantz Construction Company of Broadway, VA. The project budget was \$1.4 million. Approval for occupancy was issued June 13, 2012.



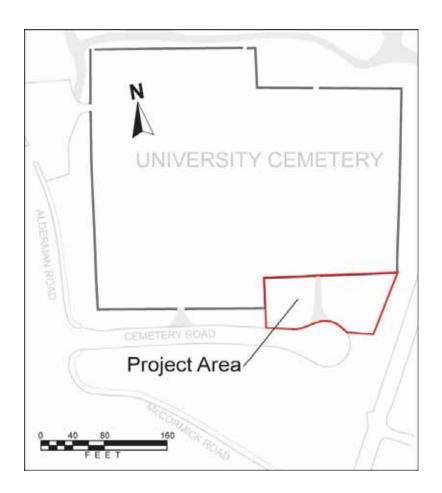
## **Cemetery Expansion**

Jody Lahendro

The University Cemetery dates to 1828, and is regarded as an almost sacred space at the University. Visitors can find an ad hoc history of our institution among the many recognizable names on the gravestones, as well as a peaceful refuge on Grounds. The current expansion is Phase III of a three-phase project, and the first addition to in-ground burial plots since the 1940s. Phases I and II, in 1990 and 2003 respectively, were columbarium wall installations along the north side of the cemetery. The current project conforms to the master plan that was commissioned by the University Cemetery Committee in 2004.

The proposed expansion will accommodate at least 126 columbarium niches and 144 crypts, with a row of twelve crypts reserved for presidents of the University. The site is southeast of the existing cemetery, near the oldest section. Cemetery Road will be shortened to accommodate the proposed addition. On the east and south sides, the stone walls will also serve as columbarium walls. Construction materials will match the existing cemetery: walls will be constructed with Shenandoah field stone, and the granite of the columbarium name panels will be of a contrasting finish.

The project is being designed by Cardno TEC, Inc. of Charlottesville, VA. Completion is anticipated for winter of 2015. The project budget is \$900,000.



#### **FM Landscape Shop**

Dave Paley / Charles Durrer

The Facilities Management Department has replaced the former landscape shed, which was too small and in subpar condition. Equipment and materials were stored in various locations in the FM yard, causing inefficiency. Also, Facilities Management had recently completed a space needs assessment, which indicated a dramatic need for more square footage overall and, in particular, better work shop space. A 2008 master plan for the FM yard shows the then-existing landscape shed and surrounding area being cleared for a different use.

The new building is located at the west end of the FM yard, adjacent to the newly built Lacy Hall. The proximity of the two projects achieved significant efficiency, since the required utilities had already been brought to the area. A salt shed and storage warehouse were removed from the project site, and a recycling shed will soon be relocated. The project was performed in a design build format by Lantz Construction Co. of Broadway VA, and included fabrication and installation of a steel structure of approximately 10,000 gsf. The lower level includes a welding shop, high-bay engine repair shop, storage for tools and spare parts, restrooms and locker areas. A second level provides office and meeting space at the north end and storage at the south end, connected by a mezzanine. The exterior is constructed of insulated metal wall panels; the window frames, garage doors, and roof are all metal. The foundation system consists of concrete slab on grade with spread footings.

Another nearby area has been regraded and will be used for storage. A metal roof structure with open sides, fabricated by the same manufacturer as the Landscape Shop, was installed. A pedestrian bridge connects this area, which is at a higher elevation, with the second floor of the adjacent Landscape Shop, providing accessibility to the office area without need for an elevator.

The project budget was \$1.96 million.



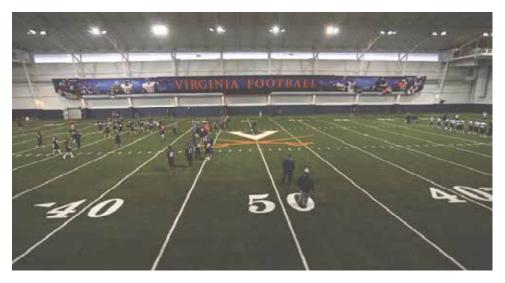
## George Welsh Indoor Practice Facility

Dade Van Der Werf, AIA / Randall Porter

The project provides an indoor practice facility for UVA Athletics on the site of an existing practice field, where teams can continue to take advantage of locker rooms, offices and other amenities in the nearby McCue Center and University Hall. The 83,000 gsf facility includes a full 100 yard football field with end zones and five-year overruns, and provides a 65' clear height at the center of the field for kicking practice. An elevated camera platform supports filming of practice within the facility and on the adjacent outdoor field.

Construction began in April 2012 and was complete in March 2013. The architect was VMDO and the construction manager was Barton Malow Company, both of Charlottesville, Virginia. The project budget was \$13 million.





#### Lacy Hall

Kate Meyer / Randall Porter

Facilities Management (FM) has collaborated with the School of Engineering and Applied Sciences (SEAS) on a building designed to give each department its own work space and encourage sharing of ideas and equipment. The four story building provides 19,200 gsf of work space. Each department occupies two floors, with one floor at standard height and the other offering high bay work space. Lacy Hall will provide SEAS and FM with the specialized spaces they need today and will adapt with these groups as their needs evolve. The Ann Warrick Lacy Experiential Learning Center on the upper floors is dedicated to collaborative hands-on learning, where students can experiment with and fabricate projects they have engineered.

The site allows for separate and convenient access. The building's third floor entrance on Edgemont Road will be used by SEAS. The ground floor opens into the FM yard. FM's cabinet shop, lock shop, building services shop and computer help desk group will occupy the lower floors.

The design/build team is Barton Malow and SHW Group, both of Charlottesville, VA. Construction of the building shell and utility infrastructure was completed in fall of 2012. Finishes, fixtures, and other "fit-out" for the SEAS levels were completed by the same design/build team; for the FM levels this work was performed by FM 's Project Services. Building occupancy was achieved in January 2013, while the Ann Warrick Lacy Experiential Learning Center opened in fall semester 2013. The project budget was \$4.5 million.



#### New Cabell Hall Renovation

Craig Hilten / Randy Porter / Charlotte Dickerson

Built in 1952, New Cabell Hall is the workhorse of the College of Arts and Sciences with 46 classrooms, and office space for 390 faculty and staff. The six-story, 150,000 gsf brick building is currently undergoing a multiphase modernization that includes new heating, plumbing, and electrical power distribution and lighting systems. Central air conditioning and fire suppression systems are being added. Elevator cabs and equipment, and telephone and data distribution systems, are being replaced. Hazardous materials are being removed. Additionally, interior finishes are being replaced and upgraded. Handicapped accessibility to the building will be vastly improved.

Classrooms in this historically significant building are receiving state of the art teaching aids equal to those installed in other new classrooms on Grounds. On the exterior, the enclosed courtyard between New and Old Cabell Hall is being terraced and fully landscaped to transform the previously under-utilized space into a vibrant new destination. The courtyard will be directly connected to the surrounding buildings to enhance and encourage use of the courtyard amenities. A new multi-story curtain wall will introduce daylight deep into the corridors of New Cabell Hall and provide an accessible connection through the building to the South Lawn plaza.

The project architect is Goody Clancy of Boston, MA, and the construction is being managed by Barton Malow of Charlottesville, VA. The project budget is \$64.5 million. Phase 1 of the two-phase renovation is complete; Phase 2 is scheduled for completion by fall semester 2014.





#### **Newcomb Hall Dining Expansion**

Dade Van Der Werf / David Fiero

The Newcomb Hall Dining Expansion project addressed the increased demand for dining space at Newcomb Hall, and has enhanced the dining experience with a revitalized, more open and light facility for dining and food service functions.

The project included a new 16,000 gsf, two-story addition to the west side of Newcomb Hall, and the renovation of 32,000 gsf of existing dining spaces on the first and second floors. Approximately 500 new seats have been added altogether. New food service equipment and improvements to the mechanical infrastructure have increased operational and energy efficiency, encouraged the introduction of contemporary menus and improved food preparation methods.

Additional improvements included a lobby and information center, relocated post office and convenience store, and new restrooms. Sitework at the Newcomb plaza included new utilities, relocation of existing utilities, and restoration of portions of the plaza adjacent to the new addition and bookstore.

In addition to improving the appearance and functionality of Newcomb Hall, the project improved pedestrian circulation in the area surrounding Newcomb Hall, modernizing the walkways and plazas while reconnecting with historic, unifying themes of the University.

Construction began in March 2011 and was substantially completed in December 2012. The architect was Cole & Denny, Inc., of Alexandria, VA and the construction manager was R.E. Lee & Son, Inc. of Charlottesville, VA. The project budget was \$18 million.





#### **Newcomb Hall Renovations**

Dade Van Der Werf, AIA / David Fiero

With its diversity of functions and prime location in the Central Grounds precinct, Newcomb Hall is an important hub of activity for students, faculty and staff throughout the year. Home to many student-life functions such as a bank, post office, activity center, game room, student newspaper, and dining facilities, and supported by numerous administrative offices, Newcomb Hall's ballroom, lounge, and theater are heavily used by the entire University community.

The Newcomb Hall Renovations project responds to an increased demand for programs and activities, while improving the facility's functionality and supporting infrastructure. Aesthetic improvements throughout the building created a fresh, inviting, and more unified atmosphere while preserving traditional elements of the architecture and surrounding landscape. Mechanical and electrical upgrades have provided increased energy and operational efficiency, as well as improved comfort and safety for the occupants. Some building elements needed, and received, repair or maintenance. Restoration of the exterior terraces enhanced the visitor experience by creating inviting and memorable spaces surrounding the east side of Newcomb Hall.

The building has undergone several renovations since its original completion in 1958, and today has an area of 184,000 gsf on six levels. The third and final phase of the Newcomb Hall Renovations project was completed in December 2012. The architect was Cole & Denny, Inc., of Alexandria, VA and the construction manager was R.E. Lee & Son, Inc. of Charlottesville, VA. The project budget was \$15.2 million.







Hoachlander Davis Photography

#### Newcomb Road Chiller Plant

Michael Vanderweide, P.E. / David Fiero

This project will construct a new Chiller Plant to replace the existing chillers and auxiliary equipment that currently reside in and serve the various buildings along Newcomb Road. The existing chillers and cooling towers are looped together, essentially forming a distribution system. The new plant will remove this equipment from the existing buildings and provide a new system within a new plant of approximately 6,000 gsf. The initial capacity of 3,000 tons can be easily increased to 3,600 tons, with piping capacity for 6,000 tons in case of a future decision to expand the plant.

The current equipment is at the end of its lifecycle and the plant is near its maximum capacity. Additionally, since the equipment is spread between several buildings, it is inefficient in terms of both energy use and ease of maintenance. The current plant capacity is 2,200 tons so the new plant will provide capacity to add several buildings that are not currently on this loop. Also, the design will enable, with some additional distribution piping, an inter-connection to the Central Grounds Chilled Water Loop.

The project examined several alternative cooling options including combined heat and power, geothermal, and heat recovery chillers. Detailed investigation demonstrated that none of these technologies were compatible with the restrictions of this site and existing distribution systems. However, with high efficiency chillers and a centralized plant, the new plant will provide significant efficiency improvements over the existing plant.

This project is being designed and constructed using a delivery method that allows the University to engage, during the design phase, not only the construction manager but also several key trade subcontractors. This has allowed the project to incorporate aspects of Integrated Project Delivery and to integrate cutting edge REVIT and BIM technologies into the execution of this project.

The project is being designed by Affiliated Engineers, Inc. of Chapel Hill, NC. Sauer Inc. of Newport News, VA has been selected as the construction manager. Full construction will begin by the spring of 2014, with substantial completion scheduled for spring of 2015. The total project budget is \$11.6 million.

Left – Overhead view. Right – Sky View looking south towards Newcomb Hall at top center.





#### North Grounds Mechanical Plant

Michael Vanderweide, P.E. / David Fiero

This project will replace most of the equipment in the North Ground Mechanical Plant and also expand the plant, which currently serves the JAG School and the associated Law School Building. The new plant will be a 2,500 gsf expansion of the existing plant, for a capacity of 16,000 MBH of heating and 2,600 tons of cooling. Space and piping will be sized for additional equipment to bring the plant up to 28,200 MBH of heating and 4,100 tons of cooling in the future.

The current plant equipment is at the end of its lifecycle and the plant is near its maximum capacity. There are near term plans to build a JAG addition and possibly to serve the Darden School from this plant. Thus the initial sizing is for the current buildings and the planned addition to the JAG school, with the ability to add equipment in the future in the event the Darden School plan is approved.

The project examined several alternative heating and cooling options including combined heat and power, biomass, solar thermal, geothermal, and heat recovery chillers. After detailed investigation, the most cost-effective system was determined to be heat recovery chillers, which will use removed heat from the buildings to add heat back into the hot water system. In combination with several other technologies, this will greatly improve the efficiency of the plant.

This project is being designed and constructed using a delivery method that allows the University to engage, during the design phase, not only the construction manager but also several key trade subcontractors. This has allowed the project to incorporate aspects of Integrated Project Delivery and to integrate cutting edge REVIT and BIM technologies into the execution of the project.

The designer is Hammel, Green and Abrahamson, Inc. of Minneapolis, MN, and Martin Horn of Charlottesville, VA has been selected as the CM at Risk Contractor. Full construction will begin by the end of September 2013, with substantial completion scheduled for November 2014. Final completion is expected by January 2015. The total project budget is \$13.1 million.







#### North Grounds Recreation Center

Amy Eichenberger / Charles Durrer

The North Grounds Recreation Center Expansion, currently under construction, will be the first of three projects to improve existing intramural recreational facilities on Grounds.

The project will include a new 33,000 gsf addition with a 25-meter 10-lane pool, whirlpool, sauna, wet classroom, mind-body multi-purpose fitness room and two new squash courts. The project will also renovate three existing racquetball courts. Minor improvements to the lobby and social gathering spaces will enhance the connection between the existing building and the new addition, which will be located to the west of the existing facility.

The exterior materials palette for the new addition will complement the existing building and other neighboring buildings in the North Grounds Precinct.

Cannon Design of Arlington, VA is the architect and Donley's LLC of Richmond, VA is the construction manager. Construction began in April 2012 and will be completed in December 2013. The project budget is \$18.9 million.



## **Old Cabell Hall Access Ramp**

James Zehmer

A temporary metal ramp has provided ADA access to Old Cabell Hall since approximately 1994. The new design resulted in a permanent steel ramp supported by brick piers, conforming architecturally to the McKim, Mead, and White building design of 1898. The east and west sets of steps were shifted north to provide symmetry and a means for the ramp to end on a level surface even with the interior lobby. The ramp is illuminated and has outlets to provide power to heated mats in case of an ice storm.

The project was designed by Frazier Associates of Staunton, VA. UVA's Project Services executed the project in conjunction with Harrisonburg Construction. Construction was completed in January 2013. The total project cost was \$488,000.



#### Pavilion X James 7ehmer

Pavilion IX was completed in 1822 as part of Thomas Jefferson's Academical Village, and was last renovated in the 1960s. The renovation was an extensive upgrade including replacement of all existing electrical and plumbing systems, and replacement of radiators and window air conditioners with a new HVAC system. A new fire suppression system was installed, along with a fire detection system monitored by UVa's Systems Control Department. An unusual feature of this project was the use of sub-grade air ducts below the basement floor, which preserves the roominess of the basement by eliminating the need for large bulky soffits.

Architectural improvements include a completely upgraded kitchen, and new fixtures in all the bathrooms. The original balcony and rear doors have been restored to their Jeffersonian faux-mahogany appearance by a graining process. Fidelity to the original Jeffersonian building footprint was an important design element; this was achieved by infilling two original window openings with replica sashes where they had been replaced with doors in more recent times. A full staircase to the attic replaces the existing ladder, facilitating access for storage and maintenance. Reconfiguring some second floor spaces has resulted in a master bedroom suite with a walk-in closet and nearby laundry facilities. This will also allow the original second floor parlor to return to its original use as a comfortable space for intimate gatherings or private study.

The architectural design was by Mesick, Cohen, Wilson, Baker Architects and the systems engineering was by Quantum Engineering, both of Albany, NY. UVa's Project Services Department has served as general contractor. The project budget, funded through private donations to the UVA Historic Preservation Endowment, was \$3 million. Construction was completed October 1, 2012.



#### **Rotunda Renovations**

Jody Lahendro

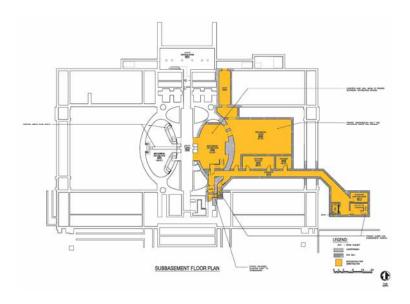
Planning for the Rotunda's remaining renovations began in February 2012. The proposed renovations will include extensive work on the building exterior and landscaping, as well as the interior.

The exterior work includes structural renovation and other repairs on the two porticos, roof replacement, replacement of the Corinthian column capitals, repairs to the column shafts and bases, and repairs to the two sheet metal cornices on the building's main drum and other ornamental sheet metal. In the four wings of the Rotunda, the brickwork, marble balustrades, windows, and ceilings and columns of the connecting colonnades will receive an intensive cleaning. The terraces above the wings will have their drainage systems repaired and then waterproofed. The landscaping of the east and west courtyards and the north terrace will be redesigned and rebuilt.

Inside the building, mechanical, electrical, lighting, plumbing, fire protection, elevator, data, security, and audiovisual systems will all be replaced. Mechanical space will be increased to improve performance, serviceability, and energy efficiency. Interior alterations will include replacement of the interior lining of the dome in the Dome Room and the addition of a stair to the lower gallery in the Dome Room. Also included are renovations to begin using certain spaces as classrooms and for quiet study. Other alterations will allow enhanced services for supporting large events.

Designed by Thomas Jefferson as the principal element of his Academical Village, the Rotunda is the centerpiece and symbol of the University of Virginia. Originally completed in 1826, it was gutted by fire in 1895 and rebuilt under the architects McKim, Mead, and White. A major project in 1976 recreated Jefferson's interior spaces and installed the present roofing and oculus. The Rotunda is internationally recognized as a National Historic Landmark on the state and federal registers of historic places. The Rotunda, Academical Village, and Monticello together are designated as a World Heritage Site.

John G. Waite Associates of in Albany, NY is architect for the project. Whiting-Turner, in Richmond, VA, is the construction management firm. Construction is expected to begin in May 2014, with completion in May 2016. The project budget is \$43.4 million.



# Rotunda Roof Replacement and Exterior Repairs Jody Lahendro

This first phase of Rotunda renovation work is replacement of the leaking roof and oculus skylight. At the same time, exterior brick walls, windows and ornamental sheet metal will be repaired.

The existing painted, terne-coated steel roofing and the aluminum-framed glass skylight are severely deteriorated and have been leaking for many years. The roof is being replaced with copper roofing installed on a base that facilitates air circulation. This fall, weather permitting, the copper roofing will be painted white. The oculus will be covered with a skylight that more closely resembles the Jeffersonian original. Two 1976 concrete steps at the base of the dome were removed to repair the supporting tile structure and iron tension ring, both of which date to 1897, and then reinstalled. Damaged and eroded mortar joints in the exterior brick walls are being repointed, and afterwards all brick walls will be cleaned. Window sashes, dating to 1897 and 1976, were removed to strip paint and replace damaged glass and hardware. The molded copper sheets that form exterior decorative features, such as cornices, window frames and first floor pediment hoods, will be stripped of all paint, repaired, and repainted.

Designed by Thomas Jefferson as the principal element of his Academical Village, the Rotunda is the centerpiece and symbol of the University of Virginia. Originally completed in 1826, it was gutted by fire in 1895 and rebuilt under the architects McKim, Mead, and White. A major project in 1976 recreated Jefferson's interior spaces and installed the present roofing and oculus. The Rotunda is internationally recognized as a National Historic Landmark on the state and federal registers of historic places. The Rotunda, Academical Village, and Monticello together are designated as a World Heritage Site.

John G. Waite Associates, Architects, a specialty preservation firm in Albany, NY, performed the documentation, research, design and construction administration for this first phase of Rotunda work. A joint venture, Christman/Gilbane, provided construction management. Construction began in May 2012 with completion scheduled for early September 2013. The project budget is \$7.2 million.



#### **Ruffner Hall Renewal**

Lynn Rush / Richard Sergi

Ruffner Hall is an 85,000 gsf, 4-story building providing classrooms, offices and research space for the Curry School of Education. Ruffner has been home to the Curry School since its construction in 1973. Forty years later, the school has outgrown the original building, and has expanded into leased space on and off Grounds.

The project includes replacement of all mechanical and electrical systems and fixtures, the roof and exterior soffits, doors and frames, and most interior finishes. Other work includes asbestos abatement, modernization of the existing elevator, re-glazing of all windows, repairs to exterior masonry, and installation of fire protection. New interior partition walls will be added, as well as a small café. The accessible route from the south parking lot will be upgraded to include a new sidewalk with accessible curb ramps. Various modifications to the building interior will to achieve ADA compliance. A new entrance will be provided, opening to the courtyard at Bavaro Hall.

The Curry Library and Innovation Commons, located on the third floor, will be used for individual and group study, small classes, meetings, gatherings and presentations, and a library function that serves the faculty. The intent is to improve the overall space use in Ruffner Hall for current and future academic programs, improve the traffic flow between Ruffner Hall and Bavaro Hall and create a better sense of community for people to work, meet and socialize.

Construction started January 7, 2013 with completion scheduled for the late summer of 2014. The project was designed by Facilities Management's Engineering & Design Department, with engineering services from McKinney & Co. of Ashland, VA. Donley's of Cleveland, OH is the contractor. The project budget is \$19.28 million.



#### **Ruth Caplin Theatre**

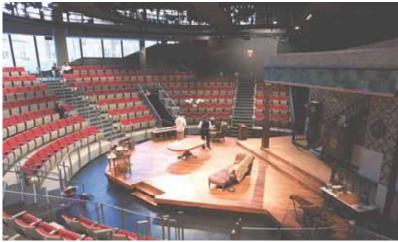
James A. Kelley, G.C., CCM. / Steve Ratliff

This project is the first part of a two-phase expansion of the existing Drama Building on Culbreth Road. The new two-story facility is partially below grade in the steep hillside to the east of the existing Drama Building, adjacent to Culbreth Road Parking Garage and Ruffin Hall. The lobbies of Ruth Caplin Theatre and the existing Culbreth Theatre will be joined, and the two will share a ticketing area.

The project included approximately 4,000 gsf of much needed renovation to the existing lobby and adjacent ticketing area currently serving the Culbreth Theatre. The addition contains a 7,000 gsf multi-purpose performance and film venue. Performance and stage support, storage, and restrooms make up the balance of this 20,540 gsf project. The building utilizes load bearing concrete and masonry as its principal structural system. The exposed northern façade consist primarily of structural curtainwall to maximize daylight. The Ruth Caplin Theatre portion of the project was underway in May 2011, with an early site utility package.

The project is designed by William Rawn Architects of Boston, Massachusetts and the construction was managed by Nielsen Construction from Harrisonburg, Virginia. Construction was completed in March, 2013. The project budget is \$13.5 million.





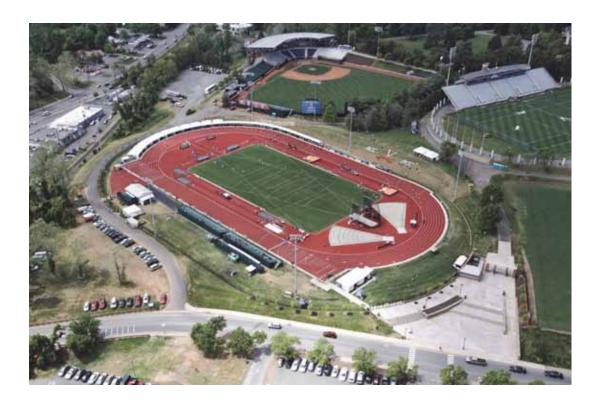
#### Track & Field Facility Improvements Phase I

Kate Meyer / Randy Porter

The Track & Field Facility Improvements Project, Phase I, replaced the existing track with a new layout based on a wider turning radius, which results in a faster track and reduces strain on runners' joints and ligaments. The wider track also provided a larger infield, allowing for a more efficient and safe layout for field events. This phase also added sports lighting, and upgraded the site utilities that will support the final build-out, including storm water, power, and domestic water services. A key feature of the new track is a 13mm polyurethane-based competitive sports surface. The infield is sodded with Bermuda grass. The track is encircled by a low fence with a 3' sidewalk along the straightaway. This phase also included a new ticket booth and redesigned sidewalk plaza and entry area.

Phase II envisions a 1,500 spectator grandstand with team facilities, concessions, press box, and officials' booth. It includes a colonnade along the first turn, which is reminiscent of other University athletics venues such as Lambeth Field and John Paul Jones Arena. A new scoreboard, a measured running path, and landscape improvements along Copeley Road complete the current master plan for Lannigan Field.

The project was designed by VMDO Architects and the construction was managed by Barton Malow, both of Charlottesville, VA. Phase I construction was completed in time for the University to host the 2012 ACC Spring Championships. Phase II is awaiting funding. The project budget for Phase I was \$7 million.



## **Utility Tunnel Repairs**

Will Moore / Charles Durrer

UVa's building utilities, such as steam and hot water, are delivered through underground tunnels, providing access for maintenance and also preserving the sense of beauty and openness on Grounds. The tunnels of this project lie along Emmett Street and traverse the Lawn, and can accommodate sidewalks and even a vehicle roadway above. On the Lawn, the roadway supports fire truck access. The tunnels needed repair due to deterioration over time, and were upgraded in accordance with current fire truck loading. In addition, to support the University's long-term building plan including recent Academic building expansions and new Alderman dorms, a steam line has been provided. The tunnel work was completed in August 2012 prior to fall classes, and the steam line was operational for the fall 2012 heating season.

Design services were being provided by Dewberry Engineers, Inc., Fairfax, VA., and the general contractor was Faulconer Construction Company, Charlottesville VA. The project budget was \$8.5 million.



## College at Wise - Accessibility

Steve Nelson / John Carter

This project provides an accessible connection between the College's athletic precinct and the main campus residential precinct. Previously the only way to cross between the two precincts was to climb a long flight of stairs or drive out of the main campus onto a public highway. In addition to providing universal access, the project also provides a convenient daily walkway for students, faculty and visitors, linking the main campus residential area with the football stadium, the intramural practice field, and the newly constructed David Prior Convocation Center.

In order to construct the walkway, it was necessary to cut through a forested ridge that separated the two precincts both physically and visually. The project consists of a landscaped concrete sidewalk, approximately 1,400 linear feet in length, requiring the removal of about 10,800 cubic yards of soil and rock. The walkway is lighted by decorative post fixtures.

The project was designed by Thompson and Litton of Wise, VA and the construction was managed by Quesenberry's Inc. of Big Stone Gap, VA. The project budget was \$1.06 million.



# College at Wise - Dam Restoration

Dave Paley / John Carter

The College's land includes two water impoundments behind the David Prior Convocation Center. The water is held back by dams, which are essentially earthen berms, built by a coal company in the 1970s. Today the dams are deficient under current dam safety standards, and require redesign. The new dams will be concrete structures with a long weir to allow control of the amount of water released downstream. The design, by Thompson & Litton with Schnabel Engineering, will be complete by early 2014. Bidding will follow in the spring, and a construction contract award is expected by May 2014. The project budget is \$2.5 million.



College at Wise: Health & Wellness Center

Stephan P. Nelson, AIA / John Carter

The University of Virginia's College at Wise is building a new Health and Wellness Center as an addition to the existing C. Bascomb Slemp Student Center. The Health and Wellness Center will provide new fitness facilities for students, faculty, staff and the general public from Wise County and surrounding areas. The addition will include an exercise area, multipurpose room, conference rooms, locker rooms, offices, café and entry lobby. The site for this addition is a steep hill which will involve significant engineering challenges during construction. The building will be a two story, 11,600 gsf structure, connected to the existing fitness areas located in the student center.

The project is scheduled for completion in April 2014. Train and Partners of Charlottesville, VA is the project architect, and BurWil Construction Co. of Bristol, TN is the construction manager. The project budget is \$6.2 million.



College at Wise: Library Stephen J. Dempsey / John Carter

The University of Virginia's College at Wise is constructing a new library, to support the academic mission of the College and provide a state-of-the-art facility for the College's students and faculty. The library will be the academic heart of the College, and is centrally located to provide a fully accessible 24-hour link between the upper and lower campuses.

The building will house the College's collections and will provide study, instructional, and multimedia resources to accommodate the College's present and future needs. The library's size and layout are designed to accommodate the number of students that will use the facility, the numerous functions the facility will serve, and the need for an accessible, 24-hour vertical link. Lobbies on several floors will be open late, and will feature café tables, group study rooms and informal lounge seating so that students can collaborate on projects, study, socialize, and gather informally throughout the day and evening. The lobbies will also serve as a direct point of entry to the multimedia learning labs. A café will further enhance the facility's role as a center of campus life.

Designed by Cannon Designs of Arlington, VA, the project features a five-story, 69,000 gsf brick and glass structure, destined to become the identifying, iconic building on the campus. Construction is now underway, with completion expected in summer of 2016. Quesenberry's of Big Stone Gap, VA is the Construction Manager. The project budget is \$37.17 million.



#### College at Wise: Smiddy Hall Renovation & New IT Wing

Stephen J. Dempsey / John Carter

The Smiddy Hall project included major renovations to Smiddy Hall, which was of early '70s vintage, and the addition of a new 6,000 gsf IT Wing. The combined area is 30,500 gsf. The renovation included replacement of all windows and interior finishes, and HVAC, fire protection, electrical and plumbing systems. The former lobby and west-wing portions of the building were demolished, replaced by a new administrative office wing and a double-height atrium lobby, which functions both as an entry to the facility and informal meeting space.

The new IT wing, completed in December 2009, is a two-story addition on the east side of Smiddy Hall, and houses the new campus data center, offices and support space. Primary power is supplemented by generator back-up, ensuring continuous operation of mission critical campus functions.

Smiddy Hall is located at the entrance to the College. The renovations to the building's exterior are in harmony with the design of adjacent buildings. Construction began in the fall of 2008 and was completed in the summer of 2011. The project was designed by Train & Partners Architects in Charlottesville, VA., and construction was performed by Rentenbach Constructors of Knoxville, TN. The project budget was \$13.55 million.



# **Health System:**

The Health System Division responded to 19 new requests for services, contributing to a total workload of 62 active projects, including projects that have reached Construction Completion in the last year. Using the HECOM threshold of \$2,000,000 for a Capital Outlay project, these active projects included:

- 12 projects in startup / request phase, budget / scope not yet developed.
- 29 small non-capital projects with an average size of \$185,859 for a total of \$5,389,909.
- 14 large non-capital projects with an average size of \$908,105 for a total of \$12,713,465.
- 17 small capital projects with an average size of \$2,763,701 for a total of \$46,982,931.
- 18 large capital projects with an average size of \$25,950,114 for a total of \$467,102,060.
- 6 capital projects in design for a total of \$71,421,000.
- 14 capital projects in construction for a total of \$219,635,701.
- 8 capital projects completed for a total of \$160,402,165.

Capital Projects In Design	Capital Projects In Construction	Capital Projects Completed
Culpeper Regional Hospital	1003 West Main Street Renovations	McLeod Hall Phase II
Emergency Department Expansion		
and Renovations		
University Hospital 7 <sup>th</sup> and 8 <sup>th</sup> Floors	Battle Building at Children's Hospital	Old Jordan Hall HVAC Infrastructure
Renovation		Replacement
University Hospital Emergency	CRU & Neurosurgery Renovations	South Chiller Plant Expansion,
Power Phase III	Davis / Barringer / McIntire	Chiller 3
University Hospital – Vegetative	Demolition of 1224 JPA – Battle	University Hospital Bed Expansion
Roof	Building	
University Hospital HVAC	East Chiller Plant and Lee Street	University Hospital Helipad Rooftop
Replacement Phase II	Realignment	Expansion
University Hospital Vascular Hybrid	ERCP Expansion	University Hospital HVAC
Operating Room		Replacement Phase 1 / Level 2M
	Lee Street Entry and Connective	University Hospital Radiology
	Elements	Master Level Plan Remaining Phases
		/ Level 1
	Old Jordan Hall Microbiology Central	University Hospital Roof
	Corridor Lab Renovations / 7 <sup>th</sup> Floor	Replacement Project Phase I
	Outpatient Surgery Modular Unit	
	Improvements	
	University Hospital Fire Alarm	
	Replacement	
	University Hospital NICU Renovation	
	/ Level 7	
	University Hospital Roof	
	Replacement Project Phase II	
	West Complex – Blake Relocation	
	X-Ray Wing Renovation – Blake	
	Relocation	

# **Health System Major Commissions**

Clinical Research Unit (CRU) & Neurosurgery Renovation Davis/Barringer/McIntire Kristine C Vey, LEED AP ID+C

This project will provide overnight and day use rooms for Clinical Research which is part of the School of Medicine. It will also provide multiple offices for Neurosurgery Faculty and a new Conference Room with improved Audio/Visual capabilities.

This project was designed by LSY of Silver Spring, MD with Engineering Design by Affiliated Engineers of Rockville, MD and Structural Engineering Design services provided by Dunbar Milby Williams Pittman and Vaughn of Charlottesville, VA. The project is being constructed by Barton Malow, Charlottesville, VA.

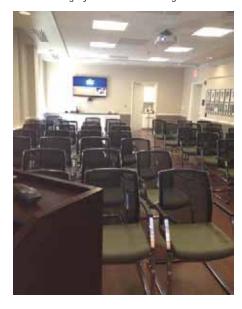
The project includes the entire 3<sup>rd</sup> floor of the McIntire Building (Neurosurgery offices) and Barringer Expansion (CRU) as well as part of the 3<sup>rd</sup> floor of the original Barringer building (Conference Room) and Davis building (NSGY offices). There is also a nutritionist work room, storage and staff space on the 2<sup>nd</sup> floor. In total it is approximately 9,000 gsf.

A new mechanical system was provided for the McIntire building, the existing HVAC will be modified to serve the new CRU space and Neurosurgery offices. The new conference room will have its own AHU system. The finishes will conform to Medical Center standards as established in clinical areas and will be approved by the School of Medicine as well as the Medical Center's finishes committee. The project is pursuing LEED Certification.

As of mid-August 2013, the first phase, which was the Neurosurgery Offices in McIntire, is complete. The Faculty and Staff moved in at the end of June. The 2<sup>nd</sup> phase (the Neurosurgery Conference room) will be complete in mid-September. The Clinical Research Unit and additional Neurosurgery Faculty offices, including the office for the Chair of the department will be completed in October, and the final phase on the 2<sup>nd</sup> floor is expected to be complete sometime in December. The total project budget is \$4.4 million.

The project area and significant portions above the ceiling on the 2<sup>nd</sup> floor has been fully abated for asbestos.





Mechanical Closet in McIntire



# **Culpeper Regional Hospital, Emergency Department Expansion**Fred Dunn

The Emergency Department Expansion project will add 21 Exam Rooms, 2 Trauma Rooms, 4 Privacy Waiting Bays, Administrative and Support Spaces, and it will include a new ambulance access area that will accommodate 8 ambulance parking slots along with a new canopy to shelter 5 ambulances. The existing Registration Waiting and Reception area will be shared with the new ED.

Designed by HKS Architects Inc. in Richmond, Virginia, with Leach Wallace Engineering consultants, the project includes an 8,400 gsf new single-story ground level addition and 5,800 gsf of renovation to the existing Emergency Department. The construction will require phasing to maintain the full operation of the ED during construction. The new addition will be constructed and occupied in Phase 1; Phases 2 and 3 will provide renovations to the existing ED. The project also includes three early phase "enabling" projects, the relocation of the bulk oxygen tank farm (completed in June 2013), the construction of a 135 space parking lot on newly acquired property across Sunset Lane (completed in September 2013), and the relocation of the Helipad (scheduled to complete in December 2013), which is required to allow for the Emergency Department's footprint to expand.

Gilbane Building Company is providing Construction Management-at-Risk services through the design, procurement, and construction phases of the project.

The ED Department Expansion is scheduled to begin in December 2013, immediately following the Helipad relocation, with completion in October 2014. The total project budget is \$13 million.



#### East Chiller Plant / Lee Street Realignment

Thomas G. Snow, P.E. / Kimberly L. Speer

A study of the Health System Chiller Plant System completed in January 2010 reviewed chilled water demand and system capacity for the next 20 years. The study provided recommendations for existing chiller replacements as well as capacity increases. The East Chiller Plant project is a result of that study and also includes the realignment of Lee Street to Roosevelt Brown Boulevard in order to best accommodate the new chiller plant site, and streamline traffic flow to the Health System facilities and parking structures.

Currently, there is a need to replace five 1,200 ton chillers (6,000 total tons) in the North Chiller Plant that are at the end of their useful life. The new East Chiller plant will provide a building shell for a 10,000 ton plant with 6,000 tons of initial installed capacity in the form of three, 2000 ton chillers.

The Lee Street realignment package started construction in August 2011, the chiller plant site development started in February 2012, and the final building package was awarded in May 2012. Completion of the plant is scheduled for September 2013.

Affiliated Engineers, Inc is the design firm with HOK as the Architectural consultant. Gilbane is the CM at Risk contractor. The total project budget is \$36.5 million.





### ERCP Expansion – Digestive Health Department

D. Andrea Fraley, AIA, LEED AP BD+C

The ERCP (Endoscopic Retrograde Cholangiopancreatography) project was originally a complete emergency renovation and expansion of the existing procedure room to accommodate the replacement of old ERCP fluoroscopy equipment which was at the end of its useful life and was experiencing significant breakdowns/downtime. The two rooms are highly specialized as the only interventional endoscopy room at the Medical Center. In addition to the new state-of- the-art equipment, the project has provided enhanced lab infrastructure, power, and HVAC.

This year, the project is in the final phase of completion with multi-function ERCP & Fluoroscopy capabile equipment being installed into the second clinical procedure room, which was completed under the original emergency project.

The A/E team was led by HKS, Inc. and the General Contractor was SRC, Inc. The first procedure in the new space was performed in May 2012. The total project budget not including equipment is \$1.5 million.









#### Lee Street Entry and Connective Elements

James Loman, AIA / M. Bree Knick, LEED AP

This project includes an expanded front entry to University Hospital, a new plaza/traffic oval centered on the hospital entrance, a new bridge over Lee Street between the hospital and the Lee Street Parking Garage, and a new vertical circulation tower that joins the Lee Street Garage with the bridge to the 11<sup>th</sup> Street Garage on the north side of the railroad tracks.

The Emily Couric Clinical Cancer Center and the Hospital Bed Expansion were designed to complement each other and have changed the public face of the Health System at its front door - Lee Street. The Lee Street Connective Elements project ties them together, allowing a unified sense of place and a new point of arrival. The plaza/traffic oval provides for better vehicular flow and controls the increased usage that results from the completion of these projects. The second and most prominent phase of construction – the expansion of the Hospital Lobby, the new curved glass front of the Hospital, and the bridge over Lee Street – opened for public use in early July, allowing for the renovation of the older portions of the lobby to proceed. Additional work in the Hospital Lobby includes new information desks, a new gift shop, and a renovated space for patient discharge. The final phase of the project also includes new sidewalks, street trees and landscaping in the new island at the hospital to create visual continuity from the plaza out to Jefferson Park Avenue.

This project uses the same architect that designed the cancer center, Zimmer-Gunsul-Frasca Partnership of Washington, DC, to ensure design continuity. All three projects share a new vocabulary of patterned glass curtainwall modulated by the rhythm of vertical mullions and columns. Construction management services are being provided by Gilbane Building Company of Laurel, MD. The total project budget is \$30.1 million and construction began in May 2010.







#### McLeod Hall Phase II

Brian R. Pinkston, P.E., Ph.D. / Kemper Tomlin

McLeod Hall was the central facility for the School of Nursing until the opening of the Claude Moore Nursing Education Building (CMNEB) in 2008. McLeod is over forty years old and had not had a building-wide renovation or infrastructure upgrade until now. Beyond the bare facility needs, the School also wished for McLeod to approach the aesthetic quality of CMNEB. McLeod consists of five core floors of offices and classrooms, two underground parking levels, and an auditorium. (The area of each core floor is 10,000 gsf.) Phase I of work renovated the first, fourth, and fifth floors. The first floor was completed in August 2010; the fourth floor in February 2011; and the fifth floor in August 2011. Phase II of work renovated the third floor and was completed in December 2012. (Renovation of the second floor is on hold pending funding.) The total project budget for Phase II was \$1.5 million. The project architect for Phases I and II was Bowie Gridley Architects of Washington, DC. Construction was completed by in-house forces from the Project Services group of Facilities Management.





#### Old Jordan Hall HVAC Infrastructure Replacement

Brian R. Pinkston, P.E., Ph.D. /David W. Booth

The original portion of Jordan Hall ("Old Jordan Hall") is a seven story building that opened in 1971. A new addition providing laboratory, office, and classroom space was opened in December 1995. This project is for the original building and does not include the new addition. The first floor of Jordan Hall contains two lecture halls, as well as a small seminar room and anatomy laboratories. The majority of the first and second year lectures are given here. The second floor houses additional student laboratories, as well as basic science research laboratories. The academic offices and research laboratories of the Departments of Anatomy, Physiology, Cell Biology, Pharmacology, Biochemistry, and Microbiology occupy floors three through seven. The intent of this project was to bring the entirety of the HVAC infrastructure up to the standards required for a modern research laboratory building. To that end the following scope was completed: 1) All airhandlers and associated central HVAC equipment were replaced; 2) All exhaust fans were replaced using a manifolded fan arrangement; 3) All supply air duct risers were replaced; 4) All supply air distribution ductwork was cleaned; 5) Controls for the HVAC infrastructure were upgraded; 6) Provisions for energy reclamation were made (e.g., heat recovery); 7) Fans to provide pressurization of egress stairways for smoke evacuations in case of fire were installed; and 8) Miscellaneous asbestos abatement took place. The project achieved final completion in January 2013.

RMF Engineering, Inc. of Charlottesville, VA was the engineer for this project. DPR Construction, Inc. out of Falls Church, VA was the construction manager. Construction began in August 2010 and was completed in January 2013. The total project budget was \$33.4 million.



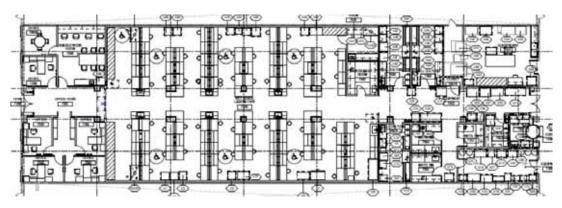


# Old Jordan Hall Microbiology Central Corridor Lab Renovation / $7^{\rm th}$ Floor

Brian R. Pinkston, P.E., Ph.D. / Kemper Tomlin

This project is renovating 9,600 gsf of space in Old Jordan Hall to provide a new laboratory for the Department of Microbiology, Immunology, and Cancer Biology. It will be the first lab renovation in Jordan Hall to take full advantage of opportunities for improved air flow control and energy savings made possible by the Old Jordan Hall HVAC Infrastructure Replacement Project. It also is the first renovation in the building to incorporate within the lab boundaries the central corridor on the floor. This, plus the use of an "open lab" design (one in which there are long rows of lab benches and few interior walls), will allow for greater efficiency in use of building space. The project is thus intended as a template for future renovations in the building. The project architect is Nalls Architecture of Philadelphia, Pennsylvania. Construction is being done by in-house forces from the Project Services group in Facilities Management. The total project budget is \$3.1 million. Anticipated completion date is March 1, 2014.





# **Outpatient Surgery Modular Unit Improvements**

Thorald A. Evans, P.E. / Christian Pouncey

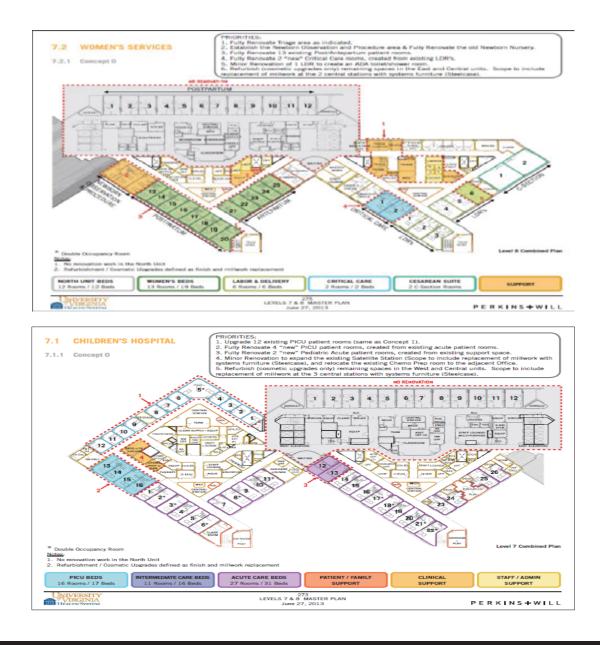
To meet the demand for operating rooms at the UVa Outpatient Surgery Center (OPSC) and allow capacity to grow in advance of the Battle Building Outpatient ORs, two modular operating rooms (MSUs) were added to the OPSC. The Project includes the area where the modular ORs are located, utility interconnections, emergency power, and medical gas storage, a link (including support spaces) from the ORs to the OPSC, a new entry canopy and a screening wall surrounding the modules. The total project cost, excluding the modules and medical equipment, is \$3 million. Baskervill, Valley and Pinnacle formed the A/E Team. Crenshaw Construction was the Contractor. The MSUs are in service.



# University Hospital 7<sup>th</sup> and 8<sup>th</sup> Floors Renovation

Brian R. Pinkston, P.E., Ph.D.

The 7th and 8th floors of the University Hospital contain the Children's Hospital and Women's Services, respectively. An extensive, inclusive process of planning for the direction of these programs and the future use of these spaces began last fall and was completed this spring. That effort resulted in a detailed plan for renovations of significant portions (roughly one half) of each floor. A project has now been formulated to effect these renovations, which will be done over at least three years and in multiple phases. Selection of the architect will be completed by September. The first phase of construction is intended to begin in spring of 2014, subject to availability of funding. The total project budget is \$15.8 million.



#### **University Hospital Bed Expansion**

Joseph A. Rainwater, R.A. / Christopher J. Hoy / David W. Watkins / M. Bree Knick, LEED AP

The Hospital Bed Expansion (HBE) adds 72 acuity adaptable patient rooms to the University Hospital. The project consists of 12 private room nursing units located on each of floors 3 through 8. The patient rooms are designed to be critical care capable with a full bathroom. This design allows the room to be used for critical care, step-down care, or acute care. This project provides much needed bed capacity to the Hospital while providing maximum flexibility.

Designed by the SmithGroup, Inc. in Washington, DC, the project is a six story, 61,000 gsf addition to the north façade of the Hospital's Central Bed Tower. The HBE bears on a truss structure constructed over the second story roof of the Hospital Lobby. An expanded mechanical penthouse is included to house new air handling equipment to serve the HBE. The project also involves 62,000 gsf of renovation to create the adjacent nursing units on each of the six patient care floors. Gilbane Building Company, in association with H. J. Russell & Company provide Construction Manager-as-Agent services through the design, procurement, and construction phases of this project.

The design of the exterior of the HBE was influenced, in large part, by the design of the Emily Couric Clinical Cancer Center (ECCCC). The University Hospital Bed Towers are oriented to face the ECCCC building site. The HBE facade is a unitized factory-glazed curtainwall system. On the interior, the patient rooms are oriented to fully utilize this system to provide wall-to-wall and floor-to-ceiling glass. This maximizes the use of natural light in the patient rooms while taking advantage of the northern exposure.

The HBE began construction in October of 2008 with completion in mid-2012. By combining several trade packages with the ECCCC project, high trade interest in this project, and a favorable bidding climate, excellent construction pricing was achieved. The total project budget was \$82.5 million.





#### **University Hospital Emergency Power Phase 3**

Michael J. Vandeweide, P.E. / David W. Watkins

The purpose of the ongoing Emergency Power Projects is to increase the capacity of the system in response to a growing need to provide backup power in the event of a service disruption. Phase 3 will install an additional 5,000 amp feeder from the generator room to the Hospital and add two new 1500kw generators to be located in the space between the Lee St. Garage and the 11th St Garage. This will provide an additional 3,700 amps of emergency power to the hospital. This phase will also install equipment inside the hospital to enhance emergency power distribution and establish the necessary infrastructure for future emergency power requirements. The new generators will ready the system for the HVAC Upgrade Project Phase 2 that is currently underway and the new Emergency Department Project in planning.

The project is being designed by Leach Wallace Associates. The first construction, an early site work package, was awarded to Martin Horn. The Project is scheduled for completion by December 2014 and the total project budget is \$4,000,000.



#### University Hospital Fire Alarm Replacement

Thomas G. Snow, P.E. / Kimberly L. Speer

The hospital fire alarm replacement will provide a completely supervised and addressable fire detection system throughout the facility. This upgrade will include the infrastructure to support expansion of the system as required for future hospital renovations and additions.

The project scope includes construction of a new fire control room for system monitoring that will also serve as a base of operations for the Charlottesville Fire Department and University fire protection personnel during emergency situations. Throughout the hospital, the new infrastructure will connect to new initiating and existing alarm devices. This new addressable system will identify the specific locations of devices in alarm, replacing the existing system that only displays the zone from which the alarm originated. The entire system will be monitored by Systems Control through new radio transceiver equipment. A digital voice alarm capability will also be provided throughout the entire hospital.

Additional life safety emergency power distribution within the hospital will also be constructed under this project. Emergency power circuits dedicated to life safety functions are currently at their limit. This project will add enough circuits to not only supply the new fire alarm system, but also create spare circuits for future projects that require dedicated life safety power (e.g., medical gas alarm panels).

The project was designed under contract with Smith Group. Protective Engineering Group, Inc. was the Fire Alarm design consultant. The construction contract was awarded to Communications Specialists, Inc. (CSI) in January 2011. The new system was commissioned by zones with the entire system in hospital operational in January 2013. The total project budget was \$6.4 million.

Below: Network Control Annunciator (left) and Voice Command Panel (right)





#### University Hospital Helipad Rooftop Expansion

Stephen C. Rohr / Nathaniel U. Brown

A new Health System Chiller Plant is under construction to better accommodate existing and future loads. This building will negatively impact the flight paths associated with the existing ground-based helipad. A new helipad was constructed on the roof of the University Hospital to mitigate the potential conflict of the East Chiller Plant and a proposed Emergency Department Expansion. The new helipad functions as the main landing pad for helicopters arriving at the Hospital.

The project is complete. It included the extension of two hospital service elevators in the East Elevator Bank, safety nets, and a walkway to the pad location from the extended East Elevator Bank, as well as column upgrades to support the helipad loads. The helipad is a 46 foot square aluminum pad above the existing roof. The helipad system is designed with provisions for a snow melt system, all required FAA lighting and wind indicators, and required filtration to protect the penthouse air intakes for the Hospital's HVAC system.

Smith Group Inc. of Washington, DC provided the design, and Gilbane Building Company is the construction manager for the project. The project budget was \$6.7 million.







#### University Hospital HVAC Replacement Phase II

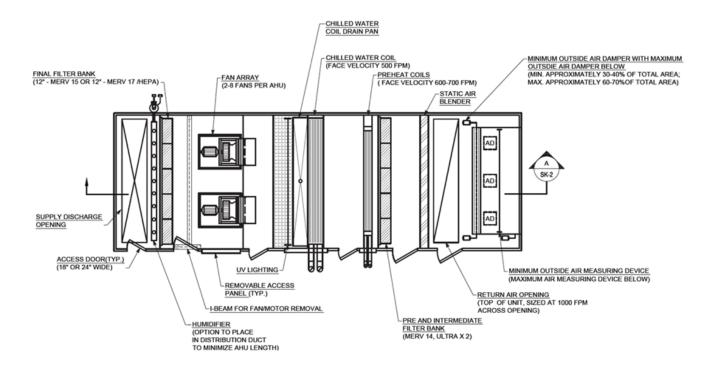
Thorald A. Evans, P.E. / William H. Shirey

In addition to replacing air handler units (AHUs) nearing the end of their projected lifespans and upgrading support systems, the Phase 2 HVAC Replacement Project has two additional goals. The first goal is to enhance the integration of the work by getting the Team in place early in the process. To meet this goal, the Construction Management joint venture, Donley's/McCarthy, the engineer, Leach Wallace, and the commissioning agent, Burns and McDonnell, were contracted at the start of design. The second goal is to develop a Building Information Management (BIM) execution plan for this work that will serve as a prototype for future University Hospital projects. This was done by working with FM personnel and consultants to develop the plan.

The Phase II Project will be conducted in two segments. The first segment is underway and consists of upgrades to the glycol system that provides preheat to the incoming outside air during low ambient conditions and the installation of ductwork on the Hospital roof that will enable excess capacity from the new Hospital Bed Expansion AHUs to serve as temporary capacity during the removal and installation of the Phase 2 AHUs in the Hospital penthouses. This will save the expense and difficulty of installing a temporary AHU on the roof and will provide limited backup capacity in the event of future needs.

The second segment will be the design and installation of six new AHUs and connections to their associated support systems. The design for this work is scheduled to begin late in the 3rd quarter of 2013.

Phase 2 is projected to be complete with both segments in 2015 and is estimated at \$14.7 million.



### University Hospital NICU Renovation / Level 7

Fred P. Dunn / Christian Pouncey

The Neonatal Intensive Care Unit (NICU) Expansion is an eight bed expansion of the existing Neonatal Unit located in the SE corner of East Wing on the 7<sup>th</sup> floor of the University Hospital. The expansion consists of neonatal bed areas and support facilities for neonates requiring the most critical intensive care. The project will take existing support spaces within the unit and renovate the area to become an eight bed, enclosed expansion of the NICU. The surrounding support facilities will be renovated or reconfigured to become more efficient and effective. Support spaces include clean and soiled utilities, equipment room, overnight sleeping rooms for families, staff offices, and ancillary patient support areas such as lactation, education, and counseling.

Nalls Architecture Inc. of Philadelphia, PA provided design services and Crenshaw Construction Inc. of Culpeper, VA is the General Contractor.

Construction began in November 2012 and is scheduled to be complete in November 2013. The project is being constructed in three phases to minimize disruption to the operation of the unit. Phase 1 was completed in March 2013 and Phase 2 was completed in September 2013. The total project cost is \$2.7 million.



Floor Plan Showing Construction Phasing





## University Hospital-Radiology Sonata Equipment / Level 1

P. Kevin Silson, AIA / Christian Pouncey

This project replaced the existing Sonata MRI with a more powerful Magnetron Skyron 3T magnet with mobile table. The new magnet provides faster and more detailed imaging, and the mobile table provides a more comfortable experience for patients. The patients now only need to transfer once, from their transport bed to the imaging table, instead of transferring to an intermediate transport bed. This is a vast improvement in care, especially for incapacitated patients. The work consisted of adding a new copper RF shielding enclosure and upgrading all room finishes and mechanical and electrical services.

Perkins Eastman of Charlotte, NC provided design services and Martin Horn, Inc. of Charlottesville, VA was the general contractor. The project cost was \$1.1 million, excluding the purchase of the MRI.





# University Hospital Roof Replacement Project

Stephen C. Rohr / Nathaniel U. Brown

The University Hospital, a 608-bed facility with a Level 1 Trauma Center, was completed in 1989. Due to the age of the existing roof, and the costs of maintaining it, a thermoplastic polyolefin (TPO) roof is being installed. The work began in late 2011 and 95% of the roofs are now complete. The remaining roof areas will be completed this year and a green roof consisting of vegetation planted in a growing medium over a waterproof membrane will installed over the lobby area next year.

The TPO roof was designed by Heyward Boyd Architects, PC. Lynch Roofing was the contractor for the work. The total project budget for all phases of the work is \$6.4 million.

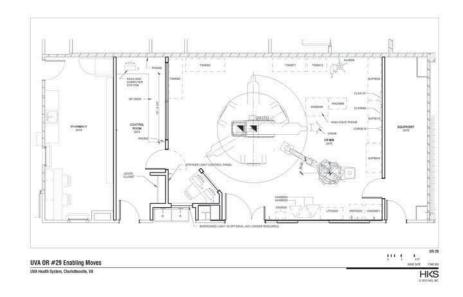


### University Hospital Vascular Hybrid OR-29

P. Kevin Silson, AIA / Christian Pouncey

Vascular Hybrid OR-29 will be a state-of-the-art operating room that includes a robotic x-ray system. This enables vascular surgeons to perform multiple operations at once; what normally would take two operations performed over two days can now be combined into one procedure.

The project includes renovating existing office space and a satellite OR pharmacy into a new pharmacy, a 180 square foot OR control room, and an 800 square foot operating room. Construction documents were started August 2012 and construction is projected to start January 2014 with occupancy in mid-to-late June, 2014. The project budget, excluding equipment, is \$2.7 million.





# University Hospital West Complex – X-Ray Wing Renovation

P. Kevin Silson, AIA

The X-Ray Wing was the old 10,000 square foot oncology x-ray equipment site, originally constructed in 1957 and renovated as equipment was upgraded over the years. When Oncology moved to the Emily Couric Cancer Center, the entire wing was vacated for the first time since it was originally constructed. At this point the entire wing was gutted, including approximately 70 tons of original lead bricks used for radiation protection. The space was renovated for office use, with all new mechanical, electrical, and plumbing systems and new building finishes. Because of the prime location, three functions that require public and UVA employee access were moved in: Human Resources, Employee Assistance and Medical Center Procurement.

The project cost \$2.45 million, was designed by Train Architects and constructed by UVA Project Services. The project was fast-tracked because the new occupants were moving from the Blake Center, the building being demolished to make way for the new entrance to the Battle Building. Design started in October, 2012, the Building Permit was issued in February 2013, and substantial completion was achieved in June 2013.





# **Engineering and Design:**

Engineering and Design is composed of two work centers, the Design Group (CC 07) and the Project Management Group (CC 78). Engineering and Design was active in the design and/or execution of over 140 individual projects and other activities in support of University facilities throughout fiscal year 2012-2013 and executed approximately \$10,000,000 in project and technical support activities.

# **Project Management Group**

<u>In Design</u>	In Construction	Completed	
Aerospace Research Roof	Alderman Library Built-In Gutters	Aquatics and Fitness Center (AFC)	
Replacement	& Low-Slope Roof Replacement	HVAC System Upgrades	
Alden House Roof Replacement	Alderman Road Dorms Concrete	Baseball and Field Hockey Video Board	
	Inspections 2013	Replacement	
Bavaro Hall Roof Hatch	Brown College Slate and Flashing	Baseball Seating Expansion	
Installation	Repairs – Phase 1		
Chemical Engineering Roof	Brown College Waterproofing	Batten Incubator Renovations	
Replacement			
Clinical Department Wing	Child Development Center Emerg.	Bookstore Roof Replacement	
Subterranean Roof Replacement	Power Generator Replacement		
Dawson's Row Roof	Darden Terrace Waterproofing and	Clay Hall Pavilion Roof Coatings	
Replacements	Repairs		
Gilmer Hall Auditorium Roof	Drama Building Roof Replacement	Dorm Waterproofing – McCormick	
Replacement		Road, Copeley, UGardens	
Halsey Hall Built-In Gutter and	JPJ Arena Building Envelope	East Range Roof Replacement	
Ridge Cap Replacement	Repairs		
Kerchof Hall Built-In Gutter and	Law School Window Replacement	Fire Alarm Upgrades – McCormick	
Low-Slope Roof Replacement		Road Dorms	
Kluge-Rue Cottage Renovation	McCormick Observatory SW Low-	Gilmer Hall Additional Elevator	
	Slope Roof Replacement		
Lorna Sundberg House Roof	O'Hill Emergency Power Generator	Lambeth Apartments Renovations	
Replacement	Replacement	Phase 5	
Materials Science Building Roof	Stacey Hall Roof Replacement	Lambeth Colonnades Restoration and	
Replacement		Repairs	
McIntire Wing Roof	TJAGLCS Site Security Upgrades	Lambeth Field Residences Roof	
Replacement		Replacement	
Memorial Gym Window Repairs	Withers Brown AHU Replacement	Law Library Entry Upgrades	
Michie Building Roof		Memorial Gymnasium Volleyball	
Replacement		Locker Room Renovation	
Old Cabell Hall Built-In Gutter		Olsson Hall Low-Slope Roof	
and Low-Slope Roof Repl.		Replacements	
Special Materials North Addition		Olsson Hall Renovations	
Roof Replacement			
Thornton Hall C-Wing Supp.		Slaughter Hall Renovations	
Sprinkler Water Line Study			
Withers Brown Hall North		Student Activities Roof Replacement	
Section Roof Replacement			
Zehmer Hall Roof Replacement			

**Design Group** 

<u>In Design</u>	<u>In Construction</u>	<u>Completed</u>	
3 <sup>rd</sup> Floor Lab Renovations MR-4	Brown College Slate Roof & Flashing Repairs	1003 West Main Street Renovations	
Athletics Storage Facility Indoor Practice	Elevator #6 Cab Refurbishment Slaughter Hall	Batten Incubator Renovations Sponsors Hall	
BIMS Education Center McKim Hall	Elevator Replacement Monroe Hill	Cobb Hall Renovations for Department of Medicine	
Drama Shop Paint Frame Replacement	Freight Elevator Modernization Mechanical Engineering (Construction Procurement)	Culbreth Theater Renovations	
Elevator #5 Modernization Slaughter Hall	Lorna Sundberg House Roof Replacement	Drama School Sprinkler & Fire Alarm	
FM Shop Renovations for Project Services	Replace Elevators #1 & #2 Memorial Gymnasium	Harmon, Grainger/Keller, & Kucenas Lab Renovations	
Gala Lift Replacement, Culbreth Theater	Ruffner Hall Renovations	Helms Theater Traps Replacement	
Install Handrails, Scott Stadium	Ticket Booth & Associated	Lambeth Residences Roof	
East & West	Renovations, Old Cabell Hall	Replacement	
Landers Lab Renovation Chemistry		Lawn/Range Bathroom Renovations (Phase 4)	
Relocate Conservator's Lab to Alderman Library		ME Classroom 339 Renovations	
Replace AHU's & FCU's Physics		Old Medical School 4 <sup>th</sup> Floor	
Building		Renovations for Neurosurgery	
Replace Elevator Doors, Alderman Library		Olsson Hall Renovation for SIE	
Thornton Stacks Renovation SEAS		Rare Book School, Alderman Library, Phase 2	
		Surgery & Transplant Renovations, 4 <sup>th</sup> Floor MSB	
		University Bookstore Roof Replacement	

# **Engineering and Design Major Commissions**

# Alderman Library Built-In Gutter and Low-Slope Roof Replacement Zachary P. Brackett, RRO

The Alderman Library, constructed in 1938 and expanded in 1967, incorporates multiple roof systems, many of which are in need of repair or replacement. This project will address the replacement of all low-slope, ballasted EPDM roofing systems on the entire building, along with the perimeter and slate roof built-in gutter systems on the original building.

The approximately 32,200 square feet of low-slope roofing installed in 1986 will be replaced with a fully-adhered, 60-mil, reinforced EPDM membrane, including flat, rigid insulation board, and all associated shop- formed metal flashing components.

The terne sheet metal built-in gutters cover approximately 1,220 linear feet and are original to the building. The four separate runs of gutter at the base of the steep-slope slate roofs will be replaced with a fully-adhered, 140-mill, fleeceback EPDM membrane and new copper metal flashings. The continuous, exterior built-in gutter that runs the full perimeter of the building will be replaced with shop formed copper liners.

The A/E of record for this project is Heyward Boyd Architects of Charlottesville, Virginia. Construction services are being provided by Roof Services Corporation of Richmond, Virginia. Construction began May 2013 and will be completed by November 2013. The total budget for this project is \$1.43 million.







#### **Batten Incubator Renovations**

Taryn Harrison / Eugenio Schettini

The W.L. Lyons Brown Innovation Laboratory (i.Lab) located in Sponsor's Hall offers the Darden School of Business a facility that promotes and encourages the incubation of business ideas and creates opportunities for students interested in starting their own ventures.

The Batten Incubator provides collaborative space to support prospective students interested in entrepreneurship. The scope of this project included the renovation of the existing lobby, the addition of a coffee bar, the addition of new meeting rooms, and the incubator, as well as various mechanical and electrical upgrades. Conceptual design was by SMBW. The architect of record was the UVA FP&C Design Group. The engineer of record was Dewberry. Construction was implemented through Facilities Management Project Services Group. The project budget was \$1.6 million. Construction was completed April 2013.



Photography by Scott Smith Photography

# Darden Graduate School of Business – Whisnand Terrace & Wilkinson Court Wall Repairs William Blodgett

Original construction of the Whisnand Terrace (north terrace adjacent to Saunders Hall) and the related Wilkinson Court brick wall had not performed well due to drainage slope and waterproofing issues, allowing water into the structure below. Whitlock Dalrymple Poston & Associates were commissioned to study the water penetration causes, and then to design corrective construction. Challenges centered on successfully waterproofing the large terrace and court wall, while matching existing mortar, wood-mould brick pavers, face brick, and special shape bricks in a visually prominent area at the Darden School.

Project scope required removal and replacement of the terrace's brick pavers and the wall's brick veneer with a fairly sophisticated terrace paving system including:

- Sand-set brick pavers
- Drainage mats and protection sheets
- Hot-applied rubberized asphaltic waterproofing
- Cover board
- High density tapered insulation boards (to attain positive drainage in the directions desired) adhered to the concrete substrate

The contractor for this effort is Martin Horn, Inc., Charlottesville, Virginia. Construction began in late May 2013, and is scheduled for completion in late November 2013 at a project cost of \$1.1 million.





### **Dormitory Fire Alarm Upgrades**

Shannon Barras

New fire alarm systems were installed in various existing dormitories across Grounds. These systems provided the dormitories with new addressable fire alarm systems. The fire alarm initiating devices consists of manual pull stations, system smoke detectors within all dwelling units. Notification appliances in public/common areas consist of ADA-compliant strobes for visual notification and horns for audible notification. Audible bases are used for notification in dwelling units. The fire alarms will be connected to the existing Keltron radio transmitter in order to transmit signals to the remote monitoring service. The dormitories upgraded from the summer of 2011 through the summer of 2013 include Bonnycastle House, Kent/Dabney House, Emmet/Page House, Lambeth Field Apartments, Echols/Humphreys House, Hancock House, and Copeley III and IV.

The design engineer for these projects was Protection Engineering Group. The construction company for 2011 through 2013 was Design Electric with Bay Electric winning the bid for Emmet/Page in 2013. Project cost for each ranged from \$270,000 to \$620,000.



## John Paul Jones Arena – Building Envelope Repairs Taryn Harrison

The John Paul Jones Arena was originally constructed between 2003 and 2006. Since the Arena was occupied, various water infiltration issues have been reported. A comprehensive study in 2012 by WDP & Associates evaluated conditions at the Arena that contribute to water leakage and other building envelope issues. Repairs addressing the water and air infiltration deficiencies will be phased over the next year. The first phase began in July 2013 and will be completed by September 2013. Phase I addressed the deficiencies of the existing penthouse louvers. New flashing and air barriers were installed and the existing metal panel system was retrofitted to accommodate the design repairs. The engineer of record is Whitlock Dalrymple Poston & Associates. The Construction Manager is Barton Malow Company. The project budget is \$3.3 million.



## **Lambeth Colonnades Repairs**

Keith Payne

The Lambeth Colonnades, located at the end of Lambeth Lane, underwent major repairs in spring 2013. The Colonnades were built in 1913 to be the university's new, state of the art, athletic stadium. The repairs were to correct the effects of 100 years of aging. Repairs included a new concrete walkway, LED lighting, plaster repairs to the columns, pavilions and field wall, terracotta roof tile replacement, carpentry repairs, new door and windows in each pavilion, painting of pavilions, colonnades, and field wall, power washing of the seating, as well as improvements to the drainage that included a new retaining wall and landscaping.

Harrisonburg Construction was procured through our Procurement & Supplier Diversity Services for all concrete and drainage repairs. All other work was performed by our FM Project Services tradesmen. FM Engineering & Design were the Engineer of Record. The project budget was \$700,000.





# School of Law – Karsh Student Services Center Taryn Harrison

The University of Virginia's School of Law began planning efforts for the renovation of the south end of Slaughter Hall in the summer of 2011. Primary goals for the renovation sought to resolve inadequate office and work areas for admissions and other administrative and student groups in order to improve the student and visitor experience. The scope of the 33,000 square foot renovation included the demolition and reconfiguration of the 1st and 2nd floors and the repurposing of offices on the 3rd floor.

The addition of a new two-story lobby pavilion serves as an extension of student services offices located on the 1st and 2nd floors, with a connecting interior stair and a roof terrace accessible from the 3rd floor Alumni Lounge. The lobby pavilion expands into Purcell Garden, an existing interior courtyard that was rehabilitated during the fall of 2012. The project also included the replacement of some exterior windows in the renovated areas of the 1st, 2nd, and 3rd floors as well as a new storefront system on at the Purcell Reading Room. The existing central VAV air handler (AC-1W) located in the basement Mechanical Equipment Room serves a majority of South Slaughter Hall and was replaced as part of this project.

Slaughter Hall is an existing building located in the North Grounds Precinct at the University of Virginia. The building was constructed in 1974 with other major renovations that were completed in 1980 and 1997. The architect of record was Train & Partners Architects and the engineer of record was Obenchain, Linkous, Daniels, and Sowick. The landscape architect was Michael Vergason Landscape Architects. Construction Manager was Martin Horn inc. The project budget was \$9.2 million and the project was completed in November 2012.



Bird's eye view showing lobby pavilion addition, Purcell Courtyard and the Alumni Lounge rooftop terrace

# **Contract Administration**

The number of contracts processed increased 6% as compared to the previous year. The Office of Contract Administration managed the procurement processes for and made awards on a total of 489 contracts in the 2012-2013 fiscal year (FY13) compared to 461 the previous year.

Professional services contracts (architectural, engineering, and consulting), and service orders on consulting term contracts, numbered 406 for a total of \$16,873,811 compared to 380 contracts the previous year totaling \$12,484,660. There were 38 change orders processed with a net additive value of \$4,189,830.

The construction side of the office handled 83 procurements for a total of \$83,444,216 in a favorable bid market, compared to 81 procurements the previous year totaling \$124,875,443. There were 289 associated construction change orders processed with a net value of \$19,065,309 compared to 383 change orders the previous year totaling \$30,347,969. The only change order included in this total over one million dollars was the planned change order for the Utility Tunnel Repairs – Central Grounds – Steam Line Upgrade valued at \$1,220,434.

During the year the office issued a total of 19 requests for proposals (RFPs) compared to 28 RFPs the previous year. The number of professional services RFPs executed this year was 7, and construction RFPs totaled 12.

We continue to team with Supplier Diversity to strategize and plan for increased diversity in Prime and Trade Contractor spending through recruitment of small, women-owned, and minority-owned (SWaM) firms. In addition the following SWaM initiatives continued in FY13:

- 1) An emphasis on SWaM participation in Facilities Management's procurements continues with an overall aspirational goal of 43% for SWaM spending for the University's 207 and 209 agencies. Special efforts are made for women-owned and minority-owned firms to improve their representation in the overall total spending.
- 2) Our Office Manager continues to take the lead in promoting SWaM participation in our procurements and he participated in the National Minority Supplier Development Council (NMSDC) seminar again this past year. He also participated in the Bluebook Network Showcase at Richmond International Raceway Torque Club in May 2013.
- 3) Members of the Office of Contract Administration attended SWaM Fest VIII in Short Pump in October 2012 and participated in various SWaM outreach meetings.

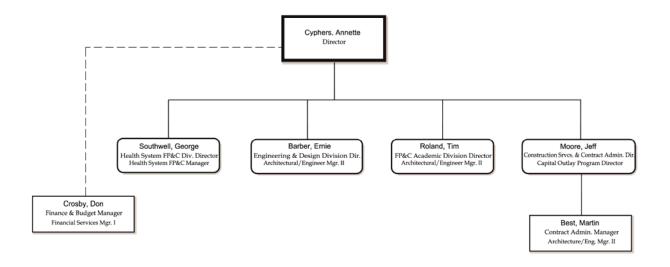
The University of Virginia Higher Education Capital Outlay Manual (HECOM) is undergoing a general update. Updates and revisions of this 250+ page manual involve many hours of editing by our Office to implement the suggestions for improvement. The electronic document is now fully linked with our web site content for ease of reference.

The Office Director is part of a small group developing an FP&C web site specifically for the public. This web site is scheduled to go live August 2013. The Office also continues to lead efforts to update the existing Contract Administration web site and the "Links and Forms" web page as a service to and as professional tools for the FP&C Staff, and University Consultants and Contractors. The continuous improvement effort contributes to FP&C consistency. Updates, modifications, and additions have been made and we are continuing to incorporate process and document improvements as we work in conjunction with the Associate General Counsel and Special Assistant Attorney General for the University. Existing web pages and templates including the UVA HECO/CO/DGS Forms page continue to be updated.

As part of ongoing improvements to the capital project execution process, we are implementing Building Information Modeling (BIM) as a design collaboration tool and for contracting with major Trade/Subcontractors early in the design process as part of a Design Assist methodology. The University Hospital HVAC Upgrade Phase II is the pilot BIM project now in progress. One of our Construction Contract Administrators is also working as part of a group reviewing FP&C's Project Information Management System (PIMS) and our processes, and looking at possible process and software changes.

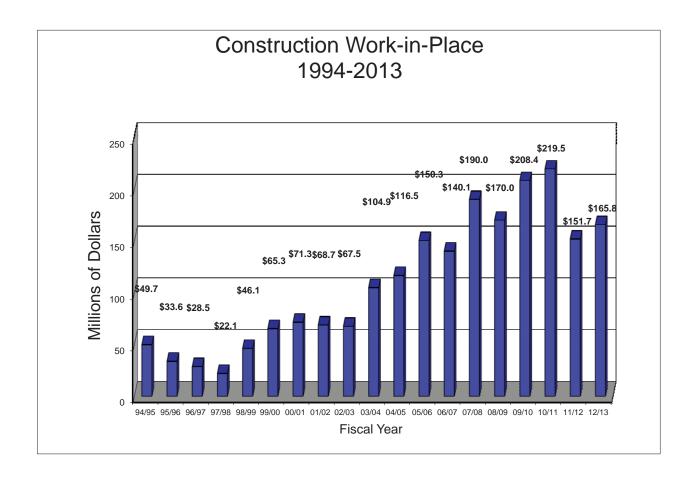
The Office consistently promotes and encourages professional involvement, certification, and training. Members of the Office, with the support of the Director of FP&C, attend the Virginia COAA semi-annual workshops and the annual meeting for the national organization. In addition the Office Director served as the COAA Virginia Chapter Treasurer again this past year and UVA supports the Virginia COAA workshops representing facility owners from around Virginia. Contract Administration staff also participated in FP&C training sessions that were held for staff and participated in numerous other training opportunities.

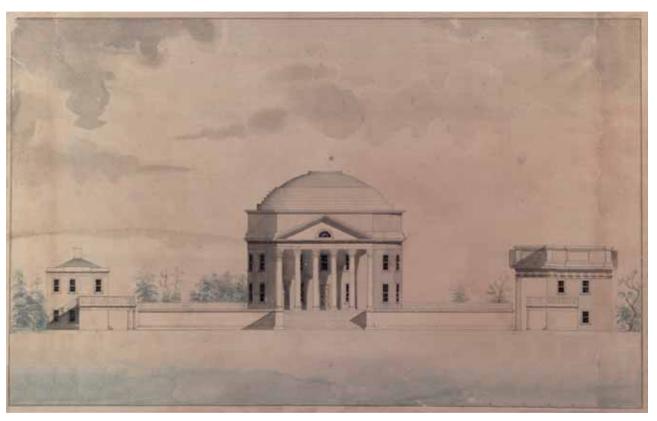
# Facilities Planning and Construction July 1, 2012- June 30, 2013



# Appendix B

Facilities construction completed during the year represented a contract construction work in place volume of \$165.8 million.





Neilson's view of the Rotunda with Pavilions IX and X, Special Collections, University of Virginia Library

We are about to establish a College near Charlottesville on the lands formerly Col. Monroe's, a mile above the town. we do not propose to erect a single grand building, but to form a square of perhaps 200 yards, and to arrange around that pavilions of about 24. by 36. f. [feet] one for every professorship & his school. they are to be of various forms, models of chaste architecture, as examples for the school of architecture to be formed on. we shall build one only in the latter end of this year, and go on with the others year after year,..."