Must every single building on Grounds be made of red brick?

In a way, this Design Guide is the result of addressing this deceptively simple question. The question – and its many variations – essentially challenges whether Jeffersonian Classicism is still the most appropriate model for present-day architectural projects at the University of Virginia. While a full and reasoned response would undoubtedly fill a bookshelf on the subject, let us begin for the moment with just a few points.

First, while red brick is, in fact, a dominant building material of the University, there are many other factors that contribute to the unified richness and singularity of the architecture of the Lawn. These factors include the use of basic geometries underlying the characteristic forms, a disciplined relationship of solid to void in the massing of the buildings and the disposition of their facades, an identification of basic structural principles, and a studied execution of architectural details. These are the foundations of the design.

In addition to design, a signature space that is compelling in its form and complete in its function it should never be simply a matter of orchestrating grand flourishes of materials into the design. Jefferson’s architecture, for example, is full of subtle nuances that add, at times imperceptibly, to the greatness of the whole. For the whole to be greater than the sum of its parts, an architect must skillfully connect each piece of the design, create multiple layers of depth, and detail and incorporate the entire ensemble sympathetically into both the overall plan and the landscape. This is the experience of the site.

Finally, with a clear knowledge and respect for the past, architects are better prepared to address present conditions and anticipate future concerns. Materials and building methods specific to the region, local environmental conditions and the architectural legacy of a given place all bear upon the final design and its sustainability. Architects should be encouraged to design in a way that suitably compliments the established order, rather than naively challenges it. Environment, materials, patterns, colors and history: they are the resources of the place.

Three themes – Foundations, Experiences, and Resources – form the framework of this Design Guide. The guide is not intended as a restrictive mandate for design. One will not find a long list of “do’s” and an even longer list of “absolutely do not”s. Rather, the Office of the Architect presents this Design Guide to inform and inspire design architects and others interested on how to best contribute to the continuing architectural legacy of this University.

The question posed at the top will remain without a direct answer on these pages. However, that is not to say the question will remain unresolved. The text and images which follow provide a clear sense of direction to its resolution. The leap to the final response, is up to each individual reader. The answer each architect arrives at in close collaboration with the Office of the Architect will reflect both an understanding of the architectural legacy of the University of Virginia and a belief in how to best carry on those traditions in our own time.

David J. Neuman, FAIA
Architect for the University
August 2005
FOREWORD

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1) Buildings & Grounds Committee Charge, Capital Project Process Chart
2) Project Steering Committees
3) Virginia Art & Architectural Review Board (AARB)
The University of Virginia was begun under the idea that education would maintain democracy to an emerging nation. The Academical Village was designed as a place where students and professors, could learn, work, and live together. There are many factors that contribute to the unified richness and singularity of the Lawn architecture and landscape. The use of basic geometries underlying the characteristic forms, a disciplined relationship of solid to void in their massing, the disposition of their roofs and facades, and a studied execution of architectural details are the foundations of the design.
Jefferson’s design of the University of Virginia relied heavily on classical tradition and precedent. Inspired by the work of Palladio, this University expresses a clear, bold geometry. Much of his building inspiration came from ancient Rome; e.g., the diameter of the Rotunda is half of the diameter of the Pantheon. Like Palladio, Jefferson adapted ancient practices, putting them into service in his place and time. This style, known as “Jeffersonian Classicism,” as he embraced both Roman architectural notions and republican ideals, through the lens of the Eighteenth Century Enlightenment.
The Academical Village design sets forth a clear plan geometry and a sense of rigid organization yet, upon closer inspection, it is flexible and uniquely idiosyncratic. There is symmetry to the Pavilion facades and at the same time a uniqueness, in scale and detail, to each individual building. The buildings and plans use the organization and geometries of classicism - the shapes of circles and polygons in defined relation to one another - yet still incorporate the eccentricities of the parterre and the dramatic west to east camber of the site. In addition, while eight of the ten Pavilions are taken directly in inspiration and proportion from classical examples, Pavilions IX and X are clearly Jefferson’s interpretation of then contemporary French architecture.
FORM AND BUILDING MASSING

Simple, basic geometries are the foundations of the Lawn’s characteristic forms. These thoughtfully ordered elements help contribute to the unified whole and yet, paradoxically, also to the rich singularity of the architecture. Regardless of ornamental detail, the buildings of the Academical Village all have clear massing and form, including roofs, ranging from the Rotunda’s dome to a variety of hip, gable and flat roof designs.

There is a strong sense of harmony achieved by a refined and balanced system of proportion in the building forms. The most successful show a clear understanding of Palladian and earlier classical traditions, and tend to possess a clear unison of base, middle, and top, when seen in elevation. In some cases, the base is accented by subtle changes in brick coursing; in the South Lawn McKim, Mead & White buildings by a distinct material change.

In American campus planning, the University of Virginia is the paradigm. The University’s neoclassical plan and form is a legacy of Thomas Jefferson’s embrace of Enlightenment principles and Palladian concepts; and his passion for design.

David J. Neuman, FAIA
Architect for the University
VOIDS AND SOLIDS - WINDOWS AND DOORS

There is a clear and disciplined relationship of solid to void in the buildings of the Academical Village. Without exception, solid-surfaces are present more than windows, creating buildings that have density and mass, rather than transparent facades. Openings have a distinct, strongly vertical geometry and are placed within the wall, following clear geometric relationships, mostly symmetrical. Openings are layered, one upon the other as in colonnade to Pavilion fenestration, and coupled with similar patterns of solid to void as in the relationship of window and door openings to wall surfaces. In many cases, operable shutters add to this layering and vertical accent.
SCALE, DETAILS, AND GEOMETRY

The finer grain elements of the Lawn composition again recall Palladian tradition. Details and patterns are also layered and articulated in a clear geometric relationships; they are simple and restrained and provide a human scale to the Lawn. The column capitals found on the temple-fronted pavilions and other details, such as moldings and railings, are each a unique and studied interpretation of ancient or Palladian models. Brickwork patterns, from Flemish bond to the bases and arch details of the Ranges, add to this detail with scaling devices.
ARTICULATION

UNIVERSITY OF VIRGINIA

OFFICE OF THE ARCHITECT

PAVILION IX
RANGE WALKWAYS
Designing a signature space that is compelling in its form and complete in its function should never be simply a matter of orchestrating grand flourishes of materials into the design. Jefferson’s, and later Stanford White’s, architecture is full of subtle nuances that add, at times imperceptibly, to the satisfying and memorable experience of the whole. To respond fully, an architect must skillfully connect each piece of the design, create multiple layers of depth and detail and incorporate the entire ensemble sympathetically into the site and landscape. This is the experience of the ensemble from the drama of the Lawn to the intimacy of the gardens.
TRANSITIONS AND THRESHOLDS

Adding to the experience of the colonnaded arcade connectors are the features that announce the passage from one condition to another. These are the transitions and thresholds that knit together the various pieces and parts. The most successful spaces of the Lawn are those that create multiple layers of depth that frame views and help to shape and define spaces. Arcades and colonnades do more than connect adjacent buildings and outdoor spaces, they also form transition thresholds through the Lawn and create inviting portals in and out of the Academical Village.

Students and visitors pass from building to loggia to courtyard; these layers allow themselves to be peeled away as the visitor encounters light, shade and shadow; shelter and sky; surfaces hard and resonant and soft and yielding; welcoming enclosure and expansive open views - all reveal vital changes that create a rich experience of spatial transitions.
Jefferson’s composition, later joined by Stanford White’s design for the reconstruction of the Rotunda and the South Lawn composition of Rouss, Cocke and Cabell Halls, is rich and complex, providing an exciting variety of experiences and responses. A distinct layering process is evident. An arcade, colonnades and columns are layered over building facades, animating and creating a lively play of light and shadow.

An understanding of the hierarchy of Lawn buildings is created through this layering of spaces, connectors, and buildings, which are ultimately joined to a subtle integration with graded site, a living landscape and vibrant human activity.
The connecting spaces of the Lawn provide gracious transitions between public and private spaces, Lawn rooms to Pavilions, or walkways to gardens. They help to create transition zones as well as pathways; they define space and direct the flow of activity. They allow people, light, and air to move through, setting boundaries and enclosures through changing experience rather than imposing barriers.

The colonnades in front of the student Lawn rooms provide a direct connection to the faculty Pavilions; they are the direct physical link that speaks also of the University philosophy of learning through interaction. They have a size and scale that allows an individual to pass, or a group of students meet between classes, without feeling either overwhelmed or confined. They shade from sunlight and rain. The connectors then, in the continuity of their function and purpose and the way they bind the buildings in seamless transition to one another, become vital to our experience of the Academical Village. These distinctive passages and connectors become a place in themselves.
CONNECTORS

UNIVERSITY OF VIRGINIA
OFFICE OF THE ARCHITECT

LAWN COLONNADE

PAVILION VII ARCADE

RANGE ARCADE
The Academical Village provides a superb example of successfully integrating buildings into the landscape. The result is the creation of dynamic outdoor spaces and rooms. These spaces can be a large-scale and “public,” quadrangle, or a small-scale and “private” enclosed garden. Public landscapes foster social interaction and the exchange of ideas while private landscapes provide more intimate areas for study, quiet conversation and contemplative reflection. In the Academical Village, successful public and private landscapes are clearly defined by structural elements such as buildings, walls, steps and walkways.

The larger–scale public landscape consists of grass, trees and judiciously located retaining walls, walking paths and seating areas. The planting of these landscapes is simple and dignified with a ground plane of lawn or paving and an ordered planting of high-branched deciduous trees that provide canopy and shade but do not block views. The smaller-scale private landscape may be more complex and ornamental in its planting palette, as is appropriate to a garden setting. Here, one finds appropriate layered plantings that range from groundcover and perennials to flowering shrubs, understory and canopy trees.
A successful landscape will fit within the indigenous rolling Piedmont topography. For example, the Lawn is subtly terraced from its high point at the Rotunda to its lowest point at Cabell Hall. Though the Lawn contains a considerable drop in elevation, transitions are modest with gradual slope and minimal retaining walls and the resulting experience is of one single, unified space. The east Pavilion gardens, though very different in nature from the Lawn, also successfully embrace their topographical setting, through a system of terraces, steps, and walls that link private garden spaces.
Pavilion X - Restored to original Jefferson design, colors and materials: 2008
With a clear knowledge and respect for the past design, architects are better prepared to address present conditions and anticipate future concerns. Materials and building methods specific to the region, local environmental conditions and the architectural legacy of the place all bear upon the final design and its intelligibility. For UVa to further its mission of free inquiry, of understanding nature and the role of mankind within, we must also provide a sustainable learning environment in which to pursue this goal. Architects should be encouraged to design in a way that suitably complements the established order, rather than naively challenges it. Materials, environment, and history are the resources of the place.
Brick, wrote Thomas Jefferson, is desirable for construction because “when buildings are of durable material, every new edifice is an actual and permanent acquisition to the state, adding to its value as well as its ornament.” By implicitly contrasting the solidity of a brick building to the less-permanent nature of wood-frame construction, Jefferson is offering more than just thoughts on the relative merits of certain construction materials. He is alluding to the special way architecture can define a place and create a sense of order in the community for which it is built and for the generations to follow. Jefferson asserts that the choice of materials is not merely a matter of structural concern, but of deep symbolic value as well.

There were a number of reasons why Jefferson turned to brick as his material of choice for building. With respect to the University of Virginia, three points seem especially clear. The extensive use of brick in the making of the University is bound to what may be termed matters of permanence, place, and proportion:

One, Jefferson chose to use brick in order to convey the aspect of permanence onto the new university he founded.

Two, the regional building tradition of Virginia is inextricably tied to brick construction. The red Virginia clay that supplies the very substance of this building material is a tangible connection to the ground upon which these buildings stand.

Three, brick is appropriate for projects ranging in scale from the Rotunda (the central library and a figurative storehouse of knowledge) to small dependencies (formerly kitchens and “servants’ quarters”).
Taking inspiration from the model of the Academical Village, the built environment of the University as a whole shares in this tradition of brick architecture. With this accepted commonality of materials, the continuity of the institution is plainly stated. Furthermore, the relative importance of each building - its position in the hierarchy of the community - is affirmed by virtue of its scale, proportion, and ornamental details. Brick details such as arches, jack arches, corbels and different types of bonds add a level of detail in craftsmanship and ornament. In the end, the architecture of the University shares a common language of construction and contributes to the sense of community and continuity.
WOOD

If brick provides the gravity and mass to Jefferson’s (and later Stanford White’s) buildings, then wood is the material of choice for the details and fine definition of his designs. Similar to brick, wood is a material that is resonant of a particular place. Like the red Virginia clay that was baked to form the bricks of the University, the lumber used by the University was drawn from a regional resource. Heart pine harvested from forests nearby was hewn into lumber and shaped by carpenters into the ornamental details, flooring, doors and windows that add punctuation to the overall composition.

On the Lawn, wood is a material that acts as a necessary counterpoint to brick. Whereas brick is perceived generally as permanent and heavy, the painted wood trim of these buildings is relatively temporary and light by comparison. It is partly this simple pairing of materials - both equally suitable for varying scales and proportions - that makes the Lawn such transcendent architecture. (Contemporary replacements for wood that respect maintenance and sustainability principles can serve in its stead.)
Of the core building materials, wood is, perhaps, the most versatile. It may be delicately detailed or substantially fabricated: from classical details to balcony rails. Encircling the Lawn, the wooden balconies link the grand ensemble of unique brick structures. From any distance, the great band of the entablature combined with the balcony railing helps to visually unify the Lawn. Upon closer inspection, one can begin to see the band is comprised of geometric combinations of simple pieces.

The material’s ability to offer a sense of human-scale - an essential quality of Jeffersonian architecture - is testament to both the virtues of wood and the virtuosity of the architect and a skilled workforce.

The wood is skillfully worked by the craftsmen but is not overly-intricate. The uncomplicated, stick-built vernacular architecture of Virginia is discernible in details such as the doors, shutters, eaves, garden gates, and fences. At the same time, the temple-fronted pavilions feature many classical details in the woodwork that crowns the facade. The qualities of wood allow the material to serve for individual expressions at the same time that it unites and strengthens the whole.
The inclusion of stone in the building of the Lawn may seem to be - relative to the abundance of brick and wood - both recent and rare. From the first building campaign, there are modest examples of stone in the construction or ornamentation of the Lawn, although its use in retaining walls and stairs is notable. In fact, the native stone was found to be unworkable by the Italian sculptors wishing to carve out elaborate Corinthian capitals.
While the native stone was admirably suited for simple profiles such as those of the Tuscan colonnade, fine marble from Carrara, Italy was the material of choice for more complicated column capitals and refined finishes. With balustrades and capitals chiefly made of marble, the rustic native stone was enlisted for more utilitarian uses, such as walls and stairs.

The most conspicuous example of early native stone use is in the early retaining walls. At the turn of the nineteenth century, McKim, Mead and White’s addition to the Lawn recalls this tradition of retaining wall construction in the foundation levels of all of the South Lawn buildings.

In doing so, the buildings simultaneously pay tribute to the local regional material and the classical hierarchy employed by Thomas Jefferson. That is to say the composition of the buildings is classically composed with a base foundation of native stone supporting the main body of the building (built in brick and detailed in wood and fine marble). The rusticated foundation of granite and limestone renders the classic stratified composition plainly visible, while at the detailed level the stone’s mortar line is more pronounced to add emphasis to its distinction.
The Board of Visitors, the University President and the Office of the Architect work together to ensure the continuation of Jefferson’s vision for the University’s built environment. One way designers can promote this rich building legacy is by drawing upon an established palette of materials in their designs. Metal and slate are two of the core materials in the University’s palette. This concise palette, which includes red brick, contrasting painted trim and natural stone, was embraced by Jefferson on Grounds and helped to contribute to the creation of a unified environment.
Metal was in the palette of original building materials for the Lawn. Roofs were typically made of metal shingles fashioned on site. In later generations, these roofs were covered by tiles made of local slate. Standing and flat seam metal roofs were standard for all McKim, Mead, and White buildings, like the rebuilt Rotunda. Metal and slate materials are used for most of the current roofs.

Metal was also one of the typical materials used in the ornamental vocabulary. Ceiling borders and cornice details were made of cast lead. Slate was also used in fireplaces, copper was used for downpipes.
GLASS AND GLAZING

The windows and doors of the Lawn buildings add to the detailed facades and the articulation of the space within. Openings are typically large and generous. While most windows are rectangular, other shapes can be appropriate to the buildings. Semi-circles, alone or in combinations with rectangles, can add a special emphasis to an interior or punctuate a facade.
Windows are never large single panes of glass (impossible in Jefferson’s era; the plane is always broken up into units of complementary scale. At the time of construction, the individual window panes were considered very large as were the windows themselves, especially the triple-hung sash of the Pavilions. Glass patterns are not always orthogonal as they can be often seen in modified forms. Glass works in close combination with the brick and wood elements of the Lawn to impart a human-scale. A hierarchy of elements within the windows create their own modularity and contribute to uniting the pieces to the whole. Integration of the sills, heads, and surrounds along with full, operable shutters in many cases, further support the composition of the facade.
The built environment of University of Virginia has had a long and rich history. Jefferson’s expression of his vision for a community of scholars is our unique architectural and landscape legacy. The Central Grounds are considered to be among America’s most important designed places and a World Heritage Site, the only university campus in the United States so honored. As the University moves assuredly into the future, it must consider not only its mission as a steward of this cultural heritage, but also of the natural environment. As the University engages in environmentally sustainable development practices it will ensure the well-being of future students, faculty, staff, and visitors, as well as the vitality of the local ecosystem and the global biosphere.
We are currently faced with pressing environmental challenges for our land, water and energy supplies. As the University grows, the operation and maintenance of its landscapes, facilities, and infrastructure become increasingly expensive. While we acknowledge the impact that human activity has had on the natural environment, we must look for ways to combine cost effective conservation strategies with environmentally-friendly operations.

In order that the University should further its mission of free inquiry directed toward understanding the nature our world and the role of mankind within, we must also provide a sustainable learning environment in which to pursue this goal. It is therefore essential to the enduring success of the University to grow in a more sustainable manner.

A part of the mission of the Office of the Architect is to provide physical planning and design guidance for the University, which also includes environmental stewardship, community outreach, and expert professional services. The Office seeks to ensure an integrated approach toward the long term sustainability and management of UVA’s architectural, environmental, cultural, and land resources in support of the strategic objectives of the University.
From Thomas Jefferson’s time to our own, the demands of fulfilling the mission of the University of Virginia – to instruct, to research, and to nurture – have required continual changes on Grounds. While the construction of new facilities enables the University to provide for present needs, the thoughtful preservation of existing structures promotes an immediate connection to our shared past. Such tangible, everyday connection is vital to both safeguarding the distinction of this place and to strengthening the direction of its mission.

Each building on Grounds should stand as a testament to the on-going story of this unique place. The Academical Village, the original ensemble of buildings that continues to act as the heart of the institution, is clearly fundamental to the identity of the University. This legacy of Jeffersonian design principles is without question the single-most important factor to consider in any proposed change to the University’s environment. The Historic Preservation Framework Plan examines in more detail, each addition made to the University as a counterpoint – at times in celebration of and at times in contrast to – of the Lawn. The entire campus, then, is a bearer of the Founder’s legacy, not just the small part touched personally by Jefferson’s hand.
In the concise history of the construction and preservation of University, the Historic Preservation Framework Plan divides the long arc of building on Grounds into five sections lasting roughly thirty years each to serve as markers along a common timeline. The dates act as temporal guideposts around which a discussion may be organized concerning the various building efforts during the periods and the important issues of the day affecting the life at the University. When combined with this Design Guide and the UVa Sustainability Guidelines, designers of future additions to the University have at their disposal a comprehensive means to understand the unique context of the Grounds.
The 2005 Design Guide and Material Palette for the University of Virginia presents the concept of a continuum of architectural expression, based on the tenets of Jefferson's Palladian-derived Neoclassicism. The continuum is illustrated in this diagram, with the Academical Village and the National Historic Register District in the most intense shade of purple denoting the most traditional design expression; the mid-tone is reflective of traditional forms and details, while the remaining areas shown indicate designs of more transitional or interpretive expression.

Zone 1 includes the UNESCO World Heritage Site as well as the Virginia and National Historic Register Districts. This is the historic core of the UVa Grounds. Buildings and development in this zone must be designed consistent with the architectural expression of the Academical Village and will align directly with the Office of the Architect Design Guide.

The historic core directly influences Zone 2, the Historic Grounds Area. This Area will present a carefully designed response to Zone 1, but will allow for somewhat less traditional massing and architectural details.

The remainder of the Grounds allows for programs with less traditional massing and design expression as their location is beyond the central location of the Academical Village.
BUILDINGS AND GROUNDS COMMITTEE CHARGE

The Buildings and Grounds Committee shall have responsibility in all matters relating to the physical plant and equipment. It shall exercise oversight over the care, maintenance, and security of the University’s buildings and grounds; the selection of architects and engineers and the construction and naming of new buildings; the care and preservation of all furnishings and equipment; and such other matters relating to the buildings and grounds of the University as may come before it. On behalf of the Board, it shall approve the location and design of new buildings and shall make progress reports to the Board on its actions.

Source: Manual of the Board of Visitors of the University of Virginia 2004, [Revised to reflect changes through 20 September 2013], Section 3.22

UVA CAPITAL PROJECT PROCESS
DIRECTIVE NO.  520J  

DATE:  October 16, 2009

SUBJECT:  A/E Approval Process and Capital Project Steering Committee Procedures

REFERENCES:  Higher Education Capital Outlay Manual (HECOM)

PURPOSE:  To establish policy and provide procedures for the University of Virginia A/E Approval Process and Capital Project Steering Committees.

CANCELLATION:  This directive cancels and supersedes Facilities Management Directive No. 520I dated February 15, 2008; subject: Capital Project Steering Committees.  This change edits the reporting procedures to reflect the procedures currently in place and adds the quarterly Board of Visitors reporting requirement for Capital Projects less than $5 million.

BACKGROUND:  All Capital Projects are approved by University Senior Administration and The Board of Visitors.  Capital Projects involving state funding for the project or subsequent operations and maintenance funding also require approval by the Governor and the State General Assembly. Management and control of each Capital Project must be consistent with the authorized scope and approved budget.

POLICY:  Each Capital Project will be executed within its authorized scope and approved budget.  All Capital Project stakeholders, University sponsors, users, review committees, advisory committees, management staff, consultants, and contractors are expected to comply with this policy.  A Capital Project Steering Committee will oversee each Capital Project to ensure consistency with this policy. This Directive applies to projects at the University’s College at Wise (Agency 246), the Academic Division (Agency 207), and the Medical Center (Agency 209).

DISTRIBUTION LIST:  
- On-Line Directors
- Human Resource & Training Manager
- Information Officer
- Architect for the University

REVIEW DATE:  December 2012

OFFICE OR DEPARTMENT RESPONSIBLE FOR REVIEW:  
- Director Facilities Planning & Construction
PROCEDURES:

1. A Capital Project Steering Committee will be appointed for each capital outlay project by the Architect for the University and the Chief Facilities Officer and report to the Executive Review Committee (ERC).

   a. During programming, concepts, schematic design and preliminary design the Steering Committee will oversee the project’s scope, budget, schedule, and design, and will serve as the primary contact with the consultant’s design team. It serves as the project’s primary decision making body, and may meet as often as weekly, particularly during the initial design phases. The Architect for the University and the Chief Facilities Officer, or designees, convene the committee through completion of preliminary design.

   b. During completion of construction documents and construction the Steering Committee will provide overall project review. It will seek input from appropriate university departments, such as police, school program areas, etc. Typically, it will meet monthly. After the preliminary design is approved, the committee is convened by the Division Director from the Facilities Planning and Construction Department (FP&C), or his designee, through completion of construction documents and construction.

   c. Steering Committee membership is normally limited to 5-7 individuals. Committee members may invite other individuals from their offices, on an as needed basis, to provide input at particular meetings. Membership will normally be comprised as follows:

      1-3. Representatives from the Project Sponsor (No more than three)
      4. A Representative from the Provost Office for all academic projects or the Vice President’s Office of the Project Sponsor for non-academic projects
      5. The Architect for the University or designee
      6. The Chief Facilities Officer or designee
      7. A Project Manager from the FP&C Department (Note: The Project Manager serves as the Secretary of the Steering Subcommittee)

   d. In addition the Steering Committee will be assigned advisors normally comprised of the following:

      1. A Faculty Representative
      2. A Student Representative
      3-5. Other administrative staff from specific departments whose responsibilities are particularly germane to the project; e.g., policy, parking and transportation, etc.
2. Architect/Engineer (A/E) selections will be made by selection committees appointed by the Architect for the University in the case of Architect selections and by the Chief Facilities Officer in the case of Engineer selections. Selection committees for major commissions will normally be comprised as follows:

a. Architect for the University, Chair for Architect selections.
b. Board of Visitors (BOV) Buildings and Grounds Committee member (as available).
c. Chief Facilities Officer, Chair for Engineer Selections.
d. Provost or Vice President.
e. User Representative(s).
f. Others as necessary and appropriate.

Screening committees may be appointed distinct from the selection committee.

Approval requirements and procedures for A/E selections are as follows:

a. Capital Outlay Projects with Budgets in Excess of $5 Million

Selection for architects, engineers, planners, and landscape architects must be approved by the Buildings and Grounds Committee of The Board of Visitors. These approvals are limited to licensed professionals of record. It does not include the approval of sub-consultants.

b. Capital Outlay Projects with Budgets of $5 Million or Less

Selection of architects, engineers, planners, and landscape architects shall be approved by the Executive Vice President and Chief Operating Officer. This approval is limited to licensed professionals of record. It does not include the approval of sub-consultants.

1) Architect Selections: The Architect for the University is responsible for the management of the selection process and for contract approval of architects, planners, and landscape architects. This delegation includes contracts for all new buildings, additions to existing buildings, exterior modification of existing buildings, historic preservation / conservation projects, major landscape projects, and major land use planning projects. This approval includes licensed professionals of record.

Reporting Procedures: The Architect for the University will submit a report to the Executive Vice President and Chief Operating Officer for firm selection(s). The report is to describe the selection process and is to include information on the number of firms responding to the Request for Qualification (RFQ), the names of the firms selected to receive Request for Proposals (RFP), the names of the firms interviewed, the final ranking of the interviewed firms, the firm(s) selected and the justification for the selection(s). If applicable, the selection(s) are reported on the quarterly BOV report for Capital Projects of less than $5 million, as outlined in 2(c) below.
2) Engineer Selections: The Vice President for Management and Budget is responsible for the management of the selection process and recommendation for contract approval of engineers and has delegated this responsibility to the Chief Facilities Officer. This delegation includes contracts for the design of specific engineering and related infrastructure projects. This approval includes the engineers of record.

Reporting Procedures: The Chief Facilities Officer will submit a report to the Executive Vice President and Chief Operating Officer with a copy to the Vice President for Management and Budget, the Assistant Vice President for Budget and Financial Planning, and the Selection Committee members. The report is to describe the engineer selection process and is to include information on the number of firms responding to the RFQ, the names of the firms selected to receive RFPs, the names of the firms interviewed, the final ranking of the interviewed firms, the final ranking of the firms interviewed, the firm(s) selected to be awarded a contract and the justification for the selection(s). If applicable, the selection(s) may need to be reported on the quarterly BOV report for Capital Projects of less than $5 million, as outlined in 2(c) below.

c. A/E Selections for Term Contracts

Term contracts for architects, landscape architects, planners, etc. will be approved by the Architect for the University. This approval will be in the form of a notification letter from the Architect for the University to the Executive Vice President and Chief Operating Officer. Term contracts for all engineers will be approved by the Chief Facilities Officer. This approval will be in the form of a notification letter from the Chief Facilities Officer to the Executive Vice President and Chief Operating Officer.

1) Background: Term contracts are used to engage professional firms for the planning and design of a series of related or specialized projects. In some cases, a firm will only be responsible for a part of a project scope such as programming, fire protection, value management, cost estimating, or historic preservation assessments. These are considered “Non-Professional” term contracts. In other cases, the firm may be the architect or engineer of record for a capital outlay project and, therefore, be responsible for its design.

2) Administrative and Board of Visitors Approvals: Term contract awards do not require administrative or Board approval, unless a term contract architect or engineer is selected by the Architect for the University or the Chief Facilities Officer to be the architect or engineer of record for a capital outlay project with a budget in excess of $5 million. In these cases, the selection is subject to the approval procedures for capital outlay projects in 2(a) above. Otherwise all term contract selections shall be reported as required in sections 2(b) above. “Non-Professional” contracts do not require reporting to The Board of Visitors.
d. One Call (Fee is less than $10,000) or Three Call (Fee is more than $10,000 but less than $50,000)
Non-Capital Project A/E Selections:

The selection of consultants for non-capital outlay projects does not require administrative or Board of Visitors approval. Architect selections of this type are managed by the Architect for the University; engineer selections are managed by the Chief Facilities Officer.

3. Capital Project management will conform to the University of Virginia Higher Education Capital Outlay Manual (HECOM) and the attached Handbook for Capital Project Steering Committees.

4. Project Steering Committee members will follow the attached Handbook for Capital Project Committees.

5. Decision Briefs are required for 1) budget increases, 2) substantial program changes that add new major elements or eliminate major elements, and 3) net square footage changes that increase or decrease a project’s scope by 10% or more. The Briefs are prepared by the Project Manager, and are signed by the Chief Facilities Officer, the Architect for the University, the Provost (for academic projects) or requisite Vice President (for non-academic projects), and Vice President for Management and Budget (VPMB) for approval by the Executive Vice President and Chief Operating Officer. No commitments may be made prior to approval of the Decision Brief.

6. Proposed construction awards that will result in a 10% or more budget increase, or will require a 10% or more reduction in net square foot program space, require Board of Visitors approval.

7. EXCEPTION: Infrastructure projects (chiller plants, steam tunnels, substations, etc.), not affecting the appearance of buildings or grounds, and other than major commissions will be the responsibility of the Chief Facilities Officer. In these cases the Chief Facilities Officer will appoint the Capital Project Steering Committee, which will be chaired by a representative from the FP&C department. The Architect for the University or his designee may serve on the committee, at the Architect for the University’s discretion.

RESPONSIBILITIES: The Director Facilities Planning & Construction will implement this policy.

DOCUMENT MANAGEMENT: The Director of Facilities Planning & Construction and the Office of Contract Administration are responsible for maintaining this document.

Charles A. Johannesmeyer
Director Facilities Planning & Construction

Attachments: Handbook for Capital Project Steering Committees – August 2007
Handbook for Capital Project Steering Committees – August 2007

for

University of Virginia Academic Division
University of Virginia Medical Center
University of Virginia’s College at Wise

Office of the Architect for the University • Office of the Chief Facilities Officer

Approved by the University of Virginia Executive Vice President and Chief Operating Officer
Guidance for Project Steering Committees
for
Capital Projects

1. Overview

Except for utility infrastructure projects not affecting the appearance of the buildings and grounds, the project formulation, programming, site planning, schematic design and preliminary design of capital projects will be overseen by the Architect for the University. Construction documentation, project management, contract procurement, and construction will be managed by the Chief Facilities Officer.

Other significant University of Virginia stakeholders will be treated as collaborators in the execution of projects.

The Chief Facilities Officer has been formally delegated the University’s contracting authority for all professional services and construction contracts. As such, the Chief Facilities Officer has the responsibility to 1) execute all professional services and construction contract actions, 2) work with the General Council’s Office to resolve contractual disputes, and 3) work with the University Office of Risk Management to resolve contract related insurance and damage disputes. The Assistant Chief Facilities Officer has been designated University Building Official for the University of Virginia and holds all related code and permit authority. All code issues will be resolved under the authority of the Assistant Chief Facilities Officer. All procurement, project management, and contractual issues will be resolved under the authority of the Chief Facilities Officer.

Facilities Planning and Construction (FP&C) will make all contractual agreements and manage all contractors in accordance with the University Procurement Rules, Board of Visitors (BOV) policies, and other rules and regulations; will maintain professional and staff resources necessary to effectively manage Capital Projects; will maintain and keep current all management systems necessary for fiduciary control of Capital Projects; and will keep all significant stakeholders informed and involved in the development of each Capital Project.

The Architect for the University will lead the project formulation, programming, site planning, schematic and preliminary design; advise the Board of Visitors - Buildings and Grounds (B&G) Committee in its development of general design guidelines and specific building design guidelines; will collaborate with the project design team throughout project development for consistency with the approved program and design guidelines; will review and approve any design changes that affect program, budget, and/or physical appearance or performance; will insure consistency with the approved University Grounds Plan; will obtain approval of sites for each new capital project; and will obtain design approval and implement comments of the B&G Committee and the State of Virginia Art and Architectural Review Board (AARB).

The University Arboretum and Landscape Committee (A&L) will advise the Architect for the University on siting, design guidelines, and landscape design matters.
The Board of Visitors – Buildings and Grounds Committee (B&G) will approve architect/engineer selections for all Capital Projects costing over $5 million and will approve all designs for such projects. Architect/engineer selections for Capital Projects costing $5 million or less will be approved by the Executive Vice President and Chief Operating Officer of the University.

General project design guidance is provided by the University’s general design guides and specific project design guidelines, space criteria of the State Council of Higher Education, state building codes, the University's Facilities Design Guidelines and Sustainability Guidelines, and other material, color, and design criteria established by the Architect for the University. The procedures of the University of Virginia’s Higher Education Capital Outlay Manual (HECOM) will also be followed.

2. Responsibilities of the Capital Project Steering Committee

The Capital Project Steering Committee is the University’s focal point for the delivery of each authorized project. The Steering Committee is responsible for overseeing design and construction of the project, in accordance with its approved scope and budget. In this role, the Steering Committee will review a project’s program, design and budget, and will offer recommendations to the FP&C project manager, who will provide staff support for the Steering Committee. The Capital Project Steering Committee is responsible to the Architect for the University and the Chief Facilities Officer, who will co-chair the Committee throughout the development process.

3. Responsibilities of the Facilities Planning & Construction (FP&C) Project Manager

The FP&C Project Manager will:

a. Ensure conformance with the state-approved capital project authorization; the approved project program scope, schedule, budget, and design guidelines; construction standards; and project-specific criteria.

b. Assist the Architect for the University in the architect/engineer/landscape architect selection process in accordance with the State’s professional procurement procedures.

c. Be responsible for the conduct of all professional fee negotiations, in cooperation with the Architect for the University; and serve as a member of the negotiation team with the Director, Facilities Planning and Construction.

d. Under the direction of the Architect for the University, manage the contract with the design consultant team in the development of preliminary plans and specifications in areas such as interpretation of the building program, internal functional relationships, and overall efficiencies, in order to assure conformance to the user's program requirements.

e. Manage all project development phases in conformance with the requirements of HECOM and the Facilities Design Guidelines.

f. Present value management and/or cost reduction concepts to the Steering Committee for approval following a prescribed peer review based value management session at the conclusion of both schematic and preliminary design phases of the project.
g. Provide contractual interpretation to the project architects, engineers, landscape architects, and construction contractors.

h. Manage construction contractor or construction manager selections and negotiations as directed by the Director, FP&C.

i. Assist the Architect for the University in the preparation of materials for Buildings and Grounds Committee meetings.

j. Assist the Architect for the University in the preparation of materials for Art and Architectural Review Board (AARB) meetings.

k. Assist the project sponsor and the University Budget Office with the development of business plans and fund raising assessments by providing budget, draw schedule, and schedule information.

l. Obtain all required agency approvals during project development.

m. Review any proposals for changes to the project scope and/or budget; develop financial and/or program implications; create decision briefs (as needed); and make recommendations to the Steering Committee.

n. Work with the University Budget Office to provide authorization, budget and financial advice to the Steering Committee.

o. Assist the Architect for the University in obtaining LEED Certification for each major capital project

4. Oversight by the Board of Visitors Buildings and Grounds Committee

The Board of Visitors Buildings and Grounds (B&G) Committee oversees the development of the Six Year Capital Plan and the design of new buildings and major landscape improvements. The B&G Committee has authority for the following:

a. Approval of Concept, Site and Design Guidelines
b. Approval of architect/engineer selections for projects over $5 million.
c. Approval of the schematic design within the approved budget
d. Approval of program reductions that are equal to 10% or more of the originally approved net square feet (NSF)
e. Approval of budget increases that are equal to 10% or more of the approved budget

5. Other Submittals and Reviews (see also Chapters 8 and 14 of the HECOM)

a. University Review Unit (ASBO) for all code and permit issues.
b. The State Fire Marshal for fire and safety issues.
c. Arboretum and Landscape Committee for general siting, design guidelines, and landscape architectural issues (through the Architect for the University).
d. State Art and Architectural Review Board (AARB) for exterior architectural issues (through the Architect for the University).
e. Environmental Impact Report, prepared by the University’s Environmental Health & Safety Office, approved by the Office of the Architect and State Secretary of Administration.


6. Community Relations

Community outreach will be managed by the Director of Community Relations and the Office of the Architect. In coordination with the Director of Community Relations, the Architect for the University serves as the primary liaison with City, County, and neighborhood organizations for all matters related to physical planning and design, including traffic and other environmental impacts. The Project Manager will assist as necessary and will keep both the Director of Community Relations and the Architect for the University apprised of the status of any and all neighborhood impact issues, such as contractor traffic, construction noise, hours of construction, negotiations with local utilities and agencies, etc. The Project Manager will also serve as the project’s principal liaison with the City and/or County Agencies associated with infrastructure and roadways.

7. Selection of Architects, Engineers and Landscape Architects

Selection of architects, engineers, and landscape architects is conducted as required by the Virginia Public Procurement Act governing the procurement of professional services and under the procedures of Chapters 3-6 of the HECOM. The Architect for the University will be responsible for all Architect and Landscape Architect selections and the Chief Facilities Officer will be responsible for all Engineer selections.

8. A Summary of the Capital Project Process

a. Planning. At the start of each planning and budgeting cycle a call letter soliciting capital project requirements and priorities will be published by the Vice President for Management and Budget, who is responsible for the overall Capital Budget. Prior to submission to the Board of Visitors and the General Assembly (as required), major capital projects require the completion of a Project Formulation Study through which the project’s scope, program, budget, and business plan are developed. The resultant capital project definition must be approved by the University’s Executive Review Committee for Capital Development before a project will be included in the University’s Capital Budget. The Project Formulation development process is the responsibility of the sponsor (and the Provost’s Office for academic projects) and will be completed through the Office of the Architect for the University. As a part of this process the University Budget Office will work with the project sponsor to develop the business plan to determine the expected fund sources for the project and for its ongoing operating costs. If debt or philanthropy is identified as a fund source, the Budget Office will coordinate with Treasury Operations for debt assessment or the University Development Office for an evaluation of the private fund raising prospects. The Vice President for Management and Budget, the project sponsor, and the appropriate vice president must approve the business plan prior to the Executive Review Committee presentation.
b. **Authorization.** All capital projects require Board of Visitors authorization and if state funding is involved for either the capital project of the subsequent maintenance and operation then General Assembly authorization is also required. Normally, this authorization takes the form of a specific project authorization in a biennial budget. In some cases only a general authorization, such as a blanket authorization for the renovation of academic and research spaces, is approved by the Board of Visitors; specific individual projects are then initiated under this overall authorization. An emergency authorization procedure is available under which the Board of Visitors may authorize a project, out of sequence of the normal budget cycle, to address emergency situations or cases where a delay in the initiation of the project will result in a financial loss if the project will not require state funding for execution or the subsequent maintenance and operation. All capital projects will be developed in accordance with the procedures of the HECOM.

c. **Project Initiation.** Capital projects are initiated after 1) BOV and state authorization (if state funding is involved), 2) funding is in place, and 3) the Executive Review Committee for Capital Project Development has released the project for design. The first step is the completion of a HECO-2 for non-general fund projects. Project funds become available after the approval of these forms.

d. **Project Funding.** Fund sources for capital outlay projects are provided by the University Budget Office based on the approved business plan.

e. **Project Development.** Capital Projects are developed based on the Project Formulation Documents; HECOM; and the Facilities Design Guidelines. Chapter 14 of HECOM provides an Order of Procedures Table listing the various submittals, reviews, and approvals required for the development of capital projects.

f. **Design Phases.** (See Chapters 7 & 8 of the HECOM and the Facilities Design Guidelines for engineering criteria and design requirements).

(1). **Schematic Design.** At the initiation of the design process, the Architect for the University and the FP&C Project Manager familiarizes the design team with the UVA Capital Development process and the project’s program, site, budget, schedule, and approved design guidelines. The Architect for the University leads the Project Steering Committee through the conceptual and schematic design process. At the conclusion of schematic design, a cost estimate is obtained to assist the Project Steering Committee in adherence to the budget. An Environmental Impact Report is developed by Environmental Health & Safety and submitted to the Department of Environmental Quality for approval. Under the oversight of the Architect for the University, the design team develops all necessary design documentation and a value management session is completed using a peer review method verifying that the project is within program and budget. On projects over $5 Million, formal Value management reviews are required by the Code of Virginia. All project designs must be submitted for review and approval by 1) the Architect for the University, 2) the Art and Architectural Review Board (AARB), 3) the B&G Committee, 4) the State Fire Marshal, and 5) University Review Unit (ASBO).

(2). **Preliminary Drawings and Specifications.** Under the direction of the Architect for the University, the design team refines the approved schematics. At the conclusion of preliminary plans and specifications, a cost estimate from the design team and also from an independent consultant is obtained, and a second value management session is
conducted to assist the Project Steering Committee in adherence to the budget. The Steering Committee will review and recommend action on all value management proposals. Coordination with planning agencies and specific requirements of the City of Charlottesville and Albemarle County will be determined by the Office of the Architect for the University.

(3). **Working Drawings and Specifications.** Under the lead of the Chief Facilities Officer, the design team develops detailed construction drawings and specifications based on the previously approved preliminary drawings, and develops a detailed cost estimate from the design team and if deemed necessary again from an independent consultant. Any significant changes in program design or budget require the approval of Executive Review Committee for Capital Project Development and depending on their scope may require the approval of the Board of Visitors. A Decision Brief will be the vehicle to obtain either approval. All project working drawings must be submitted for the required review and approval by the Architect for the University, the State Fire Marshal, and to the University Review Unit.

g. **Construction Phases.** (See Chapters 10 and 11 of the HECOM for further details)

(1) **Construction Contracting.** The procurement process and contract method for construction will be approved by the Chief Facilities Officer. Any necessary selection panels will be appointed by the Chief Facilities Officer, who is also the University Selection Official. If the proposed construction award amount would cause the revised budget to exceed the approved budget, approval of the Executive Review Committee is required. If the revised budget exceeds the approved budget by 10% or more, or if the approved program is reduced by 10% or more, the Board of Visitors approval is required. A Decision Brief will be the vehicle to obtain either approval.

(2) **Contingency.** A project’s contingency is to be used for unforeseen site conditions and for errors and omissions in the construction documents and normally should be 10% of project costs. If the project sponsor determines that design changes are needed, the sponsor must provide additional funding to cover the cost of the proposed changes.

(3) **Construction.** After construction starts, significant changes may be caused by items such as unforeseen site conditions. If these necessitate a budget increase, the Steering Committee will make a recommendation to the Executive Review Committee for Capital Project Development through the Chief Facilities Officer with appropriate justification and identification of funding source. Again the vehicle for presenting such a need is a Decision Brief, developed by the project manager.

(4) **Final Inspection and Acceptance.** The Capital Project Steering Committee is complete when the project is commissioned, occupied and has been LEED certified and accepted by the University Building Official.

9. **References**

PURPOSE OF THE AARB

The AARB consists of six members appointed by the Governor, plus a representative of the Department of Historic Resources, to advise him on the “artistic character” of buildings and works of art which are to be paid for by the state, or to be located on or over state property. In practice, the AARB recommends approval or disapproval to the Director of General Services, to whom the Governor has delegated this authority. Membership criteria are set out in Section 2.1488.1 of the Code of Virginia.

The AARB interprets its mandate from the Commonwealth in straightforward terms: to encourage the design of buildings and works of art which are both aesthetically and functionally appropriate to the agency for which they are intended. While no rigid prescriptive standards exist, the AARB generally requires each submission to demonstrate:

1) A resolution of basic functional and organizational requirements.
2) A command of the fundamental principles of good design, including refinement of color, form, scale, material, and craft.
3) A positive contribution to the order and aesthetic of the physical setting.
4) Due consideration of its environmental, historical, and cultural factors.
5) Concerns for the greater public good.

AARB MEETING SCHEDULE

The AARB meets at 10 AM on the first Friday of each month of the year, unless the Friday or the following Monday is a state holiday, in which case the meeting will occur on the second Friday of the month. Meetings are held in Richmond, Virginia.

SUBMITTALS

All requests for a place on the AARB Review Agenda will be made in writing via a Fact Data form and must arrive in the office of the AARB Chairman no later than 4 PM on the Friday two weeks before the date of the meeting at which the agency wishes to make its presentation. Agency request should also include, where possible on 11” x 17” sheets, the location and general form of the building, complete with north arrows and graphic scales. These documents will comprise the Board agenda and are the basis for the recording of the AARB actions.

PRESENTATIONS TO THE AARB

In general, Agency presentations should be organized so that they may be completed within 15 minutes, in order to allow adequate discussion within a 30-minute time frame. However, the Chairman will make a reasonable effort to accommodate the request of any Agency which feels that additional time may be required because of the complexity of a particular project if this request is made at the time of the Agency’s initial submittal.
The following items should be addressed (and well illustrated) by the Agency and its Architect/Engineer at each presentation to the AARB:

1) Program: A brief description of the building program, including the purpose for the project and primary internal relationships.
2) Relationship to the Surrounding Community, Adjacent Sites, and Agency Master Plan: Include discussion of land use policy, pedestrian and vehicular circulation systems, landforms, and architectural character.
3) Site Plan Strategy: Discuss relationships of the proposed design to existing topography and plantings, adjacent structures, service and pedestrian access, surface drainage, and orientation to the sun and wind. Photographs or slides and site diagrams are essential.
4) Mass, Scale, Form, and Architectural Character: Discuss the impact of the proposed design on existing views and the mass and scale of nearby structures. Explain how the proposed design conforms to the architectural and planning principles embodied in the Master Plan and in precedent examples. Describe and illustrate proposed materials, colors, finishes, and constituent details. Include a brief description of the proposed site development, including grading, site drainage, paving, lighting, landscaping, and site furniture. The architect/engineer project managers should be organized and well prepare. Presentations should not be elaborate and overly formal. Sketches and model studies are often more useful than finished professional renderings and highly detailed models.

SUBMITTALS TO THE AARB

Submittals and presentations to the AARB will be coordinated by the University Project Manager. Generally submittals for AARB shall be completed three weeks in advance of the presentation and will include the following:

Agency Name (include address, telephone and fax, contact person):
Project Title (include project code and location):
Current Project Status and Schedule (pre-planning study, schematics, etc.; next milestone date):
Project Description (area, number of stories, building and roof forms, predominant exterior materials):
Brief Program Descriptions:
Relationship to Approved Master Site Plan (include date of master site plan):
Contextual Issues and Design Intent:
Previous History with AARB (dates and actions):
Names and Titles of Those Appearing for the Agency and Architect/Engineer.
Estimate of Time Required for this Presentation: Action This Date (for use by AARB):

Note: Attachments to this data sheet submittal are required.

ARCHITECT FOR THE UNIVERSITY

All submittals and presentations will be approved by the Office of the Architect for the University.