

**Virginia Polytechnic Institute and State University
Facilities Department Procedures**

11010 UNIFORM STATEWIDE BUILDING CODE PERMIT PROCEDURE

Date: November 23, 2015

Revision: 0

Purpose:

To establish processes for issuance of building and trade permits in accordance with the Virginia Uniform Statewide Building Code (VUSBC) under the authority of the 2006 Restructured Higher Education Administrative and Financial Operations Act Management Act between the Commonwealth of Virginia and the university. These procedures will clearly define the roles and responsibilities of all parties involved in the issuance of permits, increase awareness of the permit and document review requirements, and create a uniform procedure applicable to all campus projects.

Responsible Staff:

- The University Building Official (UBO) is responsible for permit plan review, the issuance of building permits, code mandated inspections, and the Certificate of Occupancy. The UBO is responsible for the development and maintenance of all operations, inspections, and procedures for the Office of the University Building Official.
- The UBO Office staff are responsible for managing the permit application and review process as well as the issue, inspection, and approval of final work in the field for code compliance.
- The Permit Technician (Permit Tech) is responsible for coordinating incoming and outgoing permits and permit information. The Permit Tech also coordinates the permit management program used to issue the permits and manages related inspection results.
- The Project Manager (PM) is the person who has been given the responsibility and authority to manage a project. Typically, they will be university employees from either the Facilities or Housing and Residence Life (Residence and Dining) Departments. The PM is responsible for providing the UBO with information required for permitting a project.
- The Contractor, which may include a General Contractor (GC), Design-Builder (DB) or Construction Manager (CM), is responsible for the construction of the project in accordance with the terms of their contract, the construction documents and the VUSBC. This includes the coordination and direction of all subcontractors, fabricators, and material suppliers. The Contractor is the primary person or firm responsible for compliance with OSHA and VOSHA standards and regulations.
- The Primary Registered Design Professional of Record (PRDP) or Architect/Engineer (A/E) is the primary agent responsible for the design team. The PRDP reviews and acts upon conditions noted in plan review comments and inspection reports, while providing submittal review and approval, development of or approval of fabrication and erection documents, as well as those revisions and change orders affecting work to be inspected or tested. The following sub-classifications of a PRDP may be an active part of any given project depending on the nature of the work and should be noted:

- The Architect of Record (AR) is typically the PRDP in responsible charge of the architectural building elements and may also serve as the Primary Design Professional for the project.
- The Geotechnical Engineer of Record (GER) is the Registered Design Professional (RDP) in responsible charge of the Geotechnical analysis and design of support systems for the footing and foundation support. They may be contracted directly by the owner or by sub-contract to the A/E.
- The Structural Engineer of Record (SER) is the RDP in responsible charge of the structural system. They may be contracted directly by the owner or by sub-contract to the A/E.
- The Mechanical/Electrical/Plumbing/Fire Protection Engineers of Record are the RDPs in responsible charge of the HVAC systems, electrical systems, plumbing and fire protection systems. They may be contracted directly by the owner or by sub-contract to the A/E.

Procedure:

Projects, tasks or work orders that require a building or trade permit are defined by the VUSBC. In addition, as authorized under the VUSBC, the owner (Facilities) has added the following additional tasks that require permitting and inspection:

1. Slab on grade concrete construction for sidewalks, patios, plazas, and other non-Virginia Department of Transportation (VDOT) governed roads.
2. Low voltage wall and roof/ceiling penetrations such as CNS, Hokie Passport, and communication wiring.

Except in the case of an emergency occurring after business hours or of a significant emergency incident magnitude, no work that falls within the requirements for a permit according to the VUSBC shall begin without the required permit being issued, unless special arrangements are made with the UBO. Exceptions will be noted in the project file. A significant emergency incident would generally be any incident that represents a risk to fire, life, or general safety or may result in a building being without utilities. In the event of a weekend or night emergency, the responsible department must contact the UBO office the next business day to secure permits for the work and arrange for any inspections.

Proposed new construction, alterations, additions, and modifications must be reviewed as outlined in VUSBC 108 (see appendix) for permits. Prior to a permit being issued the construction documents must be reviewed for general conformance with the building and trade codes, unless determined by the UBO as not requiring a permit due to magnitude. Simple projects are normally low construction value and a single trade involvement, but the UBO has the authority to determine the level of review based on the specific details of the project.

A review of construction documents in the schematic, preliminary, or working drawing phase is needed prior to having the final or construction drawings for permit review. At the request of the PM, the UBO office can provide review services prior to the permit application. The building code

only requires the review of the permit set. Forms are provided in the appendix for the PM to access the required services.

Regardless of project size or cost, there is no significant difference in the process for any of the review work except for the level of detail as a consequence of the status of the design or purpose of the review. These are the following levels of review:

1. Courtesy: A review provided at the request of the PM to familiarize the UBO staff with the project and identify any significant code issues that will guide or limit the course of the design. This review may or may not result in a written document.
2. Schematic: This is the initial phase of design where many details are undefined. Often review documents are limited to a narrative and general components of program elements.
3. Preliminary: This review is done during the development of the plans for the purpose of defining or refining the issues that control the design concepts and will impact the budgeting for the project. This review is normally required as a part of the funding approval process for funds being issued by the Commonwealth of Virginia by appropriation. Preliminary reviews typically result in a written review document.
4. Working Drawing: This is a detailed level of preliminary design. At this point, most of the issues should have been resolved and the review can be performed on the details of construction. Working drawing reviews typically results in a written review document; however, if the drawings are in order, permits may be issued at this stage.
5. Building Permit or Construction Drawings (Final): This is the level of final development that is intended to be utilized for construction, permitting, and inspections. This level of documentation and review may result in a permit; however, if items are outstanding comments will be generated if not code compliant, incorrect, or incomplete.

The applicant is normally directed to use the application and review request forms provided by the UBO staff; however, other forms of application may be approved by the UBO.

The VUSBC requires that review comments for permitting reviews be provided in writing, although there is significant latitude in the forms and format of the written comments. UBO staff cannot provide alternate designs.

Review Process, Plan Review Overview:

The UBO office shall perform the plan review requested by the PM. The Permit Tech will schedule the project plans to the assigned UBO staff member.

1. When the PM first applies for a review or permit, a number will be issued for the project and all related future permitting. Failure to use the Building Permit Number in correspondence may result in delays due to file retrieval difficulties.

2. The PM shall provide the UBO with the construction value and a valid account or fund for billing the permit fee.

NOTE: Should the construction value change during the project, the PM shall provide information to the UBO office for adjustments in permit billing.

3. The application will be logged into the UBO Master list and tracking software by the UBO staff, who will:
 - a. Review the project status, if any.
 - b. Review request form for completeness and accuracy.
 - c. Review the status of past reviews, if any.
 - d. Review the approved drawings per the following and prepare a review document:
 - i. The required version of the VUSBC
 - ii. DEB Notices regarding code and regulatory requirements
 - iii. The CPSM
 - iv. The university Design Standards
 - e. Provide the prepared review report and discuss with the PM as required, the goal being to achieve code compliance to the best degree possible and not leave deficiencies for inspections.
4. Construction plans and specifications will typically be reviewed with comments and/or permits issues by the UBO 30 business days from of receipt of the complete documents. Exceptions may be required and negotiated when the review/inspection is heavy, the project has a long lead time, or the project is not funded for the near future.
5. When the issues are resolved, the plan reviewer will authorize issuance of the permit or permits.
6. The UBO may void permits if no work is accomplished during any six (6) month period.
7. The UBO's Internal Guidelines and Procedures (Facilities Procedure 11000) provides additional details related to minimum inspections.

Applications and Supporting Documents:

The object is provide the UBO staff with sufficient information related to the scope of the project to understand and determine the requirements of the building code. This may require a simple scoping paragraph or a full design package with extensive design documents. Due to the nature

of the work, each project will be evaluated on its own merits. In all cases, the permit applicant shall provide the following information on transmittals or applications:

1. Project Name and Building Name and Number if known at time of permitting
2. Location or Address of the project
3. Applicant information, including mailing address, phone numbers, and email address

In the event of a review application, additional information is required as documentation and on the application or revision:

4. Building information to the extent it is defined on application
5. Scope of work on application
6. Key professionals involved in the design of application
7. Provide one (1) set of the relevant project documents. The set will not be returned to the applicant.

In the event construction documents are ready for review and permits are required, the PM completes the permit application making sure that all required or applicable areas are filled out, signed, dated and provide the supporting documents. The following documents are typically required, as well as the additional information on the application (HECO-17) or on other documents as may be determined by the UBO:

8. Detailed building information, including accurate (not estimate) square footages for new construction or areas being renovated
9. Scope of work
10. Contractors and professionals not previously identified with their DPOR issued license number
11. All required permits (building, mechanical, electrical, plumbing, fire protection). Separate permits are required for building, mechanical, electrical, fire and plumbing work
12. Two sets of documents as noted below
13. Identification of a major capital project (vs a renovations or repair project) and an estimated cost of construction for use in calculating fees

Style and Preparation of Drawings:

Drawings and documents shall provide sufficient information to understand the project, review the scope and details, and result in a set of documents that can be used in the field for contract or purchase order management, construction, and inspection. The following criteria apply:

1. Capital projects and larger renovations will be subject to all of the requirements found in the VTDCM.
2. All drawings must be on 8 ½ x 11 paper or larger. Media over 24 x 36 is discouraged except in capital work.
3. Small projects (renovation and alterations) may be hand drawn but with the use of straight edges and lettering for clarity.
4. Projects without drawings are admissible only with prior approval by the UBO.
5. Photos shall not stand for drawings.
6. Poorly drawn or confusing documents shall be returned without further review.
7. All text shall be 10 point or larger.

Permit Issuance:

Following plan review, resolution of any outstanding reference issues, and submission of required support documents, the applicant will be authorized with a permit or permits to begin work. Work cannot begin until the permit is issued unless otherwise authorized by the UBO as in the case of an emergency (see above). The permit(s) must be posted and observable from the street or primary sidewalk.

Revisions to Permit Documents or Construction:

Often during construction, there will be changes made for a number of reasons. For instance, new projects may identify poor soil or have a design change due to budget overruns or a renovation or alteration may uncover an existing unknown condition or experience a scope change.

The project manager shall forward all changes with sufficient documentation to the UBO Office for review and incorporation into the approved construction drawings. The form or a transmittal letter must clearly identify the project, the permit number, and the required action. The PM or permittee shall ensure that sufficient time (no less than five business days) is provided for the UBO to review and comment before the expected need for the change in the field. The PMs are encouraged to consult with the UBO staff to discuss scope, deadlines, impacts, and issues.

Note that all changes to a document prepared by a professional licensed in the Commonwealth of Virginia can only be altered by the sealant.

Based on review, the UBO Office staff may require additional information to clarify the change before processing the supplement.

Partial or Phased Permitting:

In some cases, a PM may determine the need to start a project early and request a partial permit to accomplish this goal before all of the final construction documents are complete. Often this represents a site package, a footing and foundation package, and then a third or balance of the work package.

These requests can be addressed by issuing a permit with limits and then upgrading as the process moves along.

The risk is on the PM and Contractor to ensure there is sufficient information to make this function. Typically, it is not possible to simply split a package due to the coordination between trades and packages. While it may seem better to get started, history would also identify situations where poorly planned work has suffered from the process as well.

The UBO will consider allowing a staged or partial permit issue based on authorization from the Associate Vice President and Chief Facilities Officer (AVP&CFO) on a case by case basis.

Permit Revocation:

In accordance with the Section 110.8; 2012 VCC, a permit can be revoked by the Authority Having Jurisdiction. For all university owned property, this is the UBO.

Appeal Process:

Appeals of review results shall be made to the UBO in writing. Appeals should:

1. Be specific as to the issue being appealed; and
2. Provide applicable supporting documentation, such as code or UL references, etc.

The UBO will respond in writing with a copy to the AVP&CFO. A copy will be placed in the project file.

Further appeal of UBO code interpretations can be made by the permit applicant to the Department of Housing and Community Development Building Code Technical Review Board.

References:

1. 2012 edition of the Virginia Uniform Statewide Building Code that adopts by reference and amends the 2012 edition of the ICC model codes published by the International Code Council.
 - a. 2012 Related Laws Package issued by DHCD with the 2012 Code Update
 - b. ASTM E-329, Standard specification for agencies engaged in construction inspection and testing. West Conshohocken: ASTM, Intl.; American Society of Testing Materials, 2007
 - c. Virginia. Department of Housing and Community Development. Uniform Statewide Building Code, Part I – Virginia Construction Code. Richmond: Virginia Board of Housing and Community Development, 2009.

Abbreviations and Definitions:

Abbreviations:

1. ACI	ACI International (American Concrete Institute)
2. AISC	American Institute of Steel Construction, Inc.
3. AISI	American Iron and Steel Institute
4. ASCE	American Society of Civil Engineers
5. ASNT	American Society of Non-Destructive Testing
6. ASTM	American Society for Testing Materials
7. AWS	American Welding Society
8. BIA	Brick Industry Association
9. CASE	Council of American Structural Engineers
10. CM	Construction Manager
11. DB	Design Builder
12. DHCD	Department of Housing and Community Development
13. EDI	Exterior Design Institute
14. EIFS	Exterior Insulation and Finish Systems
15. GC	General Contractor
16. IBC	International Building Code
17. ICC	International Code Council, Inc.
18. NCMA	National Concrete Masonry Association
19. NEC	National Electric Code
20. NFPA	National Fire Protection Association
21. NICET	National Institute for Certification in Engineering Technologies
22. MEPR	The Mechanical/Electrical/Plumbing Engineer of Record
23. OSHA	United States Department of Labor Occupational Safety and Health Administration
24. PCA	Portland Cement Association
25. PCI	Pre-cast/Pre-stressed Concrete Institute
26. PM	Project Manager
27. PTI	Post Tensioning Institute

28.RDP	Registered Design Professional
29.SDI	Steel Deck Institute
30.SJI	Steel Joist Institute
31.TMS	The Masonry Society
32.TPI	Truss Plate Institute
33.VOSHA	Virginia Occupational Safety and Health Administration

Definitions:

Words used in this procedure shall have a meaning as defined in the VUSBC and/or the International Building Code (IBC). Unless otherwise expressly stated, other words and terms shall have the meaning below. Where terms are not defined, such terms shall have ordinarily accepted meanings such as the context implies.

1. Agents of Special Inspector (Agents): qualified individuals or agencies working under the direction of the Special Inspectors who are providing the inspections and tests necessary to complete the special inspection process
2. Approved: See VCC Chapter 2 as amended
3. Approved Agency: See VCC Chapter 2 as amended
4. Approved Documents: Includes building construction documents approved by the jurisdiction including all approved revisions; Also includes fabrication and erection documents approved by jurisdiction including all approved revisions
5. Approved Fabricator: See VCC Chapter 2 as amended, 1702.1
6. Architect and Engineer (A/E, A&E): The registered design professional, professionals, or professional firm retained by the owner to provide specifications, designs, and other professional services to develop project and construction documents in conformance with the VUSBC and contract documents
7. Architect of Record (AR): The registered design professional licensed in the Commonwealth of Virginia as an architect and retained by the owner to design or specify architectural construction in accordance with the VUSBC and whose signature and seal appears on the approved architectural construction documents
8. Authority Having Jurisdiction (AHJ): The organization, office, or individual responsible for approving equipment, materials, installation, or procedure. In the case of Virginia Tech, the AHJ for the building code is the University Building Official (UBO) and the AHJ for the State Fire Code is the State Fire Marshalls Office (SFMO)
9. Building: See VCC Chapter 2 as amended
10. Building Official (also referred to as the University Building Official (UBO) at Virginia Tech and Building Official or Commissioner in some jurisdictions): The local government authority charged with the administration and enforcement of the VUSBC. This shall include any duly authorized technical assistants as specified in the VUSBC. See also AHJ.
11. Certificate of Compliance: See VCC Chapter 2 as amended, 1704.2.5.2
12. Certificate of Occupancy or Certificate of Use and Occupancy (CO): This is an authorization for occupancy of a building upon the completion of the work based on the approved construction documents and successful acceptance after all fire code and building code related inspections are satisfied. This recognizes the building is considered in general

compliance, although under the building code there is an additional two year period in which code violations can be identified and required to be resolved.

13. Construction Documents: See VCC Chapter 2 as amended
14. Contractor: A firm or person licensed in the Commonwealth of Virginia to provide construction services; See Commonwealth of Virginia, Title 54.1
15. Discrepancy: A deviation from the approved plans and specifications and/or VUSBC
16. Fabricated Item: See VCC Chapter 2 as amended
17. Fabrication and Erection Documents (Placement Drawings): All of the written, graphic, and pictorial documents prepared or assembled after issuance of a building permit and in addition to the university approved construction documents, describing the design, location, and physical characteristics of the building components or materials necessary for fabrication, assembly, or erection of the elements of the project (Examples would include, but are not limited to, concrete reinforcing shop drawings, steel fabrication and erection shop drawings, and metal building fabrication and erection shop drawings)
18. Final Report of Special Inspections: A certification by the SI which shall indicate that all construction elements subject to special inspections as identified by the jurisdiction approved Statement and Schedule of Special Inspections (SSI) for all materials or phases of construction have been inspected prior to concealment, and in the SI's professional opinion and knowledge, the construction project complies with jurisdiction's approved construction documents
19. Geotechnical Engineer of Record (GER): The Registered Design Professional retained to investigate and determine soil conditions and/or to design and specify earthwork and foundation support in accordance with the VUSBC, and whose seal and signature appear on the jurisdiction approved geotechnical report
20. Inspection: The continuous or periodic observation of work and the performance of tests for certain building or structural components to establish conformance with jurisdiction approved documents as required by the VUSBC and the IBC
21. Independent Inspection: Building Code inspections performed by an approved independent third party, when approved in advance by the UBO as a substitute for an inspection by the UBO staff. This approval is typically reserved for inspections outside normal working hours or when required at distant sites from campus.
22. Inspection Certificate: See VCC Chapter 2, as amended
23. Inspection and Testing Agency: An established and recognized agency or agencies, meeting the requirements of ASTM E 329 and accredited, retained by the owner, independent of the contractors performing the work subject to special inspections, to perform special inspections and materials testing required by the VUSBC and the IBC; See IBC-1703.1 approved agency
24. Main Windforce-Resisting System: An assemblage of structural elements assigned to provide support and stability for the overall structure. The system generally receives wind loading from more than one surface.
25. Owner: See VCC Chapter 2, as amended
26. Pre-Engineered Structural Elements: Structural elements specified by the SER but which may be designed by a specialty RDP (Examples are items such as open web steel joists and joist girders; wood trusses; combination wood, metal and plywood joists; pre-cast concrete elements; prefabricated wood or metal buildings; tilt-up concrete panel reinforcement and lifting hardware)

27. **Primary Registered Design Professional of Record (PRDP):** The leader of the design team charged with the preparation of construction documents, either an architect or professional engineer. The PRDP is responsible for determining and interpreting the needs of the client or for coordinating the work of the other members of the design team.
28. **Primary Structural System:** The combination of elements which serve to laterally brace and support the weight of the building's structural shell, the applicable live loads based upon use and occupancy, wind, snow, ice, thermal and seismic environmental loads
29. **Registered Design Professional (RDP):** An architect or professional engineer, licensed to practice architecture and engineering, as defined under Section 54.1-400 of the code of Virginia (also see VCC Chapter 2). Note that state contract documents may also refer to this person, persons, or firm as the A/E.
30. **Registered Design Professional in Responsible Charge:** A registered design professional engaged by the owner to review and coordinate certain aspects of the project, as determined by the UBO, for compatibility with the design of the building or structure, including submittal documents prepared by others, deferred submittal documents and phased submittal documents (also see VCC Chapter 2). Note that state contract documents may also refer to this person, persons, or firm as the A/E.
31. **Registered Design Professionals Seal:** A seal placed on documents prepared by or under the supervision of a RDP. The application of a professional seal indicates that the professional has exercised direct control and personal supervision over the work to which it has been affixed. An appropriately licensed certified professional shall apply a seal to all final documents in which they have had direct control and personal supervision thereof.
32. **Risk Category:** See VCC Chapter 2, 1604.5
33. **Seismic Design Category:** See VCC Chapter 2 as amended
34. **Seismic Force Resisting System:** See VCC Chapter 2 as amended
35. **Shear Wall:** See VCC Chapter 2 as amended
36. **Structural Observation:** See VCC-1702.1
37. **Shall:** This term indicates mandatory requirements
38. **Special Inspector (SI):** The SI is the Registered Design Professional in Responsible Charge who is directly responsible for special inspections, materials testing, and related services as described in the approved Statement of Special Inspections. The SI shall be retained by the owner, independent of the contractors performing the work subject to special inspection The SI shall be listed as Agent 1 on the SSI; See VCC Chapter 2
39. **Special Inspection (SI):** The process as outlined in VCC Section 1704 for the independent inspection of specific elements in the construction of a structure
40. **Special Inspection, Continuous:** The full time observation of work requiring special inspection by an approved SI who is present in the area where the work is being performed (Noted as "c" on the scope or schedule of inspections in the statement of special inspections); See VCC Chapter 2
41. **Special Inspection, Periodic:** The part-time or intermittent observation of work requiring special inspection by an approved SI who is present in the area where the work has been, or is being performed, or at the completion of groups of task involved in completion of the work. One-hundred percent of the work required to be inspected shall be inspected. Under special circumstances, and after substantiating data is reviewed, the UBO may decrease the percentage of work that is required to be inspected; See VCC Chapter 2

- 42. Sprayed Fire-Resistant Materials (SFRM): See VCC Chapter 2-1702.1
- 43. Statement of Special Inspections (SSI): A statement prepared by an RDP and approved by the appropriate RDP(s) of Record and submitted by the permit applicant. The SSI includes the scope (schedule) of the special inspection services applicable to a construction project, and the RDP's and inspection and testing agencies that will provide those services. The SSI is required as a condition for permit issuance in accordance with IBC as amended by VUSBC and must be approved by the UBO.
- 44. Structural Engineer of Record (SER): The RDP that is licensed as and experienced in engineering who designs or specifies structural documents in accordance with the VUSBC, and whose signature and seal appear on the jurisdiction approved structural construction documents
- 45. Structure: See VCC-Chapter 2 as amended
- 46. Submittal Review Stamp: A stamp applied to a submittal indicating that the RDP has reviewed the submittal, and that the submittal clearly and completely indicates in detail the product(s) that are proposed to be installed. In addition to the product, the RDP and/or UBO, may require the method(s) of installation to be completely and clearly defined. The intent of the shop drawing review process is to ensure that the RDP's intended results coincide with the contractors proposed products and methods.
- 47. Temporary Certificate of Occupancy and/or the Temporary Certificate of Use and Occupancy (TCO): This is an authorization for occupancy of a building for a specific time and for a specific set of limitations. While it is issued only where the minimum requirements for fire, and general safety as well as egress are met for a specific set of situations, it is not indicative of a completed structure.
- 48. Third Party Inspection: See Independent Inspection
- 49. Virginia Construction Code (VCC): Part I of the VUSBC which adopts and amends the International Building Code
- 50. Virginia Uniform Statewide Building Code (VUSBC): The adopted statewide building code in Virginia and includes Parts I, II, and III

Approval and Revisions:

Reviewed and Approved by:



Christopher H. Kiwus, PE, Ph.D.
Associate Vice President and Chief Facilities Officer

11-23-15

Date

Appendix:

Supporting Documents:

New Construction (including Renovations, Additions, and Alterations):

In addition to completing a review or building permit application you will need to provide the following:

1. Two sets of construction documents with adequate details to include:
 - a. Plans must indicate the relevant codes and standards to be applied in this project.
 - b. Plans must show construction type, use group, height and area limitations, occupant loads unless work is related to a trade that does not impact the nature of the construction type, occupancy use, area, height or fire rated construction.
 - c. Architectural, structural, plumbing, mechanical, electrical, gas, and fire protection system drawings. Drawings may be required to be prepared and sealed by a professional engineer or licensed architect as required by the Uniform Statewide Building Code Related Laws Package.
 - i. Note 1: One set of plans is required to have original seals if prepared by a licensed design professional. All other sets can be copied seals.
 - ii. Note 2: If plans are not prepared by a licensed design professional and are exempted from the same by state law, they must have the name, address, occupation, and phone number of the designer or tradesman. Include tradesmen's card number where applicable on plumbing, electrical, gas, and mechanical drawings.
 - d. Plans must indicate if a fire alarm, fire sprinkler, and/or a fire detection system are required or provided. Plans for these can be submitted at a later time. (May be waived by the building official if work is of a minor nature or reconfiguring of an existing use of the building.)
 - i. Plans must show partition material and construction types, fire rated assemblies and through penetration systems (with applicable design numbers, continuity details and descriptions, and locations).
 - ii. Provide structural, wind and floor design loads on the plans.
 - e. Calculations shall be provided to support structural design, HVAC ventilation requirements, plumbing (water and sewer), and electrical demands.
 - f. Model energy code envelope and electrical compliance statement and supporting documentation.
 - g. Provide a complete statement of special inspection signed by all parties when required by VUSBC Chapter 17, the Uniform Statewide Building Code Related Laws Package and in accordance with the VA Tech Special Inspections Guidelines and Procedures.
 - h. Provide a copy of the Department of Health approval for private septic systems, food related projects, kitchen hoods, etc. where Virginia Department of Health is involved (kitchens, drain fields, wells, etc.) prior to issuance of TCO or CO.
 - i. A copy of the site plan that has been approved by Site and Infrastructure if the work includes site work.

- j. A geotechnical report prepared and sealed by an engineer licensed in the Commonwealth for this work, identifying soil conditions and bearing capacities if the project includes footings, foundations, piles, piers, slab on grades, etc.
- k. A permit to install a sewage system or modify an existing sewage system from the State Health Department unless on a public or campus septic drain system or if project does not involve the sewer system.
- l. A permit to install a well or modify a well system from the State Health Department unless on a public or campus water supply or if project does not involve the water system. This includes non-potable water systems found at farms and off site research facilities.
- m. Copies of any design standard waiver approvals signed by the Associate Vice President and Chief Facilities Officer or designee.

Renovation, Alterations, and Change of Use:

By the project nature, renovations, modifications and some additions may not require the extent of design inherent in a large scale project. Therefore, there may be some documents that do not exist or are not required, while additional information on existing construction may be required. The PM is expected to know what documents are required for a plan review. Typical changes are:

1. Complete the required review request or permit request as noted above.
2. Provide the related construction drawings from the section above (some may not be required).
3. Complete an asbestos survey for all buildings undergoing alteration, renovation, and addition projects. The survey certification must include the certification documentation and signature of the responsible person.
4. Complete a lead survey for all buildings undergoing alteration, renovation, and addition projects. The survey certification must include the certification documentation and signature of the responsible person.
5. Provide a review of the current accessibility compliance for renovations. (May be waived by the UBO if work performed will bring area under full compliance with accessibility provisions.)
6. For change of building use, provide documentation of how the new use will meet the VUSBC for New Construction or the Virginia Rehabilitation Code prepared and sealed by a Virginia licensed design professional when required by state law.
7. Projects citing the Virginia Rehabilitation Code or VUSBC, Vol. II must detail and fully explain the compliance alternatives applied. The designer or applicant is advised to discuss this design alternative with the building official prior to starting the design work.
8. Copies of existing building documents generally found in Laserfiche to clarify existing construction or original design intent.
9. Note that in the case of Renovation, Addition, and Alteration, the existing building may not be of the same code, construction type, etc. In those cases, it is incumbent on the applicant to clearly note the existing parameters as well as the proposed work parameters.
10. Electrical load verification through a 30 day panel monitoring test where appropriate based on the project scope, the existing conditions, the building or the proposed loads.