CHAPTER 3 – COMPREHENSIVE CAMPUS PLANS, SITE AND UTILITY DRAWINGS

SECTION 3.1 CONFORMANCE WITH EXISTING COMPREHENSIVE CAMPUS PLANS

3.1.1 Project Conformance

Each project must conform to a Site, Precinct or Comprehensive Campus Plan developed by the University and approved by the BOV.

3.1.2 Relationship with Regional Stormwater Plan

Each project shall conform to the University's Regional Stormwater Plan.

SECTION 3.2 SITE & UTILITY DRAWINGS

3.2.1 Development of Utility Plans

Utility Plans will be developed and maintained by OUA in conjunction with the O&M Energy Manager to insure utility capacities exist to support the Comprehensive Campus Plan. Utility facility locations will be as defined in the appropriate Precinct or Comprehensive Campus Plan.

3.2.2 Current Site and Utility Drawings

Current site and utility drawings are intended to depict the current condition of the University's physical plant. Updates typically occur annually and show buildings completed, land acquired, utilities installed, etc.

SECTION 3.3 COMPREHENSIVE CAMPUS PLANS AND REQUIREMENTS

3.3.1 Preparation

The Comprehensive Campus Plan shall be prepared by a Registered Architect, Engineer or recognized Professional Planner and shall include all existing and planned facilities, infrastructure and utility corridors.

3.3.2 Intent

The Comprehensive Campus Plan shall depict the current land use and future development of the campus/physical plant in an orderly and efficient fashion to maximize resources and provide a planning framework sufficiently flexible to allow response to changing program requirements.

3.3.3 Future Needs

Plans should address needs through the next 20 or more years to include future building sites, planned construction, and landscape improvements. Specifically, each plan shall:

- Identify potential building sites available for future development and planned construction as outlined in the capital program. Utilities to future building sites shall be planned for and routed accordingly.

- Generally, the Capital Plan is sufficient for facility siting planning.
- Long Range Development may be indicated as generalized areas and labeled as to the anticipated use.

3.3.4 Chesapeake Bay Watershed

Future development shall be sensitive to the Chesapeake Bay Watershed Development Policies and Guidelines, published by the Chesapeake Executive Council. Emphasis should be placed on compatible land use.

3.3.5 Standardization of Content

The Criteria and content requirements of this chapter shall apply to all future Comprehensive Campus Plans. Materials shall be presented in the following sequence:

- Cover Sheet - "Comprehensive Campus Plan for William & Mary"
- Table of Contents
- Narrative Detail
- Maps / Graphics – Current Conditions
- Maps / Graphics – Future Developments Site Utility Plans are required separately but will also be included in a graphic master site and utility plan which records all existing work and is updated annually.

3.3.6 Narrative information

This information should supplement, not repeat, information contained on drawings or maps.

- Vision: Provide a brief narrative describing the vision for the Comprehensive Campus Plan outlining existing conditions and future goals. Provide incremental milestones with intended time frames as may be applicable.
- Existing Conditions: Provide a brief description for each precinct (West Campus, East Campus, Central Campus, Historic Campus, Corner Campus, School of Education, Law School, and Dillard Complex) outlining the following:
    - Land Use: Identify the general use for each precinct and note undeveloped land as green space, future building sites, current/future utility corridors, archeological and/or historical sites, hazardous materials and/or dump sites, etc. This data shall be used as the initial input for future capital plans.
        - Identify any and all covenants, easements and preserves established by law or agreement.
        - Visions and plans for future programs, property acquisitions and similar information may be included in the narrative.
    - Facilities: Identify existing facilities and their respective current uses. Identify major deficiencies as may be applicable.
        - Facility condition assessment reports shall be performed by the University on a rolling 4-year cycle. The Comprehensive Campus Plan process shall cull all facility assessment reports and include current information within each update.
    - Infrastructure: Briefly describe the capacity and current load of utility plants and energy and utility lines and the general areas of development on the Comprehensive Campus Plan that requires increased energy/utility system capacity.
        - Where utilities are provided by commercial or municipal sources, indicate connected capacity and/or any limitations stipulated in the contract/agreement between the

University and the commercial/municipal source (e.g., sewerage, water, electric and natural gas).
        - Provide a description and conditional assessment of existing roads and pathways. Note any specific driving or walking hazards that are not in compliance with ADAAG requirements.
- Planned Development:
    - Land/Property Acquisitions and development: Identify property that is intended to be acquired and/or developed. Indicate location, acreage, building square footage, number of floors and construction type as may be applicable.
    - Facilities Modifications: Identify each proposed new or altered building. Include the number of floors, gross square feet and the year construction is anticipated.
        - Identify any buildings which are anticipated to be surplused or demolished. Indicate the name, number and location of the building, the current function, the gross square feet, and the type of construction.
    - Infrastructure: Briefly describe the capacity of proposed new or enlarged energy/utility plants and systems and the general areas of development on the Comprehensive Campus Plan that requires increased energy/utility system capacity.
    - Identify proposed improvements to pedestrian or vehicular path/roadways. Include improvements intended to comply with ADAAG accessibility and the Campus Precinct Guidelines.

3.3.7 Maps:

Similar to the narrative, the maps shall distinctly identify both existing conditions and planned development in precinct level detail.

- Existing Conditions: Maps indicating existing conditions shall include the following as a minimum:
    - Vicinity Map: Include a vicinity map to show the location of the site in Virginia and in the overall setting.
    - Topographic Map: A topographic map with contours showing buildings, roads, parking lots, vegetation/tree areas (both improved and unimproved areas), and major pedestrian avenues. Show the Limits of the 100-year Flood Plain, RMA – RPA and “wetlands”. See current Commonwealth of Virginia flood plain design standards.
    - Site Plan: A site plan / map without contours showing buildings with name and FAACS number, roads, parking lots, major pedestrian avenues, archeological sites, historic landmarks, dump sites, green spaces, etc.
    - Energy and Utility: A map showing all heating and cooling plants and associated distribution utilities as applicable. Indicate capacities as a ratio of (current use) / (total potential capacity).
    - Water Distribution: A map illustrating potable water distribution, as well as storm and sanitary collection systems. Indicate location of all water meters, including individual building meters and deductive meters for irrigation or cooling towers. Indicate if these meters are electronically metered or not.

    - Facilities Condition: A map indicating by color or hatch pattern facilities which are considered to be in good condition; in need of major repair or renovation (detailed within the narrative) and facilities which have not undergone a facilities assessment within the last six years.

- Planned Development: Maps indicating planned development shall include the following as a minimum:
    - Future Development Site Plan: A future development site plan without contours showing existing and future buildings (future facilities will be cross- hatched or highlighted by some other technique), existing and future roads (with traffic direction indicated), areas identified as green space, parking lots and major pedestrian avenues, revised proposed property boundaries, archeological sites, historic landmarks, and uses for land proposed for acquisition.
    - Land Acquisition: If additional land is proposed for acquisition, indicate the proposed use, how this relates to existing use, the location, information on terrain, water courses and bodies of water, 100-year floodplain, archeological sites and historic landmarks. See current Commonwealth of Virginia flood plain design standards.
    - Surplused Land: If land is anticipated to be surplused, indicate the location and amount of acreage.
    - New or Recently Altered Buildings: For new or altered buildings. Include the name (function) of the building, the number of floors, the gross square feet, and when the year construction is planned to begin.
    - Facility Renewal: Provide a brief outline or matrix for existing facilities in need of major repair or renewal. Where known, indicate the specific scope of work required and type of project required to accomplish the scope (capital, maintenance reserve and departmental projects). Type of projects shall include but not limited to:
        - Building Envelope (roofs, window replacements, siding repair/replacement, pointing and calking, etc.).
        - Building Systems (systems with moveable parts subject to wear, including mechanical, plumbing, electrical, communication, moveable storage, etc.)
        - Finishes (tile, carpet, paint, wall coverings and substrates, ceiling tile, etc.)
        - Structure and Substrates (floors, walls and roofs, including structural and nonstructural elements)
        - Built in Equipment and Systems (Systems and equipment built into the facility which generally do not have moving parts but are critical to the building such as building wiring, drainage systems and water distribution systems)
        - Compatibility with Use (Regardless of condition, report any known facility elements which are not compatible with current use and/or current technology which would impair or restrict the intended use. Such elements may include an incompatible floor plan, insufficient electrical outlets/panels/capacity, ADA accessibility issues, etc.)
    - Energy Plants: Indicate location of proposed new or enlarged energy/utility plants and systems and the general areas of development on the Comprehensive Campus Plan that requires increased energy/utility system capacity.
    - Surplused Buildings: Indicate buildings that are anticipated to be surplused or demolished.

3.3.8 Site and Utility Plans:

- Scale: Maps must include those to be to scale of 1-inch equals 50 feet scale (1"=50').
- Contours: Where contours are specified, a 2- foot contour interval is required.
- Exceptions: For tracts of land which are planned for limited development, or contain significant elevation change, smaller scale maps and/or greater contour intervals may be used where approved by the University Architect.

- Electronic Submittals: For each annual update, georeferenced CAD and GIS drawings shall be prepared in accordance with the current version of university drawing standards, (as may be applicable) including:
    - Symbols
    - Layering standards
    - Incorporation of the State Grid System
- General Site Plan: A site plan with contours showing property boundaries, easements, benchmarks or reference points, buildings with name and FAACS number, roads, parking lots, major pedestrian avenues, RMA - RPA - "wetland areas", 100- year flood plain limits, and vegetation / tree areas. See current Commonwealth of Virginia flood plain design standards.
    - Political subdivision lines shall be shown and labeled with the name of each jurisdiction, if the facility lies within more than one political subdivision.
- Utility Drawings Without Contours: Utility drawings without contours showing buildings, roads, parking lots, aboveground and buried electrical and communication lines, water distribution lines, natural gas lines and heating and/or cooling distribution lines. For the purpose of clarity, utility drawings shall be subdivided into the following categories:
    - Data and electrical distribution
    - Potable water distribution
    - Storm and sanitary sewer drainage
    - Steam, hot water, chilled water and natural gas distribution
    - Depth of burial (3-dimensional data)
    - Utility Drawings with Contours: Utility drawings with contours showing buildings, roads, parking lots and storm drainage and sanitary sewerage lines.
    - Abandoned Utilities: Utilities known to be abandoned in place shall be identified as such on their respective utility drawing.

3.3.9 Format

The format and content requirements of this chapter shall apply to all future Comprehensive Campus Plans.

- Narrative: This information will normally be presented in color on 11' X 17 pages formatted with foldouts as necessary. Information may be provided in tabular form, if such presentation would make it more understandable to the reader.
- Maps: All precinct maps shall be printed in color and shall meet the following minimum requirements:
    - Scale: All maps must be to scale of 1-inch equals 100 feet scale (1"=100').
    - Contours: Where contours are specified, 5-foot contour interval is required.
    - Exceptions: For tracts of land which are planned for limited development, or contain significant elevation change, smaller scale maps and/or greater
    - contour intervals may be used where approved by the University Architect.
    - Drawings(s) / Site Plan(s): Provide to the University in AutoCAD format on removable digital media.
    - CAD Standards: Drawings shall be prepared in accordance with the current version of University drawing standards, (as may be applicable) including symbols, layering standards and incorporation of the State Grid System.

3.3.10 Posting and Distribution

The current Comprehensive Campus Plan shall be posted to the College of William & Mary web site. A minimum of eighteen (18) hard copies shall be required and distributed as follows:

- (14) Business Affairs, including OUA and O&M
- (1) Institutional Research
- (1) Information Technology
- (2) the Office of Finance and Administration

3.3.11 Updates

The University shall update its site and utility drawings on an ongoing basis to ensure the drawings are sufficiently accurate to allow informed decisions for future work. Content to be updated includes, but is not limited to:

- Recently constructed/demolished buildings
- New, existing and abandoned utilities
- Modifications to contours for new facilities, storm drainage improvements, etc.
- Miscellaneous Site improvements
- Completed land transactions
- Plans shall be annotated with: “Current as of (date)”.
- “MISS UTILITY” will notify participating utility providers (“operators”) who have utilities on university property and will come onto university property to mark their utilities upon request. University owned utilities on Campus are identified by university personnel who are notified through the “MISS UTILITY” system.