General Requirements

1 Overview:
These Guidelines are issued to promote the development of AutoCAD drawings suitable for use in the University of North Carolina Wilmington’s Office of Facilities CAD environment. Electronic drawings produced and submitted in accordance with these guidelines have significantly greater value to the institution, helping to provide consistency and compatibility with existing AutoCAD documents. Architects, Engineers, Design Professionals and Contractors delivering AutoCAD documentation to UNCW must ensure these guidelines are reviewed and understood by those persons responsible for preparing AutoCAD drawings. All AutoCAD drawings forwarded to UNCW shall be submitted in a timely fashion, coinciding with the needs of the project and UNCW staff. The delivery of AutoCAD documentation during various project stages shall be timed appropriately to ensure that UNCW ultimately receives the most accurate information available. The receipt of electronic AutoCAD drawings alone does not alleviate the responsibility of the Architect, Engineer or Consultant of providing original signed and sealed hard copy documentation to UNCW. Other UNCW contracts or construction documents may reference this document.

2 Drawing Formats:
UNCW requires that all project drawings be created and submitted using AutoCAD (.dwg file extension) software. AutoCAD version 2010 or newer up to version 2015 is required. GIS data delivered as ESRI shapefiles may be submitted. Supplemental GIS data may also be delivered as ESRI shapefiles tied to the North Carolina State Plane Coordinate System NAD 83 survey feet with the vertical datum of NAVD 88. GIS data may not be submitted in lieu of .dwg format drawings – all data submitted in GIS format must also be delivered in .dwg electronic format. Revit .rvt files will also be accepted as supplemental data.

CAD:
Drawing Content:
- Prior to submitting drawings to UNCW, AutoCAD files containing multiple drawing sheets shall be broken down into separate drawings containing single sheets. Multiple layout tabs are not to be used.
- The drawing file name shall match the drawing number on the title bar.
- The proper layer state shall be restored for each drawing submitted.
- All CAD drawings shall be purged of empty, unused, or non-essential drawing data.
- All externally referenced data (XREF’s) that were used in the Cad drawings shall be inserted and bound, using the “bind” command. No CAD drawings that contain xref’s will be accepted.
- Each final submitted drawing sheet shall have “As-Built” or “Record Drawing” clearly marked on every electronic and printed sheet.
• Text styles and fonts may vary, however, custom fonts and hatch styles not packaged within AutoCAD are not permitted.
• All blocks must be created on layer “0”. Nested blocks should be avoided.
• All objects, layers and line types must be defined as “BYLAYER”.

Model and Paper Space Usage:
• The primary drawing(s) shall be created in model space.
• All drawings created within model space must be drawn to full size (1:1 scale).
• Any additional items such as details, dimensions, elevations, or sections should be drawn to full scale in model space.
• General project graphic elements such as title blocks should be drawn in paper space. Elements such as legends, schematics, key plans, diagrams and notes may also be drawn in paper space.
• Scale objects using paper space viewports – zoom viewports to the appropriate scale.
• Label scale of each viewport in paper space.
• Viewports should be created on a “viewport” layer.

3 Drawing Submittal Requirements:
• Include a transmittal sheet with submittals indicating UNCW project number, UNCW project name and a complete list of all materials submitted.
• Deliver one set of original signed and sealed hard copy prints along with the .dwg electronic drawing submission. All electronic drawings shall be submitted on a CD or with permission through UNCW’s or the designer’s FTP site. These drawings should be labeled with project name, type of drawing package (i.e. bid set, construction drawings, record drawings), and date created.
• All content of the electronic drawings must match the delivered hard copy version. The electronic .dwg files should look exactly like the hard copy version when the file is opened by UNCW personnel.
• If a project was created in Revit the final model should be submitted along with the required .dwgs.

4 As-Built Submittal Requirements:
• On completion of the project the Designer is responsible for providing a signed and sealed complete set of drawings to UNCW. Mark all drawings with ‘As-Built’ (for completed and final submittals of a new building or new building addition drawing set) or ‘Record Drawings’ (for final submittal of drawings of remodeling projects, shop drawings and site works) and subscribe to the previously recommended CAD standards.
• Designers are responsible for incorporating any changes in the field submitted by the Contractors into the final drawings. Scans of the Contractor’s hard copy as-built drawings will not be accepted.