



## The University of North Carolina at Chapel Hill

### Capital Project Close-out Procedure and Record Document Requirements

April 4, 2013

The Designer shall provide the following project services toward completion of the project. These requirements are in addition to the deliverable requirements described in the North Carolina–State Construction Manual (NC-SCM). Final payment will not be approved until all deliverables are received in good order. All items are expected to be delivered within sixty days of project acceptance.

A. **At project close-out** the Designer shall provide the following documents to the University Construction project manager. All the following items shall be updated to accurately reflect as-built conditions:

1. **One Archival Drawing Set** printed. As follows:
  1. This set shall be imaged on Mylar stock
  2. This set shall be made up of loose sheets, NOT bound.
  3. This set includes ALL drawings and illustrations that describe any demolition and construction completed as part of the project.
  4. The drawing set's Contents or Sheets list shall be updated to reflect the final drawing collection.
  5. Formatted per section D below.
2. **One set of CAD Drawing Files** used to produce the printed drawings.
  1. Delivered per section E below.
3. **One Drawings Index** in electronic format.
  1. One line per record document sheet: giving the document sheet number, sheet name and corresponding electronic file name used to produce the record drawing.
  2. Described in section E below.
4. **Specifications Manual set including Addenda** following NC-SCM guidelines:
  1. **One Printed set** per section D below.
  2. **One Electronic set** per section E below.
5. **Final Report** following NC-SCM guidelines
  1. **One Printed copy** per section D below.
    1. Include a copy of all warranties.
    2. Include a copy of all close-out required affidavits.
  2. **One Electronic file(s)** set per section E below.
    1. Original content only, forms and scans are not required.

#### B. **Printed materials**

1. Shall follow the following standards unless specified otherwise above:
  1. For As-built drawings, document pages must be imaged on Mylar.
  2. All other materials should be imaged on acid-free, white, 18 to 30-pound white paper of bond or rag base with contrasting print.
  3. Covers must be acid-free cover paper, card stock, art board or Mylar.
  4. Plastic (polyvinyl) covers and/or comb binding are NOT permitted.
  5. All text (margins) must be at least  $\frac{3}{4}$  inches from document edge.
  6. Document sets over 1 inch thick shall be split into multiple volumes.
  7. The cover of each item, and each drawing sheet, shall include, as applicable:
    1. Phase indication or "Record Document" clearly visible.
    2. Architect and/or engineer's name and State IDs.
    3. Architect and/or engineer's Seal and Signature. PE must Seal and Sign As-Built drawings.
    4. State Project Code-Item and State Project ID.
    5. Revision history with revision dates.

Note:



6. A volume identifier, such as “Volume 1 of 3”.
8. Materials produced by a reprographics firm shall include a statement of the materials used by the reprographics firm (or receipt) to assure compliance with these UNC standards.

**C. Electronic documents**

1. May be delivered on: Compact Disk, DVD or Flash Drive media and follow the standards below:
  1. All electronic files shall be named according to their printed sheet name.
  2. File names shall not include space or punctuation characters other than hyphens, periods and underscores.
  3. **Text files** shall be:
    1. Delivered in Rich Text Format, RTF, or Microsoft Word 2000 or later format.
    2. Acrobat PDFs are also acceptable for textual material as long as content are text searchable and selectable.
    3. All documents in printed form must include seal and signature.
  4. **Spreadsheets** shall be:
    1. Delivered in Comma Separated Values, CSV format or Microsoft Excel 2000 or later format.
  5. **Drawing Files** shall be:
    1. Compatible with AutoCAD release 2012.
    2. Each CAD file shall be bound with no external references (XREFs) and purged of unreferenced objects.
    3. Include any non-bindable attachments, custom font (SHX file) and the CTB file used in project.
    4. In editable condition, not protected or locked.

**D. Notes**

1. Documents will be reviewed by UNC Construction staff for completeness and accuracy before being accepted by the Plan Room.
2. Documents not meeting these requirements when received by the Plan Room Archive will be need to be corrected and resubmitted at the expense of the designer.