CLOSE OUT DOCUMENTS GUIDE

NOTE: The Close Out Documents Guide is part of The University of Chicago Guide for Professional Consultants (Close Out – Basic Services) and part of the University contract set for all renovation and construction projects. Final payment of the A/E's Basic Services and Additional Services Fees cannot be made until all requirements of Close Out are met.

a. Summary

This section outlines the University's Close Out documents requirements. It includes information about the distribution process, the format and quantities of various types of information, and the internal review process for document acceptance. Fulfillment of these requirements is a condition precedent to the Contractor receiving final payment.

b. Document Types and Formats

The chart shown below outlines the various types of documents. All required documents should be conveyed to the University Project Manager who will be responsible for the internal distribution. All documents must be submitted in electronic formats as shown in the chart below. Additional printed copies for internal distribution to shops and building managers must also be provided, as subject to the discretion of the project manager.

Materials	**Format**
1.) Contractor Documents	
As-built drawings	CAD & PDF*
Operation and Maintenance Manuals	Searchable PDF*
Shop drawings	CAD & PDF*
Guaranty/warranty materials	PDF*
Testing/inspection certifications	PDF*
Documents Transmittal Memo	Word or Excel*
Asset Data – Building Information Model / COBIE Asset Spreadsheets	BIM** / Excel
2.) Architect / Engineer Documents	
Record Drawings	CAD & PDF*****
Site survey	CAD & PDF*
Project Manual with Specifications	Searchable PDF*
Building Information Model, if applicable	Revit**
3.) Project Manager Documents	
Final Scope, Cost and Schedule	PDF*
- Final cost summary by account - Final schedule of values submitted by GC - Final schedule	

- Final Charter to provide project description and scope - Final Executive summary	
* See notes on CAD/Electronic documents	
** See BIM Standards in Volume IV.E.	

1. Contractor Documents

The Contractor shall bind and turn over to the University Project Manager sets of manufacturers' warranties and operating and/or maintenance manuals, instructions or schedules for all equipment and special materials requiring them, as-built drawings, approved shop drawings, building information models, asset data, and associated copies of testing reports and certificates. The file sets will categorize and index each piece of equipment and material included using a CSI format to be provided by the University, and shall be clearly marked noting "project specific" equipment, model numbers, and equipment cut sheets, value tag charts, electrical panel charts and other applicable information. As mentioned above, all pages of the manuals must be submitted in digital format. Such manuals will be collected and organized by the Contractor and submitted to the Owner at one time, after review by the Architect/Engineer, prior to the issuance of the certificate of Substantial Completion. Except for the changes noted in this section, the Contractor will follow the procedure outlined in the Standard General Conditions.

2. Architect / Engineer Documents

Site survey, record drawings, and project manuals with specifications, must be submitted in the format noted above. If a Building Information Model was used for the project it must be included with close-out.

3. Project Manager Documents

The Project Manager will update the final scope, cost, and schedule documents as described above.

4. Electronic Materials

i. As noted above, all documents must be submitted in digital format.
ii. One set of the close-out documents should be uploaded to the University's Construction Management System (e-Builder). A duplicate set of the close-out documents should be delivered on USB or current digital media format.

5. CAD Files

CAD drawings must adhere to the National CAD Standard. The University of Chicago requires the following additional guidelines for CAD drawings:

- X-references must be bound into the discipline drawings.
- Individual drawings must be saved as separate files. Multiple drawing sheets combined and saved under a single file name will not be accepted. It is acceptable to show details of individual drawings on layout tabs, however there should be only one view per layout tab, and each view tab should carry a descriptive label.
- Geodetic Control: All CAD as-built surveys, maps, and plans submitted for review or record must be compatible with the University of Chicago's Geographic Information System (GIS). This requirement assists the University in providing accurate parcels, utilities, right-of-way and other digital information that remains consistent with existing GIS data and adheres to

the University's accuracy standards. This requirement also assists in the implementation of University facility operations, emergency response, construction, and other services.

- The University of Chicago will make available all Geodetic survey control network information to be used for survey purposes. All coordinate values shall be in the Illinois State Plane System using the North American Datum (NAD83). All measurements shall be in US Survey Feet. The surveyor or engineer shall tie the boundary into at least one of the points in the above mentioned survey control network. See detailed horizontal and vertical standards below.
- *Horizontal:*
  - Projected Coordinate System: NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
  - Projection: Transverse_Mercator
  - False_Easting: 984250.00000000
  - False_Northing: 0.00000000
  - Central_Meridian: -88.33333333
  - Scale_Factor: 0.99997500
  - Latitude_Of_Origin: 36.66666667
  - Linear Unit: Foot_US
  - Geographic Coordinate System: GCS_North_American_1983
  - Datum: D_North_American_1983
  - Prime Meridian: Greenwich
  - Angular Unit: Degree
- *Vertical:*
  - NAVD_1988
  - WKID: 5703 Authority: EPSG
  - Linear Units: Foot
  - Direction: positive up
  - Vertical Shift: 0.0
  - Vertical Datum: North_American_Vertical_Datum_1988
- CAD layers shall follow the AIA Layering Guidelines according to the National CAD Standard. In addition, the quantity of layers for each discipline should be kept to a minum so that the data can easily be isolated in the CAD drawing for use in GIS.

- Use only AutoCAD text fonts and line styles. No custom fonts or linestyles are allowed. Text must *plot* at a *minimum plotted* height of 3/32". For standard 1/8" scale plots, use 6" text in model space.
- The University expects a high degree of dimensional accuracy. In new or detail drawings, the CAD drawing should be +/- 2-inches for any one room dimension. Wall thickness should be to the nearest ¼-inch. Drawings generated from existing University CAD files must be field verified and corrected to meet dimensional accuracy.
- The University uses space standards defined in the U.S. Department of Education "Postsecondary Education Facilities Inventory and Classification Manual" (FICM). These are also commonly known as the "HEGIS" standards. All room area polyline boundaries will be linked by building, floor and room ID's to the space information management system (SIMS) database. See Building Measurement Standards Policy in Section IV.E of the Facility Standards.
- For room numbering, see Room Number Assignment Guidelines in Section IV.E of the Facility Standards.

6. Building Information Models and Asset Data

   See BIM Standards in Volume IV.E of the Facility Standards.

d. Acceptance

The University Project Manager will review the transmittal memo and associated documentation for adherence to the Close Out Requirements and inform the Submittor within 45 days of the date of submission of the acceptance of materials. Documents, including CAD drawings and other electronic files, not meeting the Close Out Requirements will be returned to the Submittor for revisions or modifications at the Submittor's expense. This requirement is a condition precedent to the Submittor receiving final payment.