

## SECTION 01 77 00 - CLOSEOUT PROCEDURES AND REQUIREMENTS

### PART I - GENERAL

#### 1.1 SUMMARY

- A. Administrative and procedural requirements for contract closeout including, but not limited to the following: (as part of Set of Manuals & Documents for Commissioning process)
  - 1. Inspection procedures including Pre-Functional Checklists and Pre-Substantial Checklists.
  - 2. Functional Testing Procedures (part of Commissioning process)
  - 3. Project record document submittal set(s)
  - 4. Operation and maintenance manual submittal set(s).
  - 5. Submittal set of warranties.
  - 6. Final cleaning (documentation as defined in Project Cleaning Section).
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 1 through 48 and shall be coordinated with this Section.

#### 1.2 RELATED SECTIONS *[Note to PSC: Include these sections in the Contract Documents, even though some are not included in the U of I Facilities Standards]*

- A. *Section 01 74 23 – Final Cleaning*
- B. *Section 01 78 23 – Operation and Maintenance Data*
- C. *Section 01 78 39 – Project Record Documents*
- D. *Section 01 74 00 - Warranties and Bonds*
- E. *Section 01 79 00 – Demonstration and Training*
- F. *Section 01 87 00 - Keys and Keying Schedule*
- G. *Section 01 91 13 – General Commissioning Requirements*
- H. *Section 23 08 00 – Commissioning of HVAC*

#### 1.3 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Exhibits: Pre-Substantial (Verification of) Completion Checklists:
  - 1. *Exhibit 01 77 00-1, Architectural Requirements*
  - 2. *Exhibit 01 77 00-2, Elevator Requirements*
  - 3. *Exhibit 01 77 00-3, Plumbing Requirements*

4. *Exhibit 01 77 00-4, Heating Requirements*
5. *Exhibit 01 77 00-5, Cooling Requirements*
6. *Exhibit 01 77 00-6, Ventilation Requirements*
7. *Exhibit 01 77 00-7, Controls Requirements*
8. *Exhibit 01 77 00-8, EMS Requirements*
9. *Exhibit 01 77 00-9, Electrical Distribution Requirements*
10. *Exhibit 01 77 00-10, Lighting Requirements*
11. *Exhibit 01 77 00-11, Emergency Power Requirements*
12. *Exhibit 01 77 00-12, Fire Alarm Requirements*
13. *Exhibit 01 77 00-13, Routine Construction Inspection Report*

#### 1.4 INSPECTION PROCEDURES

- A. Progress Inspections: In addition to PSC observations, progress inspections will be conducted by an assigned University Facilities & Services Division Quality Assurance (Inspection and Commissioning) (FSQA) Team throughout the course of the construction Project. The objective of this inspection is to effectively see that construction is carried out in accordance with the approved plans and code requirements. *[Note to PSC: This does not relieve the PSC of their responsibility.]*
- B. Substantial Completion and Final Acceptance Inspections: Additional inspections will also be performed by the PSC and FSQA in conjunction with Substantial Completion and Final Acceptance.

#### 1.5 SUBSTANTIAL COMPLETION AND PROJECT CLOSEOUT

- A. Definition: Substantial Completion date occurs after a punch list has been generated and accepted, and all commissioning activities have been completed including Owner acceptance of the PSC's Certificate of Substantial Completion. The issuance of the PSC's Certificate of Substantial Completion indicates the construction is sufficiently complete in accordance with the Contract Documents so that the Project may be occupied for the use for which it is intended.
- B. Definition: Project Closeout for Contractor(s) is the period of time after the Substantial Completion date until the Contractor has completed all contract items, closeout obligations, received final payment. This time period may overlap a portion of the warranty period.
- C. Definition: Project Closeout for PSC(s) is the period of time after Substantial Completion date until the Contractor and PSC have completed their closeout obligations. This time period may overlap a portion of the warranty period.
- D. Definition: Warranty period is one year from the Substantial Completion date. Individual products and work performed may have longer specific warranty periods as outlined in the Certificate of Substantial Completion. PSC's contract may also refer to the warranty period as "Post Construction Phase".
- E. Substantial Completion: Before requesting a walk through inspection for determining date of Substantial Completion, complete the following items.
  1. Advise Owner of pending insurance changeover requirements.
  2. Complete startup testing of systems.
  3. Submit test and balance reports.
  4. Request and complete commissioning and inspection.

5. Contractor notifies PSC and Owner when work is considered substantially complete.
6. Prepare a list of items to be completed and corrected (punch list), including the value of items and reasons why the Work is not complete.
7. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner, labelled with manufacturer's name and model number where applicable, and submitted with letter of transmittal including list of items and specific delivery location(s).
8. Make final changeover of permanent locks and deliver keys and keying schedule to Owner. Advise Owner's personnel of changeover in security provisions.
9. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
10. Submit changeover information related to heat and other utilities, and Owner's occupancy, use, operation, and maintenance.
11. Complete final cleaning requirements, including touchup painting.
12. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
13. Prepare and submit Completed Commissioning Manual (LEED)
14. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar re-releases.

F. Preliminary Inspection: PSC will make a preliminary inspection within 7 business days after receipt of Contractor's declaration.

G. Submit a written request for inspection for Substantial Completion. Upon receipt of request, Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. PSC will prepare the Certificate of Substantial Completion, A.I.A. Document G704 or similar, after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by PSC, that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

H. Upon determining that Work is substantially complete, PSC will:

1. Punch List: Prepare a punch list of items to be completed or corrected, as determined by the inspection.
2. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A.
  - a. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - b. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - c. Include the following information at the top of each page:
    - i Project name.
    - ii Date.
    - iii Name of PSC and Construction Manager.

- iv Name of Contractor.
- v Page number.
- d. Submit list of incomplete items in the following format:
  - i PDF electronic file.
  - ii Three paper copies of product schedule or list, unless otherwise indicated. PSC, through Construction Manager, will return two copies.
- 3. Certificate: Prepare and process a certificate of substantial completion, containing:
  - a. Date of substantial completion.
  - b. Punchlist of items to be completed or corrected.
  - c. The time within which punchlist items shall be completed or corrected.
  - d. Date and time the Owner will take occupancy of Project or designated portion thereof.
  - e. Responsibilities of Owner and Contractor for:
    - i Insurance.
    - ii Utilities.
    - iii Operation and maintenance of mechanical, electrical and other systems.
    - iv Maintenance and cleaning.
    - v Security.
  - f. Signatures of:
    - i PSC.
    - ii General Contractor.
    - iii Owner.
    - iv Prime Contractor.
- I. Contractor is responsible for the following:
  - 1. Corrections: Complete all Work listed for completion or correction within designated time.
  - 2. Final Cleaning: Perform final cleaning.
- J. Occupancy: Using Agency will occupy Project or designated portions thereof under provisions stated in the Certificate of Substantial Completion.
- K. Complete All Work: At time of inspection, should substantial completion not be certified, Contractor shall complete the Work and resubmit declaration in accordance with item the requirements of this Section.

## 1.6 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
  - 1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and complete operations where required.
  - 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.

3. Submit certified copy of the PSC's final inspection list of items to be completed or corrected, endorsed and dated by the PSC. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the PSC.
  4. Submit consent of surety to final payment.
  5. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  6. Submit pest-control final inspection report and warranty.
  7. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Final Inspection: Submit a written request for final inspection for acceptance. On receipt of request, PSC and Construction Manager will either proceed with inspection with Contractor or/and as appropriate notify Contractor of unfulfilled requirements to ensure completion of all Contract requirements.
- C. Closeout Documents: PSC will prepare and process closeout documents when all Work is considered finally complete in accord with Contract Document requirements including all Deliverable Documentation.
1. Reconcile with PSC: Submittal log of all items from *Section 01 33 23 – Shop Drawings, Product Data, and Samples*
  2. Submit all required submittals of Part 2 – Products of *Section 01 78 23 – Operation and Maintenance Data*.
  3. Submit all required submittals of Part 2 – Products of *Section 01 78 39 – Project Record Documents*.
  4. Submit a copy of the Asbestos Inspection and Sampling Reports for existing and newly installed materials.
  5. Submit completed Punch Lists.
  6. Submit final completion construction photographic documentation.
  7. Submit damage or settlement surveys, property surveys, and related documentation.
  8. Submit all lien waivers.
- D. PSC will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
- E. Re-inspection Procedure:
1. The PSC will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the PSC.
  2. Upon successful completion of re-inspection, the PSC will prepare a certificate of final acceptance. If the Work is incomplete, the PSC will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. When necessary, re-inspection will be repeated.

#### 1.7 WARRANTIES (Commencing other than date of Substantial Completion)

- A. Submittal Time: Submit written warranties on request of PSC for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES" Project name, and name of Contractor.
  - 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION 01 77 00

This section of the *U of I Facilities Standards* establishes minimum requirements only.  
It should not be used as a complete specification.