

SECTION 01700

CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section Includes Administrative and Procedural Requirements for Contract Closeout Including, but Not Limited To, the Following:
 - 1. Inspection procedures.
 - 2. Project record document submittal.
 - 3. Operation and maintenance manual submittal.
 - 4. Submittal of warranties.
 - 5. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

1.02 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
 - a. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - b. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Occupancy permits and similar approvals.
 - 3. Advise the Owner of pending insurance changeover requirements.
 - 4. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - 5. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 6. Submit record drawings, maintenance manuals and similar final record information.
 - 7. Deliver tools, spare parts, extra stock, and similar items.
 - 8. Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
 - 9. Test/adjust/balance records.
 - 10. Complete startup testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 - 11. Complete final cleanup requirements, including touchup painting.
 - 12. Touch up and otherwise repair and restore marred, exposed finishes.
- B. When Contractor Considers the Work Is Substantially Complete, Contractor Shall Submit to Architect:
 - 1. A written notice that the work, or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
- C. Within a reasonable time after receipt of such notice, Architect will make a site visit to determine the status of completion.

- D. Should Architect determine that the work is not substantially complete:
 - 1. Architect will promptly notify the Contractor in writing, giving the reasons therefor.
 - 2. Contractor shall remedy the deficiencies in the work, and send a second written notice of Substantial Completion to Architect.
 - 3. Architect will reinspect the work.

- E. When Architect Concurs That the Work Is Substantially Complete:
 - 1. Prepare a Certificate of Acceptance accompanied by Contractor's list of items to be completed or corrected, as verified and amended by the Architect.
 - 2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

1.03 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 - 1. Submit the final payment request with release of liens from all subcontractors and major material suppliers, and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 - 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 - 3. Submit a certified copy of Architect's final inspection list of items to be completed or corrected, endorsed and dated by Architect. 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 Architect.
 - 4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of Date of Substantial Completion or when the Owner took possession of, and assumed responsibility for, corresponding elements of the Work.
 - 5. Submit consent of surety to final payment.
 - 6. Submit a final liquidated damages settlement statement.
 - 7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

- B. When Contractor Considers the Work Is Complete, the Following Written Certification Shall Be Submitted:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and systems have been tested in presence of Owner's representative, are operational, and instructional meeting with Owner has been held.
 - 5. Work is completed and ready for final inspection.

- C. Architect will make a site visit to verify the status of completion with reasonable promptness after receipt of such certification.

- D. Should Architect Consider That the Work Is Incomplete or Defective:
 - 1. Architect will promptly notify the Contractor in writing, listing the incomplete or defective work.
 - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Architect that the work is complete.
 - 3. Architect will reinspect the work.

- E. When the Architect finds that the work is acceptable under the Contract Documents, the Architect shall request that the Contractor make closeout submittals.

1.04 ADDITIONAL SERVICES INSPECTION FEES

- A. If the Architect Perform Reinspections Due to Failure of the Work to Comply with the Claims of Status of Completion Made by the Contractor, Or, Should the Contractor fail to complete the work, Or, Should the Contractor fail to promptly correct warranty items or work later found to be deficient:
 - 1. Owner will compensate Architect for such additional services.
 - 2. Owner will deduct the amount of such compensation from the final payment to the Contractor.
- B. If the Work is not completed by the date set in the agreement, and the Architect needs to perform additional Contract Administrative and on site observation duties:
 - 1. Owner will compensate Architect for such additional services.
 - 2. Owner will deduct the amount of such compensation from the final payment to the Contractor.

1.05 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire-resistant location. Provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: Maintain a clean, undamaged set of blue or black line prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which Drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - 1. Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the Work.
 - 2. Mark new information that is important to the Owner but was not shown on Contract Drawings or Shop Drawings.
 - 3. Note related change-order numbers where applicable.
 - 4. Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.
 - 5. Maintain record drawings of all trades at a central location, readily available for viewing, updated on a weekly basis.

1.06 MAINTENANCE MANUALS

- A. Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, 3-ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information:
 - 1. Emergency instructions.
 - 2. Spare parts list.
 - 3. Copies of warranties.
 - 4. Wiring diagrams.
 - 5. Recommended "turn-around" cycles.
 - 6. Inspection procedures.
 - 7. Shop Drawings and Product Data.
 - 8. Fixture lamping schedule.
- B. Where the above described "Maintenance Manual" data is called for under separate sections, include it in the "Maintenance Manual" described in this Article.
- C. Arrange data in "Maintenance Manual" in same order as the Specifications.
- D. Provide indexed set of approved Shop Drawings and product data for Divisions 1 through 16 inclusive as part of "Maintenance Manual" submission.

- E. Include written operating instructions as part of "Maintenance Manual".
- F. Provide the Owner with 2 sets of Maintenance Manuals.

1.07 WARRANTIES

- A. Refer to Section 01740 - Warranties and Bonds for closeout requirements.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 CLOSEOUT PROCEDURES

- A. Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:

1. Maintenance manuals.
2. Record documents.
3. Spare parts and materials.
4. Tools.
5. Lubricants.
6. Fuels.
7. Identification systems.
8. Control sequences.
9. Hazards.
10. Cleaning.
11. Warranties and bonds.
12. Maintenance agreements and similar continuing commitments.

- B. As Part of Instruction for Operating Equipment, Demonstrate the Following Procedures:

1. Startup.
2. Shutdown.
3. Emergency operations.
4. Noise and vibration adjustments.
5. Safety procedures.
6. Economy and efficiency adjustments.
7. Effective energy utilization.

3.02 FINAL CLEANING

- A. Refer to Section 01710 - Cleaning for requirements at closeout.

END OF SECTION