

SECTION 01770 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures
- B. Final cleaning
- C. Start-up Procedures
- D. Project record documents
- E. Operation and maintenance data
- F. Warranties
- G. Chemicals
- H. Spare parts and maintenance materials

1.2 RELATED SECTIONS

- A. Section 01571 - Construction Facilities and Temporary Controls

1.3 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's inspection.
- B. Provide submittals to Engineer that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.4 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean equipment and fixtures to a sanitary condition.
- C. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- D. Do not drag, push, or scrape along or across the final pavement surface.
- E. Only use equipment with pneumatic tires on the final pavement surface.
- F. Determine the Safety Zone using the current AASHTO Roadside Design Guide.
 - 1. No protrusions or depressions greater than 3 inches are allowed within the clear zone (rocks, boulders, ridges, stumps, etc.).
 - 2. Remove trees and provide proper sight distance.
- G. Within drainage ditches: clean all debris and obstructions and dispose of material removed.
- H. On fill slopes: cover large rocks or boulders with fine material from roadway excavation or borrow. On slopes steeper than 3:1 beyond the clear zone, clean up of large rocks and boulders may not be required.
- I. On cut slopes: do not undercut the slope. Remove all overhanging rocks. On slopes steeper than 4:1 beyond the clear zone, solid ledge rock or partially buried boulders 0.33 yd³ or more may be left in place.
- J. Within borrow and local material source sites: Refer to Section 01455 Material Quality Requirements.
- K. Within right-of-way limits:
 - 1. Remove all dead trees and shrubs.
 - 2. Prune trees and shrubs as required.
 - 3. Trim and shape trees to provide horizontal sight distance and 20 ft vertical clearances above the roadway.
 - 4. Remove undesirable live trees, shrubs, and all fruit trees to a depth of

- 5. 18 inches below natural ground.
- 5. Dispose of trash and debris.
- L. For staging and office sites:
 - 1. Clean up and finish in accordance with the requirements as described for the finishing of local material source sites under Section 01455, including seeding and mulching.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract
 - 5. Reviewed shop drawings, product data, and samples
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of vaults and boxes.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract Drawings.
- F. Delete Engineer title block and seal from all documents.
- G. Submit documents to Engineer with claim for final Application for Payment.

1.6 EQUIPMENT AND SYSTEM PERFORMANCE AND OPERATIONAL TESTING

- A. Contractor is required to provide all testing, training and documentation required in Section 01660.

1.7 OPERATION AND MAINTENANCE DATA

- A. Submit three sets prior to final inspection, bound in 8-1/2 x 11 inch (216 x 279 mm) text pages, three D side ring capacity expansion binders with durable covers.
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified, type on 24 pound white paper.
- E. Part 1: Directory, listing names, addresses, and telephone numbers of Engineer, Contractor, subcontractors, and major equipment suppliers.
- F. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - 1. Significant design criteria
 - 2. List of equipment

3. Parts list for each component
 4. Operating instructions
 5. Maintenance instructions for equipment and systems
 6. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents
- G. Part 3: Project documents and certificates, including the following:
1. Shop drawings and product data
 2. Certificates
 3. Photocopies of warranties and bonds
- H. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned after final inspection, with Engineer comments. Revise content of documents as required prior to final submittal.
- I. Submit final volumes revised, within 10 days after final inspection.

1.8 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three D side ring binder with durable cover.
- D. Submit prior to final Application for Payment.
- E. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.

1.9 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to and place in location as directed; obtain receipt prior to final payment.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION – Not Used

END OF SECTION