

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
 - 4. Miscellaneous record submittals.
- B. Related Sections:
 - 1. Division 01, 26 and 31 Specification Sections

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one (1) set of marked-up record prints.
 - 2. Number of Copies: Submit copies of Record Drawings as follows:
 - a. Final Submittal: Submit one (1) paper copy set of marked-up record prints, one (1) set of record digital data files, and one (1) set of record digital data file plots. Plot each drawing file, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: Refer to other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities.

Submit one (1) paper copy of each submittal unless otherwise indicated by other Specification Sections.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Locations and depths of underground utilities.
 - d. Revisions to routing of piping, wiring and conduits.
 - e. Revisions to electrical circuitry.
 - f. Actual equipment locations.
 - g. Locations of concealed internal utilities.
 - h. Changes made by Change Order or Change Directive.
 - i. Changes made following Engineer's written orders.
 - j. Details not on the original Contract Drawings.
 - k. Field records for variable and concealed conditions.
 - l. Record information on the Work that is shown only schematically.
 - 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Utilize personnel proficient at recording graphic information in production of marked-up record prints.
 - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Engineer. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 3. Refer instances of uncertainty to Engineer for resolution.
 4. Design Engineer will furnish the Owner with one set of digital data files of the Contract Drawings. Contractor may request the files from the Owner for use in recording information.
 - a. The Design Engineer will not be liable for any content, suitability, alteration, deterioration or misuse of any intended use or reuse of the Design Engineer's digital data files for any purpose. The use of the digital data files for any purpose will be at the sole risk and responsibility of the user without liability or legal consequences to the Design Engineer.
 - b. Record markups in layers as per the Owner's CAD Standards.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Engineer determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
 2. Consult Engineer for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 3. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Owner and Engineer
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 - 5. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as paper copy.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as paper copy.
 - 1. Include record Product Data directory organized by specification section number and title, linked to each item of record Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as paper copy.
 - 1. Include miscellaneous record submittals directory organized by specification section number and title, linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to project record documents as they occur; do not wait until the end of Project. At any time during the construction period and as a condition of processing Contractor progress payments, project record documents will be made available for status review by the Owner and Engineer with one (1) day advance notice to the Contractor. Failure by the Contractor to maintain current record documents shall be grounds for withholding of progress payments at the Owner's discretion.
- B. Certification: Certify, as a part of each application for payment, that project record documents are current at the time of application. Certify to their accuracy and completion, all modifications clearly marked for identification. Upon completion of Owner and Engineer's review, all submitted documents will be forwarded to the Owner's representative for review, approval and ownership.
- C. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Engineer's reference during normal working hours.

END OF SECTION 017839