#### **SECTION 01 78 39 - PROJECT RECORD DOCUMENTS**

#### **PART 1 - GENERAL**

### 1.1 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.

# 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
  - 1. Record Drawings.
  - Record Product Data.
  - 3. Miscellaneous record submittals.

### B. Related Requirements:

- 1. Section 01 73 00 "Execution" for final property survey.
- 2. Section 01 77 00 "Closeout Procedures" for general closeout procedures.
- 3. Section 01 78 23 "Operation and Maintenance Data" for operation and maintenance manual requirements.

### 1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Submit one paper copy of marked-up record prints.
- B. Construction Waste management Plan: Submit one paper copy of construction waste management plan and a final summary of construction waste management data as specified in Section 01 74 19 "Construction Site Waste Management."
- C. Commissioning Report: Submit one paper copy of the commissioning report as specified in Section 01 91 13 "Commissioning General Requirements."

#### **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, incorporating new and revised drawings as modifications are issued, depicting the current status of the Work.
  - 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.

- 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.
- 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. Depths of foundations.
  - d. Locations and depths of underground utilities.
  - e. Revisions to routing of piping and conduits.
  - f. Revisions to electrical circuitry.
  - g. Actual equipment locations.
  - h. Duct size and routing.
  - i. Locations of concealed internal utilities.
  - Changes made by Change Order, Construction Change Directive, or Field Work Order.
  - k. Changes made following Criteria Architect's written orders.
  - I. Details not on the original Contract Drawings.
  - m. Field records for variable and concealed conditions.
  - n. Record information on the Work that is shown only schematically.
  - o. Changes made by responses to Requests for Information (RFI's).
- 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use 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 DOCUMENTS

- At completion of the project, Architect shall furnish the District with the original drawings, specifications, structural and all other engineering calculations, all revised to include recorded construction changes, in electronic format via the web based electronic project management interface. Drawings shall be fully prepared in CAD with no hand drawn changes. All change orders, addenda, corrections, etc. shall be incorporated into these documents. All sheets with changes shall be replotted, restamped and resigned by the Architect, and re-approved by DSA as may be required. Sub-consultant stamps and signatures will be provided as appropriate per sheet. The DSA application number and approval date shall be affixed to CAD drawings, but re-stamping and resigning by DSA may be required depending on the circumstances of the changes. Architect shall review "Record" Grading Plan and determine whether grades "of record" comply with the contract documents. He/she shall initiate required corrective action. Deliverables are required to be formatted per the District's current CAD manual.
- 2. Architect shall correct the drawings to show all approved "Record" documents as follows:
  - a. "Record" information concerning the locations and invert elevations of underground utility lines, junction boxes, bends, clean-outs, stub-outs, tie-ins, valves, etc., is of prime importance. In the past much time and expense has been

expended attempting to locate underground utilities where "As-Builts" are non-existent, incomplete or incorrect. Since the data is best collected and recorded at time of construction, the following criteria have been established.

- b. Following the completion of every construction project, the Architect shall correct the original drawings and set of specifications to reflect all addenda, change orders and job record data. Above corrections shall be noted on the original drawings and one (1) set of specifications in the following manner:
  - Changes listed in the addenda, change orders and job record prints shall be made on the original drawings and where applicable printed in italics in the specifications.
  - 2) Changes made on original drawings shall be marked with a triangle and a reference note stating which item in which addendum or change order (including date) initiated in the change. This note shall be shown adjacent to the change and shall be flagged accordingly. For example SEE CHANGE ORDER #2, ITEM #6, 6.4.92 SEE ADDENDUM #2, ITEM #6, 6.4.92
  - 3) Changes in the specifications shall be marked with a large asterisk (\*) and a reference note stating which item in addendum or change order (including date) initiated the change. This note shall be shown in the right margin viz.: Add. #2, Item 4, 6-30-86.
  - 4) At each item in the addenda and change orders a reference note shall be made as to which sheet and/or which detail in the original drawings are affected and/or which section, page, and item in the specifications are affected. Example: See "SHEET S-2. DETAIL B" or See "SECTION # 07600-1, ITEM 1.2 (c)".
  - 5) Any change not indicated on Project record prints but known to the Architect shall be shown on the record drawings as indicated above with a note that identifies who observed the change and when.
  - 6) Architect shall verify that "As-Built" survey is received per the terms of the General Conditions of the construction contract.
- Deliverables for archiving purposes shall be provided in electronic format. Archive 3. documents include As-built documents, DSA wet signature documents, and the complete set of bid documents to include, but not limited to specifications, technical reports such as structural calculations, geotechnical reports, and lead/asbestos surveys. The format for described the electronic deliverables shall be as in section "ARCHITECT/ENGINEER (ARCHITECT)-consultant's responsibilities regarding drawing and file submissions" of the District CAD Manual which will be provided to the consultant by the District upon project award.
- 4. Letter of Transmittal: Accompanying the "Record" documents (listed in Item 4 above), the Architect shall send a letter of transmittal that will be filed in the District's coordinating office. This letter shall itemize the accompanying documents as follows: (Dates and sheet numbers are examples only).

"ORIGINAL DRAWINGS" - with As-built corrections made:

Sheets 1 - 30

Sheets E-1 - E-3

Sheets P-1 - P-3

Sheets H-1 - H-3

"ORIGINAL ADDENDUM DRAWING DRAWINGS"

Addendum 1, Sheet 1, Addendum 2, Sheet 2

"ORIGINAL CHANGE SHEET DRAWINGS" - dated as follows:

mm/dd/yy Change Order 1, Sheet 1 mm/dd/yy Change Order 2, Sheet 2

"ORIGINAL STRUCTURAL CALCULATION SHEETS"

Sheets 1 – 15

"1 - SET OF SPECIFICATIONS" - with as-built corrections made:

"ADDENDA"

Addendum #1

Addendum #2

"CHANGE ORDERS" - dated as follows:

mm/dd/yy (Change Order #1) mm/dd/yy (Change Order #2)

"JOB RECORD PRINTS" with DSA approvals and wet signature- including:

Sheets 1-30 Sheets E-1 - E-3 Sheets P-1 - P-3 Sheets H-1 - H-3

"JOB RECORD PRINT CD ROM"

Non-CAD and/or non-computerized construction documents shall be scanned and included on the CD As-Built set. As-built set shall include digital photos of the project taken by the Architect. At a minimum, approximately 10 digital photos of small projects, 20 for new schools or large additions/modernization projects).

Architect shall review the contractor provided project manual detailing the kind and purpose of mechanical and electrical equipment used in the school which is to be operated and controlled by school staff, together with a set of operating instructions for the use of each piece of equipment. The operating instructions shall be written in non-technical terms understandable to a layman. This manual and set of operating instructions shall be considered to be a portion of the "Record" documents for the project. Project manual shall then be forwarded to the District.

While the information submitted by the Contractor and incorporated by Architect into the "record" documents will be assumed to be reliable, Architect will not be responsible for the accuracy of this information nor for the errors or omissions that may appear in the record documents as a result.

Architect shall notify District in writing of any significant changes to the project that appear in the "Record Documents".

# **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 revisions to project record documents as they occur; do not wait until end of Project.
- B. 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 Criteria Architect's, Project Inspector's, and Construction Manager's reference during normal working hours.
- C. Upon completion of the Work assemble and promptly transmit to the Criteria Architect all documents maintained at the Site by the Design-Build Entity pursuant to the foregoing and all other record documents.

D. Incorporate an index into the Record Drawing set. The index shall reflect the following information obtained from the drawing title block: drawing number, drawing date of issue and drawing last date of revision.

E. Review Record Documents weekly with Project Inspector. Indicate to Project Inspector the items incorporated in Project Record Documents concurrent with progress of the Work, including modifications, concealed conditions, field changes, product selections, and other notations incorporated.

### **END OF SECTION 01 78 39**

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