

## **SECTION 01782 - OPERATING, MAINTENANCE AND PRODUCT DATA - CONSTRUCTION MANAGER EDITION**

### **PART 1 - GENERAL**

#### 1.1 Summary:

- A. To aid continued instruction of operation and maintenance personnel, and to provide a positive source of information regarding the products incorporated into Work, furnish and deliver the described in this Section and in pertinent other Sections of these Specifications.
- B. Construction Manager shall organize all submissions by Contractors into one organized set of Operations and Maintenance manuals in CSI format.

#### 1.2 Related Sections:

- A. Documents affecting Work of this Section include General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- B. Required contents of submittals also may be amplified in pertinent other Sections of these Specifications.

#### 1.3 Quality Assurance:

- A. In preparing data required by this Section, use only personnel who are thoroughly trained and experienced in operation and maintenance of described items, completely familiar with requirements of this Section, and skilled in technical writing to extent needed for communicating essential data.

#### 1.4 Submittals:

- A. Comply with pertinent provisions of Section 01330 "Submittals".
- B. Submit one copy of completed data in final form at time of Substantial Completion inspection. Copy will be returned after final inspection or acceptance, with comments.
- C. Submit three (3) copies of approved data in final form ten (10) working days before Final Application for Payment.

### **PART 2 - PRODUCTS**

2.1 Where instruction Manuals are required to be submitted under other Sections of Specifications, prepare in accordance with provisions of this Section.

#### 2.2 Format:

- A. Size: 8-1/2 inches x 11 inches
- B. Paper: White bond, at least 20 lb weight
- C. Text: Neatly written or printed at maximum of 12 cpi.

- D. Drawings: 11 inches in height preferable; bind in with text; foldout acceptable but fold to fit within Manual and provide a drawing pocket inside rear cover or bind in with text.
- E. Flysheets: Separate each portion of Manual with neatly prepared flysheets briefly describing contents of ensuing portion; flysheets may be in color.
- F. Binding: Use commercial quality 3-ring binders with durable and cleanable plastic covers. Maximum ring size will be 2 inches. When multiple binders are used, correlate data into related consistent groupings.
- G. Measurements: Provide measurements in U.S. standard units such as feet-and-inches, lbs, and cfm; where items may be expected to be measured within ten years in accordance with metric formulae, provide additional measurements in "International System of Units" (SI).
- H. Digital Media: Provide two copies of Information in manual as scanned digital format as specified in Section 01781 "Project Record Documents".
- I. Provide front and back covers for each Manual, using durable material approved by Construction Manager and Architect, and clearly identified on or through cover with at least following information:

OPERATING AND MAINTENANCE INSTRUCTIONS  
 ( )  
 ( name and address of Work )  
 ( )  
 ( name of Contractor )  
 ( )  
 ( general name of this Manual )  
 ( )  
 ( space for approval signatures of )  
 ( Construction Manager and Architect )  
 ( and approval data )

- J. Contents: Include the following:
  - 1. Neatly typewritten index near front of Manual, giving immediate information as to location within Manual of emergency information regarding installation.
  - 2. List of all Contractors, Subcontractors and suppliers with complete name of firm, subsidiary, etc.; address, telephone number, and principal contact person.
  - 3. Complete instructions regarding operation and maintenance of mechanical and electrical systems equipment involved including lubrication, disassembly, and reassembly.
  - 4. Complete nomenclature of mechanical and electrical system parts and equipment.
  - 5. Complete nomenclature and part number of replaceable parts, name and address of nearest vendor, and other data pertinent to procurement procedures.
  - 6. Complete operating, maintenance, cleaning and product data for every finish material and product contained in finished project, including the following:
    - a. Architectural Woodwork

- b. Roofing
- c. Skylights
- d. Windows & Doors
- e. Finish Hardware
- f. Glazing
- g. Tile
- h. Resilient Flooring
- i. Carpeting
- j. Gymnasium Flooring
- k. Gymnasium Equipment
- l. Painting
- m. Wall Coverings
- n. Acoustical Treatment
- o. Whiteboards & Tackboards
- p. Folding Partitions
- q. Operable Walls
- r. Identifying Devices
- s. Stage Curtains
- t. Food Service Equipment
- u. Storage Shelving
- v. Sealants
- w. Projection Screens
- x. Elevator
- y. Lavatory Accessories
- z. Cabinets and Storage
- aa. Venetian Blinds and Shades
- bb. Cyclorama Curtain
- cc. Planting Material manual as specified

7. Copy of guarantees and warranties issued.

8. Manufacturers' bulletins, cuts, and descriptive data, where pertinent, clearly indicating the precise items included in this installation and deleting, or otherwise clearly indicating, manufacturers' data with which this installation is not concerned.
9. Exact size of glass, type of coatings and tint for each window for re-glazing requirements.
10. Color Schedules.
11. Complete report of air and water balancing.
12. Such other data as required in pertinent Sections of these Specifications.

### **PART 3 - EXECUTION**

#### 3.1 Preliminary:

- A. Prepare a preliminary draft of each proposed Manual.
- B. Show general arrangement, nature of contents in each portion, probable number and size of drawings, and proposed method of binding, covering and digital format.
- C. Secure Architect's approval prior to proceeding.

#### 3.2 Final:

- A. Complete Manuals in strict accordance with approved preliminary drafts and Construction Manager and Architect's review comments.

#### 3.3 Revisions:

- A. Following indoctrination and instruction of operation and maintenance personnel, review proposed revisions of Manual with Construction Manager and Architect.
- B. If Contractor is required by Construction Manager and Architect to revise previously approved Manuals, compensation will be made as provided for under "Changes" in General Conditions.

**END OF SECTION**