

SECTION 017823 - OPERATION AND MAINTENANCE DATA

Initial Issue Date: 8/6/2026

(A/E shall edit specifications to meet project requirements. This includes but is not limited to updating Equipment and/or Material Model Numbers indicated in the specifications and adding any additional specifications that may be required by the project. Remove text underlines and highlights)

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect and Commissioning Authority will comment on whether content of operation and maintenance submittals is acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:
 - 1. Submit operation and maintenance manuals as electronic files only. Upload manuals to the University's PMIS in accordance with Section 013000 "Submittal Procedures." Enable electronic reviewer comments on draft submittals. Submission of paper copies is not required.
- C. Draft Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. University, Architect and Commissioning Authority will comment on whether general scope, content, and format of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and

training. University, Architect, and Commissioning Authority will return copy with comments.

1. Correct or revise each manual to comply with review comments. Provide written responses in a separate file. Submit copy corrected manual within **15** days of receipt of all comments and prior to commencing demonstration and training.

1.3 FORMAT OF OPERATION AND MAINTENANCE MANUALS

A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

1. Electronic Files: Use electronic files prepared by the manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
2. File Names and Bookmarks: Bookmark individual documents based on content. Refer to submittal specification numbers and names. Organize manual by Division and identify submittals and operation manuals by specification section number.
3. Refer to UMB O&M Manual Template for bookmark tree details.
4. Provide searchable, text-recognizable PDF files. Scanned image-only PDF files and external hyperlinks to manufacturer websites or cloud storage locations are not acceptable.

1.4 REQUIREMENTS FOR OPERATION, AND MAINTENANCE MANUALS

A. Organization of Manuals: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual to contain the following materials, in the order listed:

1. Title page.
2. Table of contents.
3. Manufacturer and Suppliers List
4. Warranties
5. Manual contents – Organized by Division
 - a. Civil
 - b. Structural
 - c. Architectural
 - d. Mechanical
 - e. Electrical
 - f. Site Work
6. Contractors Closeout Documents
 - a. Fire Protection Drawing Files

- b. Fire Alarm Drawing Files
- c. Communication Drawing Files
- d. Security System Drawing Files

B. Title Page:

- 1. Use the university standard O&M Cover Sheet
- 2. Include the following information:
 - a. Name and address of Project.
 - b. Name and address of University.
 - c. Date of submittal.
 - d. Owner name and address
 - e. Board of Public Works and Maryland General Assembly information
 - f. Name and contact information
 - 1) General Contractor/Construction Manager
 - 2) Architect
 - 3) Major consultants to the Architect that designed the systems contained in the manuals.
 - 4) Commissioning Authority.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual. Match order from project specifications.

- 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents: Organize into sets of manageable size..

E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents.

F. Product Information: Include the following, as applicable:

- 1. Product name and model number.
- 2. Manufacturer's name.
- 3. Color, pattern, and texture.
- 4. Reordering information for specially manufactured products.

G. Maintenance Procedures: Include manufacturer's written recommendations and the following:

- 1. Inspection procedures.

2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Schedule for routine cleaning and maintenance.
 5. Repair instructions.
- H. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- I. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION