## Amended 07-25-2024 – updated website addresses

## 1. REQUEST FOR DEVIATION FROM THE UMB A/E DESIGN STANDARDS

To View / Access This Form Go to the UMB D&C Web Site @ https://www.umaryland.edu/designandconstruction/design-and-constructiondocuments/umb-standard-project-forms/

## 2. UMB MASTER SPECIFICATION TABLE OF CONTENTS

To View / Access the TOC Go to the UMB D&C Web Site @ <u>https://www.umaryland.edu/designandconstruction/design-and-construction-documents/umb-master-specifications/</u>

## 3. UMB MECHANICAL CAD DETAIL LIST

https://www.umaryland.edu/designandconstruction/design-and-constructiondocuments/umb-cad-files-for-details/

1 – ChillerPlantdet.dwg Chiller Plant Diagram for condenser water, chilled water, primary and secondary systems, cooling water systems for the building TBD

2 – HeatPlantdet.dwg Heating Plant Diagram includes primary heating water, secondary heating water (reheat), perimeter heating water zones and steam and condensate systems TBD

3 – Chldet.dwg Centrifugal Chiller Piping Details for chilled water and condenser water piping for single and multiple chillers

4 – CtWIDrFldet.dwg	Cooling Tower Water Level Control Detail			
5 – CtDraindet.dwg	Cooling Tower Automatic Drain and Fill Detail TBD			
6 – CtWaTreatdet.dwg	Cooling Tower Water Treatment Detail TBD			
7 – Bmpdet.dwg Base Mounted Pump Details for slab on grade and mezzanine applications utilizing end suction pumps and split case pumps				
8 - InlinePumpdetdet.dwg	Inline Pump Detail			
9 – Extdet.dwg	Expansion Tank Detail (No Glycol)			
10 – Glydet.dwg	Expansion Tank Detail (Glycol)			

11 – Hcdet.dwg Heating Coil Details for single coils, and multiple coil applications with two way and three way control valves for TRU's & AHU's

12 – Ccdet.dwg Cooling Coil Details for single coils, and multiple coil applications with two way and three way control valves for AHU's

13 – Ercdet.dwg Energy Recovery Coil Piping Details for single coils, and multiple coil applications with two way and three way control valves for AHU's

14 – Hxdet.dwg Heat Exchanger Detail for single and multiple heat exchanger applications with 1/3, 2/3 control valves, equipment supports, etc.

- 15 Chuhdet.dwg Cabinet Heater & Unit Heater Coil Details
- 16 Phdet.dwg Perimeter Heat Details for connections to zoned PD and reheat systems

17 – Convdetdet.dwg Convector Piping Detail

- 18 FanCoilUnitPipingdet.dwg Fan Coil Piping Detail
- 19 WcAcudet.dwg Water Cooled Compressorized A/C Unit Piping Detail
- 20 Tprvdet.dwg Temperature & Pressure Relief Valve Piping Detail
- 21 Mpsdet.dwg Miscellaneous Pipe & Fitting Details
- 22 Stsrvdet.dwg Steam Service Building Piping Detail for new projects
- 23 Srvdet.dwg Steam Relief Vent Detail
- 24 Stcdet.dwg Steam Coil Piping Detail
- 25 Humdet.dwg Humidifier Duct Mounted Steam Grid Type Detail
- 26 Emddet.dwg End of Main Drip Detail
- 27 Rdrpdet.dwg Steam Riser Drip Detail.
- 28 Trudet.dwg Terminal Reheat Unit Detail for sheet metal connections
- 29 Etudet.dwg Exhaust Terminal Unit Detail for sheet metal connections
- 30 Ddtdet.dwg Dual Duct Terminal Unit Detail for sheet metal connections
- 31 FcuAbvClgdet.dwg Fan Coil Unit Above Ceiling Duct Connection Details

# UMB A/E DESIGN STANDARDS – <u>CHAPTER 5</u> APPENDICES

32 – AirDevicedet.dwg		Air Device Details		
33 – Ductdet.dwg		Miscellaneous Duct Details		
34 – Dfddet.dwg applications	Duct	Fire Dampers Details for both horizontal and vertical		
35 – Shdet.dwg projects	Sprink	ler Head Piping Detail for renovation projects and new		
36 – Szvdet.dwg		Sprinkler Zone Valve Piping Detail for new projects		
37 – WaServdet.dwg		Water Service Entry Piping Details		
38 – Acddet.dwg Air Conditioning Condensate Drain Details for Draw through and Blow through Air Handling Units				
39 – Rodidet.dwg		RO / DI Water Piping Details		
40 – WallFlrPipSlvdet.dwg renovation projects	Wall /	Floor Sleeve Piping Details for new construction and		
41 – BotGasPdet.dwg		Bottled Gas Piping Details for manifold systems		
42 – GasZoneValvedet.dwg		Gas Zone Valve Detail for laboratories		
43 – BSCPipingdet.dwg		Bio Safety Cabinet Piping Detail.		
44 – IceMachinePdet.dwg		Ice Machine Piping Detail		
45 – EmergencyShowerdet.dwg		Emergency Shower Piping Detail		
46 – MopSinkdet,dwg		Mop Sink Piping Detail		
47 – Rcbdet.dwg		Roof Curb Details		
48 – Esbdet.dwg		Equipment Support Base Detail		

49 – Atcdet.dwg ATC TRU Control Diagrams for TRU's only, TRU's with Fume Hoods and TRU's with Fume Hoods and Exhaust Terminal Units

50 – BtuFmPipedet.dwg Btu Flow Meter Pipe Details for both in line and insertion type flow meters.

51 – BtuFmBasEthdet.dwg Btu Flow Meter BAS Ethernet Details for both in line and insertion type flow meters for ethernet applications

52 – FmBasEthdet.dwg Flow Meter BAS Ethernet Details for both in line and insertion type flow meters for ethernet applications

53 – UltrFloEngMdet.dwg Ultrasonic Energy /Flow Meter Detail

54 – HousekeepingPaddet.dwg Housekeeping Pad Detail for M/E Equipment

xx – BtuFmBasNoEthdet.dwg Btu Flow Meter BAS Non Ethernet Details for both in line and insertion type flow meters for non ethernet applications. (Reference Only - No Longer Required)

#### 4. UMB STANDARD PDF FILE BOOKMARKS FOR A/E SUBMISSIONS

**Note:** The intent of this document is to identify and standardize bookmarks for pdf files submitted to the University by Consultants. See examples below.

**Bookmarks**: Bookmarks shall be Set Up as Document Outlines. Thumbnails are not required.

EXAMPLE: PDF DRAWING FILE SUBMISSION

Document Outline: (List each drawing number – sheet title for the project in each discipline)
(See Drawing Index and UMB Standard Drawing Numbers and Sheet Titles) Architectural G000 – Cover Sheet A002 – Code Analysis AD100 – Basement Floor Demolition Plan A100 – Basement Floor Plan
Mechanical M001 – Symbols and Abbreviations MD100 – Basement Floor Demolition Plan – HVAC M100 – Basement Floor Plan – HVAC MD200 – Basement Floor Demolition Plan – HVAC Piping M200 – Basement Floor Plan – New Work – HVAC Piping
Plumbing P001 – Symbols and Abbreviations PD100 – Basement Floor Demolition Plan – Plumbing P100 – Basement Floor Plan - Plumbing
Fire Protection FP001 – Symbols and Abbreviations FPD100 – Basement Floor Demolition Plan - Sprinkler FP100 – Basement Floor Plan - Sprinkler

Electrical E001 – Symbols and Abbreviations ED100 – Basement Floor Demolition Plan – Power E100 – Basement Floor Plan – Power ED200 – Basement Floor Demolition Plan – Lighting E200-Basement Floor Plan - Lighting Telecomm E001 – Symbols and Abbreviations ED100 – Basement Floor Demolition Plan E100 – Basement Floor Plan – Power Fire Alarm FA001 – Symbols and Abbreviations FAD100 – Basement Floor Demolition Plan EXAMPLE: PDF SPECIFICATION FILE USING SUBMISSION -FULL SPECIFICATIONS **Document Outline:** Cover Sheet Table of Contents (Full Specs - List each specification section for the project in each Division) Division 01 010100 - Summary of Work 010200 - Allowances Division 08 081113 – Hollow Metal Doors and Frames 081416 - Flush Wood Doors Division 21 210000 - Basic Mechanical Requirements - Fire Protection 210513 – Motor Requirements for Fire Protection Equipment **Division 22** 220000 – Basic Mechanical Requirements – Plumbing 220513 – Motor Requirements for Plumbing Equipment Division 22 220000 - Basic Mechanical Requirements - HVAC 220513 - Motor Requirements for HVAC Equipment (Do Not Include Bookmarks for Articles, Paragraphs, Subparagraphs in Full Specification

Sections)

# EXAMPLE: PDF SPECIFICATION FILE SUBMISSION – USING FULL SPECIFICATION DIVISION 01 & CONDENSED SPECS

Document Outline: Cover Sheet Table of Contents

(Full Specs - List each specification section for the project in each Division)

Division 01

010100 – Summary of Work 010200 – Allowances

Division 08

081113 – Hollow Metal Doors and Frames 081416 – Flush Wood Doors

(Do Not Include Bookmarks for Articles, Paragraphs, Subparagraphs in Full Specification Sections)

(Condensed Specs - List each article for project in each Part in each Division)

## Division 21 (Cond Spec) [List each article in each Part]

- Part 1 General
  - 1.1 Related Documents
  - 1.2 Scope
- Part 2 Products
- Part 3 Execution

Division 22 (Cond Spec)

- Part 1 General
  - 1.1 Related Documents
  - 1.2 Scope
- Part 2 Products
  - 2.1 Listed Manufacturers
  - 2.2 Fire Stops, Smoke Seals and Wall and Floor Sleeve Applications
- Part 3 Execution
  - 3.1 General Requirements Execution
  - 3.2 Connections and Alterations to Existing Work

## Division 23 (Cond Spec)

- Part 1 General
  - 1.1 Related Documents
  - 1.2 Scope
- Part 2 Products
  - 2.1 Listed Manufacturers

- 2.2 Fire Stops, Smoke Seals and Wall and Floor Sleeve Applications
- Part 3 Execution
  - 3.1 General Requirements Execution
  - 3.2 Connections and Alterations to Existing Work

Division 26 (Cond Spec)

- Part 1 General
  - 1.1 Related Documents
  - 1.2 Scope
- Part 2 Products
  - 2.1 Listed Manufacturers
  - 2.2 Fire Stops, Smoke Seals and Wall and Floor Sleeve Applications
- Part 3 Execution
  - 3.1 General Requirements Execution
  - 3.2 Sleeves

(Condensed Specs: Do Not Include Bookmarks for Paragraphs and Subparagraphs Parts 1 - 3)

EXAMPLE: PDF STUDY / REPORT FILE SUBMISSION

**Document Outline:** Cover Sheet **Table of Contents Executive Summary Existing Conditions Physical Conditions Environmental Conditions Design Options** Option – 1 Option – 2 Recommendations Appendices Appendix A Appendix B Tables Table 1 Table 2 Figures Figure 1 Figure 2

(Study / Report: Actual bookmarks may vary, depending on the type of Study / Report. See actual study / report Table of Contents for bookmarks.) END OF <u>CHAPTER 7</u> APPENDICES END OF UMB A/E DESIGN STANDARDS