LOS ANGELES COMMUNITY COLLEGE DISTRICT
DEPARTMENT OF FACILITIES PLANNING AND DEVELOPMENT
SUSTAINABLE BUILDING PROGRAM

Form DES-0002-D: BIM Asset Data for Design and As-Built Documentation for New Construction and Renovation

Project #: **Project Name:** **Review Date:** **Reviewed By:**

Description Metadata in Native Authored BIM Elements / Design / Performance Metadata in Native Authored BIM Elements

Schedule Identifier NAME - Match with Schedule Names in the LACCD BIM Review Form & Schedule Names in the LACCD BIM ASSET Revit Template	**OmniClass Schedule Identifier NUMBER -** Match with Schedule Numbers in the LACCD BIM Review Form & Schedule Numbers in the LACCD BIM ASSET Revit Template	**Object Information Needed →** / **Minimum Elements to be Modeled ↓**	**Family Category / Schedule Category** Revit Families for the Elements should be defined within this Category. The Elements can then be scheduled in Revit using the same specific Category from the list of Schedule Categories provided.	**Keynote** Add to an Object's Family for Automatic Filtering of Schedules in the LACCD BIM ASSET Revit Template	**Name**	**Description**	**ID Tag**	**Location** (Describe Space Name & Room No)	**Floor Number** (Level)	**Mounting Height** (Model in Correct Location)	**Size** (Dimension / Thickness)	**Type Name**	**Material** (If Applicable)	**Quantity**	**Omniclass 2010 Table 21** (Uniformat)	**Omniclass 2010 Table 23 Category**	**System and Zone Information**	**Clearance Requirements**	**Design / Performance Metadata**	*Attributes listed here are for example only. Record data for all attributes shall be as required per Basis of Design and/or DSA Approval.*
		Site Utilities																		
Util. 01	22-26 12 00	Transformers	Electrical Equipment	EQTRM	X	X	X	X		X	X	X		X				X		
Util. 02	22-33 49 00	Utilities Back-Flow Preventor Fire Valve	Multiple Categories	MCBFP	X	X	X	X				X		X						*pipe size, depth*
No Schedule		Fire Hydrants Utilities (Optional to model)		MCFHD	X	X														*static pressure, residual pressure, flow rate*
No Schedule		Utilities Catch Basin (Optional to model)		MCCBS	X	X														*top elevation, invert elevation*
No Schedule		Utilities Manholes (Optional to model)		MCMNH	X	X														*top elevation, invert elevation*
No Schedule		Utilities Valves (Optional to model)		MCVLV	X	X														*depth, per basis of design*
		Landscape																		
Lsp. 01	22-32 80 00	Irrigation (System Controllers only)	Multiple Categories	MCIRG	X	X		X		X	X	X	X					X	X	*flow rate, gpm, controller type*
No Schedule		Site Features		*-N/A-*	X	X						X		X						
		Architectural Model																		
Arch. 01	22-05 51 00	Ramps	Ramps	ARRMP	X	X					X								X	*Handrail ADA Compliance requirements shall be modeled*
Arch. 02	22-05 51 00	Stairs (Architectural Information)	Stairs	ARSTR	X	X					X	X	X						X	*Handrail ADA Compliance requirements shall be modeled*
Arch. 03	22-05 52 00	Railings	Railings	ARRLG	X	X					X	X	X	X					X	*Handrail ADA Compliance requirements shall be modeled*
Arch. 04	22-07 00 00	Roofing Systems	Roofs	ARRFG	X	X	X				X	X	X						X	*fire rating, R-value*
Arch. 05	22-08 10 00	Doors	Doors	ARDOR	X	X	X	X	X	X	X	X	X	X		X			X	*hardware group, glazing type, fire rating, frame type*
Arch. 06	22-08 50 00	Windows	Windows	ARWDW	X	X	X			X	X	X	X	X		X			X	*fire rating, frame type, glazing type, u-value*
Arch. 07	22-09 50 00	Ceilings	Ceilings	ARCLG	X	X	X		X	X	X	X	X						X	*recycled content, fire rating, resilience*
Arch. 08	22-09 70 00	Room Finishes (Floor and Ceiling)	Rooms	*-N/A-*	X				X										X	*Finishes, Offset, Recycled content, slip resistance, resilience*
Arch. 09	22-11 13 00	Loading Dock Equipment	Specialty Equipment	SQLDE	X	X	X	X				X		X			X			*fire rating, R-value*
Arch. 10	22-12 30 00	Furniture Systems (Casework,Cabinets)	Casework	ARCWK	X	X	X	X	X		X	X	X	X						
Arch. 11	22-12 36 00	Countertops	Casework	ARCTP	X	X	X	X	X		X	X	X	X						
Arch. 12	22-14 00 00	Conveying Equipment (Elevators Escalators)	Specialty Equipment	SQELV	X	X	X				X	X		X					X	*current voltage, frequency, capacity, speed, amps, motor power*
Arch. 13 - See Specialty Equipment on Page 2 of this Matrix																				
No Schedule		Fenestration (curtain wall, storefront)		*-N/A-*	X	X	X			X	X	X		X		X			X	*fire rating, frame type, glazing type, u-value*
No Schedule		Walls		ARWAL	X	X	X			X	X	X							X	*fire rating, R-value, STC rating*
No Schedule		Movable Furniture (incl. Work Stations)		*-N/A-*	X	X	X													
		Structural Model																		
Struc. 01		Beam Systems	Structural Beam Systems	*-N/A-*	X	X				X				X					X	*per Basis of Design, DSA Requirements*
Struc. 02		Column Systems	Structural Columns	*-N/A-*	X	X				X	X	X	X	X					X	*per Basis of Design, DSA Requirements*
Struc. 03		Foundations (incl. Footings and Grade Beams)	Structural Foundations	*-N/A-*	X	X					X	X	X						X	*per Basis of Design, DSA Requirements*
Struc. 04		Trusses	Structural Trusses	*-N/A-*	X	X					X	X	X						X	*per Basis of Design, DSA Requirements*
Struc. 05		Framing (incl. Brace Frames & Shear Walls)	Structural Framing	*-N/A-*	X	X					X	X	X	X					X	*per Basis of Design, DSA Requirements*
Struc. 06	22-05 51 00	Stairs (Structural Information)	Stairs	STSTR	X	X					X	X	X							
No Schedule		Floor Slabs / Decks		*-N/A-*	X	X			X	X	X	X	X							*per Basis of Design, DSA Requirements*
		Mechanical Systems Model																		
Mech. 01	22-23 09 13	Instrumentation/Control Thermostats	Mechanical Equipment	MQTSAT	X	X	X	X				X		X			X			
Mech. 02	22-23 21 23	Hydronic Pumps	Mechanical Equipment	MQPMP	X	X	X		X		X	X		X		X			X	*current, voltage, frequency, flow rate, pressure, controller type*
Mech. 03	22-23 25 00	Cooling Tower Water Treatment Assemblies	Mechanical Equipment	MQPWT	X	X	X					X		X			X	X	X	
No Schedule		Ductwork (Air Ducts, etc)		*-N/A-*	X	X						X								
Mech. 04	22-23 33 13	Motors (incl. Motorized Dampers)	Mechanical Equipment	MQDMP	X	X	X	X				X						X	X	*current, voltage, frequency, power, phase, efficiency*
Mech. 05	22-23 34 00	HVAC Fans	Mechanical Equipment	MQFAN	X	X	X					X		X			X		X	*air flow, fan speed, fan motor power, phase*
Mech. 06	22-23 34 13	Duct Silencers	Mechanical Equipment	MQDSL	X	X	X	X				X		X			X			
Mech. 07	22-23 34 33	Air Curtain Fans	Mechanical Equipment	MQACT	X	X	X	X				X		X			X		X	*current, voltage, frequency, service, flow rate*
Mech. 08	22-23 35 13	Sawdust Collection Systems (Industrial)	Mechanical Equipment	MQSDC	X	X	X			X		X		X						
Mech. 09	22-23 36 13	Constant Air Volume Boxes (CAV)	Mechanical Equipment	MQCAV	X	X	X	X	X	X		X		X		X	X	X		*current, voltage, frequency, inlet size, air flow, pressure drop*
Mech. 10	22-23 36 16	Variable Air Volume Boxes (VAV)	Mechanical Equipment	MQVAV	X	X	X	X	X	X		X		X		X	X	X		*current, voltage, frequency, inlet size, air flow, pressure drop*
Mech. 11	22-23 37 13	Air Terminals (Diffusers, Grilles, etc)	Air terminals	ATGRL	X	X						X					X			
Mech. 12	22-23 40 00	HVAC Air Cleaning Devices	Mechanical Equipment	MQACD	X	X	X	X		X	X	X		X			X			*air flow, pressure drop, efficiency rating, filter type*
Mech. 13	22-23 52 00	Heating Boilers	Mechanical Equipment	MQBLR	X	X	X	X	X	X	X	X		X		X	X	X	X	*power, voltage, current, vent diameter, water flow, frequency, ene*
Mech. 14	22-23 62 00	Compressors and Condenser Units	Mechanical Equipment	MQCMP	X	X	X	X	X		X	X					X	X	X	*current, voltage, frequency, refrigerant type, capacity, speed*
Mech. 15	22-23 64 00	Chillers	Mechanical Equipment	MQCHL	X	X	X	X	X	X	X	X		X		X	X	X	X	*power, voltage, current, capacity, water flow, frequency, energy e*
Mech. 16	22-23 74 13	Air Handling Units	Mechanical Equipment	MQAHU	X	X	X	X	X	X	X	X		X		X	X	X	X	*fan flow, fan motor power, coil flow, coil velocity, coil capacity, air*
Mech. 17	22-23 81 23	Computer Room AC	Mechanical Equipment	MQCRAC	X	X	X	X	X	X		X		X			X			
Mech. 18	22-23 84 13	Humidifiers	Mechanical Equipment	MQHMD	X	X		X	X	X		X		X			X			
Mech. 19	22-23 84 16	Dehumidifiers	Mechanical Equipment	MQDMD	X	X		X	X	X		X		X			X			

M&O Attributes Metadata in the COBie Asset Data Spreadsheet TYPE Tab / M&O Attributes Metadata in the COBie Asset Data Spreadsheet COMPONENT Tab

Schedule Identifier	Minimum Elements to be Modeled	**Type Name** (Repeat)	**Omniclass 2010 Table 23 Category** (Repeat)	**Type Description** (COBie Type)	**Asset Type** (Fixed / Moveable)	**Manufacturer**	**Model Number**	**Warranty Guarantor Parts**	**Warranty Duration Parts** (in months)	**Warranty Guarantor Labor**	**Warranty Duration Labor** (in months)	**Manufacturer's Warranty Duration**	**Replacement Cost**	**Expected Life** (in months)	**Component Name** (COBie Component)	**Floor Number** (Level) (Repeat)	**Type Name** (Repeat)	**Location** (Repeat)	**Component Description** (COBie Component)	**Serial Number**	**Installation Date**	**Warranty Start Date**	**Tag Number**	**Barcode / RFID Tag**	**Asset Identifier**	**Model Existing Objects** (to Remain) **in Renovation Project?** Existing Condition Elements to be modeled in Renovation BIM	**Existing Objects'** Metadata to Include **Name; Description; ID Tag**
	Site Utilities																										
Util. 01	Transformers																									Yes	X
Util. 02	Utilities Back-Flow Preventor Fire Valve																									Yes	
No Schedule	Fire Hydrants Utilities (Optional to model)																									No	
No Schedule	Utilities Catch Basin (Optional to model)																									No	
No Schedule	Utilities Manholes (Optional to model)																									No	
No Schedule	Utilities Valves (Optional to model)																									No	
	Landscape																										
Lsp. 01	Irrigation (System Controllers only)																									No	
No Schedule	Site Features																									No	
	Architectural Model																										
Arch. 01	Ramps																									Yes	
Arch. 02	Stairs (Architectural Information)																									Yes	
Arch. 03	Railings																									Yes	
Arch. 04	Roofing Systems	X		X		X		X	X	X	X			X	X		X		X							Yes	
Arch. 05	Doors	X	X	X		X		X	X	X	X				X	X	X	X	X							Yes	X
Arch. 06	Windows	X	X	X		X	X	X	X	X	X				X		X	X	X							Yes	X
Arch. 07	Ceilings																									Yes	
Arch. 08	Room Finishes (Floor and Ceiling)																									No	
Arch. 09	Loading Dock Equipment	X		X		X		X	X	X	X										X	X				Yes	X
Arch. 10	Furniture Systems (Casework,Cabinets)																									No	
Arch. 11	Countertops																									No	
Arch. 12	Conveying Equipment (Elevators Escalators)																									Yes	X
No Schedule	Fenestration (curtain wall, storefront)	X	X	X		X		X	X	X	X				X		X	X	X							Yes	
No Schedule	Walls																									Yes	X
No Schedule	Movable Furniture (incl. Work Stations)																									No	
	Structural Model																										
Struc. 01	Beam Systems																									Yes	
Struc. 02	Column Systems																									Yes	
Struc. 03	Foundations (incl. Footings and Grade Beams)																									No	
Struc. 04	Trusses																									Yes	
Struc. 05	Framing (incl. Brace Frames & Shear Walls)																									Yes	
Struc. 06	Stairs (Structural Information)																									Yes	
No Schedule	Floor Slabs / Decks																									Yes	X
	Mechanical Systems Model																										
Mech. 01	Instrumentation/Control Thermostats	X		X											X		X		X							Yes	X
Mech. 02	Hydronic Pumps	X	X	X		X	X	X	X	X	X		X	X	X	X	X		X							Yes	X
Mech. 03	Cooling Tower Water Treatment Assemblies	X		X		X	X	X	X	X	X		X	X	X	X	X		X		X	X	X		X	Yes	X
No Schedule	Ductwork (Air Ducts, etc)	X		X													X									Yes	X
Mech. 04	Motors (incl. Motorized Dampers)	X		X		X	X	X	X				X	X	X		X	X	X		X	X			X	No	
Mech. 05	HVAC Fans	X		X		X	X	X	X	X	X		X	X	X	X	X		X		X	X			X	Yes	X
Mech. 06	Duct Silencers	X		X											X		X		X							No	
Mech. 07	Air Curtain Fans	X		X		X	X	X	X				X	X	X	X	X	X	X		X	X			X	Yes	X
Mech. 08	Sawdust Collection Systems (Industrial)	X		X		X	X	X	X	X	X				X		X		X		X	X	X		X	No	
Mech. 09	Constant Air Volume Boxes (CAV)	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X		X	X				Yes	X
Mech. 10	Variable Air Volume Boxes (VAV)	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X		X	X				Yes	X
Mech. 11	Air Terminals (Diffusers, Grilles, etc)																									Yes	X
Mech. 12	HVAC Air Cleaning Devices	X		X		X	X						X	X	X	X	X	X	X		X				X	No	
Mech. 13	Heating Boilers	X	X	X		X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X		X	Yes	X
Mech. 14	Compressors and Condenser Units	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X		X	X			X	Yes	X
Mech. 15	Chillers	X	X	X		X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X		X	Yes	X
Mech. 16	Air Handling Units	X	X	X		X	X	X	X	X	X			X	X	X	X	X	X		X	X	X		X	Yes	X
Mech. 17	Computer Room AC	X		X		X	X	X	X						X	X	X	X	X		X	X	X		X	No	
Mech. 18	Humidifiers	X		X		X	X	X	X	X	X		X		X		X		X		X	X				No	
Mech. 19	Dehumidifiers	X		X		X	X	X	X	X	X		X		X		X		X		X	X				No	

Notes

See notes below regarding New Construction BIM versus Renovation BIM elements, etc.

Additional notes, instructions and definitions of Object Information Metadata needed can be found in Form ***DES-0002-E: Parameter ID Definitions for the BIM Asset Data Matrix DES-0002-D Spreadsheet***

Model Existing Site features whenever possible. (Landscape)

New Construction BIMs shall contain model elements accurately described and located - based upon requirements of Program + Criteria and DSA Approved Drawings. New Construction BIM elements should also include detailed asset data as noted in this matrix.

Renovation BIMs shall, at a minimum, contain the model objects defined (in red) as "Yes" in the "Model Existing Objects (to Remain) in Renovation Projects?" column in this matrix. Renovation BIM elements should also include asset data as defined (in red) in the "Existing Objects' Metadata to Include:" columns in this matrix

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Project #: | **Project Name:** | **Review Date:** | **Reviewed By:**

					Description Metadata in Native Authored BIM Elements														Design / Performance Metadata in Native Authored BIM Elements		M&O Attributes Metadata in the COBie Asset Data Spreadsheet TYPE Tab													M&O Attributes Metadata in the COBie Asset Data Spreadsheet COMPONENT Tab												
Schedule Identifier NAME - Match with Schedule Names in the **LACCD BIM Review** Form & Schedule Names in the **LACCD BIM ASSET** Revit Template	**OmniClass Schedule Identifier NUMBER -** Match with Schedule Numbers in the **LACCD BIM Review** Form & Schedule Numbers in the **LACCD BIM ASSET** Revit Template	**Object Information Needed →** **Minimum Elements to be Modeled ↓**	**Family Category / Schedule Category** Revit Families for the Elements should be defined within this Category. The Elements can then be scheduled in Revit using the same specific Category from the list of Schedule Categories provided.	**Keynote** Add to an Object's Family for Automatic Filtering of Schedules in the **LACCD BIM ASSET** Revit Template	**Name**	**Description**	**ID Tag**	**Location** (Describe Space Name & Room No)	**Floor Number** (Level)	**Mounting Height** (Model in Correct Location)	**Size** (Dimension / Thickness)	**Type Name**	**Material** (If Applicable)	**Quantity**	**Omniclass 2010 Table 21** (Uniformat)	**Omniclass 2010 Table 23 Category**	**System and Zone Information**	**Clearance Requirements**	**Design / Performance Metadata**	*Attributes listed here are for example only. Record data for all attributes shall be as required per Basis of Design and/or DSA Approval.*	**Type Name** (Repeat)	**Omniclass 2010 Table 23 Category** (Repeat)	**Type Description** (COBie Type)	**Asset Type** (Fixed / Moveable)	**Manufacturer**	**Model Number**	**Warranty Guarantor Parts**	**Warranty Duration Parts** (in months)	**Warranty Guarantor Labor**	**Warranty Duration Labor** (in months)	**Manufacturer's Warranty Duration**	**Replacement Cost**	**Expected Life** (in months)	**Component Name** (COBie Component)	**Floor Number** (Level) (Repeat)	**Type Name** (Repeat)	**Location** (Repeat)	**Component Description** (COBie Component)	**Serial Number**	**Installation Date**	**Warranty Start Date**	**Tag Number**	**Barcode / RFID Tag**	**Asset Identifier**	**Model Existing Objects** (to Remain) **in Renovation Project?** Existing Condition Elements to be modeled in Renovation BIM	**Existing Objects'** Metadata to Include **Name; Description; ID Tag**
		Electrical and Lighting Systems Model																																												
Elec. 01	22-26 11 00	Generators & Substations	Electrical Equipment	EQSUB	X	X	X	x	x	x	X	X		X		X	X	X	X	*maximum output, operating weight, fuel type*	X	X	X	X	X	X	X	X	X	X				X	x	X	X	X	X	X	X	X		X	Yes	X
Elec. 02	22-26 13 00	Switchgear	Electrical Equipment	EQSGR	X	X	X	X	X		X	X		X			X	X	x	*current, voltage, frequency, operating weight, bus currents*	X		X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	X		X	Yes	X
Elec. 03	22-26 24 13	Switchboards	Electrical Equipment	EQSBR	X	X	X	X	X		X	X		X			X	X	X	*current, voltage, frequency, operating weight, bus currents*	X		X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	X		X	Yes	X
Elec. 04	22-26 24 16	Panelboards (Distribution Panels)	Electrical Equipment	EQPBD	X	X	X	X	X	x	X	X		X		x	x	X	X	*current, voltage, frequency, phase, AIC rating*	X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	X		X	Yes	X
Elec. 05	22-26 24 19	Motor Controllers	Electrical Equipment	EQMOT	X	X	X	x	X	x	x	X		X			X	x	x	*current, voltage, frequency*	X		X		X	X	X	X	X	X				X	X	X	x	X	x	X	X	X		X	No	
Elec. 06	22-26 25 00	Enclosed Bus Assemblies	Electrical Equipment	EQBUS	X	X	X	X	X	X		X		X					x		X		X		X	X	X	X	X	X			x		X	X	X				X			X	No	
Elec. 07	22-26 26 00	Power Distribution Units	Electrical Equipment	EQPSP	X	X	X	X	X	X		X		X					x		X		X		X	X	X	X	X	X			x		X	X	X				X			X	Yes	X
Elec. 08	22-26 27 13	Electricity Metering	Electrical Equipment	EQMTR	X	X	X	X	X	X		X		X					X		X		X		X	X	X	X	X	X			x		X	X	X				X			X	Yes	X
Elec. 09	22-26 27 19	Outlets & Multi-Outlet Assemblies	Electrical Fixture	EFOLT	X	X	X					X		X		x	x		x	*current, voltage, frequency, panel name, panel circuit*	x	x	x		x									x		x		x							No	
Elec. 10	22-26 28 16	Enclosed Sensors	Electrical Fixture	EFSSR	X	X	X	x	X	x	x	X		X			X	x	x	*current, voltage, frequency*	X		X		X	X	X	X	X	X				X	X	X	x	X	x	X	X	X		X	No	
Elec. 11	22-26 28 16	Enclosed Switches and Circuit Breakers	Electrical Fixtures	EFSWT	X	X	X	X	X	x	x	X		X		x	x		X	*current, voltage, frequency, panel name, panel circuit*	X	x	X		X	X								x		x		x							No	
Elec. 12	22-26 29 23	Variable-Frequency Motor Controllers	Electrical Fixture	EFVFD	X	X	X	X	X	x		X					X		x	*current, voltage, frequency, power, phase, efficiency*	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X	x	X	X	x		X	No	
Elec. 13	22-26 31 00	Photovoltaic (Collector) Panels	Electrical Equipment	EQPVC	X	X	X	X	x	x	X	X		X		X	x	x	X		X	X	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	X		X	Yes	X
Elec. 14	22-26 50 00	Light Fixtures (Interior and Exterior)	Lighting Fixtures	LFLGT	X	X	X	X	X	x	X	X	X	X	x	X	X		X	*current, voltage, frequency, lens type, lamp type, wattage*	X	X	X	X	X	X	x	x	x	x		X	x	X	X	X	X	X	x	x	x	x		x	Yes	X
No Schedule		Conduit & Cable Trays (Optional to model)		-N/A-	X	X		x		x		X					x	x																		x									No	
		Plumbing Systems Model																																												
Plmb. 01	22-22 14 29	Pumps (incl Sump Pumps)	Plumbing Fixtures	PFPMP	X	X	X	x	X	x	x	X		X	x	X	X	x	X	*service, capacity, power requirements, operating weight*	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	x	X	x	x	x	x		x	Yes	X
Plmb. 02	22-22 30 00	Plumbing Drain	Plumbing Fixtures	PFDRN	X	X	x	x	x	x	X	X	X	X			x				x		x		x	x								x	x	x		x							No	
Plmb. 03	22-22 30 00	Plumbing Valves	Pipe Accessories	PAVLV	X	X	X	x	x	x	x	X		X			X	x		*demand, inlet/outlet size, pressure*	X		X				X	X	x	x				X	x	X		X		X	X				No	
Plmb. 04	22-22 30 00	Plumbing Vents	Plumbing Fixtures	PFVNT	X	X					X	X	X	X			x		x	*slope, flow rate*	X		X				x	x	x	x				X		X		X		x	x				No	
Plmb. 05	22-22 40 00	Plumbing Fixtures	Plumbing Fixtures	PFFIX	X	X	X	X	X	x	X	X		X	x	X	X	x	X	*water supply fixture units, liters/flush, maximum flow rate*	X	X	X		X	X	x	x	x	x		x		X	X	X	X	X		x	x	x		x	Yes	X
Plmb. 06	22-22 40 00	Water Heaters & Tanks	Mechanical Equipment	MQWHR	X	X	X	x	X	x	X	X		X			X		X	*pressure, operating weight, capacity*	X		X	X	X	X	X	X	X	X				X	X	X	x	X	x	X	X	X		X	Yes	X
Plmb. 07	22-22 61 00	Plumbing Misc. Equipment	Plumbing Fixtures	PFEQP	X	X	X	x	X	x	X	X		X			X		X	*pressure, operating weight, capacity*	X		X	X	X	X	X	X	x	x				X	X	X	x	X	x	X	X	x		x	Yes	X
		Fire Suppression Systems Model																																												
Fire. 01	22-21 13 00	Fire-Suppression System Sprinkler Heads	Fire Alarm Devices	FAFSP	X	X	X		X	x	x	X		X			x	x	X	*head type, thread size*	X		X		X		X	X	X	X				X	X	X		X		X	X				Yes	
Fire. 02	22-21 20 00	Fire-Extinguishing Systems	Fire Alarm Devices	FAFEX	X	X	x	x	X	x	x	X		X					X	*capacity, rating*	X		X		X	X	X	X				X	X	X	X	X	x	X		X	X				No	
Fire. 03	22-21 30 00	Fire Pumps	Fire Alarm Devices	FAFPM	X	X	X	x	X	X	x	X		X	x	X	X	x	X	*frequency, rated flow, churn pressure, controller type*	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	x	X	x	X	X	X		X	Yes	X
		Audio-Visual Model Objects																																												
AV.01	22-11 52 13	Audio-Video Projector Screens/ Smart Screens	Electrical Equipment	EQSSC	X	X	X	X	x	X	X	X	x	X		x		x			X	x	X	X	X	X	X	X	x	x				X	X	X	X	X		X	X				Yes	X
AV.02	22-11 52 16	Projectors	Electrical Equipment	EQPRJ	X	X	X	X	x	X	X	X		X		X	X	X	X	*power requirements, bulb type*	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	x		X	Yes	X
AV.03	22-27 11 19	Communications Termination Panels	Electrical Equipment	EQPNL	X	X	X	X	X	X	x	X		X		x	x	x	X	*current, voltage, frequency, phase, AIC rating*	X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		X	Yes	X
AV.04	22-27 11 19	Data Communications Panel Board	Communication Devices	CDPNL	X	X	X	X	X	X	x	X		X		x	x	x	X	*current, voltage, frequency, phase, AIC rating*	X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		X	Yes	X
AV.05	22-27 41 16	Speakers	Communication Devices	CDSPK	X	X	X	X	X	X	X	X		X			x				X		X	X	X	X	x	x	x	x				X	X	X	X	X		x	x				Yes	X
AV.06	22-27 53 13	Clock Systems (Master Clock Controller Only)	Communication Devices	CDCLK	X	X	X	X	X	X	x	X		X		x	x	x	X	*current, voltage, frequency, phase, AIC rating*	X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		X	Yes	X
No Schedule		AV Outlets (Optional to model)		-N/A-	X	X	x	x	x	x	x	X		x		x	x		x		x	x	x		x									x	x	x	x	x								
		Security and Low Voltage Model Objects																																												
Secu. 01	22-28 10 00	Elect Access Control & Intrusion Detection	Security Devices	SDCRL	X	X	X	X	X	X	X	X		X		x	x	X	x	*current, voltage, frequency, power requirements*	X	x	X	X	X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		X	Yes	X
Secu. 02	22-28 13 33	Access Control Interface (Security Panels)	Security Devices	SDACC	X	X	X	X	X	X	x	X		X		x	x	x	X	*current, voltage, frequency, phase, AIC rating*	X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		X	Yes	X
Secu. 03	22-28 31 00	Fire Detection & Alarm (Smoke Detectors,	Fire Alarm Devices	FADET	X	X	X	x	x	X	x	X		X		x	x	x	x		X	x	X		X	X	X	X	x	x				X	X	X	x	X	x	x	x	x		x	Yes	X
Secu. 04	22-28 31 33	Fire Alarm Annunciator Panels & Stations	Electrical Equipment	EQFPNL	X	X	X	X	x	X	x	X		X		x	x	x	x		X	x	X		X	X	X	X	X	X				X	X	X	X	X	x	X	X	x		x	Yes	X
Secu. 05	22-28 32 33	Radiation and Alarm Detection Sensors	Lighting Devices	LDSNS	X	X	X	X	x	X	x	X		X		x	x	x	x		X	x	X		x	x	x	x	x	x				x	x	x	x	x	x	x	x	x		x	No	
No Schedule		Data Outlets (Optional to model)		-N/A-	X	X	x			x	x	X		x		x	x		x		x	x	x		x									x	x	x	x	x							No	
		Specialty Equipment Model Objects																																												
FS. 01	22-11 40 00	Equipment - Foodservice	Specialty Equipment	SQFSQ	X	X	X	X	X	X	X	X		X		X	x	X	x	*current, power requirements, water supply, gas supply*	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X		X	Yes	X
Lib. 01	22-11 51 00	Equipment - Library	Specialty Equipment	SQLEQ	X	X	X	X	X	X	X	X	x	X	x	X	x	X	x		X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X			Yes	X
Lab. 01	22-11 53 00	Equipment - Lab	Specialty Equipment	SQLAB	X	X	X	X	X	X	X	X		X		X	x	X	X	*current, power requirements, water supply, gas supply*	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X		X	Yes	X
Arch. 13	22-41 33 00	Machining Equipment (Non-Movable)	Specialty Equipment	SEMAQ	X	X	X	X	X	X	X	X	x				x	X	x		X		X		X	X	X	X	X	X				X	X	X	X	X		X	X				Yes	X
		Additional Specialty Systems/Equipment		-N/A-	X	X		X	X	X	X	X	x				x	X	x		X		X		X	X	X	X	X	X				X	X	X	X	X		X	X				Yes	X

Notes

See notes below regarding New Construction BIM versus Renovation BIM elements, etc.

Additional notes, instructions and definitions of Object Information Metadata needed can be found in Form ***DES-0002-E: Parameter ID Definitions for the BIM Asset Data Matrix DES-0002-D Spreadsheet***

New Construction BIMs shall contain model elements accurately described and located - based upon requirements of Program + Criteria and DSA Approved Drawings. New Construction BIM elements should also include detailed asset data as noted in this matrix.

Renovation BIMs shall, at a minimum, contain the model objects defined (in red) as "Yes" in the "Model Existing Objects (to Remain) in Renovation Projects?" column in this matrix. Renovation BIM elements should also include asset data as defined (in red) in the "Existing Objects' Metadata to Include:" column in this matrix

Gray "X" or a blank box indicates metadata NOT required in model elements (for this project).

Black "X" indicates metadata required in model elements. Refer to the Parameter ID Definitions Spreadsheet for additional clarifications.

Blue background color - Indicates input from Designers, Engineers, and Contractors in the BIM

Yellow background color - Indicates Input from Fabricators/Subcontractors in the BIM, and/or in an (Excel) Asset Data Spreadsheet

Please Note: This form is meant to be printed in color on 11"x17" paper in landscape mode. When printed this way the document should be only two 11"x17" pages.