

**GENERAL NOTES**

- REFER TO SPECIFICATION 23 09 00 FOR CONTROLS RELATED INSTALLATION REQUIREMENTS.
- REFER TO SPECIFICATION 23 09 93 FOR SEQUENCE OF OPERATIONS.
- REFER TO ELECTRICAL PROJECT SPECIFICATIONS FOR ALL WIRING INSTALLATION REQUIREMENTS.
- INSTALL FLEXIBLE CONNECTIONS IN RUNS OF RACEWAYS, CABLES, WIREWAYS, CABLE TRAYS, AND BUSWAYS WHERE THEY CROSS EXPANSION JOINTS, SEISMIC JOINTS OR ARE SUBJECT TO STRUCTURAL DEFLECTIONS OR INTERSTORY BUILDING DRIFTS. FLEXIBLE CONNECTIONS SHALL BE INSTALLED WHERE ADJACENT SECTIONS OF RACEWAYS ARE SUPPORTED BY DIFFERENT STRUCTURAL ELEMENTS AND WHERE THEY TERMINATE TO EQUIPMENT THAT IS ANCHORED OR SUPPORTED TO A DIFFERENT STRUCTURAL ELEMENT. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS IN ORDER TO PROVIDE THE REQUIRED FLEXIBLE CONNECTIONS.
- CONTRACTOR SHALL COORDINATE INSTALLATION ACTIVITIES WITH OTHER CONTRACTORS AND OTHER TRADES AS NEEDED. THIS INCLUDES COORDINATING FINAL SENSOR LOCATIONS AND ELEVATIONS WITH OWNER REF TO INCORPORATE ANY TENANT REQUIREMENTS FOR SENSORS.
- INSTALLATION OF ALL THERMOSTATS AND DIFFERENTIAL PRESSURE SENSORS SHALL BE COORDINATED WITH ALL OTHER WALL DEVICES FOR INSTALLATION HEIGHT ABOVE FINISHED FLOOR.
- CONTROL PANELS ARE FED FROM TWO SEPARATE 120VAC POWER SOURCES.
- PROVIDE FIELD COORDINATION WITH SYSTEM INTEGRATOR ON ALL PANELS.
- CONTROLS AND ELECTRICAL CONTRACTORS TO COORDINATE ALL ETHERNET COPPER AND FIBER CABLING WITH TELECOM SPECIFICATIONS.

**KEYED NOTES**

- DUAL 120VAC POWER CIRCUITS (BY OTHERS) FROM DIVERSE UPS PANELS TO CONTROL CONTRACTOR PROVIDED CONTROL PANEL CIRCUITS SHALL BE DEDICATED TO EACH PANEL AND NOT SHARED WITH ANY OTHER DEVICES OR PANELS. CONTROL CONTRACTOR SHALL PROVIDE AND INSTALL ALL HARDWARE REQUIRED FOR REDUNDANT CONTROLLER AND INSTRUMENTATION UPON ANY COMPONENT OR SOURCE FAILURE SHALL BE SEAMLESS AND NOT CAUSE ANY INTERRUPTION IN CONTROLLER OR INSTRUMENTATION OPERATION.
- DATA HALL MANAGER CONTROL PANEL HARDWARE INSTRUMENTATION TO CONTROL PANEL FOR DATA HALL MONITORING AND AUTOMATIC CONTROL OF MECHANICAL EQUIPMENT CONTROL SEQUENCES. INCLUDE ANY INTEGRATION OF ASSOCIATED MECHANICAL EQUIPMENT.
- EPMS CONTROL PANEL INCLUDE ANY APPROPRIATE COMFORT HEATING AND COOLING HVAC EQUIPMENT.
- ADMIN SPACE CONTROL PANEL INCLUDE ANY APPROPRIATE GATEWAYS FOR FULL INTEGRATION OF ASSOCIATED COMFORT HEATING AND COOLING HVAC EQUIPMENT.
- CHILLER PLANT MANAGER CONTROL PANEL HARDWARE INSTRUMENTATION TO CONTROL PANEL FOR CHILLER PLANT MONITORING AND AUTOMATIC CONTROL OF PLANT LEVEL SEQUENCES. CONTROL COMMANDS FROM THE CHILLER PLANT MANAGER TO THE CHILLER LINEUP CONTROL PANELS SHALL BE HARDWIRED. NETWORK COMMUNICATION SHALL ONLY BE USED FOR MONITORING, ALARMING, AND TROUBLESHOOTING.
- BMS/EPMS CORE SWITCHES, AGGREGATE SWITCHES, PATCH PANELS, AND SUPERVISORY SERVERS FURNISHED BY THE CONTROLS CONTRACTOR AND INSTALLED IN A RACK IN THE MMR ROOM BY THE TELECOM CONTRACTOR. ALL NETWORK COMPONENTS SHALL BE REVIEWED AND APPROVED BY OWNER IT.
- BMS/EPMS AGGREGATE SWITCHES AND PATCH PANELS FURNISHED BY THE CONTROLS CONTRACTOR AND INSTALLED IN THE DCM CABINET IN THE TELECOM RISER ROOM BY THE TELECOM CONTRACTOR. ALL NETWORK COMPONENTS SHALL BE REVIEWED AND APPROVED BY OWNER IT.
- MECHANICAL EQUIPMENT CONNECTED TO ASSOCIATED BMS SCP. CONTROL CONTRACTOR TO COORDINATE WITH OWNER IT TO FINALIZE EXACT NETWORK SWITCH CONNECTIONS AND PORT ALLOCATIONS.
- ELECTRICAL EQUIPMENT CONNECTED TO ASSOCIATED EPMS SCP. CONTROL CONTRACTOR TO COORDINATE WITH OWNER IT TO FINALIZE EXACT NETWORK SWITCH CONNECTIONS AND PORT ALLOCATIONS.
- PARKING GARAGE CARBON MONOXIDE SENSOR AND HORNSTROBE. CONTROL CONTRACTOR TO INTERFACE SENSOR TO BMS SCP AND OPERATE ASSOCIATED EXHAUST FAN BASED ON CARBON MONOXIDE CONCENTRATION.
- CONTROL CONTRACTOR SHALL FURNISH 120V DAMPER ACTUATOR(S) FOR LOUVER. DAMPER ACTUATOR(S) TO BE INSTALLED ON LOUVER BY MECHANICAL CONTRACTOR. 120V POWER PROVIDED BY ELECTRICAL CONTRACTOR. REFERENCE ARCHITECTURAL PLANS FOR LOUVER SIZING.
- CONTROL CONTRACTOR SHALL PROVIDE LOUVER POSITION CONTROL AT THE BMS. REFERENCE SEQUENCE OF OPERATIONS.
- CONTROL CONTRACTOR SHALL INTERLOCK DAMPER ACTUATOR TO ASSOCIATED GENERATOR START SIGNAL. ACTUATOR SHALL BE FAST ACTING, POWER-CLOSED, AND SPRING-OPEN. GENERATOR INSTALLER SHALL PROGRAM GENERATOR SYSTEM TO OFFSET GEN START BY 3 SECONDS TO ALLOW DAMPER ACTUATORS TO BEGIN TO OPEN ON A CALL TO RUN.
- COMBINATION FIRE/SMOKE DAMPER FURNISHED WITH OPEN AND CLOSED END SWITCHES. MONITOR DAMPER POSITION AT BMS.
- BMS SHALL MONITOR HOT AISLE CONTAINMENT SYSTEM DIFFERENTIAL PRESSURE, TEMPERATURE, AND RELATIVE HUMIDITY. REFERENCE DETAIL 9 ON SHEET IC05-01 FOR HAC DP INSTALLATION. INSTALL COLD AISLE INSTRUMENTS CONDUIT MOUNTED, SUPPORTED BY THE ROOF STRUCTURE, HANGING AT A LEVEL 8 AFF. ROUTE CONDUIT TO AVOID CLASHING WITH CABLE TRAY. INSTALL HOT AISLE TEMPERATURE SENSOR CENTRAL TO THE HOT AISLE, 2' BELOW THE DROP CEILING.
- ELECTRICAL ROOM TEMPERATURE SENSOR SHALL BE CONDUIT MOUNTED FROM CEILING 12" AFF.
- LEAK DETECTION ROPE SHALL BE FURNISHED WITH CRAH AND FV UNITS AND INSTALLED TO MONITOR LEAKS AT EACH UNIT.

**ISSUES**

NO.	DATE	DESCRIPTION
1	01/23/2026	DESIGN DEVELOPMENT

**REVISIONS**

NO.	DATE	DESCRIPTION
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**NOT FOR CONSTRUCTION**  
 Date: 01/23/2026

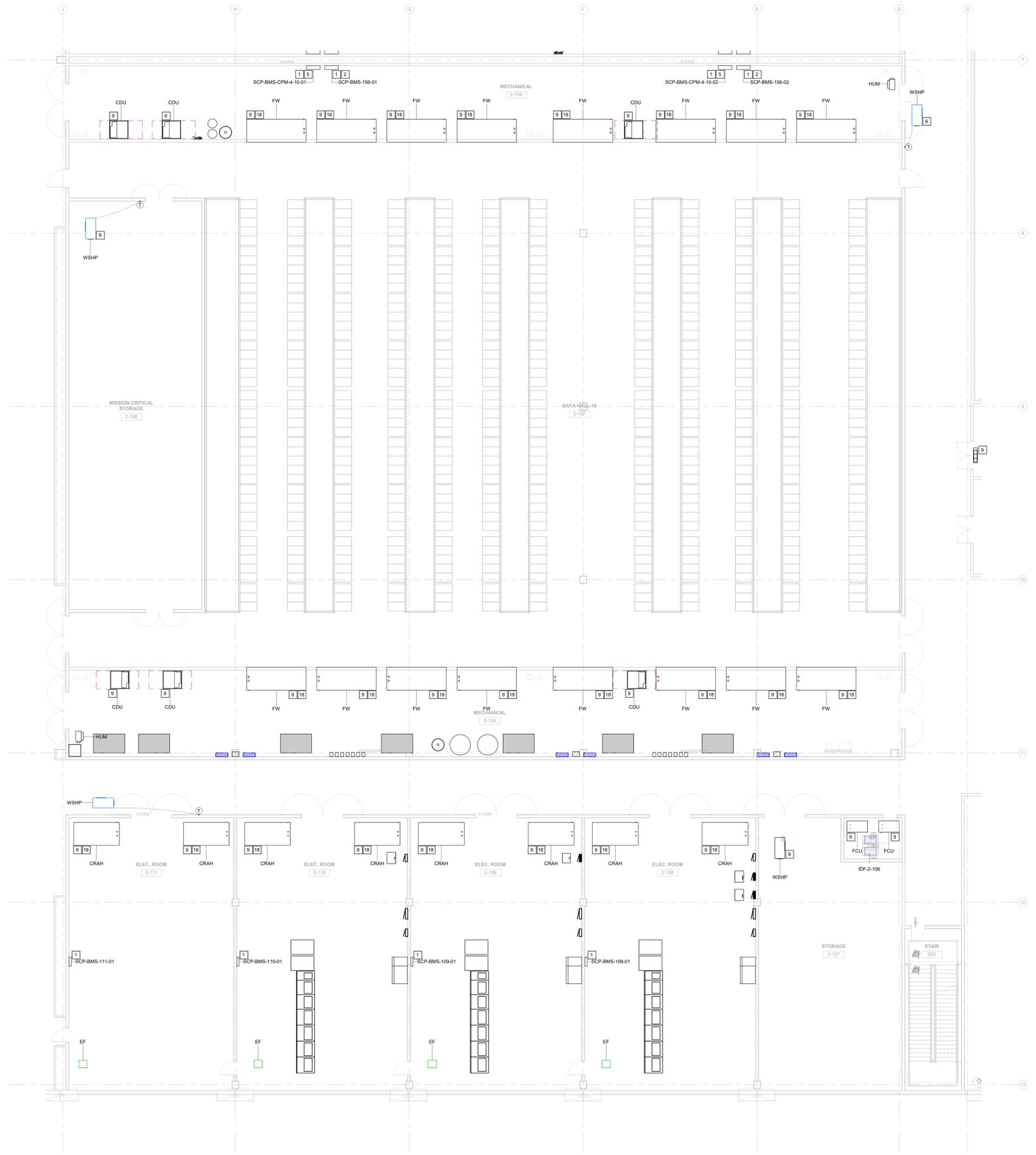
**SF - ARK01**  
**DESIGN DEVELOPMENT**  
 CLARKSVILLE, AR 72830

L	K	J	
G	E	C	A
H	F	D	B
P	N	M	

**LEVEL 2 - CONTROLS PLAN - SEGMENT D**

**JOB SHEET** US0049903.5614

IC02-02D



1 LEVEL 2 - CONTROLS PLAN - SEGMENT D  
 1/8" = 1'-0"