MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-029
Item to be Scouted	Distribution Panelboards
Days to be scouted	15
Response Due By	02/13/2025
Description	Circuit breaker type and fusible switch type power distribution panelboards as shown on drawings.
Notify Requester Immediately	No
State item to be used in	Alabama

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Designing and engineering the panel layout, cutting and preparing the metal enclosure, bending and shaping the metal pieces to create the panel enclosure, punching holes for mounting components and wire entry points, applying finishes, installing electrical components like breakers and bus bars, wiring connections, quality testing, and final assembly.
Provide dimensions / size / tolerances / performance specifications for the item	Please see attached information sheet for list of specifications, dimensions, etc.
List required materials needed to make the product, including materials of product components	Incoming feeder lugs, cooper conductors, filler plates, wire terminals, ground bus, sub-feed lugs, and pressure wire connectors.
Are there applicable certification requirements?	No
Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	Yes
Details	NECA 407 - Recommended Practice for Installing and Maintaining Panelboards NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum) NEMA AB 1 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures NEMA FU 1 - Low-Voltage Cartridge Fuses NEMA PB 1 - Panelboards NEMA PB 1.1 - General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less NFPA 70 - National Electrical Code UL 50 - Enclosures for Electrical Equipment UL 67 - Panelboards UL 486A-486B - Wire Connectors UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures UL 512 - Fuseholders
NAICS 1	335313 Switchgear and switchboard apparatus manufacturing
NAICS 2	
Additional Technical Comments	Products shall comply with BABBA.

Section 4: Business Information

Estimated potential business volume	11 Units. One time purchase.
Estimated target price / unit cost information (if unavailable explain)	As this is related to BABBA, acceptable pricing is to be determined in negotiation.
When is it needed by?	9/1/2025
Describe packaging requirements	Store in clean, dry space. Maintain factory wrapping or provide additional canvas or plastic cover to protect from dirt, water, construction debris, and traffic.
Where will this item be shipped?	Tuscaloosa, AL

Additional Comments

Is there other information you would like to include?	For BABBA related questions: University of Alabama POC: Joshua Bollinger jsbollinger@ua.edu

SECTION 262416.16 - DISTRIBUTION PANELBOARDS

PART 1 - GENERAL

1.1 RELATED WORK

A Section 260519 - Low-Voltage Electrical Power Conductors and Cables

B Section 260526 - Grounding and Bonding for Electrical Systems

C Section 260529 - Hangers and Supports for Electrical Systems

D Section 260548 - Vibration and Seismic Controls For Electrical Systems

E Section 260553 - Electrical Systems Identification

F Section 260573 - Power System Studies

G Section 260812 - Power Distribution Acceptance Tests

H Section 260813 - Power Distribution Acceptance Test Tables

I Section 262713 - Electrical Metering

J Section 262813 - Fuses

1.2 REFERENCE

A Products shall comply with the Build America, Buy America Act (BABBA). Provide all information to certify compliance. Refer to Division 00 and Division 01 for additional information.

1.3 DESCRIPTION

A Section includes circuit breaker type and fusible switch type power distribution panelboards as shown on drawings and as scheduled.

B Distribution panelboards are limited to 800A main bus capacity. Equipment with bus rating of greater than 800A must be switchboard construction.

1.4 REFERENCE STANDARDS

A NECA 407 - Recommended Practice for Installing and Maintaining Panelboards

B NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum)

C NEMA AB 1 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures

D NEMA FU 1 - Low-Voltage Cartridge Fuses

E NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum)

F NEMA PB 1 - Panelboards

G NEMA PB 1.1 - General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less

H NFPA 70 - National Electrical Code

I UL 50 - Enclosures for Electrical Equipment

J UL 67 - Panelboards

K UL 486A-486B - Wire Connectors

L UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures

M UL 512 - Fuseholders

1.5 SUBMITTALS

A Product Data:

1. Submit catalog data showing specified features of standard products. Eliminate extraneous catalog data.

B Shop Drawings:

1. Submit for review prior to manufacture. Include complete description, front view, dimensions, voltage, main bus ampacity, circuit breaker fusible switch arrangement and sizes, short circuit current rating, and factory settings of individual protective devices.
2. Submit 1/4” scale electrical room floor plans with panelboard locations.
3. Shop drawings that are not complete and/or not properly checked by the contractor will be rejected.
4. Submit features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.

C Partial Submittals:

1. Panelboards shall be submitted for review together. Partial submittals of panelboards are not acceptable and will be rejected.

D Manufacturer’s Installation Instructions:

1. Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of product.

E Test Report:

1. Indicate field test and inspection procedures and interpret test results and corrective action taken for compliance with specification requirements.

F Closeout Submittals:

1. Project Record Documents:
   a. Record actual locations of panelboards and record actual circuiting arrangements.
2. Operation and Maintenance Data:
   a. Include manufacturer's recommended operating instructions, maintenance procedures and intervals, and preventive maintenance instructions.
   b. Include manufacturer's written instructions for testing and adjusting overcurrent protective devices.
   c. Include time-current curves and selectable ranges for each type of overcurrent protective device.
   d. Include spare parts data listing, source, and current prices of replacement parts and supplies.

1.6 QUALITY ASSURANCE

A Obtain panelboards, overcurrent protective devices, components, and accessories from one source and by a single manufacturer.

B Regulatory Requirements:

1. Comply with NFPA 70.
2. Furnish products listed and classified by Underwriters Laboratories, Inc., as suitable for purpose specified and indicated.

1.7 DELIVERY, STORAGE, AND HANDLING

A Store in clean, dry space. Maintain factory wrapping or provide additional canvas or plastic cover to protect from dirt, water, construction debris, and traffic.

B Comply with NEMA PB 1.1 and manufacturer's written instructions.

1.8 WARRANTY

A Refer to Division 01 and Section 260000 - General Electrical Requirements for general warranty requirements.

B Manufacturer shall provide standard 1 yr written warranty against defects in materials and workmanship for products specified in this Section. Warranty period shall begin on date of substantial completion.

1.9 MAINTENANCE

A Extra Materials:

1. Furnish Owner with two keys per panelboard.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A Schneider Square D

B ABB-GE Industrial Solutions

C Eaton Cutler Hammer

D Siemens

2.2 POWER DISTRIBUTION PANELBOARDS

A NEMA PB 1, UL 67.

B Fabrication:

1. Factory assembled
2. Individualized breaker fusible switch dead-front cover door-in-door construction
3. Incoming feeder lugs: copper conductors
4. Multiple lugs to match number of conductors per phase
5. Sub-feed (double) lugs, or feed-through lugs where indicated
6. Filler plates
7. Wiring terminals for field installed conductors: Pressure wire connectors, except wire-binding screws for #10 AWG or smaller conductors.
8. Barriers shall be placed such that no uninsulated, ungrounded service busbar or service terminal is exposed to inadvertent contact by persons or maintenance equipment while servicing load terminations.

C Panelboard Buses:

1. Copper
2. Ampere rating as scheduled
3. Ground bus: uninsulated, bonded to panelboard cabinet
4. Insulated neutral bus where applicable: 100% of phase bus rating

D Molded-Case Circuit Breakers:

1. NEMA AB 1, UL 489
2. Bolt-on or I-line type, labeled for 75°C copper and aluminum conductors
3. Equipped with individually insulated, braced, and protected connectors

4. Common internal trip on multi-pole breakers. Handle-ties are not permitted.
5. Ampere rating as scheduled
6. Front face flush with each other
7. Large, permanent, individual circuit numbers affixed to each breaker in uniform position
8. Tripped indication clearly shown by breaker handle taking position between “ON” and “OFF.”
9. Listed as Type HACR for air conditioning equipment circuits
10. Bussing, device mounting hardware, and steel knockouts in dead front where “space” is indicated
11. For 225A frame size and below: thermal-magnetic trip
12. For 250A frame size and above: electronic trip units interchangeable in the field within the frame size and field-adjustable long and short time pickup levels, long and short time delay adjustmetns, and instantaneous current settings. Each adjustment shall have discrete settings and shall be independent of all other adjustments.

E Cabinet

1. NEMA 250, UL 50
2. NEMA Type 1, Type 3R (outdoor locations) enclosure.
3. Four-piece front (trim) surface mounted with door over the front, with concealed self-adjusting trim clamps, and complete with cylinder-type lock and catch.
4. Same height matching trim, where two cabinets are mounted adjacent to one another in finished areas.
5. All sections of panelboards have the same size, where oversize cabinets are required for one section of multi-section panelboard.
6. Boxes and fronts made of code-gauge galvanized steel
7. Manufacturer’s standard gray enamel finish over prime coat.

2.3 METERS

A Provide meters as indicated on plans

1. Provide separate metering compartments with digital meter in accordance with Section 262713 - Electrical Metering.

2.4 SHORT CIRCUIT CURRENT RATING

A Each panelboard with minimum short circuit current rating as indicated on drawings.

B Panelboards marked with their maximum short circuit current rating at supply voltage.

C Panelboards: Fully rated; series-rating is not allowed.

2.5 SURGE PROTECTIVE DEVICES (SPD)

A Per requirements in Section 264300 - Surge Protective Devices (SPD).

PART 3 - EXECUTION

3.1 COORDINATION WITH MANUFACTURER

A Instruct manufacturer about the location of additional wiring gutter space when required, i.e. top, bottom, right, left, or combination.

B Instruct manufacturer about the location of main lugs or main circuit breaker (i.e., top or bottom feed based on incoming feeder entrance location).

C Instruct manufacturer to provide multiple lugs where conductors in parallel or sub-feed (double) lugs or feed-through lugs are indicated.

D Instruct manufacturer on the size of cross-connection cables for panelboards fed via sub-feed (double) lugs or feed-through lugs. Make cable size with ampacity equal to incoming feeder.

E Verify that “touch-up” paint kit is available for repainting.

F Coordinate painting of cabinets in finished areas with work performed under Division 09 - Finishes

3.2 EXAMINATION

A Verify that space indicated for panelboard mounting meets code-required working clearances and dedicated equipment space.

B Notify Architect/Engineer of any discrepancies prior to submittal of product data and shop drawings.

3.3 INSTALLATION

A Install panelboards in accordance with NECA 407 and NEMA PB 1.1.

B Install panelboards plumb and rigid without distortion of box, in accordance with manufacturer's written instructions, and in compliance with recognized industry practices.

C Install top breaker handle a maximum of 6’-7” above finished floor or working platform, with handle in its highest position.

D Tighten electrical connectors and terminals according to equipment manufacturer's published torque tightening values. Where manufacturer’s torque values are not indicated, use those specified in UL 486A-486B.

E Install as-built typewritten circuit directory in directory frame (to indicate installed circuit loads before completing load balancing) mounted inside each panelboard door. Include description of connected loads, room number, room name, area, or item served for each branch circuit. Indicate motor names and horsepower as applicable. Cover circuit directory with colorless plastic. Coordinate with Owner and Architect to ensure that room numbers used in panel directory are final numbers assigned by Owner.

F Install engraved plastic nameplates under provisions of Section 260553 - Electrical Systems Identification. Attach nameplate to exterior of each panelboard using small, corrosion-resistant metal screws or rivets. Do not use contact adhesive.

1. Indicate panelboard name, amperage, voltage, phase, and number of wires.

G Label spare circuits as SPARE. Leave spare breakers in OFF position.

H Room numbers used shall be those used by Owner except as otherwise directed by Architect.

I Install panelboard in dedicated electrical space per NFPA 70 and as shown on drawings. Coordinate with miscellaneous trades for equipment foreign to the electrical installation to be outside of dedicated electrical space.

J Install filler plates in unused spaces.

K Install fuses in fusible switches, per requirements in Section 262813 - Fuses.

3.4 CONNECTIONS

A Ground panelboards according to Section 260526 - Grounding and Bonding for Electrical Systems.

B Connect wiring according to Section 260519 - Low-Voltage Electrical Power Conductors and Cables.

3.5 FIELD QUALITY CONTROL

A Inspect for physical damage, proper alignment, anchorage, and grounding.

B Test circuit breakers per requirements in Sections 260812 - Power Distribution Acceptance Tests and 26 0813 – Power Distribution Acceptance Test Tables.

C Interpret test results in writing and submit to Engineer.

3.6 REPAINTING

A Remove paint splatters or other marks from surface of panelboards.

B Touch-up chips, scratches, or marred finishes to match original finish, using manufacturer-supplied paint kit. Leave remaining paint to Owner.

3.7 ADJUSTING

A Adjust fronts, covers, hinges, and locks.

B Circuit Breakers: Set field-adjustable trip settings or change the trip settings recommended by the overcurrent protective device coordination study supplied by the EOR.

3.8 CLEANING

A Clean panelboard interiors and exteriors prior to final inspection. Remove paint splatters and other spots, dirt and debris.

END OF SECTION 262416.16

CTHP1

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 480 Delta | 3 PHASE | 3 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01, | FED FROM: CTDP-1 | SCCR: 35 kA | CALCULATED AVAILABLE FAULT...: 19.0 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
SPARE		20 A	3	1	0.00			--			2	1	--		SPACE
--	--	--	--	3		0.00			--		4	1	--		SPACE
--	--	--	--	5			0.00			--	6	1	--		SPACE
SPARE		20 A	3	7	0.00			--			8	1	--		SPACE
--	--	--	--	9		0.00			--		10	1	--		SPACE
--	--	--	--	11			0.00			--	12	1	--		SPACE
SPARE		20 A	3	13	0.00			--			14	1	--		SPACE
--	--	--	--	15		0.00			--		16	1	--		SPACE
--	--	--	--	17			0.00			--	18	1	--		SPACE
SPACE		--	1	19	--			--			20	1	--		SPACE
SPACE		--	1	21		--			--		22	1	--		SPACE
SPACE		--	1	23			--			--	24	1	--		SPACE
SPACE		--	1	25	--			--			26	1	--		SPACE
SPACE		--	1	27		--			--		28	1	--		SPACE
SPACE		--	1	29			--			--	30	1	--		SPACE
SPACE		--	1	31	--			--			32	1	--		SPACE
SPACE		--	1	33		--			--		34	1	--		SPACE
SPACE		--	1	35			--			--	36	1	--		SPACE
SPACE		--	1	37	--			--			38	1	--		SPACE
SPACE		--	1	39		--			--		40	1	--		SPACE
SPACE		--	1	41			--			--	42	1	--		SPACE

	A	B	C
PHASE SUBTOTAL (kVA)	0.00 kVA	0.00 kVA	0.00 kVA
PHASE SUBTOTAL (AMPS)	0 A	0 A	0 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	0.00 kVA		0.00 kVA
TOTAL AMPS	0 A		0 A

CTLP1

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE | 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01, | FED FROM: T-CTLP1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 1.77 kA

REMARKS: EG - EQUIPMENT GROUND FAULT PROTECTION (30 mA)

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
HEAT TRACE CONTROL CT-1	EG	20 A	2	1	1.00			0.50			2	1	20 A		PAD-MOUNT MV SWITCH CTRLS
--	--	--	--	3		1.00			2.00		4	1	20 A		DS-GSA AUX POWER
HEAT TRACE CONTROL CT-2 - ALT.	EG	20 A	2	5			1.00			2.00	6	1	20 A		CT1 COND WTR VALVE
--	--	--	--	7	1.00			2.00			8	1	20 A		CT2 COND WTR VALVE
HEAT TRACE CONTROL 24" TWS	EG	20 A	1	9		1.40			0.36		10	1	20 A		EQUIP YRD SEC CAMERAS
REC - WALK-IN EQUIP ENCLOSURE		20 A	1	11			0.54			0.00	12	1	20 A		SPARE
REC - EQUIPMENT YARD		20 A	1	13	1.08			0.00			14	1	20 A		SPARE
LTS - EQUIPMENT YARD		20 A	1	15		0.24			0.00		16	1	20 A		SPARE
LTS - WALK-IN EQUIP ENCLOSURE		20 A	1	17			0.11			0.00	18	1	20 A		SPARE
SPARE		20 A	1	19	0.00			0.00			20	1	20 A		SPARE
SPARE		20 A	1	21		0.00			0.00		22	1	20 A		SPARE
SPARE		20 A	1	23			0.00			0.00	24	1	20 A		SPARE
SPARE		20 A	1	25	0.00			0.00			26	1	20 A		SPARE
SPARE		20 A	1	27		0.00			0.00		28	1	20 A		SPARE
SPARE		20 A	1	29			0.00			0.00	30	1	20 A		SPARE
SPARE		20 A	1	31	0.00			0.00			32	1	20 A		SPARE
SPARE		20 A	1	33		0.00			0.00		34	1	20 A		SPARE
SPARE		20 A	1	35			0.00			0.00	36	1	20 A		SPARE
SPACE		--	1	37	--			--			38	1	--		SPACE
SPACE		--	1	39		--			--		40	1	--		SPACE
SPACE		--	1	41			--			--	42	1	--		SPACE

	A	B	C
PHASE SUBTOTAL (kVA)	5.58 kVA	5.00 kVA	3.65 kVA
PHASE SUBTOTAL (AMPS)	48 A	43 A	30 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	11.90 kVA	100%	11.90 kVA
LIGHTING	0.35 kVA	100%	0.35 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	1.98 kVA	100% FIRST 10KVA, 50% OTHER	1.98 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	14.23 kVA		14.23 kVA
TOTAL AMPS	39 A		39 A

2SPL1

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE | 4 WIRE | MOUNTING: Recessed | ENCLOSURE: Type 1
LOCATION: LAB BUILD/TEST/BURN-IN 239 | FED FROM: 1SPL1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 4.3 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC - LAB BUILD/TEST #2011		20 A	1	1	0.18			1.00			2	1	20 A		BAS CONTROL PANEL - CUP
REC - LEADERSHIP CLASS #2016		20 A	1	3		0.90			0.50		4	1	20 A		BAS CONTROL PANEL - CUP
REC - SMR LAB BUILD/TEST #2011		20 A	1	5			0.72			0.50	6	1	20 A		BAS CONTROL PANEL - HPC ELEC
REC - SMR LAB BUILD/TEST #2011		30 A	2	7	1.00			0.00			8	1	20 A		SPARE
--	--	--	--	9		1.00			0.00		10	1	20 A		SPARE
REC - SMR LAB BUILD/TEST #2011		30 A	2	11			1.00			0.00	12	1	20 A		SPARE
--	--	--	--	13	1.00			0.00			14	1	20 A		SPARE
REC - SMR LAB BUILD/TEST #2011		30 A	2	15		1.00			0.00		16	1	20 A		SPARE
--	--	--	--	17			1.00			0.00	18	1	20 A		SPARE
SPARE		20 A	1	19	0.00			0.00			20	1	20 A		SPARE
SPARE		20 A	1	21		0.00			0.00		22	1	20 A		SPARE
SPARE		20 A	1	23			0.00			0.00	24	1	20 A		SPARE
SPARE		20 A	1	25	0.00			0.00			26	1	20 A		SPARE
SPARE		20 A	1	27		0.00			0.00		28	1	20 A		SPARE
SPARE		20 A	1	29			0.00			0.00	30	1	20 A		SPARE
SPARE		20 A	1	31	0.00			0.00			32	1	20 A		SPARE
SPARE		20 A	1	33		0.00			0.00		34	1	20 A		SPARE
SPARE		20 A	1	35			0.00			0.00	36	1	20 A		SPARE
SPARE		20 A	1	37	0.00			0.00			38	1	20 A		SPARE
SPARE		20 A	1	39		0.00			0.00		40	1	20 A		SPARE
SPARE		20 A	1	41			0.00			0.00	42	1	20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	3.18 kVA	3.40 kVA	3.22 kVA
PHASE SUBTOTAL (AMPS)	27 A	28 A	27 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	9.80 kVA	100% FIRST 10KVA, 50% OTHER	9.80 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	9.80 kVA		9.80 kVA
TOTAL AMPS	27 A		27 A

1UPHM

MAIN TYPE: MCB | MAIN RATING: 225 A | BUS RATING: 225 A
VOLTAGE: 480 Delta | 3 PHASE | 3 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: UPS MECH | SCCR: 35 kA | CALCULATED AVAILABLE FAULT...: 26.5 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
P-HPCW-1		100 A	3	1	18.01			0.00			2	3	20 A		SPARE
--	--	--	--	3		18.01			0.00		4	--	--	--	--
--	--	--	--	5			18.01			0.00	6	--	--	--	--
P-PCHW-S-1		100 A	3	7	18.01			0.00			8	3	20 A		SPARE
--	--	--	--	9		18.01			0.00		10	--	--	--	--
--	--	--	--	11			18.01			0.00	12	--	--	--	--
SPARE		60 A	3	13	0.00			0.00			14	3	20 A		SPARE
--	--	--	--	15		0.00			0.00		16	--	--	--	--
--	--	--	--	17			0.00			0.00	18	--	--	--	--
SPARE		100 A	3	19	0.00			0.00			20	3	20 A		SPARE
--	--	--	--	21		0.00			0.00		22	--	--	--	--
--	--	--	--	23			0.00			0.00	24	--	--	--	--
SPARE		20 A	3	25	0.00			0.00			26	3	20 A		SPARE
--	--	--	--	27		0.00			0.00		28	--	--	--	--
--	--	--	--	29			0.00			0.00	30	--	--	--	--
SPACE		--	1	31	--			--			32	1	--		SPACE
SPACE		--	1	33		--			--		34	1	--		SPACE
SPACE		--	1	35			--			--	36	1	--		SPACE
SPACE		--	1	37	--			--			38	1	--		SPACE
SPACE		--	1	39		--			--		40	1	--		SPACE
SPACE		--	1	41			--			--	42	1	--		SPACE

	A	B	C
PHASE SUBTOTAL (kVA)	36.03 kVA	36.03 kVA	36.03 kVA
PHASE SUBTOTAL (AMPS)	130 A	130 A	130 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	108.08 kVA	125% LARGEST, 100% OTHER	121.59 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	108.08 kVA		121.59 kVA
TOTAL AMPS	130 A		146 A

1UPLM

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE | 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: T-1UPLM | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: <1 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
CONTROLS - RTU-2		20 A	1	1	0.50			0.00			2	1	20 A		SPARE
CONTROLS - RTU-1		20 A	1	3		0.50			0.00		4	1	20 A		SPARE
CONTROLS - DOAS-1		20 A	1	5			0.50			0.00	6	1	20 A		SPARE
SPARE		20 A	1	7	0.00			0.00			8	1	20 A		SPARE
SPARE		20 A	1	9		0.00			0.00		10	1	20 A		SPARE
SPARE		20 A	1	11			0.00			0.00	12	1	20 A		SPARE
SPARE		20 A	1	13	0.00			0.00			14	1	20 A		SPARE
SPARE		20 A	1	15		0.00			0.00		16	1	20 A		SPARE
SPARE		20 A	1	17			0.00			0.00	18	1	20 A		SPARE
SPARE		20 A	1	19	0.00			0.00			20	1	20 A		SPARE
SPARE		20 A	1	21		0.00			0.00		22	1	20 A		SPARE
SPARE		20 A	1	23			0.00			0.00	24	1	20 A		SPARE
SPARE		20 A	1	25	0.00			0.00			26	1	20 A		SPARE
SPARE		20 A	1	27		0.00			0.00		28	1	20 A		SPARE
SPARE		20 A	1	29			0.00			0.00	30	1	20 A		SPARE
SPARE		20 A	1	31	0.00			0.00			32	1	20 A		SPARE
SPARE		20 A	1	33		0.00			0.00		34	1	20 A		SPARE
SPARE		20 A	1	35			0.00			0.00	36	1	20 A		SPARE
SPARE		20 A	1	37	0.00			0.00			38	1	20 A		SPARE
SPARE		20 A	1	39		0.00			0.00		40	1	20 A		SPARE
SPARE		20 A	1	41			0.00			0.00	42	1	20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	0.50 kVA	0.50 kVA	0.50 kVA
PHASE SUBTOTAL (AMPS)	4 A	4 A	4 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	1.50 kVA	100%	1.50 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	1.50 kVA		1.50 kVA
TOTAL AMPS	4 A		4 A

1EPL1

MAIN TYPE: MCB | MAIN RATING: 70 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE | 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,HPC ELECTRICAL... | FED FROM: 1EH-INV | SCCR: 14 kA | CALCULATED AVAILABLE FAULT...: < 1 kA

REMARKS: FA - BREAKER SERVES FIRE ALARM SYSTEM (RED WITH LOCK-ON ATTACHMENT)

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FA CONTROL PANEL - RM #1004	FA	20 A	1	1	0.50			0.97			2	1	20 A		LIGHTS - LEVEL 1 - EQPM ROOMS
FA NAC PANEL - RM #1004	FA	20 A	1	3		0.50			0.72		4	1	20 A		LIGHTS - LEVEL 1 - EQPM ROOMS
SPARE		20 A	1	5			0.00			0.37	6	1	20 A		LIGHTS - LEVEL 1 - CIRCULATION
ASD POWER SUPPLY - RM #1004	FA	20 A	1	7	0.50			0.17			8	1	20 A		LIGHTS - STAIR #2
ASD POWER SUPPLY - RM #1017	FA	20 A	1	9		0.50			0.24		10	1	20 A		LIGHTS - STAIR #2
ASD POWER SUPPLY - RM #1018	FA	20 A	1	11			0.50			0.48	12	1	20 A		LIGHTS - LEVEL 2
ASD POWER SUPPLY - RM #2016	FA	20 A	1	13	0.50			0.38			14	1	20 A		LIGHTS - LEVEL 2
PREACTION - N2 GEN - RM #1015	FA	30 A	1	15		2.00			0.07		16	1	20 A		LIGHTS - L2 - FUTURE SCIF
PREACTION - CTRL - RM #1015	FA	20 A	1	17			0.50			0.58	18	1	20 A		LIGHTS - EXTERIOR
FA NAC PANEL - RM #2008A	FA	20 A	1	19	0.50			0.11			20	1	20 A		LIGHTS - ENTRPZ DC HVAC - SHELL
SPARE		20 A	1	21		0.00			0.11		22	1	20 A		LIGHTS - ENTRPZ DC - SHELL
ERRCS - RM #1004		20 A	1	23			0.50			0.00	24	1	20 A		SPARE
REFRIG PURGE CTRL - CUP		20 A	1	25	0.50			0.00			26	1	20 A		SPARE
SPARE		20 A	1	27		0.00			0.00		28	1	20 A		SPARE
EF-3 (REFRIG PURGE)		15 A	3	29			0.94			0.00	30	1	20 A		SPARE
--	--	--	--	31	0.94			0.00			32	1	20 A		SPARE
--	--	--	--	33		0.94			0.00		34	1	20 A		SPARE
SPARE		20 A	1	35			0.00			0.00	36	1	20 A		SPARE
SPARE		20 A	1	37	0.00			0.00			38	1	20 A		SPARE
SPARE		20 A	1	39		0.00			0.00		40	1	20 A		SPARE
SPARE		20 A	1	41			0.00			0.00	42	1	20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	5.06 kVA	5.08 kVA	3.85 kVA
PHASE SUBTOTAL (AMPS)	44 A	44 A	32 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	5.50 kVA	100%	5.50 kVA
LIGHTING	4.07 kVA	100%	4.07 kVA
MOTOR	2.81 kVA	125% LARGEST, 100% OTHER	3.51 kVA
RECEPTACLE	1.50 kVA	100% FIRST 10KVA, 50% OTHER	1.50 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	13.99 kVA		14.69 kVA
TOTAL AMPS	39 A		41 A

1SPH1

MAIN TYPE: MCB | MAIN RATING: 125 A | BUS RATING: 150 A
VOLTAGE: 480/277 Wye | 3 PHASE | 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: CUP ELEC 1010 | FED FROM: T-1SPH1 | SCCR: 14 kA | CALCULATED AVAILABLE FAULT...: 2.3 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FCU-1010		35 A	3	1	7.57			0.25			2	1	20 A		LIGHTS - L1 - MDF ROOMS
--	--	--	--	3		7.57			0.19		4	1	20 A		LIGHTS - ELEV 1 - SHAFT
--	--	--	--	5			7.57			0.29	6	1	20 A		LIGHTS - ELEV 2 - SHAFT
SPARE		20 A	1	7	0.00			0.00			8	1	20 A		SPARE
SPARE		20 A	1	9		0.00			1.48		10	1	20 A		LIGHTS - CUP/ELEC
SPARE		20 A	1	11			0.00			0.00	12	1	20 A		SPARE
SPARE		20 A	1	13	0.00			0.00			14	1	20 A		SPARE
SPARE		20 A	1	15		0.00			0.00		16	1	20 A		SPARE
SPARE		20 A	1	17			0.00			0.00	18	1	20 A		SPARE
SPARE		20 A	1	19	0.00			0.00			20	1	20 A		SPARE
SPARE		20 A	1	21		0.00			0.00		22	1	20 A		SPARE
SPARE		20 A	1	23			0.00			0.00	24	1	20 A		SPARE
SPARE		20 A	1	25	0.00			0.00			26	1	20 A		SPARE
SPARE		20 A	1	27		0.00			0.00		28	1	20 A		SPARE
SPARE		20 A	1	29			0.00			0.00	30	1	20 A		SPARE
SPARE		20 A	1	31	0.00			0.00			32	1	20 A		SPARE
SPARE		20 A	1	33		0.00			0.00		34	1	20 A		SPARE
SPARE		20 A	1	35			0.00			0.00	36	1	20 A		SPARE
GEN AUX PNL 1GPLA MTS		80 A	3	37	0.00			0.00			38	1	20 A		SPARE
--	--	--	--	39		0.00			0.00		40	1	20 A		SPARE
--	--	--	--	41			0.00			0.00	42	1	20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	7.82 kVA	9.24 kVA	7.85 kVA
PHASE SUBTOTAL (AMPS)	28 A	33 A	28 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	2.21 kVA	100%	2.21 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	22.70 kVA	100%	22.70 kVA
TOTAL LOAD	24.91 kVA		24.91 kVA
TOTAL AMPS	30 A		30 A

1SPL1

MAIN TYPE: MCB | MAIN RATING: 250 A | BUS RATING: 250 A
VOLTAGE: 120/208 Wye | 3 PHASE | 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: T-1SPL1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 5.3 kA

REMARKS: EG - EQUIPMENT GROUND FAULT PROTECTION (30 mA)

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	LEFT SIDE, kVA A	B	C	RIGHT SIDE, kVA A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC - ELEV #1 PIT		20 A	1	1	0.18			0.50			2	1	20 A	EG	HEAT TRACE TES TANK
REC - ELEV #1 MACHINE RM #1006		20 A	1	3		0.18			0.15		4	1	20 A	EG	HEAT TRACE RTU-1/2 AND DOAS-1
ELEV CAB LTG - ELEV #1		20 A	1	5			0.18			0.36	6	1	15 A		FCU-1004 - MDF-S
REC - ELEV #2 PIT		20 A	1	7	0.18			0.36			8	1	15 A		FCU-1006 - ELEV 1 MACHINE RM
REC - ELEV #2 MACHINE RM #1014		20 A	1	9		0.18			0.36		10	1	15 A		FCU-1014 - ELEV 2 MACHINE RM
ELEV CAB LTG - ELEV #2		20 A	1	11			0.18			0.36	12	1	15 A		FCU-1017 - MDF-L
REC - CUP ELEC #1010		20 A	1	13	0.72			2.00			14	2	30 A		REC - MDF-S #1004
SMR REC - MDF-S #1004		20 A	1	15		0.72			2.00		16	--	--	--	--
SMR REC - MDF-S #1004		20 A	1	17			0.54			2.00	18	2	30 A		REC - MDF-S #1004
REC - CUP #1011		20 A	1	19	0.90			2.00			20	--	--	--	--
REC - CUP #1011		20 A	1	21		0.90			2.00		22	2	30 A		REC - MDF-L #1017
SMR REC - MDF-L #1017		20 A	1	23			0.90			2.00	24	--	--	--	--
SMR REC - MDF-L #1017		20 A	1	25	0.90			2.00			26	2	30 A		REC - MDF-L #1017
SUMP PUMP ELEV #1		20 A	1	27		1.18			2.00		28	--	--	--	--
SUMP PUMP ELEV #2		20 A	1	29			1.18			2.00	30	2	30 A		REC - MDF-L #1017
REC - HVAC #1019, ELEC #1018 WALL		20 A	1	31	1.08			2.00			32	--	--	--	--
REC - ELEC #1018 UNISTRUT		20 A	1	33		0.72			2.00		34	2	30 A		REC - MDF-L #1017
REC - WAT. ENTRY/FIRE RIS. #1015		20 A	1	35			0.36			2.00	36	--	--	--	--
2SPL1	BL	100 A	3	37	3.18			0.50			38	1	20 A		SITE SEC CAMERAS
--	--	--	--	39		3.40			0.00		40	1	20 A		SPARE
--	--	--	--	41			3.22			0.00	42	1	20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	16.50 kVA	15.79 kVA	15.28 kVA
PHASE SUBTOTAL (AMPS)	138 A	132 A	127 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	4.31 kVA	100%	4.31 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.50 kVA	125% LARGEST, 100% OTHER	0.56 kVA
RECEPTACLE	42.76 kVA	100% FIRST 10KVA, 50% OTHER	42.76 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	47.57 kVA		47.63 kVA
TOTAL AMPS	132 A		132 A

ALABAMA LICENSED No. 22836 PROFESSIONAL ENGINEER WILLIAM D. HENNE
11/08/2024

HIGH PERFORMANCE COMPUTING AND DATA CENTER

THE UNIVERSITY OF ALABAMA
TUSCALOOSA, ALABAMA

DAVIS
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OWNER
THE UNIVERSITY OF ALABAMA
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ARCHITECT OF RECORD
DAVIS ARCHITECTS, INC.
120 23RD STREET SOUTH
BIRMINGHAM, AL 35233
205-322-7482
ATTN: SKYLAR HOWARD / COURTNEY PITTMAN

DATA CENTER ARCHITECT
GENSLER
999 PEACHTREE STREET NORTH EAST, SUITE 1400
ATLANTA, GA 30309
410-230-7712
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MECHANICAL/ ELECTRICAL/PLUMBING/TECHNOLOGY ENGINEER
AFFILIATED ENGINEERS, INC
1414 RALEIGH ROAD, SUITE 305
CHAPLE HILL, NC 27517
919-609-6469
ATTN: BART HOGGE

CIVIL ENGINEER
DUNCAN COKER ASSOCIATES, P.C.
302 MERCHANTS WALK, SUITE 250
TUSCALOOSA, AL 35406
205.561.0808
ATTN: JASON COKER / JC WILHITE

STRUCTURAL ENGINEER
MBA ENGINEERS, INC.
300 20TH STREET NORTH, SUITE 100
BIRMINGHAM, AL 35203
205-909-6040
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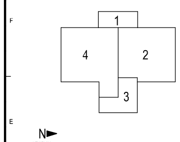
LANDSCAPE ARCHITECT
JOHNSON AND COMPANY
2413 2ND AVENUE SOUTH
BIRMINGHAM, AL 35233
205-324-4447
ATTN: WILLIAM JOHNSON



KEY PLAN

REV	DATE	DESCRIPTION
1	09-04-2024	ADDENDUM 2
2	09-20-2024	ADDENDUM 5
3	11-08-2024	ASI #4

DATE: 10-11-2024
PHASE: CONFORMING SET
ISSUED FOR: ASI #4
ISSUED BY: DAVIS & GENSLER
PROJECT NO.: 4014

SHEET TITLE
ELECTRICAL EQUIPMENT SCHEDULES - PANELBOARDS

DRAWING NO.
E608

NOTE: SHEET CONTAINS COLOR ELEMENTS AND MUST BE PRINTED IN COLOR. ARCHITECT IS NOT RESPONSIBLE FOR ERRORS MADE DUE TO IMPROPER PRINTING

1NPL1

MAIN TYPE: MCB | MAIN RATING: 250 A | BUS RATING: 250 A
VOLTAGE: 120/208 Wye | 3 PHASE 4 WIRE | MOUNTING: SURFACE | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: T-1NPL1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 5.3 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
EWH-1 - CUSTODIAL #1009		40 A 2	1	3.00			0.90			2	1 20 A		SMR REC - MDF-S #1004
--	--	-- --	3		3.00			0.72		4	1 20 A		SMR REC - MDF-S #1004
PP-2 - CUSTODIAL #1009		15 A 1	5			0.60			1.08	6	1 20 A		SMR REC - MDF-L #1017
REC - #1001, #1002		20 A 1	7	0.72			0.90			8	1 20 A		SMR REC - MDF-L #1017
REC - #1003		20 A 1	9		0.72			0.50		10	1 20 A		UV LIGHTS - DOAS-1
REC - BR #1007, #1008, JAN. #1009		20 A 1	11			0.54			0.50	12	1 20 A		UV LIGHTS - RTU-1
REC - #C002		20 A 1	13	0.54			1.50			14	1 20 A		DAMPERS - DOAS-1
REC - #C001A, 1001, 1005		20 A 1	15		0.72			0.50		16	1 20 A		OIL SEPARATOR CTRL - CUP
REC - HPC HVAC #1019		20 A 1	17			0.54			0.36	18	1 20 A		REC - ENTRPZ DC HVAC - SHELL
REC - HPC ELEC #1018 WALL		20 A 1	19	0.54			0.27			20	1 20 A		LIGHTS - L1 - RESTROOMS
REC - HPC ELEC #1018 UNISTRUT		20 A 1	21		0.72			0.46		22	1 20 A		LIGHTS - L2 - RESTROOMS/NURSING
REC - CUP #1011		20 A 1	23			1.44			0.50	24	1 20 A		LIGHTS/RECS - DOAS-1
WATER FOUNTAIN - CORR. #C003	GF	20 A 1	25	0.50			0.00			26	1 20 A		SPARE
REC - #1013, #1012, #1015		20 A 1	27		1.26			0.00		28	1 20 A		SPARE
REC - CORR. #C003		20 A 1	29			1.08			0.00	30	1 20 A		SPARE
REC - EAST EXTERIOR		20 A 1	31	0.72			8.86			32	3 100 A	BL	1NPL2
EF-1		20 A 1	33		0.70			5.51		34	-- --	--	--
EF-2		20 A 1	35			1.18			5.51	36	-- --	--	--
REC - CUP ELEC. #1010		20 A 1	37	0.72			8.56			38	3 100 A	BL	2NPL1
LIGHTS/RECS - RTU-1 & 2		20 A 1	39		1.00			8.84		40	-- --	--	--
UV LIGHTS - RTU-2		20 A 1	41			0.50			6.76	42	-- --	--	--

	A	B	C
PHASE SUBTOTAL (kVA)	27.73 kVA	24.65 kVA	20.59 kVA
PHASE SUBTOTAL (AMPS)	236 A	211 A	172 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	24.50 kVA	100%	24.50 kVA
LIGHTING	0.74 kVA	100%	0.74 kVA
MOTOR	7.36 kVA	125% LARGEST, 100% OTHER	7.98 kVA
RECEPTACLE	40.02 kVA	100% FIRST 10KVA, 50% OTHER	40.02 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	72.98 kVA		73.60 kVA
TOTAL AMPS	203 A		204 A

1NPH1

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 480/277 Wye | 3 PHASE 4 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: CUP ELEC 1010 | FED FROM: T-1NPH1 | SCCR: 14 kA | CALCULATED AVAILABLE FAULT...: 2.3 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
LIGHTS - L1 - HPC ELEC		20 A 1	1	1.40						2			
LIGHTS - L1 - LOADING DOCK		20 A 1	3		1.16					4			
LIGHTS - CUP		20 A 1	5			1.67				6			
LIGHTS - LOBBY		20 A 1	7	1.60						8			
LIGHTS - L1 SHELL (FUTURE)		20 A 1	9		0.00					10			
LIGHTS - L2 - CORR/OFFICE		20 A 1	11			1.53				12			
LIGHTS - L2 - DATA HALL		20 A 1	13	2.13						14			
LIGHTS - L2 - DATA HALL		20 A 1	15		2.13					16			
LIGHTS - L2 - CONF/LAB/NOC		20 A 1	17			1.31				18			
LIGHTS - L2 - SHELL		20 A 1	19	0.18						20			
LIGHTS - EXTERIOR		20 A 1	21		2.14					22			
LIGHTS - ENTRPZ DC HVAC - SHELL		20 A 1	23			0.29				24			
LIGHTS - ENTRPZ DC - SHELL		20 A 1	25	0.25						26			
			27							28			
			29							30			
			31							32			
			33							34			
			35							36			
SPACE		-- 1	37	--		--				38	1 --		SPACE
SPACE		-- 1	39		--			--		40	1 --		SPACE
SPACE		-- 1	41			--			--	42	1 --		SPACE

	A	B	C
PHASE SUBTOTAL (kVA)	5.56 kVA	5.43 kVA	4.80 kVA
PHASE SUBTOTAL (AMPS)	20 A	20 A	17 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	15.53 kVA	100%	15.53 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	15.78 kVA		15.78 kVA
TOTAL AMPS	19 A		19 A

1NPL2

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE 4 WIRE | MOUNTING: SURFACE | ENCLOSURE: Type 1
LOCATION: CUP ELEC 1010 | FED FROM: 1NPL1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 5.2 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
EV CHARGING STATION 1		40 A 2	1	3.35			0.50			2	1 20 A		IRRIGATION CONTROLLER
--	--	-- --	3		3.35			0.50		4	1 20 A		VEHICLE RSTRNT CTRL - DOCK
EV CHARGING STATION 2		40 A 2	5			3.35			0.50	6	1 20 A		VEHICLE RSTRNT CTRL - DOCK
--	--	-- --	7	3.35			0.00			8	1 20 A		SPARE
SPARE		20 A 1	9		0.00			0.00		10	1 20 A		SPARE
SPARE		20 A 1	11			0.00			0.00	12	1 20 A		SPARE
DOCK LEVELER 1		15 A 3	13	0.83			0.00			14	1 20 A		SPARE
--	--	-- --	15		0.83			0.00		16	1 20 A		SPARE
--	--	-- --	17			0.83			0.00	18	1 20 A		SPARE
DOCK LEVELER 2		15 A 3	19	0.83			0.00			20	1 20 A		SPARE
--	--	-- --	21		0.83			0.00		22	1 20 A		SPARE
--	--	-- --	23			0.83			0.00	24	1 20 A		SPARE
SPACE		-- 1	25	--			--			26	1 --		SPACE
SPACE		-- 1	27		--			--		28	1 --		SPACE
SPACE		-- 1	29			--			--	30	1 --		SPACE
SPACE		-- 1	31	--			--			32	1 --		SPACE
SPACE		-- 1	33		--			--		34	1 --		SPACE
SPACE		-- 1	35			--			--	36	1 --		SPACE
SPACE		-- 1	37	--			--			38	1 --		SPACE
SPACE		-- 1	39		--			--		40	1 --		SPACE
SPACE		-- 1	41			--			--	42	1 --		SPACE

	A	B	C
PHASE SUBTOTAL (kVA)	8.86 kVA	5.51 kVA	5.51 kVA
PHASE SUBTOTAL (AMPS)	74 A	46 A	46 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	13.40 kVA	100%	13.40 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	5.48 kVA	125% LARGEST, 100% OTHER	6.10 kVA
RECEPTACLE	1.00 kVA	100% FIRST 10KVA, 50% OTHER	1.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	19.88 kVA		20.50 kVA
TOTAL AMPS	55 A		57 A

1NPHM1

MAIN TYPE: MCB | MAIN RATING: 250 A | BUS RATING: 250 A
VOLTAGE: 480 Delta | 3 PHASE 3 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: SWBD M1 | SCCR: 50 kA | CALCULATED AVAILABLE FAULT...: 40.1 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
CHILLED WATER PUMP LT-1		30 A 3	1	3.05			3.00			2	3 20 A		AT-C001, 1001 & 1002 - LOBBY
--	--	-- --	3		3.05			3.00		4	-- --	--	--
--	--	-- --	5			3.05			3.00	6	-- --	--	--
CHILLED WATER PUMP LT-2		30 A 3	7	3.05			3.67			8	3 20 A		AT-1012 - STAGING 1012
--	--	-- --	9		3.05			3.67		10	-- --	--	--
--	--	-- --	11			3.05			3.67	12	-- --	--	--
DOAS-1		40 A 3	13	6.10			2.17			14	3 15 A		AT-C003-1 & 2 - LEVEL 1 CORR
--	--	-- --	15		6.10			2.17		16	-- --	--	--
--	--	-- --	17			6.10			2.17	18	-- --	--	--
DOAS ELECTRIC REHEAT		50 A 3	19	8.67			--			20	1 --		SPACE
--	--	-- --	21		8.67			--		22	1 --		SPACE
--	--	-- --	23			8.67			--	24	1 --		SPACE
FCU-1018A		15 A 3	25	2.03			--			26	1 --		SPACE
--	--	-- --	27		2.03			--		28	1 --		SPACE
--	--	-- --	29			2.03			--	30	1 --		SPACE
FCU-1015		15 A 3	31	2.03			--			32	1 --		SPACE
--	--	-- --	33		2.03			--		34	1 --		SPACE
--	--	-- --	35			2.03			--	36	1 --		SPACE
CUH-C120		15 A 3	37	1.00			9.00			38	3 60 A		GEN AUX HVL TGPLA MTS
--	--	-- --	39		1.00			0.00		40	-- --	--	--
--	--	-- --	41			1.00			0.00	42	-- --	--	--

	A	B	C
PHASE SUBTOTAL (kVA)	34.76 kVA	34.76 kVA	34.76 kVA
PHASE SUBTOTAL (AMPS)	125 A	125 A	125 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	67.68 kVA	100%	67.68 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	36.60 kVA	125% LARGEST, 100% OTHER	41.18 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	104.28 kVA		108.86 kVA
TOTAL AMPS	125 A		131 A

2NPL1

MAIN TYPE: MCB | MAIN RATING: 100 A | BUS RATING: 100 A
VOLTAGE: 120/208 Wye | 3 PHASE 4 WIRE | MOUNTING: Recessed | ENCLOSURE: Type 1
LOCATION: LEVEL 02,LAB... | FED FROM: 1NPL1 | SCCR: 10 kA | CALCULATED AVAILABLE FAULT...: 4.4 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
MICROWAVE - BRK RM #2001		20 A 1	1	0.18			0.18			2	1 20 A		REC - AIRLOCK #2015
COFFEE - BRK RM #2001		20 A 1	3		0.18			0.18		4	1 20 A		REC - HPC(RESERVED) #2016A
FRIDGE - BRK RM #2001	GF	20 A 1	5			0.18			0.90	6	1 20 A		REC - NOC #2014 WEST
PRINTER - COPY/PRINT #2002B		20 A 1	7	0.18			0.90			8	1 20 A		REC - NOC #2014 EAST
REC - #2001, #2002B COUNTERTOP		20 A 1	9		0.36			0.18		10	1 20 A		REC - NOC #2014 DED NORTH
REC - OPEN OFFICE #2002		20 A 1	11			1.26			0.18	12	1 20 A		REC - NOC #2014 DED SOUTH
REC - PRIV. OFFICE #2003		20 A 1	13	1.26			0.36			14	1 20 A		REC - SHELL SPACE #2013
REC - PRIV. OFFICE #2004		20 A 1	15		1.08			0.36		16	1 20 A		REC - IT STORAGE #2012
REC - CLOSET #2002A		20 A 1	17			0.36			0.00	18	1 20 A		SPARE
REC - PUBLIC CORR. #C200		20 A 1	19	0.90			0.90			20	1 20 A		REC - ROOF
REC - BR #2005/06/07, JAN #2008/08A		20 A 1	21		1.08			0.90		22	1 20 A		REC - ROOF
WATER FOUNTAIN - CORR. #C201	GF	20 A 1	23			0.36			0.18	24	1 20 A		REC - PUBLIC CORR. #C200 AV
REC - MOTHERS #2009		20 A 1	25	0.36			0.18			26	1 20 A		REC - OPEN OFFICE #2002 AV
REC - CONF. AV #2010B		20 A 1	27		0.18			0.54		28	1 20 A		REC - BRK RM #2001
REC - CONF. #2010 WEST WALL		20 A 1	29			0.72			0.36	30	1 20 A		REC - PUBLIC CORR #C200
REC - CONF. #2010 NORTH AND...		20 A 1	31	1.08			0.90			32	1 20 A		REC - SMR LAB BUILD/TEST #2011
REC - CONF. #2010 SOUTH FLOOR		20 A 1	33		0.72			1.00		34	2 30 A		REC - SMR LAB BUILD/TEST #2011
REC - CONF. #2010 NORTH FLOOR		20 A 1	35			0.72			1.00	36	-- --	--	--
REC - LAB BUILD/TEST #2011		20 A 1	37	0.18			1.00			38	2 30 A		REC - SMR LAB BUILD/TEST #2011
REC - LEADERSHIP CLASS #2016		20 A 1	39		1.08			1.00		40	-- --	--	--
REC - PUBLCI CORR. #C200 SOUTH		20 A 1	41			0.54			0.00	42	1 20 A		SPARE

	A	B	C
PHASE SUBTOTAL (kVA)	8.56 kVA	8.84 kVA	6.76 kVA
PHASE SUBTOTAL (AMPS)	74 A	76 A	56 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	24.16 kVA	100% FIRST 10KVA, 50% OTHER	24.16 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	24.16 kVA		24.16 kVA
TOTAL AMPS	67 A		67 A

1NPHM2

MAIN TYPE: MCB | MAIN RATING: 250 A | BUS RATING: 250 A
VOLTAGE: 480 Delta | 3 PHASE 3 WIRE | MOUNTING: Surface | ENCLOSURE: Type 1
LOCATION: LEVEL 01,CUP ELEC 1010 | FED FROM: SWBD M2 | SCCR: 50 kA | CALCULATED AVAILABLE FAULT...: 40.4 kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP. POLES	CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP. POLES	BRKR NOTES	DESCRIPTION
				LEFT SIDE, kVA			RIGHT SIDE, kVA						
RTU-1 - SUPPLY FAN ARRAY		80 A 3	1	12.20			2.66			2	3 20 A		RTU-1 - RELIEF FAN ARRAY
--	--	-- --	3		12.20			2.66		4	-- --	--	--
--	--	-- --	5			12.20			2.66	6	-- --	--	--
RTU-1 REHEAT		50 A 3	7	10.33			0.73			8	3 15 A		HUMIDIFIER - DOAS-1
--	--	-- --	9		10.33			0.73		10	-- --	--	--
--	--	-- --	11			10.33			0.73	12	-- --	--	--
FCU-2013A - SHELL #2013A		15 A 3	13	2.03			1.67			14	3 15 A		AT-2001/02/03/04 - OPEN OFFICE
--	--	-- --	15		2.03			1.67		16	-- --	--	--
--	--	-- --	17			2.03			1.67	18	-- --	--	--
FCU-2014 - NOC #2014		15 A 3	19	0.31			2.00			20	3 15 A		AT-C110 - STAIR #1
--	--	-- --	21		0.31			2.00		22	-- --	--	--
--	--	-- --	23			0.31			2.00	24	-- --	--	--
FCU-2016A - SHELL #2016A		15 A 3	25	2.03			2.50			26	3 20 A		AT-C200/2009/2010
--	--	-- --	27		2.03			2.50		28	-- --	--	--
--	--	-- --	29			2.03			2.50	30	-- --	--	--
OH BUS (480/277V) - LAB #2011	BL	100 A 3	31	0.00			0.83			32	3 15 A		AT-C203 - LEVEL 2 CORR
--	--	-- --	33		0.00			0.83		34	-- --	--	--
--	--	-- --	35			0.00			0.83	36	-- --	--	--
T-1NPHTB (415/240V) - LAB #2011	BL	125 A 3	37	0.00			1.17			38	3 15 A		AT-2012 - RM #2011 & 2012
--	--	-- --	39		0.00			1.17		40	-- --	--	--
--	--	-- --	41			0.00			1.17	42	-- --	--	--

	A	B	C
PHASE SUBTOTAL (kVA)	38.46 kVA	38.46 kVA	38.46 kVA
PHASE SUBTOTAL (AMPS)	139 A	139 A	139 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	70.80 kVA	100%	70.80 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	44.58 kVA	125% LARGEST, 100% OTHER	53.73 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	115.38 kVA		124.53 kVA
TOTAL AMPS	139 A		150 A

ALABAMA LICENSED PROFESSIONAL ENGINEER WILLIAM D. HENNEN 12/19/2024

HIGH PERFORMANCE COMPUTING AND DATA CENTER

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TUSCALOOSA, ALABAMA

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205.348.3573
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DAVIS ARCHITECTS, INC.
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BIRMINGHAM, AL 35233
205-322-7482
ATTN: SKYLAR HOWARD / COURTNEY PITTMAN

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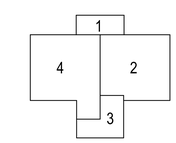
CHAPLE HILL, NC 27517
919-609-6469
ATTN: BART HOGGE

CIVIL ENGINEER
DUNCAN COKER ASSOCIATES, P.C.
302 MERCHANTS WALK, SUITE 250
TUSCALOOSA, AL 35406
205.561.0808
ATTN: JASON COKER / JC WILHITE

STRUCTURAL ENGINEER
MBA ENGINEERS, INC.
300 20TH STREET NORTH, SUITE 100
BIRMINGHAM, AL 35203
205-909-6040
ATTN: ANDREW MARLIN

LANDSCAPE ARCHITECT
JOHNSON AND COMPANY
2413 2ND AVENUE SOUTH
BIRMINGHAM, AL 35233
205-324-4447
ATTN: WILLIAM JOHNSON



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KEY PLAN

REV	DATE	DESCRIPTION
1	09-20-2024	ADDENDUM 5
2	12-19-2024	ASI #6

DATE: 10-11-2024
PHASE: CONFORMING SET
ISSUED FOR: ASI #6
ISSUED BY: DAVIS & GENSLER
PROJECT NO: 4014

SHEET TITLE
ELECTRICAL EQUIPMENT SCHEDULES - PANELBOARDS

DRAWING NO.
E609

NOTE: SHEET CONTAINS COLOR ELEMENTS AND MUST BE PRINTED IN COLOR. ARCHITECT IS NOT RESPONSIBLE FOR ERRORS MADE DUE TO IMPROPER PRINTING