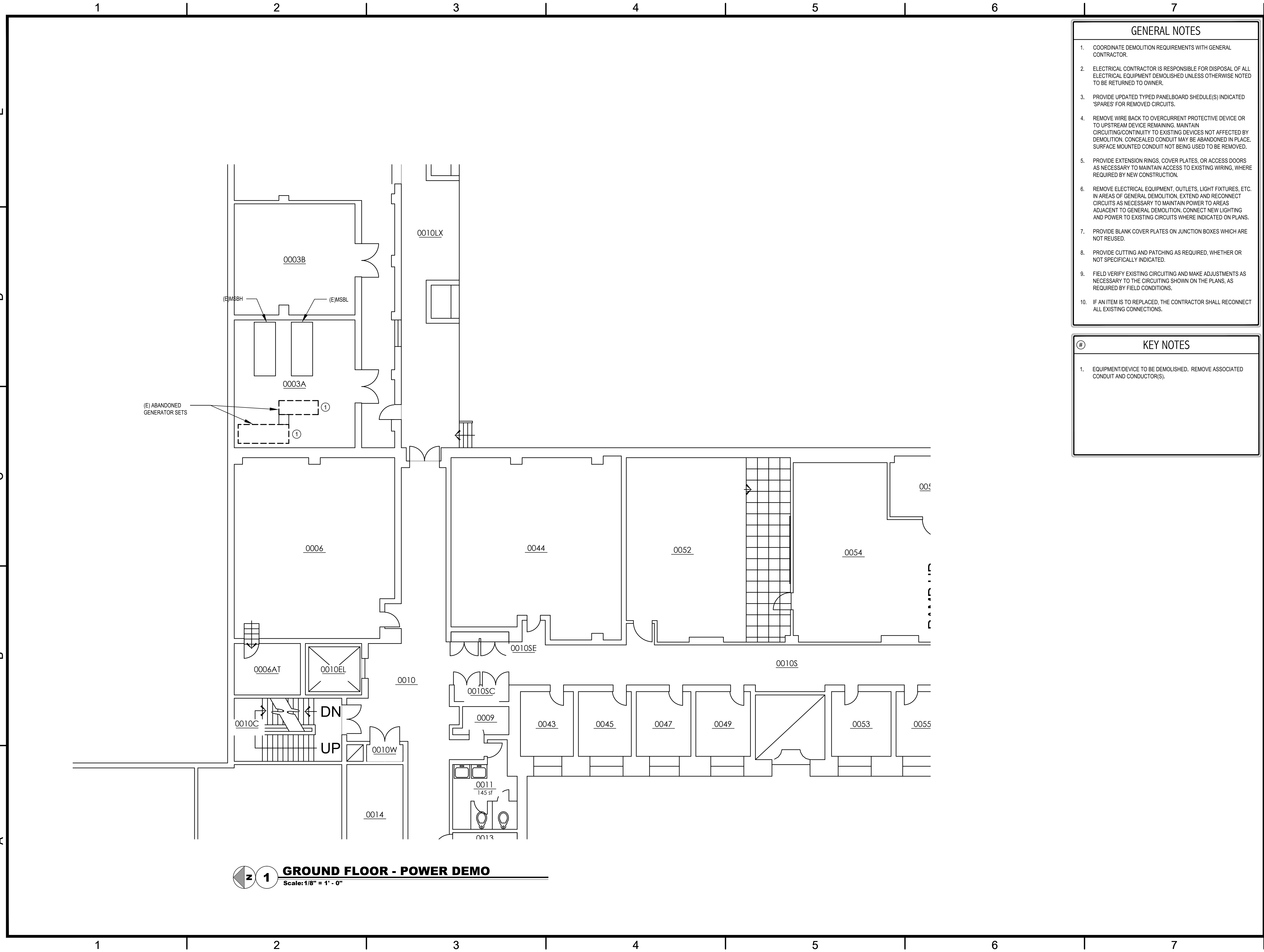




1. COORDINATE DEMOLITION REQUIREMENTS WITH GENERAL CONTRACTOR.
2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL ELECTRICAL EQUIPMENT DEMOLISHED UNLESS OTHERWISE NOTED TO BE RETURNED TO OWNER.
3. PROVIDE UPDATED TYPED PANELBOARD SCHEDULE(S) INDICATED 'SPARES' FOR REMOVED CIRCUITS.
4. REMOVE WIRE BACK TO OVERCURRENT PROTECTIVE DEVICE OR TO UPSTREAM DEVICE REMAINING. MAINTAIN CIRCUITING/CONTINUITY TO EXISTING DEVICES NOT AFFECTED BY DEMOLITION. CONCEALED CONDUIT MAY BE ABANDONED IN PLACE. SURFACE MOUNTED CONDUIT NOT BEING USED TO BE REMOVED.
5. PROVIDE EXTENSION RINGS, COVER PLATES, OR ACCESS DOORS AS NECESSARY TO MAINTAIN ACCESS TO EXISTING WIRING, WHERE REQUIRED BY NEW CONSTRUCTION.
6. REMOVE ELECTRICAL EQUIPMENT, OUTLETS, LIGHT FIXTURES, ETC. IN AREAS OF GENERAL DEMOLITION. EXTEND AND RECONNECT CIRCUITS AS NECESSARY TO MAINTAIN POWER TO AREAS ADJACENT TO GENERAL DEMOLITION. CONNECT NEW LIGHTING AND POWER TO EXISTING CIRCUITS WHERE INDICATED ON PLANS.
7. PROVIDE BLANK COVER PLATES ON JUNCTION BOXES WHICH ARE NOT REUSED.
8. PROVIDE CUTTING AND PATCHING AS REQUIRED, WHETHER OR NOT SPECIFICALLY INDICATED.
9. FIELD VERIFY EXISTING CIRCUITING AND MAKE ADJUSTMENTS AS NECESSARY TO THE CIRCUITING SHOWN ON THE PLANS, AS REQUIRED BY FIELD CONDITIONS.
10. IF AN ITEM IS TO BE REPLACED, THE CONTRACTOR SHALL RECONNECT ALL EXISTING CONNECTIONS.

1. EQUIPMENT/DEVICE TO BE DEMOLISHED. REMOVE ASSOCIATED CONDUIT AND CONDUCTOR(S).

MSI ENGINEERS
www.msi-engineers.com

Facilities Services	PH 509-335-5571
2425 E. Grimes Way	FAX 509-335-9304
Pullman, Wa. 99164-1150	

COMPUTER ROOM
COOLING

007BA

	04/19/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

DESIGN BY: BMJ

CHECKED BY: BMJ

COPYRIGHT: WASHINGTON STATE UNIVERSITY

GROUND
FLOOR -
POWER DEMO

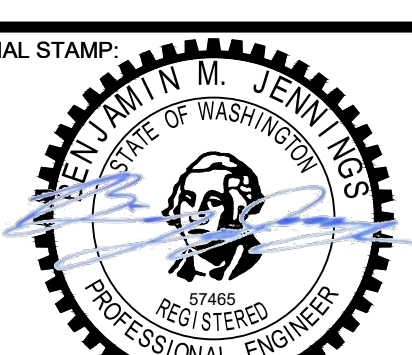
E1.01

SHEET 2 # OF 7 SHEETS

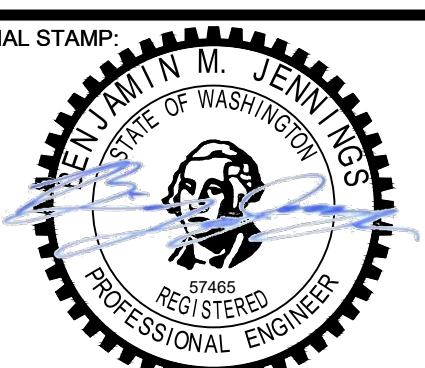


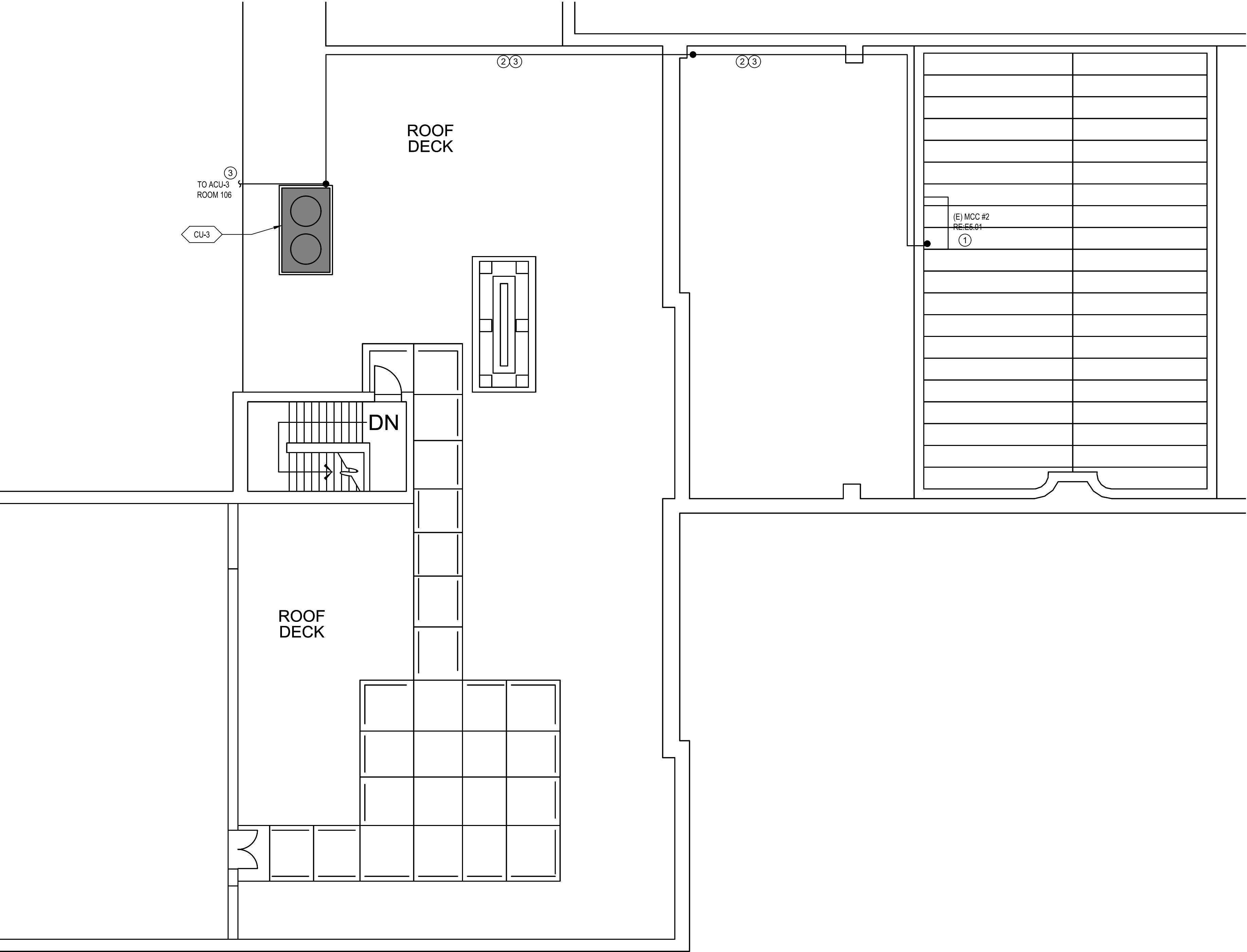
SHEET 3 # OF 7 SHEETS



DESIGN FIRM:  www.msi-engineers.com		
CONSULTANTS:		
PROVISIONAL STAMP: 		
 WASHINGTON STATE UNIVERSITY		
Facilities Services 2425 E. Grimes Way Pullman, Wa. 99164-1150		PH 509-335-5571 FAX 509-335-9304
ELECTRICAL-MECHANICAL ENGINEERING BUILDING (EEME)		
COMPUTER ROOM COOLING		
007BA		
	04/19/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION
CAD DWG FILE:		
DESIGN BY: BMJ		
DRAWN BY: DHB		CHECKED BY: BMJ
PROJECT No.		FILE No. TBD
COPYRIGHT: WASHINGTON STATE UNIVERSITY		
SHEET TITLE GROUND FLOOR - POWER		
E2.01		
SHEET	4	#
		OF
		7
		SHEETS



DESIGN FIRM:		
 www.msi-engineers.com		
CONSULTANTS:		
PROVISIONAL STAMP:		
		
 WASHINGTON STATE UNIVERSITY		
Facilities Services 2425 E. Grimes Way Pullman, Wa. 99164-1150		PH 509-335-5571 FAX 509-335-9304
ELECTRICAL-MECHANICAL ENGINEERING BUILDING (EEME)		
COMPUTER ROOM COOLING		
007BA		
	04/19/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION
CAD DWG FILE:		
DESIGN BY: BMJ		
DRAWN BY: DHB		CHECKED BY: BMJ
PROJECT No.		FILE No. TBD
COPYRIGHT: WASHINGTON STATE UNIVERSITY		
SHEET TITLE		
FIRST FLOOR - POWER		
E2.02		
SHEET	5	# OF 7 SHEETS



#

1. MCC#2 IS LOCATED ON LOWER LEVEL 2 ROOF DECK IN MECHANICAL HOUSE.
2. ROUTE CU-3 POWER CIRCUIT FROM MCC#2, ALONG ROOFTOP, UP EXTERIOR OF BUILDING, AND ALONG LEVEL 3 ROOF DECK TO UNIT CU-3.
3. ROUTE ACU-3 POWER CIRCUIT FROM MCC#2, ALONG ROOFTOP, UP EXTERIOR OF BUILDING, ALONG LEVEL 3 ROOF DECK TO UNIT CU-3. FROM UNIT CU-3 ROUTE POWER CIRCUIT ADJACENT TO NEW REFRIGERANT LINE TO INDOOR ACU-3 UNIT IN ROOM 106.

DESIGN FIRM



CONSULTANTS



WASHINGTON STATE
UNIVERSITY

Facilities Services PH 509-335-5571
2425 E. Grimes Way FAX 509-335-9304
Pullman, Wa. 99164-1150

ELECTRICAL-MECHANICAL ENGINEERING BUILDING (EEME)

COMPUTER ROOM COOLING

007BA

	04/19/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

CAD DWG FILE:

DESIGN BY: BMJ

DRAWN BY: DHB

CHECKED BY: BMJ

PROJECT No.

WASHINGTON STATE UNIVERSITY

SHEET TITLE

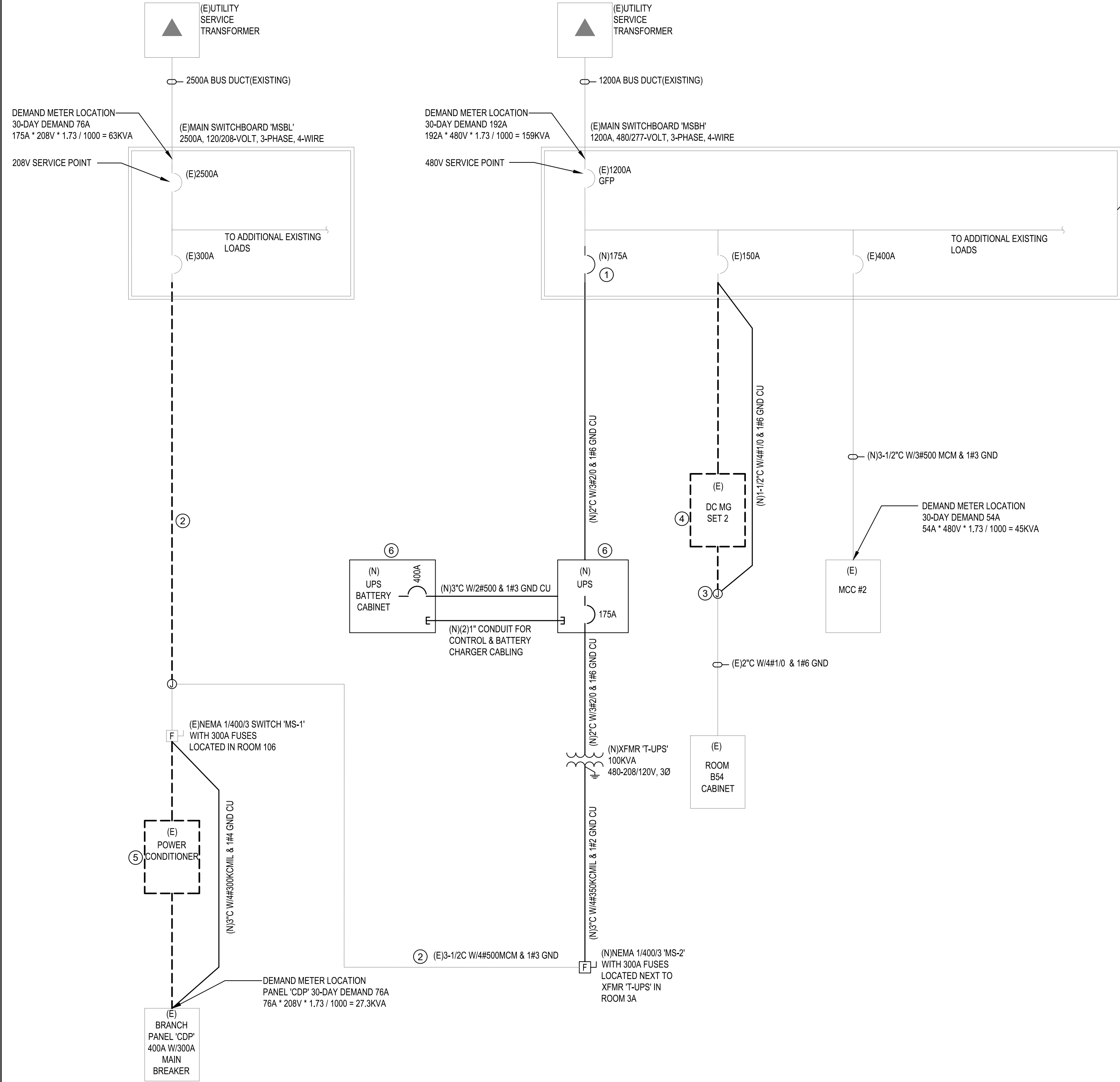
THIRD FLOOR - POWER

E2.04

SHEET 6 # OF 7 SHEET:

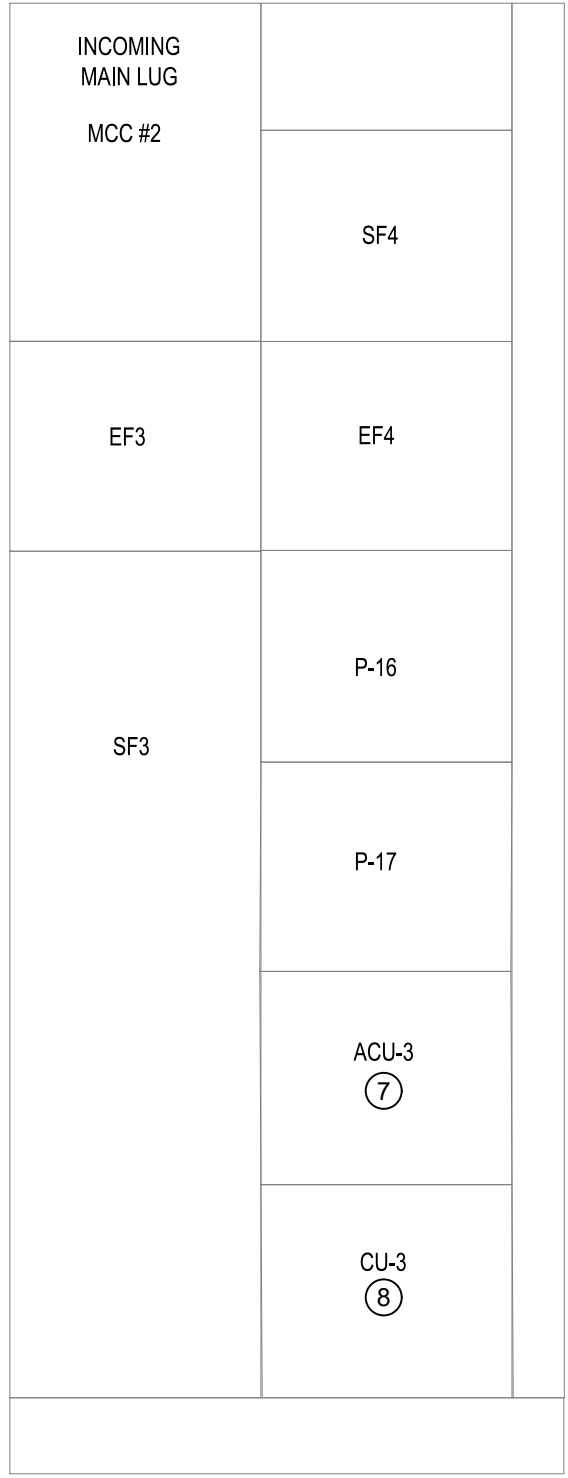
E
D
C
B
A

1 PARTIAL SINGLE LINE
Scale:NOT TO SCALE



MECHANICAL/PLUMBING EQUIPMENT SCHEDULE													
CALLOUT-#	EQUIPMENT DESCRIPTION	VOLT/PHASE	FLA	MCA	MOCP	CONDUIT & WIRE	CONNECTION TYPE	DISCONNECT DESCRIPTION	DISC BY	STARTER DESCRIPTION	STARTER PROVIDED BY	CIRCUIT ID	NOTES
ACU-3	AC UNIT	480/3	41	45	60	1" C 3#6, 1#10G	HARDWIRED	FACTORY	MFR PROVIDED	MFR	MFR	MCC#2	PROVIDE ADDITIONAL 1" C FOR CONTROLS BETWEEN ACU-3 AND CU-3.
CU-3	CONDENSING UNIT	480/3	6	6.3	15	3/4" C 3#12, 1#12G	HARDWIRED	FACTORY	MFR PROVIDED	MFR	MFR	MCC#2	PROVIDE ADDITIONAL 1" C FOR CONTROLS BETWEEN ACU-3 AND CU-3.

2 MCC #2 ELEVATION
Scale:NOT TO SCALE



Peak Demand - MSBH		
DESCRIPTION	KVA	REMARKS
EXISTING 30-DAY PEAK DEMAND	159	METERED DATA BETWEEN 7/18/23 - 8/18/23
NEC 125% ADJUSTMENT FACTOR	199	DEMAND * 1.25 = NEC DEMAND
MCC#2	39	NEW LOAD 'MCC#2' AT 480V, 3-PHASE
CDP	34	RELOCATED LOAD 'CDP' AT 480V, 3-PHASE
TOTAL EXISTING LOAD	272	TOTAL DEMAND LOAD AFTER RENOVATION

Peak Demand - MSBL		
DESCRIPTION	KVA	REMARKS
EXISTING 30-DAY PEAK DEMAND	63	METERED DATA BETWEEN 12/11/23 - 1/11/24
NEC 125% ADJUSTMENT FACTOR	79	DEMAND * 1.25 = NEC DEMAND
LOAD REMOVED	27	LOAD REMOVED
TOTAL LOAD	52	TOTAL DEMAND LOAD AFTER RENOVATION

Peak Demand - CDP		
DESCRIPTION	KVA	REMARKS
EXISTING 30-DAY PEAK DEMAND	27	METERED DATA BETWEEN 3/14/23 - 4/13/23
NEC 125% ADJUSTMENT FACTOR	34	DEMAND * 1.25 = NEC DEMAND
TOTAL EXISTING LOAD	34	NO LOAD ADDED OR SUBTRACTED

Peak Demand - MCC#2		
DESCRIPTION	KVA	REMARKS
EXISTING 30-DAY PEAK DEMAND	45	METERED DATA BETWEEN 6/15/23 - 7/17/23
NEC 125% ADJUSTMENT FACTOR	56	DEMAND * 1.25 = NEC DEMAND
ACU-3	34	LOAD ADDED
CU-3	5	LOAD ADDED
TOTAL LOAD	95	TOTAL DEMAND LOAD AFTER RENOVATION

KEY NOTES

1. PROVIDE NEW BREAKER INDICATED IN EXISTING MAIN SWITCHBOARD.
2. EXISTING 300A FEEDER CONDUIT AND CONDUCTOR(S) FROM 'MSBL' TO 'MS-1' TO BE DISCONNECTED FROM 'MSBL'. EXISTING CONDUCTOR(S) TO BE RE-TERMINATED AT NEW 400A DISCONNECT 'MS-2' AS INDICATED.
3. INTERCEPT AND EXTEND EXISTING ROOM 154 FEEDER IN ELECTRICAL ROOM TO EXISTING BREAKER ONCE DC GENERATOR(S) HAVE BEEN DEMOLISHED AND REMOVED. PROVIDE SPLICE/TAP BOX AS NEEDED.
4. EXISTING DC GENERATOR(S) AND ASSOCIATED EQUIPMENT TO BE REMOVED.
5. EXISTING POWER CONDITIONER TO BE DEMOLISHED AND REMOVED. PROVIDE NEW FEEDER BETWEEN EXISTING DISCONNECT AND PANEL AS INDICATED.
6. UPS IS OWNER FURNISHED CONTRACTOR INSTALLED.
7. PROVIDE 60A SWITCH WITH 60A FUSES IN EXISTING MCC BUCKET FOR ACU-3 POWER CIRCUIT. SEE MECHANICAL SCHEDULE FOR CIRCUIT REQUIREMENTS. IF BID ALTERNATE #1 IS ACCEPTED FUSES ARE TO BE DOWNSIZED TO 50A RATING.
8. PROVIDE 15A SWITCH WITH 15A FUSES IN EXISTING MCC BUCKET FOR CU-3 POWER CIRCUIT.SEE MECHANICAL SCHEDULE FOR CIRCUIT REQUIREMENTS.

DESIGN FIRM:



CONSULTANTS:

PROVISIONAL STAMP:



Facilities Services PH 509-335-5571
2425 E. Grimes Way FAX 509-335-9304
Pullman, Wa. 99164-1150

ELECTRICAL-MECHANICAL
ENGINEERING
BUILDING (EEME)

COMPUTER ROOM
COOLING

007BA

	04/19/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

CAD DWG FILE:	
DESIGN BY: BMJ	
DRAWN BY: DHB	CHECKED BY: BMJ
PROJECT No.	FILE No. TBD
COPYRIGHT: WASHINGTON STATE UNIVERSITY	

SHEET TITLE

ELECTRICAL
DETAILS

E5.01

SHEET 7 # OF 7 SHEETS