BLPL

(NEW)
BUSWAY SCHEDULE

SUPPLY FROM: REFER TO ONE-LINE DIAGRAM — VOLTAGE: 240/120 V — A.I.C. RATING: 10,000
MOUNTING: PER PLANS — PHASE: 1 — MAIN TYPE: MLO
LOCATION: ELECTRONICS — WIRE: 3 — MAIN RATING: 225 A
SERVING: GENERAL POWER

CKT	DESCRIPTION	CB TRIP RATING	POLES	A		B		POLES	CB TRIP RATING	DESCRIPTION	CKT
1	PHOTO KIOSK	20 A	1	360 VA	180 VA			1	20 A	RECEPTACLES	2
3	PHOTO WORKSTATION	20 A	1			540 VA	790 VA	1	20 A	SP PRINTER	4
5	DL PRINTER	20 A	1	540 VA	900 VA			1	20 A	WIDE FORMAT PRINTER	6
7	ENT - ENTERTAINMENT TABLE	20 A	1			1080 VA	1080 VA	1	20 A	ENT - ENTERTAINMENT TABLE	8
9	ENT - ENTERTAINMENT TABLE	20 A	1	1080 VA	1080 VA			1	20 A	ENG - ENTERTAINMENT GONDOLA	10
11	ENG - ENTERTAINMENT GONDOLA	20 A	1			720 VA	0 VA	1	20 A	SPARE	12
13	ENG - ENTERTAINMENT GONDOLA	20 A	1	1440 VA	1080 VA			1	20 A	ENG - ENTERTAINMENT GONDOLA	14
15	ENG - ENTERTAINMENT GONDOLA	20 A	1			1080 VA	1080 VA	1	20 A	ENG - ENTERTAINMENT GONDOLA	16
17	ENG - ENTERTAINMENT GONDOLA	20 A	1	1080 VA	1080 VA			1	20 A	ENG - ENTERTAINMENT GONDOLA	18
19	ENG - ENTERTAINMENT GONDOLA	20 A	1			1080 VA	1080 VA	1	20 A	ENG - ENTERTAINMENT GONDOLA	20
21	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPARE	24
25	SPACE	--	--	0 VA	0 VA			--	--	SPACE	26
27	SPACE	--	--			0 VA	0 VA	--	--	SPACE	28
29	SPACE	--	--	0 VA	0 VA			--	--	SPACE	30
31	SPACE	--	--			0 VA	0 VA	--	--	SPACE	32
33	SPACE	--	--	0 VA	0 VA			--	--	SPACE	34
35	SPACE	--	--			0 VA	0 VA	--	--	SPACE	36
37	SPACE	--	--	0 VA	0 VA			--	--	SPACE	38
39	SPACE	--	--			0 VA	0 VA	--	--	SPACE	40
41	SPACE	--	--	0 VA	0 VA			--	--	SPACE	42
	CONNECTED VA LOAD PER PHASE:			9120 VA		8530 VA					
	CONNECTED AMPERE LOAD PER PHASE:			76 A		71 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
RECEPTACLES	17650 VA	78.33%	13825 VA		
				TOTAL CONNECTED VA:	17650 VA
				TOTAL DEMAND VA LOAD:	13825 VA
				TOTAL CONNECTED AMPERES:	74 A
				TOTAL DEMAND AMPERES:	58 A

NOTES:

L1D3

(NEW)
PANELBOARD SCHEDULE

SUPPLY FROM: REFER TO ONE-LINE DIAGRAM — VOLTAGE: 208Y/120 V — A.I.C. RATING: 10,000
MOUNTING: SURFACE — PHASE: 3 — MAIN TYPE: M.C.B
LOCATION: TYPE 1 — WIRE: 4 — MAIN RATING: 100 A
SERVING: GENERAL POWER

CKT	DESCRIPTION	CB TRIP RATING	POLES	A		B		C		POLES	CB TRIP RATING	DESCRIPTION	CKT
1	TRAINING ROOM RECEPTS	20 A	1	1080 VA	1080 VA					1	20 A	TRAINING ROOM RECEPTS	2
3	TRAINING ROOM RECEPTS	20 A	1			720 VA	1920 VA			1	20 A	BREAKROOM ISLAND PLUGMOLD	4
5	TRAINING ROOM TV	20 A	1					180 VA	1920 VA	1	20 A	BREAKROOM ISLAND PLUGMOLD	6
7	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	8
9	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	10
11	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	12
13	SPACE	--	--	0 VA	0 VA					--	--	SPACE	14
15	SPACE	--	--			0 VA	0 VA			--	--	SPACE	16
17	SPACE	--	--					0 VA	0 VA	--	--	SPACE	18
19	SPACE	--	--	0 VA	0 VA					--	--	SPACE	20
21	SPACE	--	--			0 VA	0 VA			--	--	SPACE	22
23	SPACE	--	--					0 VA	0 VA	--	--	SPACE	24
25	SPACE	--	--	0 VA	0 VA					--	--	SPACE	26
27	SPACE	--	--			0 VA	0 VA			--	--	SPACE	28
29	SPACE	--	--					0 VA	0 VA	--	--	SPACE	30
	CONNECTED VA LOAD PER PHASE:			2160 VA		2640 VA		2100 VA					
	CONNECTED AMPERE LOAD PER PHASE:			18 A		22 A		18 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
RECEPTACLES	6900 VA	100.00%	6900 VA		
				TOTAL CONNECTED VA:	6900 VA
				TOTAL DEMAND VA LOAD:	6900 VA
				TOTAL CONNECTED AMPERES:	19 A
				TOTAL DEMAND AMPERES:	19 A

NOTES:

TRANSFORMER NOTES

DRY TYPE TRANSFORMER NOTES (ALL NOTES APPLY):
A. GROUND IN ACCORDANCE WITH NEC 250-30.
B. TRANSFORMERS SHALL BE 150 DEC C RISE, MAXIMUM, WITH ANSI/NEMA MAXIMUM SOUND LEVELS.
C. CLEARANCE FOR VENTILATING OPENINGS SHALL BE NO LESS THAN THAT REQUIRED ON MANUFACTURERE'S NAMEPLATE. NEC 110-13(B), 450-9 AND 450-11.
D. EQUIPMENT SHALL BE MANUFACTURED BY CUTLER-HAMMER, ABB, SIEMENS OR SQUARE D.
E. PROVIDE TYPE 2 ENCLOSURE FOR INDOOR LOCATIONS AND TYPE 3R FOR OUTDOOR LOCATIONS

COORDINATE ALL CHANGES TO EXISTING ELECTRICAL SERVICE AND METERING WITH UTILITY COMPANY.
STORE ADDRESS: WALMART GENERAL REMODEL
955 OLD WILMINGTON RD.
FAYETTEVILLE, NC 28302

UTILITY COMPANY: PUBLIC WORKS COMM.
CONTACT: JAMES CLINE
PHONE: (910) 223-4523

BUILDING ELECTRICAL SERVICE LOAD SUMMARY

SERVICE DESCRIPTION:
480Y/277V, 3PH

	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
EXISTING PEAK UTILITY LOAD @ 0.9 pf	951.33 KVA	125%	1189.16 KVA
EXISTING PEAK UTILITY AMPACITY	789.98 A		987.48 A
SERVICE AMPACITY	4000 A		4000 A
SPARE AMPACITY	3210.02 A		3012.52 A
LOAD TO BE DELETED IS COMMENSURATE WITH ADDED LOAD			

*PER UTILITY COMPANY BILLING PEAK DEMAND OF: 856.20 KW AUG-19

20A WIRE SIZING NOTES

ALL WIRE SIZES SHOWN ON PLANS ARE INTENDED TO BE MINIMUM ACCEPTABLE WIRE SIZE.

ALL 120V 20A CIRCUITS LONGER THAN 150' AND ALL 277V 20A CIRCUITS LONGER THAN 250' SHALL BE #10W MINIMUM.

FEEDER SCHEDULE

ALL CONDUIT AND CONDUCTOR SIZES ARE BASED ON EMT WITH 40% FILL. 75°C RATED TERMINATIONS AND TYPE THHN/THWN-2 INSULATION. FOR NON-EMT CONDUIT OR TERMINATIONS OR INSULATION TYPES RATED LESS THAN 75°C, MODIFY SIZES ACCORDING TO NEC.

XXX	FEEDER OR GROUND SIZE
43	(3)#8, (1)#10 G, 3/4" C
94	(4)#3, (1)#8 G, 1-1/4" C

ARC FLASH

ARC FLASH HAZARD WARNING LABELING REQUIREMENTS PER NEC ARE PROVIDED BY OWNER UNDER SEPARATE CONTRACT.

KEYNOTES

16.472 FURNISH AND INSTALL NEW CIRCUIT BREAKER (##A-#P) IN EXISTING PANELBOARD INDICATED. E.C. SHALL MATCH MANUFACTURER, TYPE AND AIC RATINGS OF EXISTING CIRCUIT BREAKERS.

POWER INTERRUPTION NOTE

11.30.18

COORDINATE ALL WORK THAT REQUIRES POWER INTERRUPTIONS TO THE STORE WITH THE STORE MANAGER AND THE WALMART CONSTRUCTION MANAGER A MINIMUM OF 48 HOURS IN ADVANCE OF ALL STORE POWER INTERRUPTIONS. IN ADDITION, IF THE MAIN ELECTRICAL SWITCHGEAR REQUIRES WORK AND DOES NOT HAVE A MAIN SERVICE DISCONNECTING MEANS, COORDINATE WITH THE UTILITY COMPANY A MINIMUM OF TWO WEEKS IN ADVANCE OF THE STORE POWER INTERRUPTION. IF STORE IS NOT OPEN 24 HOURS PER DAY, ALL STORE POWER INTERRUPTIONS ARE TO BE ACCOMPLISHED AFTER NORMAL STORE BUSINESS HOURS. PROVIDE TEMPORARY POWER AS REQUIRED PER SPECIFICATIONS. INSTALLATION OF NEW EQUIPMENT SHALL BE COMPLETED AND THE POWER SYSTEM TESTED AND RE-ENERGIZED PRIOR TO THE TIME ESTABLISHED BY THE STORE MANAGER AND THE WALMART CONSTRUCTION MANAGER.

ONE-LINE DIAGRAM LEGEND

11.19.10

NEW EQUIPMENT
EXISTING EQUIPMENT
EQUIPMENT TO BE DEMOLISHED

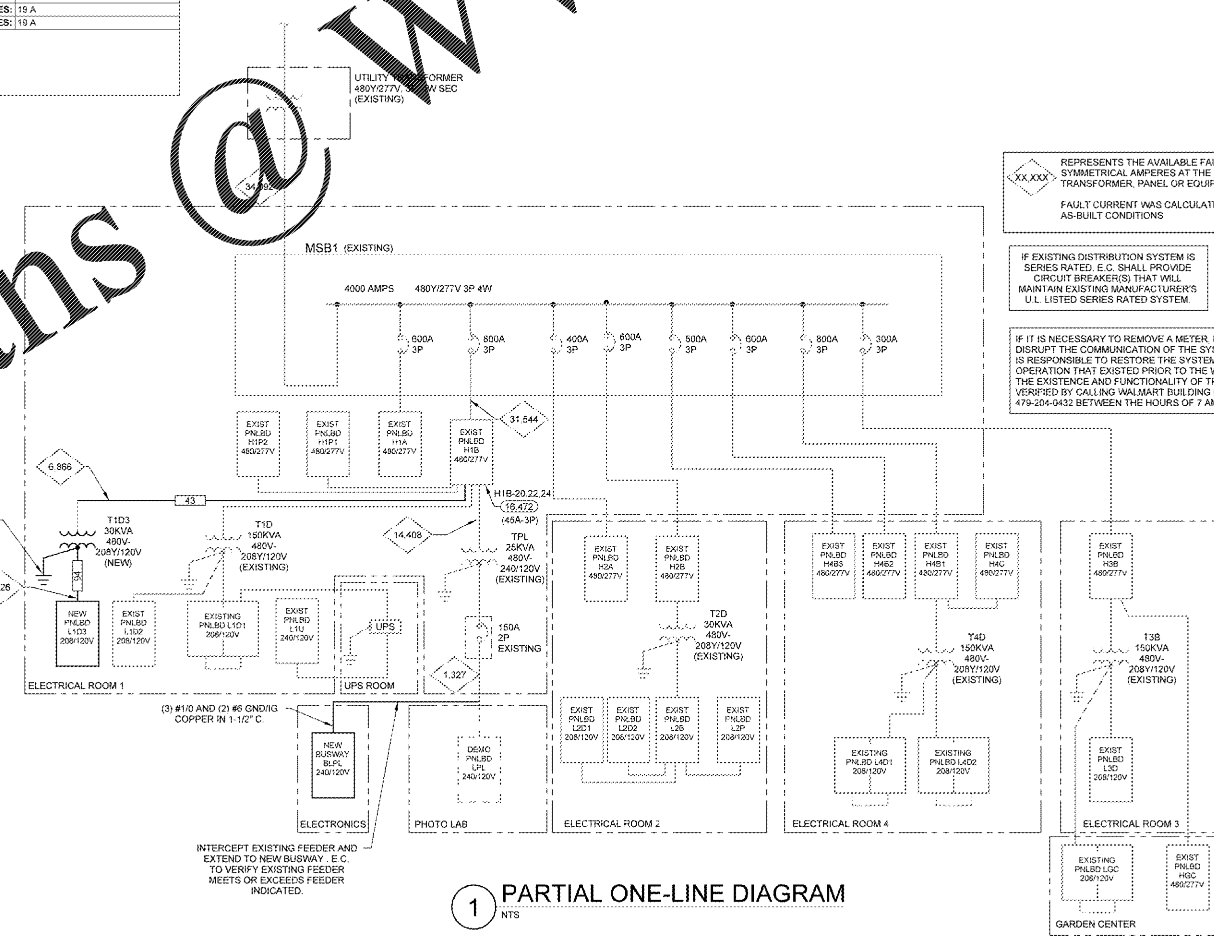
NOTE:
ALL OF THE ELECTRICAL DEVICES SHOWN ON THE RISER DIAGRAM ARE EXISTING AND ARE BASED UPON AS-BUILT DRAWINGS. E.C. SHALL VERIFY THE EXACT EXISTING CONDITIONS, SIZES AND LOCATIONS OF EQUIPMENT PRIOR TO ROUGH-IN. THIS RISER IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ANY NEW DEVICES ARE SHOWN IN BOLD AND ARE NOTED. DURING CONSTRUCTION, THE STORE SHALL STAY OPEN FOR BUSINESS. ANY NECESSARY POWER DOWNTIME SHALL BE SCHEDULED AND APPROVED BY WALMART CONSTRUCTION MANAGER.

PANELBOARD NOTES ()

07.28.15

1. TERMINATE GROUND ON ISOLATED GROUND BUS.
2. INSTALL LOCKING DEVICE (LOCK-OFF FOR MAINTENANCE). LOCKING DEVICE SHALL BE UL LISTED. MANUFACTURER SHALL MATCH EXISTING PANELBOARD MANUFACTURER.
3. INSTALL LOCKING DEVICE (LOCK-ON FOR CRITICAL LOAD).
4. GFI BREAKER FOR PERSONNEL PROTECTION (5MA).
5. GFI BREAKER FOR EQUIPMENT PROTECTION (30MA).
6. CONDUCTOR SIZE HAS BEEN INCREASED FOR VOLTAGE DROP. SIZE EQUIPMENT GROUNDING CONDUCTOR PROPORTIONATELY PER NEC.
7. REFER TO ONE-LINE DIAGRAM FOR AVAILABLE FAULT CURRENT FOR INTERRUPT RATINGS.
8. REFER TO ONE-LINE DIAGRAMS FOR WIRE SIZES.
9. FACTORY WIRED TO LOAD.
10. BREAKER SHALL BE HIGH MAGNETIC TYPE.
11. FIELD VERIFY BREAKER IS NOT CONNECTED TO ANY LOAD. REMOVE CIRCUIT BREAKER AND REPLACE WITH BLANK COVER. UPDATE TYPEWRITTEN CIRCUIT DIRECTORY IDENTIFYING CIRCUIT AS "SPACE". IF AN EXISTING LOAD IS CONNECTED, REFER TO PANELBOARD NOTE (22).
12. DUAL TAP SOLENOID OPERATED BREAKER. CONNECT EMERGENCY/NIGHT LIGHTING TO UNSWITCHED TERMINATION.
13. EXISTING CIRCUIT TO REMAIN.
14. ROUTE CIRCUIT THROUGH CONTACTOR.
15. PROVIDE INTERLOCK WIRING WITH EXHAUST HOOD ANSUL SYSTEM.
16. RELOCATED CIRCUIT FROM EXISTING PANELBOARD.
17. PROVIDE BLANK CIRCUIT BREAKER FILLER PLATE FOR EXPOSED SPACE IN PANELBOARD.
18. PROVIDE U.L. LISTED OVERCURRENT DEVICE TO COORDINATE AND MAINTAIN MANUFACTURER'S SERIES RATED SYSTEM.
19. EXISTING CIRCUIT BREAKER TO REMAIN. VERIFY CONDITION OF CIRCUIT BREAKER TO ENSURE THAT IT IS OPERATIONAL AND MEETS ALL U.L. RATINGS.
20. ROUTE CIRCUIT THROUGH EXISTING LCU CABINET UTILIZING EXISTING RELAY AND CONTROLS. UPDATE LCU IDENTIFICATION SCHEDULE WITH LOAD IDENTIFICATION.
21. SOLENOID OPERATED CIRCUIT BREAKER. REFER TO ENERGY MANAGEMENT PLANS FOR CIRCUIT BREAKER CONTROL.
22. TRACE EXISTING CIRCUIT, IDENTIFY LOAD AND PROVIDE COMPLETE TYPEWRITTEN PANELBOARD IDENTIFICATION SCHEDULE AND PLACE ON INTERIOR OF PANELBOARD DOOR. IF CIRCUIT IS A "SPARE", REFER TO PANELBOARD NOTE (11).

GENERAL NOTES:
1. E.C. SHALL ADD OR REARRANGE CIRCUIT BREAKERS WITHIN PANELBOARDS AS REQUIRED TO MATCH NEW CIRCUIT DESIGNATIONS SHOWN ON DRAWINGS.
2. NEW OVERCURRENT PROTECTIVE DEVICES PLACED IN EXISTING PANELBOARDS OR DISTRIBUTION BOARDS SHALL MATCH THE TYPE AND AIC RATING OF EXISTING OVERCURRENT PROTECTION DEVICES IN SAID BOARD.
3. E.C. SHALL TRACE ALL ELECTRICAL CIRCUITS FOR ALL EXISTING ELECTRICAL PANELBOARDS AFFECTED BY THE REMODEL AND IDENTIFY LOADS ON EACH CIRCUIT. PROVIDE A COMPLETE TYPEWRITTEN PANELBOARD IDENTIFICATION SCHEDULE FOR ALL AFFECTED PANELBOARDS.
4. ALL OVERCURRENT DEVICES ARE NEW UNLESS NOTED OTHERWISE.



1 PARTIAL ONE-LINE DIAGRAM
NTS

XX,XXX REPRESENTS THE AVAILABLE FAULT CURRENT IN RMS SYMMETRICAL AMPERES AT THE RESPECTIVE TRANSFORMER, PANEL OR EQUIPMENT.

FAULT CURRENT WAS CALCULATED FROM PREVIOUS AS-BUILT CONDITIONS

IF EXISTING DISTRIBUTION SYSTEM IS SERIES RATED, E.C. SHALL PROVIDE CIRCUIT BREAKER(S) THAT WILL MAINTAIN EXISTING MANUFACTURER'S U.L. LISTED SERIES RATED SYSTEM.

IF IT IS NECESSARY TO REMOVE A METER, RTU SERVER, CT OR DISRUPT THE COMMUNICATION OF THE SYSTEM, THE CONTRACTOR IS RESPONSIBLE TO RESTORE THE SYSTEM TO THE SAME LEVEL OF OPERATION THAT EXISTED PRIOR TO THE WORK BEING INITIATED. THE EXISTENCE AND FUNCTIONALITY OF THE SYSTEM SHALL BE VERIFIED BY CALLING WALMART BUILDING PERFORMANCE TEAM AT 479-204-0432 BETWEEN THE HOURS OF 7 AM UNTIL 5 PM CT.

EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

CYNTERGY
810 SOUTH CINCINNATI
SECOND FLOOR
TULSA, OK 74119
918.877.6000
www.cyntergy.com

STIPULATION FOR REUSE
THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE AT FAYETTEVILLE, NC CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 04/15/2020 AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

CONSULTANTS

Walmart
FAYETTEVILLE, NC
STORE NO: 1261-246
JOB NUMBER: USRM-007235 PROTO: 195 PROTO SC

ISSUE BLOCK

CHECKED BY:	DES
DRAWN BY:	BDJ
PROTO CYCLE:	02/28/2020
DOCUMENT DATE:	04/15/2020

DOCUMENTS WITHOUT SIGNATURE AND REQUIRED SEAL OF AOR/EOR ARE NOT FOR CONSTRUCTION

CYNTERGY ENGINEERING, PLLC
CA # P-0894
EXPIRES 06/30/2020
MATTHEW RUTKOWSKI, P.E.
ENGINEER OF RECORD

ELECTRICAL ONE-LINE DETAILS AND SCHEDULES

SHEET: E4

Order Plans @ WWW.LDILine.com