

Order Plans

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**KEYNOTES**

- 16.472 FURNISH AND INSTALL NEW CIRCUIT BREAKER (#BA-#P) IN EXISTING PANELBOARD INDICATED. E.C. SHALL MATCH MANUFACTURER, TYPE AND AIC RATINGS OF EXISTING CIRCUIT BREAKERS.
- 16.477 FURNISH AND INSTALL NEW CIRCUIT BREAKER (#BA-#P) IN EXISTING PANELBOARD INDICATED. PROVIDE CIRCUIT BREAKER LOCKING DEVICE (LOCK-OFF FOR MAINTENANCE). E.C. SHALL MATCH MANUFACTURER, TYPE AND AIC RATINGS OF EXISTING CIRCUIT BREAKERS.

**FEEDER SCHEDULE**

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

XXXX	FEEDER OR GROUND SIZE
105	(4) #8 (1) #8 G, (1) #8 IG, 1-1/4" C
604	(2) 3" C, EACH W/ (4) 3/50 NMW, (1) #1 G
T104	(4) #8 (1) #8 SSBL, 1-1/4" C
T123	(3) #1, (1) #6 SSBL, 1-1/4" C
V053B	(3) #1, (1) #4 G, 1" C

**ONE-LINE DIAGRAM LEGEND**

- 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 DOWN TIME SHALL BE SCHEDULED AND APPROVED BY WALMART CONSTRUCTION MANAGER.

**PANELBOARD NOTES ()**

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-OFF FOR CRITICAL LOAD).
4. GFI BREAKER FOR PERSONNEL PROTECTION (SMA).
5. GFI BREAKER FOR EQUIPMENT PROTECTION (SMA).
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. REMOVE FIELD VERIFY CIRCUIT BREAKER IS NOT SERVING AN EXISTING LOAD. IF NO EXISTING LOAD, REMOVE CIRCUIT BREAKER AND PROVIDE LOCK-OFF DEVICES IF BREAKER IS SERVING A LOAD. IDENTIFY LOAD SERVED. UPDATE CIRCUIT IDENTIFICATION SCHEDULE AS "SPACE" OR INDICATE LOAD SERVED.
12. DUAL TAP SOLENOID OPERATED BREAKER. CONNECT EMERGENCY NIGHT LIGHTING TO UNSWITCHED TERMINATION.
13. EXISTING CIRCUIT AND/OR CIRCUIT BREAKER.
14. ROUTE CIRCUIT THROUGH CONTRACTOR.
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 UL 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 LOU CABINET UTILIZING EXISTING RELAY AND CONTROLS. UPDATE LCUI IDENTIFICATION SCHEDULE WITH LOAD IDENTIFICATION.
21. SOLENOID OPERATED CIRCUIT BREAKER. REFER TO ENERGY MANAGEMENT PLANS FOR CIRCUIT BREAKER CONTROL.
22. EXISTING LOAD - TRACE EXISTING CIRCUIT. IDENTIFY LOAD AND UPDATE CIRCUIT IDENTIFICATION SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN USE, REFER TO PANELBOARD NOTE (11).
23. ROUTE CIRCUIT THROUGH ENCLOSED GFI BREAKER FOR PERSONNEL PROTECTION (SMA).
24. SPARE - FIELD VERIFY CIRCUIT BREAKER IS NOT SERVING AN EXISTING LOAD. IF NO EXISTING LOAD, PROVIDE LOCK OFF DEVICE TO LOCK SPARE BREAKER IN THE OFF POSITION. IF BREAKER IS SERVING A LOAD, IDENTIFY LOAD SERVED. UPDATE CIRCUIT IDENTIFICATION SCHEDULE AS "SPARE" OR INDICATE LOAD SERVED.
25. EXISTING LOAD - TRACE EXISTING CIRCUIT. IDENTIFY LOAD AND UPDATE CIRCUIT IDENTIFICATION SCHEDULE FOR LOAD SERVED. IF CIRCUIT IS NOT IN USE, REFER TO PANELBOARD NOTE (24).

**GENERAL NOTES:**

1. NEW OVERCURRENT PROTECTIVE DEVICES PLACED IN EXISTING PANELBOARDS OR DISTRIBUTION BOARDS SHALL MATCH THE TYPE AND AIC RATING OF EXISTING OVERCURRENT PROTECTIVE DEVICES IN SAID BOARD.
2. E.C. SHALL TRACE ALL ELECTRICAL CIRCUITS FOR EVERY EXISTING PANELBOARD AFFECTED BY THIS PROJECT. IDENTIFY LOADS ON EACH CIRCUIT. PROVIDE A COMPLETE TYPEWRITTEN CIRCUIT IDENTIFICATION SCHEDULE FOR EVERY AFFECTED PANELBOARD.
3. ALL OVERCURRENT DEVICES ARE NEW UNLESS NOTED OTHERWISE.

**SOURCE OF SUPPLY NOTE**

CONTRACTOR TO VERIFY THE FEEDER ORIGINATION POINT SOURCE OF POWER FOR ALL DISTRIBUTION BOARDS, PANELBOARDS, AND BUSWAY AFFECTED BY THE REMODEL SCOPE OF WORK. PROVIDE A LAMINATED PLASTIC NAMEPLATE PER SPECIFICATIONS INDICATING THIS INFORMATION.

EXAMPLES:  
H1A FED FROM MSWB  
L1D FED FROM H1B VIA T1D

**ARC FLASH**

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

**POWER INTERRUPTION NOTE**

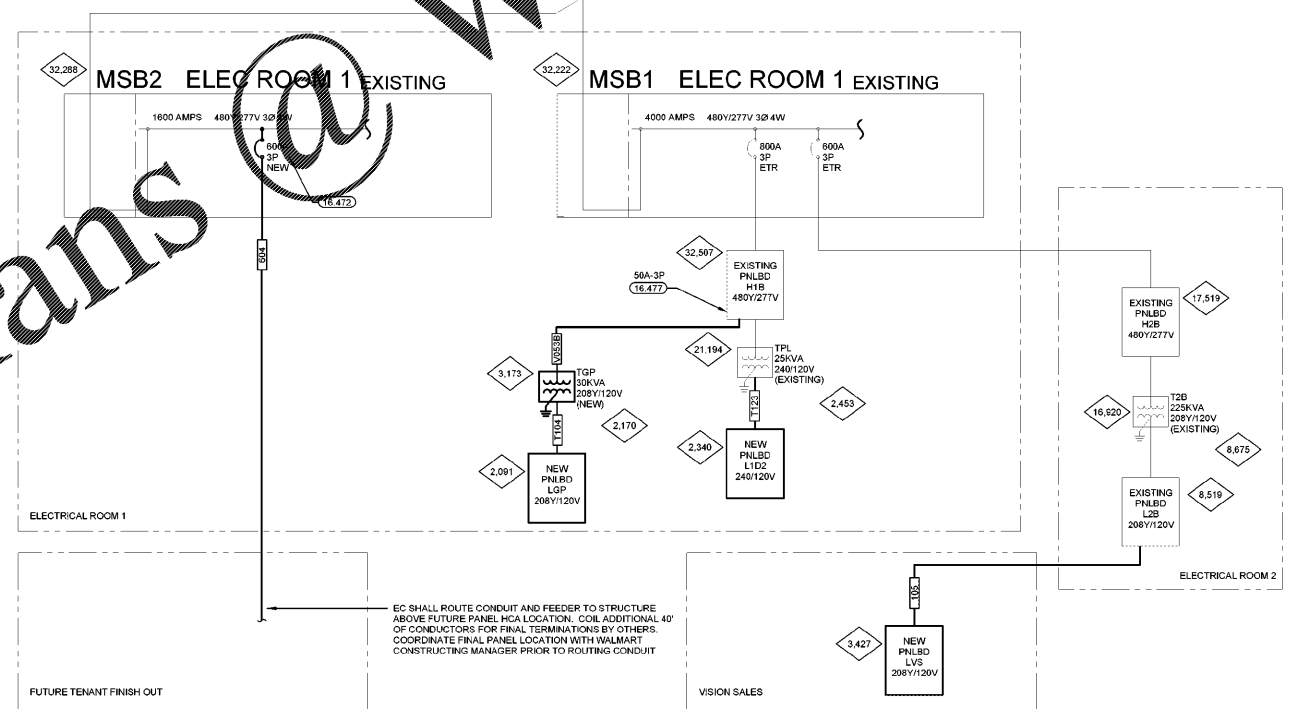
COORDINATE ALL WORK THAT REQUIRES POWER INTERRUPTIONS TO THE STORE WITH THE STORE MANAGER AND THE WALMART CONSTRUCTION MANAGER A MINIMUM OF 48 HOURS IN ADVANCE OF ALL STORE POWER INTERRUPTIONS. IN ADDITION, IF THE MAIN ELECTRICAL SWITCHGEAR REQUIRES WORK AND DOES NOT HAVE A MAIN SERVICE DISCONNECTING 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.

REPRESENTS THE AVAILABLE FAULT CURRENT IN RMS SYMMETRICAL AMPS AT THE RESPECTIVE TRANSFORMER, PANELBOARD, OR EQUIPMENT.

FAULT CURRENT CALCULATIONS ARE BASED ON AVAILABLE CURRENT OF 33,914 AMPS AT SECONDARY TERMINALS OF TRANSFORMER BY ASSUMING A 1,500KVA TRANSFORMER WITH 5.32% IMPEDANCE AND INFINITE PRIMARY.

EXISTING SUBMETERING. IF IT IS NECESSARY TO REMOVE A METER, RTU SERVER, CT OR DISRUPT THE COMMUNICATION OF THE SUBMETERING SYSTEM IN ANY WAY, THE CONTRACTOR IS RESPONSIBLE TO RESTORE OPERATION THAT EXISTED PRIOR TO THE WORK BEING INITIATED. THE EXISTENCE AND FUNCTIONALITY OF THE SUBMETERING SYSTEM SHALL BE VERIFIED BY CALLING WALMART BUILDING PERFORMANCE TEAM AT 479-264-0432 BETWEEN THE HOURS OF 7 AM AND 5 PM CENTRAL TIME.

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



**ONE-LINE DIAGRAM**

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 THEMSELVES 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.

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**ISSUE BLOCK**

NO.	DESCRIPTION	DATE

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NOT FOR CONSTRUCTION

**ELECTRICAL ONE-LINE DETAILS AND SCHEDULES**

SHEET: **E4**

WILLIAM R. HANSTON