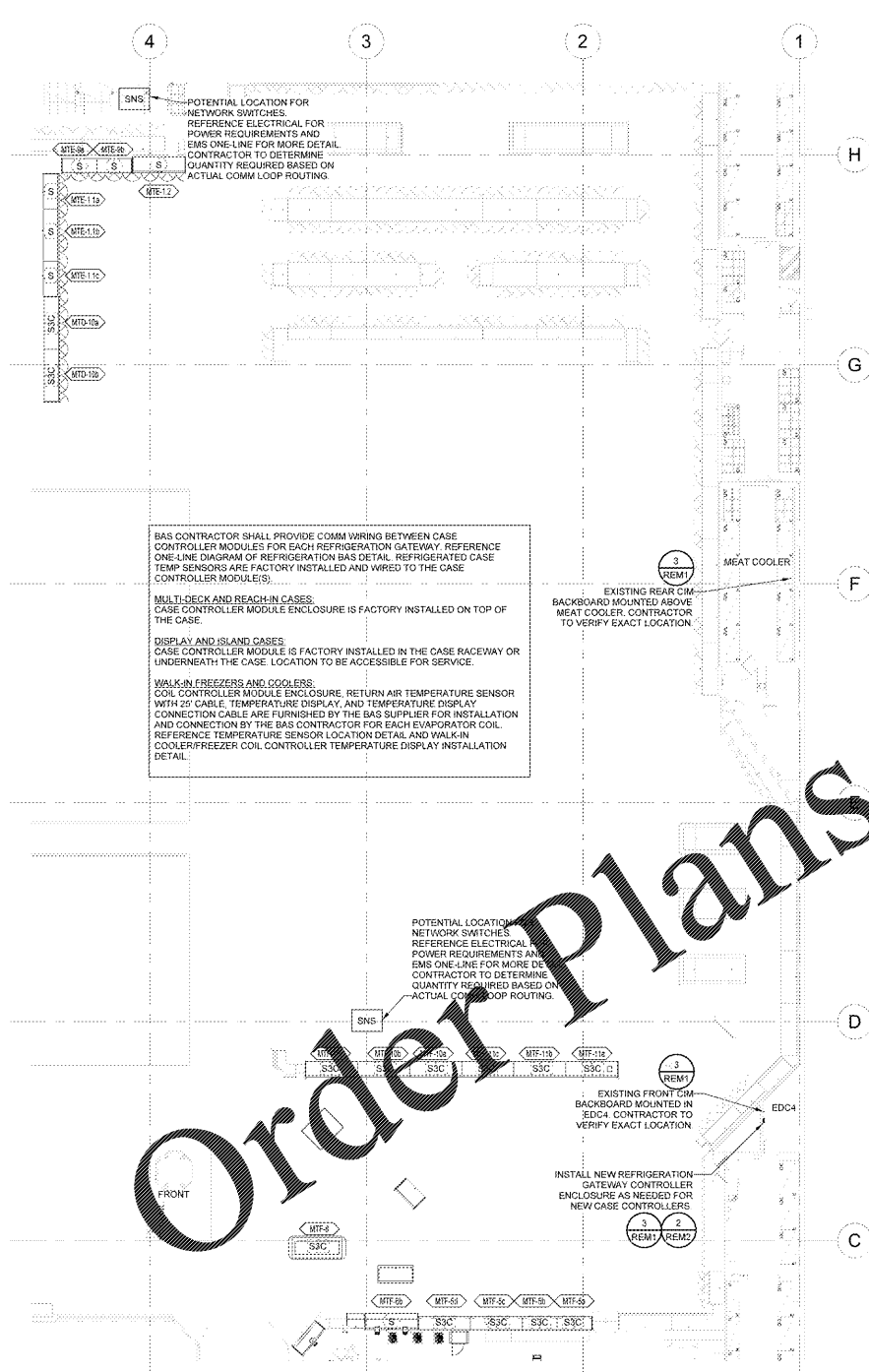


2 UPC ENERGY MANAGEMENT PLAN
1/8" = 1'-0"



1 REFRIGERATION ENERGY MANAGEMENT PLAN
1/8" = 1'-0"



OWNER FURNISHED REFRIGERATION CONTROLS EQUIPMENT

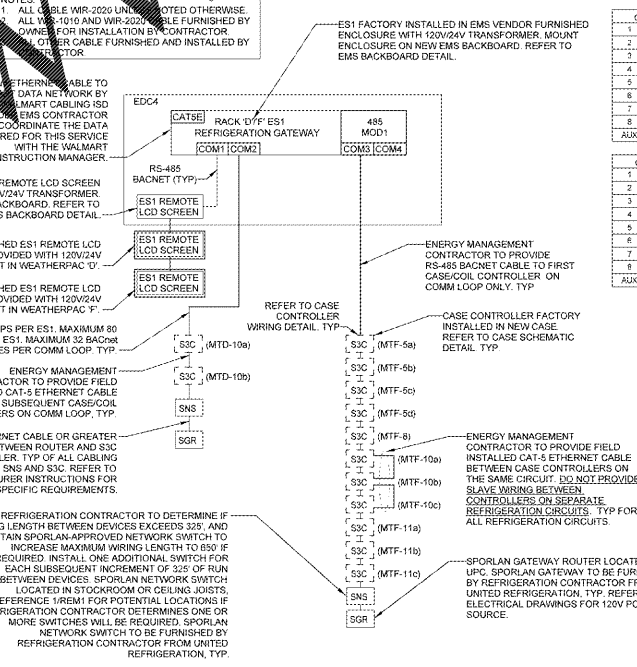
VENDOR	VENDOR SAP #	Type	QTY
NOVAR	1000211054	Novar ES1 w/ 24VAC	1

EMS ONE-LINE AND SCHEDULE NOTES

E	EXISTING EMS DEVICE, SENSOR, OR WIRE FOR REUSE
RL	EXISTING EMS DEVICE OR SENSOR TO RELOCATE AND RECONNECT. INSTALL NEW CABLE FOR RELOCATED DEVICE OR SENSOR AS NECESSARY
RD	REDESIGNATED EMS DEVICE OR SENSOR
RP	REPLACED EMS DEVICE OR SENSOR
N	NEW EMS DEVICE OR SENSOR
FI	NEW FIELD INSTALLED EMS DEVICE, SENSOR, OR WIRE
FA	NEW FACTORY INSTALLED EMS DEVICE, SENSOR, OR WIRE
M	EMS DEVICE OR SENSOR USED FOR MOUNTING ONLY
DI	DIGITAL INPUT
AI	ANALOG INPUT

WIRE LEGEND

WR-1010	WR-1010 (18-2, 20-2, 22-2, 24-2, 26-2)
WR-001	BLUE CABLE (18-2, 20-2, 22-2, 24-2, 26-2)
WR-200	WR-200 (18-2, 20-2, 22-2, 24-2, 26-2)



3 REFRIGERATION EMS ONE-LINE DIAGRAM (SPORLAN)
NTS

WHERE EXISTING REFRIGERATION CHASES ARE BEING REMOVED, ANY DAMAGED OR IMPROPERLY SUPPORTED EMS CONDUITS WITHIN CHASE SHALL BE REPAIRED OR REPLACED AS REQUIRED. ANY EXISTING EMS CABLES WITHIN CHASE NOT INSTALLED IN CONDUIT SHALL BE RE-ROUTED THROUGH NEW CONDUIT. FINAL APPROVAL BY ARCHITECTURAL DRAWINGS FOR REFRIGERATION CHASES BEING REMOVED.

GENERAL REFRIGERATION EMS NOTES

REM SYMBOLS

E2E	REFRIGERATION NETWORK GATEWAY
ES1	REFRIGERATION NETWORK GATEWAY
EMS	ENERGY MANAGEMENT SYSTEM
TEMP	TEMPERATURE
VFD	VARIABLE FREQUENCY DRIVE
BACKBOARD	BACKBOARD
M	CASE INPUT MODULE
LTA-X	REFRIGERATION CIRCUIT
P	PRESSURE TRANSDUCER
S	TEMPERATURE SENSOR
DTS	DUAL TEMP SWITCH
REL	RELAY IN BOX
C-REF	CONTACTOR
REL IN BOX	RELAY IN BOX (CONTACTOR P)
RI	RACK INPUT MODULE
RO	RACK OUTPUT MODULE
CM	CASE INPUT MODULE
SS	REFRIGERATION CASE/CIRCUIT CONTROLLER (SPORLAN)
SR	SPORLAN GATEWAY ROUTER
SW	SPORLAN NETWORK SWITCH
IO	INPUT/OUTPUT MODULE
R	INTERFACE RELAY
RM	UNIVERSAL INPUT MODULE
MIN	INPUT/OUTPUT MODULE
RCC	RCC CASE/CIRCUIT CONTROLLER (NOVAR)
NEW EQUIPMENT	NEW EQUIPMENT
EXISTING EQUIPMENT	EXISTING EQUIPMENT
FACTORY INSTALLED EQUIPMENT	FACTORY INSTALLED EQUIPMENT

1. EMS CONTRACTOR SHALL CONTACT THE EMS SUPPLIER(S) TO OBTAIN A CURRENT MODULE CONFIGURATION PRINTOUT BEFORE TERMINATING SENSOR LEADS AT INPUT MODULES. THE REQUEST FOR THE CONFIGURATION PRINTOUT SHALL BE MADE PRIOR TO THE INSTALLATION OF EMS CABLES. WIRING TERMINATIONS SHALL BE LANDED ACCORDING TO THE EMS SUPPLIER CONFIGURATION SHEETS.

2. EMS CONTRACTOR SHALL PROVIDE COMPLETED REFRIGERATION SENSOR INPUT VERIFICATION FORMS TO THE EMS SUPPLIER(S) AT THE BEGINNING OF THE REFRIGERATION EQUIPMENT STARTUP. EMS INSTALLER SHALL PROVIDE ASSISTANCE TO THE EMS SUPPLIER(S) FOR SPOT CHECKING OF SENSORS FOR ACCURACY.

3. ALL EMS CABLE ON THE SALES FLOOR SHALL BE ROUTED IN CONDUIT AND CONCEALED FROM VIEW AND ROUTED ALONGSIDE OTHER PIPING OR CONDUIT AS MUCH AS POSSIBLE.

4. EMS CONTRACTOR SHALL BE PRESENT AND AVAILABLE TO RESOLVE ISSUES AND PROVIDE REFRIGERATION STARTUP ASSISTANCE UNTIL COMPLETED BY THE EMS SUPPLIER(S) AND WALMART MECHANICAL CONSTRUCTION MANAGER.

5. DURING REFRIGERATION STARTUP, EMS CONTRACTOR SHALL COMPLETE ALL REFRIGERATION WORK PRIOR TO THE STARTUP OF OTHER EMS INSTALLATION ITEMS.

6. WHEN THE EMS SUPPLIER IS NOT SCHEDULED TO PERFORM THE ON SITE REFRIGERATION STARTUP, THE ENERGY MANAGEMENT CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL CHECKS AND TEST TO ENSURE A FULLY FUNCTIONAL REFRIGERATION CONTROL SYSTEM. CONTACT THE EMS SUPPLIER FOR THE BLANK TEST VERIFICATION FORMS AND INSTRUCTIONS FOR COMPLETING. ALL COMPLETED TEST VERIFICATION FORMS SHALL BE RETURNED TO THE WALMART MECHANICAL CONSTRUCTION MANAGER.

7. REFER TO ARCHITECTURAL DRAWINGS FOR PIPING INSTALLATION AND SEALING REQUIREMENTS FOR DEVICES SHOWN ON COOLER/FREEZER PANELS. DO NOT INSTALL PIPING WITHIN COOLER/FREEZER PANELS.

8. ROUTE ALL UTILITY SERVICE LINES (PIPES AND CONDUIT) WITHIN STUD WALLS WHEREVER POSSIBLE ON COOLER/FREEZER PANELS IN FOOD PREP AREAS WHERE UTILITIES MUST BE EXPOSED. CONTRACTOR TO HAVE THE OPTION OF THE FOLLOWING:

- A. SURFACE MOUNT UTILITIES WITH NON-CORROSIVE ANCHORS. SEAL BOTH SIDES OF PIPE/CONDUIT TO PANEL CONTINUOUSLY WITH SEALANT.
- B. INSTALL UTILITIES 1/2" OFF FACE OF PANEL TO ALLOW FOR CLEANING. USE ONLY NON-CORROSIVE MATERIALS FOR SPACERS AND ANCHORS.
- C. COVER UTILITIES WITH 20 GAUGE STAINLESS STEEL BENT PLATES MOUNTED TO WALL WITH NON-CORROSIVE ANCHORS. APPLY CONTINUOUS SEALANT ALONG EDGES AND JOINTS.

9. REFERENCE ARCHITECTURAL DEMOLITION PLANS FOR FULL EXTENT OF DEMOLITION WORK REQUIRED.

24 HOURS PRIOR TO SHUTTING DOWN ANY REFRIGERATION SYSTEMS, HVAC SYSTEMS OR ENERGY MANAGEMENT CONTROL SYSTEMS, SEND EMAIL TO NSR@WALMART.COM THE E-MAIL SHALL STATE WHAT, WHY, AND WHEN IT IS BEING SHUT DOWN AND HOW LONG IT IS ANTICIPATED TO BE SHUT DOWN. THEN SEND A FOLLOW UP EMAIL TO NSR@WALMART.COM AFTER THE WORK IS COMPLETE AND THE SYSTEM IS BACK UP AND RUNNING.

EMS EQUIPMENT SALVAGE REQUIREMENTS

10. ALL DEMOLISHED NOVAR EMS EQUIPMENT SHALL BE RETURNED TO WALMART MECHANICAL SERVICES CONSTRUCTION MANAGER. EQUIPMENT TO BE RETURNED INCLUDES: EXECUTIVE CONTROLLERS; IOM(S), CIM(S), COM(S), ETC. PROVIDE DOCUMENTATION FOR ALL EQUIPMENT REMOVED IN ACCORDANCE WITH SPECIFICATIONS AND REQUIRED CLOSE-OUT DOCUMENTS.

WALMART
Fayetteville, NC

PROJECT NO: 2024.2.01
GENERAL REFERENCE
JOB NUMBER: #1251

ISSUE BLOCK

NO.	DESCRIPTION	DATE	STATUS

CHECKED BY: KK
DRAWN BY: KP
PROTO: 02/28/2020
PROTO CYCLE: 195 SC
DOCUMENT DATE: 04/15/2020

DOCUMENTS WITHOUT SIGNATURE AND REQUIRED SEAL OF REGISTERED ARE NOT FOR CONSTRUCTION

REFRIGERATION ENERGY MANAGEMENT PLAN

SHEET: **REM1**

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.