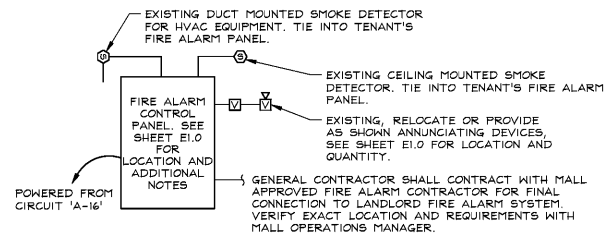


SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO CENTERLINE UNLESS NOTED OTHERWISE
F	FIRE ALARM MANUAL PULL STATION	48"
FV	FIRE ALARM AUDIO/VISUAL SIGNAL DEVICE	80"
FV	FIRE ALARM VISUAL SIGNAL DEVICE	80"
FV	FIRE ALARM AUDIO SIGNAL DEVICE	80"
FV	FIRE ALARM SPEAKER/VISUAL SIGNAL DEVICE	80"
FV	FIRE ALARM SPEAKER SIGNAL DEVICE	80"
M	MAGNETIC DOOR HOLDER VIA FIRE ALARM SYSTEM	48"
FACP	FIRE ALARM CONTROL PANEL	AS REQUIRED
FAAP	FIRE ALARM REMOTE ANNUNCIATOR PANEL	AS REQUIRED
FABP	FIRE ALARM BOOSTER PANEL	AS REQUIRED
FJ	FIRE ALARM JUNCTION BOX	AS REQUIRED
FD	FIRE ALARM DUCT MOUNTED SMOKE DETECTOR	---
RA	REMOTE ALARM/TEST SWITCH FOR DUCT DETECTOR	AS REQUIRED
CD	CEILING MOUNTED SMOKE DETECTOR	---
FW	FIRE ALARM WATER FLOW SWITCH	AS REQUIRED
FT	FIRE ALARM TAMPER SWITCH	AS REQUIRED
FR	FIRE ALARM RELAY	AS REQUIRED
DC	DIGITAL COMMUNICATOR	AS REQUIRED
(E)	EXISTING	---
(R)	RELOCATED	---
(C)	CEILING MOUNTED	---



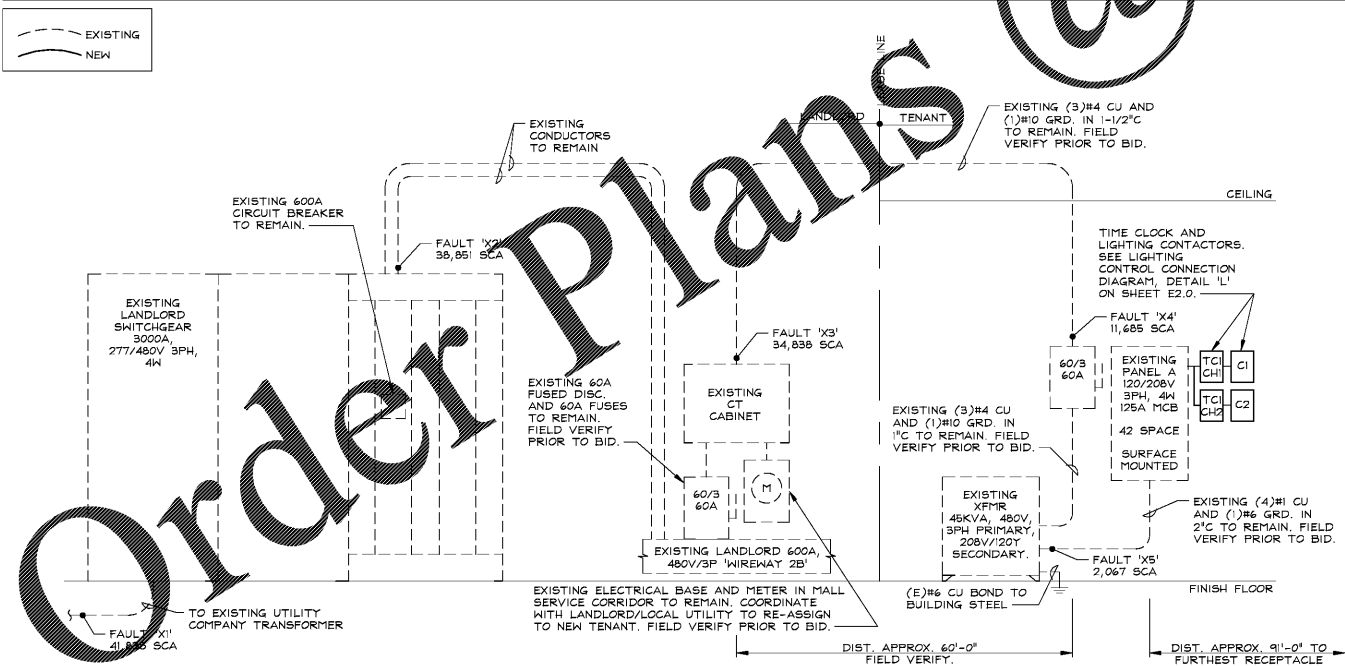
FIRE ALARM RISER NOTES:

- SEE SHEET E1.0 FOR ACTUAL NUMBER OF DEVICES, AND ADDITIONAL NOTES.
 - ALL MATERIALS SHALL BE NEW AND BEAR UL LABELS.
 - SUPPLY SHOP DRAWINGS FOR FIRE ALARM SYSTEM TO LOCAL AUTHORITY FOR APPROVAL PRIOR TO INSTALLATION.
 - FURNISH AND INSTALL ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE INSTALLATION AS INDICATED.
 - ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF NEC, NFPA, STATE AND LOCAL CODES.
- FIRE ALARM SEQUENCE OF OPERATION:**
- UPON ALARM SIGNAL FROM ANY INITIATING DEVICE THE FIRE ALARM PANEL SHALL:
 - INITIATE AN ALARM SIGNAL AT TENANT'S PANEL AND LANDLORD'S MAIN FIRE ALARM PANEL.
 - SHUT DOWN TENANT'S HVAC SYSTEM (IF APPLICABLE).
 - INITIATE MALL'S AND TENANT'S HORN/STROBES.
 - ACTIVATE THE TENANT ZONE SMOKE CONTROL EXHAUST SYSTEM AND THE MALL OUTSIDE AIR SUPPLY (IF APPLICABLE).
 - NOTIFY LOCAL FIRE DEPARTMENT OF FIRE EMERGENCY LOCATION.

FIRE ALARM RISER DIAGRAM AND NOTES

RISER DIAGRAM GENERAL NOTES:

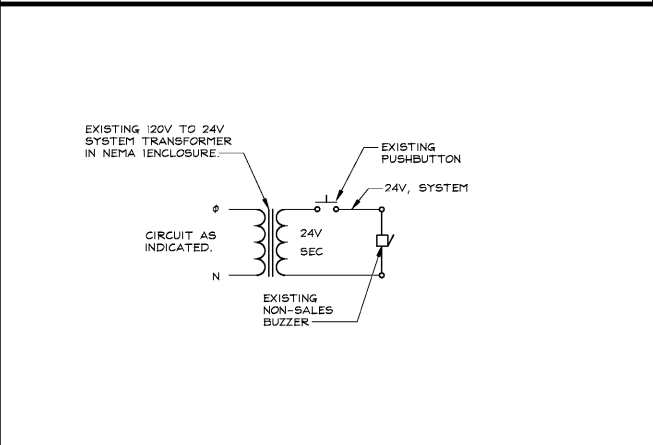
- HVAC CIRCUIT BREAKERS TO BE "HACR" TYPE WHERE REQUIRED BY EQUIPMENT NAMEPLATE PER N.E.C.
- BALANCE ALL PANELS AND ELECTRICAL EQUIPMENT, UNDER LOAD CONDITIONS, TO 1% BETWEEN PHASES A/B, B/C, C/A REGARDLESS OF CIRCUITING INDICATED. PROVIDE BALANCE SHEET TO CONSTRUCTION MANAGER AT PUNCHLIST.
- PROPER CLEARANCE MUST BE MAINTAINED ABOVE ELECTRICAL EQUIPMENT PER N.E.C. FIELD VERIFY EXACT MOUNTING SPACE AVAILABLE IN ELECTRICAL ROOM/AREA PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT.
- MAKE ALL FINAL ELECTRICAL CONNECTIONS FOR A COMPLETE ELECTRICAL DISTRIBUTION SYSTEM.
- ALL CONNECTIONS TO LANDLORD'S SERVICE EQUIPMENT SHALL BE AS DIRECTED BY LANDLORD'S SITE REPRESENTATIVE. TENANT GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TERMINATION EXPENSES.



ELECTRICAL RISER AND NOTES

NOT USED

M MECHANICAL FEEDER/CONNECTION SCHEDULE



R DELIVERY BUZZER DIAGRAM

- SYSTEM SHALL BE GROUNDED TO THE MAIN BUILDING'S GROUNDING SYSTEM.
- DISCONNECT SWITCHES AND PANELS SHALL BE INSTALLED ON PLYWOOD BACKERS.
- TENANT CONTRACTOR MUST VERIFY ELECTRICAL SERVICE, SUB-FEED WIRING, AND PANELS PRIOR TO START OF TENANT'S ELECTRICAL WORK.
- TENANT ELECTRICAL CONTRACTOR SHALL MAKE APPLICATION TO THE (MALL/LOCAL UTILITY) FOR AN ELECTRIC METER AND A METERED ELECTRIC SERVICE IN THE TENANT'S NAME. TENANT ELECTRICAL CONTRACTOR SHALL CONFIRM ALL LOCAL UTILITY GUIDELINES AND REQUIREMENTS PRIOR TO BID, SHALL INCLUDE THE COSTS OF THESE REQUIREMENTS IN THE BID, AND SHALL COMPLY WITH THEM DURING CONSTRUCTION.
- APPLICATION FOR A TEMPORARY ELECTRIC METER AND CONVERSION TO A PERMANENT ELECTRIC METER SHALL BE SUBMITTED TO THE UTILITY UPON AWARD OF CONTRACT. INSTALLATION AND PROVISIONS FOR SAME SHALL COMMENCE WITHIN THE FIRST WEEK OF CONSTRUCTION.
- TENANT CONTRACTOR SHALL LEGIBLY MARK IN FIELD THE MAXIMUM AVAILABLE FAULT CURRENT, DATE FAULT-CURRENT CALCULATION WAS PERFORMED, AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED PER NEC SECTION 110.24.

J PANEL SCHEDULES AND LOAD SUMMARIES

M MECHANICAL FEEDER/CONNECTION SCHEDULE

ITEM	VOLTAGE	HP	KVA	M.C.A.	FEEDERS	TYPE OF CONN	BRANCH BREAKER	REMARKS
(E) AHU-1	208V 1PH	0.75	10.0	53.8	3#6 THHN 1#10 G	(E) 3/4"	(E) DISC. SWITCH	SEE NOTE #3
(E) ACCU-1	208V 1PH	---	---	28.0	EXISTING 3#8 THHN 1#10 G	(E) 3/4"	(E) DISC. SWITCH	SEE NOTE #3
(E) MH-1	120V 1PH	---	1.65	---	EXISTING 2#12 THHN 1#12 G	(E) 3/4"	EXISTING 'AC' TOGGLE SWITCH	SEE NOTE #3

NOTE:
 1. DISCONNECT IS FURNISHED WITH UNIT.
 2. DISCONNECT IS TO BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR (COORDINATE WITH SUB-CONTRACTORS, FOR INSTALLATION).
 3. DISCONNECT IS EXISTING TO REMAIN.

M PANEL WIRING SCHEDULE (3-phase)

Panelboard	Panel Type	Mounting	Voltage	Phase	Wires	Wiring	Notes
1	EXISTING	1	120/208	3	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
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PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
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DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
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DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
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PHASE C	3	120/208	120/208

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

ELECTRICAL RISER AND NOTES

D FIELD VERIFY ALL CONDITIONS

DESIGN DRAWINGS ARE SCHEMATIC. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING OR AWARD OF CONTRACT TO INSPECT EXISTING FIELD CONDITIONS. THE CONTRACTOR SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR FIELD MODIFICATIONS DUE TO EXISTING CONDITIONS.

THE CONTRACTOR SHALL CONTACT THE ARCHITECT, ENGINEER OR TENANT PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT. CLARIFICATIONS MADE BY THE ARCHITECT, ENGINEER OR TENANT AFTER BIDDING WILL BE FINAL AND SHALL BE IMPLEMENTED AT THE CONTRACTOR'S COST.

BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS AND EXISTING. THE CONTRACTOR SHALL ALERT ARCHITECT, ENGINEER OR TENANT OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT.

VERIFY ALL REQUIREMENTS WITH LANDLORD AND LOCAL POWER COMPANY PRIOR TO BID. INCLUDE IN BID THE COST OF ALL WORK REQUIRED FOR A FULLY OPERATIONAL ELECTRICAL SERVICE SYSTEM INCLUDING BUT NOT LIMITED TO ACCESSORIES, FEEDER WIRING, PANEL REQUIREMENTS, UPGRADE OF LANDLORD'S EQUIPMENT, ETC.

TRANSFORMER SUMMARY

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

ELECTRICAL LOAD SUMMARY

DESCRIPTION	PHASE	WIRE SIZE	TERMINAL
PHASE A	1	120/208	120/208
PHASE B	2	120/208	120/208
PHASE C	3	120/208	120/208

Voltage Drop Calculator

Wire Material: Copper
 Wire Size: 400
 Voltage: 400
 Phase: AC 3-phase
 Number of conductors: single set of conductors
 Distance: 60 feet
 Load current: 60 Amps

Result:
 Voltage drop: 1.55
 Voltage drop percentage: 0.39%
 Voltage at the end: 398.45

ELECTRICAL RISER AND NOTES

OWNER:
UNTUCKIT
 SHIRTS DESIGNED TO BE WORN UNTUCKED.
 110 GREENE STREET
 SUITE 400
 DURHAM, NC, 27701

ARCHITECT/ENGINEER:
SHREMSHOCK
 North Carolina Firm
 License Number: #C-3048
 www.shremshock.com

SHREMSHOCK Architects & Engineers, Inc.
 7400 W. Clampus Rd. Ste. 150 New Albany, OH 43054
 1-614-545-4550 T: 614-545-4550

PROJECT LOCATION:
 THE STREETS AT SOUTHPOINT
 6910 FAYETTEVILLE RD
 SPACE#: 1140
 DURHAM, NC 27713

DESIGN TYPE:
 Electrical Design Engineer

REVISIONS:
 REQUIRED BY: DATE

DRAWN BY: JWH
CHECKED BY: KAH

Bid Set TRCI
 04.10.18

DRAWING TITLE:
 ELECTRICAL PANEL SCHEDULES & RISER DIAGRAM

DATE ISSUED:
 03/30/2018

PROJECT NO:
 180088

DRAWING NO:
 E4.0