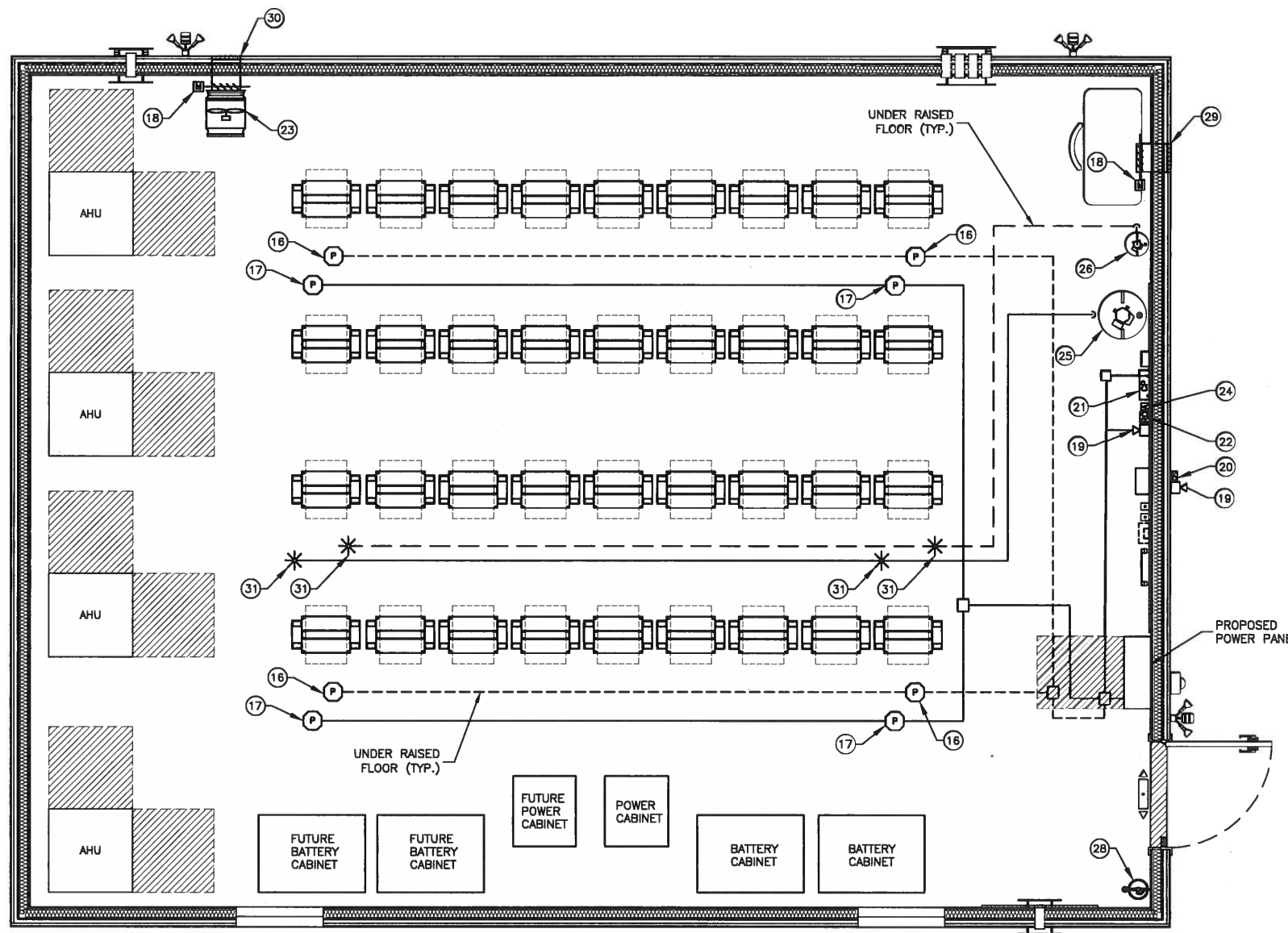


BILL OF MATERIALS		QTY
16	FM 200 SYSTEM SMOKE DETECTOR (UNDER RAISED FLOOR)*	1
17	FM 200 SYSTEM SMOKE DETECTOR (ROOM)*	1
18	GAS EVACUATION DAMPER	2
19	FM 200 SYSTEM CEILING/WALL MOUNT 80cd FIRE STROBE/HORN (WEATHER PROOF)*	2
20	FM 200 SYSTEM FIRE DEPARTMENT LOCKABLE SWITCH*	1
21	FM 200 SYSTEM FIRE ALARM/SUPPRESSION CONTROL PANEL*	1
22	FM 200 SYSTEM ELECTRIC REMOTE CONTROL (PULL STATION)*	1
23	700 CFM, 1/4" SP, 1/4" HP 120,1#	1
24	FM 200 SYSTEM ABORT SWITCH SWITCH - CONSTANT PRESSURE TYPE*	1
25	FM 200 SYSTEM 600# FM 200 CYLINDER*	1
26	FM 200 SYSTEM 80# FM 200 CYLINDER*	1
27	FM 200 SYSTEM 180° DISCHARGE NOZZLE*	1
28	10LB CO2 FIRE EXTINGUISHER AND MOUNTING BRACKET & SIGNAGE	1
29	24"x12" INTAKE AIR LOUVER WITH PLENUM BOX	1
30	18"x12" EXHAUST AIR LOUVER WITH PLENUM BOX	1
31	FM 200 SYSTEM 360° DISCHARGE NOZZLE*	4

* ALL FM 200 FIRE SUPPRESSION SYSTEM EQUIPMENT TO INTERFACE WITH THE KIDDE ARIES CONTROL PANEL BY KIDDE FIRE SYSTEMS (OR APPROVED EQUAL). CONTRACTOR TO VERIFY ALL PART NUMBERS PRIOR TO PURCHASE.



FIRE SUPPRESSION PLAN

SCALE: 3/16"=1' FOR 11"x17"
3/8"=1' FOR 22"x34"



NOTES:

- INTERIOR HEIGHT: 10'-2" HEIGHT USED FOR ROOM VOLUME CALCULATION. RAISED FLOOR HEIGHT: 1'-2" HEIGHT USED FOR RAISED FLOOR VOLUME CALCULATION.
- ALL PROPOSED INTERIOR EQUIPMENT LOCATIONS TO BE FIELD VERIFIED PRIOR TO FM-200 SYSTEM INSTALLATION.
- A.F.F. - ABOVE FINISHED FLOOR.
- KIDDE ARIES FIRE ALARM/SUPPRESSION CONTROL PANEL BY KIDDE FIRE SYSTEMS. CONTRACTOR TO CONTACT ADVANCED SAFETY SYSTEMS FOR ORDERING INFORMATION (978) 532-5737.
- FM-200 CLEAN AGENT SUPPRESSION SYSTEM CONTRACTOR SHALL PROVIDE WORKING PLANS IN ACCORDANCE WITH NFPA 2001 SECTION 5.1.2 FOR REVIEW AND APPROVAL BY THE STATE OF MAINE AND ENGINEER OF RECORD. THE CONTRACTOR TO PROVIDE PIPE FLOW CALCULATIONS, COMPLIANT HANGING BRACING AND SPACING REQUIREMENTS AND BATTERY CAPACITY AND BATTERY CALCULATIONS.
- FIRE ALARM/SUPPRESSION SYSTEM TO BE TIED INTO MAIN EQUIPMENT ROOM CIRCUIT BREAKER & INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- ALL ITEMS SHOWN SCHEMATICALLY, CONTRACTOR TO FIELD VERIFY LOCATION OF EACH ITEM. SMOKE DETECTORS & NOZZLE DISCHARGE PATH SHOULD BE CLEAR OF OBSTRUCTIONS. LOCATION OF FIRE PANEL AND ABORT SWITCHES SHOULD ALLOW EQUIPMENT ROOM TO OPERATE PROPERLY.
- ALARMS AND INDICATORS SHOULD BE USED TO INDICATE THE OPERATION OF THE FM-200 CLEAN-AGENT SYSTEM, HAZARDS TO PERSONNEL, OR FAILURE OF ANY SUPERVISED DEVICE. THE TYPE (AUDIBLE, VISUAL, OR OLFACTORY), NUMBER AND LOCATION OF THE DEVICES SHOULD BE SUCH THAT THEIR PURPOSE IS SATISFACTORY ACCOMPLISHED. AUDIBLE AND VISUAL PRE-DISCHARGE ALARMS SHOULD BE PROVIDED WITHIN THE PROTECTED AREA TO GIVE POSITIVE WARNING OF THE IMPENDING DISCHARGE. THE OPERATION OF THE WARNING DEVICES IS TO BE CONTINUED AFTER THE FM-200 CLEAN-AGENT DISCHARGE UNTIL POSITIVE ACTION HAS BEEN TAKEN TO ACKNOWLEDGE THE ALARM AND PROCEED WITH APPROPRIATE ACTION (NFPA 2001, 1.3.5.1/2). THE EXTERIOR AND INTERIOR NOTIFICATION DEVICES SHOULD BE LABELED ACCORDINGLY.
- SIGN ON DOOR TO READ: "CAUTION EQUIPMENT ROOM PROTECTED BY FM-200 FIRE ALARM/SUPPRESSION SYSTEM. DO NOT ENTER UNTIL VENTILATED". "CONTACT LOCAL FIRE DEPARTMENT IN CASE OF EMERGENCY".
- EXHAUST FAN & INTAKE LOUVERS TO BE TIED INTO MAIN EQUIPMENT ROOM CIRCUIT BREAKER PER MANUFACTURER'S RECOMMENDATIONS.
- FAN TO BE MANUALLY CONTROLLED VIA FIRE DEPARTMENT SWITCH. DAMPERS TO OPEN WHEN FAN START BY GREENHECK OR APPROVED EQUAL.
- VERIZON WIRELESS SHALL CONTACT THE PORTLAND FIRE DEPARTMENT REGARDING THE PLACEMENT OF THE KNOX BOX.
- INSTALL SMOKE DETECTION IN RAISED FLOOR FOR AIR FLOW TERMINATION UPON SMOKE DETECTION.

LEGEND

- PHOTO ELECTRIC SMOKE DETECTOR
- ABORT STATION - CONSTANT PRESSURE TYPE (MOUNTING HT. 4'-0" MAX.)
- 600 LB. CYLINDER WITH 383 LB. 80 LB. CYLINDER WITH 44 LB.
- 360° NOZZLE
- 180° NOZZLE
- FM-200 CONTROL PANEL
- ELECTRIC REMOTE CONTROL PULL STATION
- STROBE/ HORN WITH MANUAL PULL STATION BELOW (MOUNTING HT. 7'-0" MAX.)
- KEY SWITCH
- GAS EVACUATION DAMPER

FM - 200 CALCULATION

HAZARD	DESIGN TEMP	SQ. FT.	ROOM VOL.	% CONCENTRATION	FLOODING FACTOR	TOTAL REQUIRED	TOTAL PROVIDED	CONTAINER SIZE
RAISED FLOOR	70°	1,106	1,280 CUFT	7%	0.0341	44 LB.	44 LB.	60 LBS CYL.
EQUIPMENT ROOM	70°	1,106	11,244 CUFT	7%	0.0341	383 LB.	383 LB.	600 LBS CYL.

NOTES:

- ACTUAL HFC-227EA DESIGN SHALL BE BASED ON NFPA 2001 - CURRENT EDITION AND THE MANUFACTURERS UL LISTING AND FM APPROVAL.
- AGENT QUANTITIES ARE APPROXIMATE AND BASED ON ROOM VOLUME.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE ROOM VOLUME FOR THE CORRECT AMOUNT OF AGENT FOR EACH ZONE BEING PROTECTED.

verizon
WIRELESS

VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**PORTLAND ME
HEAD END**

CONSTRUCTION DRAWINGS

D	11/27/17	FOR CONSTRUCTION
C	10/30/17	90% SUBMITTAL
B	10/04/17	80% SUBMITTAL
A	04/14/17	50% SUBMITTAL

Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: SK

REVIEWED BY: MFT

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50080012

SITE ADDRESS:

1531 CONGRESS ST.
PORTLAND, ME 04102

SHEET TITLE

FIRE SUPPRESSION PLAN

SHEET NUMBER

FS-1