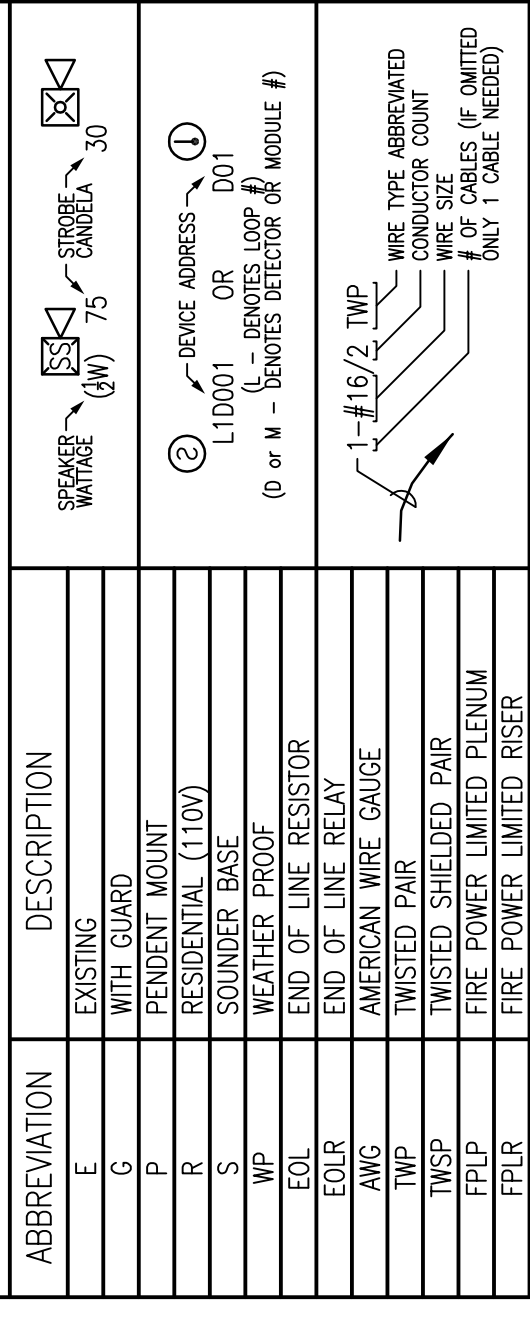


REVISION	0	ISSUED FOR REVIEW & APPROVAL	10/19/2013
DESCRIPTION			
DATE			

RESERVED FOR CITY STAMP

SYMBOL	DESCRIPTION	MOUNTING
FAP	FIRE ALARM CONTROL PANEL	WALL-TOP @ 66"
FAS	FIRE ALARM POWER SUPPLY	FIELD VERIFY
FSA	FIRE SYSTEM ANNUNCIATOR	WALL-TOP @ 66"
FSD	FIRE/SMOKE DAMPER	BY OTHERS
Ⓢ	SMOKE DETECTOR	CEILING
Ⓢ-	DUCT SMOKE DETECTOR	BY OTHERS
Ⓢ-	HEAT DETECTOR	CEILING
Ⓢ-	ADDRESSABLE CONTROL MODULE	FIELD VERIFY
Ⓢ-	ADDRESSABLE MONITOR MODULE	FIELD VERIFY
Ⓢ-	MANUAL PULL STATION	WALL @ 48"
Ⓢ-	CONTROL RELAY (MULTI-VOLTAGE)	FIELD VERIFY
Ⓢ-	ADDRESSABLE RELAY MODULE	FIELD VERIFY
Ⓢ-	KNOX BOX	FIELD VERIFY
Ⓢ-	MAGNETIC DOOR HOLDER	FIELD VERIFY
Ⓢ-	WATER FLOW SWITCH	BY OTHERS
Ⓢ-	VALVE TAMPER SWITCH	BY OTHERS
Ⓢ-	BELL	BY OTHERS
Ⓢ-	CEILING MOUNT STROBE	FIELD VERIFY
Ⓢ-	CEILING MOUNT HORN / STROBE	FIELD VERIFY
Ⓢ-	CEILING MOUNT SPEAKER / STROBE	FIELD VERIFY
Ⓢ-	HORN	WALL @ 10'-0"
Ⓢ-	HORN / STROBE	WALL 80"-96"
Ⓢ-	SPEAKER / STROBE	WALL 80"-96"
Ⓢ-	SPEAKER	WALL @ 90"
Ⓢ-	STROBE	WALL 80"-96"



FIRE ALARM SYMBOL LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED IN THIS PROJECT

GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- WIRING DEPICTED ON THESE PLANS IS SCHEMATIC - ACTUAL WIRE LOCATIONS MAY DIFFER FROM THESE PLANS. WIRING SHALL BE PERFORMED AS ACTUAL BUILDING CONSTRUCTION CONDITIONS ALLOW AND TO MINIMIZE PENETRATIONS THROUGH AREA SEPARATION WALLS AND FIRE WALLS. THE USE OF A RACEWAY IS PERMITTED AS LONG AS NO 110V OR HIGHER VOLTAGE CABLES ARE IN THE SAME RACEWAY.
- FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
- POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED AC BRANCH CIRCUIT.
- POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCK OUTS AND/OR SEPARATE CONDUITS.
- WHEN UTILIZING CLASS "A" CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS OF CLASS "A" CIRCUITS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
- WHEN UTILIZING SHIELDED CABLE TIE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK AT END.
- ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE.
- SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
- LOCATE SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM MECHANICAL DIFFUSERS. WALL-MOUNTED SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 4" AND A MAXIMUM OF 12" FROM CEILING. CEILING-MOUNTED SMOKE DETECTORS SHALL BE MOUNTED ON CEILINGS AND NOT ON THE BOTTOMS OF BEAMS OR JOISTS.
- PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS. PROVIDE ALL REQUIRED SYNC MODULES. PROVIDE A MULTI-SYNC MODE SLAVE CONNECTION BETWEEN ALL SYNC MODULES.
- VERIFY ALL FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES WITH FIRE ALARM CONTRACTOR.
- UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION.
- PROVIDE OFF-SITE MONITORING AS REQUIRED BY THE INTERNATIONAL FIRE CODE, SECTION 907.15 AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- INSTALLING CONTRACTOR SHALL, PHYSICALLY, LABEL ALL INITIATING DEVICES AND NOTIFICATION APPLIANCE CIRCUIT END OF LINE (WHEN WIRING CLASS 'B'). THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.

APPLICABLE CODES:

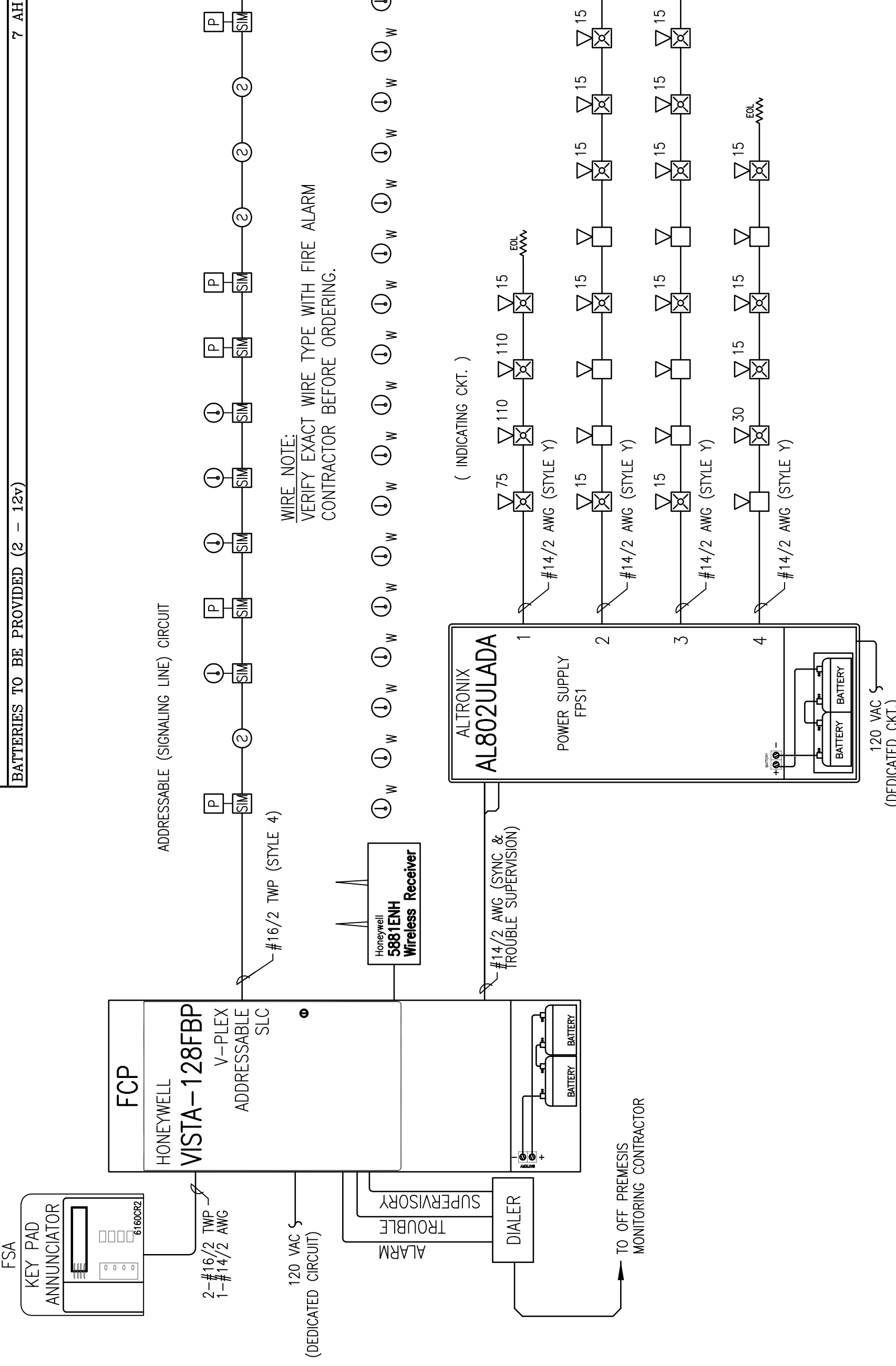
MAINE UNIFORM ENERGY & BUILDING CODE
 PORTLAND CITY CODE, CHAPTER 10, FIRE PREVENTION & PROTECTION
 NFPA 1, FIRE CODE, & NFPA 70, LIFE SAFETY CODE

Facility Information		Standby and Alarm Times		Battery Configuration	
Location: 108 SHERMAN STREET		Battery Standby (Hours):	24	Battery Capacity (Ah):	14.3
Account #		Alarm Duration (minutes):	5	Recommended Battery Capacity (Ah) for 48-Hr. Recharge:	14.3
Estimate #					
Date:					

SELECTED PANEL MAXIMUM OUTPUT RATINGS											
Panel:	Vista-128FBP	Standby Power (VA)	1000	Alarm Power (VA)	1700	Peak Power (VA)	470	Standby Current (mA)	1700	Alarm Current (mA)	1500
Calculated Current Draw:	60.4	150	3.10	Calculated Bell Draw:	0	Standby Current (mA)	0	Standby Current (mA)	0	Alarm Current (mA)	150
Power Budget:	7000	10000	10000	Bell Power Budget:	10000	Standby Current (mA)	17000	Current (mA)	17000	Alarm Current (mA)	1500
External Bell Power Req'd (mA):			0.0	Ret. Ut. Power Req'd (mA):			0.0				

Device	Enter Quantity	How many powered by 48V?	Standby (over 48V)	Alarm (over 48V)	Standby (over 48V)	Alarm (over 48V)	Point Poling Loop	Point Poling Loop	Point Poling Loop	Point Poling Loop	Total Standby Current	Total Alarm Current	Total External Current
EXTENDERS	1	0	4.5	150	45	150	45	150	45	150	150	150	150
AUXILIARY POWERED DEVICES	1	0	60	0	0	0	0	0	0	0	60	0	0
PULLING LOOP DEVICES	16	0	0	0	0	0	24	24	24	24	38.4	0	0
515253 SMOKE DETECTOR	13	0	0	2.8	2.8	35.4	0	0	0	0	35.4	0	0

FPSI Battery Calculation		Regulated Load in Standby		Regulated Load in Alarm		Battery Requirements	
PROJECT NAME: 108 SHERMAN STREET		Number of Devices	1	Number of Devices	1	Required Standby Time in Hours	24.0000
Required Standby Time: 24 Hours		Current (Amps)	0.09000	Current (Amps)	0.17500	Required Alarm Time in Hours	=
Required Alarm Time: 5 Minutes		Total Standby Load	0.09000	Total Alarm Load	0.37800	Decoding Factor	X
						Total Amper Hours (before derating factor)	2.36758
						BATTERIES TO BE PROVIDED (2 - 12V)	2.84110
							7.4H



FIRE ALARM RISER DIAGRAM

SCHEMATIC: NO SCALE

CALCS, LEGEND, MATRIX, NOTES, RISER DIAGRAM

108 SHERMAN STREET
 PORTLAND, MAINE 04101

OPERATIONS MATRIX	
FIRE ALARM INPUT	●
SMOKE DETECTORS	●
HEAT DETECTORS	●
PULL STATIONS	●
FIRE ALARM AC POWER FAIL	●
FIRE ALARM LOW BATTERY	●
OPEN CIRCUIT	●
NAC SHORT CIRCUIT	●
LOSS OF AC TO BUILDING	●
FIRE ALARM INDICATOR	●
ACTIVATE AUDIBLE ALARM	●
ACTIVATE TROUBLE INDICATOR	●
ACTIVATE AUDIBLE TROUBLE INDICATOR	●
TRANSMIT TROUBLE SIGNAL	●
ACTIVATE TROUBLE INDICATOR	●
TRANSMIT TROUBLE SIGNAL	●

DRAWN	JPB UNICAD JOB #13008
CHECKED	WAYNE B. HAWES NCET # 90496
DATE	10/18/2013
REVISION	0
SCALE	NONE