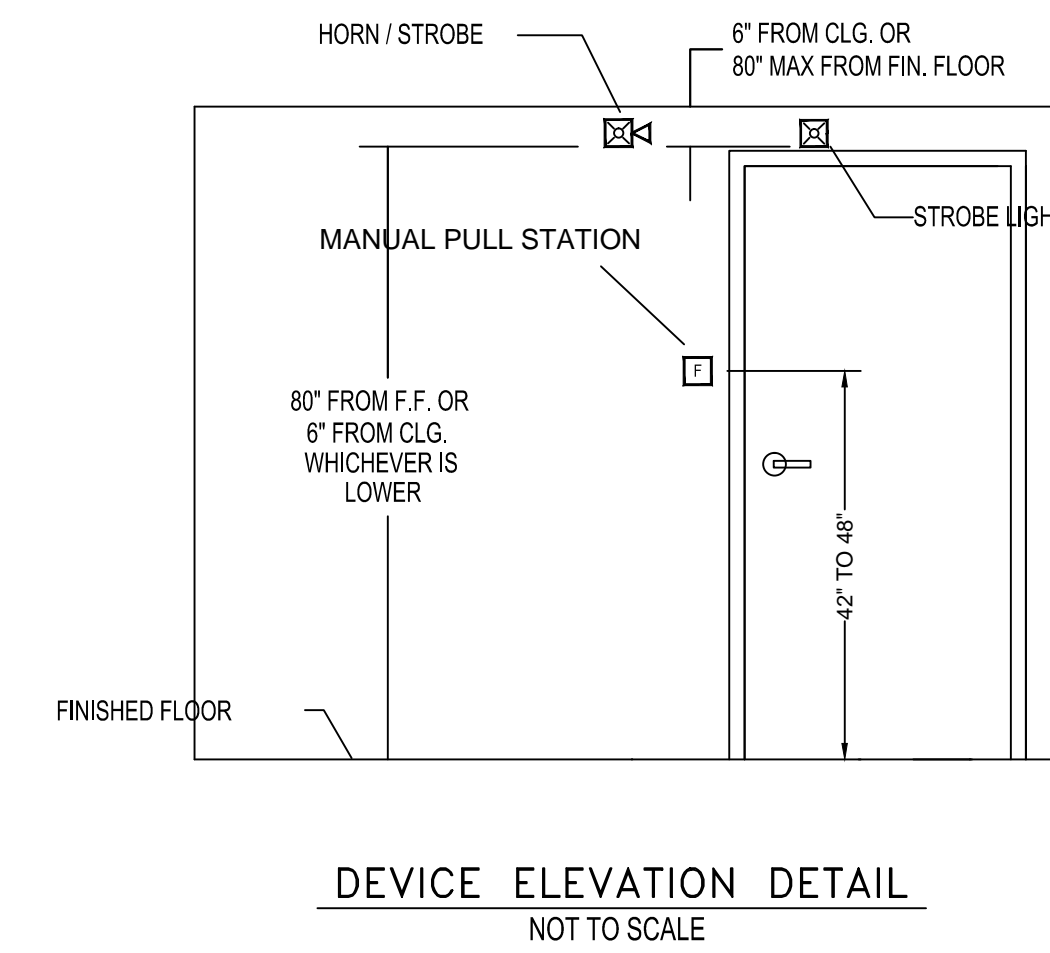


FIRE ALARM WIRING DETAIL  
SCALE: N.T.S.

**FC 922 BATTERY CALCULATIONS**

DESCRIPTION	STANDBY CURRENT (A)	ALARM CURRENT (A)
STANDARD OPERATING UNIT	.125	.125
252 POINT PERIPHERY BOARD	.115	.115
NAC EXPANDER	.025	.025
NAC LOAD (4 CKTS)	.000	3.198
RS-485 MODULE	.055	.055
REMOTE ANNUNCIATOR (2)	.068	.068
DACT	.025	.025
OH921 SMOKE DETECTOR (9)	.00252	.00252
FDIO422 I/O MODULE	.00100	.00100
MSM-KD/HTRI-M MANUAL STATION (13)	.01820	.01820
HTRI-S SINGLE INPUT MODULE	.00140	.00140
HTRI-D DUAL INPUT MODULE	.00140	.00140
<b>TOTAL CURRENT</b>	<b>.438</b>	<b>3.636</b>
<b>STANDBY TIME (24 HOURS)</b>	<b>10.50 A/hr</b>	
<b>ALARM TIME (5 MINS)</b>		<b>.030 A/hr</b>
<b>A/hr REQUIRED (NO RESERVE)</b>		<b>10.80</b>
<b>BATTERY RESERVE</b>		<b>125%</b>
<b>A/hr REQUIRED WITH RESERVE</b>		<b>13.50</b>
<b>BATTERY SIZE PROVIDED</b>		<b>18 A/hr</b>



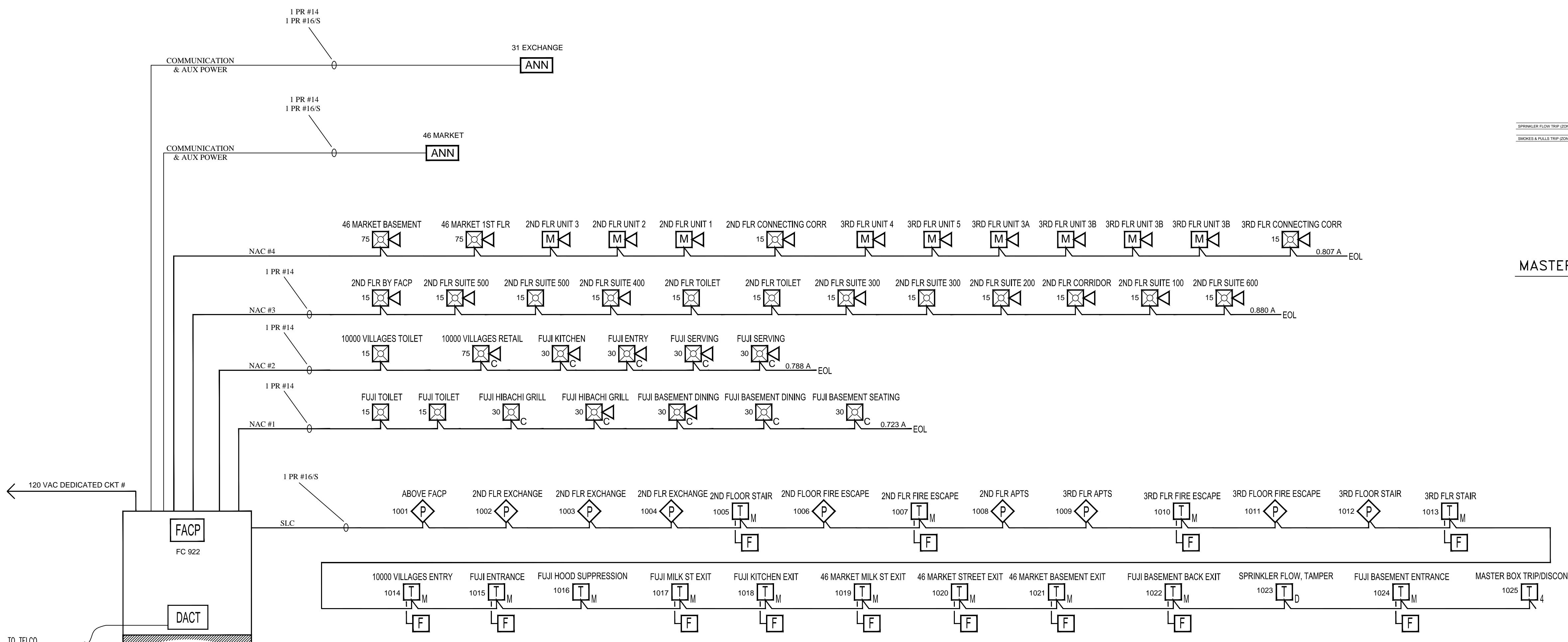
DEVICE ELEVATION DETAIL  
NOT TO SCALE

**SYMBOL LEGEND**

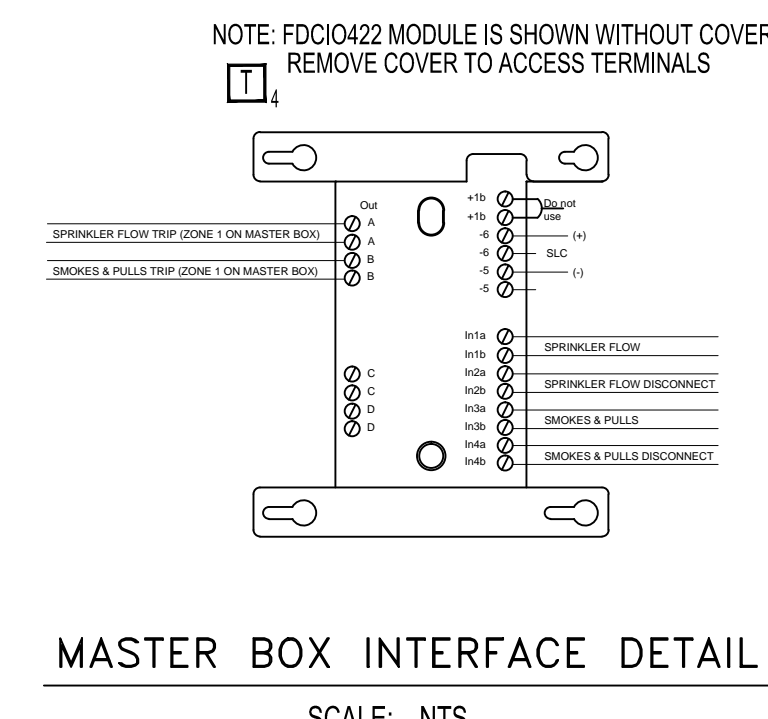
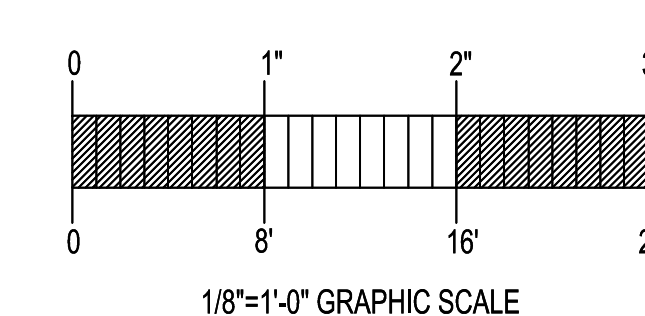
QTY	SYMBOL	DESCRIPTION	MODEL	BACK BOX
1	[FACP]	FIRE ALARM CONTROL PANEL	FC-922	ENCLOSURE
1	[MST]	RADIO MASTER BOX	AES	ENCLOSURE
2	[ANN]	REMOTE ANNUNCIATOR	FT2015-R3	ENCLOSURE
9	[OH921]	SMOKE DETECTOR/BASE	OH921/DB-11	SINGLE GANG OR OCTAGON BOX
13	[Fxx]	MANUAL PULL STATION	MSM-KD/HTRI-M	3.5" DEEP SINGLE GANG
1	[T <sub>M</sub> ]	SINGLE INPUT MINI MONITOR MODULE	HTRI-M	-
1	[T <sub>D</sub> ]	DUAL INPUT MONITOR MODULE	HTRI-D	4" SQUARE
2	[T <sub>I</sub> ]	4 INPUT/OUTPUT MODULE	FDIO422	4 11/16" SQUARE
7	[ZHR]	MULTI-CANDELA STROBE	ZR-MC-R	4" SQUARE
3	[ZHR]	MULTI-CANDELA STROBE (CEILING)	MODEL	4" SQUARE
12	[ZHR]	MULTI-CANDELA HORN/STROBE	ZH-MC-R	4" SQUARE
7	[ZHR]	MULTI-CANDELA HORN/STROBE (CEILING)	ZH-MC-CR	4" SQUARE
9	[MH]	MINI HORN	MH-R	4" SQUARE
1	[KB]	KNOX BOX	MODEL	3.5" DEEP SINGLE GANG

31 EXCHANGE/46 MARKET ST FIRE ALARM INPUT/OUTPUT MATRIX

System Inputs	31 Exchange	46 Market	10000 Villages	Fuji	3rd Flr Apts	3rd Flr Fire Escape	3rd Flr Stair
Manual Pull Station (Exchange St & Market 3rd & 4th Floor)	X	X					
Manual Pull Station (Market St. Basement & First Floor)	X	X					
Smoke Detector	X	X					
Low Battery			X	X	X	X	X
Loss of AC Power			X	X	X	X	X
Open Circuit			X	X	X	X	X
Short Circuit			X	X	X	X	X
Ground Fault			X	X	X	X	X
Sprinkler Flow	X	X			X	X	X
Sprinkler Tamper	X	X			X	X	X
Hood Suppression	X	X			X	X	X



FIRE ALARM RISER DETAIL  
SCALE: 1/8"=1'



MASTER BOX INTERFACE DETAIL  
SCALE: NTS

**OCCUPANCY CLASSIFICATION**

31 EXCHANGE/46 MARKET ST IS CLASSIFIED AS A MIXED OCCUPANCY. THE BASEMENT & PARTIAL 1ST FLOOR OF 31 EXCHANGE (FUJI RESTAURANT) IS CLASSIFIED AS ASSEMBLY. THE RETAIL SPACE ON THE 1ST FLOOR OF 31 EXCHANGE (10000 VILLAGES) MERCANTILE, AND THE UNOCCUPIED SPACE (BASEMENT & 1ST FLOOR) OF 46 MARKET SHALL BE CONSIDERED ASSEMBLY FOR ANTICIPATION OF FUTURE USE. THE SECOND & 3RD FLOORS OF BOTH BUILDINGS ARE CLASSIFIED AS BUSINESS & RESIDENTIAL. DUE TO THE FACT THAT THERE IS ONLY ONE MEANS OF EGRESS ALL OCCUPIED SPACE OF THE SECOND & 3RD FLOORS ARE CONSIDERED 31 EXCHANGE ST.

**FIRE DEPARTMENT NOTIFICATION**

**MASTER BOX**  
- MASTER BOX SHALL ACTIVATE ON ANY ALARM THROUGHOUT BOTH 31 EXCHANGE & 46 MARKET. ALARM WILL RING INTO PORTLAND FIRE DEPARTMENT AS 31 EXCHANGE ONLY

**CENTRAL STATION**  
- CENTRAL STATION SHALL RECEIVE POINT BY POINT SIGNALS DISTINGUISHING A CONDITION IN 31 EXCHANGE VS 46 MARKET. COORDINATE FINAL ZONE LIST WITH PORTLAND FIRE DEPARTMENT TO ENSURE PROPER DIRECTION IN THE CASE OF A FIRE.

- ALL WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NFPA 70) ARTICLE 760. ALL SUPERVISED CKTS ARE CLASSIFIED AS POWER LIMITED
- EFS TO MAKE ALL FINAL CONNECTIONS IN THE FACP. DO NOT APPLY POWER TO ANY EQUIPMENT UNTIL AN EFS TECHNICIAN IS ON SITE AND HAS AUTHORIZED
- AVOID SPLICING WHERE UNNECESSARY. SYSTEM SHALL BE WIRED DEVICE TO DEVICE AS SHOWN ON FIELD PLANS.
- NO PARALLEL BRANCHING OF WIRING ON SUPERVISED CKTS IS PERMISSIBLE AND POLARITY MUST BE OBSERVED.
- ALL FIELD WIRING MUST BE CHECKED FOR SHORTS AND GROUNDS BEFORE CONNECTIONS TO THE CONTROL PANEL ARE MADE
- RESIDENTIAL UNITS SHALL BE EQUIPPED WITH AUDIBLE HORNS TO ACHIEVE THE NFPA 72 REQUIREMENT OF 75 DB AT THE PILLOW
- WHERE EACH BUSINESS TENANT OCCUPIES SEPARATE LEASED SPACE AUDIBLE/VISUAL NOTIFICATION IS PROVIDED.
- FIRE ALARM SYSTEM IS DESIGNED PER NFPA 101 AND REQUIREMENTS DERIVED FROM INDEPENDENT CODE REVIEW AND LIFE SAFETY EVALUATION DATED 12/11/2013.

GENERAL NOTES	DATE	REVISIONS	REQUIRED APPROVALS	FIRE ALARM SYSTEM
			OWNER STATE FIRE MARSHAL LOCAL FIRE DEPARTMENT	31 Exchange/46 Market PORTLAND, ME
			DRAWN BY CRM	PLANS & DETAILS DWG. NO. 2 OF 2
			CHECKED BY BWB	JOB NUMBER
			CONTRACTOR LICENSE #	SCALE AS SHOWN
				DATE 5/8/2014

