

FIRE DETECTION AND ALARM NOTES:

1. THE FIRE ALARM SYSTEM SHALL BE INSTALLED, TESTED, MAINTAINED PER THE FOLLOWING AND ALL REFERENCED AND ADOPTED CODES AND STANDARDS THEREIN;

- 2010 FLORIDA BUILDING CODE.
- 2008 NATIONAL ELECTRICAL CODE, NFPA-70. 2009 LIFE SAFETY CODE, NFPA-101. FLORIDA SPECIFIC EDITION.
- 2007 NATIONAL FIRE ALARM CODE, NFPA-72.
- 2010 FLORIDA FIRE PREVENTION CODE. ADDITIONAL LOCAL STANDARDS, ORDINANCES AND POLICIES.

2. THE FIRE ALARM SYSTEM SHALL CONSIST OF ALL NECESSARY HARDWARE EQUIPMENT AND SOFTWARE PROGRAMMING TO PERFORM THE FOLLOWING FUNCTIONS:

- 1. FIRE ALARM AND DETECTION OPERATIONS
- 2. GENERAL ALARM: A SYSTEM ALARM SHALL INCLUDE:
- a) INDICATION OF ALARM CONDITION AT THE FIRE ALARM CONTROL PANEL.

b) IDENTIFICATION OF THE ZONE THAT IS THE SOURCE OF THE ALARM AT THE FIRE ALARM CONTROL

c) OPERATION OF AUDIBLE AND VISIBLE NOTIFICATION ON THE EXTERIOR OF THE BUILDING. d) DISPLAY SYSTEM ZONE NUMBER, DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE ZONE. e) A SIGNAL SHALL BE SENT TO THE OWNER'S REMOTE STATION VIA DACT. f) THE DACT SHALL TRANSMIT SEPARATE SIGNALS TO THE OFF SITE MONITORING COMPANY. THEY SHALL BE AS FOLLOWS: ALARM, SUPERVISORY, TROUBLE AND WATER FLOW.

3. THE SYSTEM SHALL BE PROVIDED WITH SUFFICIENT BATTERY CAPACITY TO OPERATE THE ENTIRE SYSTEM UPON LOSS OF NORMAL 120 VAC POWER IN A NORMAL SUPERVISORY MODE FOR A PERIOD OF 24 HOURS WITH 5 MINUTES OF ALARM OPERATION AT THE END OF THIS PERIOD.

4. THE SYSTEM SHALL AUTOMATICALLY TRANSFER TO BATTERY STANDBY UPON POWER FAILURE. ALL BATTERY CHARGING AND RECHARGING OPERATIONS SHALL BE AUTOMATIC.

5. FIRE ALARM SYSTEM WIRING: ALL WIRING TO BE FPLR RATED. WIRING METHODS SHALL BE FPLR WIRE INSTALLED IN CONDUIT. PROTECTION FROM PHYSICAL DAMAGE TO THE WIRE SHALL BE IN ACCORDANCE WITH NFPA 70, WIRING SHALL BE PROTECTED FROM PHYSICAL DAMAGE AS REQUIRED BY NFPA 70; ARTICLES 300 AND 760. WIRE AND CABLE SHALL BE AS FOLLOWS: POWER LIMITED CLASS "B"/STYLE B FOR THE INITIATING DEVICE CIRCUIT (IDC), AND POWER LIMITED CLASS "B"/STYLE "Y" FOR THE NOTIFICATION APPLIANCE CIRCUITS (NAC). WIRE TYPE SHALL BE LISTED FOR ITS INTENDED USE BY AN APPROVAL AGENCY ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION (AHJ) AND SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROPRIATE ARTICLES FROM THE CURRENT APPROVED EDITION OF NFPA 70: NATIONAL ELECTRIC CODE (NEC).

1). WIRING TO BE SIZED, COLOR CODED AND IN QUANTITIES AS RECOMMENDED. a. BY THE EQUIPMENT MANUFACTURER, AND IN ACCORDANCE WITH NEC 760. b. INITIATING DEVICE CIRCUIT DEVICE WIRING SHALL BE AWG #18 AWG MINIMUM.

c. ALARM NOTIFICATION DEVICE WIRING SHALL BE #14 AWG.

f. ALL INTERIOR CONDUIT WHERE REQUIRED TO BE 3/4" MINIMUM. g. ALL EXTERIOR UNDERGROUND CONDUIT SHALL BE 1" MINIMUM.

6. "PRIMARY POWER" CONNECTIONS FOR THE FIRE ALARM CONTROL PANEL WILL COMPLY WITH NFPA 72 (2007 ed.) SECTIONS 4.4.1.4.1 THROUGH 4.4.1.4.4. THE DEDICATED BRANCH CIRCUIT(S) AND CONNECTIONS FEEDING THE FIRE ALARM CONTROL PANEL AND THE THE SELF-CONTAINED AIR CONDITIONER, SHALL BE MECHANICALLY PROTECTED. THE CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING. SHALL BE ACCESSIBLE ONLY TO AUTHORIZED MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT. THE OVER CURRENT PROTECTIVE DEVICE SHALL BE CAPABLE INTERRUPTING THE MAXIMUM SHORT CIRCUIT CURRENT ON THE UNGROUNDED

7. HORNS TO BE TEMPORAL CODED UNLESS NOTED OTHERWISE.

8. ALL STROBES ARE TO BE SYNCHRONIZED.

9. ALL DEVICES AND APPLIANCES SHALL BE COMPATIBLE WITH THE FIRE ALARM CONTROL PANEL. DEVICES AND APPLIANCES THAT ARE LOCATED IN NON-CONDITIONED SPACES OR ENVIRONMENTS ARE LISTED FOR THAT USE. ALL DEVICES AND APPLIANCES WILL BE MOUNTED AND SPACED PER NFPA 70, NFPA 72 AND THE MANUFACTURERS RECOMMENDED APPLICATION AND INSTRUCTIONS.

FIRE ALARM SYMBOL LEGEND		
SYMBOL	MODEL NUMBER	DESCRIPTION
FACP	FSP-502GD	FireShield Conventional, 5—zone, 2—NAC circuit FACP
17401	PS-1270	Battery 7.0 AH
2	711C	2 Wire Conventional Smoke Detector 12/24 volt
•	278B-1120	Pull Station, Double Action, Lexan, Key Reset
■ WP	MPSR1-S45W-GE	Weatherproof Pull Station, Single Action, Key Reset
<u>V</u>	G1RF-HDVM	WALL MOUNT, RED, HORN STROBE, MULTI-CANDELA 15,30,75,110
	GCFR-VM	CEILING MOUNT, RED, STROBE, MULTI-CANDELA 15,30,75,95
\Diamond	EXISTING	Flow Switch
\bigcirc	EXISTING	Tamper Switch
TVSS 1	DTK-120 HW	120 AC LINE SURGE PROTECTOR

FIRE ALARM SYSTEM SEQUENCE OF OPERATIONS:

TYPE OF SYSTEM: LOCAL ALARM 24 HOURS STANDBY, 5 MINUTES ALARM USED FOR BATTERY CALCULATIONS.

THIS SYSTEM IS GENERAL ALARM. ACTIVATION OF AN ALARM INITIATING DEVICE WILL CAUSE THE NOTIFICATION DEVICES TO ACTIVATE THROUGH OUT THE BUILDING AND AN ALARM SIGNAL SHALL BE SENT TO THE FACP. DISPLAY SYSTEM POINT NUMBER, POINT DESCRIPTION, AND MESSAGE ASSOCIATED WITH THE POINT ON TERMINAL. A SIGNAL SHALL BE SENT TO THE OWNER'S REMOTE STATION VIA DACT. THE DACT SHALL TRANSMIT SEPARATE SIGNALS TO THE OFF SITE MONITORING COMPANY. THEY SHALL BE AS FOLLOWS: ALARM, SUPERVISORY, TROUBLE AND WATER FLOW.

TROUBLE CONDITIONS WILL BE ANNUNCIATED AT THE FIRE ALARM CONTROL PANEL. A SIGNAL SHALL BE SENT TO THE OWNER'S REMOTE STATION VIA DACT. TROUBLE CONDITIONS CAN BE ANY OF THE FOLLOWING: LOSS OF A/C POWER, BATTERY FAILURE OR LOW BATTERY, GROUND FAULT, BREAK IN THE WIRING, DEFECTIVE EQUIPMENT, DISCONNECTED OR REMOVED DEVICES, LOSS OF PHONE LINES, LOSS OF ELEVATOR POWER (WHEN INSTALLED).

SUPERVISORY CONDITIONS WILL BE ANNUNCIATED AT THE FIRE ALARM CONTROL PANEL. A SIGNAL SHALL BE SENT TO THE OWNERS REMOTE STATION VIA DACT. SUPERVISORY CONDITIONS CAN BE ANY OF THE FOLLOWING: SPRINKLER TAMPER SWITCHES.

INITIATING DEVICE OPERATIONS:

SMOKE DETECTOR WILL CAUSE AN ALARM CONDITION. PULL STATIONS WILL CAUSE AN ALARM CONDITION.

SPRINKLER FLOW SWITCH (WHEN INSTALLED) WILL CAUSE AN ALARM CONDITION. SPRINKLER TAMPER SWITCHES (WHEN INSTALLED) WILL CAUSE A SUPERVISORY CONDITION.

FIRE ALARM SYSTEM WIRE SCHEDULE

(A) INITIATING DEVICE CIRCUIT (IDC): 2 CONDUCTOR #18 - FPLR RATED

B NAC CIRCUIT: 2 CONDUCTOR #14 AWG - FPLR RATED

<u>WIRING NOTES:</u>

- * FIRE ALARM SYSTEM WIRING SHALL BE POWER LIMITED.

APPROVED TOWN OF LONGBOAT KEY

DEC - 5 2013

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FIRE MARSHAL'S OFFICE

DEC 0 3 2013 TOWN CH LONGBOAT KIT Planner 12 John G. St. 11 July

ORIGINAL ISSUE DATE 11/26/13 SHEET #

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FIRE ALARM FLOOR PLAN - GROUND FLOOR SCALE: 1/4" = 1'-0"

SCOPE OF WORK:

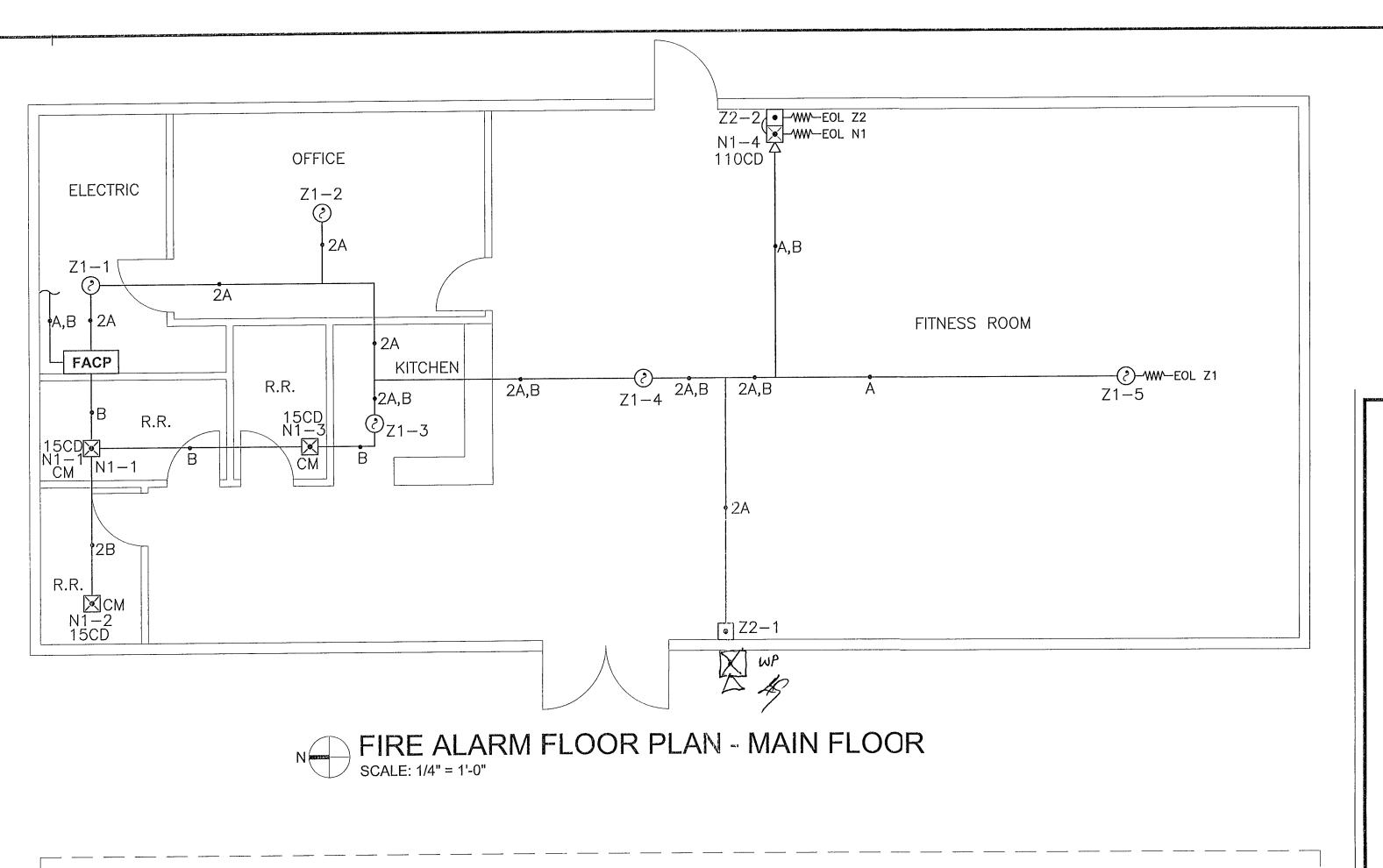
INSTALL NEW CONVENTIONAL 5 ZONE EST FSP-502DG FIRE ALARM CONTROL PANEL IN THE ELECTRICAL ROOM AS SHOWN. PROVIDE 120VAC SURGE PROTECTION FOR PANEL. WE WILL UTILIZE THE EXISTING DEDICATED 120V CIRCUIT THAT IS IN PLACE FOR THE EXISTING TO BE REMOVED FACP. THE CONTROLLING BREAKER(S) SHALL HAVE A LOCK ON PROVISION AND SHALL COMPLY WITH NFPA 72 (2007 ed.) 4.4.1.4.1 - 4.4.1.4.4

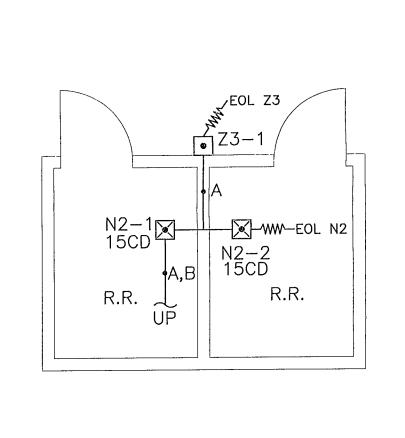
WIRING METHODS SHALL BE FPLR WIRE INSTALLED IN A FREE WIRED SYSTEM THROUGHOUT. PROTECTION FROM PHYSICAL DAMAGE TO THE WIRE SHALL BE IN ACCORDANCE WITH NFPA 70.

CONNECT THE CONVENTIONAL INITIATING DEVICES TO THE FIRE ALARM CONTROL PANEL AS SHOWN. CONNECT THE EXISTING FLOW AND TAMPER ZONES TO THE NEW FIRE ALARM CONTROL PANEL.

INSTALL WALL MOUNT AND CEILING MOUNT NOTIFICATION APPLIANCES AS SHOWN. CONNECT NOTIFICATION DEVICES TO THE FIRE ALARM CONTROL PANEL AS SHOWN.

* ALL WIRING BELOW GRADE TO BE LISTED FOR WET LOCATIONS. FACP N1-2 15CD 15CD





FIRE ALARM FLOOR PLAN - GROUND FLOOR SCALE: 1/4" = 1'-0"

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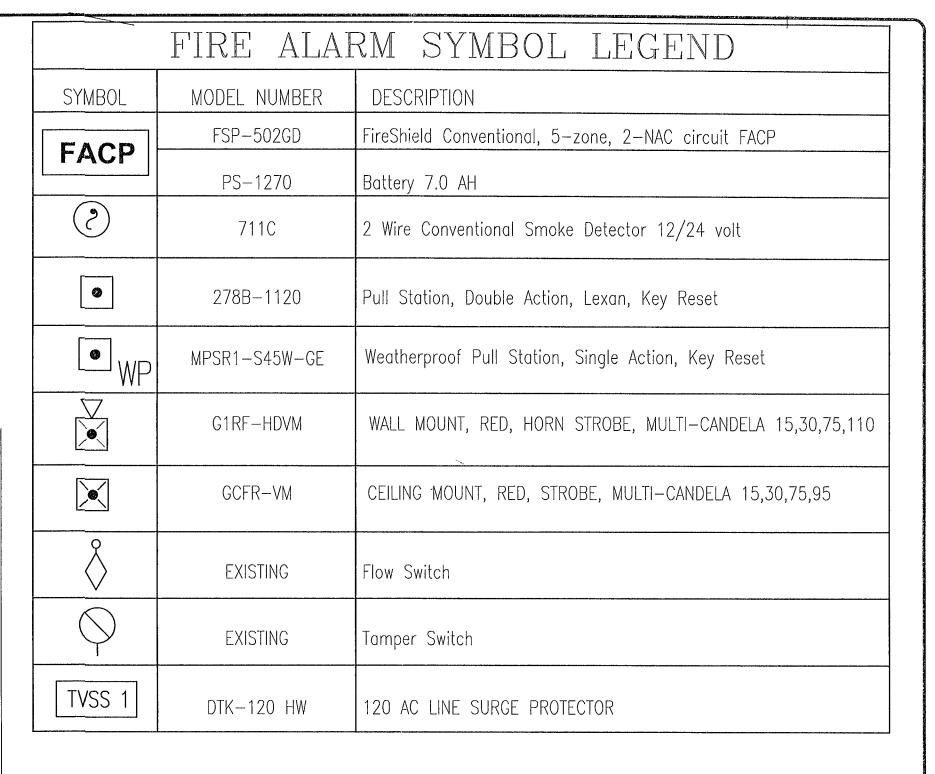
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APPROVED
TOWN OF LONGBOAT KEY

FIRE MARSHAL'S OFFICIE O Planner: Zoning and Building

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