BATH AND BODY WORKS SOUTH HILL MALL

3500 S. MERIDIAN STREET PUYALLUP, WA 98373

FIRE ALARM SYSTEM

SYMBOL	QTY	DESCRIPTION	MOUNTING REQUIREMENTS	SUPPLIER	PART NUMBER
	23	INTELLIGENT PHOTO SMOKE DETECTOR	4 SQUARE DEEP w/ 3" ROUND RING	NOTIFIER	FSP-951 w/ B300-6
?	12	CEILING SPEAKER w/ STROBE: WHITE SEE DEVICE DESIGNATION FOR STROBE cd SETTING	4 SQUARE DEEP w/ EXT RING; CENTER ON CEILING TILE	SYSTEM SENSOR	SPSCWL
?	1	CEILING STROBE: WHITE SEE DEVICE DESIGNATION FOR STROBE cd SETTING	4 SQUARE DEEP; CENTER ON CEILING TILE	SYSTEM SENSOR	SCWL
ED	10	REMOTE LED ANNUNCIATOR		SYSTEM SENSOR	RA100Z

ES:
1- DEVICE SUBSCRIPT: NW=NEW RR=REMOVE & RELOCATE EX=EXISITNG TO REMAIN AC=ABOVE CEILING RB=RELAY BASE WP=WATERPROOF WG=WIRE GUARD
2- CABLEING SHOWN IS FOR CIRCUIT REFERENCE ONLY AND DOES NOT INTENDED TO INDICATE THE EXACT PATHWAY.

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3- DEVICES SHOWN ON DRAWINGS IN GRAY SCALE ARE EXISTING DEVICES AND MAY NOT BE INCLUDED IN THIS SYMBOL LEGEND UNLESS NOTED.
4- SET HORN/STROBE DECIBLE SETTING TO LOW FROM FACTORY SETTING OF HIGH, ONLESS OTHERWISE NOTED ON THE DRAWINGS.

5- ALL DEVICES WITH A WP SUBSCRIPT WILL REQUIRE THE USE OF A OUTDOOR OR WP BACKBOX.

3- INSTALL WIRING PER NEC. USE CABLE TYPE CONSISTENT WITH NEC REQUIREMENTS, IE: PLENUM, RISER, UNDERGROUND, ETC.

5- THIS CABLE MUST BE INSTALLED IN A CONTINUOUS PATH POINT-TO-POINT. ABSOLUTLEY NO SPLICES ARE ALLOWED.

6- THIS IS A SPECIFIC CABLE, NO ALTERNATES ARE ALLOWED

4- THE "Y" FIBER OPTIC CABLE LISTED IS A BELDEN CABLE PART NUMBER AS WEST PENN NO LONGER SUPPORTS FIBER OPTIC CABLE

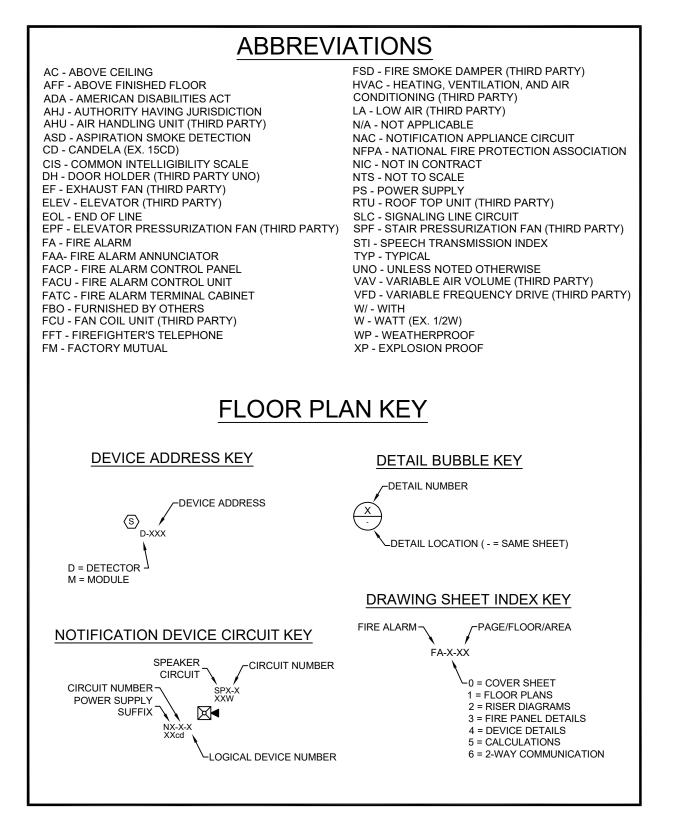
WIRE LEGE	ND				
SYMBOL	DESCRIPTION	WEST PENN P/N	COLOR CODING	TYPE OF CIRCUIT APPLICATION	NOTES
D	1 PAIR 16AWG TWISTED \ NON SHIELDED FIRE RATED CABLE (FPLP)	60991B	RED JACKET w/ NO STRIPE	DATA (SLC) CIRCUIT	
S	1 PAIR 14AWG FIRE RATED CABLE (FPLP)	60993B	RED JACKET w/ WHITE STRIPE	STROBE (NAC) CIRCUIT	
٧	1 PAIR 16AWG TWISTED \ SHIELDED FIRE RATED CABLE (FPLP)	60990B	RED JACKET w/ YELLOW STRIPE	SPEAKER (AUDIO) CIRCUIT	
NOTES:					
** STRI	PES ARE NOT REQUIRED, HOWEVER IT DOES MAKE IT EASIER FOR CIRCUIT IDENTIFICATION.				
1- WIR	E MANUFACTURER IS FOR REFERENCE PURPOSE ONLY. WHEN USING OTHER MANUFACTURE,	ENSURE PROPER CRO	SS REFERENCE		
2- FPL	P CAN BE USED IN MOST ALL APPLICATIONS WITH THE EXCLUSION OF WET AND CIRCUIT INT	EGRITY REQUIREMENTS			

SCOPE OF WORK & DESIGN BASIS

• UPDATING TI WITH NEW SMOKES AND SPEAKER/HORN STROBES TO EXISTING FACP
• ADDING SMOKES ABOVE CEILING AND REMOTE LED ANNUNCIATORS

DESIGN CRITERIA APPLIED CODES AND STANDARDS:
NFPA 72 2019 EDITION
IBC 2018 EDITION WITH WASHINGTON AMENDMENTS
NFPA 70 (NEC) 2017 EDITION

DOCUMENTS RECEIVED BYADT:
SHEETS:
DATE:



ANY AIR DIFFUSER.

INSTALLED.

CONTRACTOR

TECHNICIAN.

INVOICED ON A T&M BASIS.

PRIOR TO INSTALLATION.

BOTTOM (PER ADA REQUIREMENTS).

ADT COMMERCIAL (RHF&S) TECHNICIANS.

PROTECTION CONTRACTOR

MINIMUM OF 80" AFF TO A MAXIMUM OF 96" AFF.

CLEAN-UP.

2019 NFPA 72-17.7.1.11 REQUIRES THAT SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER FINAL CONSTRUCTION

2.1. ANY SMOKE DETECTORS THAT HAVE BEEN INSTALLED PRIOR

WALL MOUNTED NOTIFICATION DEVICES BACKBOX BETWEEN A

RANGE MUST BE VERIFIED BY ADT COMMERCIAL (RHF&S)

3.1. DEVICES THAT ARE UNABLE TO BE MOUNTED WITHIN THAT

3.2. SEE FLOOR PLANS FOR CANDELA RATING OF EACH DEVICE

ALL MANUAL PULL STATIONS ARE TO BE MOUNTED AT A HEIGHT

NO GREATER THAN 48" TO TOP AND NO LOWER THAN 36" TO

FIELD VERIFY ALL SPRINKLER MONITORING DEVICES WITH FIRE

FIELD VERIFY ALL HVAC, FAN CONTROL, FIRE/SMOKE DAMPERS

FACP SHALL NOT BE ENERGIZED WITHOUT THE PRESENCE OF

NO TAPPING OF SIGNALING OR INITIATING ZONE CIRCUITS ARE ALLOWED. T-TAPPING OF STYLE 4 ADDRESSABLE CIRCUITS IS ALLOWED PROVIDING A SPLICE IS PROFESSIONALLY INSTALLED, POLARITY IS OBSERVED AND SHIELDS ARE CONTINUOUS AND FREE OF GROUNDS. SHIELDS MUST BE TERMINATED AT FACP

8.1. CABLE SHIELDS SHALL BE SPLICED TOGETHER AT EVERY

THE SYSTEM SHALL BE MONITORED BY A U.L. LISTED

AS-BUILTS ARE REQUIRED AT TIME OF AHJ ACCEPTANCE. ADT COMMERCIAL (RHF&S) REQUIRED ELECTRICAL RED LINES WITHIN

EACH NAC CIRCUIT MUST BE CLEARLY MARKED AS TO WHICH DEVICES ARE ON EACH CIRCUIT AND IN THE ORDER THE

10.1. EACH CIRCUIT (SLC, NAC OR POWER) MUST BE CLEARLY

DEVICES ARE WIRED TO COMPLETE THE CIRCUIT.

MONITORING STATION BEFORE AHJ TEST.

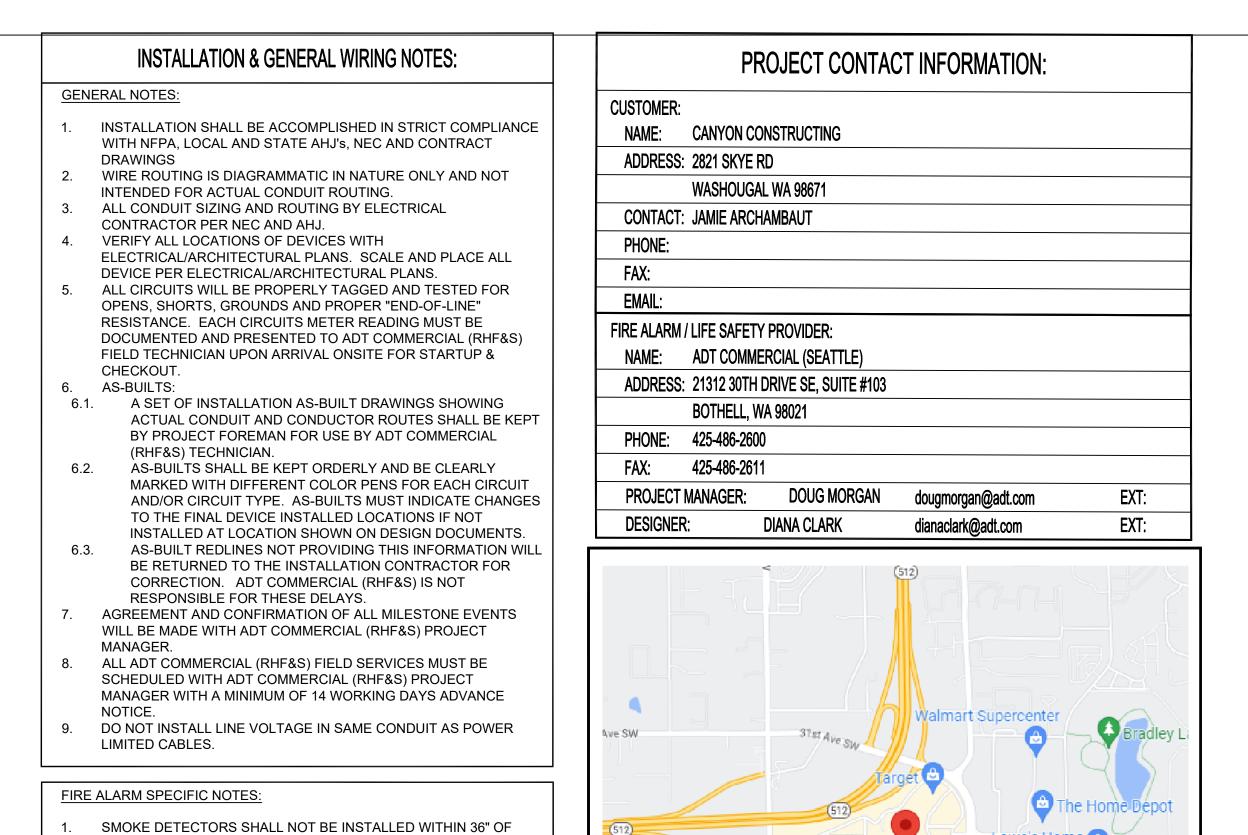
IDENTIFIED WITH A DISTINCT COLOR

2 WEEKS PRIOR TO AHJ TESTS.

JUNCTION BETWEEN THE FACP AND THE LAST DEVICE ON EACH CABLE RUN. SHIELDS AND OTHER FIRE ALARM CONDUCTORS (EXCEPT POWER GROUNDS) SHALL BE INSULATED AND COMPLETELY FREE FROM CONDUIT OR EARTH GROUNDS. SHIELDS WILL BE TIES TO GROUND ONLY AT THE FACP BY THE ADT COMMERCIAL (RHF&S) FIELD

AND DUCT DETECTORS LOCATIONS WITH MECHANICAL

TO CLEAN-UP MUST BE CLEANED OR REPLACED AND WILL BE

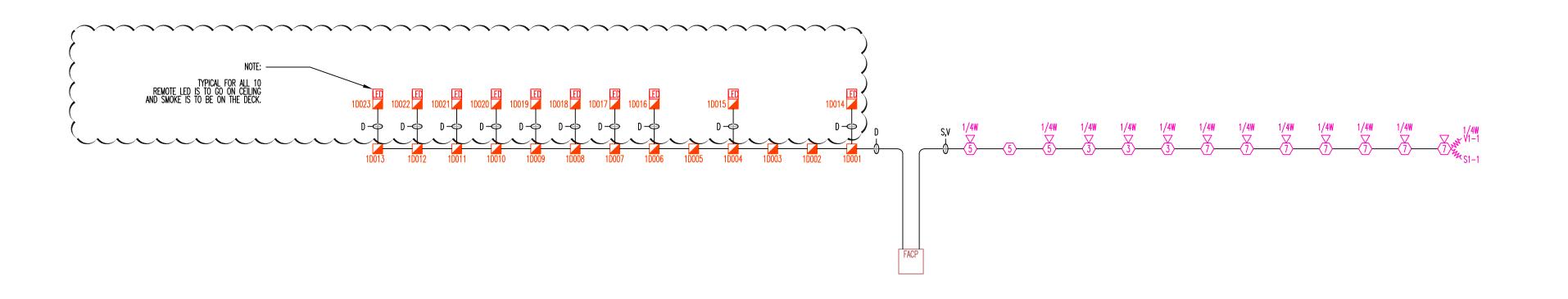


SHEET INDEX					
SHEET NO.	SHEET DESCRIPTION				
FA0.1	COVER SHEET				
FA0.2	FIRE ALARM DETAILS				
FA1.1	FLOOR PLAN TI				

Best Buy 😩

VICINITY MAP

37th Ave SE



Commercial

DESIGNER of RECORD

AUTUMN PELATA

NICET III FIRE ALARM SYSTEMS NICET I SPECIAL HAZARDS SYS

CERT # 109987 EXPIRE DATE: 11-31-2023

FOR VERIFICATION PLEASE VISIT: NICET.ORG

REV # DESCRIPTION
REVO ISSUED FOR PERMIT
Rev#1 REVISED DRAWINGS 0
Rev# Description d
Rev# Description d
Rev# Description d

 SCALE:

 PREPARED BY:
 DC

 CHECKED BY:
 AP

 DATE:
 03/07/2023

 PROJECT NO:
 501275872

PROJECT NO: TITLE:

COVER SHEET

SHEET:

FA-0-1

INITIATING WIRING

SIGNATURE LOOP WIRING LIMITATIONS:

SIGNATURE DUAL DRIVER CONTROLLER MODULES SUPPORTS UP TO 250 INTELLIGENT SIGNATURE DETECTORS AND 250 INTELLIGENT SIGNATURE MODULES

WIRE LENGTH LIMITATIONS:

NON-TWISTED, NON-SHIELDED WIRE 16AWG - 20pf/FT & 4.02 OHMS/1000 FEET 18AWG - 20pf/FT & 6.38 OHMS/1000 FEET

DETECTORS ONLY

MODULES ONLY

16AWG - 125 DETECTORS - 9,275'

16AWG - 125 MODULES - 7,921'

DETECTORS AND MODULES

16AWG - 125 OF EACH - 3,608'

DETECTORS ONLY

18AWG - 125 DETECTORS - 5,839'

MODULES ONLY

18AWG - 125 MODULES - 4,986'

DETECTORS AND MODULES

18AWG - 125 OF EACH - 2,271'

TWISTED PAIR, NON-SHIELDED WIRE 16AWG - 36pf/FT & 4.02 OHMS/1000 FEET

18AWG - 25pf/FT & 6.38 OHMS/1000 FEET

DETECTORS ONLY

MODULES ONLY

DETECTORS AND MODULES

16AWG - 125 MODULES - 7,921'

DETECTORS AND MODULES

16AWG - 125 OF EACH - 3,608'

DETECTORS ONLY

18AWG - 125 DETECTORS - 5,839'

MODULES ONLY

18AWG - 125 MODULES - 4,986'

DETECTORS AND MODULES 18AWG - 125 OF EACH - 2,271'

TWISTED PAIR, SHIELDED WIRE

16AWG - 82pf/FT & 4.02 OHMS/1000 FEET

18AWG - 58pf/FT & 6.38 OHMS/1000 FEET

DETECTORS ONLY 16AWG - 125 DETECTORS - 6,098'

MODULES ONLY 16AWG - 125 MODULES - 6,098'

DETECTORS AND MODULES 16AWG - 125 OF EACH - 3,608'

DETECTORS ONLY 18AWG - 125 DETECTORS - 5,839'

MODULES ONLY 18AWG - 125 MODULES - 4,986'

DETECTORS AND MODULES 18AWG - 125 OF EACH - 2,271'

SIGNATURE DATA LOOP WIRING . CLASS B ONLY

SLC DATA (*)

SUC DATA (*)

S

NOTIFICATION WIRING

STAR-TAPPING, UNACCEPTABLE

SPEAKER CIRCUIT WIRING LIMITATIONS:

T-TAPPING, ACCEPTABLE

WIRE LENGTH LIMITATIONS:

THE MAXIMUM ALLOWABLE WIRE LENGTH IS THE FARTHEST DISTANCE THAT A SPEAKER CIRCUIT CAN EXTEND FROM THE AMPLIFIER TO THE LAST SPEAKER WITHOUT LOSING 0.5 dB OF SIGNAL. THE FOLLOWING ARE MAXIMUM DISTANCE BASED ON APPROXIMATE WATTAGE OF THE SPEAKER CIRCUIT. CIRCUIT LENGTHS ARE FURTHER BASED ON ORIGINATION OF A CIRCUIT FROM EITHER THE AMPLIFIER OR FROM THE CC1 MODULE.

ALLOWABLE LENGTH AT 25 Vrms, WITH 0.5 dB LOSS 16AWG - 20 WATTS - 231' 16AWG - 30 WATTS - 154'

16AWG - 40 WATTS - 116'

ALLOWABLE LENGTH AT 70 Vrms, WITH 0.5 dB LOSS

NGTH AT 70 Vrms, WITH 0.5 dB LOS 16AWG - 20 WATTS - 1815' 16AWG - 30 WATTS - 1210' 16AWG - 40 WATTS - 907'

NAC CIRCUIT (HORN, STROBE) WIRING LIMITATIONS:

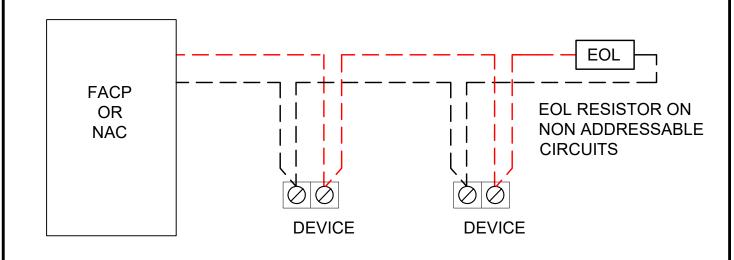
FOR 24VDC SYSTEMS, MINIMUM DEVICE OPERATING VOLTAGE IS 16VDC. VOLTAGE DROP CALCULATIONS ARE BASED ON 16VDC AND POWER SUPPLY DE-RATED AND ON DEPLETED BATTERY BACKUP PER THE PRESCRIBED PERIOD OF STANDBY AND ALARM RING TIME. THE VOLTAGE DROP WILL LIMIT THE CIRCUITS CAPACITY IN ALMOST ALL CASES AND CURRENT CANNOT BE USED AS THE ONLY CIRCUIT WIRING LIMITATION. ALTERATIONS TO CIRCUIT LENGTH FROM THOSE CALCULATED MAY CAUSE CIRCUITS TO BE OUT OF THE TOLERANCES GRANTED BY THE FIRE ALARM CODE. CHANGES TO DEVICE LOCATION OR CIRCUIT LENGTH SHALL BE COMMUNICATED TO THE CONVERGINT TEAM.

NAC CIRCUIT WIRING AND ROUTING MUST NOT EXCEED WHAT IS SHOWN ON THE DESIGN DRAWINGS AND CALCULATIONS. A VOLTAGE DROP TEST IS PART OF MOST FIRE FINALS AND IS REQUIRED BY NFPA. A FAILED FIRE FINAL MAY REQUIRE REWIRING OF THE FAILED CIRCUITS.

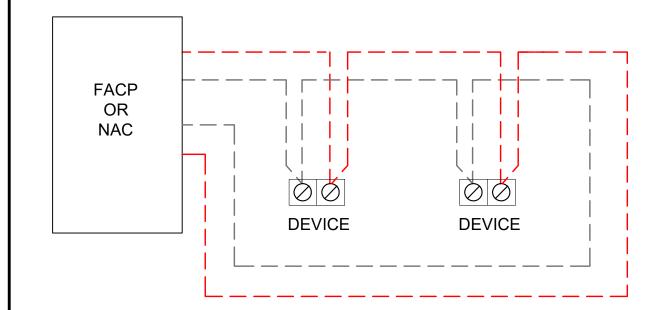
WIRE RESISTANCE RATINGS USED FOR CALCULATIONS: 18AWG - 13 OHMS PER 1000' 16AWG - 8 OHMS PER 1000' 14AWG - 5.2 OHMS PER 1000'

EXAMPLE: 1.0 AMP CIRCUIT LOAD USING #14 WIRE = 409 FEET MAXIMUM.

CLASS A OR B NOTIFICATION WIRING



CLASS B, STYLE 4 WIRING



CLASS A, STYLE 6 WIRING

SEPARATION OF CLASS A CIRCUITS - INSTALLATION EXCEPTIONS:

CLASS A OUTGOING AND RETURN CONDUCTORS, EXITING AND RETURNING TO THE CONTROL PANEL, ARE TO BE ROUTED SEPARATELY. THE MINIMUM RECOMMENDED SEPARATION IS 1 FT. VERTICALLY AND 4 FT. HORIZONTALLY. THE FOLLOWING EXCEPTIONS STILL DO NOT ELIMINATE THE 2ND PAIR OF WIRES. THEY ALLOW YOU TO USE A SINGLE RACEWAY AND ELIMINATE THE SEPARATION FOR THESE CONDITIONS.

- 1. WHEN MAXIMUM CABLE, ENCLOSURE, OR RACEWAY IS LESS THAN 10
- FEET. NO LIMIT TO NUMBER OF DEVICES.

 2. UNLIMITED CONDUIT OR RACEWAY DROP TO AN INDIVIDUAL DEVICE.
- 3. UNLIMITED CONDUIT OR RACEWAY DROP TO A ROOM NOT EXCEEDING 1000 SQ, FT. NO LIMIT TO THE NUMBER OF DEVICES.

RECORD DRAWINGS

AS-BUILT / RECORD DRAWING REQUIREMENTS:

THE FOLLOWING INFORMATION SHOULD BE RECORDED ON A SEPARATE SET OF DRAWINGS FOR EACH PROJECT:

- ANY CHANGES IN THE LOCATION OF ANY ASSOCIATED FIRE ALARM OR INTERFACE EQUIPMENT. CONTROL PANELS, ANNUNCIATORS, DETECTORS, CONTROL RELAYS, INPUT AND OUTPUT MODULES, TERMINAL CABINETS,
- 2. ANY CHANGES TO CIRCUIT WIRING. THIS INCLUDES DELETION OR ADDITIONAL WIRING RUNS. ANY RE-ROUTING OF CIRCUIT WIRING. ANY ADDITIONS OR DELETIONS TO THE NUMBER, LOCATION, AND ORDER OF DEVICE WIRING ON A CIRCUIT.
- ADDRESSES AND/ OR LABELS FOR ALL ADDRESSABLE DEVICES.
 CANDELA SETTINGS OF ALL VISUAL NOTIFICATION DEVICES.
- 5. WATTAGE TAP SETTINGS OF ALL SPEAKER NOTIFICATION DEVICES.

ANY CHANGES SHALL BE DISCUSSED WITH CONVERGINT PROJECT MANAGER TO ENSURE SYSTEM AND CODE PARAMETERS ARE MET. CONVERGINT SHALL NOT BE HELD ACCOUNTABLE FOR CHANGES MADE WITHOUT APPROVAL.

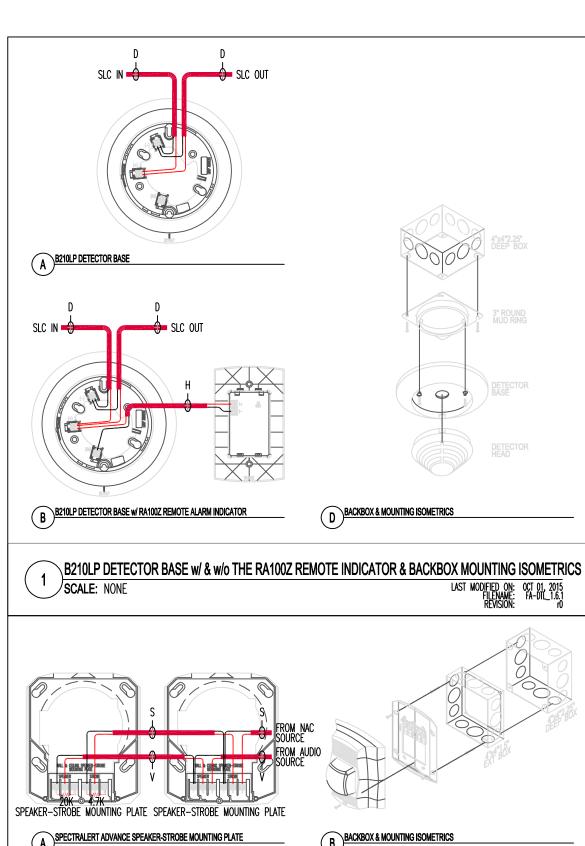
THIS INFORMATION SHALL BE NEAT AND LEGIBLE WHEN PRESENTED TO THE TECHNICIAN AT THE CONCLUSION OF THE PROJECT. PLEASE NOTE CONTACT INFORMATION ON DRAWINGS FOR INDIVIDUALS WITH FAMILIARITY OF INSTALLATION IN THE EVENT QUESTIONS ARISE DURING THE CLOSEOUT PROCESS.

CONDUIT INSTALL PER INSTALL P

MOUNTING HEIGHTS

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS

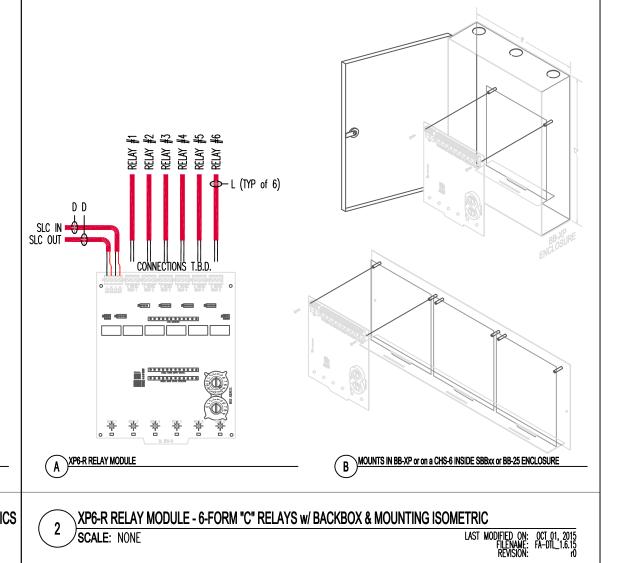
* DEVICES SHOWN DEPICT DEVICE TYPES ONLY.

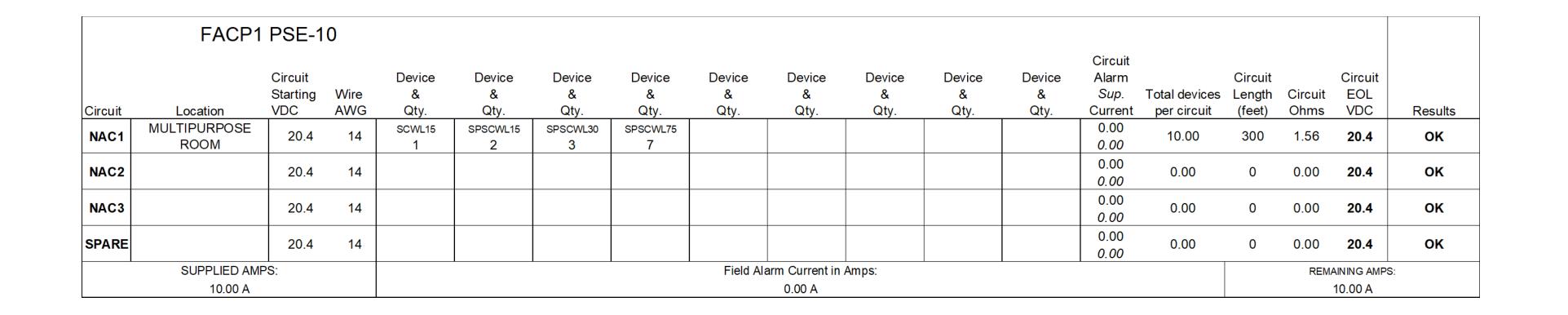


NAC OUTPUT #4
NAC OUTPUT #3
NAC OUTPUT #2

NAC POWER SUPPLY

SPECTRALERT ADVANCE COMBINATION SPEAKER-STROBE via FCPS NAC P.S. & DAA2 AMPLIFIER





SCALE: NONE

EV #DESCRIPTIONDATEBYEV0ISSUED FOR PERMIT03/07/23DCev#1REVISED DRAWINGS04//12/23DCkev#DescriptiondateBykev#DescriptiondateBykev#DescriptiondateBykev#DescriptiondateBy

Commercial

SCALE:

 PREPARED BY:
 DC

 CHECKED BY:
 AP

 DATE:
 03/07/2023

 PROJECT NO:
 501275872

 TITLE:

FIRE ALARM DETAILS

SHEET:

FA-0-2

