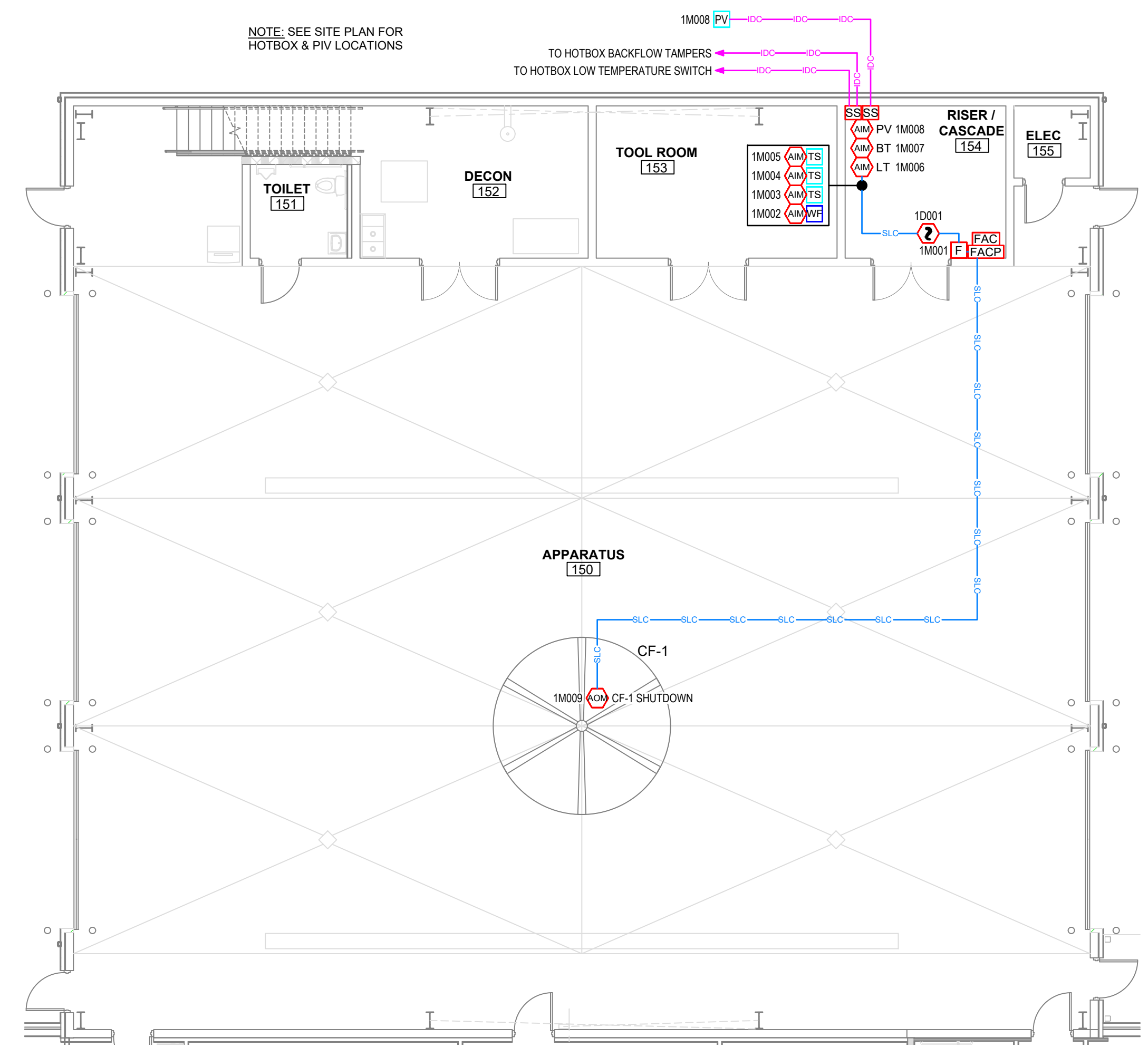


SYMBOL LEGEND			
SYMBOL	DESCRIPTION	MODEL #	BACK BOX
FACP	FIRE ALARM CONTROL PANEL W/DAC&T & BATTERIES	ES-200X	N/A
FAC	IP/CELLULAR COMMUNICATOR	HWF2V-COM	N/A
2	PHOTOELECTRIC SMOKE SENSOR W/BASE	SD365	4" OCTAGON - 1-1/2" DEEP
F	MANUAL PULL STATION	BG-12LX	SINGLE GANG - 1-1/2" DEEP
AM	MONITOR MODULE	MMF-300	4" SQUARE - 1-1/2" DEEP
RM	RELAY MODULE	CRF-300	4" SQUARE - 1-1/2" DEEP
TVSS	120VAC PANEL SURGE PROTECTOR	DTK-120HW	N/A
SS	24VDC SURGE PROTECTOR, 2-CIRCUIT	DTK-2LVLPF	N/A
LT	LOW TEMPERATURE SWITCH	RTS-O	N/A
WF	SPRINKLER WATERFLOW SWITCH	BY OTHERS	N/A
TS	SPRINKLER TAMPER SWITCH	BY OTHERS	N/A
BT	BACKFLOW TAMPER SWITCH	BY OTHERS	N/A
PV	P.I.V. TAMPER SWITCH	N/A	N/A

- SPRINKLER MONITORING NOTES:**
- SPRINKLER MONITORING SYSTEM SHALL BE INSTALLED IN ACCORDANCE TO ALL APPLICABLE STATE AND LOCAL CODES INCLUDING THE 2018 NC STATE BUILDING CODE AND 2013 EDITION OF NFPA 72.
 - SIGNALING LINE CIRCUITS (SLC) SHALL BE CLASS 'B' STYLE AS PER 2013-NFPA 72.
 - ALL OPENINGS IN RATED ASSEMBLIES SHALL BE REPAIRED AS PER LOCAL BUILDING CODES.
 - THE OPERABLE PART OF A MANUAL PULL STATION SHALL BE MOUNTED NOT LESS THAN 42" AND NOT MORE THAN 48" FROM THE FINISHED FLOOR.
 - THE FACP SHALL BE POWERED FROM A DEDICATED 120 VAC CIRCUIT. THE BREAKER NUMBER MUST BE CLEARLY IDENTIFIED ON THE POWER SUPPLY. THE BREAKER SHALL BE LOCKED IN THE "ON" POSITION AND IDENTIFIED BY A RED MARKING.
 - SEE FIRE ALARM MATRIX FOR INPUT/OUTPUT FUNCTIONS.
 - VERIFY THE QUANTITY AND LOCATION OF SPRINKLER DEVICES TO MONITOR WITH THE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.

WIRE LEGEND		
SYMBOL	DESCRIPTION	WIRE TYPE/SIZE
SLC	SIGNALING LINE CIRCUIT (SLC)	16/2 FPLP TWISTED PAIR, NO SHIELD - RED JACKET
NAC	NOTIFICATION APPLIANCE CIRCUIT (NAC)	14/2 FPLP STRANDED - RED JACKET
IDC	INITIATING DEVICE CIRCUIT (IDC)	14/2 FPLP STRANDED - RED JACKET



Standby Battery Calculation
Firelite ES-200X Fire Alarm Control Panel

Protected Premises: NW Harnett Fire Station 3
Address: US 401
City: Harnett County State: NC Zip: _____

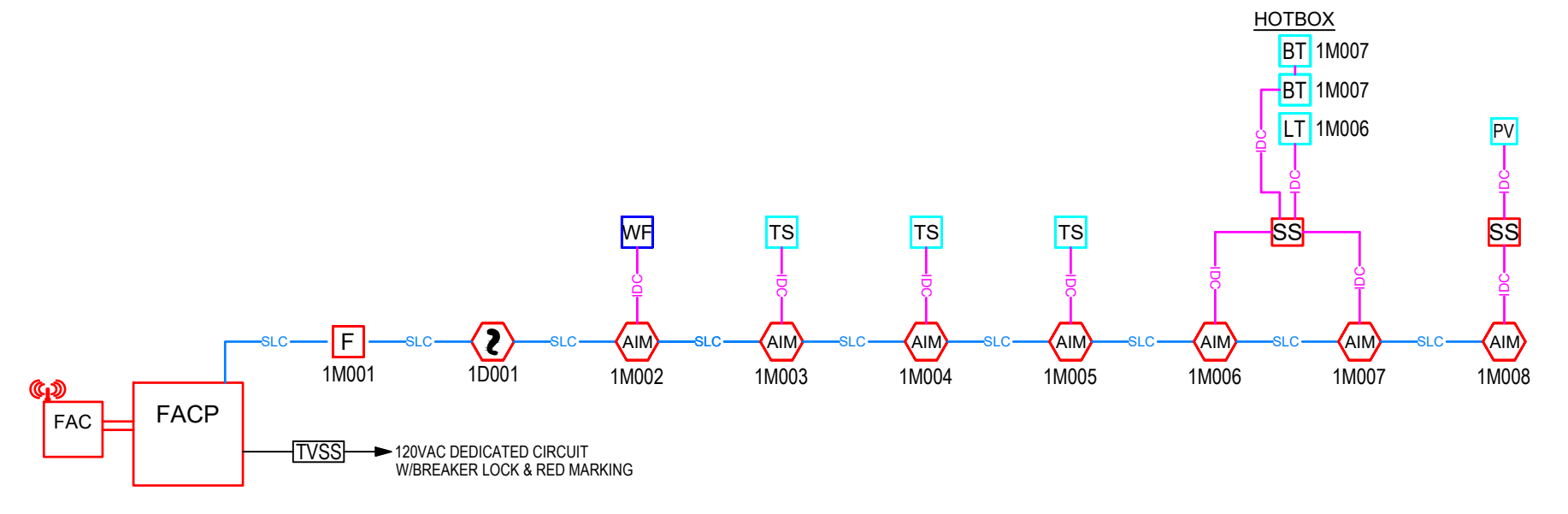
Panel ID: FACP Location: Riser/Cascade 154

System Device	Qty	Standby Draw	Alarm Draw
ES-200X	1	0.141000	0.257000
SPOTS.COM Communicator	1	0.040000	0.041000
SD365 Photo Detector	1	0.000000	0.004000
BS-15.3 Manual Pull Station	1	0.000000	0.005000
MMF-300 Monitor Module	7	0.000000	0.005000
CRF-300 Relay Module	1	0.000000	0.005000
Total Standby:		0.184	0.349

Secondary Load Requirements 5.35 Amp Hours
Total Secondary Load from the calculation table below:

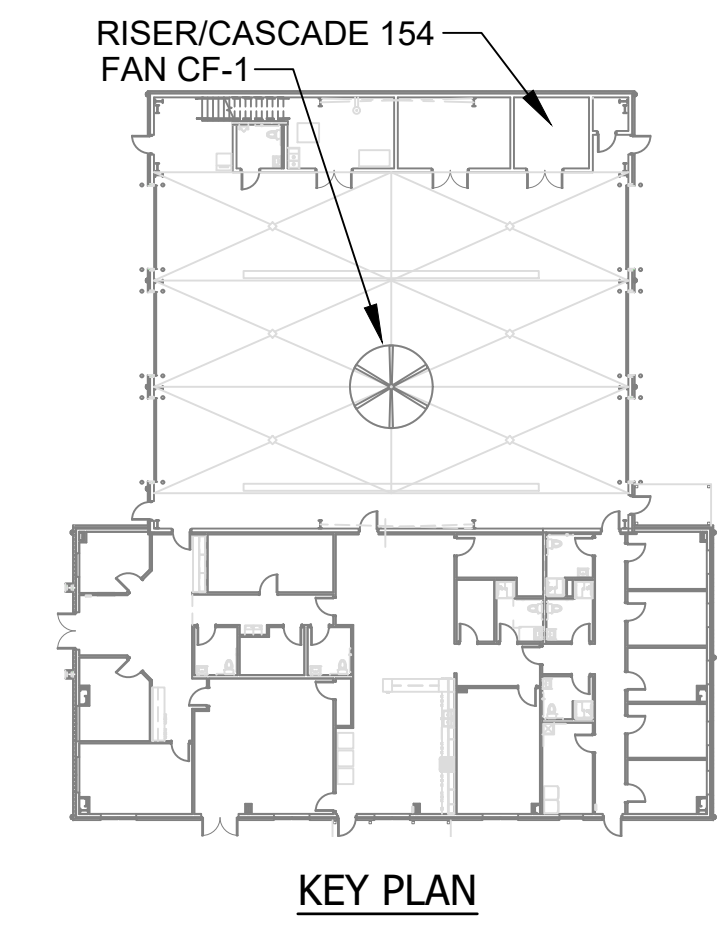
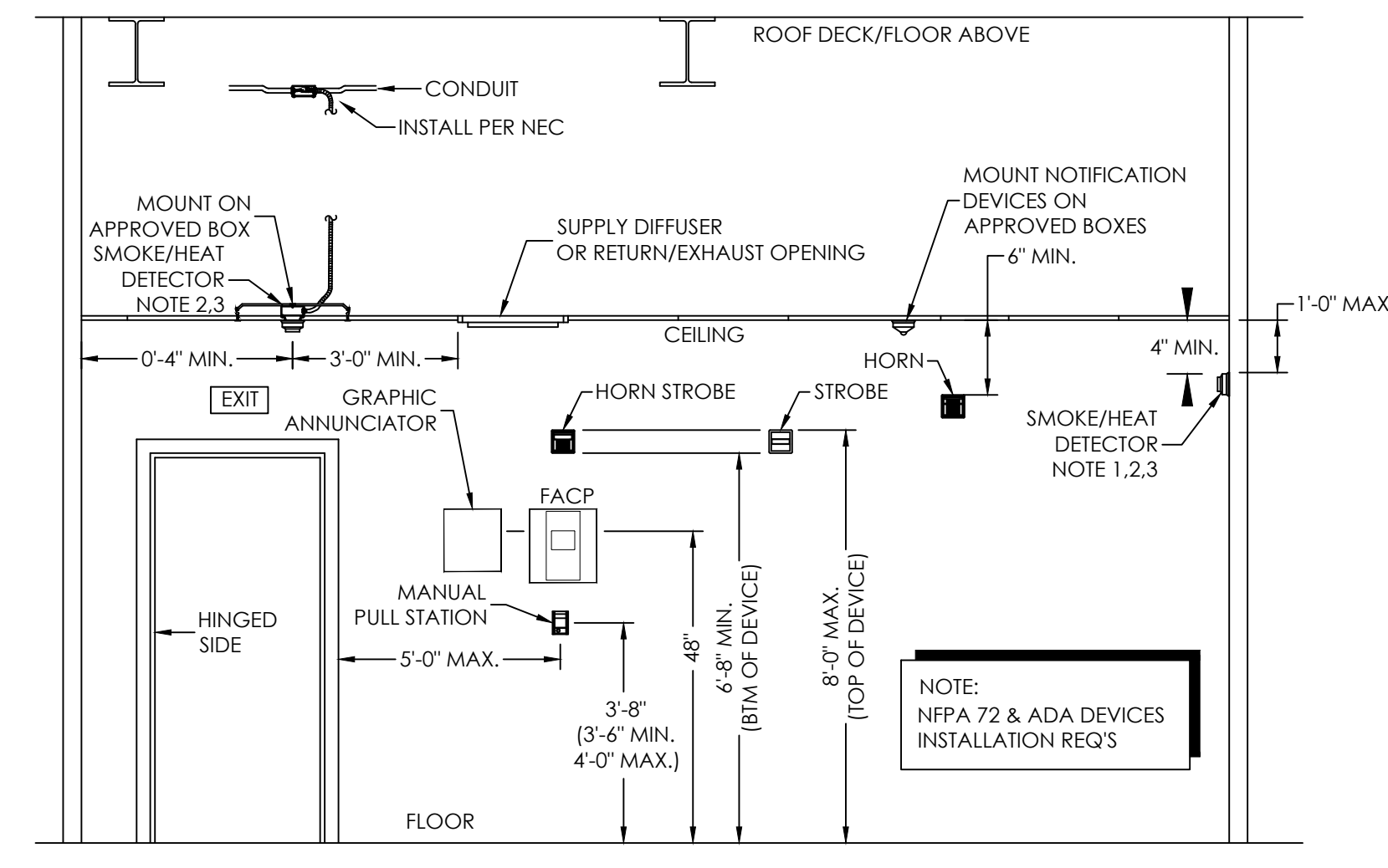
Current Draw (amps)	Time (hours)	Total (A-H)
0.184	24	4.43
0.349	0.04	0.03
	Total Secondary Load	4.45
	Diversity Factor	1.20
	Secondary Load Requirements	5.35

Battery Selection 7 Amp Hours



3 FIRE ALARM MATRIX
Scale: None

DEVICE / INPUT	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE ADDRESSABLE ANDR SIGNAL	ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTIVATE ADDRESSABLE SUPERVISORY SIGNAL	ACTIVATE ADDRESSABLE TROUBLE SIGNAL	TRANSMIT ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	SHUTDOWN RESPECTIVE AIR HANDLING UNIT
SPRINKLER MONITORING SYSTEM AC POWER FAILURE									
SPRINKLER MONITORING SYSTEM LOW BATTERY									
OPEN CIRCUIT									
GROUND FAULT									
NOTIFICATION APPLIANCE CIRCUIT SHORT									
MANUAL PULL STATION									
SMOKE DETECTOR									
SPRINKLER TAMPER SWITCH									
LOW TEMPERATURE SWITCH									
BACKFLOW TAMPER SWITCH									
P.I.V. TAMPER SWITCH									
SPRINKLER WATER FLOW									



NO.	DATE	REVISION	BY

WACO
PLUMBING, MECHANICAL, ELECTRICAL
TELEPHONE CONSTRUCTION

9527 Industry Drive Raleigh, NC 27603
Tel: (919) 772-1745 Fax: (919) 779-2410
License # SP, FA/LV, 33515

SPRINKLER MONITORING SYSTEM FOR:
NW HARNETT FIRE STATION 3
US 401
HARNETT COUNTY, NC

SPRINKLER ALARM PLAN & DETAILS

DATE:	09/07/2022
DRAWN BY:	JRC
CHECKED BY:	RP
SCALE:	AS SHOWN

SHEET:
FA-1

Randy Pleasant
License # SP, FA/LV, 33515