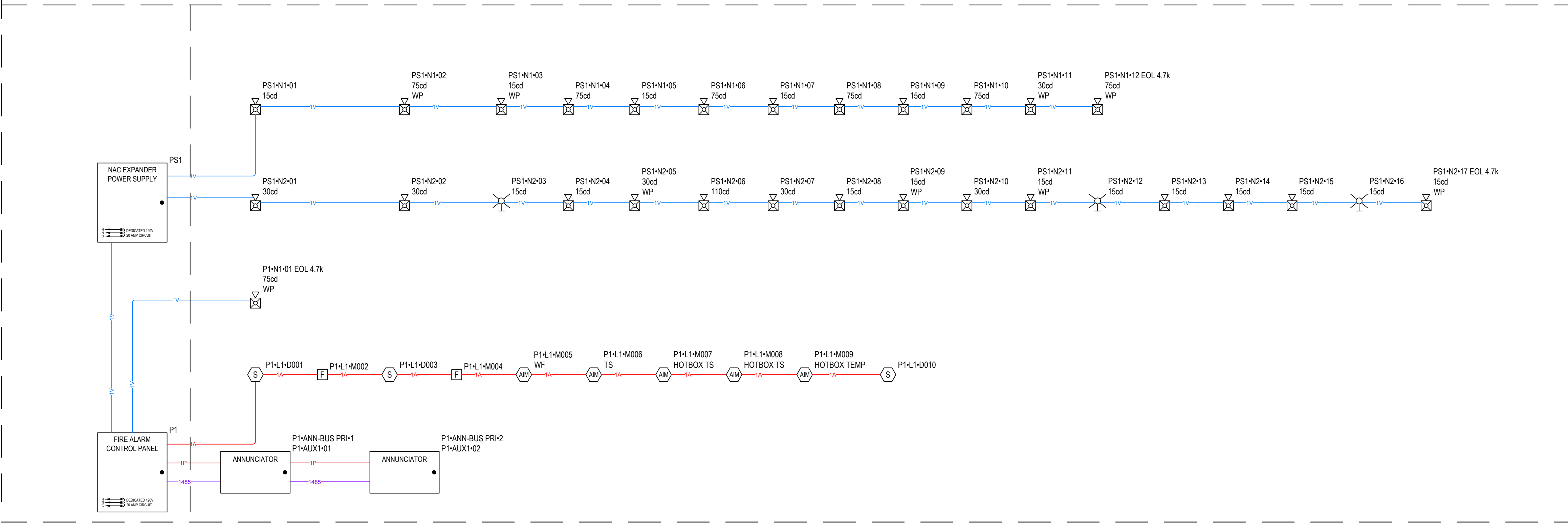


DEVICE LEGEND				
SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
[FACU]	1	FIRELITE	ES-50XP	ADDRESSABLE FIRE ALARM CONTROL PANEL WITH ONE SLC LOOP INCLUDES MAIN CIRCUIT BOARD WITH DISPLAY, PRE-INSTALLED CLSS PATHWAY PRO COMMUNICATOR, CHASSIS WITH TRANSFORMER, DRESS PANEL, BACKBOX WITH DOOR, PLASTIC BAG CONTAINING SCREWS, CABLES, KEY, ETC.
[NAC]	1	FIRELITE	FL-PS6	6.0 A, 120 VAC REMOTE CHARGER POWER SUPPLY IN A LOCKABLE METAL ENCLOSURE
[FAA]	2	FIRELITE	ANN-80	RED 80 CHARACTER LCD ANNUNCIATOR
[AM]	5	FIRELITE	MMF-300	ADDRESSABLE MONITOR MODULE W/ FLASHSCAN, SUPERVISES CLASS A OR CLASS B OF DRY CONTACT INPUT
[F]	2	FIRELITE	BG-12LX	ADDRESSABLE MANUAL PULL STATION WITH INTERFACE MODULE MOUNTED INSIDE
[S]	3	FIRELITE	SD365 WB300-6	WHITE, ADDRESSABLE PHOTOELECTRIC DETECTOR, STANDARD BASE
[SWLED]	3	SYSTEM SENSOR	SWLED	STROBE, WALL, WHITE
[P2GRKLED]	9	SYSTEM SENSOR	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR
[P2WLED]	18	SYSTEM SENSOR	P2WLED	2-WIRE, HORN STROBE, WHITE
[SS] 2 24v	1	DITEX	DTK-2MHL P24WB	2 PAIR / 4 WIRE SURGE MODULE W/BASE FOR PIV, NAC, IDC, ETC.
[SS] 120v	1	SPACE AGE ELECTRONICS	T120-DG W/SNAP TRACK	2 PAIR / 4 WIRE SURGE MODULE, 120V
[DOC]	1	SPACE AGE ELECTRONICS	SSU01690	FIRE ALARM DOCUMENT CABINET W/8GB USB DRIVE (ACE-11), BLACK WITH CUSTOM LOGO
ADDITIONAL ASSEMBLY COMPONENTS AND HARDWARE				
	1	FIRELITE	CLSS PATHWAY PRO	CLSS
	1	FIRELITE	ES-50XP MAIN BOARD	MAIN BOARD
	1	FIRELITE	FL-PS6 MAIN BOARD	FIRE ALARM POWER SUPPLY MAIN BOARD

CABLE AND WIRE LEGEND						
LABEL	PART NO	MANUFACTURER	APPLICATION	RESISTANCE MET	AWG	DESCRIPTION
485	182 P/P/R	GENERIC	RS-485	7.77	18	2 COND. SOLID COPPER P/P/R ANALOG UNSHEATHED
A	182 P/P/R	GENERIC	SLC	4.89	18	2 COND. SOLID COPPER P/P/R ADDRESSABLE
P	142 P/P/R	GENERIC	AUX	3.97	14	2 COND. SOLID COPPER P/P/R UNSHEATHED
V	142 P/P/R	GENERIC	NAC	3.97	14	2 COND. SOLID COPPER P/P/R ANALOG UNSHEATHED



VSC FIRE & SECURITY, INC.
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 919-645-5880



ALTIS SERENITY CLUBHOUSE
 325 STREAMSIDE TERRACE,
 FUQUARY-VARINA, NC 27526

REVISIONS:	DATE:
Permit Set	1-29-26
REVI - Engineer added occupant notification	3-25-26

DRAWN BY: K.H.
 PROJECT MGR: TBD
 A/E: HARTNETT COUNTY
 DATE: 3/28/26
 SCALE: AS-NOTED
 JOB NO.: TBD
 TYPE: FIRE ALARM SYSTEM

FOR SUBMITTAL, DRAWING RECORD
 I/We have reviewed these plans and
 certify that they comply with the
 applicable codes and standards.
 I/We certify that they were copied from
 sealed engineering plans.

DRAWN BY: [Signature]
 PROJECT MGR: [Signature]
 DATE: 3-28-26
 PRINTED NAME: [Name] DATE: [Date]

FIRE ALARM SYSTEM DESIGN LAYOUT, RISER DETAIL, AND DEVICE LEGEND
 All ceilings less than 10' - 0" unless noted

SCALE: 1/8" = 1'-0"

SHEET NUMBER:
 FAS-02

PANEL P1 (ES-50XP) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS)							
PANEL COMPONENTS				STANDBY CURRENT		SECONDARY ALARM CURRENT	
				CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
QTY	PART NO.	DESCRIPTION					
1	ES-50XP	ADDRESSABLE FIRE ALARM CONTROL PANEL WITH ONE SLC LOOP. INCLUDES MAIN CIRCUIT BOARD WITH DISPLAY. PRE-INSTALLED CLSS PATHWAY PRO COMMUNICATOR, CHASSIS WITH TRANSFORMER, DRESS PANEL, BACKBOX WITH DOOR, PLASTIC BAG CONTAINING SCREWS, CABLES, KEY, ETC.	0	0	0	0	
1	CLSS PATHWAY PRO	CLSS	0.1	0.1			0.1
1	ES-50XP MAIN BOARD	MAIN BOARD	0.141	0.141	0.257	0.257	0.257
TOTAL STANDBY (A)			0.24225		TOTAL ALARM (A)		0.57250
REQUIRED STANDBY TIME (HOURS)					REQUIRED ALARM TIME (MINUTES)		24
SECONDARY STANDBY LOAD (A)			0.274225		SECONDARY ALARM LOAD (A)		24
STANDBY AND ALARM SUBTOTAL (AMP HOURS)			0.57250		0.083		6.58
DERATING FACTOR					6.63		1.25
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					8.29		
PROVIDE (2) 12V 12AH BATTERIES							
*BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION.							

PANEL P51 (FL-P56) BATTERY CALCULATION (SECONDARY POWER SOURCE REQUIREMENTS)							
PANEL COMPONENTS				STANDBY CURRENT		SECONDARY ALARM CURRENT	
				CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
QTY	PART NO.	DESCRIPTION					
1	FL-P56	60 A, 120 VAC REMOTE CHARGER POWER SUPPLY IN A LOCKABLE METAL ENCLOSURE	0	0	0	0	
1	FL-P56 MAIN BOARD	FIRE ALARM POWER SUPPLY MAIN BOARD	0.139	0.139	0.157	0.157	
TOTAL STANDBY (A)			0.139		TOTAL ALARM (A)		1.51
REQUIRED STANDBY TIME (HOURS)					REQUIRED ALARM TIME (MINUTES)		24
SECONDARY STANDBY LOAD (A)			0.139		SECONDARY ALARM LOAD (A)		24
STANDBY AND ALARM SUBTOTAL (AMP HOURS)			1.51		0.083		3.46
DERATING FACTOR					3.46		1.25
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					4.33		
PROVIDE (2) 12V 7AH BATTERIES							
*BATTERY BOX SIZE CAPACITY NOT SPECIFIED. REFER TO MANUFACTURER DOCUMENTATION.							

P1 AUX1 POINT-TO-POINT REPORT											
CURRENT SUMMARY				POWER SUMMARY							
MAX. CIRCUIT CURRENT (A)	1	TOTAL CIRCUIT CURRENT (A)	0.08	STARTING CALC. VOLTAGE:	20.40	MAX. VOLTAGE DROP:	0.05				
		SPARE CIRCUIT CURRENT (A)	0.920	VOLTAGE DROP %:			0.23 %				
		SPARE CIRCUIT CURRENT %:	92.00 %	MIN. OPERATIONAL VOLTAGE:	16	END OF LINE VOLTAGE:	20.35				
		TOTAL CARD CURRENT (A)	0.2005	WIRE RESISTANCE (Ω/KFT):	3.07	TOTAL CIRCUIT LENGTH (FT):	184				
		SPARE CARD CURRENT (A)	2.50	TOTAL CIRCUIT RESISTANCE (Ω):			1.13				
		SPARE CARD CURRENT %:	92.57 %								
CIRCUIT WIRING PROPERTIES: P 14/2 FPLPR AUX 14 AWG, 2 COND. SOLID COPPER FPLPR UNSHIELDED											
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED											
DEVICE LABEL	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	REMAINING ALARM CURRENT (A)	DISTANCE FROM PREVIOUS (F)	RESISTANCE FROM PREVIOUS (Ω)	VOLTAGE DROP FROM PREVIOUS	VOLTAGE AT DEVICE	TOTAL VOLTAGE DROP	VOLTAGE DROP PERCENT
P1-AUX1-01	ANN-80	RED 80 CHARACTER LCD ANNUNCIATOR		0.04	0.08	5	0.033029	0	20.40	0	0.01 %
P1-AUX1-02	ANN-80	RED 80 CHARACTER LCD ANNUNCIATOR		0.04	0.04	179	1.10	0.04	20.35	0.05	0.23 %

P1 N1 POINT-TO-POINT REPORT											
CURRENT SUMMARY				POWER SUMMARY							
MAX. CIRCUIT CURRENT (A)	2.50	TOTAL CIRCUIT CURRENT (A)	0.087	STARTING CALC. VOLTAGE:	20.40	MAX. VOLTAGE DROP:	0.01				
		SPARE CIRCUIT CURRENT (A)	2.41	VOLTAGE DROP %:			0.02 %				
		SPARE CIRCUIT CURRENT %:	96.52 %	MIN. OPERATIONAL VOLTAGE:	16	END OF LINE VOLTAGE:	20.39				
		TOTAL CARD CURRENT (A)	0.2005	WIRE RESISTANCE (Ω/KFT):	3.07	TOTAL CIRCUIT LENGTH (FT):	9				
		SPARE CARD CURRENT (A)	2.50	TOTAL CIRCUIT RESISTANCE (Ω):			0.058302				
		SPARE CARD CURRENT %:	92.57 %								
CIRCUIT WIRING PROPERTIES: Y 14/2 FPLPR NAC 14 AWG, 2 COND. SOLID COPPER FPLPR ANALOG UNSHIELDED											
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED											
DEVICE LABEL	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	REMAINING ALARM CURRENT (A)	DISTANCE FROM PREVIOUS (F)	RESISTANCE FROM PREVIOUS (Ω)	VOLTAGE DROP FROM PREVIOUS	VOLTAGE AT DEVICE	TOTAL VOLTAGE DROP	VOLTAGE DROP PERCENT
P1-N1-01 EOL 4.7K	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	75CD	0.087	0.087	9	0.058302	0.01	20.39	0.01	0.02 %

P51 N1 POINT-TO-POINT REPORT											
CURRENT SUMMARY				POWER SUMMARY							
MAX. CIRCUIT CURRENT (A)	3	TOTAL CIRCUIT CURRENT (A)	0.7350	STARTING CALC. VOLTAGE:	20.40	MAX. VOLTAGE DROP:	0.60				
		SPARE CIRCUIT CURRENT (A)	2.27	VOLTAGE DROP %:			2.94 %				
		SPARE CIRCUIT CURRENT %:	75.50 %	MIN. OPERATIONAL VOLTAGE:	16	END OF LINE VOLTAGE:	19.80				
		TOTAL CARD CURRENT (A)	1.35	WIRE RESISTANCE (Ω/KFT):	3.07	TOTAL CIRCUIT LENGTH (FT):	220				
		SPARE CARD CURRENT (A)	4.65	TOTAL CIRCUIT RESISTANCE (Ω):			1.35				
		SPARE CARD CURRENT %:	77.45 %								
CIRCUIT WIRING PROPERTIES: Y 14/2 FPLPR NAC 14 AWG, 2 COND. SOLID COPPER FPLPR ANALOG UNSHIELDED											
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED											
DEVICE LABEL	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	REMAINING ALARM CURRENT (A)	DISTANCE FROM PREVIOUS (F)	RESISTANCE FROM PREVIOUS (Ω)	VOLTAGE DROP FROM PREVIOUS	VOLTAGE AT DEVICE	TOTAL VOLTAGE DROP	VOLTAGE DROP PERCENT
PS1-N1-01	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.7350	2	0.013096	0.01	20.39	0.01	0.05 %
PS1-N1-02	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	75CD	0.087	0.70	18	0.108197	0.08	20.31	0.09	0.42 %
PS1-N1-03	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	15CD	0.035	0.6130	67	0.408417	0.25	20.06	0.34	1.65 %
PS1-N1-04	P2WLED	2-WIRE, HORN STROBE, WHITE	75CD	0.087	0.5780	9	0.057155	0.03	20.03	0.37	1.81 %
PS1-N1-05	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.491	16	0.098916	0.05	19.98	0.42	2.05 %
PS1-N1-06	P2WLED	2-WIRE, HORN STROBE, WHITE	75CD	0.087	0.456	16	0.099386	0.05	19.94	0.46	2.27 %
PS1-N1-07	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.369	16	0.100133	0.04	19.90	0.5	2.45 %
PS1-N1-08	P2WLED	2-WIRE, HORN STROBE, WHITE	75CD	0.087	0.334	24	0.147362	0.05	19.85	0.550	2.69 %
PS1-N1-09	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.247	11	0.065963	0.02	19.83	0.570	2.77 %
PS1-N1-10	P2WLED	2-WIRE, HORN STROBE, WHITE	75CD	0.087	0.212	8	0.050361	0.01	19.82	0.580	2.82 %
PS1-N1-11	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	30CD	0.038	0.125	25	0.153136	0.02	19.81	0.590	2.92 %
PS1-N1-12 EOL 4.7K	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	75CD	0.087	0.087	8	0.051518	0	19.80	0.60	2.94 %

P51 N2 POINT-TO-POINT REPORT											
CURRENT SUMMARY				POWER SUMMARY							
MAX. CIRCUIT CURRENT (A)	3	TOTAL CIRCUIT CURRENT (A)	0.6180	STARTING CALC. VOLTAGE:	20.40	MAX. VOLTAGE DROP:	1.07				
		SPARE CIRCUIT CURRENT (A)	2.38	VOLTAGE DROP %:			5.26 %				
		SPARE CIRCUIT CURRENT %:	79.40 %	MIN. OPERATIONAL VOLTAGE:	16	END OF LINE VOLTAGE:	19.33				
		TOTAL CARD CURRENT (A)	1.35	WIRE RESISTANCE (Ω/KFT):	3.07	TOTAL CIRCUIT LENGTH (FT):	451				
		SPARE CARD CURRENT (A)	4.65	TOTAL CIRCUIT RESISTANCE (Ω):			2.77				
		SPARE CARD CURRENT %:	77.45 %								
CIRCUIT WIRING PROPERTIES: Y 14/2 FPLPR NAC 14 AWG, 2 COND. SOLID COPPER FPLPR ANALOG UNSHIELDED											
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED											
DEVICE LABEL	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	REMAINING ALARM CURRENT (A)	DISTANCE FROM PREVIOUS (F)	RESISTANCE FROM PREVIOUS (Ω)	VOLTAGE DROP FROM PREVIOUS	VOLTAGE AT DEVICE	TOTAL VOLTAGE DROP	VOLTAGE DROP PERCENT
PS1-N2-01	P2WLED	2-WIRE, HORN STROBE, WHITE	30CD	0.038	0.6180	114	0.702	0.43	19.97	0.43	2.13 %
PS1-N2-02	P2WLED	2-WIRE, HORN STROBE, WHITE	30CD	0.038	0.580	17	0.101482	0.06	19.91	0.49	2.42 %
PS1-N2-03	SWLED	STROBE, WALL, WHITE	15CD	0.018	0.5420	18	0.10797	0.06	19.85	0.550	2.70 %
PS1-N2-04	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.5240	1	0.003096	0	19.85	0.550	2.71 %
PS1-N2-05	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	30CD	0.038	0.489	30	0.183334	0.09	19.76	0.640	3.15 %
PS1-N2-06	P2WLED	2-WIRE, HORN STROBE, WHITE	110CD	0.094	0.451	64	0.390362	0.18	19.58	0.820	4.01 %
PS1-N2-07	P2WLED	2-WIRE, HORN STROBE, WHITE	30CD	0.038	0.357	27	0.168635	0.06	19.52	0.880	4.31 %
PS1-N2-08	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.319	7	0.043286	0.01	19.51	0.890	4.38 %
PS1-N2-09	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	15CD	0.035	0.284	19	0.116501	0.03	19.47	0.930	4.54 %
PS1-N2-10	P2WLED	2-WIRE, HORN STROBE, WHITE	30CD	0.038	0.249	41	0.252344	0.06	19.41	0.990	4.85 %
PS1-N2-11	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	15CD	0.035	0.211	17	0.103909	0.02	19.39	1.01	4.95 %
PS1-N2-12	SWLED	STROBE, WALL, WHITE	15CD	0.018	0.176	13	0.081527	0.01	19.37	1.03	5.02 %
PS1-N2-13	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.158	8	0.048316	0.01	19.37	1.03	5.06 %
PS1-N2-14	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.123	23	0.141049	0.02	19.35	1.05	5.15 %
PS1-N2-15	P2WLED	2-WIRE, HORN STROBE, WHITE	15CD	0.035	0.088	31	0.192573	0.02	19.33	1.07	5.23 %
PS1-N2-16	SWLED	STROBE, WALL, WHITE	15CD	0.018	0.053	12	0.075448	0	19.33	1.07	5.25 %
PS1-N2-17 EOL 4.7K	P2GRKLED	2-WIRE, COMPACT HORN STROBE, WALL, RED, OUTDOOR	15CD	0.035	0.035	10	0.059672	0	19.33	1.07	5.26 %

FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS

SCALE: NTS

VSC FIRE & SECURITY, INC.
 MAILING ADDRESS:
 325 STREAMSIDE TERRACE,
 FUYUARY-VARINA, NC 27526
 919-645-5880



ALTIS SERENITY CLUBHOUSE
 325 STREAMSIDE TERRACE,
 FUYUARY-VARINA, NC 27526

REVISIONS: DATE:
 Permit Set 1-29-26

REVI - Engineer added occupant notification 3-25-26

DRAWN BY: K.H
 PROJECT MGR: TBD
 AHJ: HARTNETT COUNTY
 DATE: 3/25/26
 SCALE: AS-NOTED
 JOB NO: TBD
 TYPE: FIRE ALARM SYSTEM

FOR SUBMITTAL, DRAWING RECORD
 (I) have reviewed these plans and certify that they comply with the applicable codes and standards. I certify they were copied from sealed engineering plans.
 DRAWING NO: 2024-001
 PROJECT NO: 2024-001
 DATE: 3-25-26

SHEET NUMBER:
 FAS-03

NOT ALL DEVICES REPRESENTED ON THIS PAGE MAY BE USED ON THIS PROJECT.
 DEVICE DRAWINGS ARE FOR REFERENCE ONLY. INSTALLING CONTRACTOR IS RESPONSIBLE FOR ALL FIELD WIRING. REFER TO INDIVIDUAL CUT SHEETS THAT COME WITH EACH DEVICE FOR MORE INFORMATION.

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 MAILING ADDRESS:
 GARBER, NC 27529
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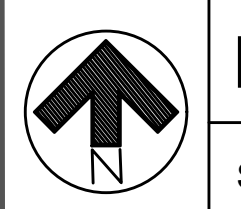
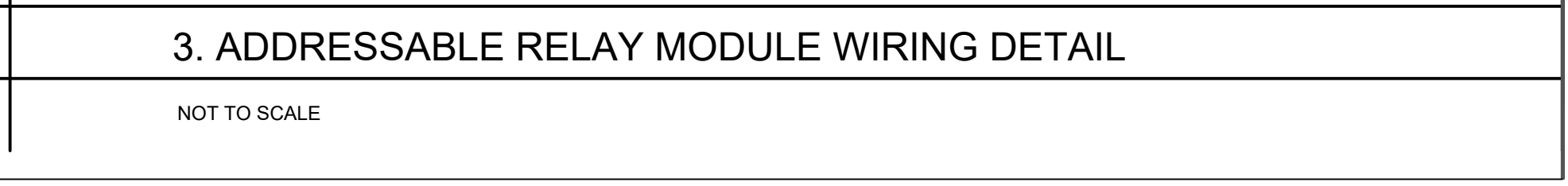
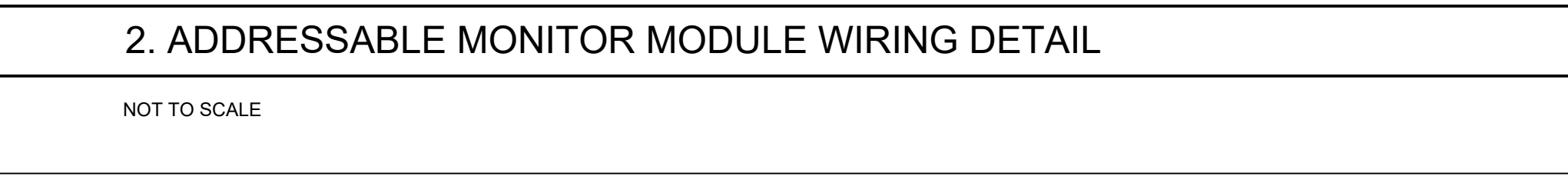
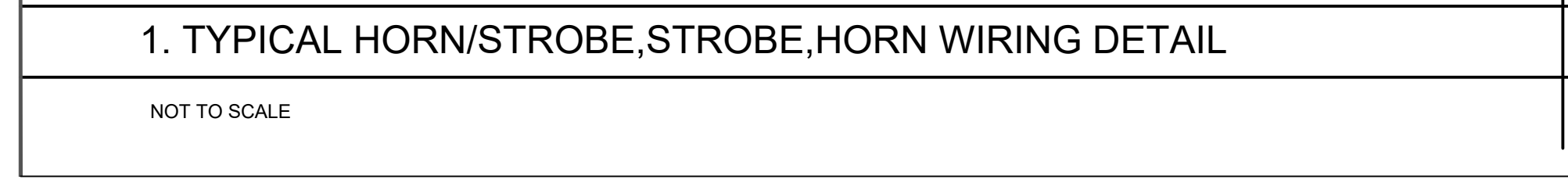
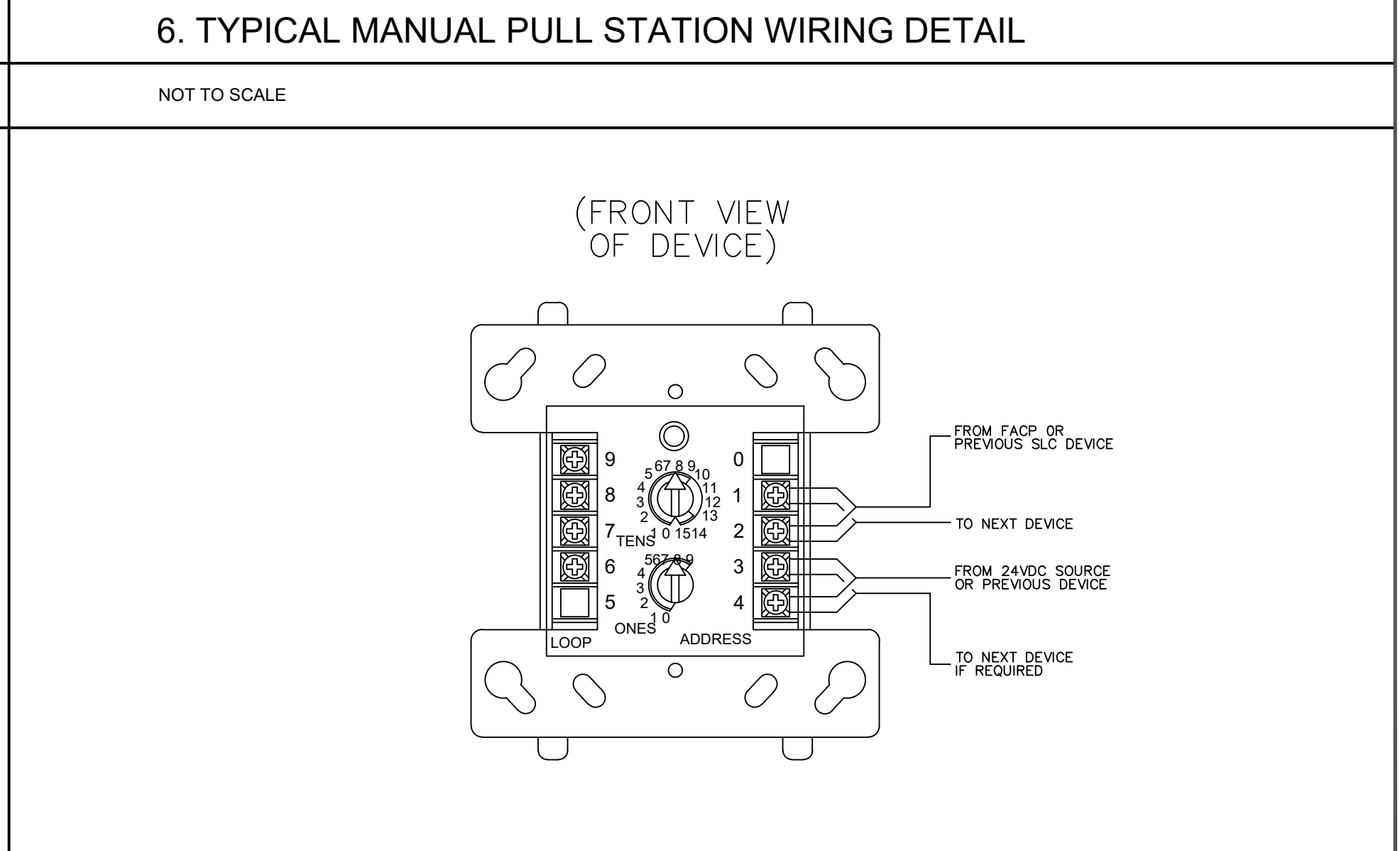
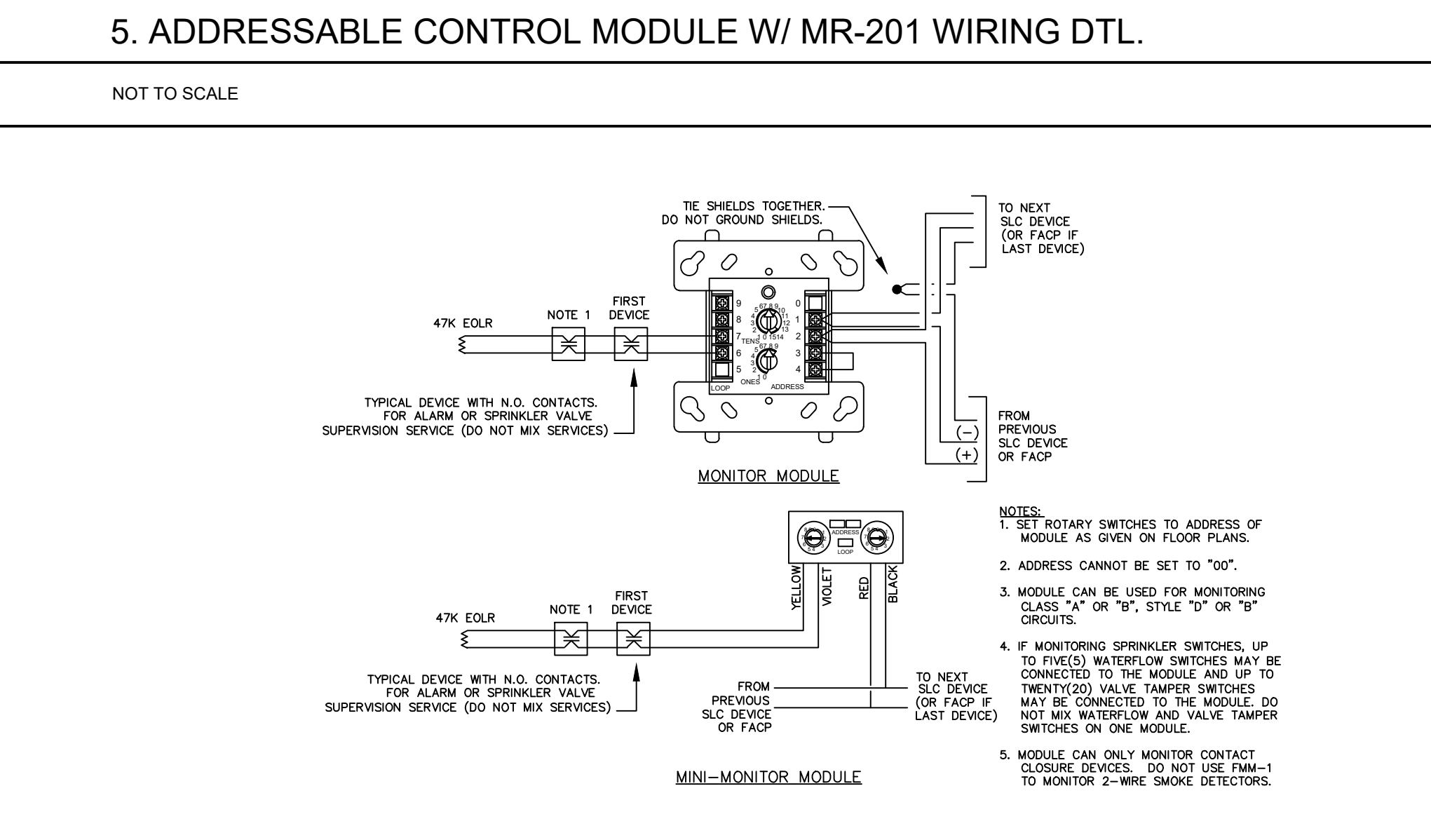
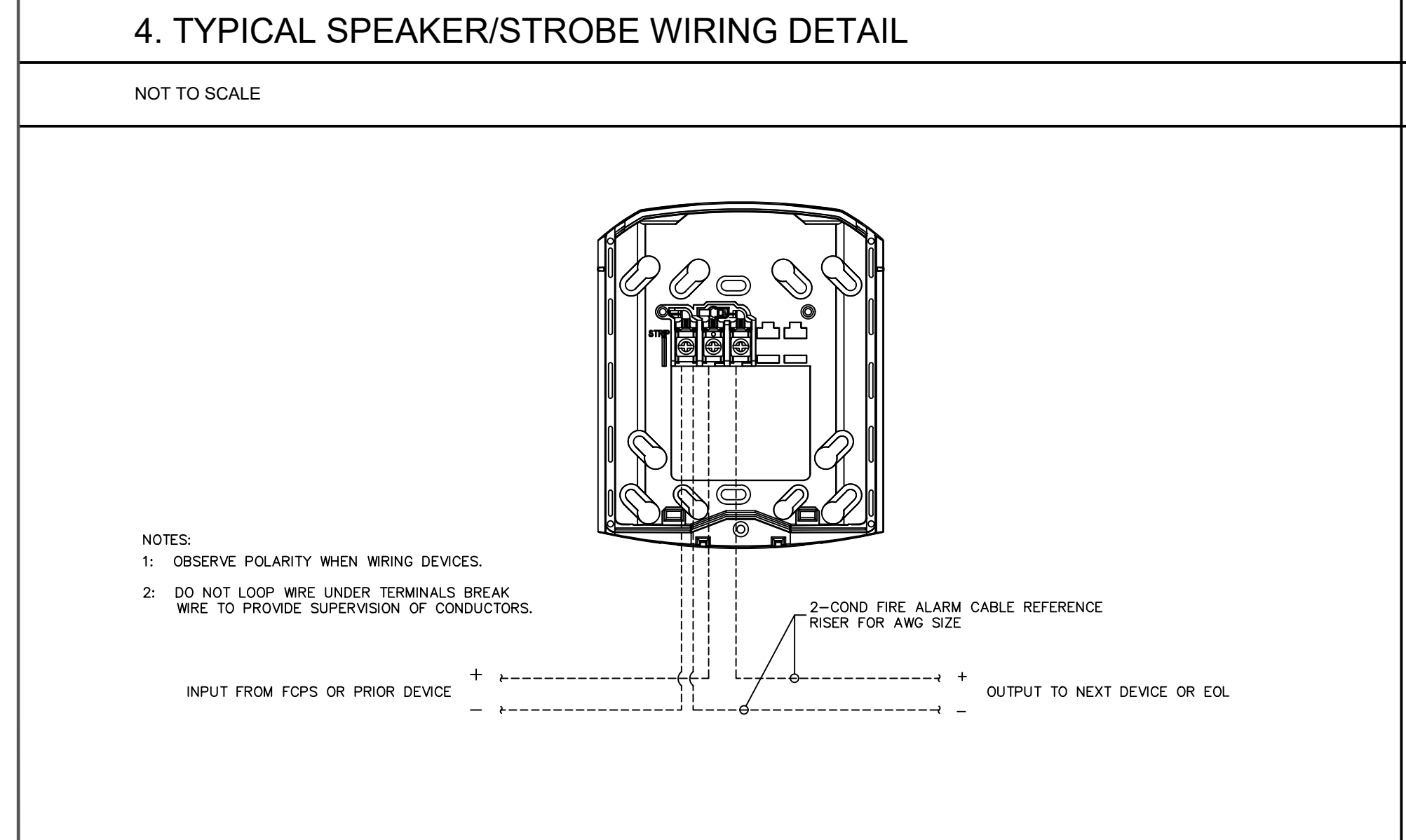
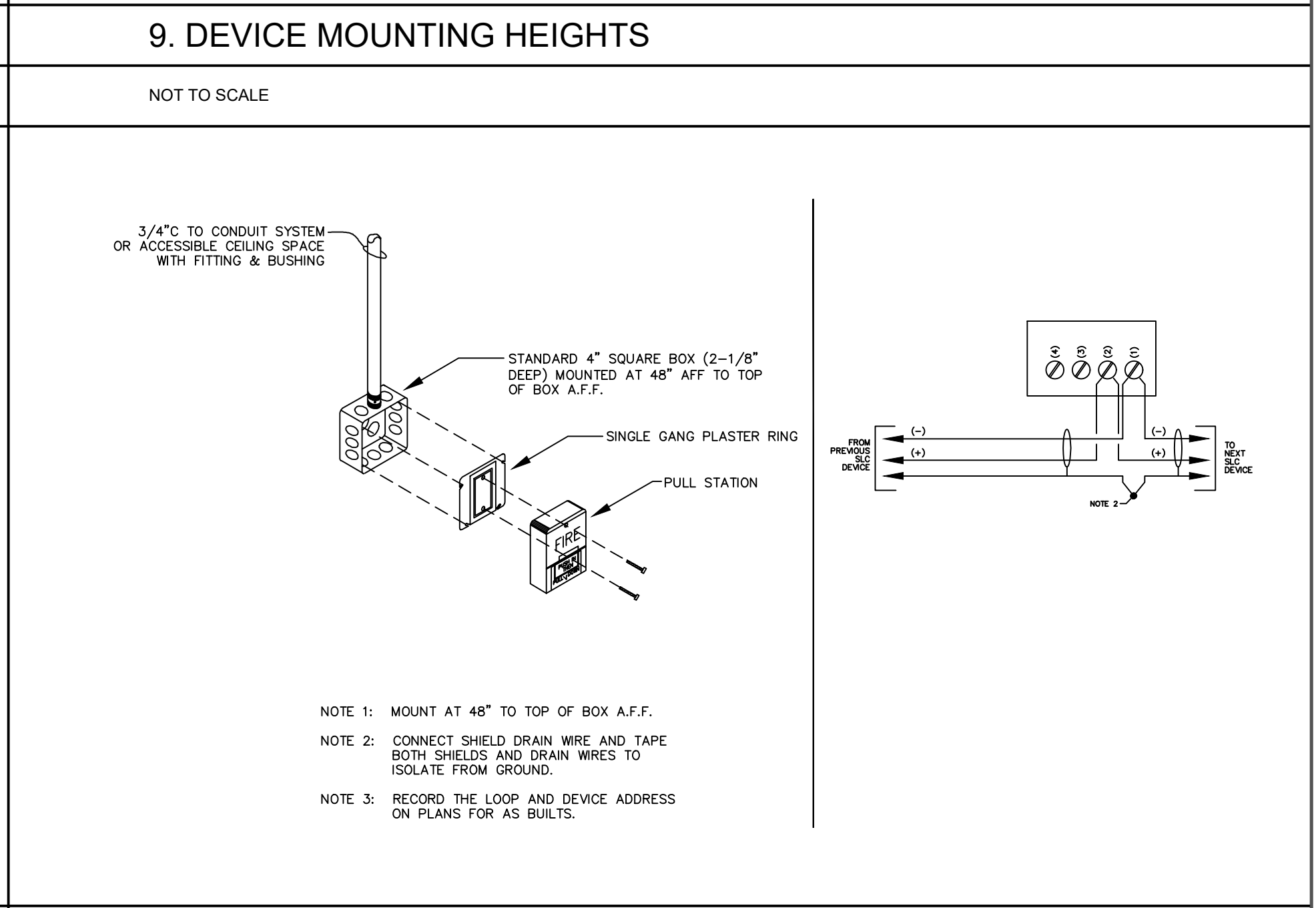
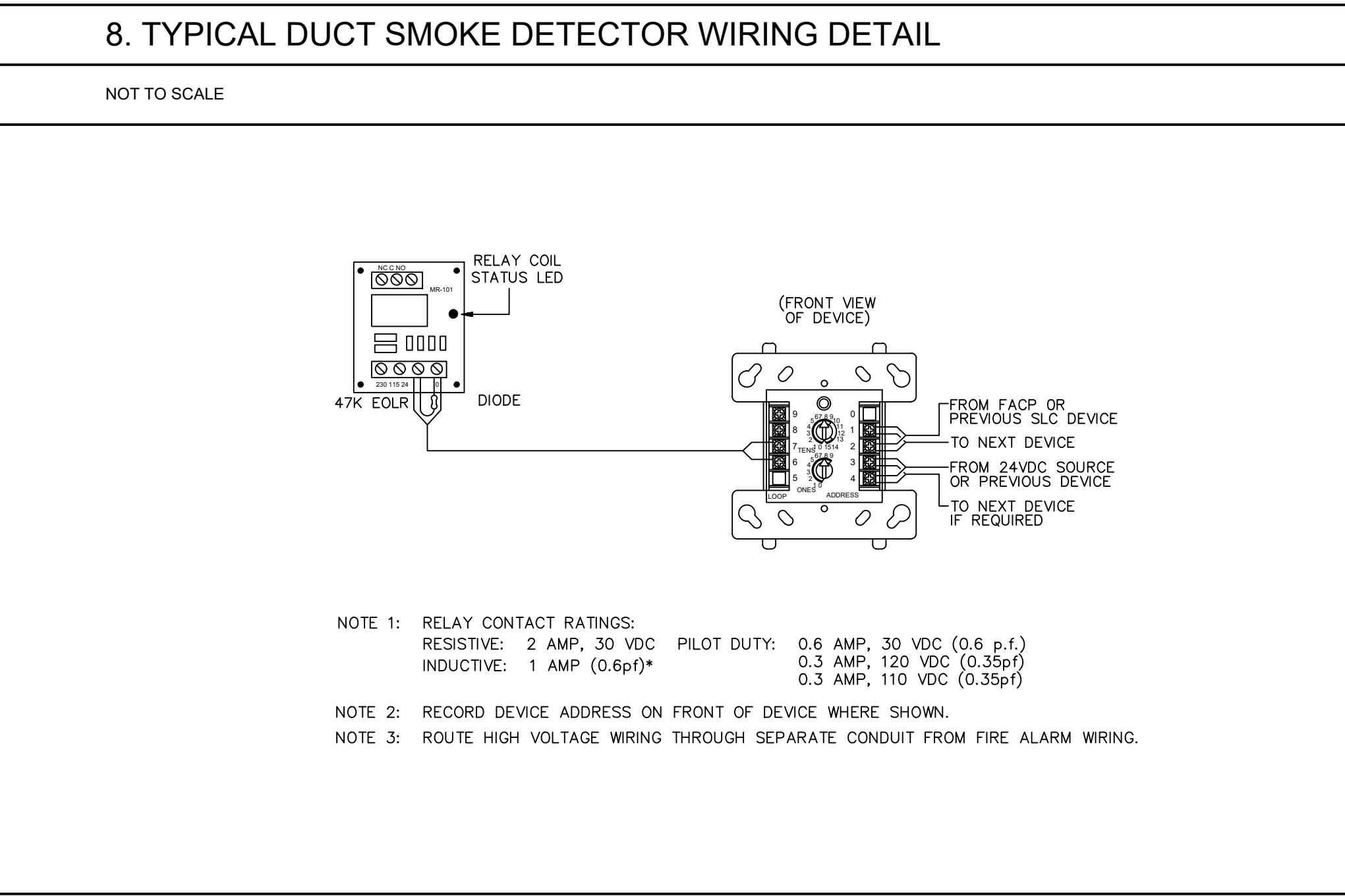
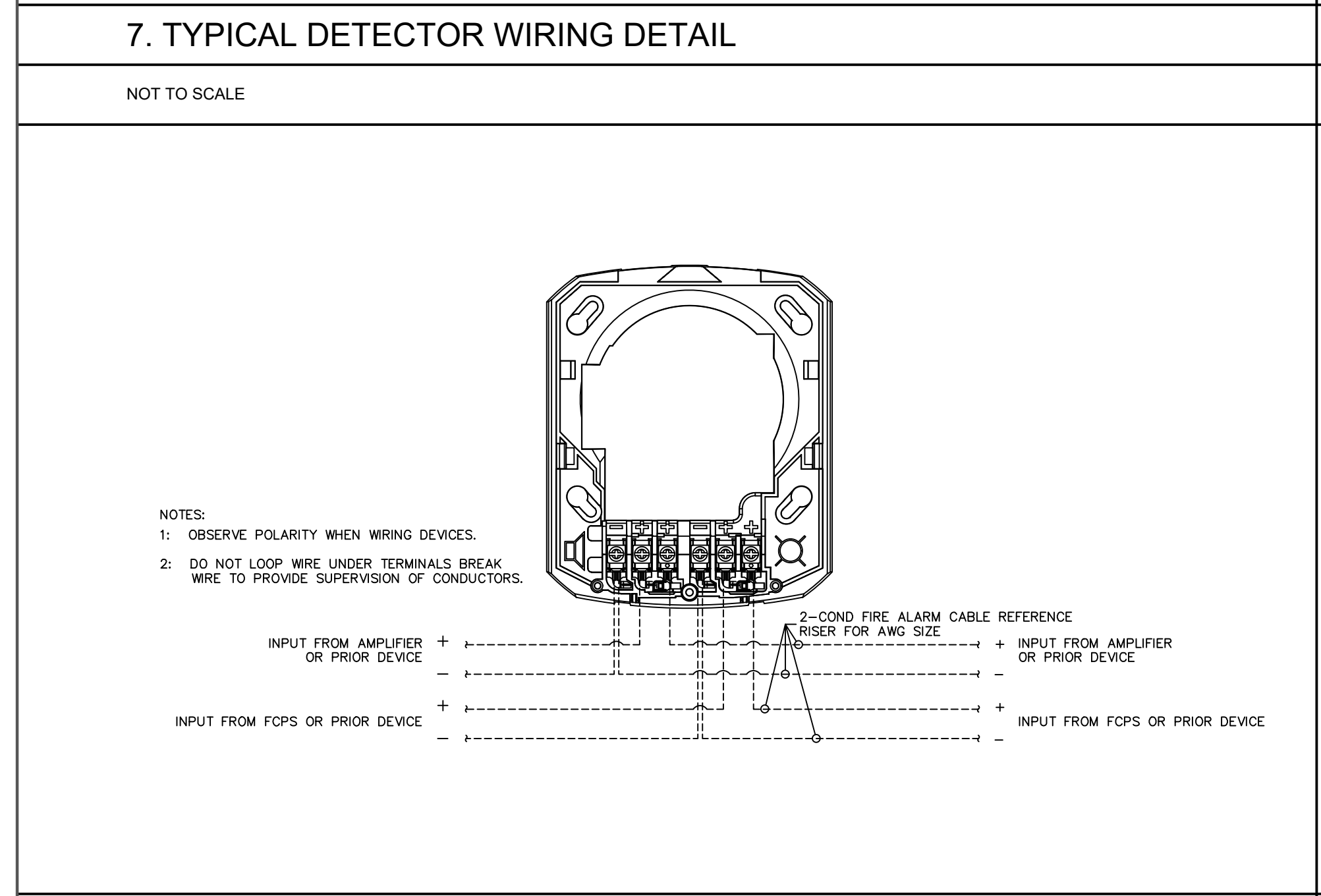
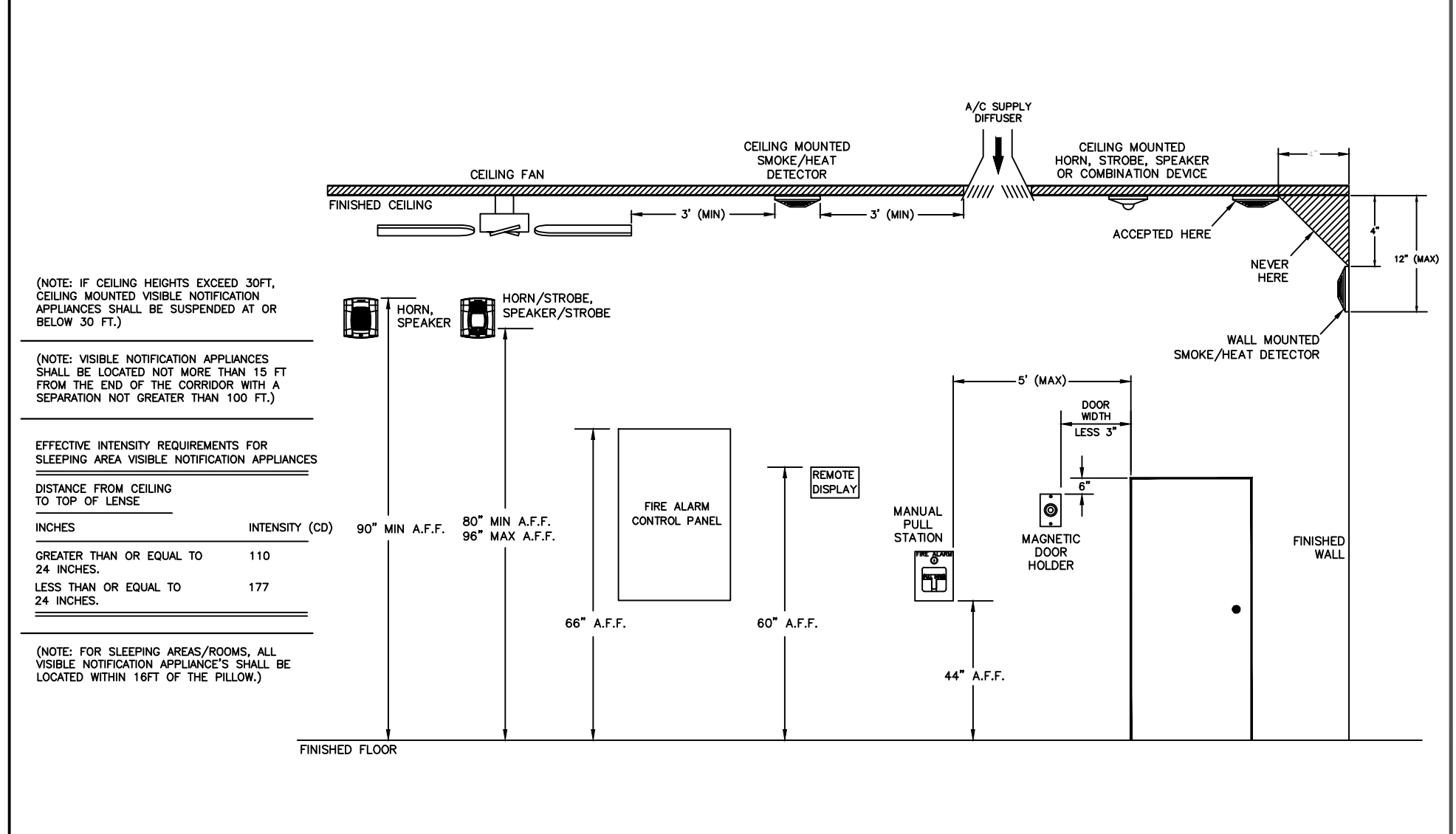
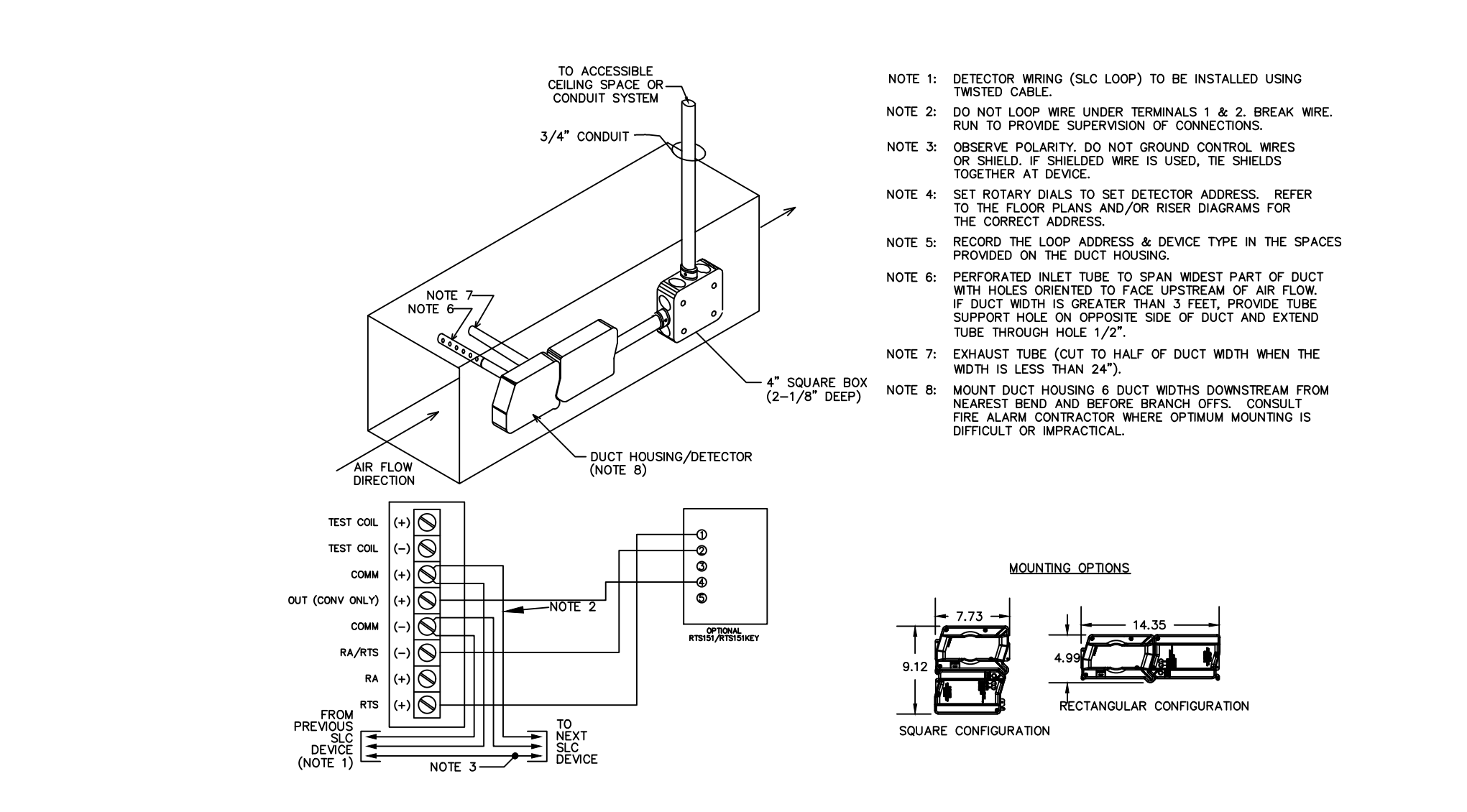
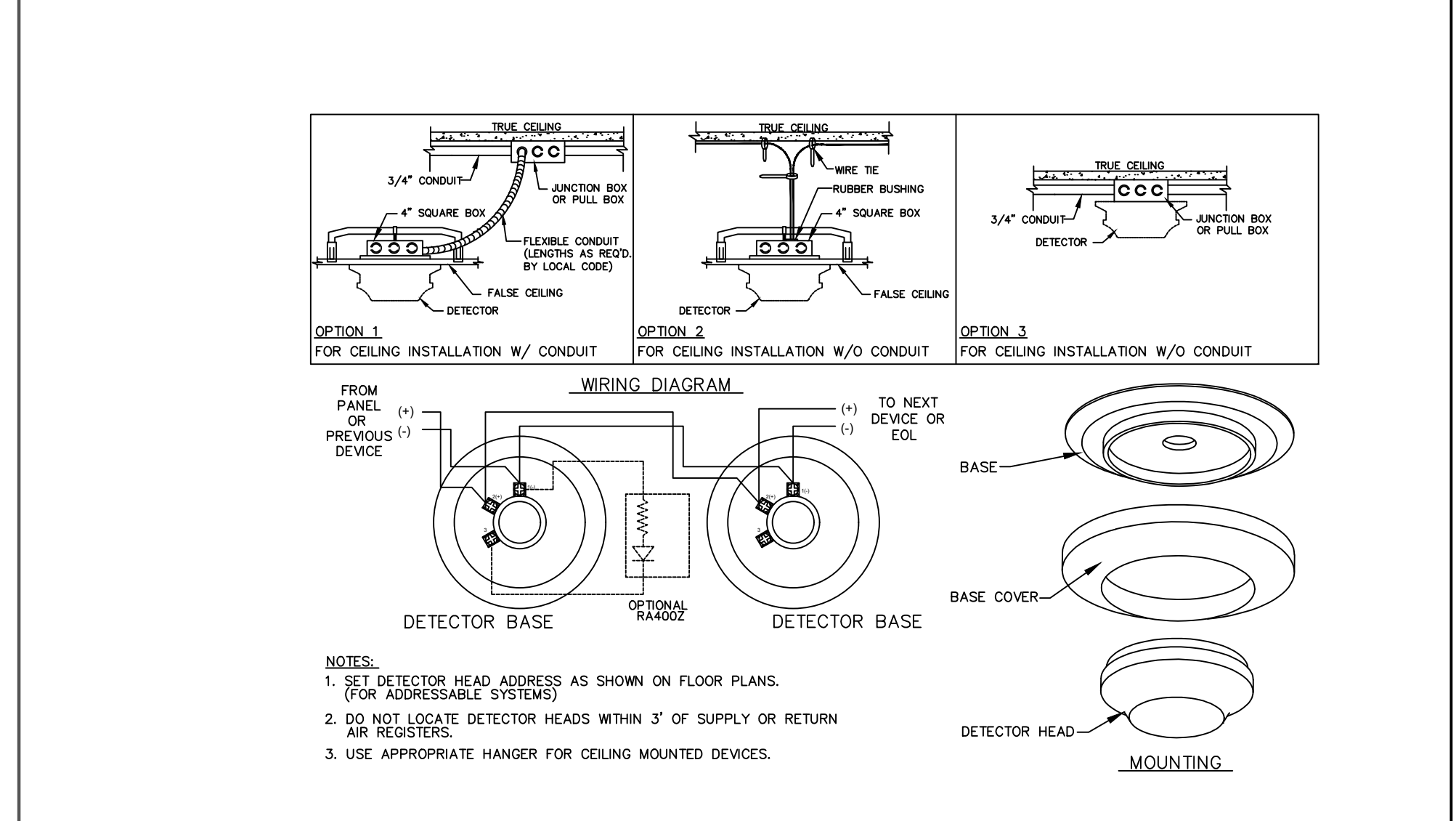
ALTIS SERENITY CLUBHOUSE
 325 STREAMSIDE TERRACE,
 FUGUARY-VARINA, NC 27526

REVISIONS:	DATE:
Permit Set	1-29-26
REVI - Engineer added occupant notification	3-25-26

DRAWN BY: KH
 PROJECT MGR: TBD
 A/E: HARNETT COUNTY
 DATE: 3/28/26
 SCALE: AS-NOTED
 JOB NO.: TBD
 TYPE: FIRE ALARM SYSTEM

FOR SUBMITTAL, DRAWING RECORD
 I/We have reviewed these plans and certify that they comply with the applicable codes and standards. I/We certify they were created from model engineering plans.
 I/We certify that the fire alarm system is certified to UL 1480 and valid through 06-27-2027.
 Dylan T. Uink
 PRINTED NAME: 3-25-26
 DATE

SHEET NUMBER:
 FAS-04



FIRE ALARM SYSTEM COMPONENTS WIRING DETAILS

SCALE: NTS