

2902 ADELINE APARTMENTS

2902 ADELINE STREET BERKELEY, CALIFORNIA 94703 FIRE ALARM SYSTEM

GENERAL NOTES

- 1- ALL WIRING SHALL BE IN ACCORDANCE WITH CALIFORNIA ELECTRICAL CODE (CEC) AND REGULATIONS. REFERENCE APPLICABLE EDITIONS UNDER "APPLICABLE CODES AND REGULATIONS".
- 2- WIRING SHALL NOT BE LOOPED THROUGH DEVICES UPON TERMINATION. WIRE MUST BE CUT FOR IN AND OUT RUNS PRIOR TO DEVICE TERMINATION.
- 3- ALL CONDUITS SHALL BE A MINIMUM OF 3/4". CONDUIT SIZES SHALL BE IN ACCORDANCE WITH C.E.C., CHAPTER 9 TABLES AND EXAMPLES ON CONDUIT FILLS.
- 4- ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED TO THE MANUFACTURERS SPECIFICATIONS.
- 5- AUDIBLE NOTIFICATION IN SLEEPING AREAS SHALL HAVE A SOUND LEVEL OF AT LEAST 15 DB ABOVE AVERAGE AMBIENT SOUND LEVEL OR 5 DB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS OR A SOUND LEVEL OF AT LEAST 75 DBA, WHICHEVER IS GREATER, MEASURED AT THE PILLOW LEVEL. [NFPA 72 §18.4.5.1]
- 6- PUBLIC AUDIBILITY NOTIFICATION SHALL HAVE A SOUND LEVEL OF AT LEAST 15 DB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 DB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5- FEET ABOVE THE FLOOR. [NFPA 72 §18.4.5.1]
- 7- ALL STROBE APPLIANCES SHALL BE SYNCHRONIZED IN ACCORDANCE WITH NATIONAL FIRE ALARM CODE (NFPA 72). REFERENCE APPLICABLE EDITIONS UNDER "APPLICABLE CODES AND REGULATIONS".
- 8- SMOKE DETECTOR AND HEAT DETECTOR LOCATIONS ARE BASED ON SMOOTH CEILING WITH MAXIMUM HEIGHT OF 10 FEET UNLESS OTHERWISE NOTED.
- 9- STROBE LOCATIONS ARE BASED ON 10 FOOT CEILING HEIGHTS AND ARE INSTALLED IN ACCORDANCE WITH NATIONAL FIRE ALARM CODE (NFPA 72) UNLESS OTHERWISE NOTED. REFERENCE APPLICABLE EDITIONS UNDER "APPLICABLE CODES AND REGULATIONS".
- 10- WALL-MOUNTED STROBE APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 INCHES AND NOT GREATER THAN 96 INCHES ABOVE FINISHED FLOOR LEVEL.
- 11- OPERABLE PORTION OF MANUAL PULL STATIONS SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR LEVEL.
- 12- FIRE ALARM SIGNAL SHALL MEET ANSI V3.41, AUDIBLE EMERGENCY EVACUATION SIGNAL (TEMPORAL PATTERN).
- 13- INITIATION DEVICE CIRCUITS ARE RATED POWER LIMITED. MINIMUM RECOMMENDED WIRE SIZE IS LISTED.
- 14- CONTROL CIRCUITS ARE NON-POWER LIMITED. MINIMUM RECOMMENDED WIRE SIZE TO BE DETERMINED BY CIRCUIT LOAD.
- 15- WHERE SHIELDED CABLE IS USED, THE SHIELD SHALL BE CONTINUOUS AND GROUNDED ONLY AT THE RESPECTIVE CONTROL PANEL.
- 16- REFER TO RESPECTIVE CATALOG CUT SHEETS FOR ELECTRICAL MOUNTING HARDWARE.
- 17- T-TAPPING OR PARALLEL BRANCHING OF ADDRESSABLE INITIATION DEVICE CIRCUITS IS PERMITTED ON CLASS B CIRCUITS ONLY. T-TAPPING IS PROHIBITED ON ANY OTHER CIRCUITS (I.E. NAC, IDC, PANEL NETWORK WIRING).
- 19- PHOTOELECTRIC DETECTORS SHALL NOT BE WITHIN 36" OF DIRECT AIR STREAM SUPPLY AIR OUTLETS.
- 20- UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE AHI.
- 21- ALL DEVICES OF THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE FIRE MARSHAL.
- 22- AUDIBILITY WILL BE DETERMINED BY THE FIELD FIRE MARSHAL.
- 23- INITIATION AND NOTIFICATION CIRCUITS SHALL BE CLEARLY IDENTIFIED AT ALL JUNCTION BOXES AND TERMINATIONS.
- 24- THE TELEPHONE NUMBER OF THE 24 HOUR MONITORING SERVICE SHALL BE PLACED ON THE DOOR OF THE PANEL OR NEXT TO THE PANEL ON THE WALL.
- 25- CIRCUIT BREAKER FOR THE FIRE ALARM PANEL SHALL BE RED IN COLOR AND HAVE A LOCK OUT ON IT. THE CIRCUIT BREAKER SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT".
- 26- FIRE BELL SHALL BE ON ITS OWN BREAKER.
- 27- ALL NOTIFICATION APPLIANCES INSTALLED WITHIN THIS PROJECT SHALL PROVIDE A DISTINCTIVE THREE-PULSE TEMPORAL PULSE FIRE ALARM SIGNAL IN ACCORDANCE WITH ANSI S3.41.
- 28- 48 HOUR ADVANCE NOTICE REQUIRED FOR ALL INSPECTIONS.
- 29- ACCESS KEYS FOR FACP AND PULL STATIONS SHALL BE PROVIDED AND LABELED FOR PLACEMENT IN THE KNOX BOX.
- 30- A 24 HOUR LISTED FIRE MONITORING SERVICES SHALL RECEIVE SIGNALS.
- 31- ROOM IN WHICH FACP IS LOCATED SHALL BE LABEL ACCORDING TO LOCAL FD POLICY.
- 32- CALL FOR FINAL FIRE ALARM TEST AND INSPECTION AT LEAST 24 HOURS IN ADVANCE. APPROVED PLANS MUST BE ON SITE FOR FINAL INSPECTION. ALL AREAS THAT REQUIRE INSPECTION MUST BE ACCESSIBLE. THIS MAY MEAN HAVING A LIFT ON SITE TO INSPECT/TEST WORK, AS REQUIRED.
- 34- AN NFPA 72 RECORD OF COMPLETION SHALL BE COMPLETED AND PROVIDED TO THE FIRE INSPECTOR AT TIME OF FINAL ACCEPTANCE INSPECTION/TESTING.
- 35- ALL FIRE ALARM SYSTEMS SHALL BE PRE-TESTED PRIOR TO SCHEDULING FINAL INSPECTION. PROVIDE THE FD "FIRE ALARM PRE-TEST VERIFICATION" FORM TO BE COMPLETED AND SUBMITTED TO THE FIRE INSPECTOR AT THE TIME OF FINAL ACCEPTANCE INSPECTION/TESTING.
- 36- PER CEC 760.30 - FIRE ALARM CIRCUITS SHALL BE IDENTIFIED AT THE TERMINAL AND JUNCTION LOCATIONS IN A MANNER THAT HELPS TO PREVENT UNINTENTIONAL SIGNAL ON THE FIRE ALARM SYSTEM CIRCUITS DURING TESTING AND SERVICING OF OTHER SYSTEMS.

DRAWING SHEET INDEX		
SHEET	SHEET DESCRIPTION	SHEET CONTENTS
FA-0.0	TITLE SHEET	SEQ OF OPS, NOTES, CODE ANALYSIS, CODES & REGS, SYMBOL LEGEND & LIST OF MATERIAL, SCOPE OF WORK, ELEVATION DETAIL
FA-0.1	SITE PLAN	
FA-1.0	1ST FLOOR PLAN	
FA-2.0	2ND FLOOR PLAN	
FA-3.0	3RD FLOOR PLAN	
FA-4.0	4TH FLOOR PLAN	
FA-5.0	5TH FLOOR PLAN	
FA-6.0	6TH FLOOR PLAN	
FA-7.0	ROOF PLAN	
FA-8.0	SYSTEM RISER DIAGRAM & FACP DEVICE ADDRESSES	
FA-9.0	BATTERY & VOLTAGE DROP CALCULATIONS - 1	
FA-9.1	BATTERY & VOLTAGE DROP CALCULATIONS - 2	
FA-10.0	FUTURE HEARING IMPAIR UNIT CONVERSION	
FA-11.0	POINT TO POINT WIRING DETAIL	
FA-12.0	FIRE STOP PENETRATION DETAILS	

PROJECT INFORMATION	
BUILDING (NEW OR EXISTING):	NEW - (1) RESIDENTIAL BUILDING
OCCUPANCY CLASS:	R2, M, S2, B
CONSTRUCTION TYPE:	TYPE I-A - GROUND LEVEL, TYPE III-A LEVELS 2-6
NUMBER OF LEVELS/ STORIES:	6 STORY (6F-3-3/4")
BUILDING TOTAL SQUARE FOOTAGE:	54,470 S.F.
TYPE OF SYSTEM:	NEW AUTOMATIC FIRE ALARM SYSTEM
FIRE ALARM SYSTEM PATHWAY SURVIVABILITY LEVEL :	LEVEL 0
BUILDING IS FULLY SPRINKLERED:	YES
MECHANICAL UPGRADE:	YES
EMERGENCY GENERATOR:	NO
FIRE PUMP:	NO
BPDA (BACKFLOW DEVICE):	YES

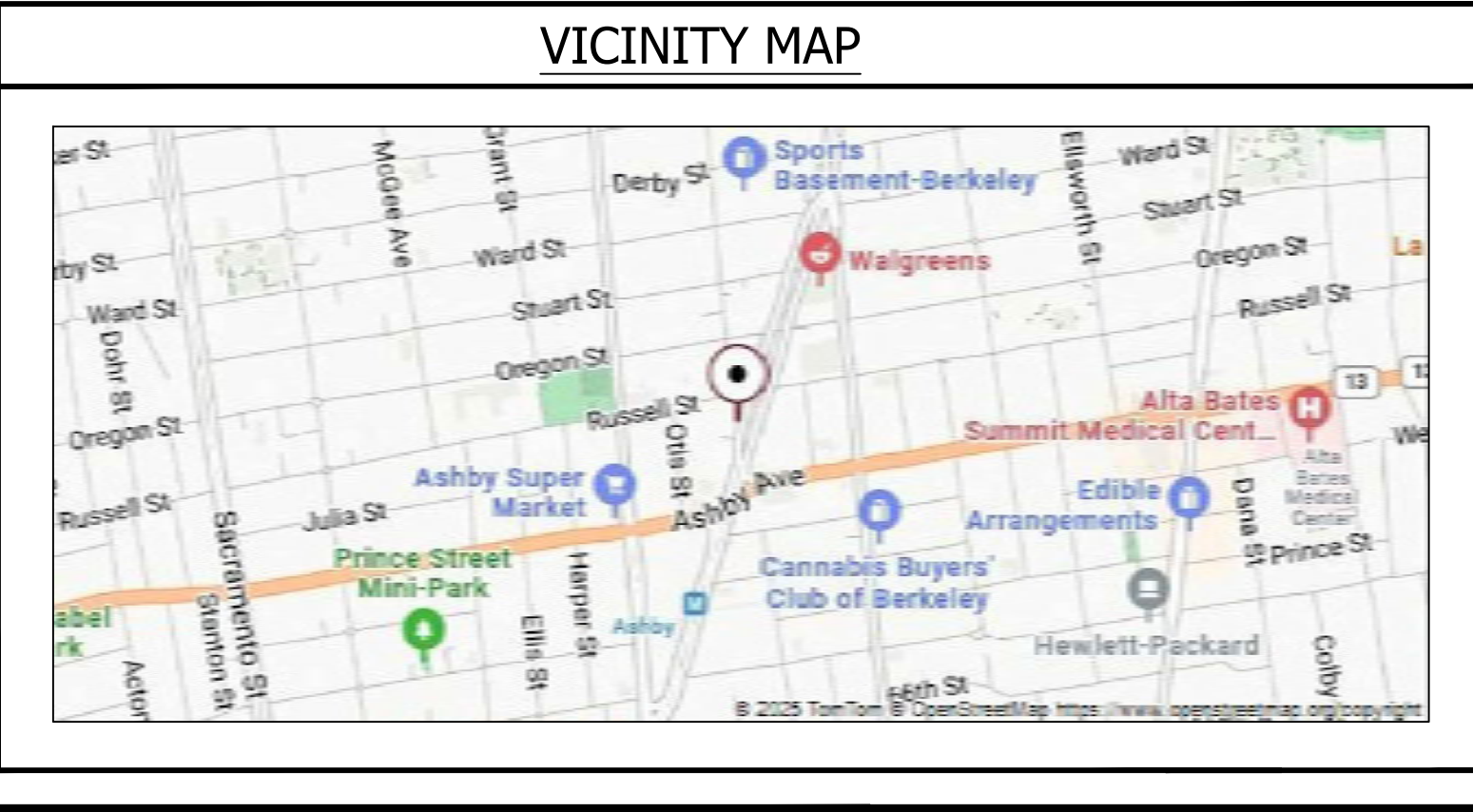
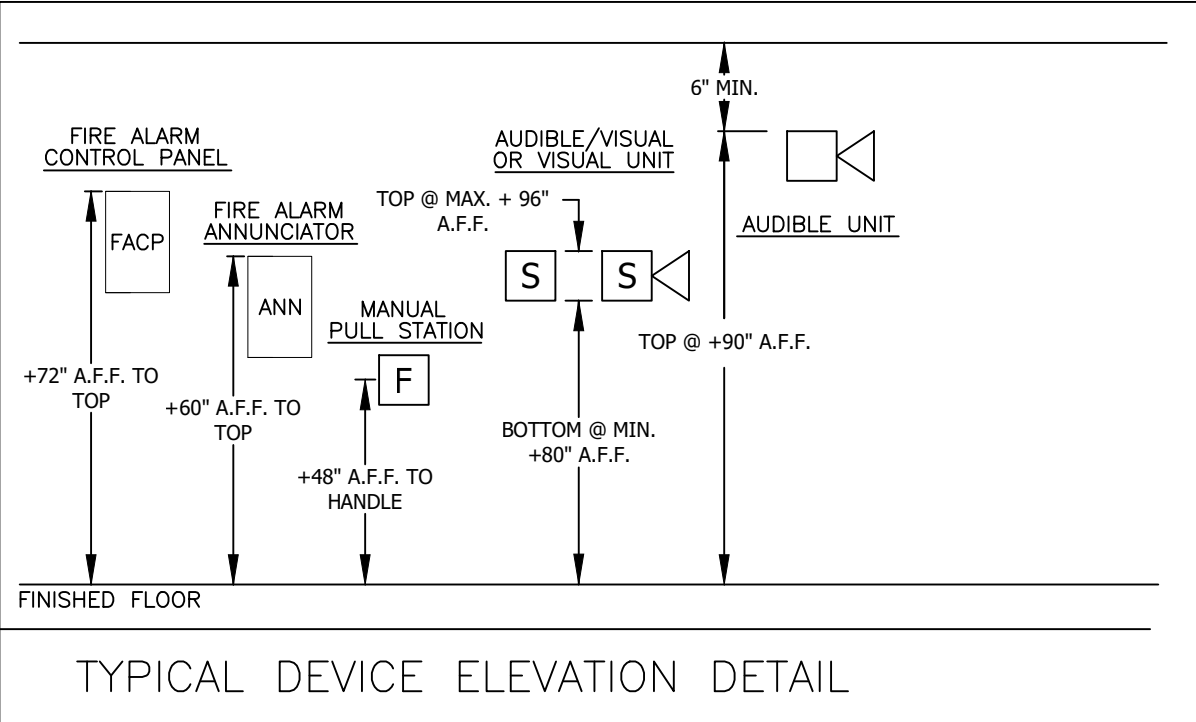
SEQUENCE OF OPERATIONS																	
ACTION:	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE COMMON TROUBLE SIGNAL	ACTUATE SPRINKLER BELL (NOTE: NOT CONNECTED TO THE FACP)	ACTUATE NOTIFICATION APPLIANCE CIRCUITS	RECALL ELEVATOR TO 1ST FLR	RECALL ELEVATOR TO 2ND FLR	ACTUATE ELEVATOR CAB FIRE/EMERGENCY HAT LAMP	ELEVATOR SHUNT-TRIP	DOOR HOLDER RELEASE	ACTUATE ELEVATOR SMOKE GUARD	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION
MANUAL PULL STATION	●	●						●							●		
SMOKE DETECTOR ABOVE FIRE SYSTEM EQUIPMENT	●	●						●					●		●		
SMOKE DETECTOR ABOVE CORRIDOR FIRE DOORS	●	●						●					●		●		
1ST FLOOR ELEVATOR LOBBY SMOKE DETECTOR	●	●						●		●	● (STEADY)		●		●		
2 THRU 6 ELEVATOR LOBBY SMOKE DETECTOR	●	●						●	●		● (STEADY)		●	●	●		
ELEVATOR MACHINE SMOKE DETECTOR	●	●						●	●		● (FLASH)		●		●		
SPRINKLER WATER FLOW	●	●					●	●							●		
SPRINKLER TAMPER VALVE CLOSED			●	●												●	
SPRINKLER BACK FLOW VALVE CLOSED			●	●												●	
SLC LOOP OPEN					●	●											●
SLC LOOP SHORT					●	●											●
SLC LOOP EARTH GROUND					●	●											●
NOTIFICATION CIRCUIT OPEN					●	●											●
NOTIFICATION CIRCUIT SHORT					●	●											●
NOTIFICATION CIRCUIT EARTH GROUND					●	●											●
FACP AC FAIL					●	●											●
FACP LOW BATTERY					●	●											●
BOOSTER POWER SUPPLY AC FAIL					●	●											●
BOOSTER POWER SUPPLY LOW BATTERY					●	●											●
CELLULAR PANEL COMMUNICATIONS FAIL		●	●														●
CELLULAR PANEL LOW BATTERY					●	●											●
CELLULAR PANEL AC FAIL					●	●											●
ERROS TROUBLE STATUS (AC FAIL / LOW BATTERY BATTERY CHARGE FAIL/ SIGNAL BOOSTER FAIL / 700MHZ ANTENNA MALFUNCTION / BDA LINK FAIL / INDOOR ANTENNA MALFUNCTION)		●	●													●	
2 WAY COMMUNICATION SYSTEM TROUBLE			●	●												●	

SCOPE OF WORK	
FIRE ALARM SYSTEM FOR (6) STORY RESIDENTIAL BUILDING. INSTALLATION OF THIS SYSTEM PER THESE DRAWINGS. UPON COMPLETION OF THE INSTALLATION A COMPLETE PRETEST SHALL BE PERFORM TO VERIFY FUNCTIONALITY OF THE SYSTEM. IF FUNCTIONALITY IS SATISFACTORY, THEN THE PROPER DOCUMENTATION SHALL SUBMITTED TO THE AHI PRIOR TO SCHEDULING A FINAL INSPECTION.	

CENTRAL MONITORING STATION
SIERRA FIRE ALARM, INC. 4505 YANKEE HILL COURT ROCKLIN, CA 95677 PHONE #: 916-630-1472 ULF #: 535471

APPLICABLE CODES AND REGULATIONS	
CALIFORNIA BUILDING CODE, TITLE 24 CALIFORNIA CODE OF REGULATIONS (CCR)	
2019 CALIFORNIA BUILDING CODE (CBC), TITLE 24 PART 2	
2019 CALIFORNIA ELECTRICAL CODE (CEC), TITLE 24 PART 3	
2019 CALIFORNIA MECHANICAL CODE (CMC), TITLE 24 PART 4	
2019 CALIFORNIA FIRE CODE (CFC), TITLE 24 PART 9	
NATIONAL FIRE PROTECTION ASSOCIATION	
2016 NFPA 72	
2016 NFPA 70	
2016 NFPA 90A	

DEVICE LEGEND & MATERIAL LIST						
SYMBOL	QTY	DESCRIPTION	MANUF.	MODEL	CSFML#	BACKBOX
FACU	1	ADDRESSABLE FIRE ALARM CONTROL UNIT	FIRE-LITE	ES-200X	7165-0075-0500	INCLUDED
	2	12VDC, 7AH RECHARGEABLE LEAD-ACID BATTERIES	POWERSONIC	PS-1270	N/A	N/A
FAC	1	CELLULAR COMMUNICATOR PANEL	TELGUARD	TG/LAF01	7300-1402-0109	INCLUDED
	1	12VDC, 7AH RECHARGEABLE LEAD-ACID BATTERIES	POWERSONIC	PS-1270	N/A	N/A
BPS	2	NAC BOOSTER POWER SUPPLY, 10 AMP	HONEYWELL	HPF-PS10	7315-1637-0505	INCLUDED
	1	NAC BOOSTER POWER SUPPLY, 6AMP	HONEYWELL	HPF-PS6	7315-1637-0505	INCLUDED
FADB	6	12VDC, 7AH RECHARGEABLE LEAD-ACID BATTERIES	POWERSONIC	PS-1270	N/A	N/A
	1	FIRE DOCUMENT BOX ACE 11	SPACE AGE	SSU00672	7300-0553-0110	INCLUDED
FAA	1	REMOTE LCD ANNUNCIATOR	FIRE-LITE	ANN-80	7165-0075-0500	3-GANG
F	12	ADDRESSABLE MANUAL PULL STATION	FIRE-LITE	BG-12XL	7150-0075-0184	1-S BOX
F _{WP}	1	MANUAL PULL STATION, WEATHER PROOF	FIRE-LITE	BG-12LOB	7150-0075-0184	PS-WPB
	1	MANUAL PULL STATION, WEATHER PROOF BOX	FIRE-LITE	WWB	7150-0075-0184	--
?	38	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR	FIRE-LITE	SD365	7272-0075-0502	4X4 BOX W/ 3-Ø RING
MM	30	ADDRESSABLE SINGLE MINI MONITOR MODULE	FIRE-LITE	MMF-301	7300-0075-0185	1-S BOX
ISØ	7	FAULT ISOLATION MODULE	FIRE-LITE	ID00	7300-0075-0159	1-S BOX
CR	11	ADDRESSABLE RELAY MODULE	FIRE-LITE	CRF-300	7300-0075-0185	4X4 BOX
R	3	MULTI VOLTAGE AUXILIARY RELAY	FIRE-LITE	PAM-1	7300-1004-0101	INCLUDED
SD	1	DUCT SMOKE DETECTOR (BY OTHERS)	--	--	MUST BE CSFM APPROVED	--
?	10	MAGNETIC DOOR HOLDER (BY OTHERS)	MUST BE CSFM LISTED			--
HL	114	HORN (LOW FREQUENCY)	SYSTEM SENSOR	HWL-LF	7135-1653-0516	1-S BOX
HS	29	MULTI-CANDELA WALL HORN-STROBE	SYSTEM SENSOR	P2WLED	7135-1653-0526	1-S BOX
HS	3	MULTI-CANDELA WALL HORN-STROBE, WEATHERPROOF	SYSTEM SENSOR	P2WK	7125-1653-0188	SA-WBB
SL	13	MULTI-CANDELA WALL STROBE	SYSTEM SENSOR	SWLED	7300-1653-0525	1-S BOX
FS	6	SPRINKLER FLOW SWITCH (BY OTHERS)	MUST BE CSFM LISTED			--
SV	9	SPRINKLER CONTROL VALVE TAMPER SWITCH (BY OTHERS)	MUST BE CSFM LISTED			--
SB	1	SITE BACKFLOW TAMPER SWITCHES	POTTER	OSYSU1	7770-0328-0010	--
PSD	--	FIRE SMOKE DAMPERS (BY OTHERS)	MUST BE CSFM LISTED			--
ADA	--	ADA 3-BOX	--			--



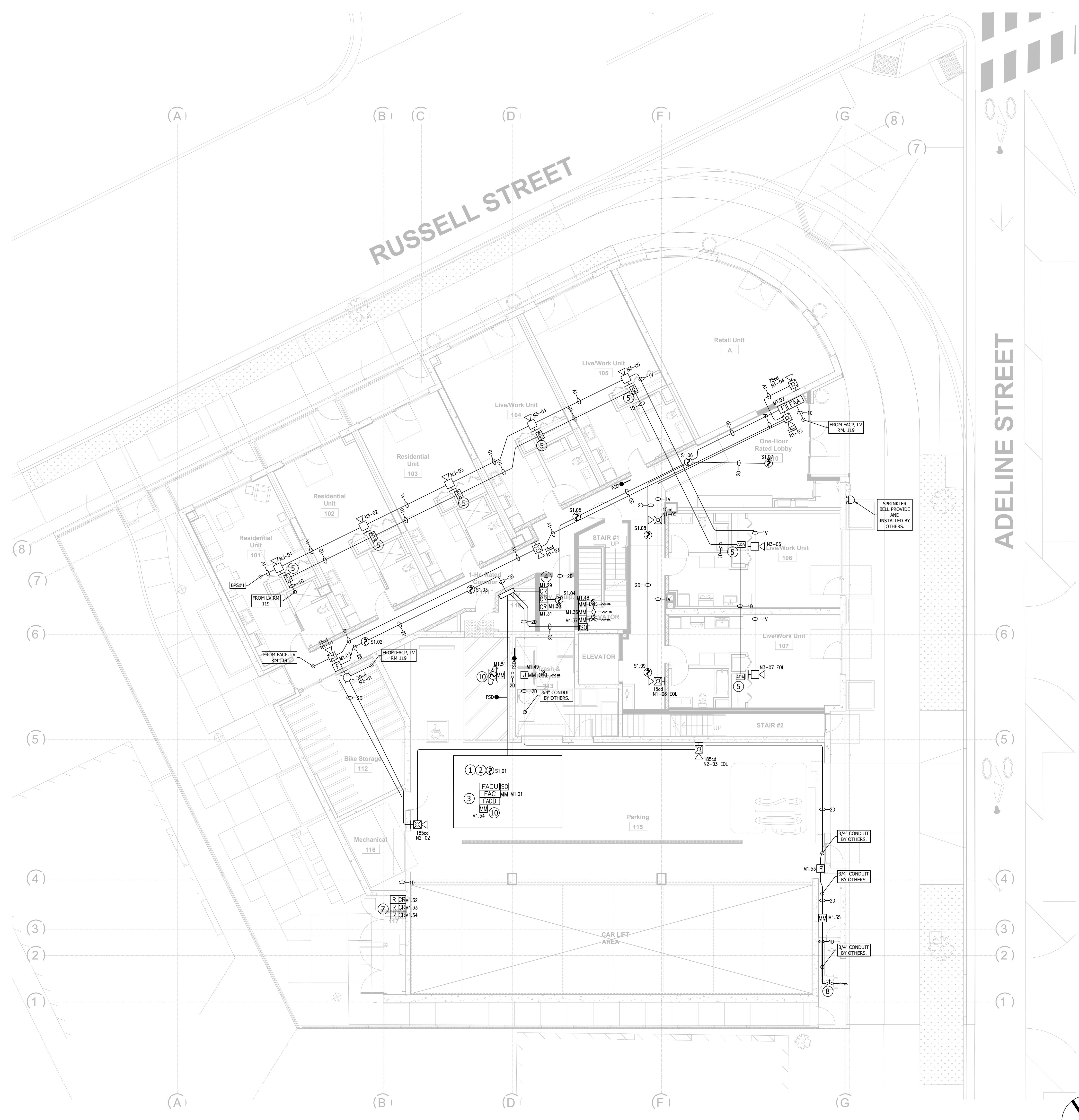
SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
ROCKLIN, CA 95677
OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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2902 ADELINE APARTMENTS 2902 ADELINE STREET BERKELEY, CALIFORNIA 94703

REV.	DATE	DESCRIPTION	D.B.
1	01-19-2026	CITY OF BERKELEY CORRECTIONS	
2			
3			
4			
DESIGNER: FUSCO ENGINEERING & DESIGN P.O. BOX 880522 PORT SAINT LUCIE, FL 34988 Carlos Olvera (519) 519-8637, NICET III #94003 carlos.olvera@fuscoeng.com			
DESIGN: C.O.		DRAWN: C.O.	
CHECKED: LM		JOB NO:	
DATE: 07-25-2025		PLOT:	
SHEET TITLE: TITLE SHEET			
2902 ADELINE APARTMENTS			
FIRE ALARM SYSTEM			
SCALE: N.T.S.			
SHEET NO. FA-0.0			



1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"

KEY NOTES	
①	120 VAC, 20 AMP DEDICATED CIRCUIT TO FACP AND BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE RED IN COLOR AND LOCKED OUT IN THE "ON" POSITION.
②	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
③	INSTALL SYSTEMS RECORD CABINET ADJACENT TO FACP PER NFPA 72.
④	ELEVATOR RECALL AND FIREMEN'S HAT RELAY MODULES. FIELD VERIFY LOCATION. INSTALL NO MORE THAN 3'-0" AWAY FROM INTERFACE DEVICE.
⑤	PRE-WIRE J-BOX FOR FUTURE HEARING IMPAIR UNIT CONVERSION.
⑥	ERRCS MONITOR MODULE. FIELD VERIFY LOCATION.
⑦	FIRE SMOKE DAMPER ACTIVATION RELAY. FIELD VERIFY LOCATION WITH ELECTRIC CONTRACTOR.
⑧	ELEVATOR SMOKE CURTAIN RELEASE RELAY. FIELD VERIFY WITH SMOKE CURTAIN CONTRACTOR.
⑨	NO SPRINKLER AT TOP OF ELEVATOR HOISTWAY. FIELD COORDINATE LOCATION WITH ELEVATOR CONTRACTOR.
⑩	DUCT SMOKE DETECTORS PROVIDED BY AND INSTALLED BY MECHANICAL CONTRACTOR. FIRE ALARM SYSTEM TO MONITOR DUCT SMOKE DETECTORS. RESET OF DUCT SMOKE DETECTORS AND SUPPLY FANS SHUTDOWN BY MECHANICAL CONTRACTOR.
⑩	2 WAY COMM. SYSTEM TROUBLE MONITOR MODULE. FIELD VERIFY LOCATION.

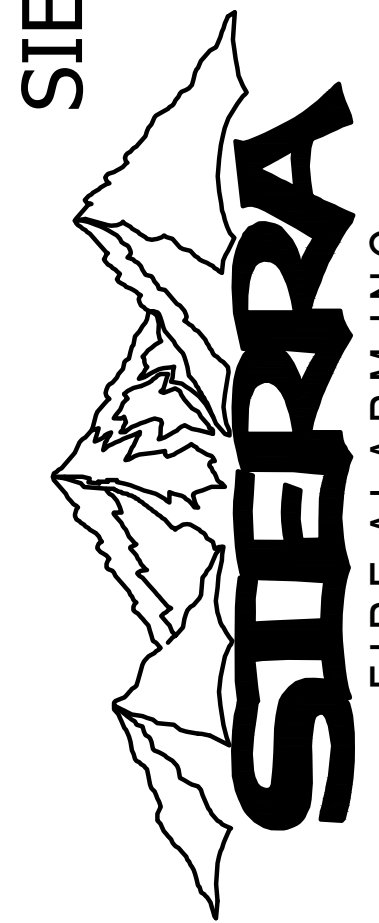
- GENERAL NOTES
1. SMOKE / CO ALARMS IN UNITS INSTALLED BY ELECTRICAL CONTRACTOR. REFERENCE ELECTRICAL PLAN FOR LOCATIONS. PER ELECTRICAL PLANS, LISTED AND CSM APPROVED SMOKE / CARBON MONOXIDE DETECTORS SHALL BE LOCATED IMMEDIATELY OUTSIDE EACH SLEEPING AREA.

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL UNIT
[FAA]	REMOTE ANNUNCIATOR
[FAC]	CELLULAR COMMUNICATOR
[BPS]	BOOSTER POWER SUPPLY
[FADB]	FIRE ALARM DOCUMENT CABINET
②	SMOKE DETECTOR
Ⓜ	HEAT DETECTOR
[F]	ADDRESSABLE PULL STATION
[MM]	ADDRESSABLE INPUT MODULE
[DM]	ADDRESSABLE RELAY MODULE
[DM]	ADDRESSABLE DUAL INPUT MODULE
[R]	10 AMP RELAY
[ISO]	FAULT ISOLATION MODULE
[H]	HORN WALL, LOW FREQ
[H-S]	HORN-STROBE WALL
[S]	STROBE WALL
[H-S-WP]	HORN-STROBE WALL, WP
[S-FS]	SPRINKLER FLOW SWITCH
[S-TS]	SPRINKLER TAMPER SWITCH
[S-BFS]	SPRINKLER BACKFLOW SWITCH
[PSD]	FIRE SMOKE DAMPER
[J-BOX]	ADA J- BOX

WIRE LEGEND			
WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
D	ADDRESSABLE CIRCUIT	18/2 FPLR	A
V	NAC CIRCUIT	14/2 FPLR	B
C	ANNUNCIATOR CKT	16/4 FPLR	B
T	BPS TRIGGER	14/2 FPLR	B
P	DOOR HOLDER CKT	14/2 FPLR	D
U	UNDERGROUND CIRCUIT	18/2 UNDERGROUND RATED IN CONDUIT**	B
X	SLC UNDERGROUND CKT	14/2 UNDERGROUND RATED IN CONDUIT**	B
** ALL FIRE ALARM CONDUIT SHALL BE A MINIMUM OF 3/4" U.O.N.. CONDUIT SHALL BE NO MORE THAN 40% MAX FILL.			

SMOKE DAMPER ACTUATION	
①	WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5' OF THE DAMPER WITH NO AIR OUTLETS OR INLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE LOCAL SMOKE DETECTORS REQUIRE A MINIMUM VELOCITY TO OPERATE.
②	WHERE A SMOKE DAMPER IS INSTALLED ABOVE SMOKE BARRIER DOORS IN A SMOKE BARRIER, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL BE INSTALLED ON EITHER SIDE OF THE SMOKE BARRIER DOOR OPENING.
③	WHERE A SMOKE DAMPER IS INSTALLED IN AN AIR TRANSFER OPENING IN A WALL, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL BE INSTALLED WITHIN 5' HORIZONTALLY OF THE DAMPER.
④	WHERE A SMOKE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING, THE DAMPER SHALL BE PERMITTED TO BE CONTROLLED BY A SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR.
⑤	WHERE A TOTAL-COVERAGE SMOKE-DETECTION SYSTEM IS PROVIDED WITHIN AREAS SERVED BY A HEATING, VENTILATION AND AIR-CONDITIONING (HVAC) SYSTEM, SMOKE DAMPERS SHALL BE PERMITTED TO BE CONTROLLED BY THE SMOKE DETECTION SYSTEM.
REFER TO 716.3.3.2 (CBC 2022)	

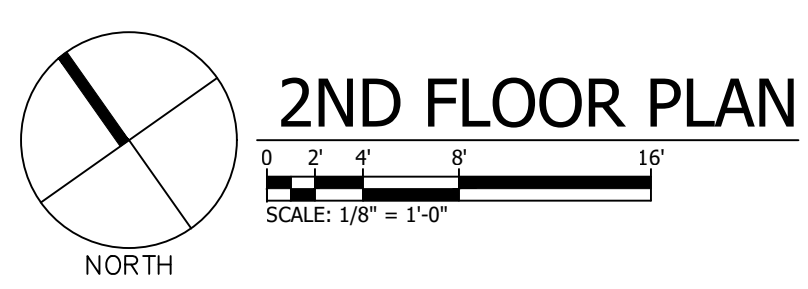
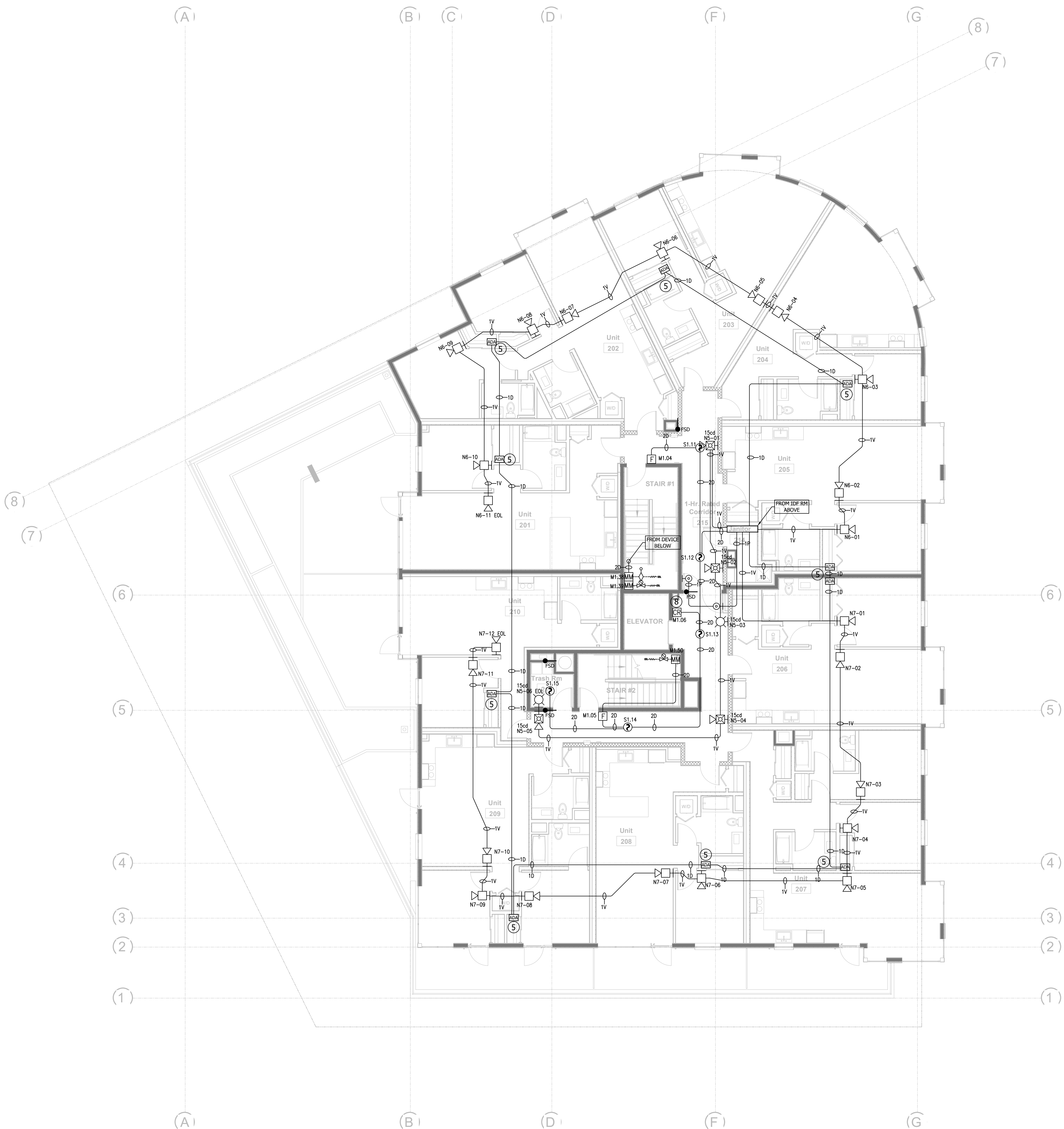
SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
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OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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BERKELEY, CALIFORNIA 94703

DATE	DESCRIPTION		D.B.
01-19-2026	CITY OF BERKELEY CORRECTIONS		
DESIGNER: PUSCO ENGINEERING & DESIGN P.O. BOX 480922 PORT SAINT LUKE, IL 34089 Carlos Olvera (619) 610-9637, NICET III #B4003 carlos.olvera@puscogroup.com			
DESIGN: C.O.		DRAWN: C.O.	
CHECKED: LM		JOB NO:	
DATE: 07-25-2025		PLOT:	
SHEET TITLE:			
1ST FLOOR PLAN			
2902 ADELINE APARTMENTS			
FIRE ALARM SYSTEM			
SCALE: 1/8" = 1'-0"		SHEET NO.	
FA-1.0			



2ND FLOOR PLAN

KEY NOTES	
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②	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
③	INSTALL SYSTEMS RECORD CABINET ADJACENT TO FACP PER NFPA 72.
④	ELEVATOR RECALL AND FIREMEN'S HAT RELAY MODULES. FIELD VERIFY LOCATION. INSTALL NO MORE THAN 3'-0" AWAY FROM INTERFACE DEVICE.
⑤	PRE-WIRE J-BOX FOR FUTURE HEARING IMPAIR UNIT CONVERSION.
⑥	ERRCS MONITOR MODULE. FIELD VERIFY LOCATION.
⑦	FIRE SMOKE DAMPER ACTIVATION RELAY. FIELD VERIFY LOCATION WITH ELECTRIC CONTRACTOR.
⑧	ELEVATOR SMOKE CURTAIN RELEASE RELAY. FIELD VERIFY WITH SMOKE CURTAIN CONTRACTOR.
⑨	NO SPRINKLER AT TOP OF ELEVATOR HOISTWAY. FIELD COORDINATE LOCATION WITH ELEVATOR CONTRACTOR.
⑩	DUCT SMOKE DETECTORS PROVIDED BY AND INSTALLED BY MECHANICAL CONTRACTOR. FIRE ALARM SYSTEM TO MONITOR DUCT SMOKE DETECTORS. RESET OF DUCT SMOKE DETECTORS AND SUPPLY FANS SHUTDOWN BY MECHANICAL CONTRACTOR.
⑩	2 WAY COMM. SYSTEM TROUBLE MONITOR MODULE. FIELD VERIFY LOCATION.

GENERAL NOTES

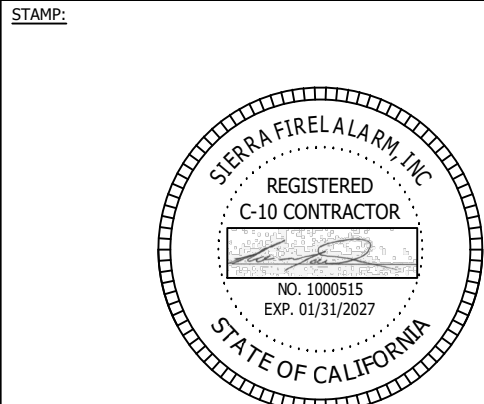
1. SMOKE / CO ALARMS IN UNITS INSTALLED BY ELECTRICAL CONTRACTOR. REFERENCE ELECTRICAL PLAN FOR LOCATIONS. PER ELECTRICAL PLANS, LISTED AND CSFM APPROVED SMOKE / CARBON MONOXIDE DETECTORS SHALL BE LOCATED IMMEDIATELY OUTSIDE EACH SLEEPING AREA.

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL UNIT
[FAA]	REMOTE ANNUNCIATOR
[FAC]	CELLULAR COMMUNICATOR
[BPS]	BOOSTER POWER SUPPLY
[FADB]	FIRE ALARM DOCUMENT CABINET
②	SMOKE DETECTOR
④	HEAT DETECTOR
[F]	ADDRESSABLE PULL STATION
[MM]	ADDRESSABLE INPUT MODULE
[CR]	ADDRESSABLE RELAY MODULE
[DM]	ADDRESSABLE DUAL INPUT MODULE
[R]	10 AMP RELAY
[ISO]	FAULT ISOLATION MODULE
[H]	HORN WALL, LOW FREQ
[H-S]	HORN-STROBE WALL
[S]	STROBE WALL
[H-S-WP]	HORN-STROBE WALL, WP
[S-FS]	SPRINKLER FLOW SWITCH
[S-TS]	SPRINKLER TAMPER SWITCH
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[FSD]	FIRE SMOKE DAMPER
[J-BOX]	ADA J-BOX

WIRE LEGEND			
WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
D	ADDRESSABLE CIRCUIT	18/2 FPLR	A
V	NAC CIRCUIT	14/2 FPLR	B
C	ANNUNCIATOR CKT	16/4 FPLR	B
T	BPS TRIGGER	14/2 FPLR	B
P	DOOR HOLDER CKT	14/2 FPLR	D
U	UNDERGROUND CIRCUIT	18/2 UNDERGROUND RATED IN CONDUIT**	B
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** ALL FIRE ALARM CONDUIT SHALL BE A MINIMUM OF 3/4" U.O.N.. CONDUIT SHALL BE NO MORE THAN 40% MAX FILL.			

SMOKE DAMPER ACTUATION	
M1-1	WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5' OF THE DAMPER WITH NO AIR OUTLETS OR INLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE LOCAL SMOKE DETECTORS REQUIRE A MINIMUM VELOCITY TO OPERATE.
M2-2	WHERE A SMOKE DAMPER IS INSTALLED ABOVE SMOKE BARRIER DOORS IN A SMOKE BARRIER, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL BE INSTALLED ON EITHER SIDE OF THE SMOKE BARRIER DOOR OPENING.
M3-3	WHERE A SMOKE DAMPER IS INSTALLED IN AN AIR TRANSFER OPENING IN A WALL, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL INSTALLED WITHIN 5' HORIZONTALLY OF THE DAMPER.
M4-4	WHERE A SMOKE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING, THE DAMPER SHALL BE PERMITTED TO BE CONTROLLED BY A SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR.
M5-5	WHERE A TOTAL-COVERAGE SMOKE-DETECTION SYSTEM IS PROVIDED WITHIN AREAS SERVED BY A HEATING, VENTILATION AND AIR-CONDITIONING (HVAC) SYSTEM, SMOKE DAMPERS SHALL BE PERMITTED TO BE CONTROLLED BY THE SMOKE DETECTION SYSTEM.
REFER TO 716.3.3.2 (CBC 2022)	

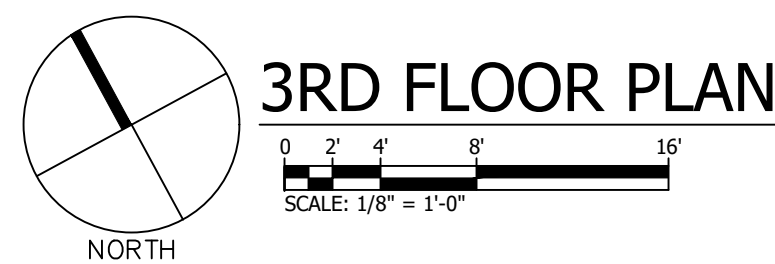
SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
ROCKLIN, CA 95677
OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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2902 ADELINE APARTMENTS
2902 ADELINE STREET
BERKELEY, CALIFORNIA 94703

REV.	DATE	DESCRIPTION	D.B.
①	01-19-2026	CITY OF BERKELEY CORRECTIONS	
②			
③			
④			
DESIGNER: PUSCO ENGINEERING & DESIGN P.O. BOX 880922 PORT SAINT LUCIE, FL 34988 Carlos Olivas (619) 610-8637, NICET III #B4003 carlos.olivas@puscogroup.com			
DESIGN: C.O.		DRAWN: C.O.	
CHECKED: LM		JOB NO:	
DATE: 07-25-2025		PLOT:	
SHEET TITLE: 2ND FLOOR PLAN 2902 ADELINE APARTMENTS FIRE ALARM SYSTEM			
SCALE: 1/8" = 1'-0"			
SHEET NO. 5A-2.0			



KEY NOTES	
①	120V, 30 AMP dedicated circuit to FACP and BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE IN CLO IN COLORED AND LOCKED OUT IN THE "ON" POSITION.
②	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
③	INSTALL FIRE RESISTANT CABINET ADJACENT TO FACP PER NFPA 72.
④	ELEVATOR RELAY AND FIREMEN'S HAT RELAY MODULES. FIELD VERIFY LOCATION. INSTALL NO MORE THAN 3'-0" AWAY FROM INTERFACE DEVICE.
⑤	PRE-WIRE J-BOX FOR FUTURE HANGING IMPAIR UNIT CONVERSION
⑥	ERCS MONITOR MODULE. FIELD VERIFY LOCATION.
⑦	FIRE SMOKE DAMPER ACTIVATION RELAY. FIELD VERIFY LOCATION WITH ELECTRIC CONTRACTOR.
⑧	ELEVATOR SMOKE CURTAIN RELEASE RELAY. FIELD VERIFY WITH SMOKE CURTAIN CONTRACTOR.
⑨	NO SPRINKLER AT TOP OF ELEVATOR HOISTWAY. FIELD COORDINATE LOCATION WITH ELEVATOR CONTRACTOR.
⑩	DUCT SMOKE DETECTORS PROVIDED BY AND INSTALLED BY MECHANICAL CONTRACTOR. FIRE ALARM SYSTEM TO MONITOR DUCT SMOKE DETECTORS. RESET OF DUCT SMOKE DETECTORS AND SUPPLY FANS SHUTDOWN BY MECHANICAL CONTRACTOR.
⑪	2 WAY COM. SYSTEM TROUBLE MONITOR MODULE. FIELD VERIFY LOCATION.

1. SMOKE / CO ALARMS IN UNITS INSTALLED BY ELECTRICAL CONTRACTOR. REFERENCE ELECTRICAL PLAN FOR LOCATIONS. PER ELECTRICAL PLANS, LISTED AND CSFM APPROVED SMOKE / CARBON MONOXIDE DETECTORS SHALL BE LOCATED IMMEDIATELY OUTSIDE EACH SLEEPING AREA.

WIRE LEGEND			
WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
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V	NAC CIRCUIT	14/2 FPLR	B
C	ANNUNCIATOR CKT	16/4 FPLR	B
T	BPS TRIGGER	14/2 FPLR	B
P	DOOR HOLDER CKT	14/2 FPLR	D
U	UNDERGROUND CIRCUIT	18/2 UNDERGROUND RATED IN CONDUIT**	B
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** ALL FIRE ALARM CONDUIT SHALL BE A MINIMUM OF 3/4" U.O.N., CONDUIT SHALL BE NO MORE THAN 40% MAX FILL

SMOKE DAMPER ACTUATION

M-1

WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED TO BE ACTIVATED WITHIN THE DUCT WITH THE DAMPER WITH NO AIR OUTLETS OR INLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE CALIBRATED TO MONITOR AIR VELOCITY, TEMPERATURE AND HUMIDITY AT THE POINT WHERE IT IS INSTALLED. OTHER THAN MECHANICAL SMOKE DETECTOR SYSTEMS, DAMPERS SHALL BE CLOSED UPON FIRE SHUTDOWN WHERE LOCAL SMOKE DETECTORS REQUIRE A MINIMUM VELOCITY TO OPERATE.

M-2

WHERE A SMOKE DAMPER IS INSTALLED ABOVE SMOKE BARRIER DOORS IN A SMOKE BARRIER, A SPOT-TYPE DETECTOR LISTED FOR RELASING SERVICE SHALL BE INSTALLED ON EITHER SIDE OF THE SMOKE BARRIER DOOR OPENING.

M-3

WHERE A SMOKE DAMPER IS INSTALLED IN AN AIR FLOWING OPENING IN A WALL, A SPOT-TYPE DETECTOR LISTED FOR RELASING SERVICE SHALL BE INSTALLED WITHIN 5' HORIZONTALLY OF THE DAMPER.

M-4


WHERE A SMOKE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING, THE DAMPER SHALL BE PERMITTED TO BE CONTROLLED BY A SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR.

M-5

WHERE A TOTAL COVERAGE SMOKE-DETECTION SYSTEM IS PROVIDED AND HAS SERVED AS THE SMOKE DETECTION SYSTEM FOR THE BUILDING AIR-CONDITIONING (HVAC) SYSTEM, SMOKE DAMPERS SHALL BE PERMITTED TO BE CONTROLLED BY THE SMOKE DETECTION SYSTEM.

REFER TO 716.3.3.2 (CBC 2022)

SIERA
FIRE ALARM INC.



SIERRA FIRE ALARM INC.
REGISTERED
C-10 CONTRACTOR
NO. 1000515
EXP. 01/31/2027
STATE OF CALIFORNIA

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2902 ADELINE STREET
BERKELEY, CALIFORNIA 94703

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DESIGNER: PUECO ENGINEERING & DESIGN
P.O. BOX 880922
PORT SAINT LUCIE, FL 34908
CARLOS OLIVERA (619) 610-8637, NICOLE III #04003
carlos.olivera@puecoeng.com

DESIGN:	C.O.	DRAWN:	C.O.
CHECKED:	LM	JOB NO:	
DATE:	07-25-2025	PLOT:	

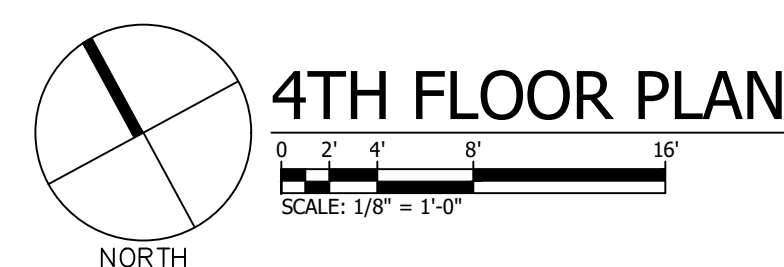
3RD FLOOR PLAN

2902 ADELINE APARTMENTS
FIRE ALARM SYSTEM

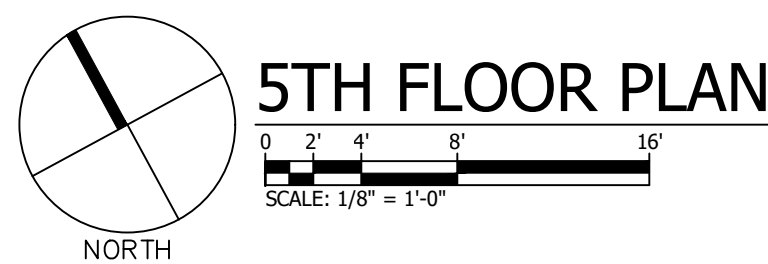
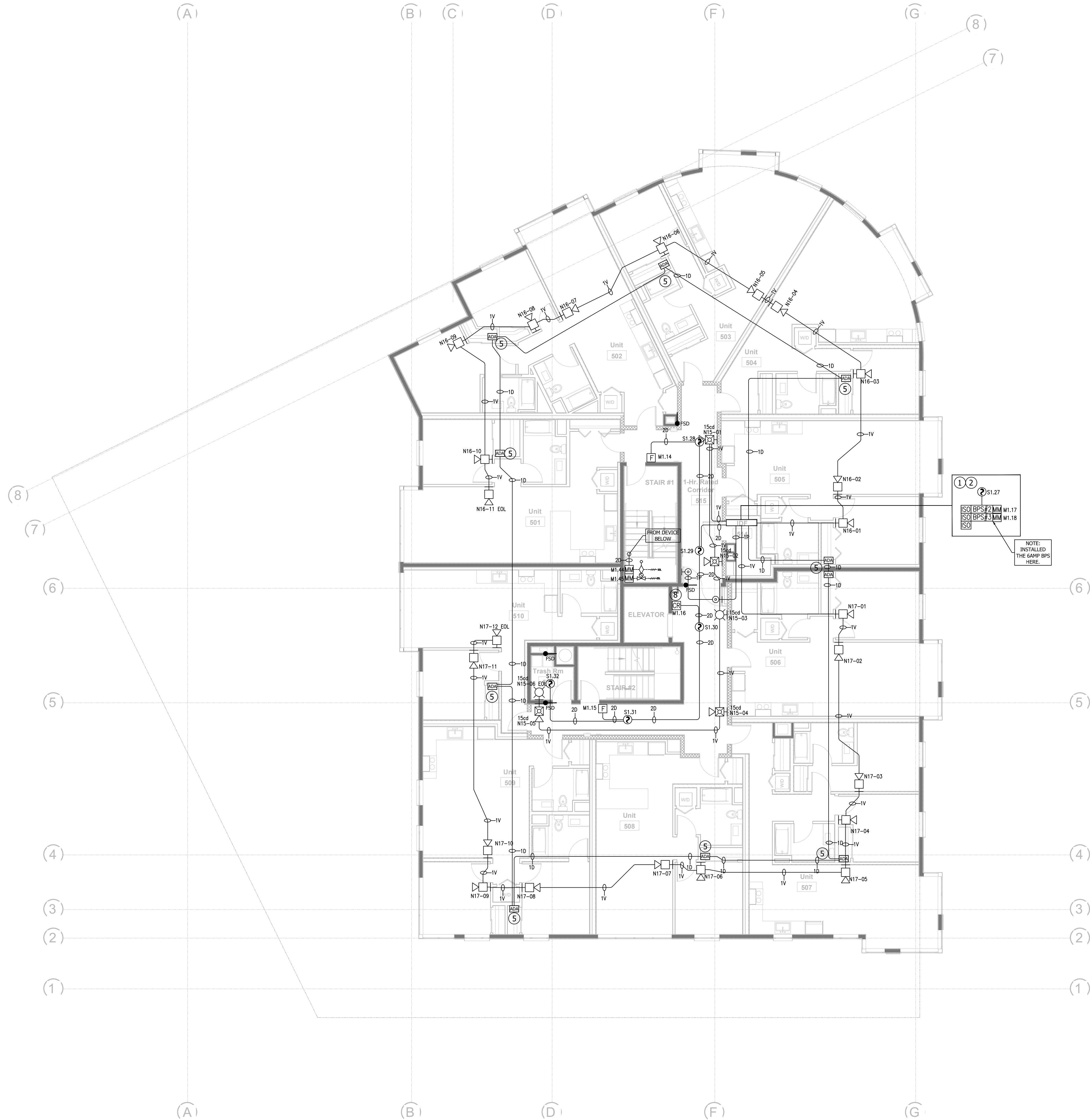
SCALE: $1/8" = 1'-0"$

SHEET NO.

FA-3.0



FA-4.0



KEY NOTES	
①	120 VAC, 20 AMP DEDICATED CIRCUIT TO FACP AND BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE RED IN COLOR AND LOCKED OUT IN THE "ON" POSITION.
②	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
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WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
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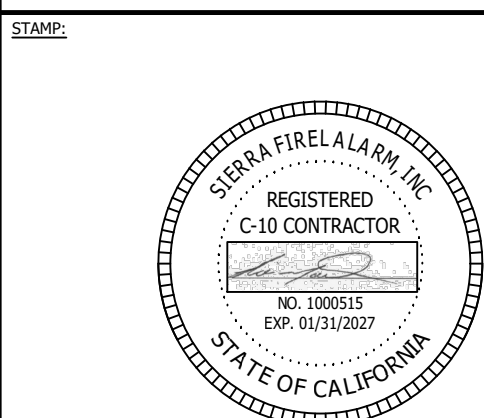
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SMOKE DAMPER ACTUATION

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REFER TO 716.3.3.2 (CBC 2022)

SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
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OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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DESIGNER: PUSCO ENGINEERING & DESIGN
P.O. BOX 880922
PORT SAINT LUCIE, FL 34989
Carlos Olvera (619) 510-8637, NICET III #B4003
carlos.olvera@puscogroup.com

DESIGN: C.O. DRAWN: C.O.

CHECKED: LM JOB NO:

DATE: 07-25-2025 PLOT:

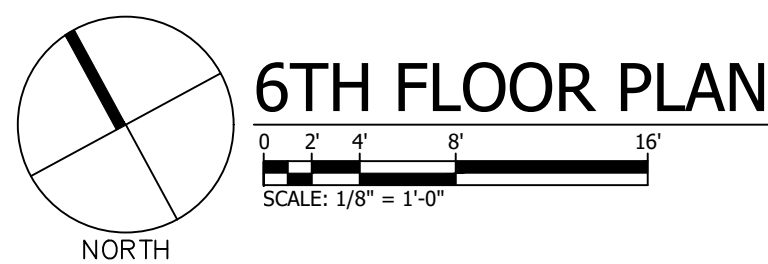
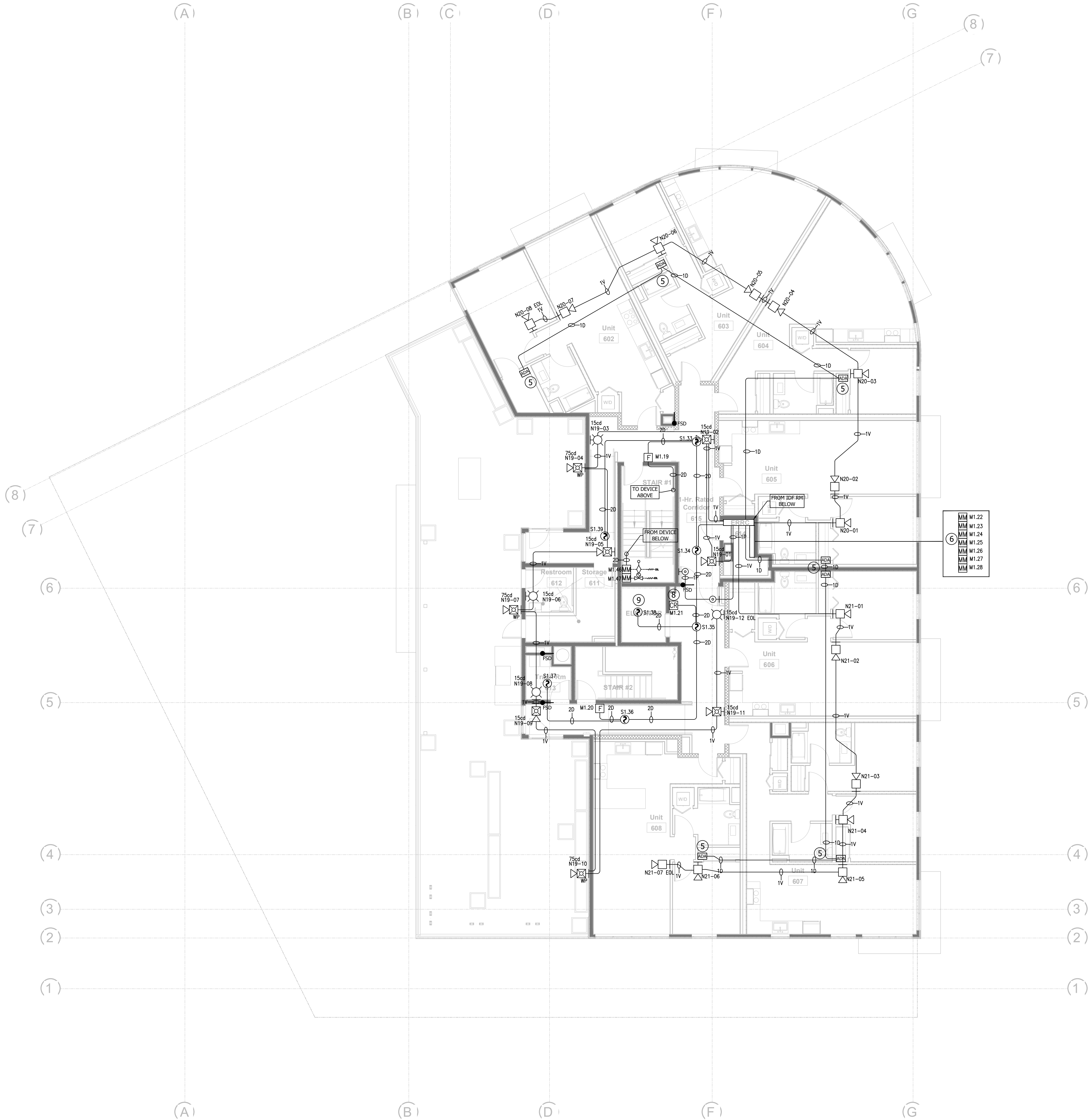
SHEET TITLE:
5TH FLOOR PLAN

2902 ADELINE APARTMENTS
FIRE ALARM SYSTEM

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

SHEET NO.

FA-5.0



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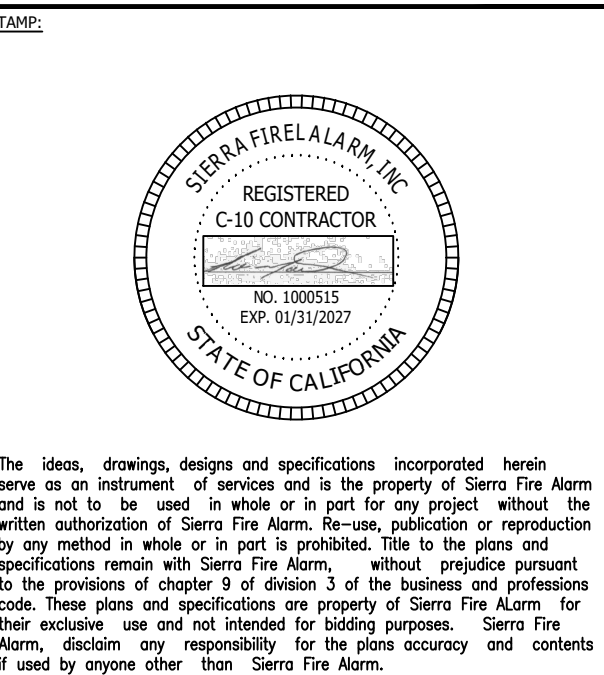
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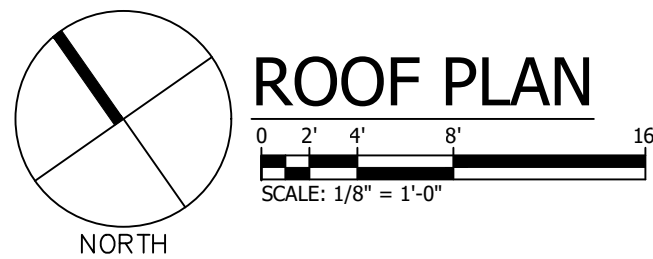
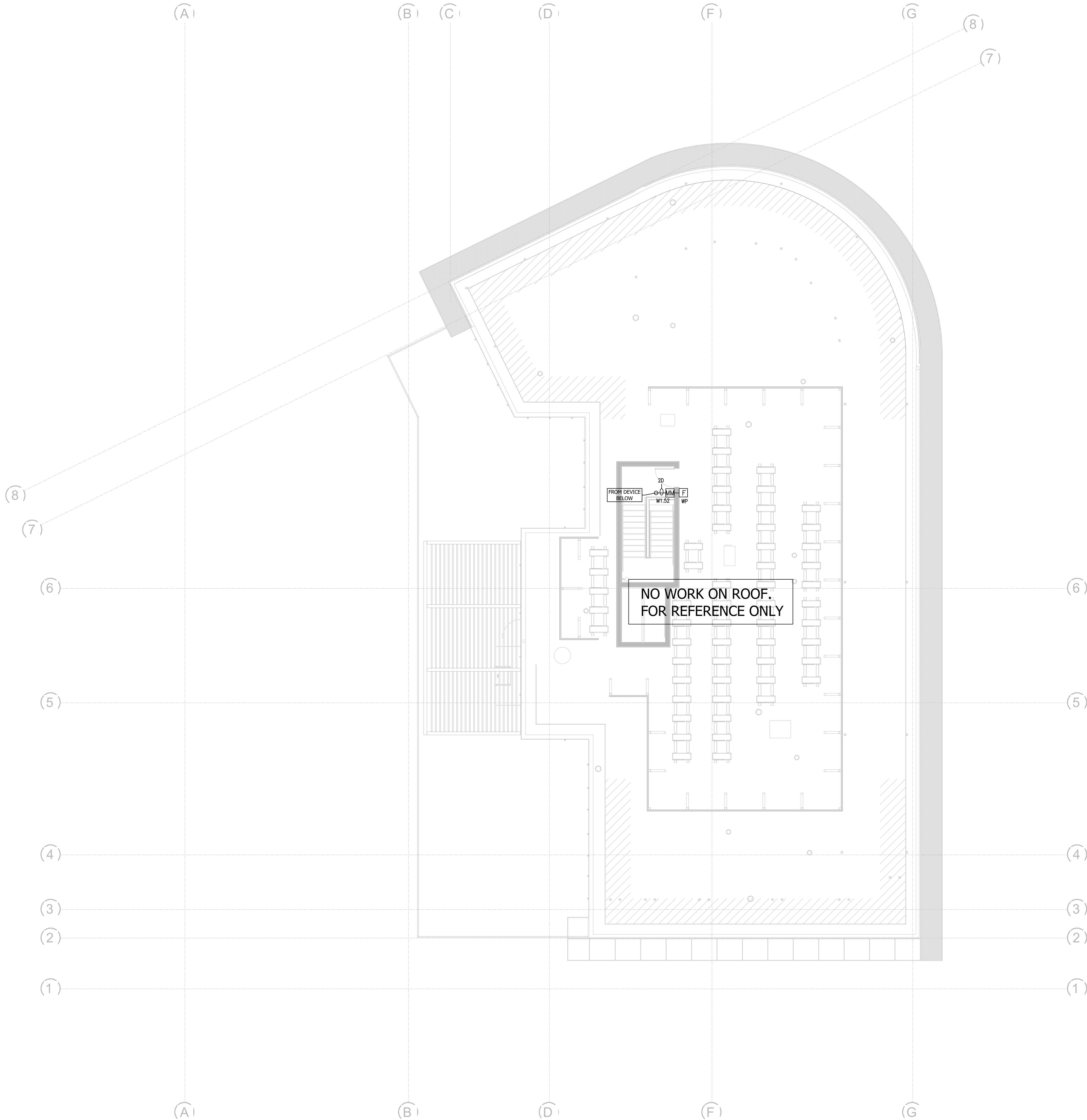
SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
ROCKLIN, CA 95677
OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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2902 ADELINE APARTMENTS
2902 ADELINE STREET
BERKELEY, CALIFORNIA 94703

REV.	DATE	DESCRIPTION	D.B.
①	01-19-2026	CITY OF BERKELEY CORRECTIONS	
②			
③			
④			
DESIGNER: PUSCO ENGINEERING & DESIGN P.O. BOX 880922 PORT SAINT LUCIE, FL 34989 Carlos Olvera (619) 610-9637, NICET III #B4003 carlos.olvera@puscogroup.com			
DESIGN: C.O.		DRAWN: C.O.	
CHECKED: LM		JOB NO:	
DATE: 07-25-2025		PLOT:	
SHEET TITLE:			
6TH FLOOR PLAN			
2902 ADELINE APARTMENTS			
FIRE ALARM SYSTEM			
SCALE: 1/8" = 1'-0"			
SHEET NO.			



KEY NOTES	
①	120 VAC, 20 AMP DEDICATED CIRCUIT TO FACP AND BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE RED IN COLOR AND LOCKED OUT IN THE "ON" POSITION.
②	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
③	INSTALL SYSTEMS RECORD CABINET ADJACENT TO FACP PER NFPA 72.
④	ELEVATOR RECALL AND FIREMEN'S HAT RELAY MODULES. FIELD VERIFY LOCATION. INSTALL NO MORE THAN 3'-0" AWAY FROM INTERFACE DEVICE.
⑤	PRE-WIRE J-BOX FOR FUTURE HEARING IMPAIR UNIT CONVERSION.
⑥	ERRCS MONITOR MODULE. FIELD VERIFY LOCATION.
⑦	FIRE SMOKE DAMPER ACTIVATION RELAY. FIELD VERIFY LOCATION WITH ELECTRIC CONTRACTOR.
⑧	ELEVATOR SMOKE CURTAIN RELEASE RELAY. FIELD VERIFY WITH SMOKE CURTAIN CONTRACTOR.
⑨	NO SPRINKLER AT TOP OF ELEVATOR HOISTWAY. FIELD COORDINATE LOCATION WITH ELEVATOR CONTRACTOR.
⑩	DUCT SMOKE DETECTORS PROVIDED BY AND INSTALLED BY MECHANICAL CONTRACTOR. FIRE ALARM SYSTEM TO MONITOR DUCT SMOKE DETECTORS. RESET OF DUCT SMOKE DETECTORS AND SUPPLY FANS SHUTDOWN BY MECHANICAL CONTRACTOR.
⑩	2 WAY COMM. SYSTEM TROUBLE MONITOR MODULE. FIELD VERIFY LOCATION.

GENERAL NOTES

1. SMOKE / CO ALARMS IN UNITS INSTALLED BY ELECTRICAL CONTRACTOR. REFERENCE ELECTRICAL PLAN FOR LOCATIONS. PER ELECTRICAL PLANS, LISTED AND CSFM APPROVED SMOKE / CARBON MONOXIDE DETECTORS SHALL BE LOCATED IMMEDIATELY OUTSIDE EACH SLEEPING AREA.

DEVICE LEGEND

SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL UNIT
[FAA]	REMOTE ANNUNCIATOR
[FAC]	CELLULAR COMMUNICATOR
[BPS]	BOOSTER POWER SUPPLY
[FADB]	FIRE ALARM DOCUMENT CABINET
Ⓜ	SMOKE DETECTOR
Ⓜ	HEAT DETECTOR
[F]	ADDRESSABLE PULL STATION
[MM]	ADDRESSABLE INPUT MODULE
[CR]	ADDRESSABLE RELAY MODULE
[DM]	ADDRESSABLE DUAL INPUT MODULE
[R]	10 AMP RELAY
[ISO]	FAULT ISOLATION MODULE
[H]	HORN WALL, LOW FREQ
[H-S]	HORN-STROBE WALL
[S]	STROBE WALL
[WP-H-S]	HORN-STROBE WALL, WP
[FS]	SPRINKLER FLOW SWITCH
[TS]	SPRINKLER TAMPER SWITCH
[BFS]	SPRINKLER BACKFLOW SWITCH
[FSD]	FIRE SMOKE DAMPER
[ADA]	ADA J-BOX

WIRE LEGEND

WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
D	ADDRESSABLE CIRCUIT	18/2 FPLR	A
V	NAC CIRCUIT	14/2 FPLR	B
C	ANNUNCIATOR CKT	16/4 FPLR	B
T	BPS TRIGGER	14/2 FPLR	B
P	DOOR HOLDER CKT	14/2 FPLR	D
U	UNDERGROUND CIRCUIT	18/2 UNDERGROUND RATED IN CONDUIT**	B
X	SLC UNDERGROUND CKT	14/2 UNDERGROUND RATED IN CONDUIT**	B

** ALL FIRE ALARM CONDUIT SHALL BE A MINIMUM OF 3/4" U.O.N.. CONDUIT SHALL BE NO MORE THAN 40% MAX FILL.

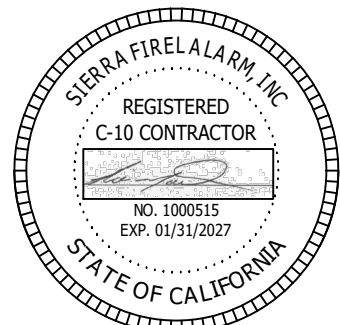
SMOKE DAMPER ACTUATION

Ⓜ-1	WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5' OF THE DAMPER WITH NO AIR OUTLETS OR INLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE LOCAL SMOKE DETECTORS REQUIRE A MINIMUM VELOCITY TO OPERATE.
Ⓜ-2	WHERE A SMOKE DAMPER IS INSTALLED ABOVE SMOKE BARRIER DOORS IN A SMOKE BARRIER, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL BE INSTALLED ON EITHER SIDE OF THE SMOKE BARRIER DOOR OPENING.
Ⓜ-3	WHERE A SMOKE DAMPER IS INSTALLED IN AN AIR TRANSFER OPENING IN A WALL, A SPOT-TYPE DETECTOR LISTED FOR RELEASING SERVICE SHALL INSTALLED WITHIN 5' HORIZONTALLY OF THE DAMPER.
Ⓜ-4	WHERE A SMOKE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING, THE DAMPER SHALL BE PERMITTED TO BE CONTROLLED BY A SMOKE DETECTION SYSTEM INSTALLED IN THE CORRIDOR.
Ⓜ-5	WHERE A TOTAL-COVERAGE SMOKE-DETECTION SYSTEM IS PROVIDED WITHIN AREAS SERVED BY A HEATING, VENTILATION AND AIR-CONDITIONING (HVAC) SYSTEM, SMOKE DAMPERS SHALL BE PERMITTED TO BE CONTROLLED BY THE SMOKE DETECTION SYSTEM.
REFER TO 716.3.3.2 (CBC 2022)	

SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
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OFFICE: 916.630.1472
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STAMP:



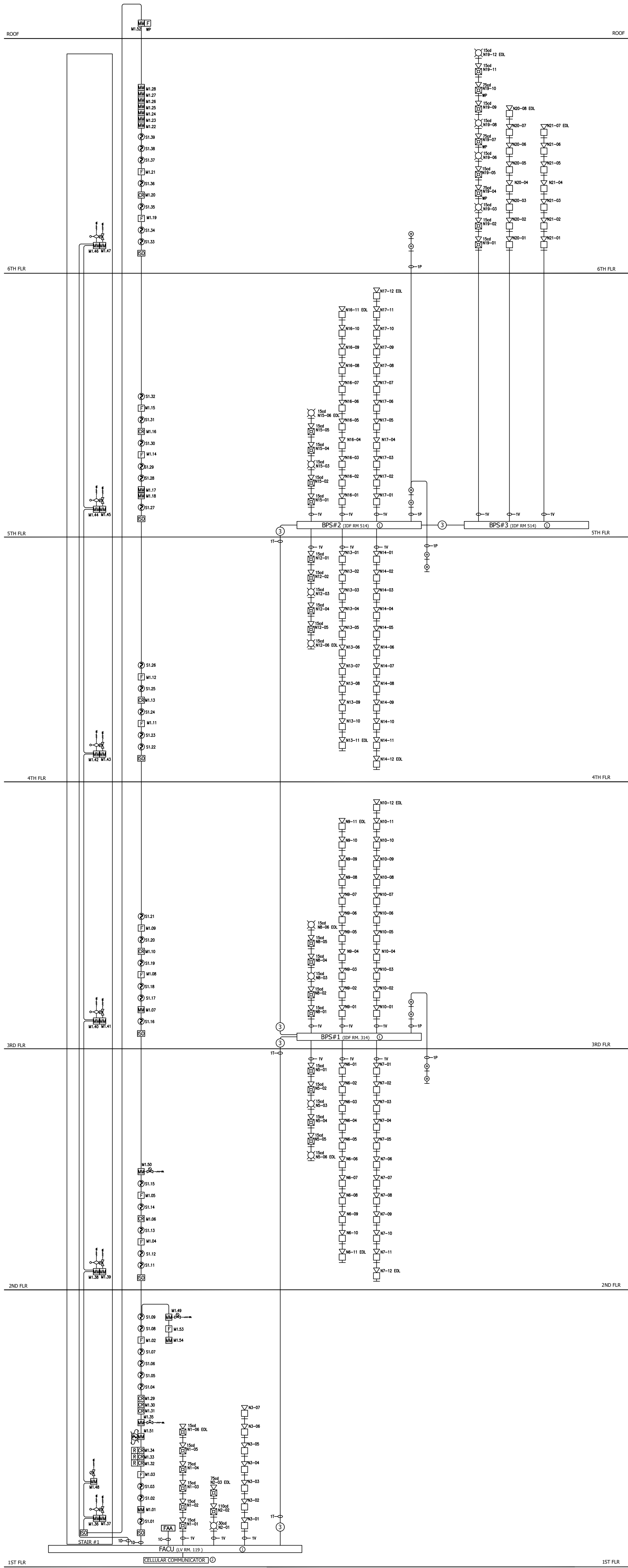
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2902 ADELINE APARTMENTS
2902 ADELINE STREET
BERKELEY, CALIFORNIA 94703

REV.	DATE	DESCRIPTION	D.B.
⚠	01-19-2026	CITY OF BERKELEY CORRECTIONS	
⚠			
⚠			
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DESIGNER: PUSCO ENGINEERING & DESIGN P.O. BOX 880922 PORT SAINT LUCIE, FL 34989 Carlos Olivas (619) 610-9637, NICET III #B4003 carlos.olivas@puscogang.com			
DESIGN: C.O.		DRAWN: C.O.	
CHECKED: LM		JOB NO:	
DATE: 07-25-2025		PLOT:	
SHEET TITLE:			
ROOF PLAN			
2902 ADELINE APARTMENTS			
FIRE ALARM SYSTEM			
1/8" = 1'-0"			
SHEET NO.			

FIRE ALARM CONTROL PANEL DEVICE ADDRESS SCHEDULE		
ADDRESS	DEVICE DESCRIPTION	
S1.01	SMOKE DETECTOR - 1ST FLR LV RM 119 - ABOVE FACP	
S1.02	SMOKE DETECTOR - 1ST FLR CORRIDOR 111	
S1.03	SMOKE DETECTOR - 1ST FLR CORRIDOR 111	
S1.04	SMOKE DETECTOR - 1ST FLR ELEVATOR CONTROL RM. 118	
S1.05	SMOKE DETECTOR - 1ST FLR CORRIDOR 111	
S1.06	SMOKE DETECTOR - 1ST FLR CORRIDOR LOBBY	
S1.07	SMOKE DETECTOR - 1ST FLR CORRIDOR LOBBY	
S1.08	SMOKE DETECTOR - 1ST FLR CORRIDOR 111	
S1.09	SMOKE DETECTOR - 1ST FLR CORRIDOR 111	
S1.10	SPARE	
S1.11	SMOKE DETECTOR - 2ND FLR CORRIDOR 215	
S1.12	SMOKE DETECTOR - 2ND FLR CORRIDOR 215 ABOVE FIRE DOORS	
S1.13	SMOKE DETECTOR - 2ND FLR ELEVATOR LOBBY	
S1.14	SMOKE DETECTOR - 2ND FLR CORRIDOR 215	
S1.15	SMOKE DETECTOR - 2ND FLR TRASH RM. 213	
S1.16	SMOKE DETECTOR - 3RD FLR IDF RM 314	
S1.17	SMOKE DETECTOR - 3RD FLR CORRIDOR 315	
S1.18	SMOKE DETECTOR - 3RD FLR CORRIDOR 315 ABOVE FIRE DOORS	
S1.19	SMOKE DETECTOR - 3RD FLR ELEVATOR LOBBY	
S1.20	SMOKE DETECTOR - 3RD FLR CORRIDOR 315	
S1.21	SMOKE DETECTOR - 3RD FLR TRASH RM. 313	
S1.22	SMOKE DETECTOR - 4TH FLR CORRIDOR 415	
S1.23	SMOKE DETECTOR - 4TH FLR CORRIDOR 415 ABOVE FIRE DOORS	
S1.24	SMOKE DETECTOR - 4TH FLR ELEVATOR LOBBY	
S1.25	SMOKE DETECTOR - 4TH FLR CORRIDOR 415	
S1.26	SMOKE DETECTOR - 4TH FLR TRASH RM. 413	
S1.27	SMOKE DETECTOR - 5TH FLR IDF RM 514	
S1.28	SMOKE DETECTOR - 5TH FLR CORRIDOR 515	
S1.29	SMOKE DETECTOR - 5TH FLR CORRIDOR 515 ABOVE FIRE DOORS	
S1.30	SMOKE DETECTOR - 5TH FLR ELEVATOR LOBBY	
S1.31	SMOKE DETECTOR - 5TH FLR CORRIDOR 515	
S1.32	SMOKE DETECTOR - 5TH FLR TRASH RM. 513	
S1.33	SMOKE DETECTOR - 6TH FLR CORRIDOR 615	
S1.34	SMOKE DETECTOR - 6TH FLR CORRIDOR 615 ABOVE FIRE DOORS	
S1.35	SMOKE DETECTOR - 6TH FLR ELEVATOR LOBBY	
S1.36	SMOKE DETECTOR - 6TH FLR CORRIDOR 615	
S1.37	SMOKE DETECTOR - 6TH FLR TRASH RM. 613	
S1.38	SMOKE DETECTOR - TOP OF ELEVATOR HOISTWAY	
S1.39	SMOKE DETECTOR - 6TH FLR CORRIDOR 615	

ADDRESS	DEVICE DESCRIPTION
M1.01	MONITOR - CELLULAR PANEL TROUBLE - 1ST FLR LV RM.
M1.02	PULL-STATION - 1ST FLR ENTRY
M1.03	PULL-STATION - 1ST FLR CORRDIOR 111 EXIT
M1.04	PULL-STATION - 2ND FLR STAIR #1 EXIT
M1.05	PULL-STATION - 2ND FLR STAIR #2 EXIT
M1.06	RELAY- 1ST FLR SMOKE CURTAIN
M1.07	MONITOR BPS#1 TROUBLE - 2ND FLR IDF RM.
M1.08	PULL-STATION - 3RD FLR STAIR #1 EXIT
M1.09	PULL-STATION - 3RD FLR STAIR #2 EXIT
M1.10	RELAY- 3RD FLR SMOKE CURTAIN
M1.11	PULL-STATION - 4TH FLR STAIR #1 EXIT
M1.12	PULL-STATION - 4TH FLR STAIR #2 EXIT
M1.13	RELAY- 4TH FLR SMOKE CURTAIN
M1.14	PULL-STATION - 5TH FLR STAIR #1 EXIT
M1.15	PULL-STATION - 5TH FLR STAIR #2 EXIT
M1.16	RELAY- 5TH FLR SMOKE CURTAIN
M1.17	MONITOR BPS#2 TROUBLE - 5TH FLR IDF RM.
M1.18	MONITOR BPS#3 TROUBLE - 5TH FLR IDF RM.
M1.19	PULL-STATION - 6TH FLR STAIR #1 EXIT
M1.20	PULL-STATION - 6TH FLR STAIR #2 EXIT
M1.21	RELAY- 6TH FLR SMOKE CURTAIN
M1.22	ERCCS- AC FAIL
M1.23	ERCCS- LOW BATTERY
M1.24	ERCCS- BATTERY CHARGER FAIL
M1.25	ERCCS- SIGNAL BOOSTER FAIL
M1.26	ERCCS- 700MHZ ANTENNA MALFUNCTION
M1.27	ERCCS- BDA LINK FAIL
M1.28	ERCCS- INDOOR ANTENNA MALFUNCTION
M1.29	RELAY- ELEVATOR RECALL PRIMARY
M1.30	RELAY- ELEVATOR RECALL ALTERNATE
M1.31	RELAY- ELEVATOR CAB FIREMEN'S LAMP
M1.32	RELAY- FSD ACTIVATION
M1.33	RELAY- FSD ACTIVATION
M1.34	RELAY- FSD ACTIVATION
M1.35	MONITOR - BACKFLOW
M1.36	MONITOR - 1ST FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.37	MONITOR - 1ST FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.38	MONITOR - 2ND FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.39	MONITOR - 2ND FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.40	MONITOR - 3RD FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.41	MONITOR - 3RD FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.42	MONITOR - 4TH FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.43	MONITOR - 4TH FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.44	MONITOR - 5TH FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.45	MONITOR - 5TH FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.46	MONITOR - 6TH FLR STAIR#1 SPRINKLER FLOW SWITCH
M1.47	MONITOR - 6TH FLR STAIR#1 SPRINKLER ISOLATION VALVE TAMPER
M1.48	MONITOR - 1ST FLR STAIR#1 HOSE RISER TAMPER
M1.49	MONITOR - 1ST FLR TRASH RMS SPRINKLER RISER TAMPER
M1.50	MONITOR - 2ND FLR STAIR#2 HOSE RISER TAMPER
M1-51	MONITOR - DUCT SMOKE DETECTOR - PARKING GARAGE
M1-52	PULL STATION - EXTERIOR ROOF
M1-53	PULL STATION - PARKING GARAGE ENTRY DOOR
M1-54	MONITOR - 2 WAY COMM. SYSTEM TROUBLE

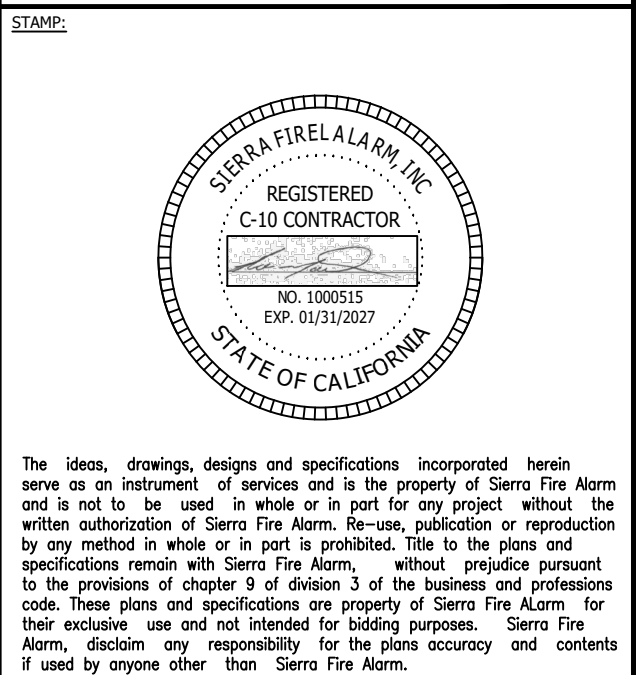
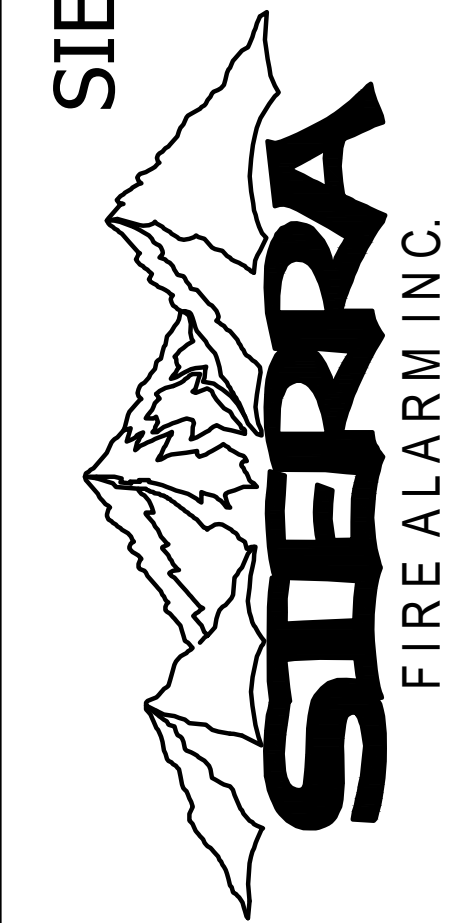


SYSTEM RISER NOTES	
①	120 VAC, 20 AMP DEDICATED CIRCUIT TO FACP AND BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE RED IN COLOR AND LOCKED OUT IN THE "ON" POSITION.
②	METHOD OF COMMUNICATIONS TO CENTRAL STATION SHALL BE VIA CELLULAR COMMUNICATOR PER NFPA-72 SECTION 26.6.3.1.5 SINGLE PATH OF COMMUNICATIONS.
③	TRIGGER WIRE TO BE DAISY CHAINED TO EACH BPS.

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACU]	FIRE ALARM CONTROL UNIT
[FAA]	REMOTE ANNUNCIATOR
[FAC]	CELLULAR COMMUNICATOR
[BPS]	BOOSTER POWER SUPPLY
[FADB]	FIRE ALARM DOCUMENT CABINET
⊙	SMOKE DETECTOR
⊙	HEAT DETECTOR
[F]	ADDRESSABLE PULL STATION
[AM]	ADDRESSABLE INPUT MODULE
[CR]	ADDRESSABLE RELAY MODULE
[DM]	ADDRESSABLE DUAL INPUT MODULE
[R]	10 AMP RELAY
[ISO]	FAULT ISOLATION MODULE
[HORN]	HORN WALL, LOW FREQ
[HORN-STROBE]	HORN-STROBE WALL
[STROBE]	STROBE WALL
[HORN-STROBE-WP]	HORN-STROBE WALL, WP
[SPRINKLER-FLOW]	SPRINKLER FLOW SWITCH
[SPRINKLER-TAMPER]	SPRINKLER TAMPER SWITCH
[SPRINKLER-BACKFLOW]	SPRINKLER BACKFLOW SWITCH
[FSD]	FIRE SMOKE DAMPER
[ADA-J-BOX]	ADA J-BOX

WIRE LEGEND			
WIRE TAG	PURPOSE	TYPE	PATHWAY CLASS
D	ADDRESSABLE CIRCUIT	18/2 FPLR	A
V	NAC CIRCUIT	14/2 FPLR	B
C	ANNUNCIATOR CKT	16/4 FPLR	B
T	BPS TRIGGER	14/2 FPLR	B
P	DOOR HOLDER CKT	14/2 FPLR	D
U	UNDERGROUND CIRCUIT	18/2 UNDERGROUND RATED IN CONDUIT**	B
X	SLC UNDERGROUND CKT	14/2 UNDERGROUND RATED IN CONDUIT**	B
** ALL FIRE ALARM CONDUIT SHALL BE A MINIMUM OF 3/4" U.O.N.. CONDUIT SHALL BE NO MORE THAN 40% MAX FILL.			

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REV.	DATE	DESCRIPTION	D.B.
△	01-19-2026	CITY OF BERKELEY CORRECTIONS	
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DESIGNER: PUSCO ENGINEERING & DESIGN P.O. BOX 880922 PORT SAINT LUCIE, FL 34989 Carlos Olvera (619) 510-8637, NICET III #B4003 carlos.olvera@puscogroup.com			
DESIGN:	C.O.	DRAWN:	C.O.
CHECKED:	LM	JOB NO:	
DATE:	07-25-2025	PLOT:	
SHEET TITLE: SYSTEM RISER DIAGRAM & FACP DEVICE ADDRESSES			
2902 ADELINE APARTMENTS FIRE ALARM SYSTEM			
SCALE:	N.T.S.		
SHEET NO.	FA-8.0		

ES-200X FACP (5 MINUTES IN ALARM, 24 HRS STANDBY)						FIRE -LITE	
A	B	C	D	E	F		
DEVICE TYPE	Quantity	Standby Current	Total Standby Current (B x C)	Alarm Current	Total Alarm Current (B x E)		
MAIN BOARD	1	0.141000A	0.141000A	0.257000A	0.257000A		
ANN-80 ANNUNCIATOR	1	0.040000A	0.040000A	0.040000A	0.040000A		
BG-12LX MANUAL PULL STATION	12	0.000230A	0.002760A	0.000230A	0.002760A		
NMF-301 MINI SINGLE MONITOR MODULE	30	0.000375A	0.011250A	0.000375A	0.011250A		
CRF-300 RELAY MODULE	11	0.000255A	0.002805A	0.000255A	0.021500A		
I300 FAULT ISOLATOR MODULE	7	0.000450A	0.003150A	0.000450A	0.003150A		
SD365 SMOKE DETECTOR	38	0.000200A	0.007600A	0.004500A	0.171000A		
		Total Standby Current =	0.209A	Total Alm Current=	0.557A		

NOTIFICATION APPLIANCES	DEVICE CURRENT DRAW	CIRCUIT # AND QTY					
		N1	N2	N3	N4-TRIGGER OUT		
30cd STROBE WALL OR CEILING	0.022A	0	1	0	0		
15cd HORN-STROBE WALL	0.035A	5	0	0	0		
75cd HORN-STROBE WALL	0.087A	1	0	0	0		
110cd HORN-STROBE WALL OR 30cd STROBE WP WALL OR CEILING	0.094A	0	0	0	0		
HORN LOW FREQ	0.108A	0	0	7	0		
	NAC CKT CURRENT DRAW =	0.262A	0.616A	0.756A	0.000A		
						TOTAL NAC CKT CURRENT DRAW =	1.634A

TOTAL STANDBY CALCULATIONS		TOTAL STANBY CALCU	
16 Total standby current			0.209
17 Multiply by 24 or 60 for standby hours needed.			24H
18 Total standby AH (Amp Hours)			5.0056 AH

ALARM CURRENT CALCULATIONS		TOTAL ALARM CURRENT CALCU	
19 Total alarm current			2.191
20 Multiply by 0.0833 for 5 min or 0.25 for 15 minutes of alarm			0.0830
21 Total alarm current.			0.1818 AH
BATTERY BACKUP REQUIREMENTS			
22 Sub total, add line 18+21			5.1874 AH
23 Multiply by 1.2 for 25% Battery Derating Factor			25%
24 Total AH (Amp Hours)			6.4842 AH

CELLULAR COMMUNICATION PANEL TG-7FS BATTERY CALCULATION							
PART#	DESCRIPTION	QTY	STANDBY CURRENT DRAW PER ITEM (AMPS)	TOTAL STANDBY CURRENT DRAW PER ITEM (AMPS)	QTY	ALARM CURRENT DRAW PER ITEM (AMPS)	TOTAL ALARM CURRENT DRAW (ITEM (AMP)
TG7LAF01	Cellular Panel	1	X 0.060	= 0.060	1	X 0.250	= 0.250
			TOTAL SYSTEM STANDBY CURRENT (AMPS)				
			0.0600				
			TOTAL SYSTEM ALARM CURRENT (AMPS)				
			0.2500				
	REQUIRED STANDBY TIME (HRS)	TOTAL SYSTEM STANDBY CURRENT (AMPS)	REQUIRED STANDBY CAPACITY (AMP- HOURS)	REQUIRED ALARM TIME (HOURS) SMN-1 083	TOTAL SYSTEM ALARM CURRENT (AMPS)	REQUIRED ALARM CAPACITY (AMP- HOURS)	
	24	X 0.0600	= 1.4400	0.083	X 0.2500	= 0.0208	
	REQUIRED STANDBY CAPACITY (AMP- HOURS)	REQUIRED ALARM CAPACITY (AMP- HOURS)	TOTAL CAPACITY (AMP- HOURS)	TOTAL CAPACITY (AMP- HOURS)	BATTERY DERATING FACTOR 20%	ADJUSTED BATTERY CAPACITY (AMP- HOURS)	
	1.44	* 0.0208	= 1.4608	1.4608	X 25%	= 1.826	
BATTERY CAPACITY = (1) 7 AMP BATTERY							
Max Battery Charging Capacity = 7AH Battery							

L SERIES WITH LED SYSTEM SENSOR NOTIFICATION APPLIANCE CURRENT DRAW LIST									
VDC CURRENT									
		Wall		Weatherproof		Ceiling		Low Freq. Wall	
Candela	Rating	Strobe	Horn- Strobe	Strobe	Horn- Strobe	Strobe	Horn- Strobe	Hom. LF	Hom. LF
15cd	0.018	0.035	0.066	0.079	0.018	---	---	---	---
30cd	0.022	0.038	0.094	0.107	0.022	---	---	---	---
75cd	0.070	0.087	0.158	0.175	0.070	---	---	---	---
95cd	0.075	0.092	0.181	0.194	0.075	---	---	---	---
110cd	0.085	0.094	0.202	0.212	---	---	---	---	---
115cd	---	---	0.210	0.218	0.090	0.120	---	---	---
135cd	0.105	0.189	0.228	0.245	---	---	---	---	---
150cd	---	---	0.246	0.259	0.110	0.189	---	---	---
177cd	---	---	0.281	0.290	0.115	0.190	---	---	---
185cd	0.120	0.190	0.286	0.297	---	---	0.266	---	---
---	---	---	---	---	---	---	---	0.108	---
A x (L/1000) x R x 2) A= CURRENT REQUIRED BY THE DEVICE L= LENGTH DISTANCE FROM DEVICE TO DEVICE R = RESISTANCE OF WIRE PER 1000 FT. 14 AWG = 3.07 OHMS PER 1000FT. VOLTAGE DROP BASE ON PANELS WORST CASE VOLTAGE OF 20.4 VDC									

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N1-01	0.035A	37'	41'	0.262A	0.065v	0.262A	0.225v	1.1027%
N1-02	0.035A	39'	43'	0.227A	0.060v	N.A.C. #1 HORN-STROBE CIRCUIT		
N1-03	0.035A	48'	53'	0.192A	0.062v			
N1-04	0.087A	11'	12'	0.157A	0.012v			
N1-05	0.035A	41'	45'	0.070A	0.019v			
N1-06	0.035A	27'	30'	0.035A	0.066v			

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N2-01	0.022A	36'	40'	0.616A	0.150v	0.616A	0.384v	1.8847%
N2-02	0.297A	28'	31'	0.594A	0.112v	N.A.C. #2 HORN-STROBE CIRCUIT		
N2-03	0.297A	61'	67'	0.297A	0.122v			

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N3-01	0.108A	55'	61'	0.756A	0.281v	0.756A	0.570v	2.7926%
N3-02	0.108A	15'	17'	0.648A	0.066v	N.A.C. #3 HORN-STROBE CIRCUIT		
N3-03	0.108A	16'	18'	0.540A	0.058v			
N3-04	0.108A	18'	20'	0.432A	0.053v			
N3-05	0.108A	17'	19'	0.324A	0.037v			
N3-06	0.108A	41'	45'	0.216A	0.060v			
N3-07	0.108A	21'	23'	0.108A	0.015v			

HPF-PS10 BPS#1 (5 MINUTES IN ALARM, 24HRS STANDBY)										HONEYWELL	
A		B	C	D	E	F					
INTERNAL POWER SUPPLY COMPONENTS		Quantity	Standby Current	Total Standby Current (B x C)	Alarm Current	Total Alarm Current (B x E)					
MAIN POWER SUPPLY BOARD		1	0.156A	0.156A	0.185A	0.185A					
			Total Standby Current =	0.156A	Total Alm Current=	0.185A					
NOTIFICATION APPLIANCES		DEVICE CURRENT DRAW	CIRCUIT # AND QTY								
			N5	N6	N7	N8	N9	N10	N11 - DOOR HOLDER POWER		
			2	0	0	2	0	0	0		
			4	0	0	4	0	0	0		
			0	11	12	0	11	12	0		
HORN LOW FREQ			NAC CKT CURRENT DRAW =	0.176A	1.188A	1.296A	0.176A	1.188A	1.296A	0.000A	
									TOTAL NAC CKT CURRENT DRAW =	5.320A	
TOTAL STANDBY CALCULATIONS				TOTAL STANBY CALCU							
16	Total standby current				0.156						
17	Multiply by 24 or 60 for standby hours needed.				24H						
18	Total standby AH (Amp Hours)				3.7440 AH						
ALARM CURRENT CALCULATIONS										TOTAL ALARM CURRENT CALCU	
19	Total alarm current					5.505					
20	Multiply by 0.0833 for 5 min or 0.25 for 15 minutes of alarm					0.0833					
21	Total alarm current.					0.4586 AH					
BATTERY BACKUP REQUIREMENTS											
22	Sub total, add line 18+21					4.2026 AH					
23	Multiply by 1.2 for 25% Battery Derating Factor					25%					
24	Total AH (Amp Hours)					5.2532 AH					
										(2) BATTERY SUPPLIED = 7 AMP	

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N5-01	0.035A	35'	36'	0.176A	0.039v	0.176A	0.082v	0.4006%
N5-02	0.035A	19'	20'	0.141A	0.017v	N.A.C. #5 HORN-STROBE CIRCUIT		
N5-03	0.018A	8'	9'	0.106A	0.006v			
N5-04	0.035A	14'	15'	0.088A	0.008v			
N5-05	0.035A	32'	33'	0.053A	0.011v			
N5-06	0.018A	3'	4'	0.018A	0.000v			

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N6-01	0.108A	33'	34'	1.188A	0.249v	1.188A	0.713v	3.4931%
N6-02	0.108A	5'	6'	1.080A	0.040v	N.A.C. #6 HORN-STROBE CIRCUIT		
N6-03	0.108A	18'	19'	0.972A	0.114v			
N6-04	0.108A	16'	17'	0.864A	0.091v			
N6-05	0.108A	3'	4'	0.756A	0.019v			
N6-06	0.108A	16'	17'	0.648A	0.068v			
N6-07	0.108A	17'	18'	0.540A	0.060v			
N6-08	0.108A	5'	6'	0.432A	0.016v			
N6-09	0.108A	11'	12'	0.324A	0.024v			
N6-10	0.108A	20'	21'	0.216A	0.028v			
N6-11	0.108A	4'	5'	0.108A	0.003v			

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N7-01	0.108A	49'	50'	1.296A	0.399v	1.296A	0.528v	4.5469%
N7-02	0.108A	4'	5'	1.188A	0.037v	N.A.C. #7 HORN-STROBE CIRCUIT		
N7-03	0.108A	20'	21'	1.080A	0.140v			
N7-04	0.108A	5'	6'	0.972A	0.036v			
N7-05	0.108A	7'	8'	0.864A	0.043v			
N7-06	0.108A	22'	23'	0.756A	0.107v			
N7-07	0.108A	5'	6'	0.648A	0.024v			
N7-08	0.108A	20'	21'	0.540A	0.070v			
N7-09	0.108A	5'	6'	0.432A	0.016v			
N7-10	0.108A	5'	6'	0.324A	0.012v			
N7-11	0.108A	28'	29'	0.216A	0.009v			
N7-12	0.108A	5'	6'	0.108A	0.004v			

HPF-PS10 BPS#2 (5 MINUTES IN ALARM, 24HRS STANDBY)										HONEYWELL									
A		B		C		D		E		F									
INTERNAL POWER SUPPLY COMPONENTS		Quantity	Standby Current	Total Standby Current (B x C)		Alarm Current		Total Alarm Current (B x E)											
MAIN POWER SUPPLY BOARD		1	0.156A	0.156A		0.185A		0.185A											
			Total Standby Current =	0.156A		Total Alm Current =		0.185A											
NOTIFICATION APPLIANCES		DEVICE CURRENT DRAW	CIRCUIT # AND QTY																
			N12		N13		N14		N15		N16		N17		N18-DOOR HOLDER POWER				
			15cd STROBE WALL OR CEILING		0.018A		2		0		2		0		0		0		
			15cd HORN-STROBE WALL		0.035A		4		0		4		0		0		0		
			HORN LOW FREQ		0.108A		0		11		12		0		11		12		0
		NAC CXT CURRENT DRAW =	0.176A		1.188A		1.296A		0.176A		1.188A		1.296A		0.000A				
															TOTAL NAC CXT CURRENT DRAW =		5.320A		
TOTAL STANDBY CALCULATIONS								TOTAL STANDBY CALCU											
16 Total standby current						0.156													
17 Multiply by 24 or 60 for standby hours needed.						24H													
18 Total standby AH (Amp Hours)						3.7440 AH													
ALARM CURRENT CALCULATIONS																			
19 Total alarm current																TOTAL ALARM CURRENT CALCU			
20 Multiply by 0.0833 for 5 min or 0.25 for 15 minutes of alarm																5.505			
21 Total alarm current.																0.0833			
																0.4586 AH			
BATTERY BACKUP REQUIREMENTS																			
22 Sub total, add line 18+21																4.2026 AH			
23 Multiply by 1.2 for 25% Battery Derating Factor																25%			
24 Total AH (Amp Hours)																5.2532 AH			
																(2) BATTERY SUPPLIED = 7 AMP			

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N12-01	0.035A	35'	39'	0.176A	0.042v	0.176A	0.086v	0.4194%
N12-02	0.035A	19'	21'	0.141A	0.018v			
N12-03	0.018A	8'	9'	0.106A	0.006v			
N12-04	0.035A	14'	15'	0.088A	0.008v			
N12-05	0.035A	32'	35'	0.053A	0.011v			
N12-06	0.018A	3'	3'	0.018A	0.000v			
N.A.C #12 HORN-STROBE CIRCUIT								

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N13-01	0.108A	33'	36'	1.188A	0.265v	1.188A	0.731v	3.5828%
N13-02	0.108A	5'	6'	1.080A	0.036v			
N13-03	0.108A	18'	20'	0.972A	0.118v			
N13-04	0.108A	16'	18'	0.864A	0.093v			
N13-05	0.108A	3'	3'	0.756A	0.015v			
N13-06	0.108A	16'	18'	0.648A	0.070v			
N13-07	0.108A	17'	19'	0.540A	0.062v			
N13-08	0.108A	5'	6'	0.432A	0.015v			
N13-09	0.108A	11'	12'	0.324A	0.024v			
N13-10	0.108A	20'	22'	0.216A	0.029v			
N13-11	0.108A	4'	4'	0.108A	0.003v			
N.A.C #13 HORN-STROBE CIRCUIT								

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N14-01	0.108A	49'	54'	1.296A	0.429v	1.296A	0.958v	4.6948%
N14-02	0.108A	4'	4'	1.188A	0.032v			
N14-03	0.108A	20'	22'	1.080A	0.146v			
N14-04	0.108A	5'	6'	0.972A	0.033v			
N14-05	0.108A	7'	8'	0.864A	0.041v			
N14-06	0.108A	22'	24'	0.756A	0.112v			
N14-07	0.108A	5'	6'	0.648A	0.022v			
N14-08	0.108A	20'	22'	0.540A	0.073v			
N14-09	0.108A	5'	6'	0.432A	0.015v			
N14-10	0.108A	5'	6'	0.324A	0.011v			
N14-11	0.108A	28'	31'	0.216A	0.041v			
N14-12	0.108A	5'	6'	0.108A	0.004v			
N.A.C #14 HORN-STROBE CIRCUIT								

L SERIES WITH LED SYSTEM SENSOR NOTIFICATION APPLIANCE CURRENT DRAW LIST									
VDC CURRENT									
	Wall	Weatherproof	Ceiling	Low Freq. Wall					
	Strobe	Horn-Strobe	Strobe	Horn-Strobe	Strobe	Horn-Strobe	Strobe LF	Horn LF	
Candela									
15cd	0.018	0.035	0.066	0.079	0.018	--	--	--	
30cd	0.022	0.038	0.094	0.107	0.022	--	--	--	
75cd	0.070	0.087	0.158	0.176	0.070	--	--	--	
95cd	0.075	0.092	0.181	0.194	0.075	--	--	--	
110cd	0.085	0.094	0.202	0.212	--	--	--	--	
115cd	--	--	0.210	0.218	0.090	0.120	--	--	
135cd	0.105	0.189	0.228	0.245	--	--	--	--	
150cd	--	--	0.246	0.259	0.110	0.189	--	--	
177cd	--	--	0.281	0.290	0.115	0.190	--	--	
185cd	0.120	0.190	0.286	0.297	--	--	0.266	--	
--	--	--	--	--	--	--	--	0.108	

A x (L/1000) x R x 2)
A= CURRENT REQUIRED BY THE DEVICE
L= LENGTH DISTANCE FROM DEVICE TO DEVICE
R = RESISTANCE OF WIRE PER 1000 FT.
14 AWG = 3.07 OHMS PER 1000FT.
VOLTAGE DROP BASE ON PANELS WORST CASE VOLTAGE OF 20.4 VDC

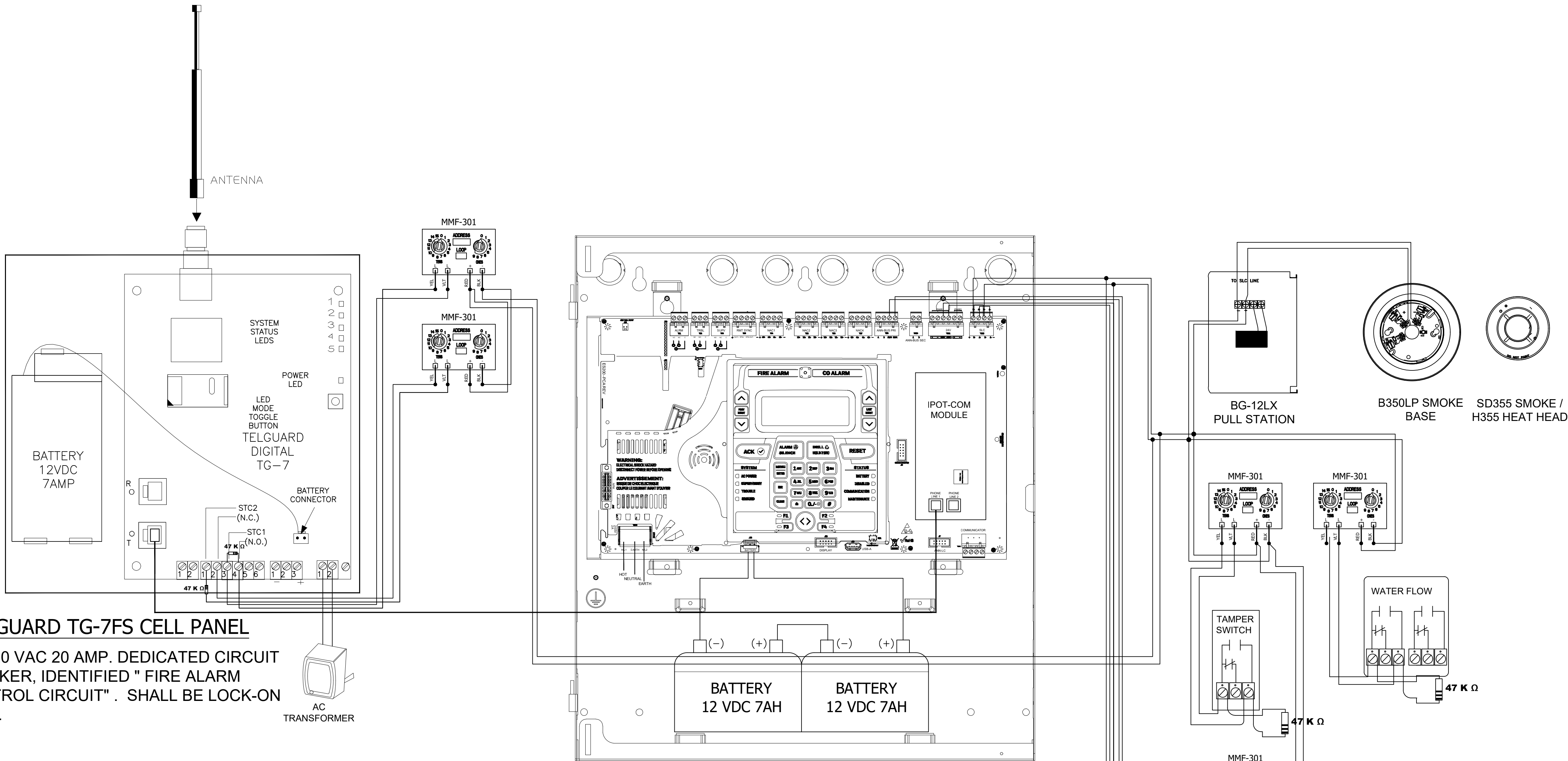
Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N15-01	0.035A	15'	17'	0.176A	0.018v	0.176A	0.062v	0.3029%
N15-02	0.035A	19'	21'	0.141A	0.018v			
N15-03	0.018A	8'	9'	0.106A	0.006v			
N15-04	0.035A	14'	15'	0.088A	0.008v			
N15-05	0.035A	32'	35'	0.053A	0.011v			
N15-06	0.018A	3'	3'	0.018A	0.000v			
N.A.C #15 HORN-STROBE CIRCUIT								

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N16-01	0.108A	15'	17'	1.188A	0.120v	1.188A	0.586v	2.8748%
N16-02	0.108A	5'	6'	1.080A	0.036v			
N16-03	0.108A	18'	20'	0.972A	0.118v			
N16-04	0.108A	16'	18'	0.864A	0.093v			
N16-05	0.108A	3'	3'	0.756A	0.015v			
N16-06	0.108A	16'	18'	0.648A	0.070v			
N16-07	0.108A	17'	19'	0.540A	0.062v			
N16-08	0.108A	5'	6'	0.432A	0.015v			
N16-09	0.108A	11'	12'	0.324A	0.024v			
N16-10	0.108A	20'	22'	0.216A	0.029v			
N16-11	0.108A	4'	4'	0.108A	0.003v			
N.A.C #16 HORN-STROBE CIRCUIT								

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps	Total Drop	Percent Drop
N17-01	0.108A	29'	32'	1.296A	0.254v	1.296A	0.783v	3.8367%
N17-02	0.108A	4'	4'	1.188A	0.032v			
N17-03	0.108A	20'	22'	1.080A	0.146v			
N17-04	0.108A	5'	6'	0.972A	0.033v			
N17-05	0.108A	7'	8'	0.864A	0.041v			
N17-06	0.108A	22'	24'	0.756A	0.112v			
N17-07	0.108A	5'	6'	0.648A	0.022v			
N17-08	0.108A	20'	22'	0.540A	0.073v			
N17-09	0.108A	5'	6'	0.432A	0.015v			
N17-10	0.108A	5'	6'	0.324A	0.011v			
N17-11	0.108A	28'	31'	0.216A	0.041v			
N17-12	0.108A	5'	6'	0.108A	0.004v			
N.A.C #17 HORN-STROBE CIRCUIT								

HPF-PS10 BPS#3 (5 MINUTES IN ALARM, 24HRS STANDBY)										HONEYWELL	
A		B	C	D	E	F					
INTERNAL POWER SUPPLY COMPONENTS		Quantity	Standby Current	Total Standby Current (B x C)	Alarm Current	Total Alarm Current (B x E)					
MAIN POWER SUPPLY BOARD		1	0.156A	0.156A	0.185A	0.185A					
			Total Standby Current =	0.156A	Total Alm Current=	0.185A					
			CIRCUIT # AND QTY								
NOTIFICATION APPLIANCES		DEVICE CURRENT DRAW	N19	N20	N21	N22-SPARE					
15cd STROBE WALL OR CEILING		0.018A	4	0	0	0					
15cd HORN-STROBE WALL		0.035A	5	0	0	0					
HORN LOW FREQ		0.108A	0	8	7	0					
		NAC CKT CURRENT DRAW =	0.775A	0.864A	0.756A	0.000A					
									TOTAL NAC CKT CURRENT DRAW =	2.395A	
TOTAL STANDBY CALCULATIONS				TOTAL STANDBY CALCU							
16	Total standby current		0.156								
17	Multiply by 24 or 60 for standby hours needed.		24H								
18	Total standby AH (Amp Hours)		3.7440 AH								
ALARM CURRENT CALCULATIONS										TOTAL ALARM CURRENT CALCU	
19	Total alarm current		2.580								
20	Multiply by 0.0833 for 5 min or 0.25 for 15 minutes of alarm		0.0833								
21	Total alarm current.		0.2149 AH								
BATTERY BACKUP REQUIREMENTS											
22	Sub total, add line 18+21		3.9589 AH								
23	Multiply by 1.2 for 25% Battery Derating Factor		25%								
24	Total AH (Amp Hours)		4.9486 AH								
										(2) BATTERY SUPPLIED = 7 AMP	

Device #	Device Draw	Distance	Distance + 10%	Amps	Volt Drop	Total Amps
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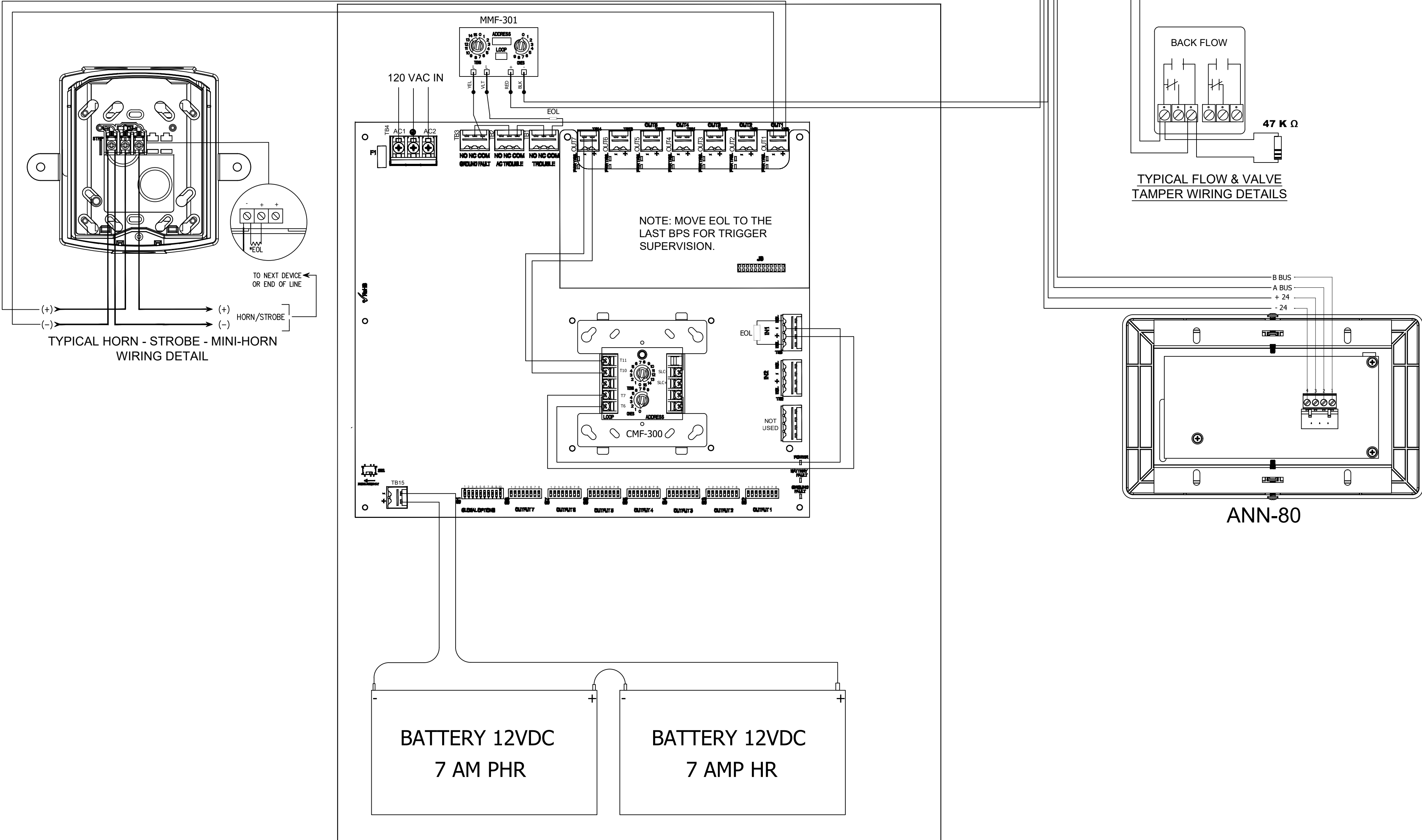


TELGUARD TG-7FS CELL PANEL

TO 120 VAC 20 AMP. DEDICATED CIRCUIT BREAKER, IDENTIFIED " FIRE ALARM CONTROL CIRCUIT" . SHALL BE LOCK-ON TYPE.

ES-200X FIRE ALARM PANEL

TO 120 VAC 20 AMP. DEDICATED CIRCUIT BREAKER, IDENTIFIED " FIRE ALARM CONTROL CIRCUIT" . SHALL BE LOCK-ON TYPE.

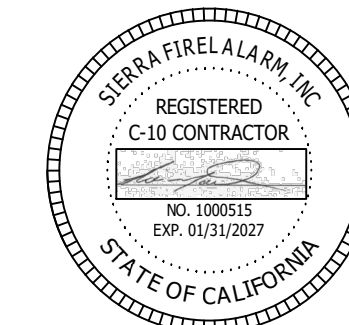
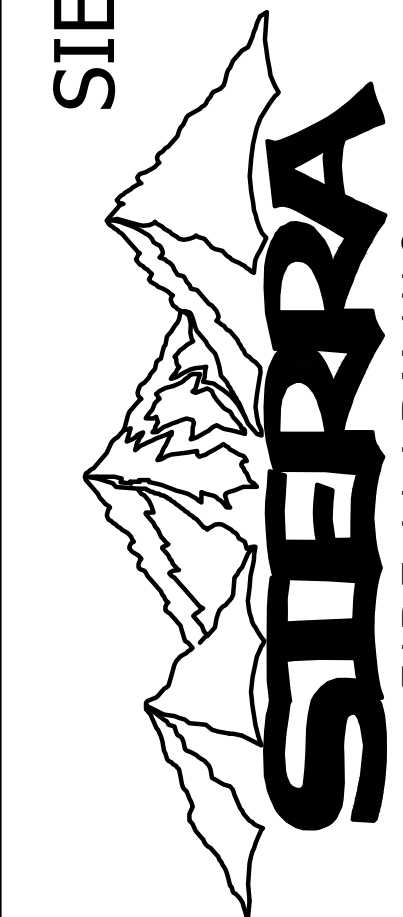


HPF-PS SERIES NAC PANEL

TYPICAL NAC PANEL WIRING DETAIL

TO 120 VAC 20 AMP. DEDICATED CIRCUIT BREAKER, IDENTIFIED " FIRE ALARM CONTROL CIRCUIT" SHALL BE LOCK-ON TYPE.

SIERRA FIRE ALARM INC.
4505 YANKEE HILL COURT
ROCKLIN, CA 95677
OFFICE: 916.630.1472
C-10 LICENSE #: 1000515



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2902 ADELINE APARTMENTS
2902 ADELINE STREET
BERKELEY, CALIFORNIA 94703

REV.	DATE	DESCRIPTION	D.B.
1	01-19-2026	CITY OF BERKELEY CORRECTIONS	
2			
3			
4			

DESIGNER: PUSCO ENGINEERING & DESIGN
P.O. BOX 880922
PORT SAINT LUCIE, FL 34989
Carlos Olvera (619) 510-9637, NICET III #B4003
carlos.olvera@puscoeng.com

DESIGN: C.O.	DRAWN: C.O.
CHECKED: LM	JOB NO:
DATE: 07-25-2025	PLOT:

SHEET TITLE:
POINT TO POINT
WIRING DETAIL

2902 ADELINE APARTMENTS
FIRE ALARM SYSTEM

SCALE: N.T.S.

SHEET NO.

FA-11.0

System No. W-L-1170

ANSI/UL1479 (ASTM E814)	CANULC S115
F Ratings — 1 & 2 Hr (See Items 1 and 4)	F Ratings — 1 & 2 Hr (See Items 1 and 4)
F Rating — 0 Hr	FT Rating — 0 Hr
	FH Ratings — 1 & 2 Hr (See Items 1 and 4)
	FTH Rating — 0 Hr

1. Wall Assembly — The 1 or 2 hr fire rated wallboard/wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features.

A. Studs — Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — Nom 5/8 in. (16 mm) thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or U400 Series Design in the Fire Resistance Directory. Max diam of opening is 9 in. (229 mm).

The hourly F, T, FT and FTH Ratings of the freestop systems are equal to the hourly fire rating of the wall assembly in which it is installed.

C. Steel Sleeve — Max 3 in. (203 mm) diam, min 28 MSG sheet metal steel sleeve inserted in nom 8 in. (203 mm) diam circular opening core drilled through wall. Length of steel sleeve to be equal to thickness of wall. As an alternate, steel sleeve may consist of nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve friction-fitted into circular cutouts in the gypsum board layers. The ends of the steel sleeve shall be flush with each surface of the wall.

D. Through Penetrant* — One metallic pipe or tubing installed concentrically or eccentrically within the freestop system. Pipe or tube to be rigidly supported on both sides of wall assembly. The annular space between the pipe or tube and periphery of the steel sleeve shall be min 1/2 in. to max 1-3/8 in. (13 to 35 mm). The following types and sizes of metallic pipes and tube may be used:

A. Copper Tube — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.

B. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

4. Freestop System — The freestop system shall consist of the following:

A. Packing Material — Min 2-1/2 in. (64 mm) thickness of min 4 pcd mineral wool insulation, firmly packed into the opening. Mineral wool to be necessary from both sides of the assembly to accommodate the required thickness of fill material (Item 4D).

B. Fill Void or Cavity Material* — Sealant — Min 5/8 in. or 1-1/4 in. (16 or 32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 and 2 hr walls, respectively.

HILTI INC. — CR650 Flexible Freestop System, CFS-S SIL GG Sealant or CPB01S Elastomeric Freestop Sealant

*Bearing the UL Classification Mark

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January 14, 2014

UL 1170

SHEET NO. _____