

MODERA MELROSE APARTMENTS

BUILDING 3

5041 OCEANSIDE BLVD.
OCEANSIDE, CA 92056

FIRE DETECTION AND VOICE

EVACUATION SYSTEM



LOW VOLTAGE CONSULTANT

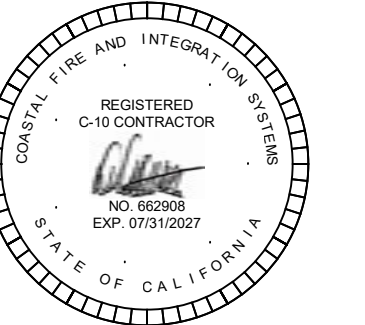
COASTAL
FIRE AND INTEGRATION

12155 PAINE PLACE POWAY, CA 858-529-3473

ARCHITECT / CLIENT

**MODERA MELROSE
APARTMENTS
BUILDING 3
5041 OCEANSIDE BLVD
OCEANSIDE, CA 92056**

FIRE DETECTION AND VOICE EVACUATION SYSTEM



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FIRE MARSHAL REQUIRED NOTES:

1. THE INSTALLING CONTRACTOR SHALL PROVIDE THE CITY OF OCEANSIDE FIRE AND RESCUE DEPARTMENT WITH A "CERTIFICATE OF COMPLETION" IN ACCORDANCE WITH NFPA 72.
2. THE FIRE ALARM INSTALLER IN RESPONSIBLE CHARGE OF EACH SPECIFIC PROJECT SHALL BE STATE CERTIFIED BY THE DIVISION OF APPOINTMENTS STANDARDS AS A "FIRELIFE SAFETY TECHNICIAN", AND MUST FURNISH AND SHOW PROOF OF SUCH CERTIFICATION UPON REQUEST.
3. AUDIBLE NOTIFICATION APPLIANCES IN ALL SLEEPING AREAS WILL 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 AT LEAST 10 SECONDS, MEASURED 5 FT (1.5M) ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM NFPA 72, SECTION 18.4.5.
4. AUDIBLE PUBLIC MESSAGE SIGNALS SHALL HAVE A SOUND LEVEL AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 DBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 10 SECONDS, WHEREVER IS MEASURED 5 FT (1.5M) ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM NFPA 72, SECTION 18.4.3.1.
5. THE TOTAL SOUND PRESSURE PRODUCED BY COMBINING THE AMBIENT SOUND PRESSURE WITH ALL AUDIBLE NOTIFICATION APPLIANCES SHALL NOT EXCEED 110 DBA AT THE MINIMUM HEARING DISTANCE. NFPA 72, SECTION 18.4.3.1.

FIRE ALARM NOTES:

1. COMPLETE PLANS AND SPECIFICATIONS FOR FIRE ALARM SYSTEM SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO SYSTEM INSTALLATION.
2. ALL NOTIFICATION APPLIANCE CIRCUITS SHALL BE WIRED WITH 142 FLPL TYPE WIRE.
3. ALL INTELLIGENT INITIATING DEVICE CIRCUITS SHALL BE WIRED WITH 1814 FLPL WIRE.
4. NOT APPLICABLE.
5. WIRES FOR ALL SIGNALING DEVICES SHALL BE RAN IN SUCH A MANNER SO THAT THE E.O.L. IS LOCATED IN THE BPS OR FACP, U.O.N.
6. a) THE FIRE ALARM PANEL SHALL HAVE A DEDICATED 120V/20AMP ELECTRICAL CIRCUIT WITH LOCK ON DEVICE AND BREAKER MARKED "FIRE ALARM PANEL" (PROVIDED BY OTHERS)
b) THE LOCATION OF THE BRANCH CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT EACH CONTROL UNIT.
c) THE FIRE ALARM CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING. THE RED MARKING SHALL NOT DAMAGE THE OVERCURRENT PROTECTIVE DEVICES OR OBSCURE THE MANUFACTURERS MARKINGS PER NFPA 72 SECTION 10.6.5.2.4.
7. FLOW AND TAMPER SWITCHES WILL BE HOOKED INTO THE FIRE ALARM CONTROL PANEL ON THEIR OWN ADDRESS OR ZONE. (ALL SWITCHES TO BE PROVIDED BY OTHERS)
8. FACP WILL BE SURFACE MOUNTED, UNLESS SPECIFIED BY THE OWNER OTHERWISE.
9. FACP SHALL UTILIZE TEMPORAL CODING ON ALL AUDIBLE NOTIFICATION APPLIANCE CIRCUITS. THE STANDARD TONE AND SIGNALING SHALL BE SYNCHRONIZED WITH A NOTIFICATION ZONE PER NFPA 72 SECTION 18.4.2.4 THAT SHALL INCLUDE SYNCHRONIZATION OF THE DISTINCTIVE "THREE PULSE TEMPORAL PATTERN" EVACUATION SIGNAL.
10. INITIATING DEVICE CIRCUITS SHALL HAVE ANNUNCIATION AS FOLLOW: ALARM (RED), SUPERVISORY ACTIVE (FAST YELLOW), SUPERVISORY RESTORE (YELLOW) AND TROUBLE (SLOW YELLOW).
11. WHEN MORE THAN TWO STROBES ARE IN THE SAME FIELD OF VIEW, FLASH SHALL IN SYNCHRONIZATION. THE STROBE FLASH SYNCHRONIZATION SHALL MEET THE REQUIREMENTS OF NFPA 72, SECTION 18.5.5.4.2.
12. AUDIBLE NOTIFICATION APPLIANCES SERVING SLEEPING AREAS SHALL COMPLY WITH THE LOW FREQUENCY REQUIREMENTS OF NFPA 72, 18.4.5.3.
13. THE DOOR TO THE ENCLOSURE CONTAINING THE FIRE ALARM CONTROL PANEL SHALL BE AFFIXED WITH A "FIRE ALARM CONTROL PANEL INSIDE" SIGN.
14. FIRE ALARM CABLEING IS NOT PERMITTED TO TOUCH THE FIRE SPRINKLER PIPES.
15. WHEN USING THE TELGARUD TGT1AF01, SECONDARY PHONE LINES ARE NOT REQUIRED TO BE CONNECTED BECAUSE THE TGT1AF01 CAN SERVE AS THE SOLE COMMUNICATIONS PATH FOR THE FIRE ALARM SYSTEM. WHEN TELGARUD IS USED IN LOCATIONS OUTSIDE THE BUILDING IT MAY BE NECESSARY TO UTILIZE THE EXO-D EXTERNAL ANTENNA OR HGD-H HIGH GAIN DIRECTIONAL ANTENNA.
16. WHERE HIGH AND LOW VOLTAGE WIRING (FIRE ALARM) RUN PARALLEL, AND A MINIMUM 12" SEPARATION IS NOT POSSIBLE. SEPARATE AS MUCH AS POSSIBLE (HIGH VOLTAGE ON TOP). A CABLE SPACER IS ALSO RECOMMENDED. UNDER NO CIRCUMSTANCE SHALL THIS SPACING BE LESS THAN 4" WITHOUT SUPPLEMENTAL SHIELDING. ALL LOW VOLTAGE WIRING (FIRE ALARM) AND HIGH VOLTAGE WIRING MUST CROSS AT RIGHT ANGLES TO EACH OTHER. A 2" MINIMUM SEPARATION IS REQUIRED.
17. FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED, AND IN DWELLING UNITS THAT HAVE A GAS FURNACE. THESE DEVICES SHALL BE 120V STAND ALONE APPLIANCES AND NOT PART OF THE FIRE ALARM SYSTEM. REFER TO ELECTRICAL UNIT DRAWINGS FOR DEVICE LOCATIONS. THE OWNER'S ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THESE DEVICES.
18. THE LOCATION OF THE BRANCH CIRCUIT(S) SERVING THE DEDICATED FIRE ALARM OVERCURRENT PROTECTION DEVICE (OCPD) OR DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT EACH CONTROL UNIT OR FACP PER NFPA 72, 10.6.5.2.4.
19. ROOM LOCATION OF FIRE ALARM DEDICATED OCPD OR DISCONNECTING MEANS SHOULD INCLUDE SPECIFIC PANEL DIRECTORY DESIGNATION / NAME IF THERE ARE MULTIPLE OR MORE THAN SERVICE PANELS SERVING THE BUILDING.

SINGLE-PATH CELLULAR COMMUNICATOR:

PER DSD TECHNICAL BULLETIN FIRE 9-2, REQUIREMENTS FOR FIRE ALARM CONTROL PANELS:

- A) THE SIGNALS SENT TO THE SUPERVISING STATION MUST CLEARLY IDENTIFY THE SPECIFIC BUILDING IN ALARM
- B) SILENCE AND RESET CAPABILITIES SHALL ONLY BE PERMITTED AT THE PANEL OF THE BUILDING WHERE THE SIGNAL ORIGINATED.

DOCUMENT CABINET:

DOCUMENTATION CABINET(S) SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 72 SECTION 7.7.2.

PROJECT DATA:	
PROJECT DESCRIPTION:	4 STORY BUILDING WITH 55 RESIDENTIAL UNITS.
ASSESSOR'S PARCEL NO:	161-030-23, 161-030-24
LOCATION OF PROPERTY:	5041 OCENSIDE BLVD. OCEANSIDE,CA 92506
BUILDING (NEW OR EXISTING):	NEW
TOTAL NUMBER OF UNITS:	108 UNITS
TOTAL BUILDING AREA:	148,163 S.F.
STORIES ABOVE GRADE PLANE:	4 STORIES
OCCUPANCY TYPE:	R2,B,A3,S2
CONSTRUCTION TYPE:	TYPE VA , IA
TYPE OF FIRE ALARM SYSTEM:	AUTOMATIC
BUILDING IS SPRINKLERED:	YES
MECHANICAL UPGRADE:	YES
EMERGENCY GENERATOR:	NO
RPDA (BACKFLOW DEVICE):	YES
FIRE PUMP:	NO

MONITORING STATION INFORMATION:

ALARM SERVICE COMPANY / SERVICE CENTER (731846-001)
COMPANY: CENTRAL MONITORING GROUP
ADDRESS: 14231 GARDEN ROAD (SUITE 1-4) POWAY, CA 92064
PHONE NO.: (800) 824-1882
U.L. LISTING NO.: S2669
MEANS OF TRANSMITTING SIGNAL TO MONITORING COMPANY:

SCOPE OF WORK:

1. INTENT, PURPOSE & REASON:
NEW FIRE ALARM SYSTEM FOR NEW APARTMENT BUILDING REQUIRED BY CODE. SYSTEM PROVIDED TO ALERT OCCUPANTS OF FIRE DANGER WITHIN BUILDING. SYSTEM WILL AID IN FIRE CONTAINMENT BY MEANS OF DOOR HOLDERS AND WILL AID IN SMOKE CONTAINMENT BY MEANS OF CONTROL RELAYS TO SHUT DOWN FIRE/SMOKE DAMPERS. SYSTEM SHALL REPORT SYSTEM STATUS TO CENTRAL STATION.
2. SCOPE:
NEW SYSTEM SHALL PROVIDE SMOKE DETECTORS IN ALL SLEEPING ROOMS AND OUTSIDE SLEEPING ROOMS. SPEAKERS IN ALL DWELLING UNITS. BEDROOMS AND LIVING ROOMS. SPEAKER-STROBES IN ALL CORRIDORS, COMMON AND PUBLIC SPACES. SMOKE DETECTION IN ALL CORRIDORS. ELECTRICAL, MECHANICAL, AND TELEPHONE ROOMS. MONITORING OR WATERLOG W/ TAMPER SWITCHES. DETECTORS FOR FIRE/SMOKE DAMPERS. DOOR HOLDERS (WHICH SHALL RELEASE DOORS IN EVENT OF ALARM OR POWER FAILURE AND AUDIBLE / VISUAL (STROBE AND HORN/STROBE) DEVICES IN PATHS OF EGRESS AND COMMON AREAS.
3. TYPE OF FA SYSTEM:
THE SYSTEM INSTALLED SHALL BE AN ANATOMY SYSTEM (FIRE DETECTION AND VOICE EVAC SYSTEM).

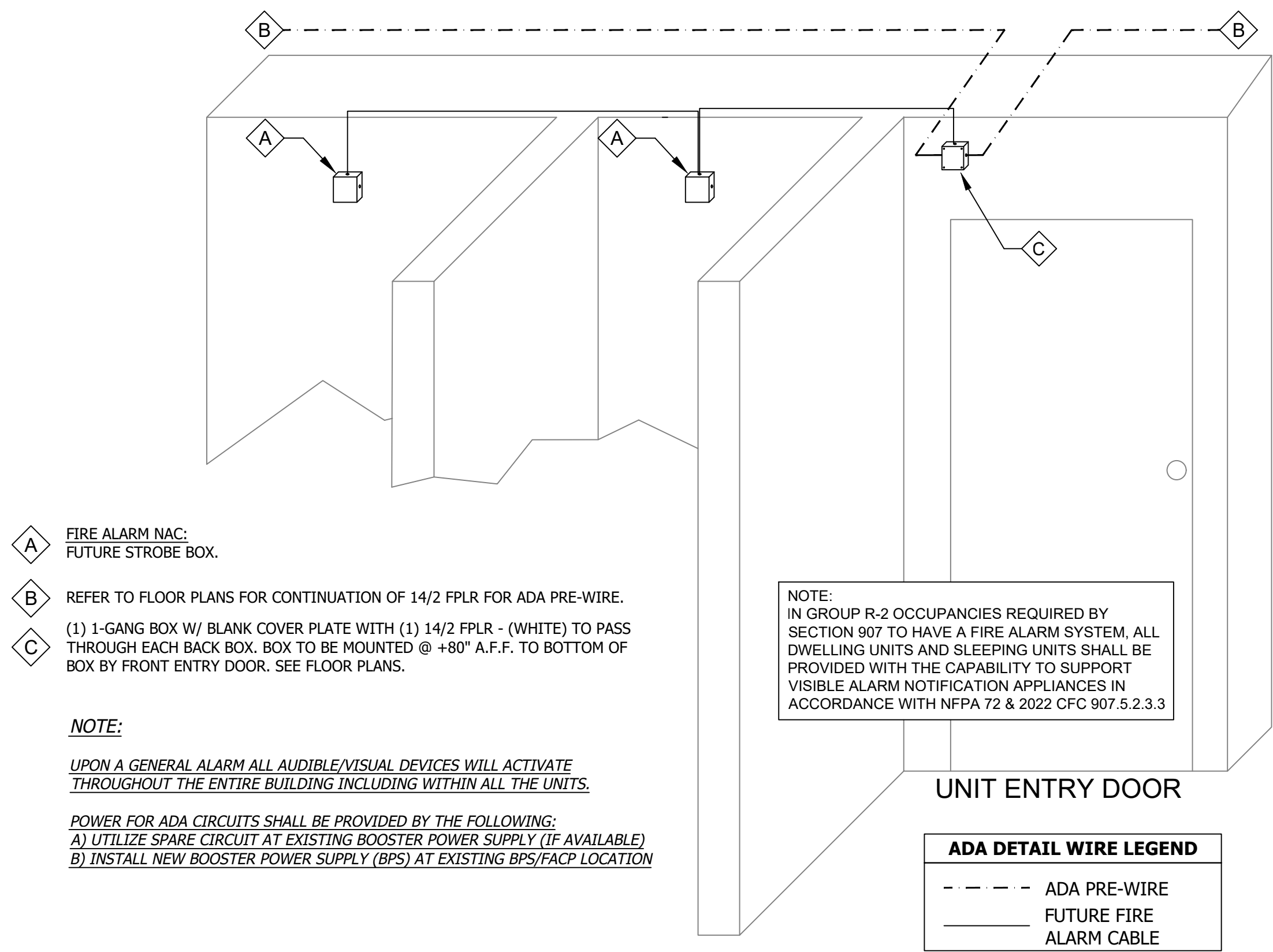
CODE REFERENCES:

1. THE DESIGN AND INSTALLATION OF THE FIRE ALARM SYSTEM SHALL COMPLY WITH THE CALIFORNIA BUILDING AND FIRE CODE, 2022 EDITIONS.
2. THE INSTALLATION OF ALL FIRE ALARM WIRING AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE, 2022 EDITION, AND NFPA 72, 2022 EDITION.

JOB CARD #58:

THERE WILL BE NO OCCUPANCY GRANTED UNTIL THE CITY CAN CONFIRM THAT THE BACKFLOW PREVENTION DEVICES (RPDA'S) ARE IN FACT MONITORED BY AN APPROVED U.L. CENTRAL STATION FACILITY.

ADA PRE-WIRE CABLING DETAIL:



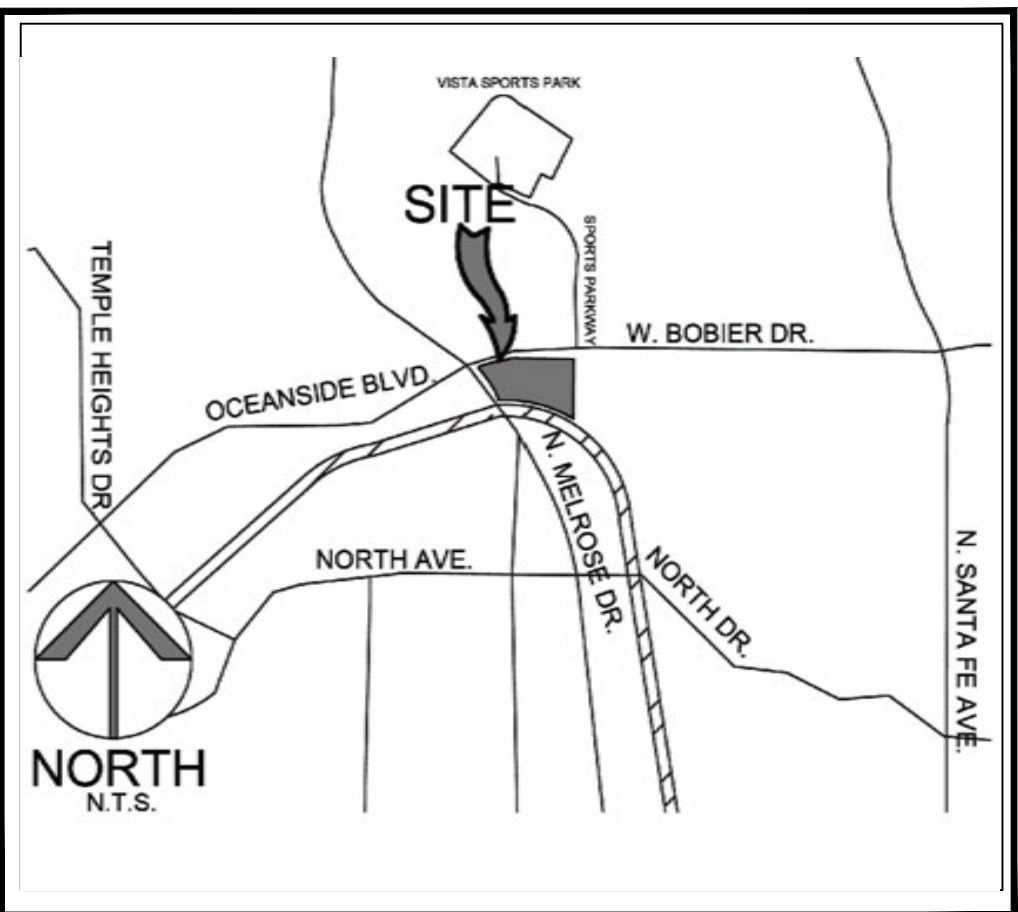
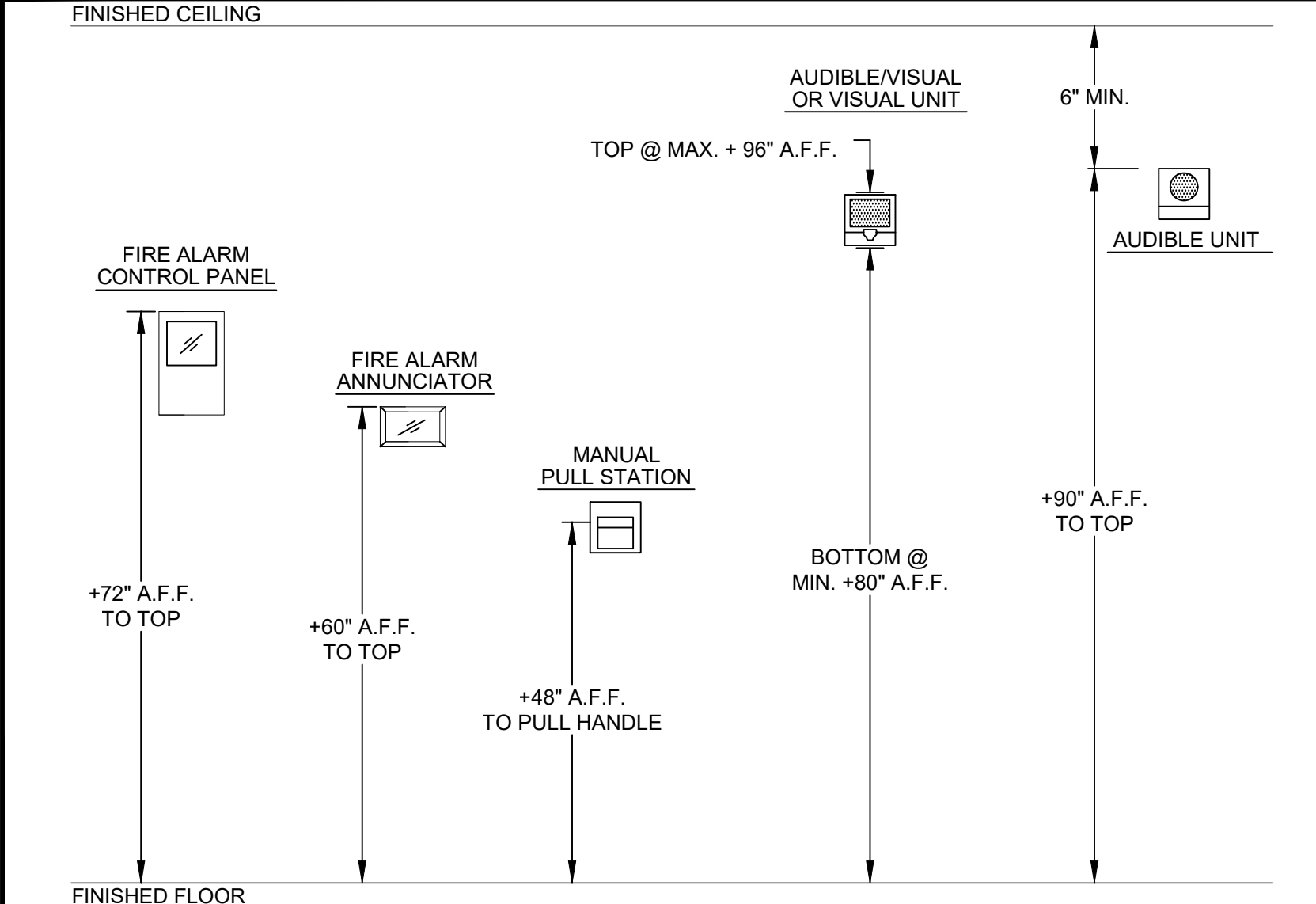
NOTE:
ALL INTERIOR BOXES AND WIRING INSIDE THE UNITS WILL BE INSTALLED AT TIME OF FUTURE ADA ADAPTABILITY. A 14/2 FPLR WILL BE INSTALLED TO A BOX JUST WITHIN THE UNIT IN ORDER TO PROVIDE FOR THIS FUTURE ADA CAPABILITY.

SMOKE DAMPER ACTUATION

- | | |
|-----|--|
| M31 | 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 INSTALLED IN THE DUCT WITHIN 5' OF THE DAMPER 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. |
| M32 | WHERE A SMOKE DAMPER IS INSTALLED ABOVE SMOKE BARRIER DOORS IN A SMOKE BARRIER, A SPOT-TYPE DETECTOR SHALL BE LISTED FOR RELEASING SERVICE SHALL BE INSTALLED ON EITHER SIDE OF THE SMOKE BARRIER DOOR OPENING. |
| M33 | 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. |
| M34 | 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. |
| M35 | 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 |

REFER TO 717.3.3.2 (CBC)

TYPICAL DEVICE ELEVATION DETAIL:



Device #	Devx	Devz	Distance	Dist + 10%	Amps	Vol	Drop	Total Amps	Total Drop	Percent Drop
N1-01	0.025A	30	31	0.438A	0.050V	0.385A	0.500V	0.0250V		
N1-02	0.025A	30	31	0.402A	0.050V					
N1-03	0.025A	30	31	0.402A	0.050V					
N1-04	0.025A	30	31	0.402A	0.050V					
N1-05	0.025A	30	31	0.402A	0.050V					
N1-06	0.025A	30	31	0.402A	0.050V					
N1-07	0.025A	30	31	0.402A	0.050V					
N1-08	0.025A	30	31	0.402A	0.050V					
N1-09	0.025A	30	31	0.424A	0.053V					
N1-10	0.025A	30	31	0.396A	0.050V					
N1-11	0.025A	42	43	0.358A	0.044V					
N1-12	0.025A	42	43	0.358A	0.044V					
N1-13	0.025A	42	43	0.358A	0.044V					
N1-14	0.025A	42	43	0.358A	0.044V					
N1-15	0.025A	42	43	0.358A	0.044V					
N1-16	0.025A	5	6	0.025A	0.003V					

NAC #7

STROBE CIRCUIT

Device #	Devx	Devz	Distance	Dist + 10%	Amps	Vol	Drop	Total Amps	Total Drop	Percent Drop
N1-01	0.025A	40	41	0.388A	0.050V	0.385A	0.500V	2.4650V		
N1-02	0.025A	40	41	0.388A	0.050V					
N1-03	0.025A	14	15	0.312A	0.031V					
N1-04	0.085A	29	30	0.240A	0.050V					
N1-05	0.025A	14	15	0.312A	0.031V					
N1-06	0.025A	42	43	0.280A	0.055V					
N1-07	0.025A	42	43	0.280A	0.055V					
N1-08	0.025A	42	43	0.152A	0.040V					
N1-09	0.100A	35	36	0.244A	0.051V					
N1-10	0.066A	85	86	0.066A	0.051V					
N1-11	0.025A	47	48	0.026A	0.008V					

NAC #8

STROBE CIRCUIT

Device #	Device Drive	Distance	Distance < 10%	Area	Volts Drop	Total Drop	Total Drop	Percent Drop
N2-01	0.0326	25	51	0.504	0.504	1.224	1.588%	
N2-02	0.0326	44	69	0.464	0.464			
N2-03	0.0326	44	69	0.464	0.464			
N2-04	0.0326	66	69	0.384	0.384			
N2-05	0.0326	66	69	0.384	0.384			
N2-06	0.0326	59	59	0.304	0.304			
N2-07	0.0326	59	59	0.304	0.304			
N2-08	0.0326	59	59	0.304	0.304			
N2-09	0.0326	45	45	0.224	0.224			
N2-10	0.0326	45	45	0.224	0.224			
N2-11	0.0326	45	45	0.224	0.224			
N2-12	0.0326	25	25	0.264	0.264			
N2-13	0.0326	25	25	0.264	0.264			
N2-14	0.0326	42	42	0.404	0.404			
N2-15	0.0326	42	42	0.404	0.404			
N2-16	0.0326	66	66	0.384	0.384			
N2-17	0.0326	66	66	0.384	0.384			
N2-18	0.0326	57	57	0.344	0.344			
N2-19	0.0326	57	57	0.344	0.344			
N2-20	0.0326	45	45	0.224	0.224			
N2-21	0.0326	45	45	0.224	0.224			
N2-22	0.0326	45	45	0.224	0.224			
N2-23	0.0326	45	45	0.224	0.224			
N2-24	0.0326	45	45	0.224	0.224			
N2-25	0.0326	30	31	0.124	0.124			
N2-26	0.0326	30	31	0.124	0.124			
N2-27	0.0326	16	17	0.056	0.056			
N2-28	0.0326	70	70	0.684	0.684			
N2-29	0.0326	70	70	0.684	0.684			
N2-30	0.0326	70	70	0.684	0.684			

NAC #11

STAGE CRUIT

NAC #12

STAGE CRUIT

APSD 6.5 AMP POWER SUPPLY - 100 WATT AMP SPEAKER/STROBE BATTERY CALCULATION										EST
A		B		C		D		E		F
INTERNAL POWER SUPPLY COMPONENTS		Quantity	Standby Current	Total Standby Current (B x C)		Alarm Current (D x F)		Total Alarm Current (E x F)		Total Alarm Current (E x F)
SISA-A-45S (70.7V) 50 WATT AMP		2	0.005A	0.010A		0.800A		2.800A		5.600A
POWER SUPPLY APSMA MOUNTED BOARD		1	0.105A	0.105A		0.375A		0.375A		0.375A
			Total Standby Current =		0.105A		Total Alarm Current =		5.875A	
SPKR CIRCUITS										
			SPKR CKT WATTAGE				SPKR CKT CURRENT DRA W			
SPEAKER ZONE 56 - AMP MODULE #1			8.50 W				0.120A			
SPEAKER ZONE 57 - AMP MODULE #1			19.75 W				0.275A			
SPEAKER ZONE 58 - AMP MODULE #1			4.50 W				0.120A			
SPEAKER ZONE 59 - AMP MODULE #2			19.75 W				0.275A			
			TOTAL SPKR CKT WATTAGE =				TOTAL SPKR CKT CURRENT DRA W =			
			56.50 W				0.795A			
TOTAL STANDBY CALCULATIONS										
						TOTAL STANDBY CALCU				
16 Total standby current						0.109				
17 Multiply by 24 or 48 for standby hours needed						2601				
18 Total standby A/H (amp-hours)						2,616.00 A/H				
ALARM CURRENT CALCULATIONS										
19 Total alarm current						7.468				
20 Multiply by 0.0033 for 5 min or 0.25 for 15 minutes of alarm						0.2500				
21 Total alarm current						1.8671 AH				
BATTERY BACKUP REQUIREMENTS										
22 Sub total, add line 18+21						4.6831 AH				
23 Multiply by 1.2 for 25% Battery Derating Factor						5.620 AH				
24 Total A/H (amp hours)						25%				
BATTERY SUPPLIED = 7 AMP										

SPEAKER ZONE S1	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage= 70.7V
SPEAKER 25W	0	0.25	0.00 W	10.00 W	0.141
SPEAKER 5W	20	0.50	10.00 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE S2	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage= 70.7V
SPEAKER 25W	0	0.25	0.00 W	18.50 W	0.262
SPEAKER 5W	37	0.50	18.50 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE S3	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage= 70.7V
SPEAKER 25W	80	0.25	20.00 W	15.00 W	0.212
SPEAKER 5W	0	0.50	0.00 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE S4	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage= 70.7V
SPEAKER 25W	0	0.25	0.00 W	8.50 W	0.120
SPEAKER 5W	17	0.50	8.50 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE S5	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage= 70.7V
SPEAKER 25W	73	0.25	18.25 W	18.25 W	0.258
SPEAKER 5W	0	0.50	0.00 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE 56	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage 70.7V
SPEAKER 25W	0	0.25	0.00 W	8.50 W	0.120
SPEAKER 5W	17	0.50	8.50 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE 57	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage 70.7V
SPEAKER 25W	79	0.25	19.75 W	19.75 W	0.279
SPEAKER 5W	0	0.50	0.00 W		
SPEAKER 1W	0	1.00	0.00 W		

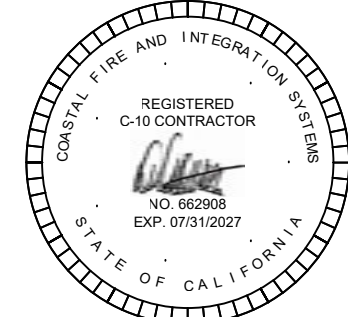
SPEAKER ZONE 58	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage 70.7V
SPEAKER 25W	0	0.25	0.00 W	8.50 W	0.120
SPEAKER 5W	17	0.50	8.50 W		
SPEAKER 1W	0	1.00	0.00 W		

SPEAKER ZONE 59	Quantity (B)	Wattage (C)	Sub Total Wattage (B x C)	Total Wattage	Wattage Convert to Current (Amps=Power/Voltage) Voltage 70.7V
SPEAKER 25W	79	0.25	19.75 W	19.75 W	0.279
SPEAKER 5W	0	0.50	0.00 W		
SPEAKER 1W	0	1.00	0.00 W		

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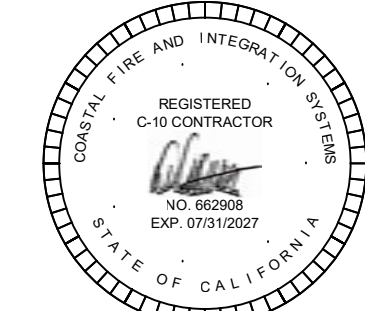
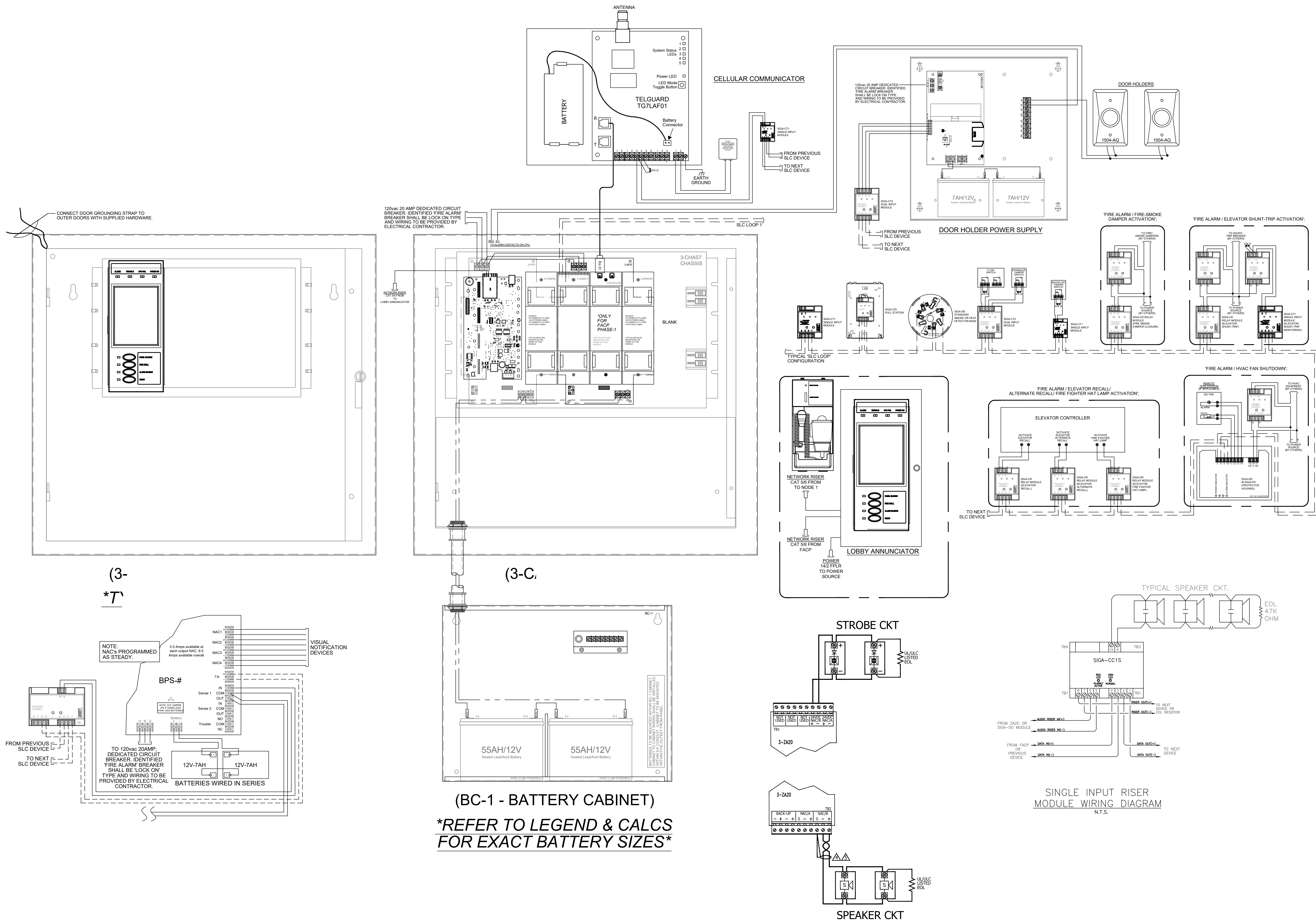
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00 FA MODERA MELROSE APTS BLDG 63

SCALE:
NOT TO SCALE

SHEET DESC: FIRE ALARM SYSTEM CALCULATIONS

SHEET #

FA-0.2



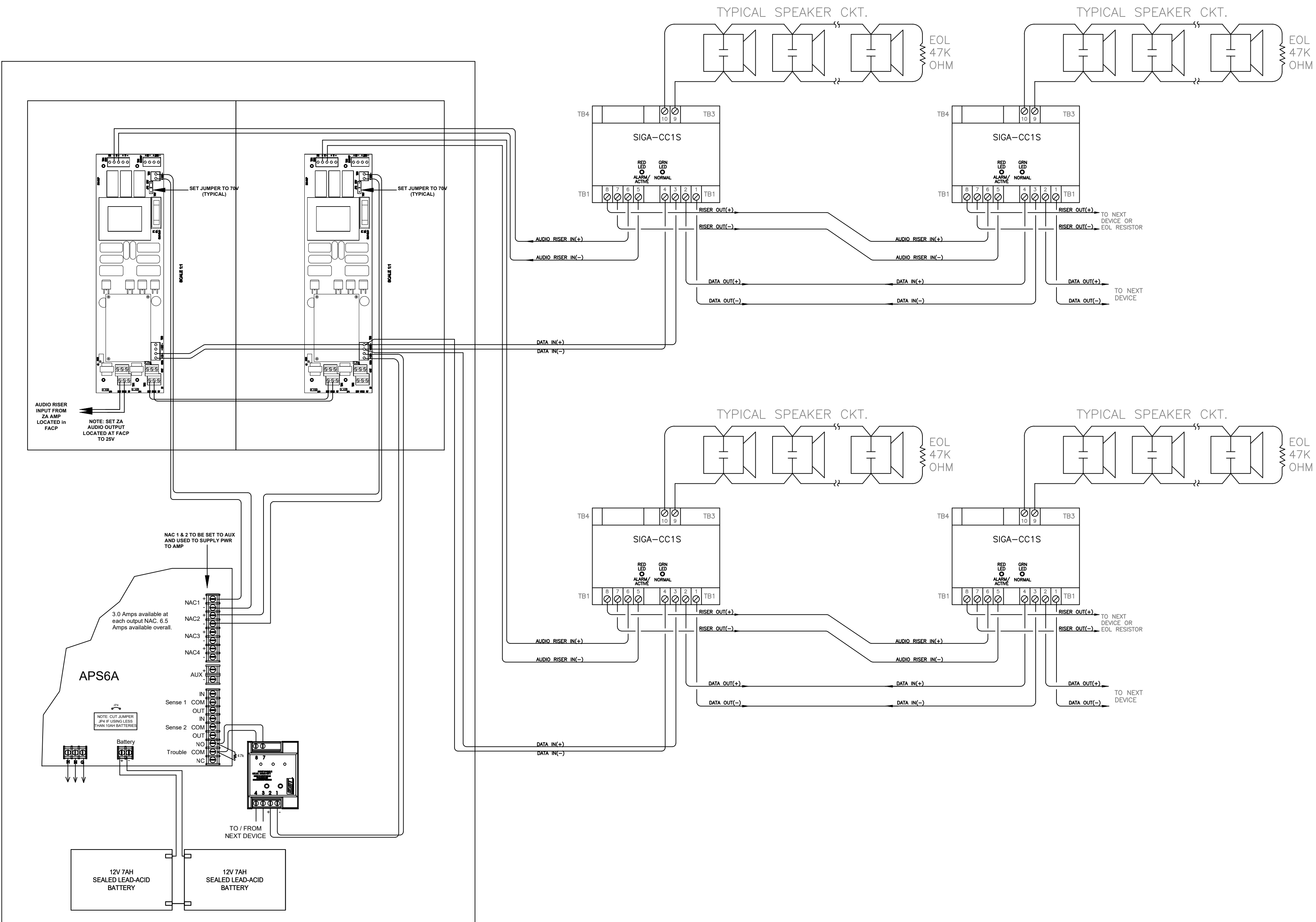
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REV.	DATE	DESCRIPTION
1	05-09-2025	ADD CORRECTIONS

FILE NAME:
00_FA MODERA MELROSE APTS BLD 3
SCALE:
NOT TO SCALE

SHEET DESC:
FIRE ALARM SYSTEM
POINT TO POINT
DIAGRAM

SHEET #:
FA-0.3



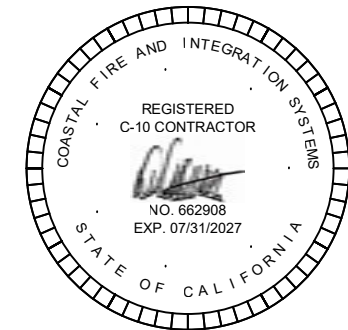
TYPICAL APS6A POWER SUPPLY WITH 50 WATT AMP

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

ARCHITECT / CLIENT

MODERA MELROSE
APARTMENTS
BUILDING 3
5041 OCEANSIDE BLVD
OCEANSIDE, CA 92056

FIRE DETECTION AND VOICE
EVACUATION SYSTEM



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REV.	DATE	DESCRIPTION	AMU CORRECTIONS
1	05-09-2025		

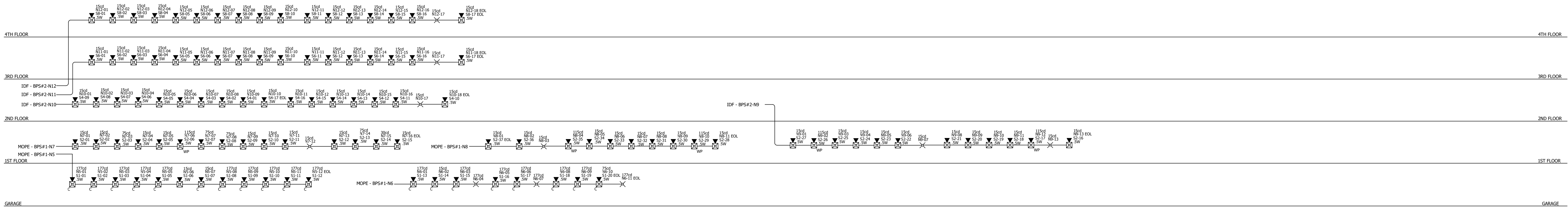
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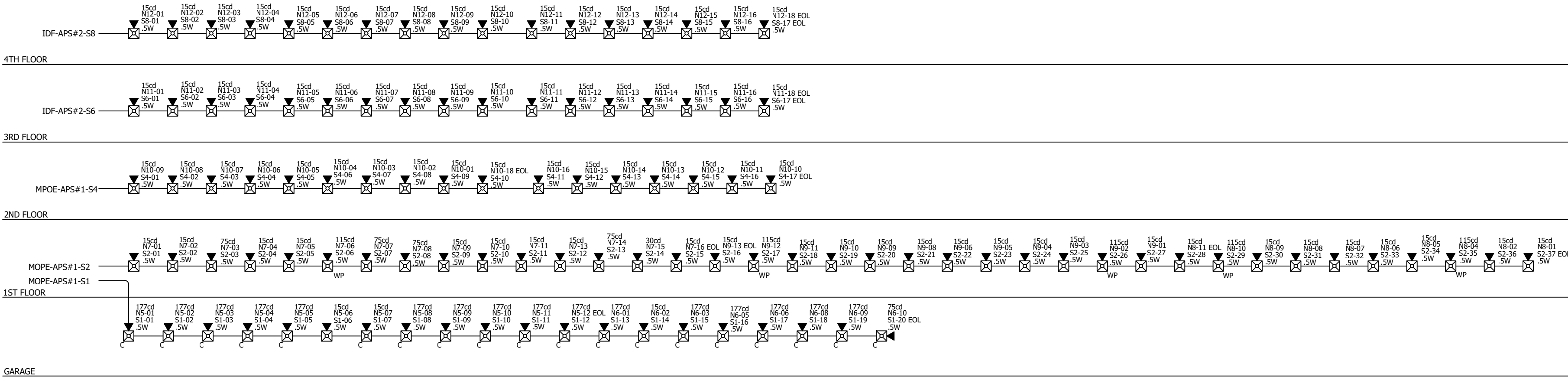
SHEET DESC:
FIRE ALARM SYSTEM
APS6A /AMPLIFIER
WIRING DETAIL

SHEET #:
FA-0.3.1

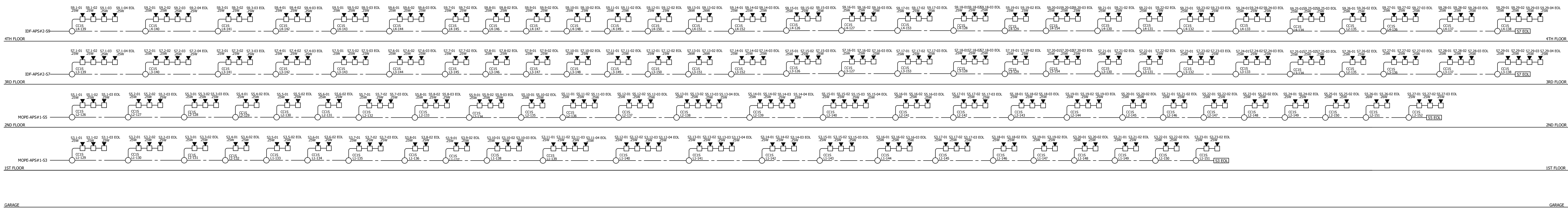
RISER DIAGRAM - CORRIDOR & GARAGE STROBE CIRCUITS N5, N6, N7, N8, N9, N10, N11, N12



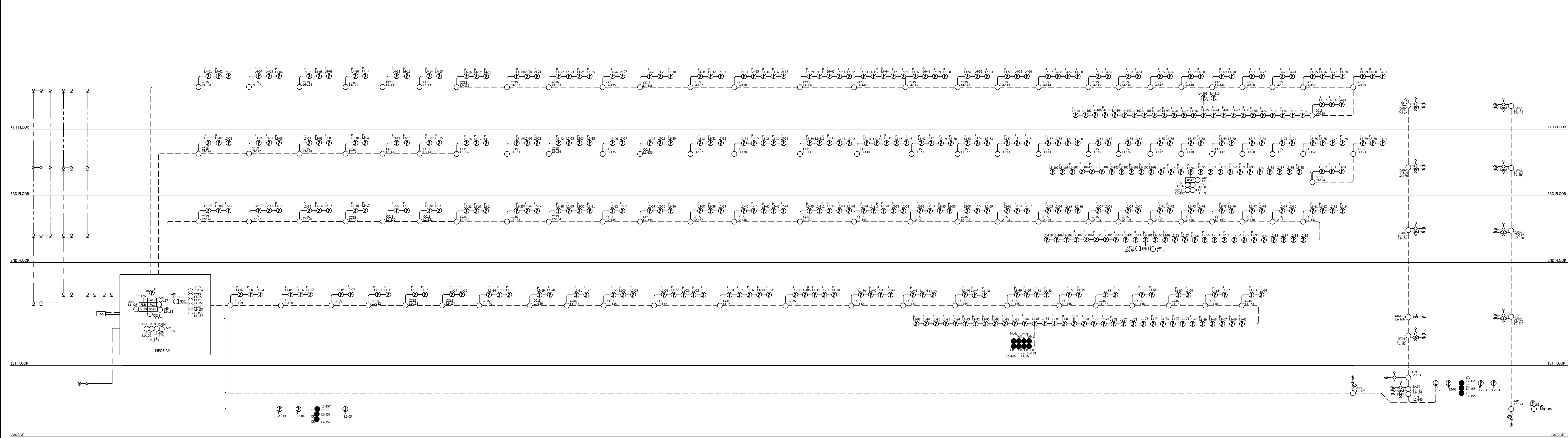
RISER DIAGRAM - CORRIDOR SPEAKER CIRCUITS S1, S2, S4, S6, S8



RISER DIAGRAM - DWELLING UNIT SPEAKER CIRCUITS S3, S5, S7, S9



RISER DIAGRAM - DOOR HOLDER & SLC CIRCUITS L1, L2, L3, L4



LOW VOLTAGE CONSULTANT

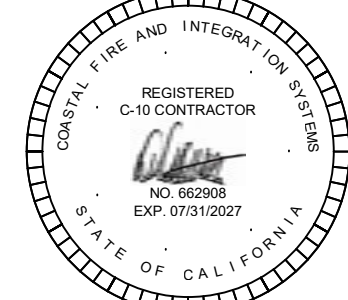


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OCEANSIDE, CA 92056

FIRE DETECTION AND VOICE
EVACUATION SYSTEM



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DESCRIPTION
AUJ CORRECTIONS

DATE
05-09-2025

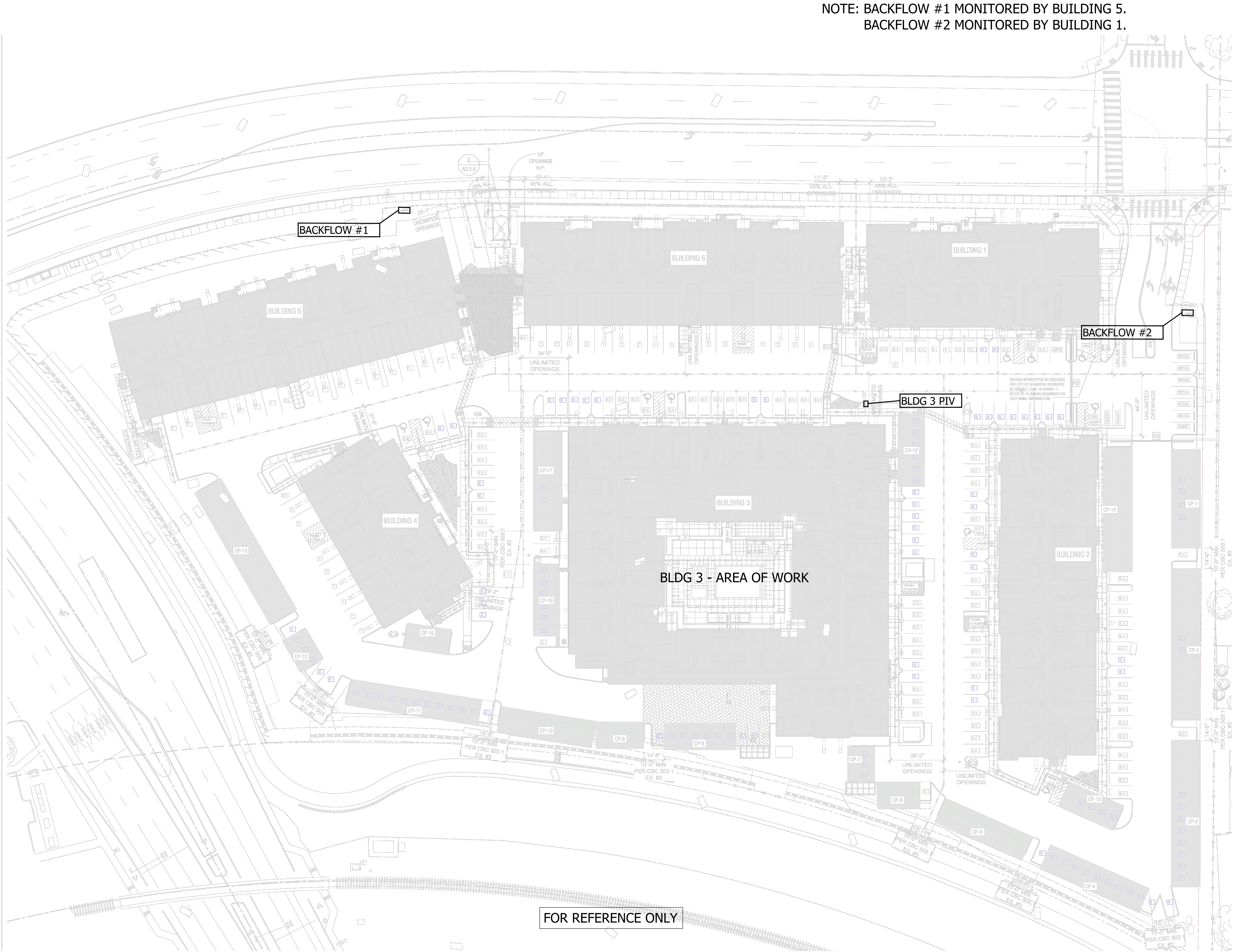
REV.
1

FILE NAME:
00_FA MODERA MELROSE APTS BLD 3

SCALE:
NOT TO SCALE

SHEET DESC:
FIRE ALARM SYSTEM
RISER DIAGRAM

SHEET #:
FA-0.4

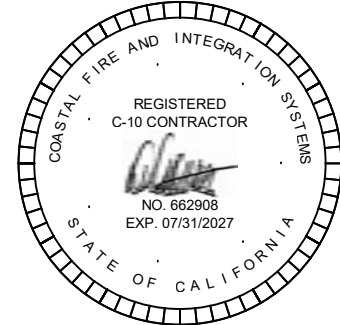


NOTE: BACKFLOW #1 MONITORED BY BUILDING 5.
BACKFLOW #2 MONITORED BY BUILDING 1.

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APARTMENTS
BUILDING 3
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OCEANSIDE, CA 92056

FIRE DETECTION AND VOICE
EVACUATION SYSTEM



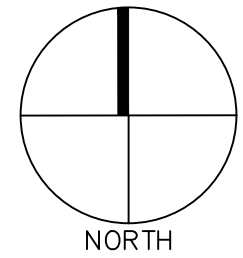
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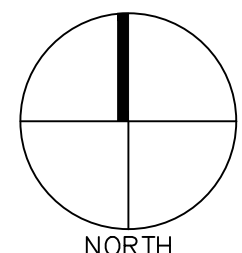
REV.	DATE	DESCRIPTION	ANU CORRECTIONS
1	05-09-2025		

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SCALE: N/A

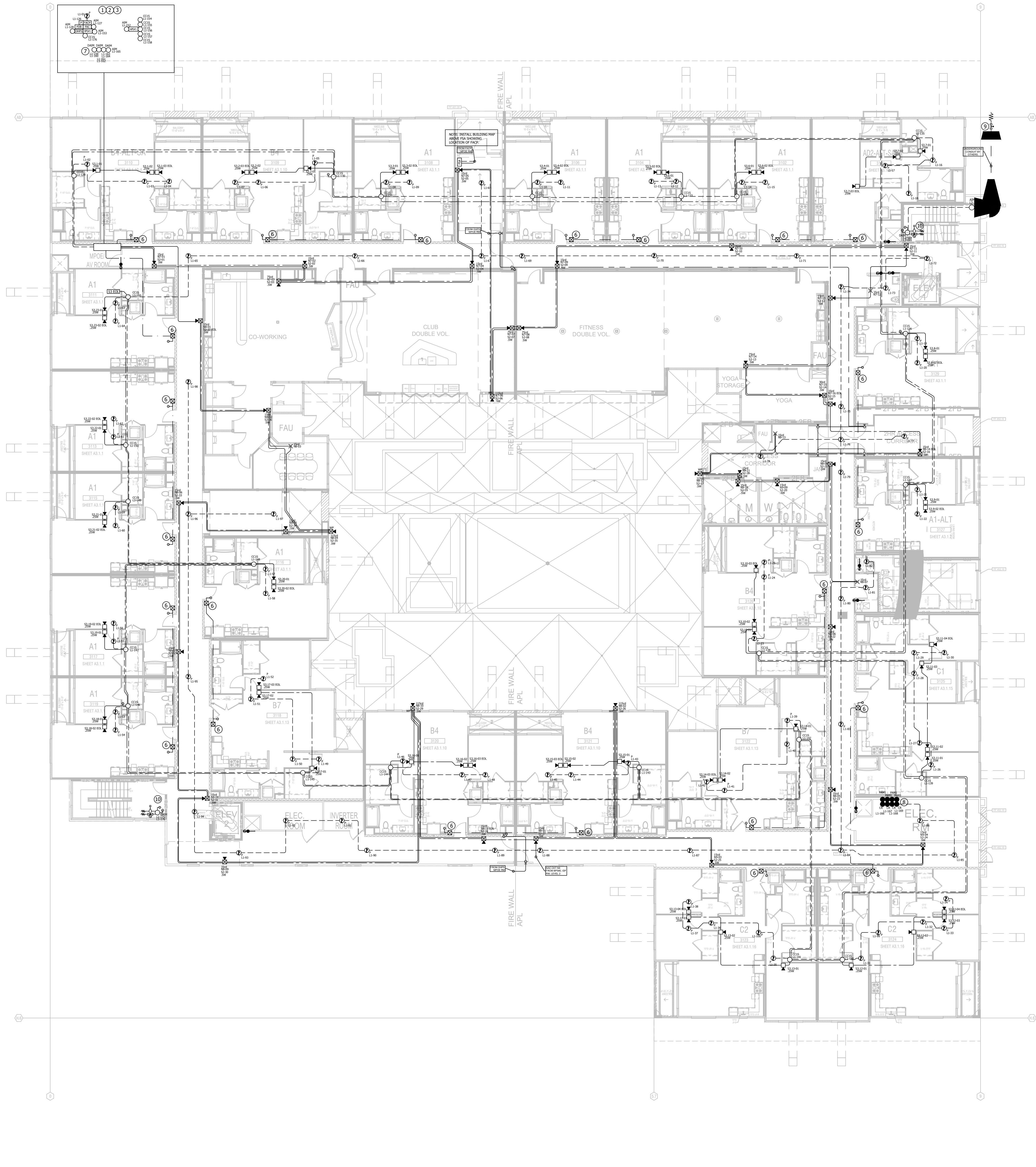
SHEET DESC:
FIRE ALARM SYSTEM
SITE PLAN

SHEET #:
FA-S.0





WIRE LEGEND		
SYMBOL	PURPOSE	WIRE SIZE / TYPE
	SLC LOOP / ANN WIRE	[1]18/4 FPLR
	AUDIO CIRCUITS	[1]16/2 TWISTED SHIELDED FPLR
	STROBE CIRCUITS	[1]14/2 FPLR
	DOOR HOLDER POWER	[1]14/2 FPLR
	UNDERGROUND WIRE	[1]14/2 THWN
	ADA PRE-WIRE CIRCUIT	[1]14/2 FPLR

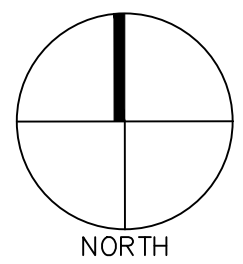


KEY NOTES	
1	INSTALL SMOKE DETECTOR NO MORE THAN 5 FEET FROM FIRE CONTROL / BOOSTER POWER SUPPLY PANELS.
2	120 VAC, 20 AMP DEDICATED CIRCUIT TO FACP / BOOSTER POWER SUPPLIES PROVIDED BY OTHERS. BREAKER SHALL BE RED IN COLOR AND LOCKED OUT IN THE "ON" POSITION.
3	INSTALL SYSTEMS RECORD CABINET ADJACENT TO FACP PER NFPA 72 7.7.2
4	ELEVATOR RECALL AND FIREMEN'S HAT RELAY MODULES. FIELD VERIFY LOCATION. INSTALL NO MORE THAN 3'-0" AWAY FROM INTERFACE DEVICE.
5	SMOKE DETECTOR IS REQUIRED BY THE STATE ELEVATOR INSPECTOR.
6	FUTURE HEARING IMPAIRED J-BOX. SEE DETAIL ON SHEET FA.0.0.
7	FIELD VERIFY LOCATION OF ERACS MONITOR MODULE.
8	FIRE SMOKE DAMPER ACTIVATION RELAY. FIELD VERIFY LOCATION WITH ELECTRIC CONTRACTOR.
9	FIELD VERIFY LOCATION OF BACKFLOW AND PIV DEVICE. SEE SITE PLAN FOR LOCATION.
10	FIELD VERIFY LOCATION OF SPRINKLER DEVICE.

FIRE ALARM SYSTEM DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	VOICE EVACUATION SYSTEM
[FAC]	CELLULAR COMMUNICATOR
[FSA]	REMOTE ANNUNCIATOR
[BPS]	BOOSTER POWER SUPPLY
[APS]	AUXILIARY POWER SUPPLY
[FDC]	FIRE ALARM DOCUMENT CABINET
[DHP]	DOOR HOLDER POWER SUPPLY
[SD]	SMOKE DETECTOR
[HD]	HEAT DETECTOR
[PS]	PULL STATION
[IM]	INPUT MODULE
[DIM]	DUAL INPUT MODULE
[CRM]	ADDRESSABLE RELAY MODULE
[DSM]	DUCT SMOKE DETECTOR
[SCR]	SIGNAL CONTROL RELAY
[SSW]	SPEAKER-STROBE, WALL
[SCS]	SPEAKER-STROBE, CEILING
[SW]	SPEAKER, WALL
[STW]	STROBE WALL
[MVR]	MULTI VOLTAGE RELAY
[DH]	DOOR HOLDER
[STS]	SPRINKLER TAMPER SWITCH
[SFS]	SPRINKLER FLOW SWITCH
[SBFS]	SPRINKLER BACKFLOW SWITCH
[SPS]	SPRINKLER PIV SWITCH
[FSD]	FIRE SMOKE DAMPER
[PWB]	ADA PRE-WIRE BOX

SMOKE DAMPER ACTUATION	
(M-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.
(M-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.
(M-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.
(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 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)	

WIRE LEGEND		
SYMBOL	PURPOSE	WIRE SIZE / TYPE
---	SLC LOOP / ANN WIRE	(1)18/4 FPLR
---	AUDIO CIRCUITS	(1)16/2 TWISTED SHIELDED FPLR
---	STROBE CIRCUITS	(1)14/2 FPLR
---	DOOR HOLDER POWER	(1)14/2 FPLR
---	UNDERGROUND WIRE	(1)14/2 THWN
---	ADA PRE-WIRE CIRCUIT	(1)14/2 FPLR



LOW VOLTAGE CONSULTANT

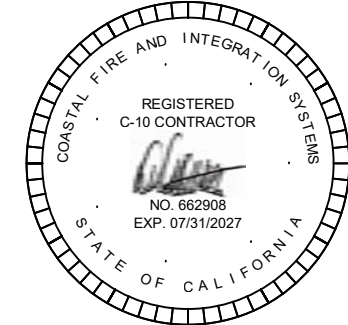


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ARCHITECT / CLIENT

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FIRE DETECTION AND VOICE
EVACUATION SYSTEM



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DESCRIPTION
ANU CORRECTIONS

DATE
05-09-2023

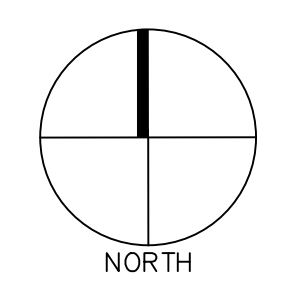
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SCALE:
3/32" = 1'-0"

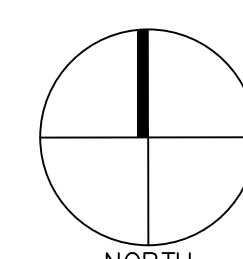
SHEET DESC:
FIRE ALARM SYSTEM
1ST FLOOR PLAN

SHEET #:
FA-2.0



WIRE LEGEND		
SYMBOL	PURPOSE	WIRE SIZE / TYPE
	SLC LOOP / ANN WIRE	(1)18/4 FPLR
	AUDIO CIRCUITS	(1)1/2 TWISTED SHIELDED FPLR
	STROBE CIRCUITS	(1)14/2 FPLR
	DOOR HOLDER POWER	(1)14/2 FPLR
	UNDERGROUND WIRE	(1)14/2 THWN
	ADA PRE-WIRE CIRCUIT	(1)14/2 FPLR





WIRE LEGEND		
SYMBOL	PURPOSE	WIRE SIZE / TYPE
	SLC LOOP / ANN WIRE	(1)18/4 FPLR
	AUDIO CIRCUITS	(1)14/2 TWISTED SHIELDED FPLR
	STROBE CIRCUITS	(1)14/2 FPLR
	DOOR HOLDER POWER	(1)14/2 FPLR
	UNDERGROUND WIRE	(1)14/2 THWN
	ADA PRE-WIRE CIRCUIT	(1)14/2 FPLR

