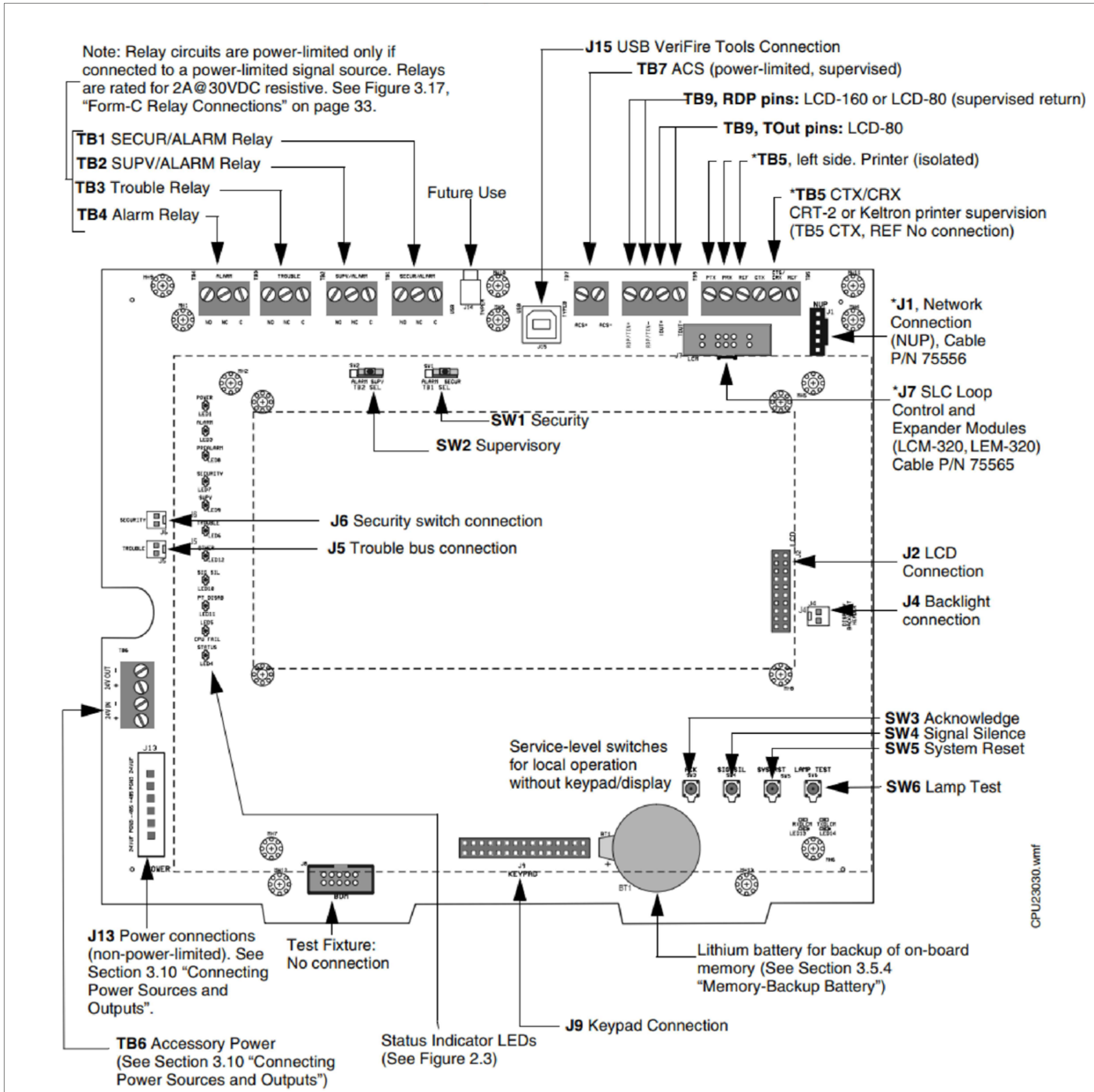
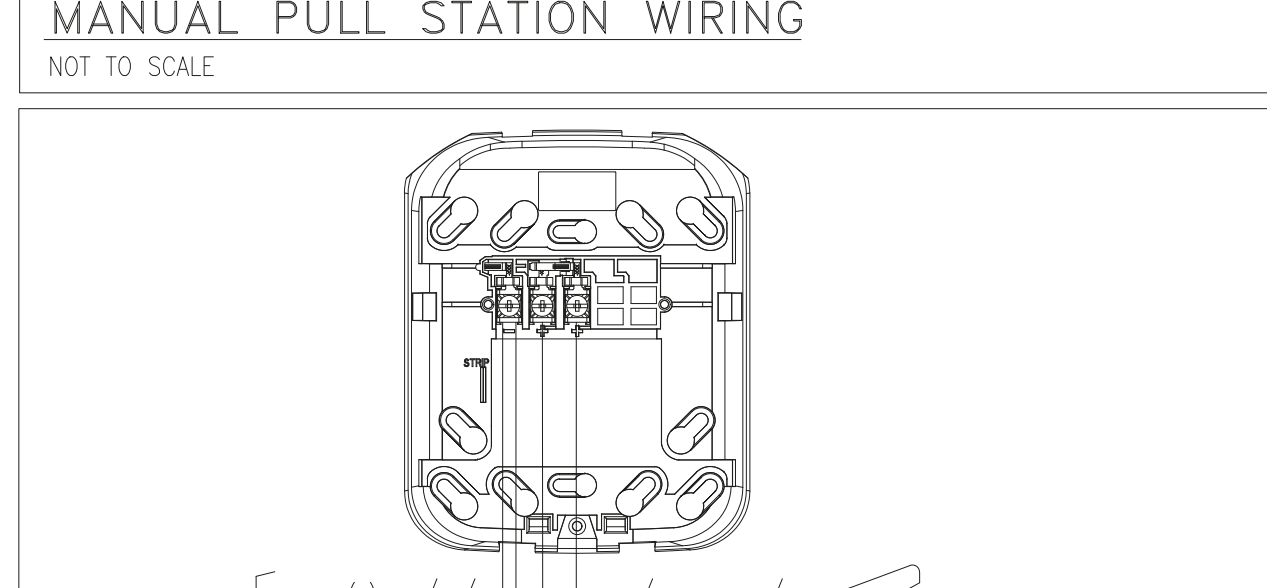
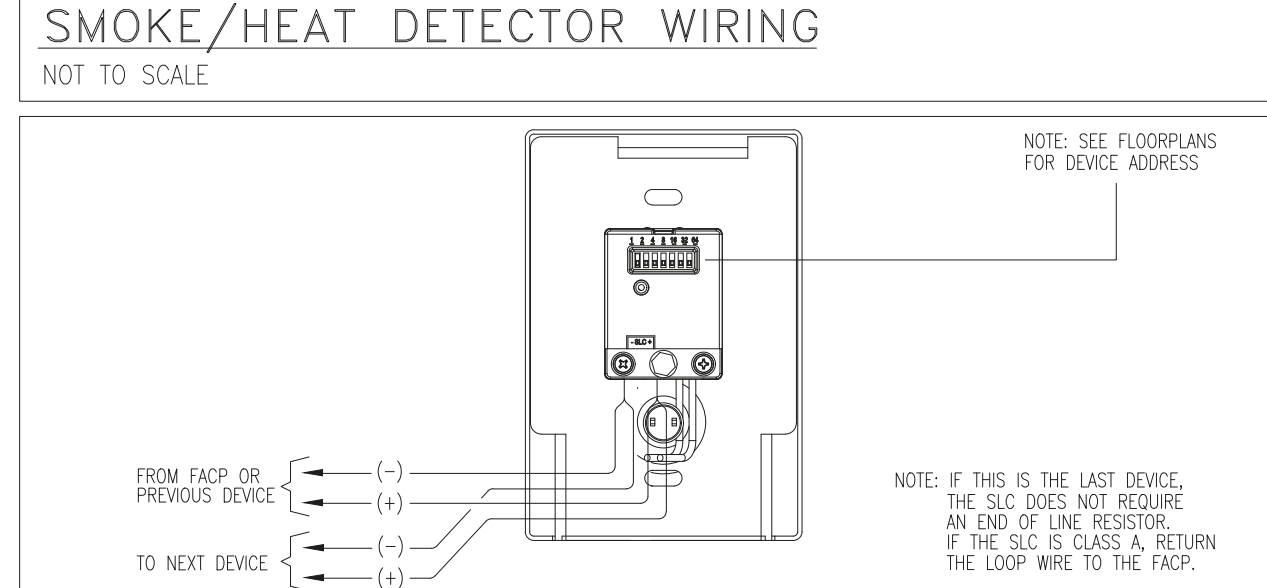
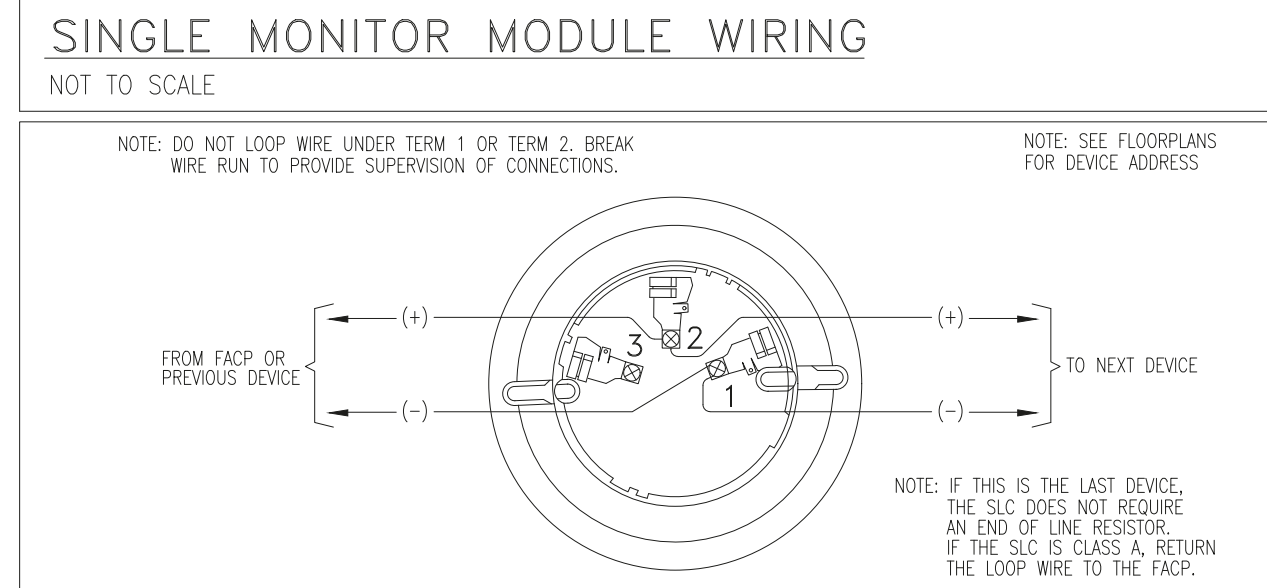
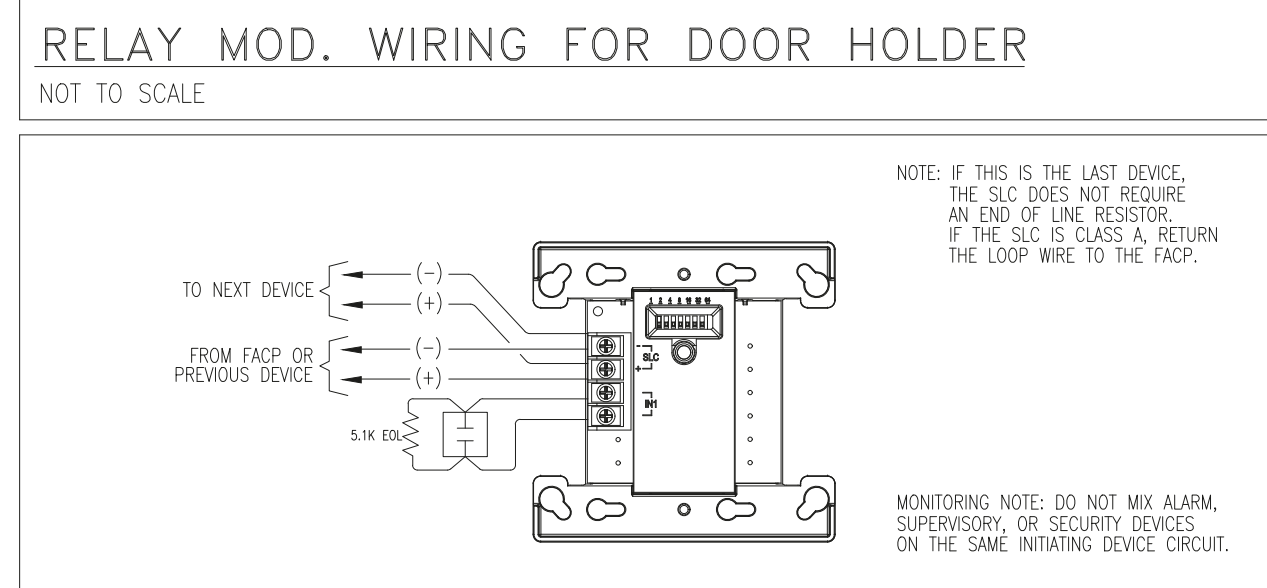
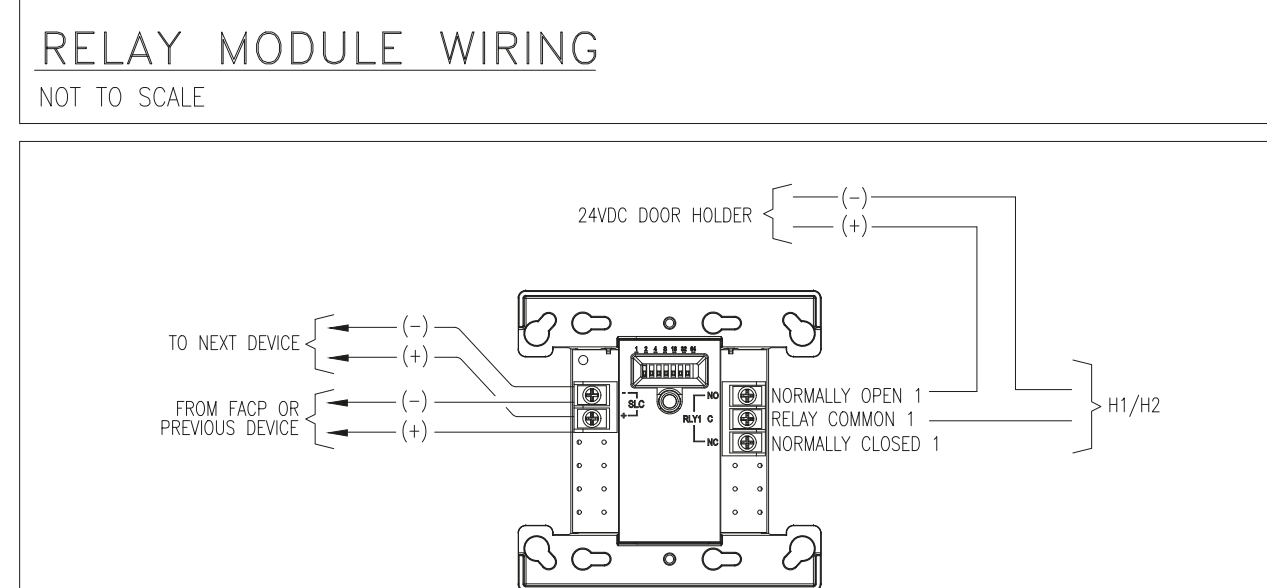
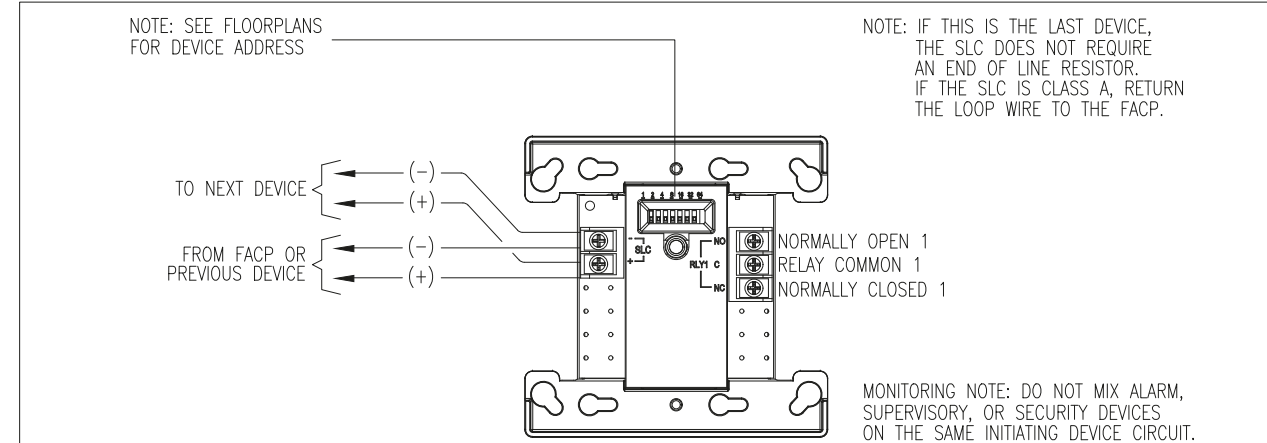
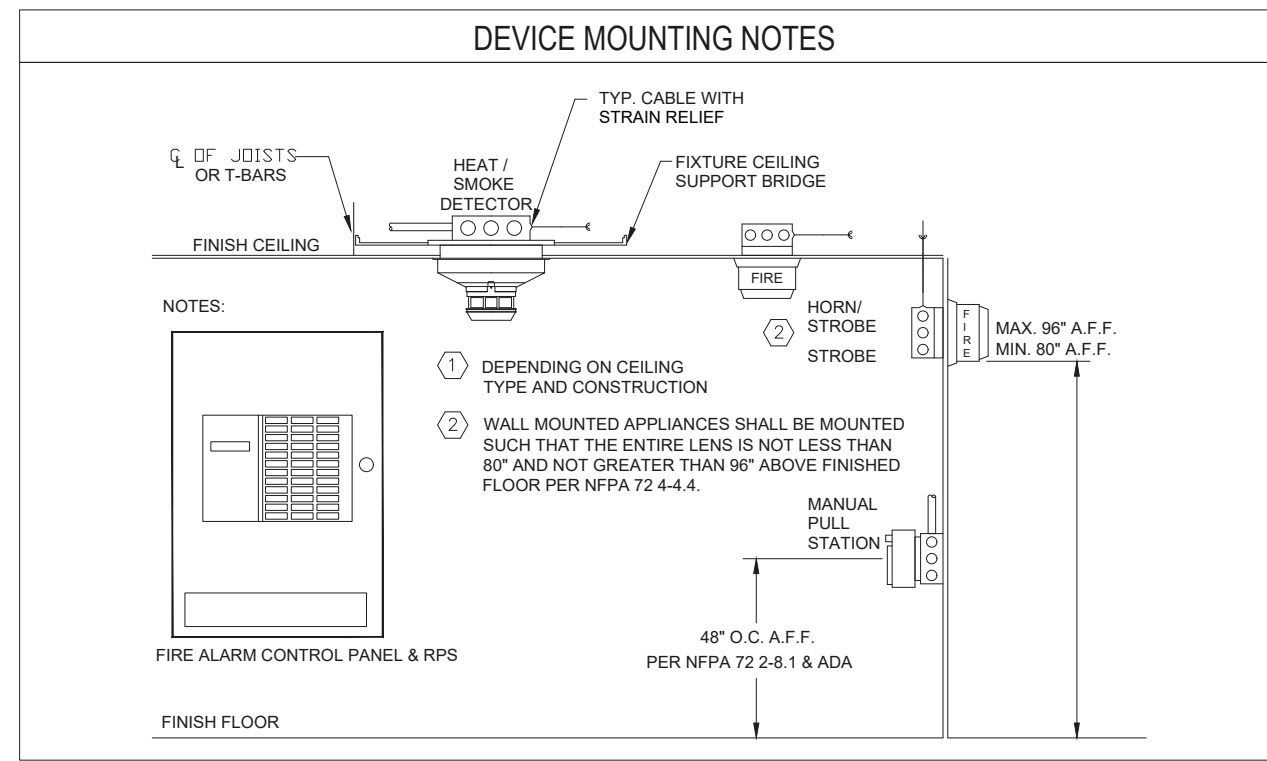


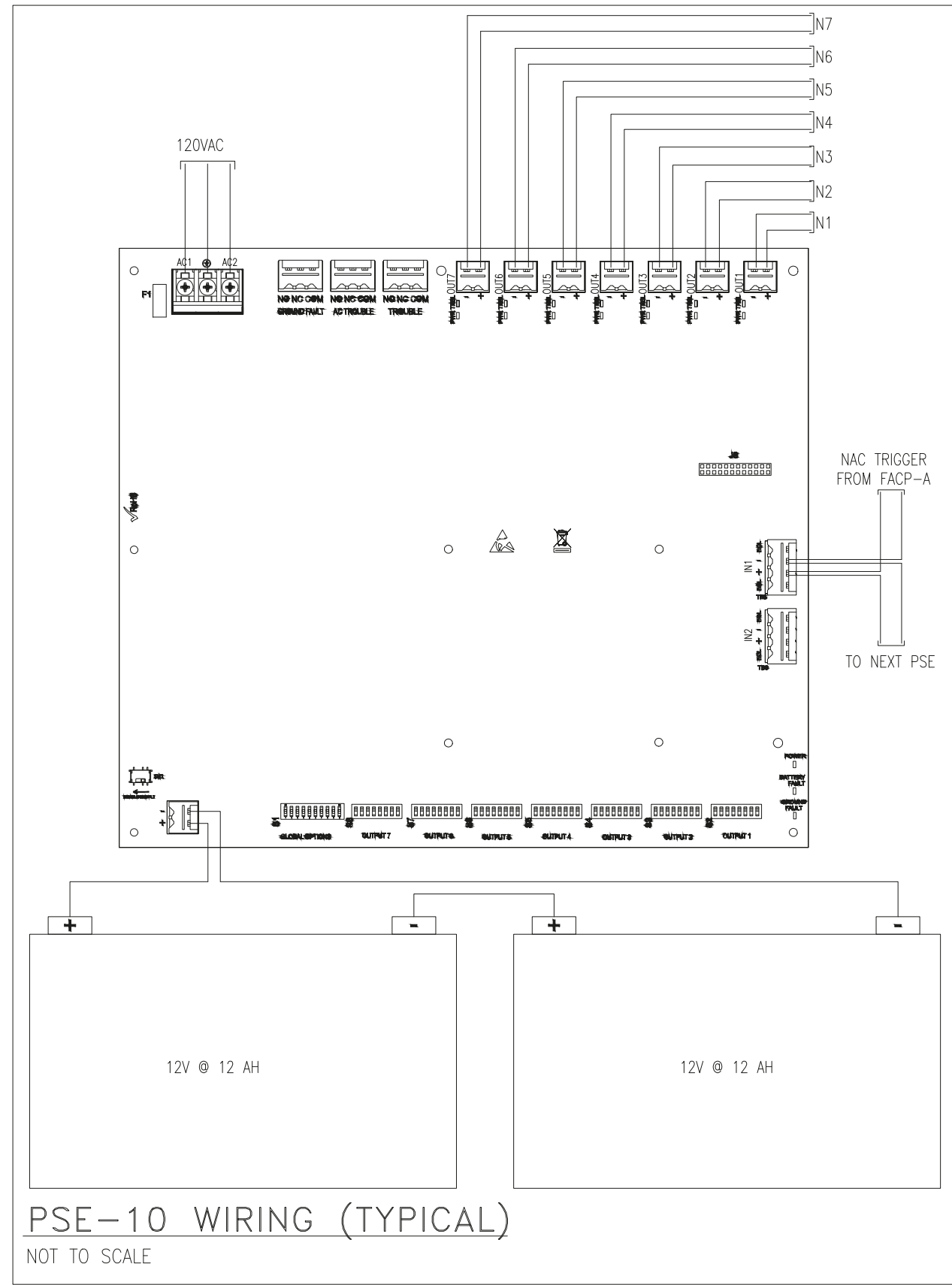
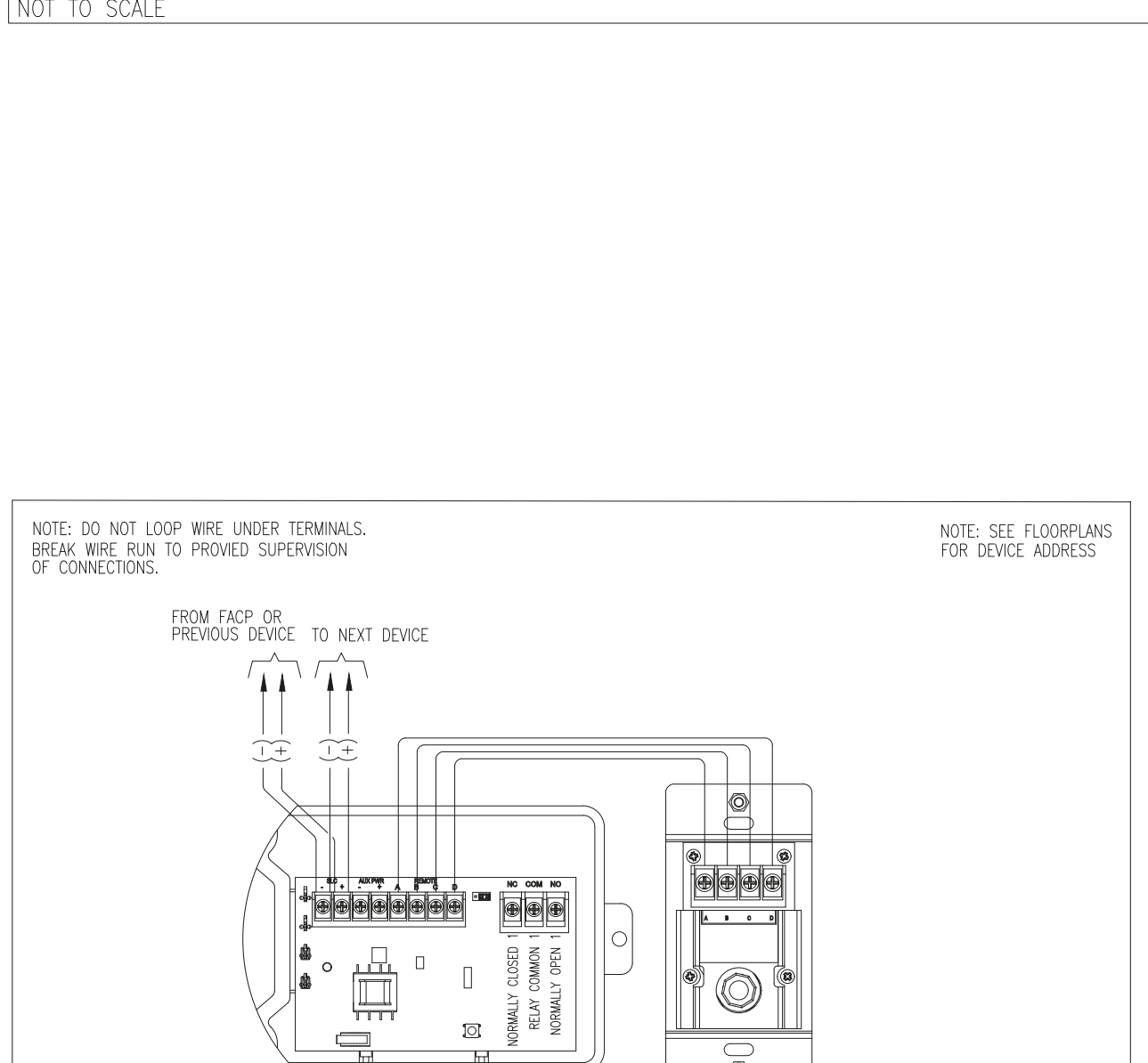
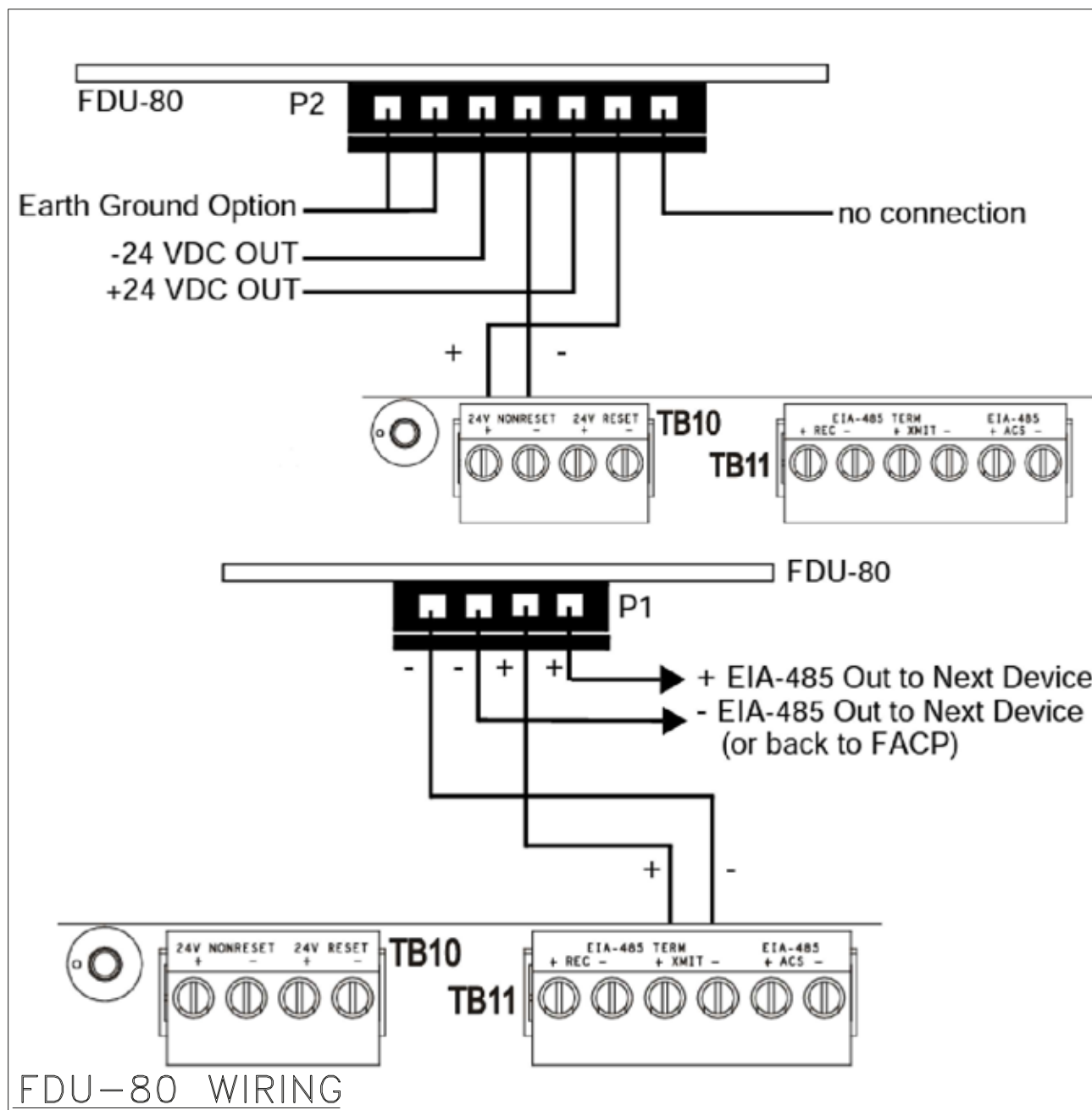
- GENERAL NOTES**
1. ALL FIRE ALARM WIRING MUST BE IN STRICT COMPLIANCE WITH APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE (ARTICLE 760) AND ALL APPLICABLE NFPA STANDARDS.
 2. INSTALLATION MUST COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL LAWS, REGULATIONS, CODES, AND SPECIFICATIONS.
 3. ALL INSTALLATION MUST BE APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
 4. TO AVOID CONTAMINATION AND DUST ACCUMULATION IN THE SMOKE DETECTORS, IT IS RECOMMENDED THAT THE SMOKE DETECTORS NOT BE INSTALLED UNTIL AFTER CONSTRUCTION IS COMPLETED AND THE SUBJECT AREA HAS BEEN CLEANED. THE SUPPLIER IS NOT RESPONSIBLE FOR DUSTS ACCUMULATION IN SMOKE DETECTORS AND WILL NOT WARRANTY DEVICES THAT HAVE NOT BEEN PROPERLY MAINTAINED. WHEN DETECTORS ARE INSTALLED, PROTECTIVE COVERS SHALL BE INSTALLED OVER EACH DETECTOR AND REMOVED BY AUTHORIZED SERVICE PERSONNEL.
 5. AS INSTRUCTED IN NFPA 70, PROVIDE A SYSTEM GROUND FOR EARTH DETECTION AND LIGHTNING PROTECTION OF THE DEVICES.
 6. ALL FIRE ALARM SYSTEM WIRING SHALL BE CLEAR FROM SHORTS, OPENS AND GROUNDS.
 7. WHERE CONDUCTORS ARE RUN IN CONDUIT, USE ONLY APPROVED CABLE WITHIN RACEWAYS, PIPES, OR CONDUITS. ALL SHIELDED WIRE MUST BE CONTINUOUS THROUGHOUT CIRCUIT. ALL SHIELDS SHALL BE ISOLATED FROM GROUND, ALL SHIELDS SHALL TERMINATE AT THE FIRE ALARM CONTROL UNIT (FACU), ONLY.
 8. CONDUIT AND JUNCTION BOX LOCATIONS ARE DIAGRAMMATIC ONLY. EXACT LOCATIONS MAY VARY DUE TO FIELD CONDITIONS. ACTUAL INSTALLATION LOCATIONS SHALL BE DETERMINED BY THE INSTALLING CONTRACTOR.
 9. DO NOT LOCATE SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AIR VENTS.
 10. WIRE RUNS ARE CRITICAL. ANY SIGNIFICANT INCREASE IN LENGTH OF WIRE MAY AFFECT CIRCUIT CONFIGURATIONS.



Note: Relay circuits are power-limited only if connected to a power-limited signal source. Relays are rated for 2A@30VDC resistive. See Figure 3.17, "Form-C Relay Connections" on page 33.

Note: Dotted line indicates location of optional keypad & LCD display

*Circuits marked with an asterisk are supervised by communication loss. See Appendix A, "Electrical Specifications" for details.



DEVICE LEGEND

SYMBOL	QTY	MANUFACTURER	PART NO	DESCRIPTION
[Symbol]	1	NOTIFIER	NFS2-3030D (DVC)	NFS2-3030D DVC, ADDRESSABLE ASSEMBLY
[Symbol]	1	NOTIFIER	AMPS-24	ADDRESSABLE POWER SUPPLY/BATTERY CHARGER
[Symbol]	1	NOTIFIER	UDACT-2	UNIVERSAL DIGITAL ALARM COMMUNICATOR TRANSMITTER-2
[Symbol]	7	POTTER	PSE-10	10A REMOTE POWER SUPPLY
[Symbol]	2	NOTIFIER	FDU-80	ANNUNCIATOR, TERMINAL MODE, 80-CHARACTER, BACKLIT LCD DISPLAY
[Symbol]	1	NOTIFIER	DVC-EM	DVC ASSEMBLY
[Symbol]	5	NOTIFIER	AMP CABINET (DAA2-5025) EQBB-4	AMPLIFIER ASSEMBLY - EQBB-84, EQDR-84, DAA2-5025, CHS-BH1
[Symbol]	26	SYSTEM SENSOR	SPSWK	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[Symbol]	70	SYSTEM SENSOR	SPSWL	SPEAKER/STROBE WALL MOUNT, WHITE
[Symbol]	24	SYSTEM SENSOR	SPSCWK	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[Symbol]	144	SYSTEM SENSOR	SPSCWL	SPEAKER/STROBE CEILING MOUNT, WHITE
[Symbol]	3	NOTIFIER	NBG-12LX	MANUAL PULL STATION, DUAL-ACTION
[Symbol]	55	NOTIFIER	FM-1	MONITOR MODULE
[Symbol]	2	NOTIFIER	FD-1	DUAL MONITOR MODULE
[Symbol]	60	NOTIFIER	FRM-1	RELAY MODULE
[Symbol]	12	NOTIFIER	DNR W/FSP-951R	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[Symbol]	3	NOTIFIER	DNR W/FSP-951R	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[Symbol]	15	NOTIFIER	FST-951 WB300-6	LOW-PROFILE 135°F FIXED THERMAL SENSOR
[Symbol]	78	NOTIFIER	FSP-951 WB300-6	ADDRESSABLE LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR

CABLE AND WIRE LEGEND

LABEL	PART NO	AWG	RESISTANCE (OHM/FT)	DESCRIPTION	TOTAL LENGTH
A	184 FPLP (ANN)	18	7.77	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	502'
B	142 FPLP (NAC TRIG.)	14	2.6	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	257'
D	162 FPLP (SLC)	16	4.8	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	5202'
E	184 FPLP (EIA)	18	7.77	EIA - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	3329'
S	162 FPLP (SPK)	16	4.89	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED	8941'
V	142 FPLP (NAC)	14	3.07	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	10760'

FIRE ALARM SYSTEM

ACTION

EVENT

EVENT	TROUBLE SIGNAL @ FIRE ALARM CONTROL PANEL	SUPERVISORY SIGNAL @ FIRE ALARM CONTROL PANEL	ALARM SIGNAL @ FIRE ALARM CONTROL PANEL	ACTIVATE NOTIFICATION DEVICES	GENERAL HVAC SHUTDOWN	LOCAL HVAC SHUTDOWN
SMOKE DETECTOR		●	●	●		
HEAT DETECTOR		●	●	●		
LOCAL DUCT DETECTOR	●					●
MANUAL PULL STATION		●	●	●		
WATERFLOW SWITCH		●	●	●		
TAMPER SWITCH		●				
PIV SWITCH		●				
FACP AC POWER FAILURE	●					
SYSTEM LOW BATTERY	●					
OPEN CIRCUIT	●					
GROUND FAULT	●					
NOTIFICATION APPLIANCE CIRCUIT SHORT	●					
STAIR SMOKE DETECTOR IN APPROVED LOCATION						
2X ATRIUM SMOKE DETECTORS						
SPRINKLER WATER-FLOW						
MANUAL ACTIVATION AT FFSCP						
PRESSURIZATION FAN SMOKE DETECTOR						

NOTE: ALL SIGNALS WILL BE SENT TO A CENTRAL STATION

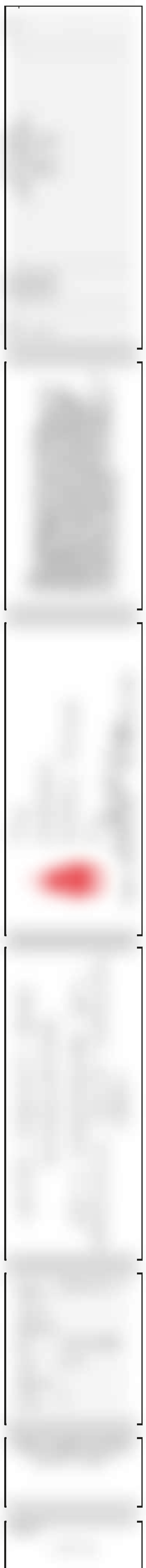
PANEL BPS-1 (PSE-1) BATTERY CALCULATION									
SECONDARY POWER SOURCE REQUIREMENTS									
TOTAL USED CAPACITY (IN ALARM) = 1.832A (84.5%)									
SECONDARY ALARM CURRENT (AMPS)									
PANEL POWER SUPPLY MAX CURRENT = 15A									
SECONDARY POWER SOURCE REQUIREMENTS									
PANEL COMPONENTS	QTY	PART NO.	DESCRIPTION	STANDBY CURRENT (AMPS)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
CIRCUIT	SYMBOL	QTY	PSE-1 MAIN BOARD	1.70	1.70	0.00	1.70	0.00	1.70
BPS-141		1	SPSCWL	0.01	0.01	0.00	0.01	0.00	0.01
		2	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		5	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		2	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		11	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		3	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-142		2	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		3	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-143		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-144		5	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-145		2	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-146		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL STANDBY (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY STANDBY LOAD (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY ALARM LOAD (A)				0.00	0.00	0.00	0.00	0.00	0.00
STANDBY AND ALARM SUBTOTAL (AMP HOURS)				0.00	0.00	0.00	0.00	0.00	0.00
DERATING FACTOR				1.2	1.2	0.00	1.2	0.00	1.2
SECONDARY LOAD REQUIREMENTS (AMP HOURS)				4.84	4.84	0.00	4.84	0.00	4.84
PROVIDE (2) 12V 7AH BATTERIES									

PANEL BPS-2 (PSE-2) BATTERY CALCULATION									
SECONDARY POWER SOURCE REQUIREMENTS									
TOTAL USED CAPACITY (IN ALARM) = 1.424A (94.2%)									
SECONDARY ALARM CURRENT (AMPS)									
PANEL POWER SUPPLY MAX CURRENT = 15A									
SECONDARY POWER SOURCE REQUIREMENTS									
PANEL COMPONENTS	QTY	PART NO.	DESCRIPTION	STANDBY CURRENT (AMPS)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
CIRCUIT	SYMBOL	QTY	PSE-2 MAIN BOARD	1.70	1.70	0.00	1.70	0.00	1.70
BPS-2410		3	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2411		1	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
		3	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2413		2	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		3	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2415		1	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		2	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2416		3	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2417		2	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-2418		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL STANDBY (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY STANDBY LOAD (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY ALARM LOAD (A)				0.00	0.00	0.00	0.00	0.00	0.00
STANDBY AND ALARM SUBTOTAL (AMP HOURS)				0.00	0.00	0.00	0.00	0.00	0.00
DERATING FACTOR				1.2	1.2	0.00	1.2	0.00	1.2
SECONDARY LOAD REQUIREMENTS (AMP HOURS)				4.84	4.84	0.00	4.84	0.00	4.84
PROVIDE (2) 12V 7AH BATTERIES									

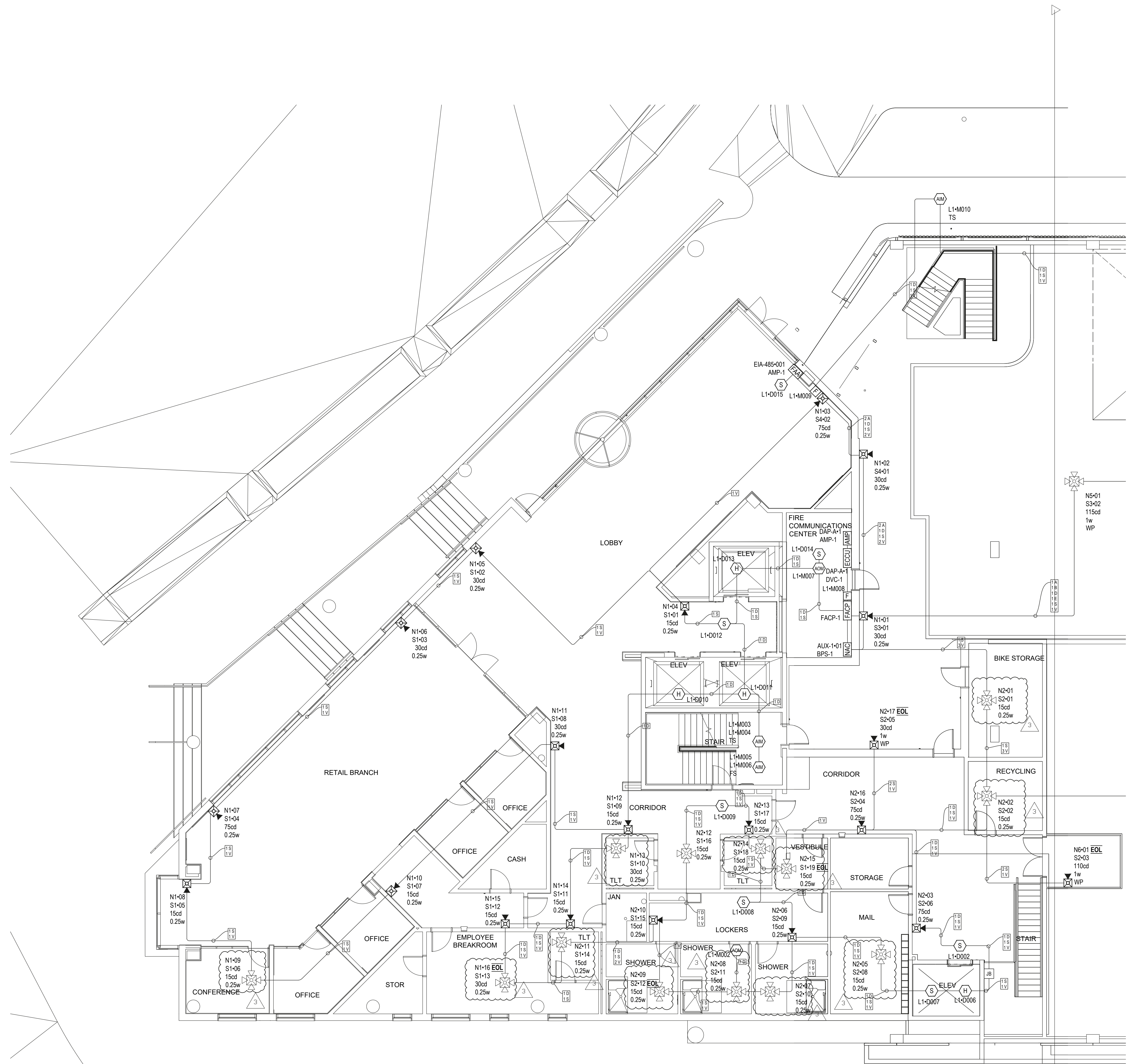
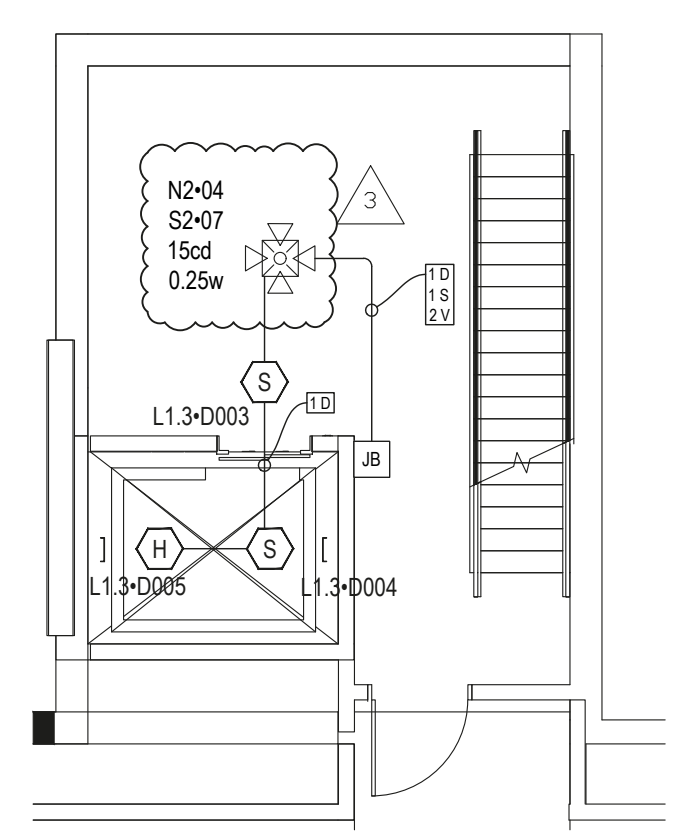
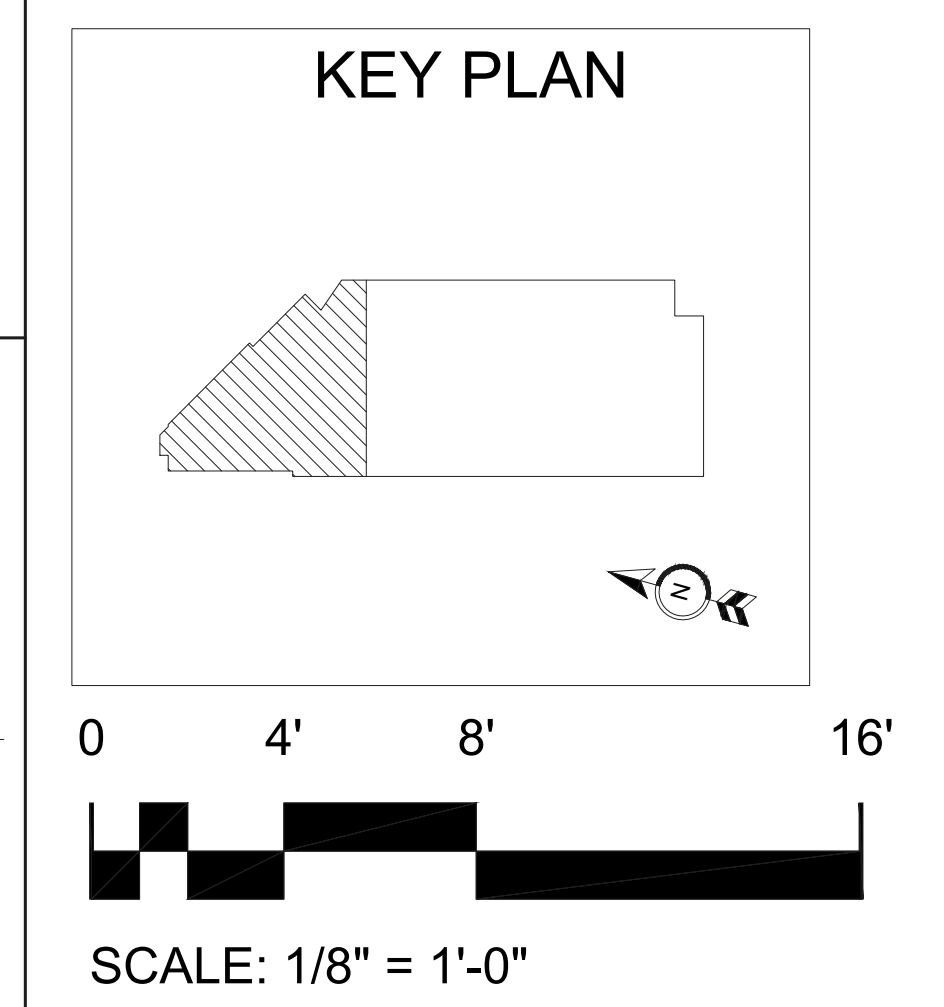
PANEL BPS-3 (PSE-3) BATTERY CALCULATION									
SECONDARY POWER SOURCE REQUIREMENTS									
TOTAL USED CAPACITY (IN ALARM) = 1.424A (94.2%)									
SECONDARY ALARM CURRENT (AMPS)									
PANEL POWER SUPPLY MAX CURRENT = 15A									
SECONDARY POWER SOURCE REQUIREMENTS									
PANEL COMPONENTS	QTY	PART NO.	DESCRIPTION	STANDBY CURRENT (AMPS)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
CIRCUIT	SYMBOL	QTY	PSE-3 MAIN BOARD	1.70	1.70	0.00	1.70	0.00	1.70
BPS-3415		1	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		4	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		7	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-3416		1	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		3	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
BPS-3417		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		2	SPSCWK	0.00	0.00	0.00	0.00	0.00	0.00
BPS-3418		1	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		1	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL STANDBY (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY STANDBY LOAD (A)				1.70	1.70	0.00	1.70	0.00	1.70
SECONDARY ALARM LOAD (A)				0.00	0.00	0.00	0.00	0.00	0.00
STANDBY AND ALARM SUBTOTAL (AMP HOURS)				0.00	0.00	0.00	0.00	0.00	0.00
DERATING FACTOR				1.2	1.2	0.00	1.2	0.00	1.2
SECONDARY LOAD REQUIREMENTS (AMP HOURS)				4.84	4.84	0.00	4.84	0.00	4.84
PROVIDE (2) 12V 7AH BATTERIES									

PANEL AMP-3 (AMP CABINET) BATTERY CALCULATION									
SECONDARY POWER SOURCE REQUIREMENTS									
TOTAL USED CAPACITY (IN ALARM) = 2.263A (105.5%)									
SECONDARY ALARM CURRENT (AMPS)									
PANEL POWER SUPPLY MAX CURRENT = 15A									
SECONDARY POWER SOURCE REQUIREMENTS									
PANEL COMPONENTS	QTY	PART NO.	DESCRIPTION	STANDBY CURRENT (AMPS)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
CIRCUIT	SYMBOL	QTY	DA04-02S	0.4	0.4	0.0	0.4	0.0	0.4
AMP-3-017		20	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		5	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
AMP-3-018		5	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		12	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
AMP-3-019		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		2	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL STANDBY (A)				0.4	0.4	0.00	0.4	0.00	0.4
SECONDARY STANDBY LOAD (A)				0.4	0.4	0.00	0.4	0.00	0.4
SECONDARY ALARM LOAD (A)				0.00	0.00	0.00	0.00	0.00	0.00
STANDBY AND ALARM SUBTOTAL (AMP HOURS)				0.00	0.00	0.00	0.00	0.00	0.00
DERATING FACTOR				1.2	1.2	0.00	1.2	0.00	1.2
SECONDARY LOAD REQUIREMENTS (AMP HOURS)				11.91	11.91	0.00	11.91	0.00	11.91
PROVIDE (2) 12V 13AH BATTERIES									

PANEL AMP-3 (AMP CABINET) BATTERY CALCULATION									
SECONDARY POWER SOURCE REQUIREMENTS									
TOTAL USED CAPACITY (IN ALARM) = 2.263A (105.5%)									
SECONDARY ALARM CURRENT (AMPS)									
PANEL POWER SUPPLY MAX CURRENT = 15A									
SECONDARY POWER SOURCE REQUIREMENTS									
PANEL COMPONENTS	QTY	PART NO.	DESCRIPTION	STANDBY CURRENT (AMPS)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)
CIRCUIT	SYMBOL	QTY	DA04-02S	0.4	0.4	0.0	0.4	0.0	0.4
AMP-3-017		20	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
		5	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
AMP-3-018		5	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
		12	SPSCWL	0.00	0.00	0.00	0.00	0.00	0.00
AMP-3-019		1	SPSWK	0.00	0.00	0.00	0.00	0.00	0.00
		2	SPSWL	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL STANDBY (A)				0.4	0.4	0.00	0.4	0.00	0.4
SECONDARY STANDBY LOAD (A)				0.4	0.4	0.00	0.4	0.00	0.4
SECONDARY ALARM LOAD (A)				0.00	0.00	0.00	0.00	0.00	0.00
STANDBY AND ALARM SUBTOTAL (AMP HOURS)				0.00	0.00	0.00	0.00	0.00	0.00
DERATING FACTOR				1.2	1.2	0.00	1.2	0.00	1.2
SECONDARY LOAD REQUIREMENTS (AMP HOURS)				11.91	11.91	0.00	11.91	0.00	11.91
PROVIDE (2) 12V 13AH BATTERIES									



DEVICE LEGEND		
SYMBOL	DESCRIPTION	
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL	
[NAC]	10A REMOTE POWER SUPPLY	
[FAA]	ANNUNCIATOR	
[ECCU]	DVC ASSEMBLY	
[AMP]	AMPLIFIER ASSEMBLY	
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE	
[F]	ALARM BELL (BY OTHERS)	
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE	
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE	
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE	
[F]	PULL STATION, DUAL-ACTION	
[AM]	MONITOR MODULE	
[AM]	DUAL MONITOR MODULE	
[AM]	RELAY MODULE W/ FLASHSCAN, TS	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP	
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.	
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.	
CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

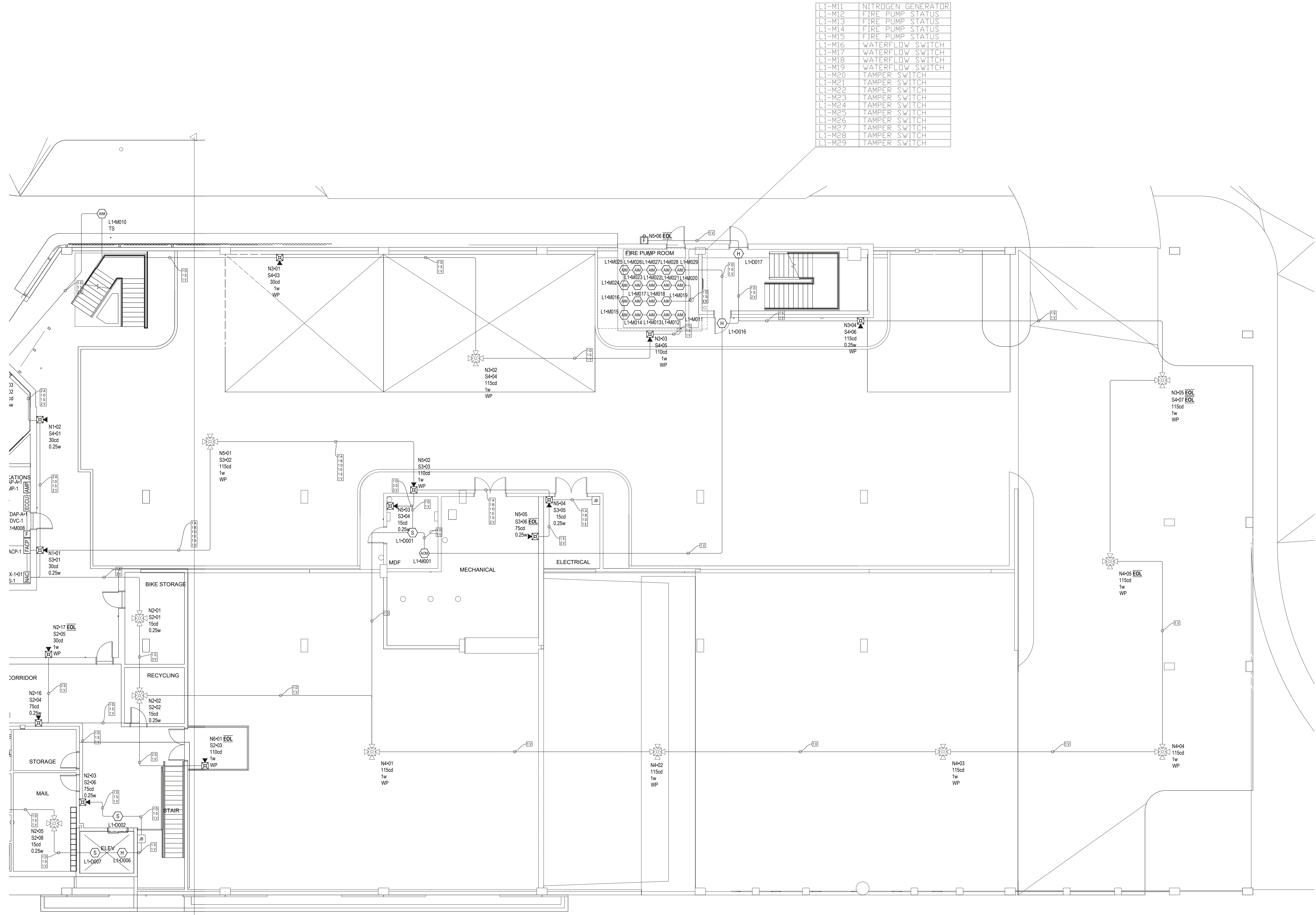
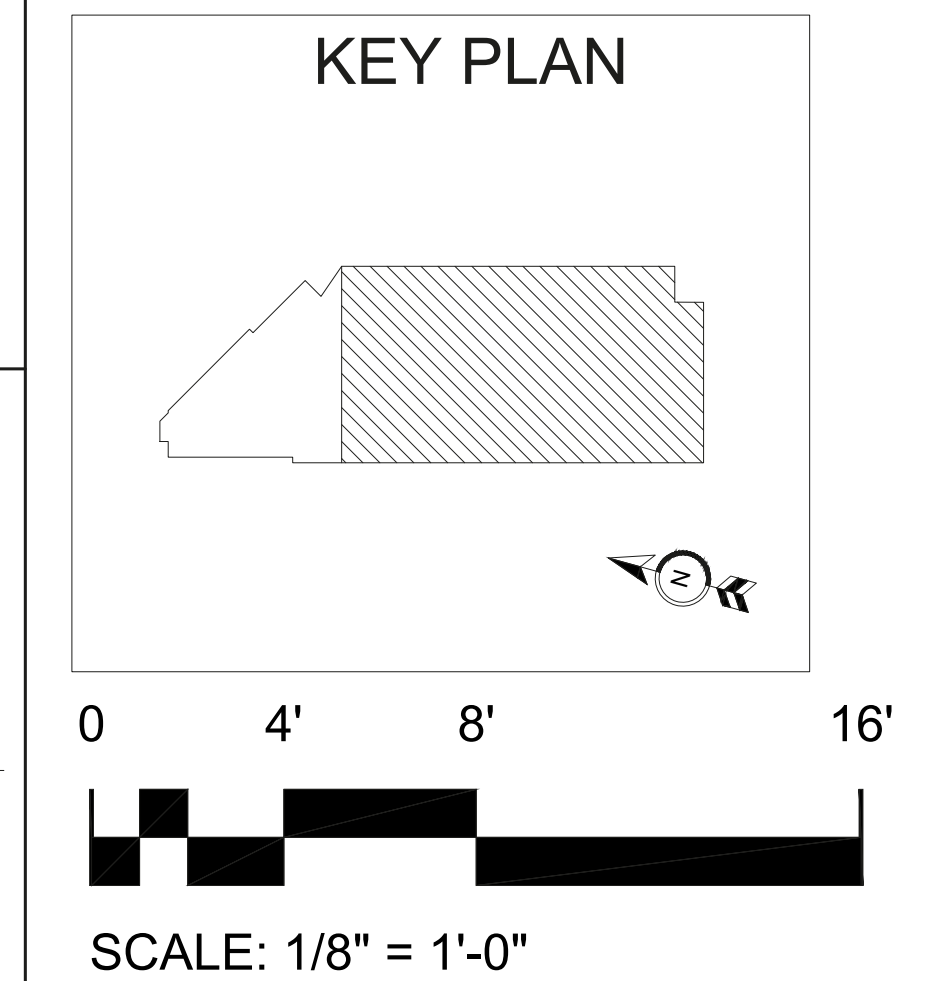


LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

CONT. SHEET 7

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED



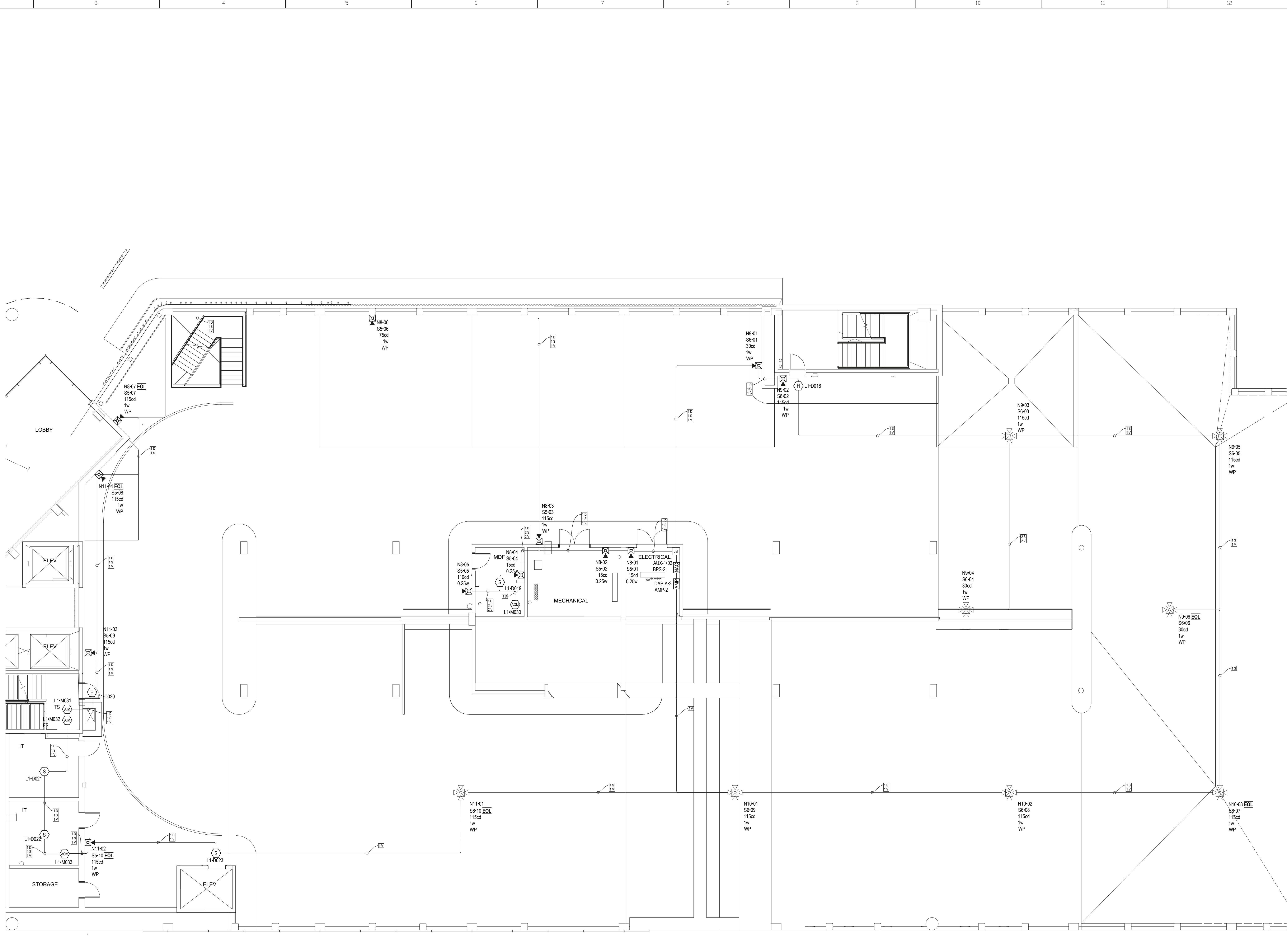
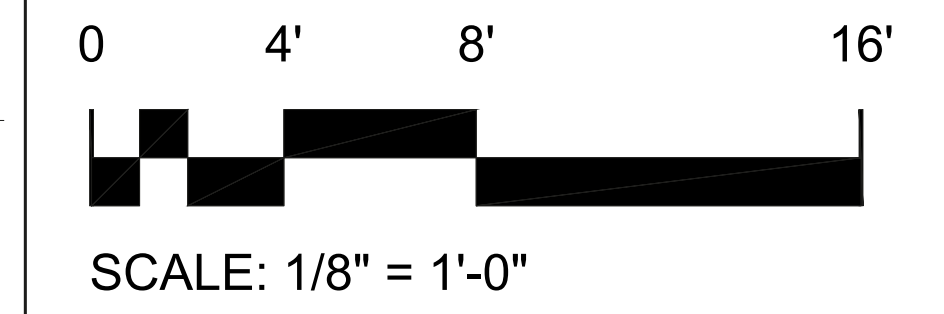
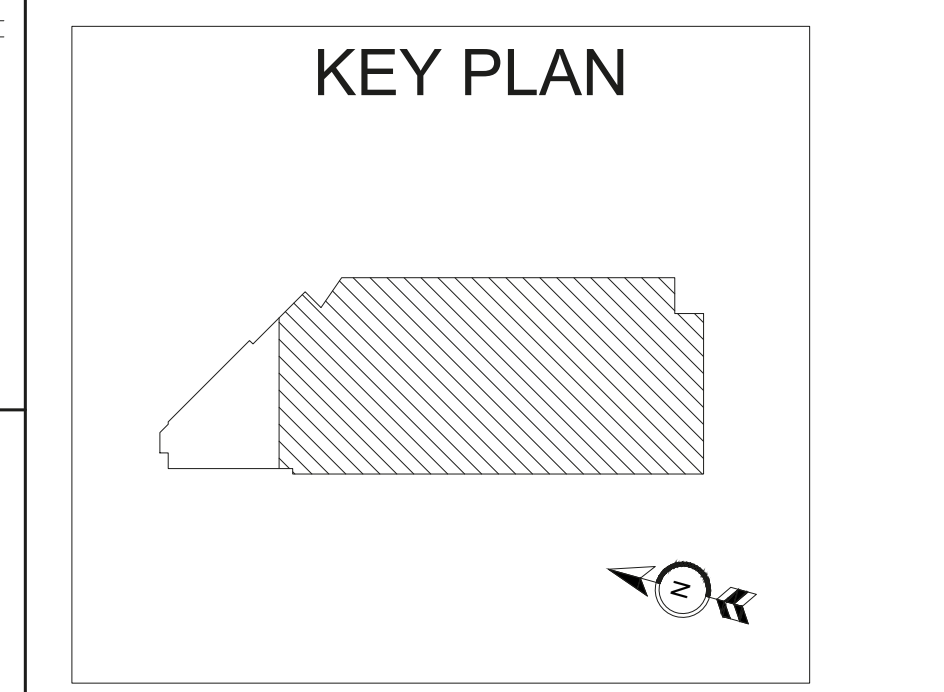
PARKING LEVEL 1
1/8"=1'-0"

CONT. SHEET 6

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

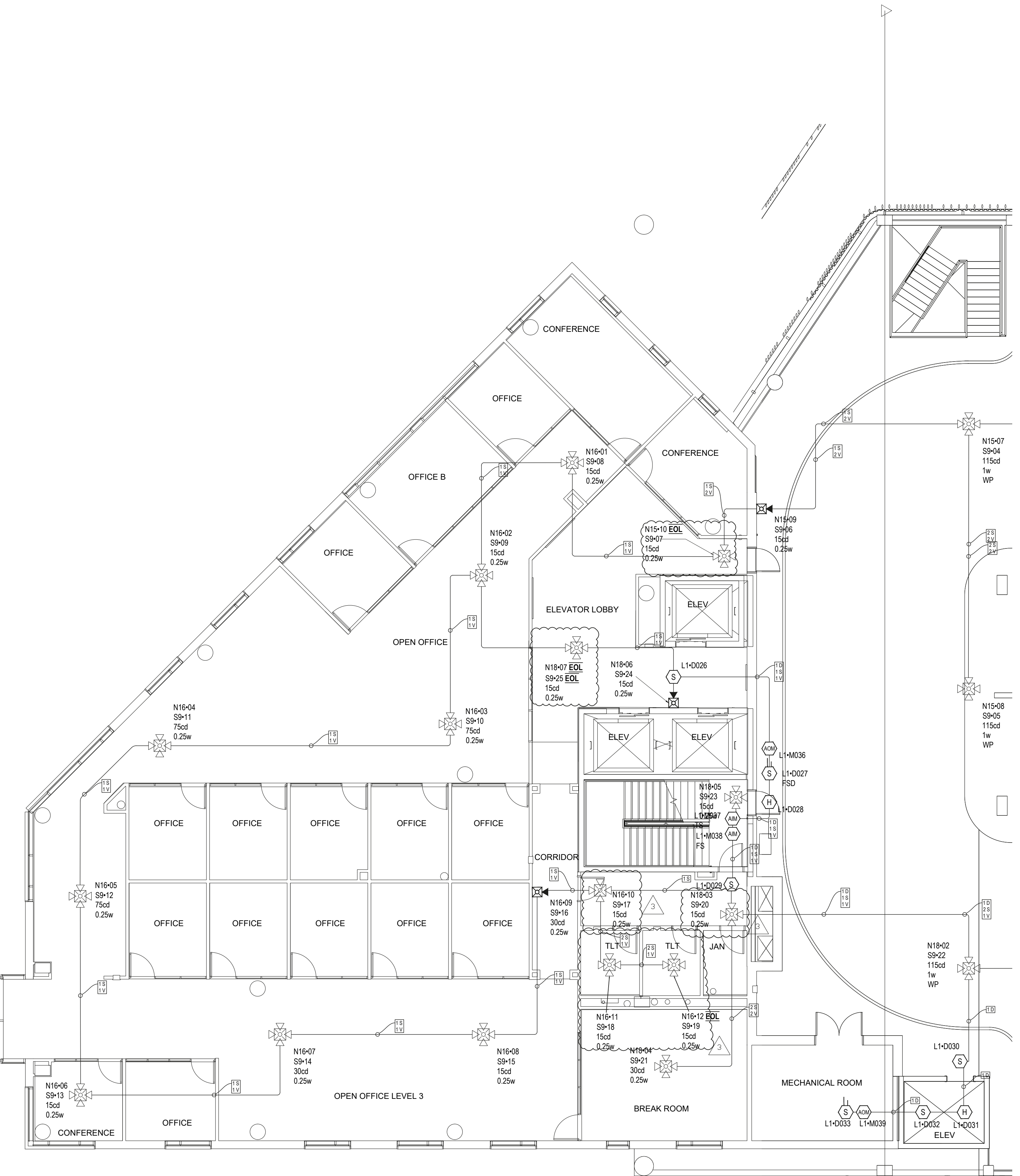
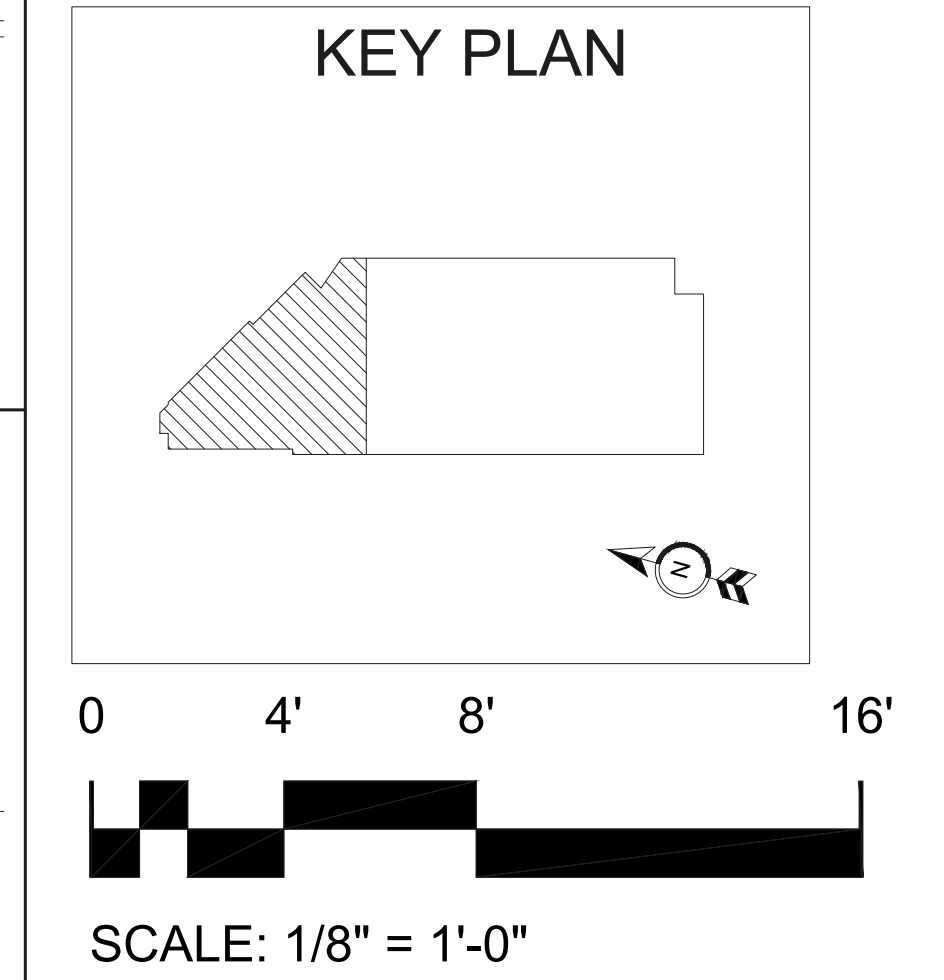
CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED



PARKING LEVEL 2
1/8"=1'-0"

LEGEND	
[PM]	POWER MONITORING
[FL]	FIELD LOCATED
[BAS]	BUILDING AUTOMATION SYSTEM
[FS]	WATERFLOW SWITCH
[TS]	TAMPER SWITCH
[A.C.]	ABOVE CEILING

DEVICE LEGEND		
SYMBOL	DESCRIPTION	
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL	
[NAC]	10A REMOTE POWER SUPPLY	
[FAA]	ANNUNCIATOR	
[ECCU]	DVC ASSEMBLY	
[AMP]	AMPLIFIER ASSEMBLY	
[WP] [Speaker]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE	
[F]	ALARM BELL (BY OTHERS)	
[Speaker]	SPEAKER/STROBE WALL MOUNT, WHITE	
[WP] [Ceiling]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE	
[Ceiling]	SPEAKER/STROBE CEILING MOUNT, WHITE	
[F]	PULL STATION, DUAL-ACTION	
[AM]	MONITOR MODULE	
[AM]	DUAL MONITOR MODULE	
[AM]	RELAY MODULE W/ FLASHSCAN, TS	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP	
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.	
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.	
CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

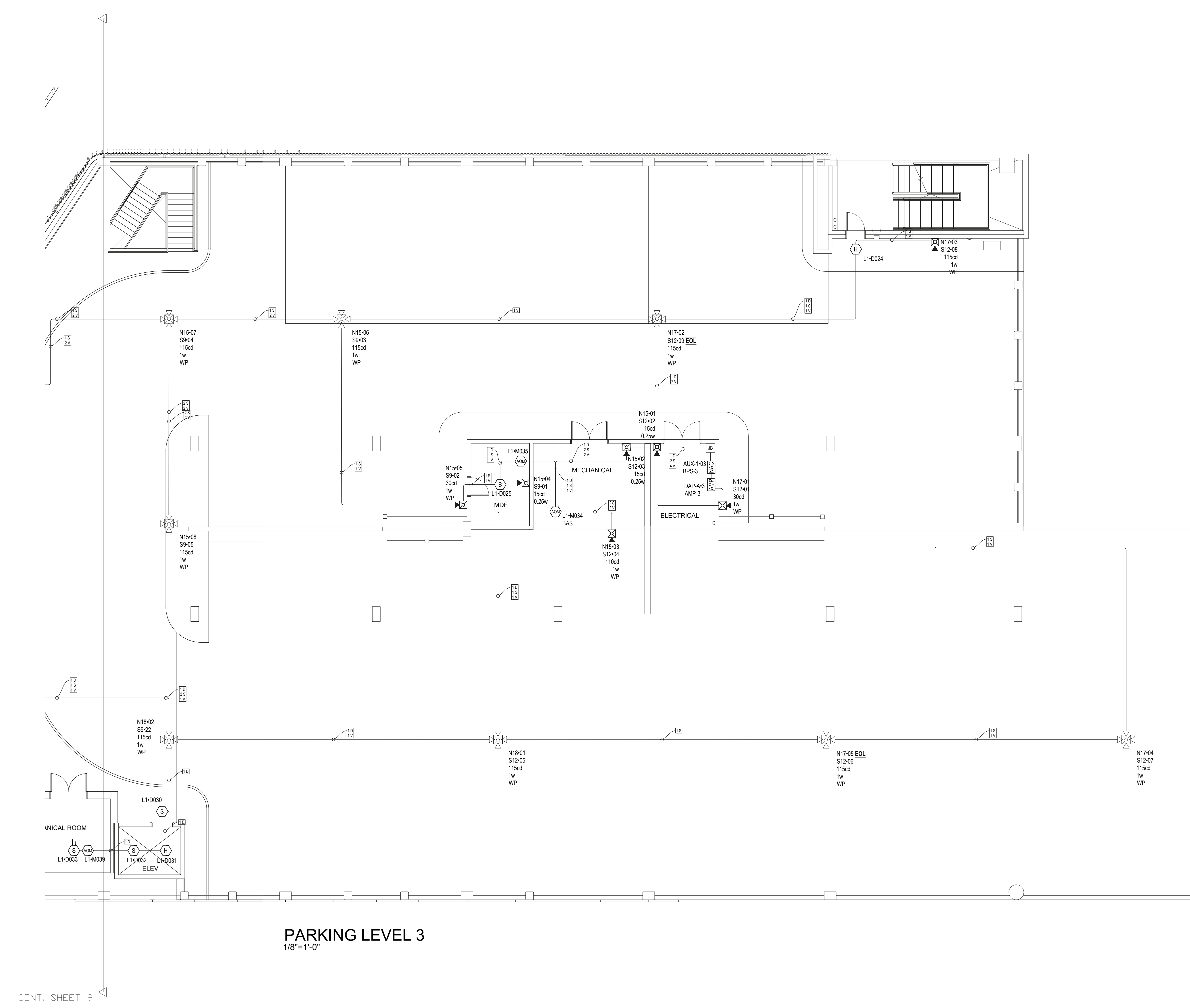
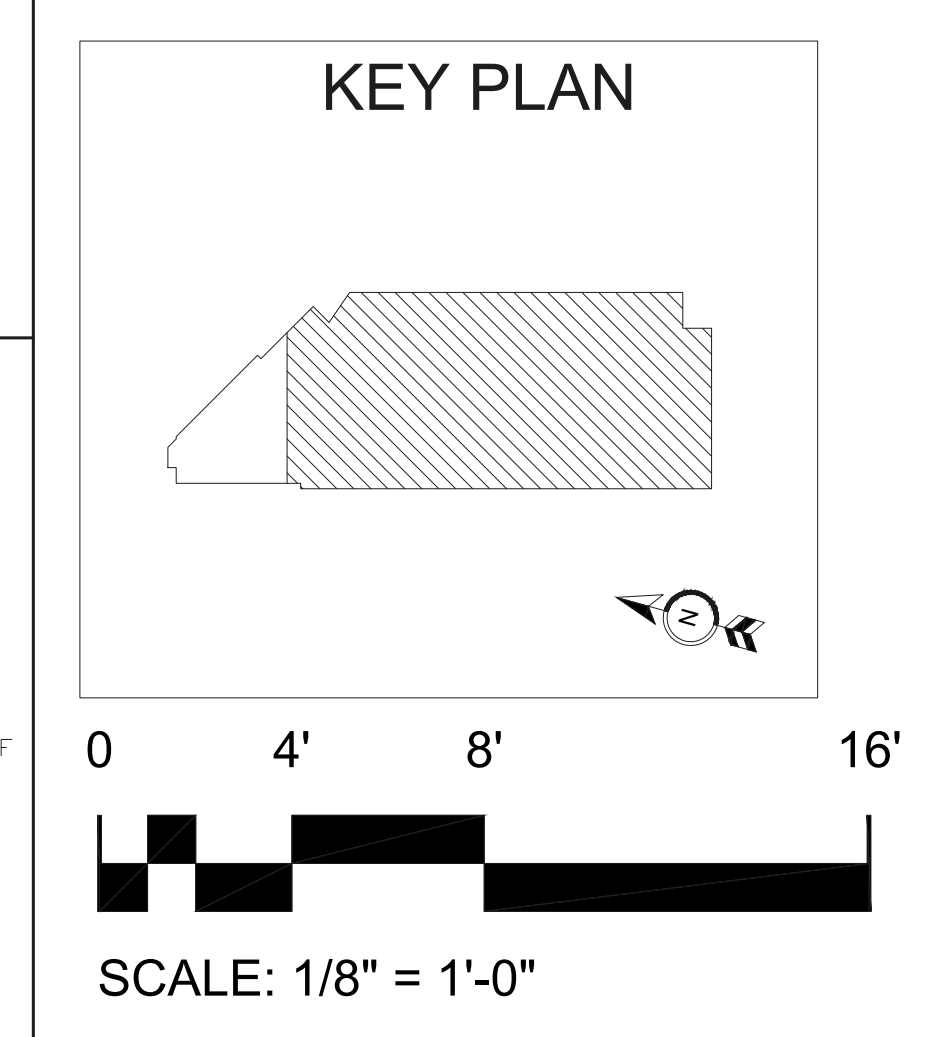


BRANCH LEVEL 2
1/8"=1'-0"

CONT. SHEET 10

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND		
SYMBOL	DESCRIPTION	
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL	
[NAC]	10A REMOTE POWER SUPPLY	
[FAA]	ANNUNCIATOR	
[ECCU]	DVC ASSEMBLY	
[AMP]	AMPLIFIER ASSEMBLY	
[WP] [Speaker]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE	
[F]	ALARM BELL (BY OTHERS)	
[WP] [Speaker]	SPEAKER/STROBE WALL MOUNT, WHITE	
[WP] [Speaker]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE	
[WP] [Speaker]	SPEAKER/STROBE CEILING MOUNT, WHITE	
[F]	PULL STATION, DUAL-ACTION	
[AM]	MONITOR MODULE	
[AM]	DUAL MONITOR MODULE	
[AM]	RELAY MODULE W/ FLASHSCAN, TS	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP	
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.	
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.	
CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED



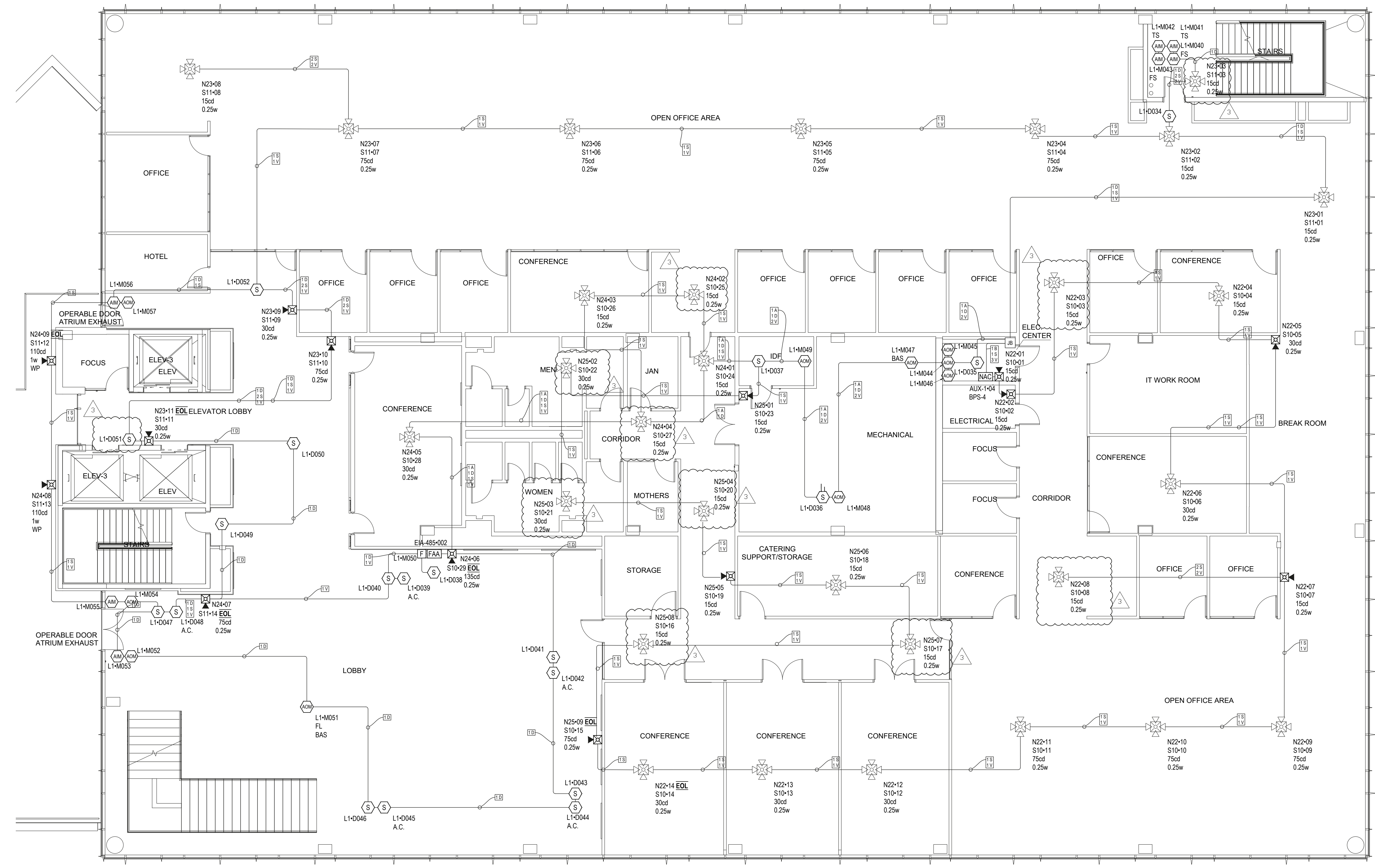
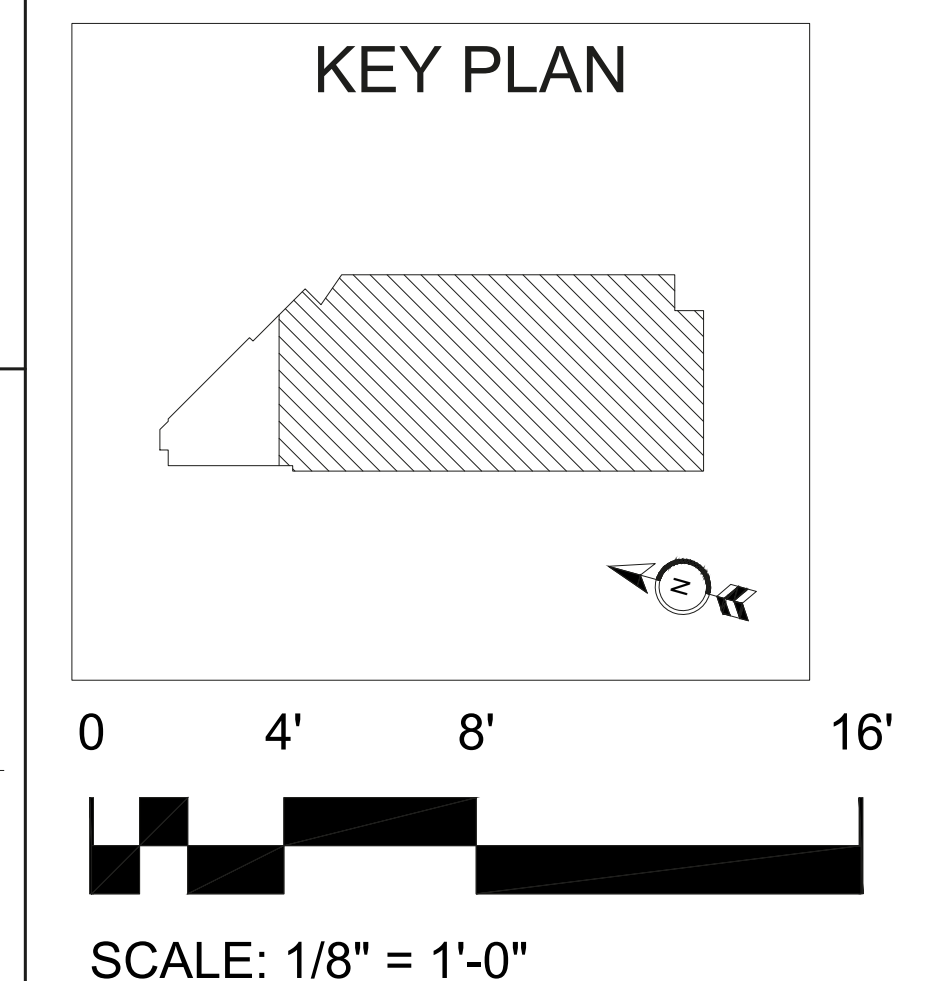
PARKING LEVEL 3
1/8"=1'-0"

CONT. SHEET 9

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

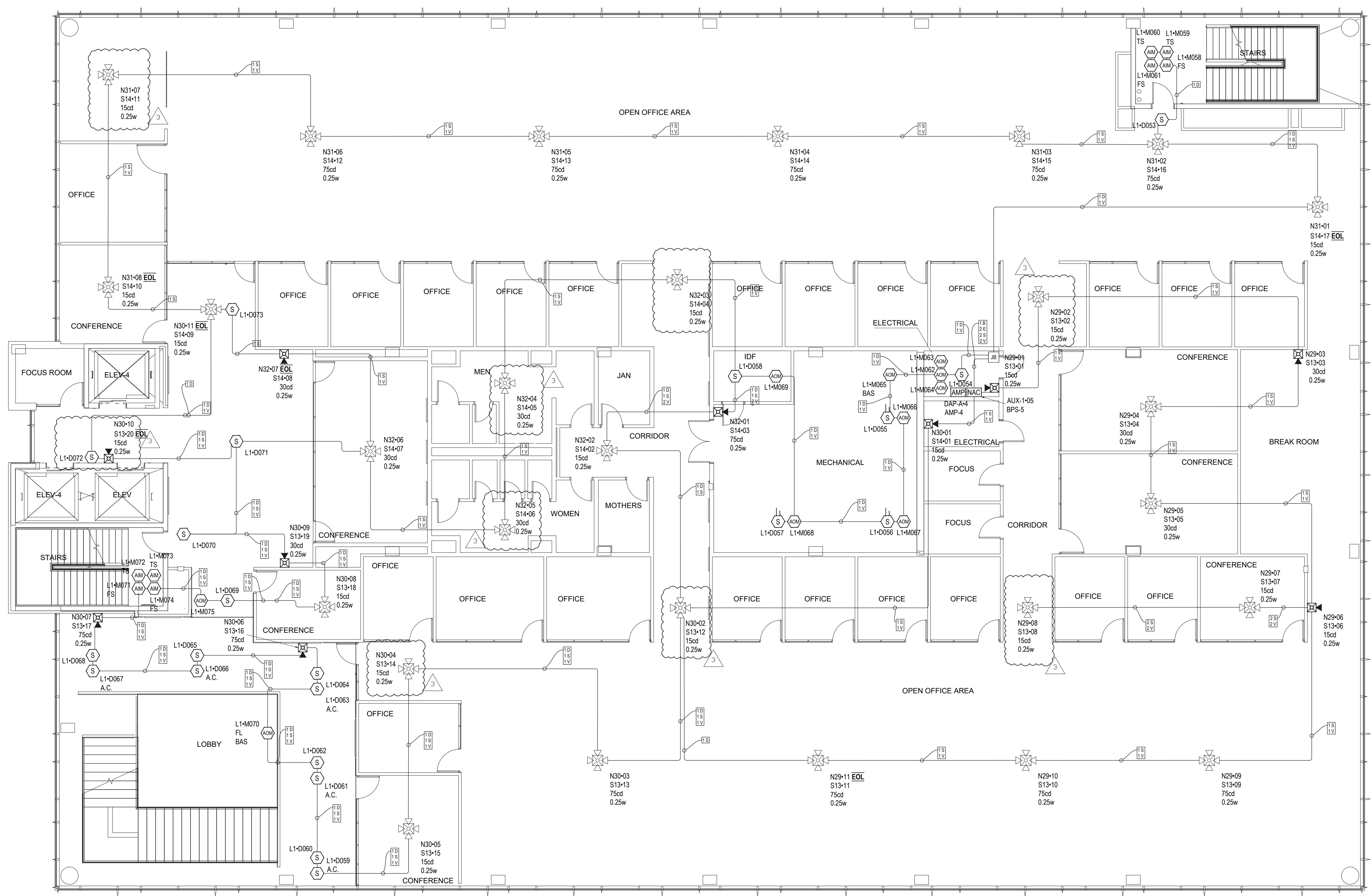
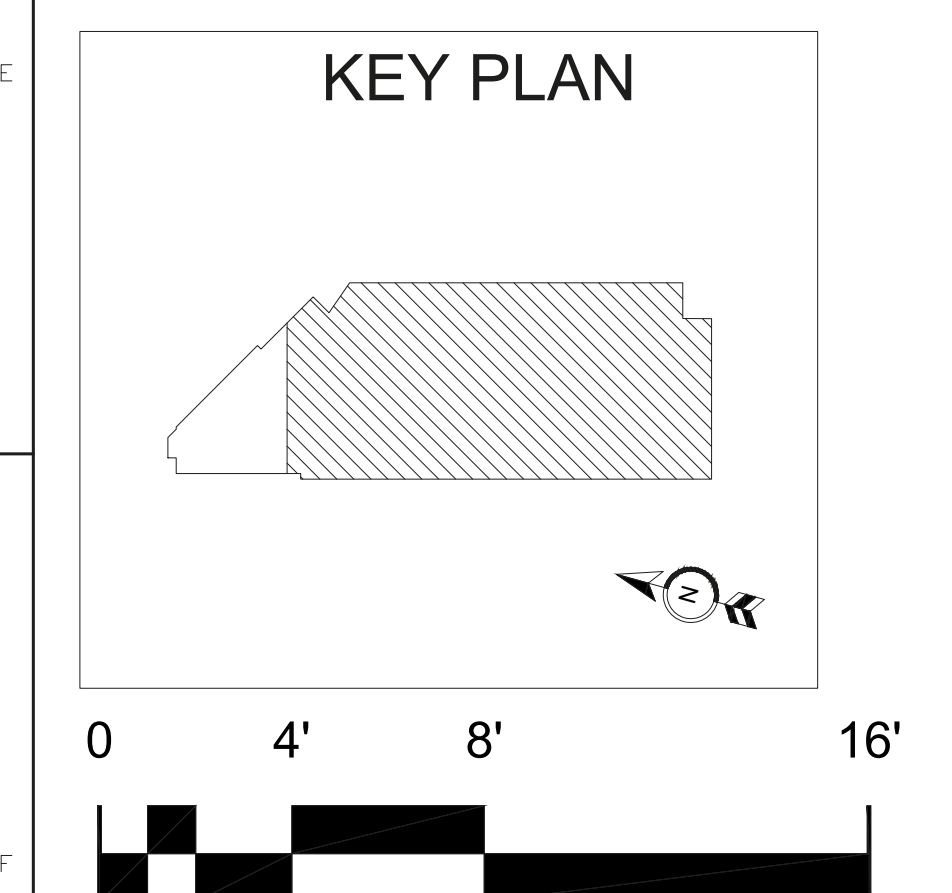


OFFICE LEVEL 4
1/8"=1'-0"

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

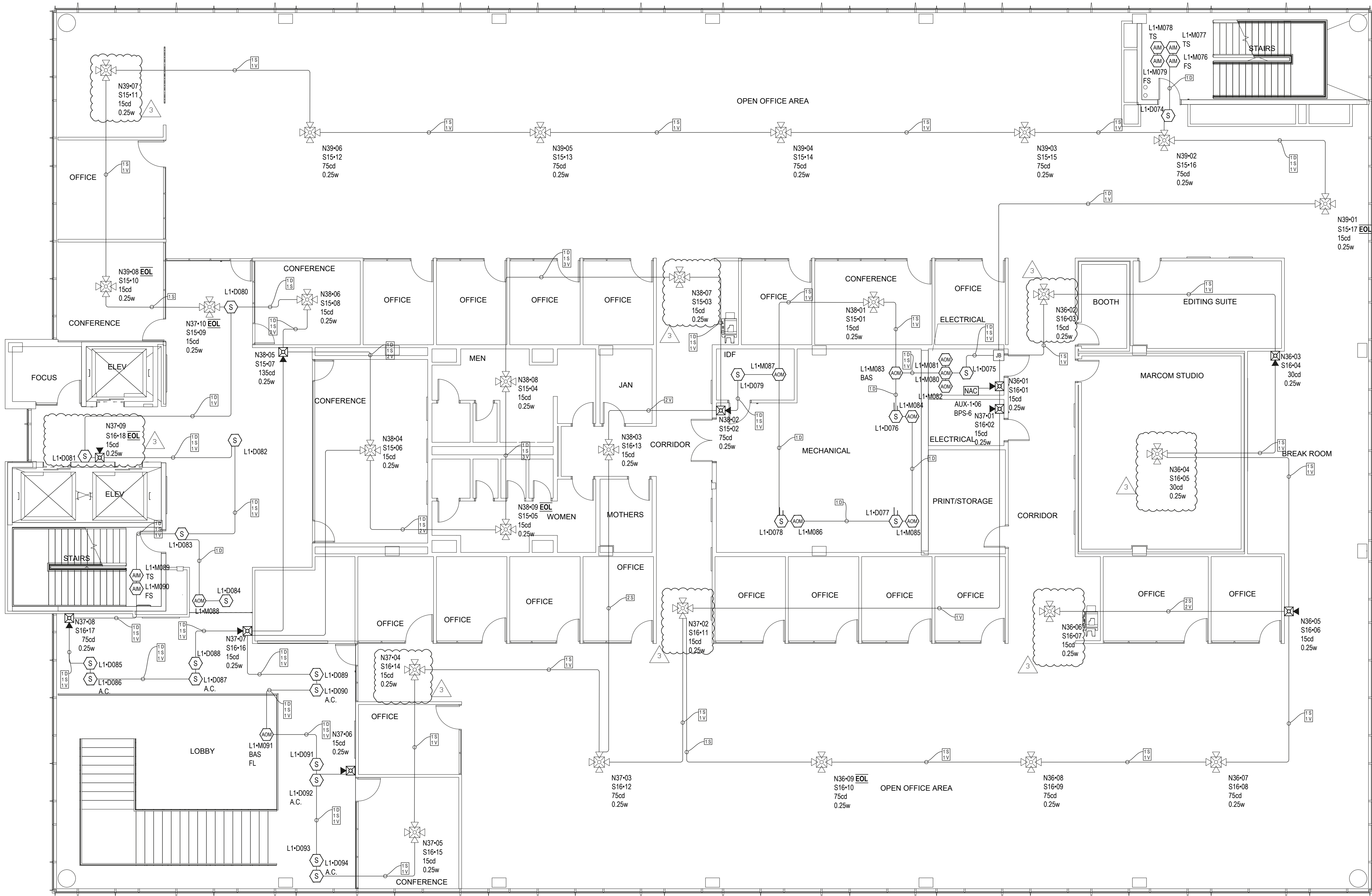
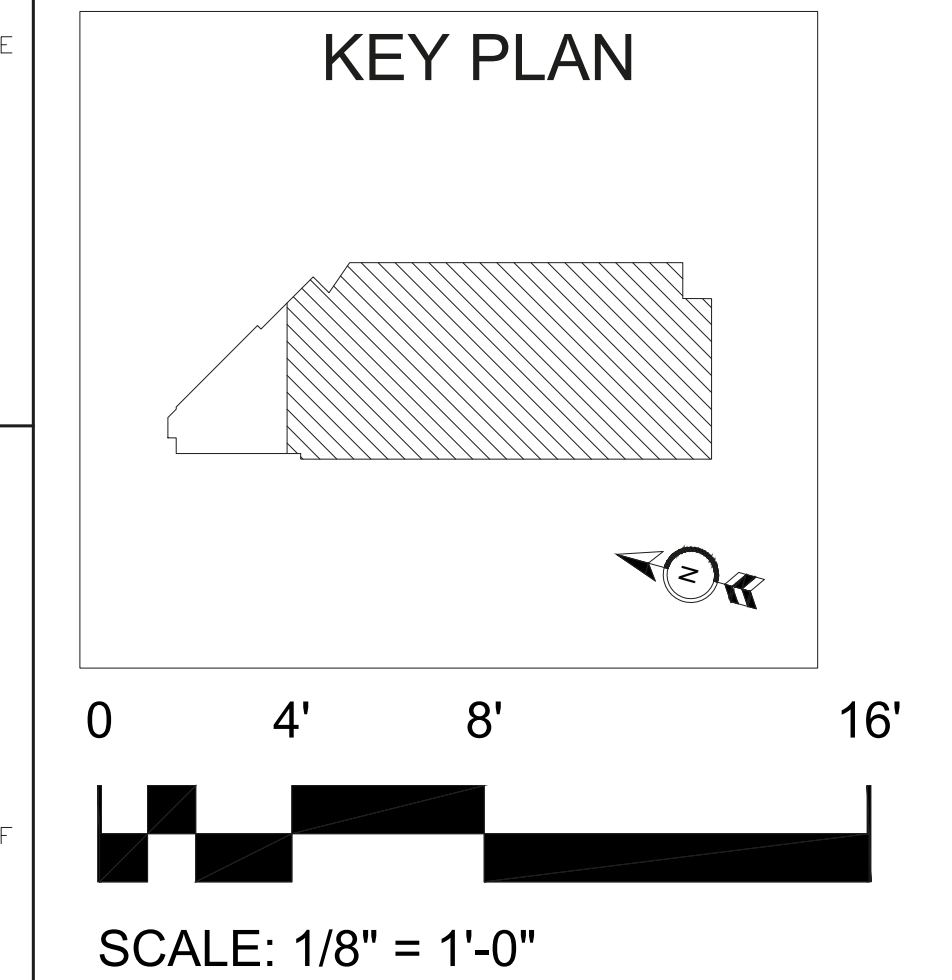


OFFICE LEVEL 5
1/8"=1'-0"

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

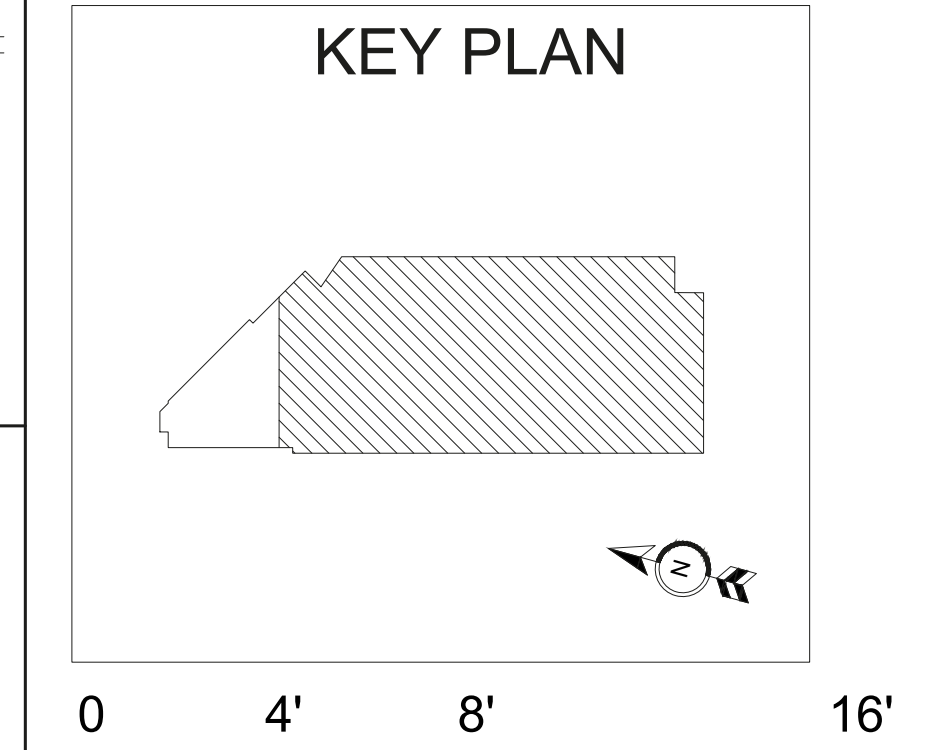


OFFICE LEVEL 6
1/8"=1'-0"

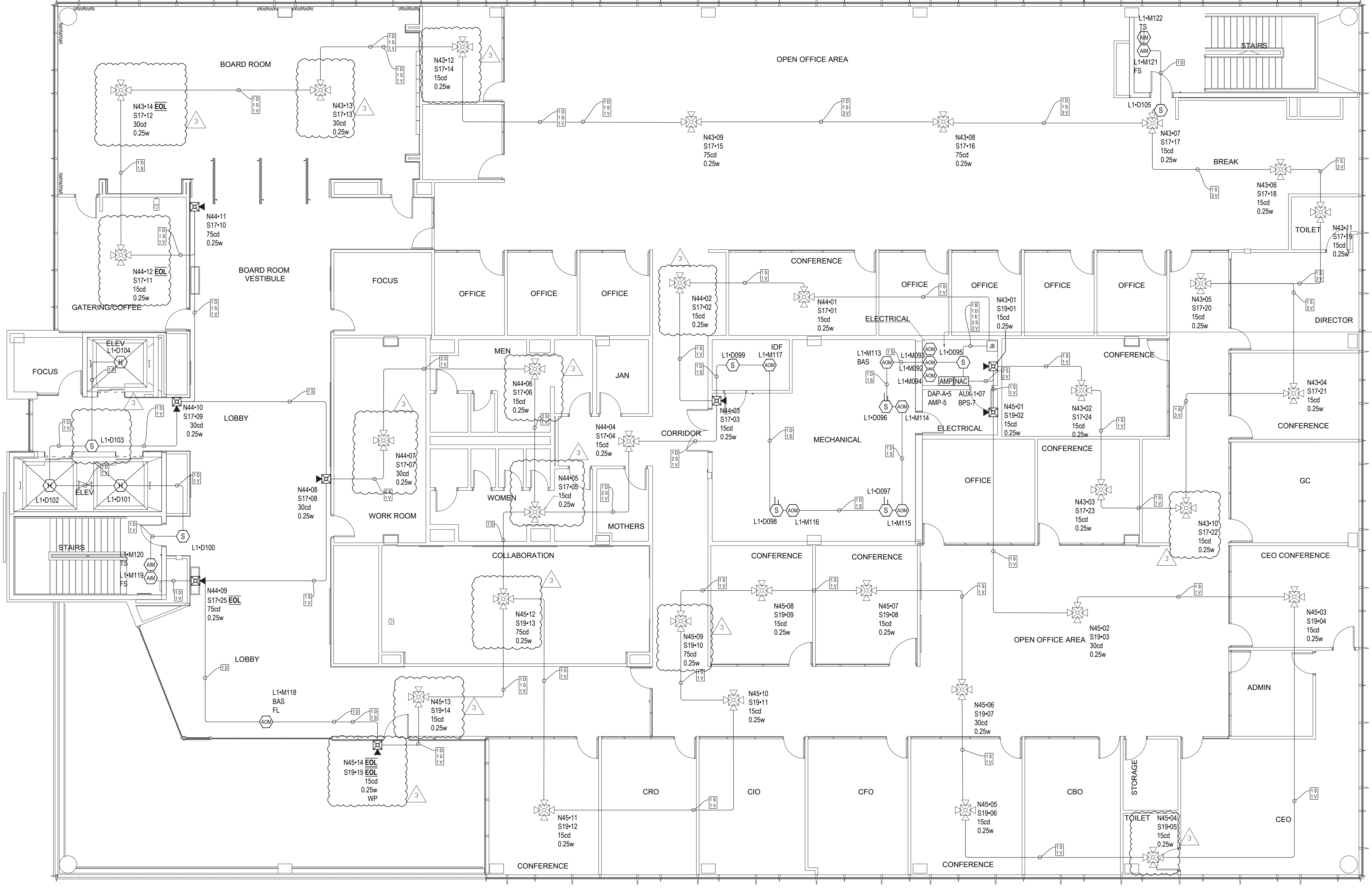
LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

DEVICE LEGEND	
SYMBOL	DESCRIPTION
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL
[NAC]	10A REMOTE POWER SUPPLY
[FAA]	ANNUNCIATOR
[ECCU]	DVC ASSEMBLY
[AMP]	AMPLIFIER ASSEMBLY
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE
[F]	ALARM BELL (BY OTHERS)
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE
[F]	PULL STATION, DUAL-ACTION
[AM]	MONITOR MODULE
[AM]	DUAL MONITOR MODULE
[AM]	RELAY MODULE W/ FLASHSCAN, TS
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED



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

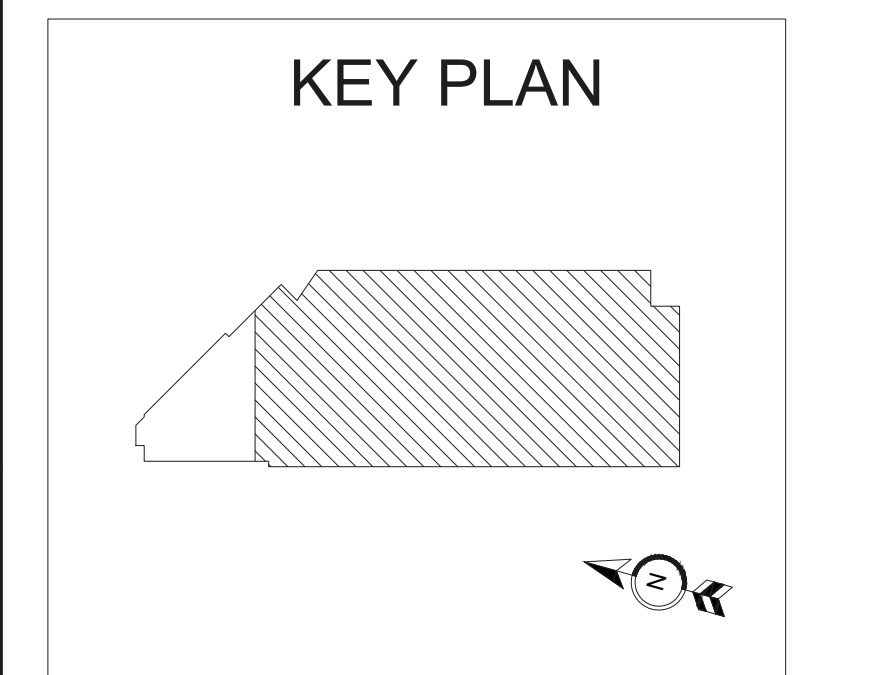


ADDRESS	DESCRIPTION	EQUIP.
L1-M095	RELAY 1	AEF-1
L1-M096	RELAY 2	AEF-1 VFD
L1-M097	MONITOR	AEF-1 MONITOR VOLTAGE
L1-M098	MONITOR	SPF-1 MONITOR VOLTAGE
L1-M099	RELAY 1	SPF-1 VFD
L1-M100	RELAY 1	SPF-1
L1-M101	RELAY 1	SPF-2
L1-M102	RELAY 2	SPF-2 VFD
L1-M103	MONITOR	SPF-2 MONITOR VOLTAGE
L1-M104	MONITOR	EPF-1 MONITOR VOLTAGE
L1-M105	RELAY 2	EPF-1 VFD
L1-M106	RELAY 1	EPF-1
L1-M107	RELAY 1	EPF-2
L1-M108	RELAY 2	EPF-2 VFD
L1-M109	MONITOR	EPF-2 MONITOR VOLTAGE
L1-M110	MONITOR	EEF-1 MONITOR VOLTAGE
L1-M111	RELAY 2	EEF-1 VFD
L1-M112	RELAY 1	EEF-1

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING

OFFICE LEVEL 7
1/8"=1'-0"

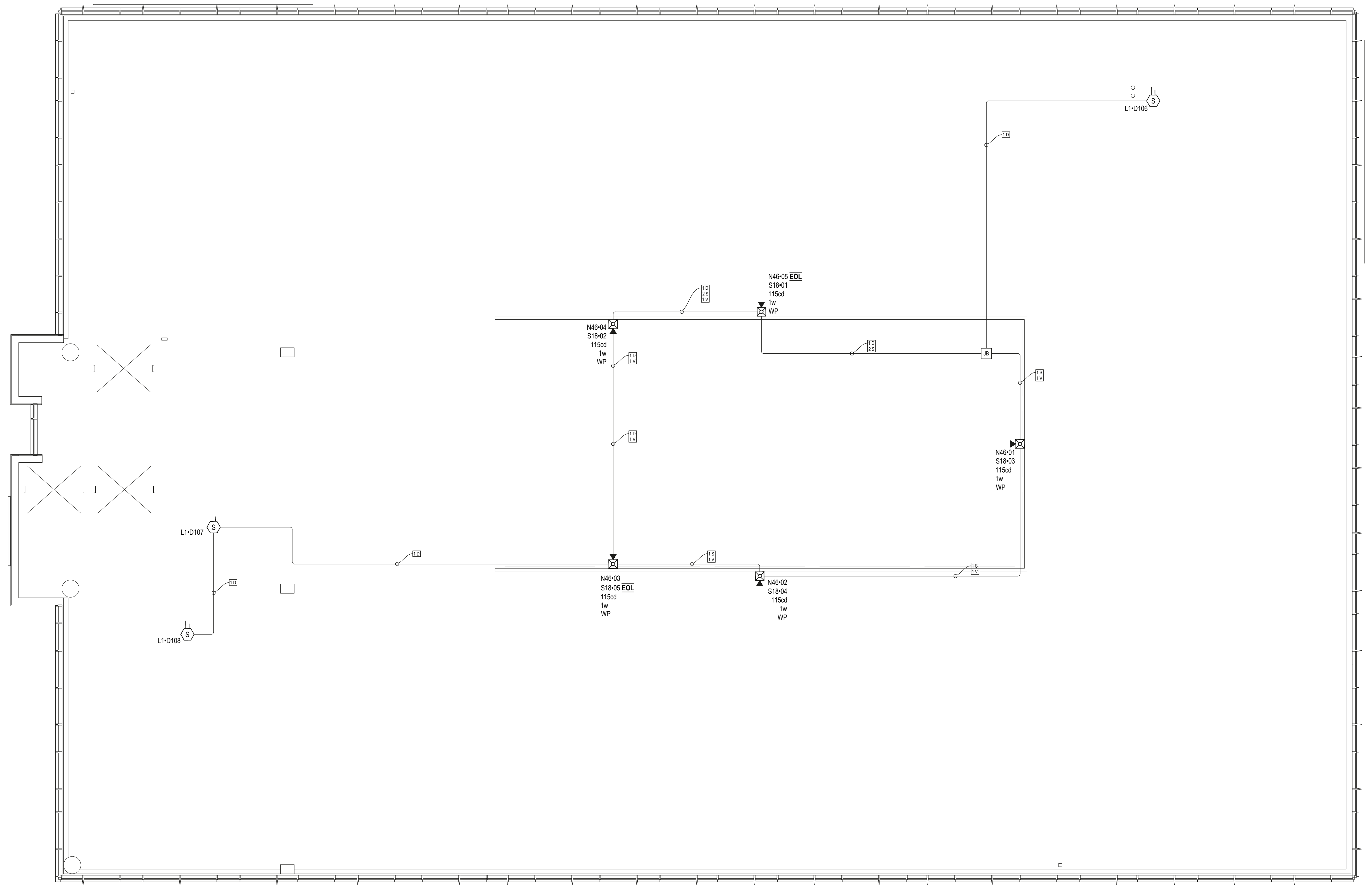
DEVICE LEGEND		
SYMBOL	DESCRIPTION	
[FACP]	NFS2-3030D FIRE ALARM CONTROL PANEL	
[NAC]	10A REMOTE POWER SUPPLY	
[FAA]	ANNUNCIATOR	
[ECCU]	DVC ASSEMBLY	
[AMP]	AMPLIFIER ASSEMBLY	
[WP]	SPEAKER/STROBE OUTDOOR WALL MOUNT, WHITE	
[F]	ALARM BELL (BY OTHERS)	
[WP]	SPEAKER/STROBE WALL MOUNT, WHITE	
[WP]	SPEAKER/STROBE OUTDOOR CEILING MOUNT, WHITE	
[WP]	SPEAKER/STROBE CEILING MOUNT, WHITE	
[F]	PULL STATION, DUAL-ACTION	
[AM]	MONITOR MODULE	
[AM]	DUAL MONITOR MODULE	
[AM]	RELAY MODULE W/ FLASHSCAN, TS	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R	
[S]	INTELLIGENT NON-RELAY PHOTOELECTRIC DUCT DETECTOR/FSP-951R, WP	
[H]	LOW-PROFILE 135°F FIXED THERMAL SENSOR, FLASHSCAN ONLY.	
[S]	LOW-PROFILE PHOTOELECTRIC SMOKE DETECTOR, FLASHSCAN ONLY.	
CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
A	18	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	14	NAC TRIGGER - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	16	SLC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
E	18	EAI - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
S	16	SPEAKER - 2 COND. SOLID COPPER FPLP ANALOG SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED



0 4' 8' 16'

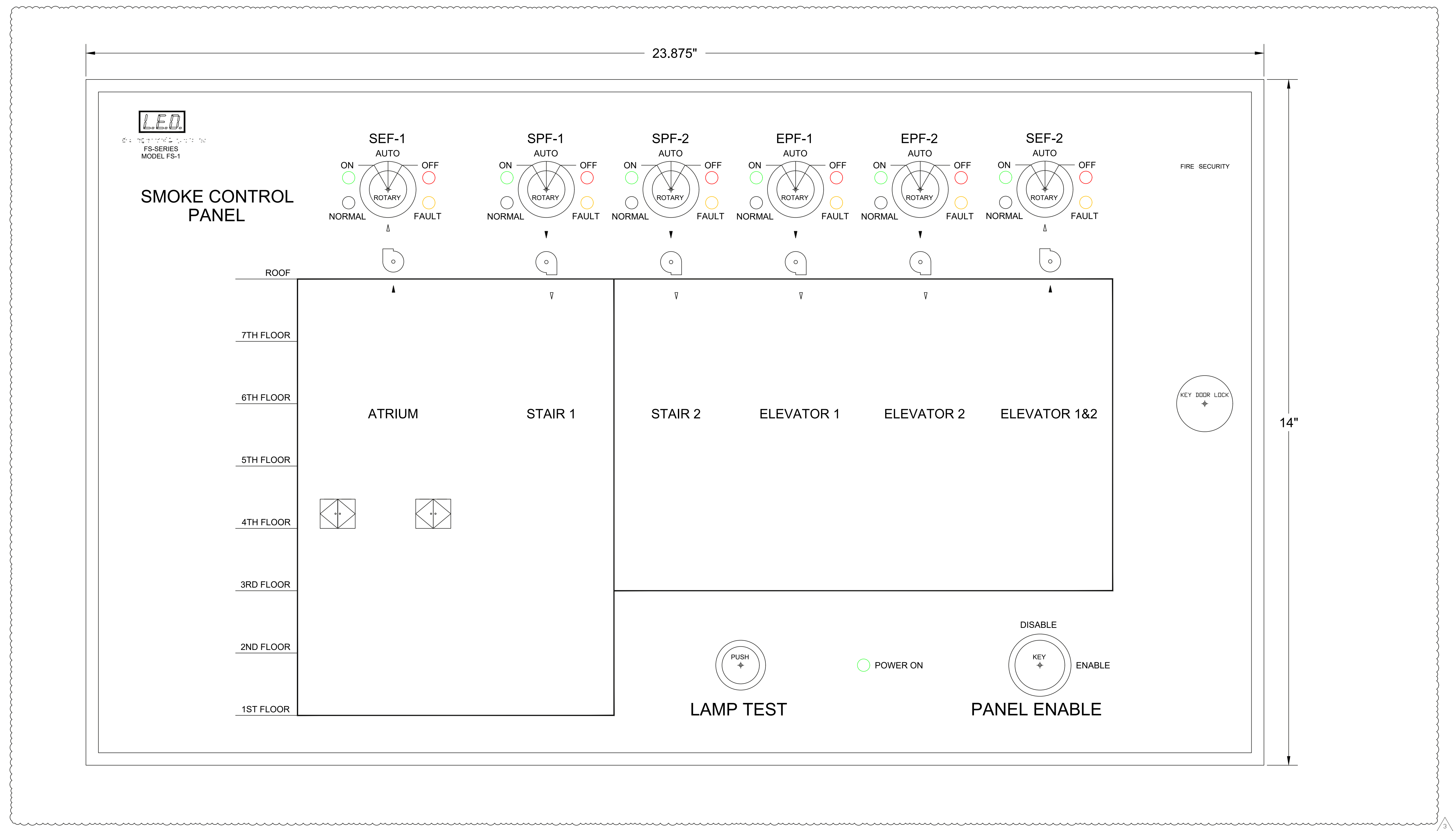


SCALE: 1/8" = 1'-0"



ROOF
1/8"=1'-0"

LEGEND	
PM	POWER MONITORING
FL	FIELD LOCATED
BAS	BUILDING AUTOMATION SYSTEM
FS	WATERFLOW SWITCH
TS	TAMPER SWITCH
A.C.	ABOVE CEILING



Smoke Control Sequence of Operations

Fire Alarm Initiating Device	Activation of Stairwell Pressurization Systems	Normal Building HVAC Shutdown	Activation of Atrium Exhaust System	Open Make-Up Air Openings on Level 4	Shutdown Corresponding Pressurization Fan	Alarm/Supervisory Condition at FACP and FFSCP
Stair Smoke Detector in Approved Location	X	X				X
2x Atrium Smoke Detectors		X	X	X		X
Sprinkler Water-Flow	X	X	X	X		X
Manual Activation at FFSCP	X	X	X	X		X
Pressurization Fan Smoke Detector					X	X

FIRE ALARM SYSTEM

SHEET INDEX	
SHEET	DESCRIPTION
FA-00.0	FIRE ALARM TITLE SHEET
FA-00.1	FIRE ALARM CONTROL SEQUENCE OF OPERATIONS
FA-00.2	FIRE ALARM CONTROL PANEL DETAIL
FA-00.3	FIRE ALARM POINT TO POINT DETAILS
FA-14	FIRE ALARM PLAN - LEVEL 14

PROJECT DATA	

120VAC EMERGENCY POWER

ALL FIRE ALARM CONTROL PANELS AND BOOSTER POWER SUPPLIES TO BE CONNECTED TO POWER GENERATOR FOR EMERGENCY POWER.



EMERGENCY VOICE EVACUATION MESSAGE

(VOICE MESSAGE WILL BE PRECEDED BY A TEMPORAL TONE)

EMERGENCY VOICE EVACUATION MESSAGE
ATTENTION! ATTENTION!
AN EMERGENCY HAS BEEN REPORTED IN THIS BUILDING.
PLEASE CEASE OPERATIONS AND LEAVE THE BUILDING UTILIZING
THE NEAREST EXIT OR FIRE EXIT STAIRWAY.
DO NOT USE THE ELEVATORS.

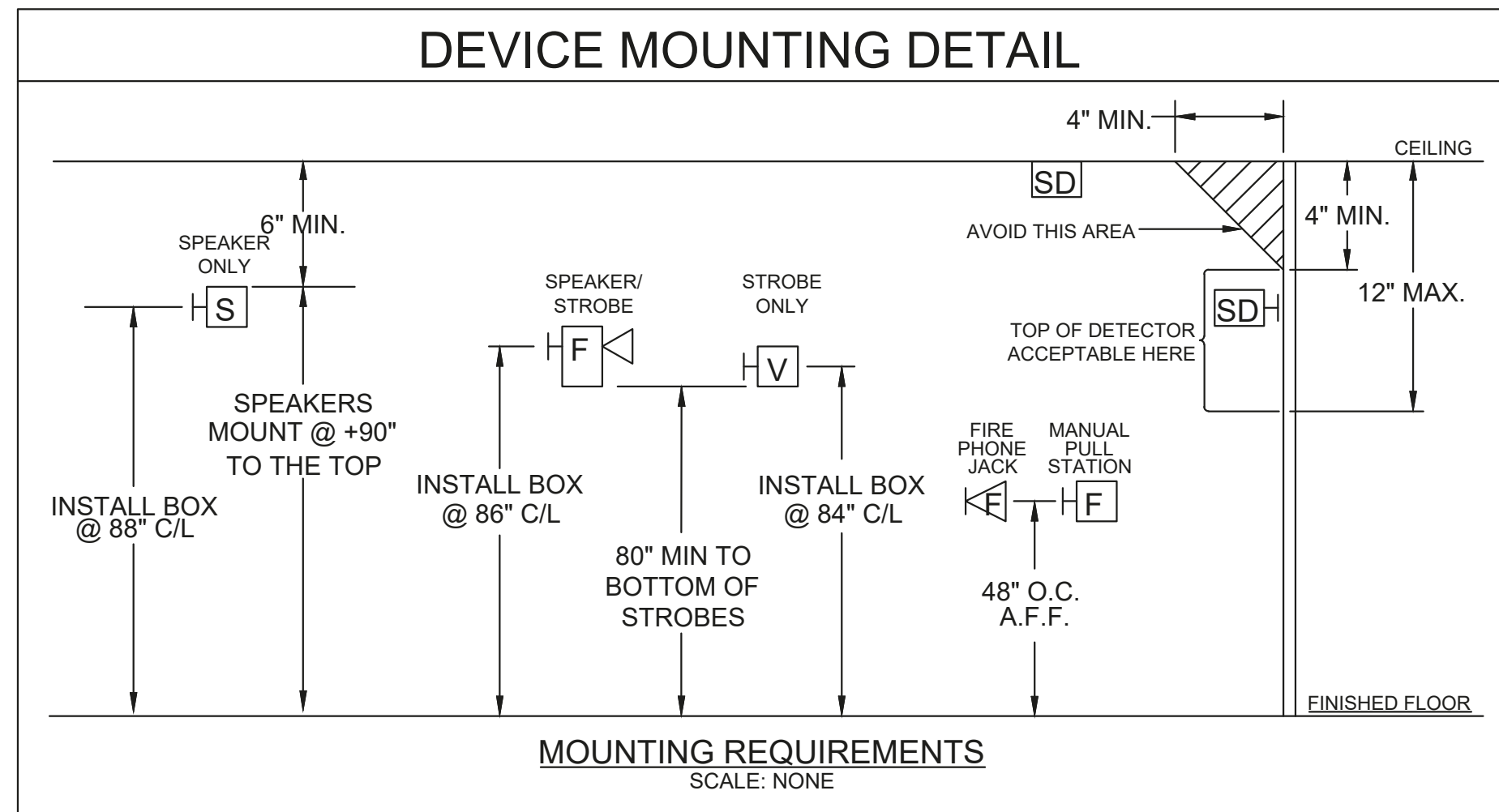
SCOPE OF WORK

TENANT IMPROVEMENT 14TH FLOOR CORRIDOR. NEW NOTIFICATION WHERE REQUIRED. NEW SMOKE DETECTORS IN EXISTING LOCATIONS. NO NEW MECHANICAL DEVICES.

FIRE ALARM CABLE LEGEND				
CIRCUIT TYPE	DESIGNATION	DESCRIPTION	WIRE TYPE	CONDUCTOR AWG
IDC/CLASS B	A	AUDIBLE - SPEAKER, VOICE CIRCUIT	14/2 FPLP	(2) #14 AWG
SLC/CLASS B	C	SIGNAL LINE CIRCUIT (S.L.C.)	16/2 FPLP	(2) #16 AWG
NAC	V	NOTIFICATION APPLIANCE CIRCUIT	12/2 FPLP	(2) #12 AWG

CABLE IS TO BE OPEN AIR CABLE SYSTEM INSTALLED IN A WORKMAN LIKE MANNER. SLC TO BE INSTALLED IN METALLIC FLEXIBLE CONDUIT.

NOTE: #CD = Condo setting. See Floor Plan, Riser Diagram, and Voltage Drop Calculation for quantity.
EX = Existing Device
EXRL = Relocated Existing Device
WP = Weather Proof



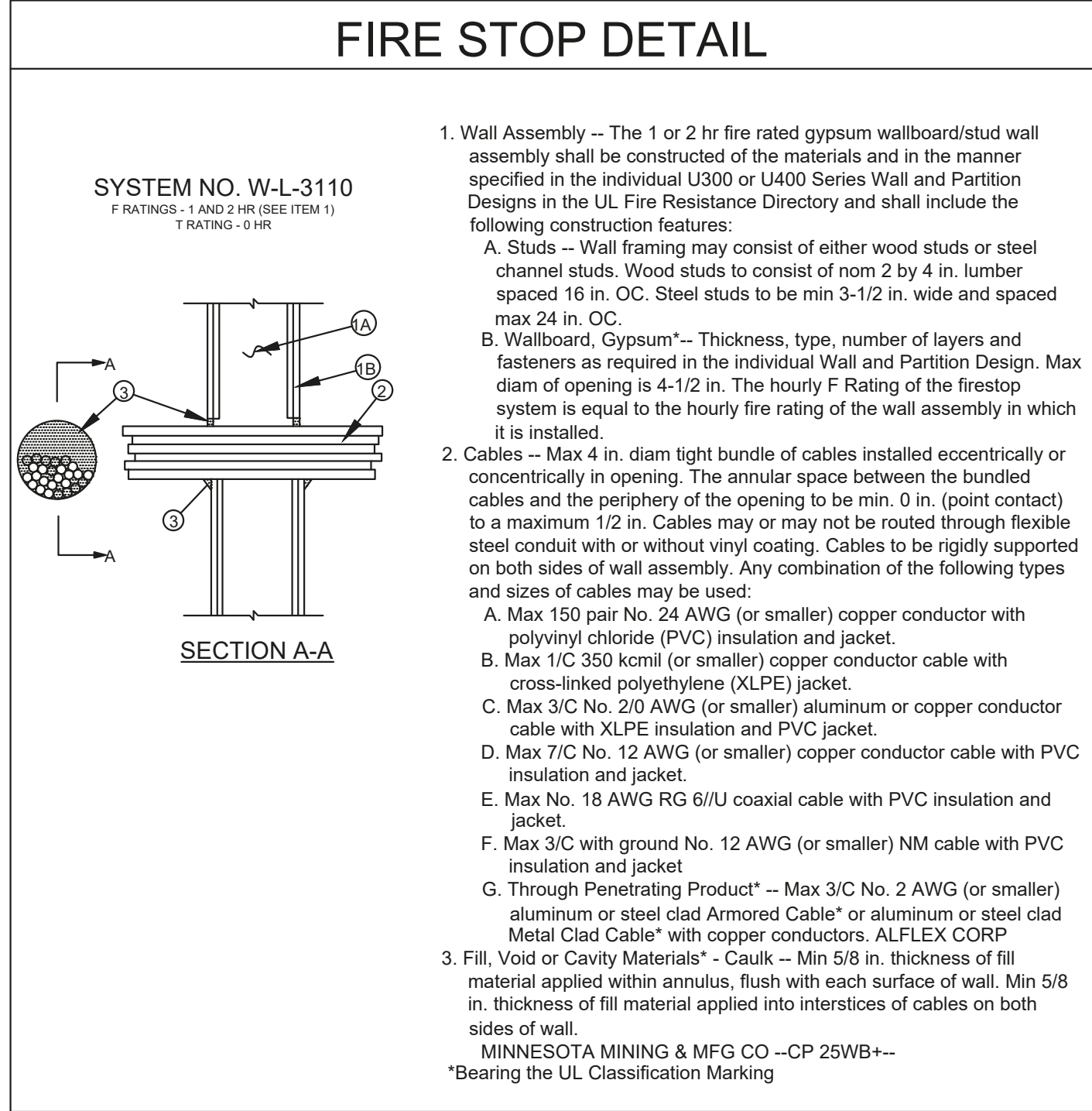
APPLICABLE CODES

DESIGN AND CONSTRUCTION SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL BUILDING CODES AND ORDINANCES TO INCLUDE BUT NOT LIMITED TO THE MOST CURRENT VERSION OF THE FOLLOWING DOCUMENTS:

- 2019 CALIFORNIA BUILDING CODE PART 2 OF TITLE 24
- 2019 CALIFORNIA ELECTRIC CODE PART 3 OF TITLE 24
- 2019 CALIFORNIA MECHANICAL CODE PART 4 OF TITLE 24
- 2019 CALIFORNIA FIRE CODE PART 9 OF TITLE 24
- ACCESSIBILITY REGULATIONS AS PRESCRIBED BY THE 2016 CALIFORNIA BUILDING CODE, CHAPTER 11
- AMERICANS WITH DISABILITIES ACT GUIDELINES, AS AMENDED, 28 CFR PART 36 AND 36, CFR 1911.
- ALL CODES AND ORDINANCES ADOPTED BY THE CITY OF SAN DIEGO.

- FIRE MARSHAL REQUIRED NOTES**
- THE INSTALLATION OF THE FIRE ALARM SYSTEM SHALL COMPLY WITH THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, 2019 EDITION (PARTS 2.3.4 AND 9); CALIFORNIA BUILDING CODE, 2019; CALIFORNIA ELECTRICAL CODE, 2019; CALIFORNIA MECHANICAL CODE, 2019; CALIFORNIA FIRE CODE, 2019 AND NFPA 72, 2016 EDITION, CITY OF SAN DIEGO TECHNICAL BULLETINS.
 - THE INSTALLATION OF ALL FIRE ALARM WIRING AND EQUIPMENT SHALL BE IN ACCORDANCE WITH C.E.C., ARTICLE 760, FIRE PROTECTIVE SIGNALING SYSTEMS.
 - ALL CONDUIT SIZES SHALL BE IN ACCORDANCE WITH C.E.C., CHAPTER 9 TABLES AND EXAMPLES ON CONDUIT FILLS.
 - ALL CONDUITS SHALL BE A MINIMUM OF 3/4" UNLESS OTHERWISE NOTED. CONDUIT FILL NOT TO EXCEED 40% PER N.E.C.
 - 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 CITY OF SAN DIEGO DEPUTY FIRE MARSHAL.
 - ALL CABLE NOT IN CONDUIT SHALL BE PLENUM RATED CABLE WHERE REQUIRED TO BE PLENUM RATED.
 - FIRE ALARM INSTALLER IN CHARGE OF THIS PROJECT MUST BE "STATE CERTIFIED" WITH THE DIVISION OF APPRENTICESHIP STANDARDS, AND SHALL FURNISH ID CARD UPON REQUEST OF THE SAN DIEGO DEPUTY FIRE MARSHAL.
 - THE VOICE INTELLIGIBILITY REQUIREMENTS OF NFPA 72 CHAPTERS 18 AND 24 WILL BE MET.
 - AUDIBLE SOUND LEVEL WILL BE AT LEAST 15 dBA ABOVE AMBIENT PER THE REQUIREMENTS OF NFPA 72 SECTION 18.4.3.1.
 - TOTAL SOUND PRESSURE LEVELS WILL NOT EXCEED 110 dBA PER THE REQUIREMENTS OF NFPA 72 SECTION 18.4.1.2.
 - THE FLASH OF STROBES IN THE SAME FIELD OF VIEW WILL BE SYNCHRONIZED AS REQUIRED IN NFPA 72 SECTION 18.5.4.2.
 - DRAWING STORAGE WILL BE PROVIDED NEXT TO THE REQUIRED WORK TABLE.

FIRE ALARM SYMBOL LIST							
QTY.	SYMBOL	DEVICE DESCRIPTION	MODEL #	Manufacturer	ELEV.	MOUNTING	CSFM LISTING #
EX	[EATC]	FIRE ALARM TERMINAL CABINET	EST3	EDWARDS	+54"		7165-1657-0186
EX	[NAC]	REMOTE BOOSTER POWER SUPPLY, 10A	BPS10A	EDWARDS	+54"		7300-1657-0229
EX	[F]	FIRE ALARM PULL STATION	SIGA-278	EDWARDS	+48"	4Sdeep1gang	7150-1657-0255
EX	[CT2]	DUAL INPUT MODULE	SIGA-CT2	EDWARDS		4Sdeep1gang	7300-1657-0121
EX	[CR]	CONTROL RELAY MODULE	SIGA-CR	EDWARDS		4Sdeep1gang	7300-1657-0121
EX	[SD]	SUPERDUCT DETECTOR	SIGA-SD	EDWARDS			3242-1657-0223
EX	[SD-T]	SUPERDUCT, AIR SAMPLE TUBE, 60 INCH	SD-T60	EDWARDS			
8	[OSD]	INTELLIGENT OPTICAL SMOKE DETECTOR	SIGA-OSD W/SIGA-SB4 BASE	EDWARDS	CLG	4S/3-0	7272-1657-0511/7300-1657-0222
EX	[OSD]	INTELLIGENT OPTICAL SMOKE DETECTOR	SIGA-OSD W/SIGA-SB4 BASE	EDWARDS	CLG	4S/3-0	7272-1657-0511/7300-1657-0222
8	[SPSTWC]	SPEAKER STROBE, CEILING, WHITE	ELSPSTWC	EATON WHEELLOCK	CLG	4Sdeep	7320-0785-0505
X	[SPSTWC]	SPEAKER STROBE, CEILING, WHITE	ELSPSTWC	EATON WHEELLOCK	CLG	4Sdeep	7320-0785-0505
1	[SPKWC]	SPEAKER, CEILING, WHITE	ELSPKWC	EATON WHEELLOCK	CLG	4Sdeep	7320-0785-0505
EX	[DH]	DOOR HOLDER		EXISTING BY OTHERS			



MONITORING CONTACT INFORMATION

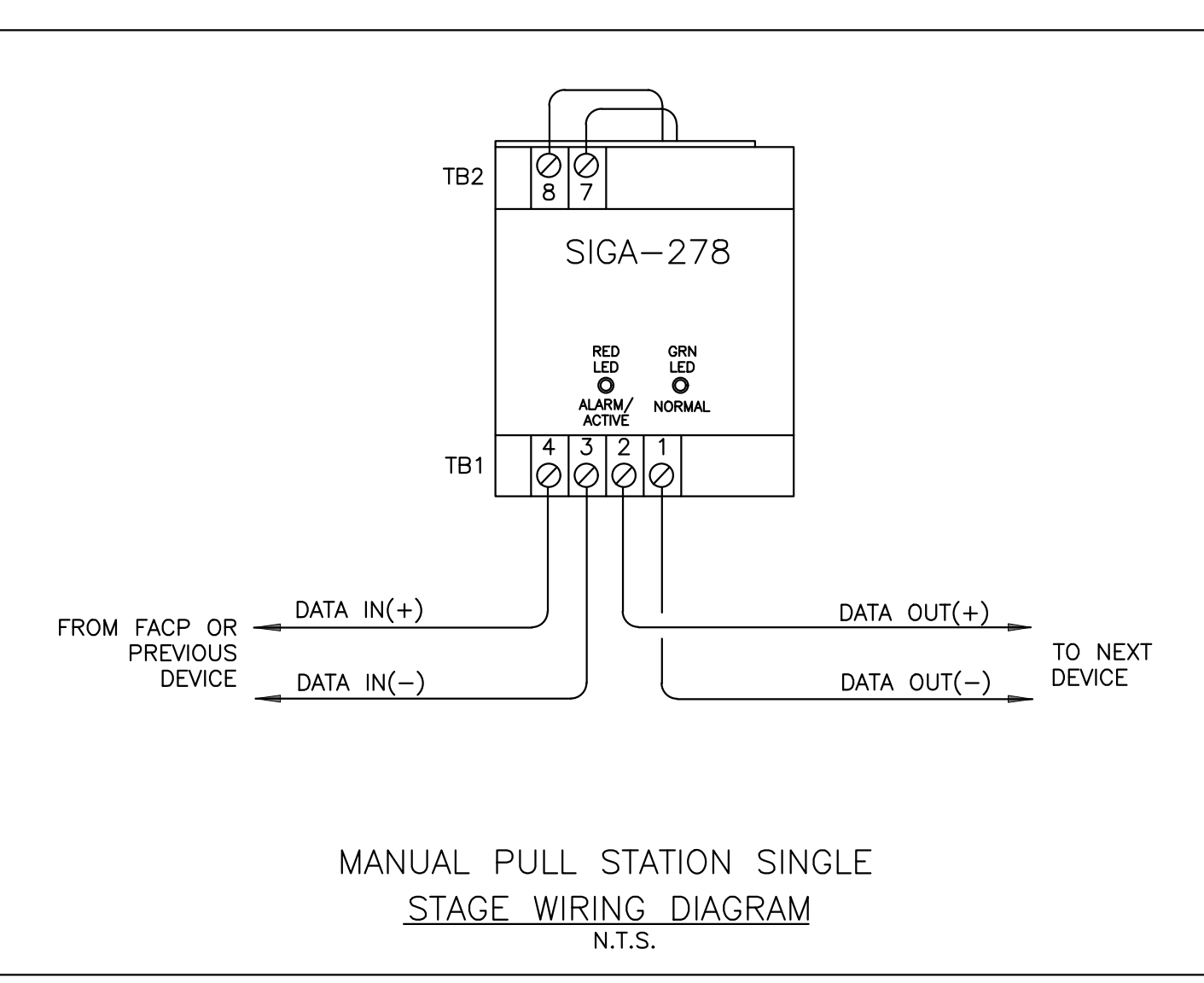
ALARM SERVICE COMPANY AND SERVICE CENTER : (257057-001)
GENERAL MONITORING SERVICES, INC
DBA-GENERAL MONITORING SERVICES
17951 LIONS CIRCLE
HUNTINGTON BEACH, CA 92647
1-800-634-3915
FILE-VOL. NO. CCN
S8126-1 UUFX
LISTING CATEGORY
(SIGNAL AND FIRE ALARM EQUIPMENT AND SERVICES)
(PROTECTIVE SIGNALING SERVICES) CENTRAL STATION
NOTE:
THE BUILDING OWNER HAS THE OPTION TO CONTRACT A MONITORING COMPANY OF THEIR CHOICE. IF THE OWNER TO CHOOSES TO CONTRACT A DIFFERENT MONITORING COMPANY, PLANS PERMITS AND SPECIAL DIALERS SHALL BE PROVIDED BY THAT MONITORING COMPANY.

- Wall Assembly -- The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual US30 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs -- Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. O.C. Steel studs to be min 3-1/2 in. wide and spaced max 24 in. O.C.
 - Wallboard, Gypsum -- Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max diam of opening is 4-1/2 in. The hourly F-Rating of the freestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
- Cables -- Max 4 in. diam light bundle of cables installed eccentrically or concentrically in opening. The annular space between the bundled cables and the periphery of the opening to be min. 0 in. (point contact) to a maximum 1/2 in. Cables may or may not be routed through flexible steel conduit with or without vinyl coating. Cables to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of cables may be used:
 - Max 1/0 pair No. 24 AWG (or smaller) copper conductor with polyvinyl chloride (PVC) insulation and jacket.
 - Max 1/0 350 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) jacket.
 - Max 3/0 No. 2/0 AWG (or smaller) aluminum or copper conductor cable with XLPE insulation and PVC jacket.
 - Max 7/0 No. 12 AWG (or smaller) copper conductor cable with PVC insulation and jacket.
 - Max No. 18 AWG RG 6/U coaxial cable with PVC insulation and jacket.
 - Max 3/0 with ground No. 12 AWG (or smaller) NM cable with PVC insulation and jacket.
 - Through Penetrating Product -- Max 3/0 No. 2 AWG (or smaller) aluminum or steel clad Armored Cable* or aluminum or steel clad Metal Clad Cable* with copper conductors. ALFLEX CORP
- Fill, Void or Cavity Materials -- Gault -- Min 5/8 in. thickness of fill material applied within annulus, flush with each surface of wall. Min 5/8 in. thickness of fill material applied into interstices of cables on both sides of wall.
MINNESOTA MINING & MFG CO -- CP 25WB --
*Bearing the UL Classification Marking

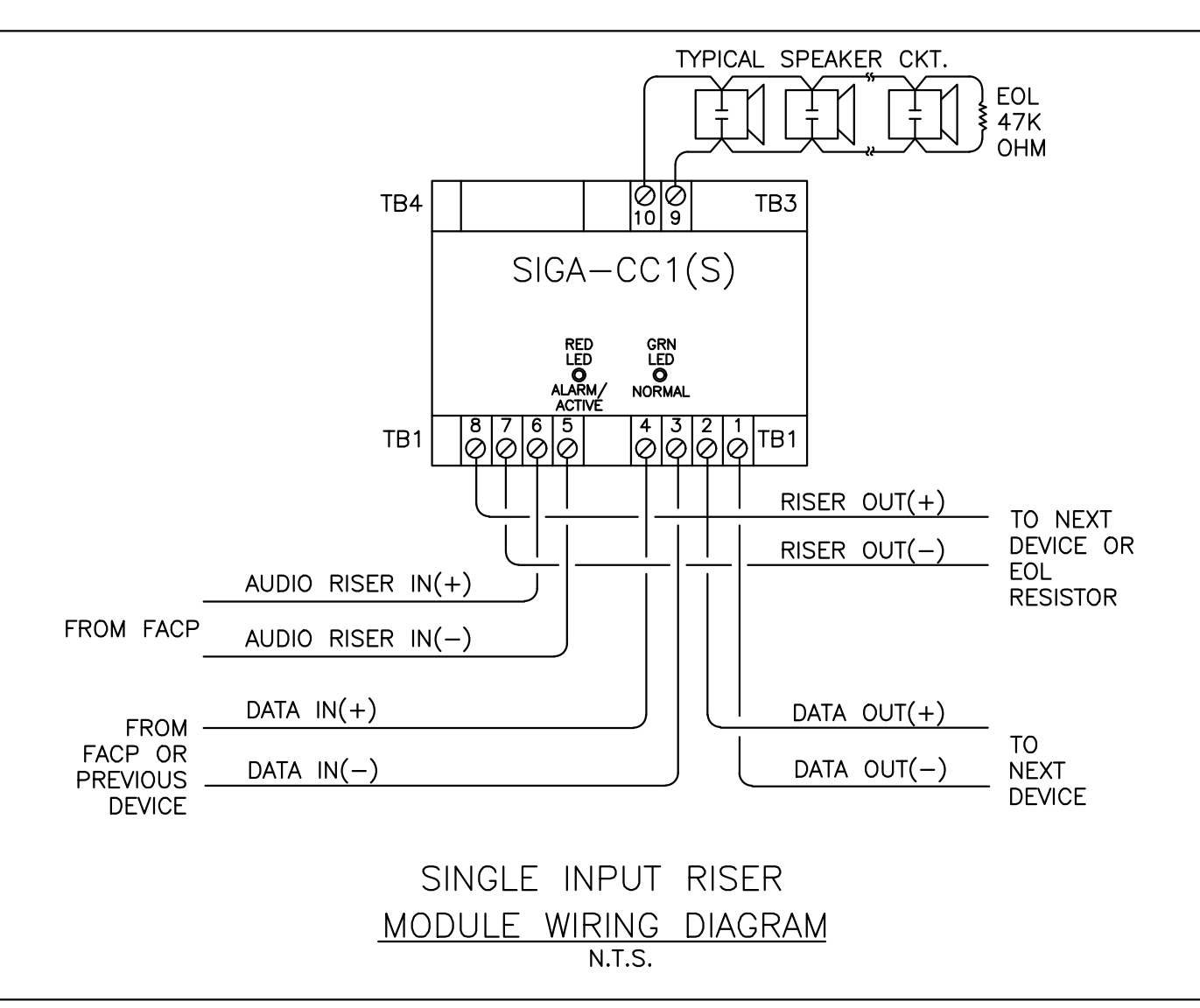
FIRE ALARM SYSTEM OUTPUTS

		CONTROL UNIT ANNUNCIATION		TRANSMISSION TO SUPERVISING STATION			NOTIFICATION										REQUIRED FIRE SAFETY FUNCTION							SUPPLEMENTARY						
																	ELEVATOR CONTROL			MECHANICAL			DOOR CONTROL				STAIR PRESSURIZATION			
																	ACTIVATE COMMON ALARM AUDIBLE AND VISUAL INDICATORS AT FIRE ALARM CONTROL UNIT(S)	ACTIVATE COMMON SUPERVISORY AUDIBLE AND VISUAL INDICATORS AT CONTROL UNIT(S)	ACTIVATE COMMON TROUBLE AUDIBLE AND VISUAL INDICATORS AT CONTROL UNIT(S)	ANNUNCIATE CHANGE OF STATUS ON CONTROL UNIT LCD DISPLAY	ACTIVATE APPROPRIATE EVENT AND LOCATION INDICATORS ON ZONING ANNUNCIATOR PANEL	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	ACTIVATE EVACUATION VOICE MESSAGE ON FLOOR OF INCIDENT, FLOOR ABOVE AND FLOOR BELOW	ACTIVATE VISUAL EVACUATION SIGNALS ON FLOOR OF INCIDENT, FLOOR ABOVE AND FLOOR BELOW	ACTIVATE EVACUATION VOICE MESSAGE AND VISUAL EVACUATION SIGNALS FOR ENTIRE BUILDING	ACTIVATE EXTERIOR WATERFLOW BELL	RECALL ELEVATOR TO PRIMARY DESIGNATED LANDING	RECALL ELEVATOR TO ALTERNATE DESIGNATED LANDING
FIRE ALARM SYSTEM INPUTS	ALARM INITIATING DEVICES	FIRE ALARM	MANUAL PULL STATION *	YES			YES	YES	YES									YES	YES	YES	YES	YES	YES	YES			MANUAL PULL STATION			
			SPRINKLER WATERFLOW *	YES			YES	YES	YES				YES							YES	YES	YES	YES	YES	YES			SPRINKLER WATERFLOW		
			AREA SMOKE DETECTOR *	YES			YES	YES	YES				YES	YES						YES	YES	YES	YES	YES	YES	YES			AREA SMOKE DETECTOR	
			AREA HEAT DETECTOR *	YES			YES	YES	YES				YES	YES						YES	YES	YES	YES	YES	YES	YES			AREA HEAT DETECTOR	
		ELEVATORS	ELEVATOR LOBBY SMOKE DETECTOR - PRIMARY DESIGNATED LANDING *	YES			YES	YES	YES				YES	YES			YES					YES	YES	YES	YES	YES			ELEVATOR LOBBY SMOKE DETECTOR - DESIGNATED LANDING	
			ELEVATOR LOBBY SMOKE DETECTOR - ALL OTHER LEVELS *	YES			YES	YES	YES				YES	YES								YES	YES	YES	YES	YES	YES			ELEVATOR LOBBY SMOKE DETECTOR - ALL OTHER LEVELS
			ELEVATOR MACHINE ROOM SMOKE *	YES			YES	YES	YES				YES	YES		YES						YES	YES	YES	YES	YES	YES			ELEVATOR MACHINE ROOM SMOKE
			ELEVATOR TOP OF SHAFT SMOKE DETECTOR *	YES			YES	YES	YES				YES	YES			YES					YES	YES	YES	YES	YES	YES			ELEVATOR TOP OF SHAFT SMOKE DETECTOR
			ELEVATOR MACHINE ROOM HEAT *	YES			YES	YES	YES				YES	YES				YES	YES	YES	YES	YES	YES	YES	YES	YES	YES			ELEVATOR MACHINE ROOM HEAT
			ELEVATOR TOP OF SHAFT HEAT *	YES			YES	YES	YES				YES	YES				YES	YES	YES	YES	YES	YES	YES	YES	YES	YES			ELEVATOR TOP OF SHAFT HEAT
	SUPERVISORY INITIATING DEVICES	SUPERVISORY	DUCT MOUNTED SMOKE DETECTOR - SUPPLY FAN		YES		YES	YES		YES																			DUCT MOUNTED SMOKE DETECTOR - SUPPLY FAN	
			DUCT MOUNTED SMOKE DETECTOR - SMOKE FIRE DAMPER *		YES		YES	YES		YES																				DUCT MOUNTED SMOKE DETECTOR - SMOKE FIRE DAMPER
			SPRINKLER / STANDPIPE CONTROL VALVE *		YES		YES	YES		YES																				SPRINKLER / STANDPIPE CONTROL VALVE
		SMOKE CONTROL	CARBON MONOXIDE DETECTOR *		YES		YES				YES																			CARBON MONOXIDE DETECTOR
			120VAC SHUNT TRIP CONTROL CIRCUIT *		YES		YES				YES																			120VAC SHUNT TRIP CONTROL CIRCUIT
			STAIR PRESSURIZATION FAN - POWER FAILURE *		YES		YES				YES																			STAIR PRESSURIZATION FAN - POWER FAILURE
	TROUBLE CONDITIONS	TROUBLE CONDITIONS	SYSTEM WIRING OPEN (SLC, NAC, IDC, NETWORK) *			YES	YES					YES																	SLC LOOP OPEN	
			SYSTEM WIRING SHORT (SLC, NAC, IDC, NETWORK) *			YES	YES						YES																	SLC LOOP SHORT
			SYSTEM WIRING GROUND (SLC, NAC, IDC, NETWORK)			YES	YES						YES																	SLC LOOP EARTH GROUND
			FIRE CONTROL UNIT FAULT (AC FAIL / LOW BATTERY / GROUND FAULT)			YES	YES						YES																	FACP LOW BATTERY
FIRE CONTROL UNIT COMPONENT FAILURE					YES	YES						YES																	FACP AC FAIL	
BOOSTER PANEL TROUBLE (AC FAIL / LOW BATTERY / GROUND FAULT)					YES	YES						YES																	BOOSTER PANEL TROUBLE (AC FAIL / LOW BATTERY)	

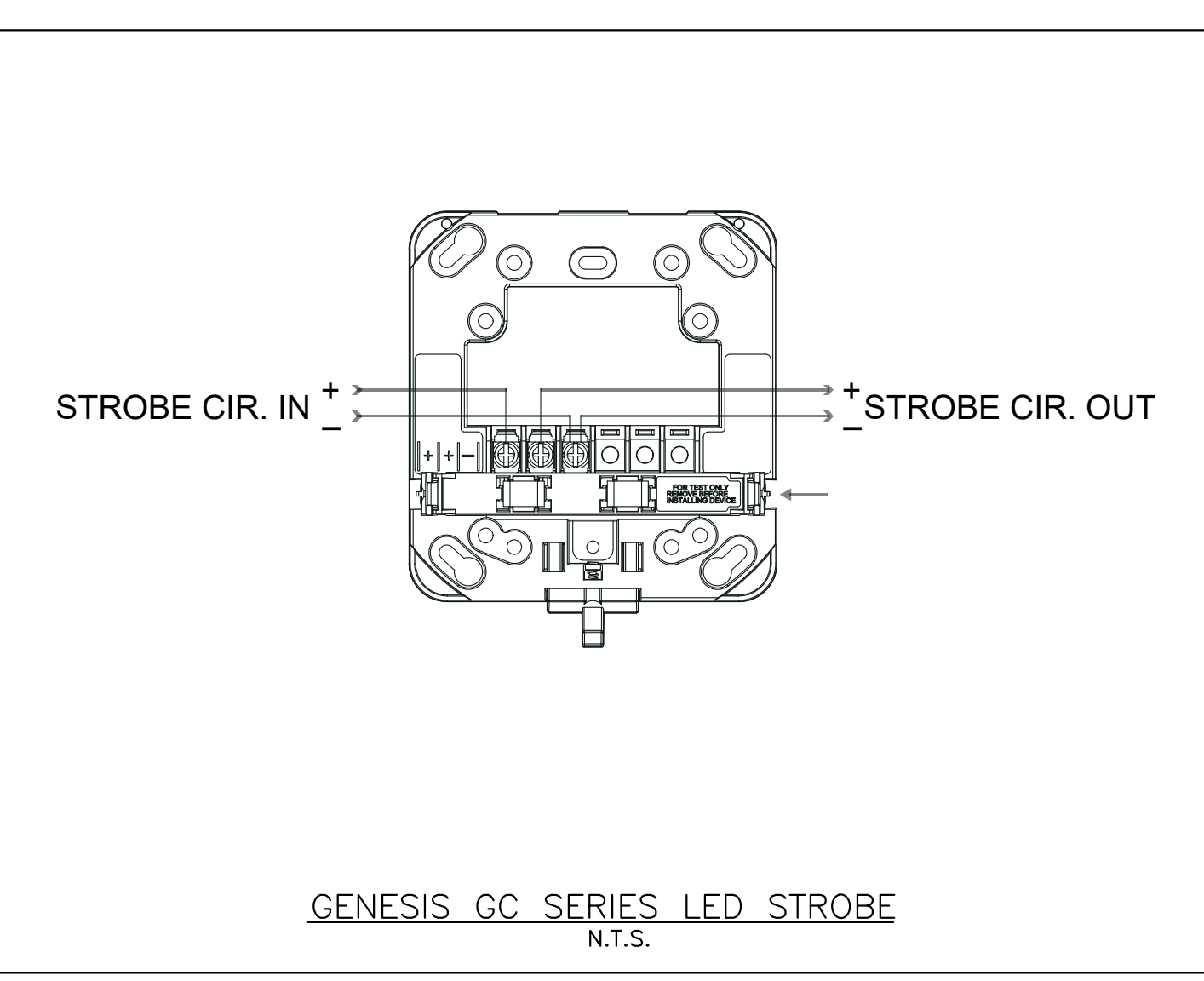
NOTES:
 * Existing to remain, not in current project scope



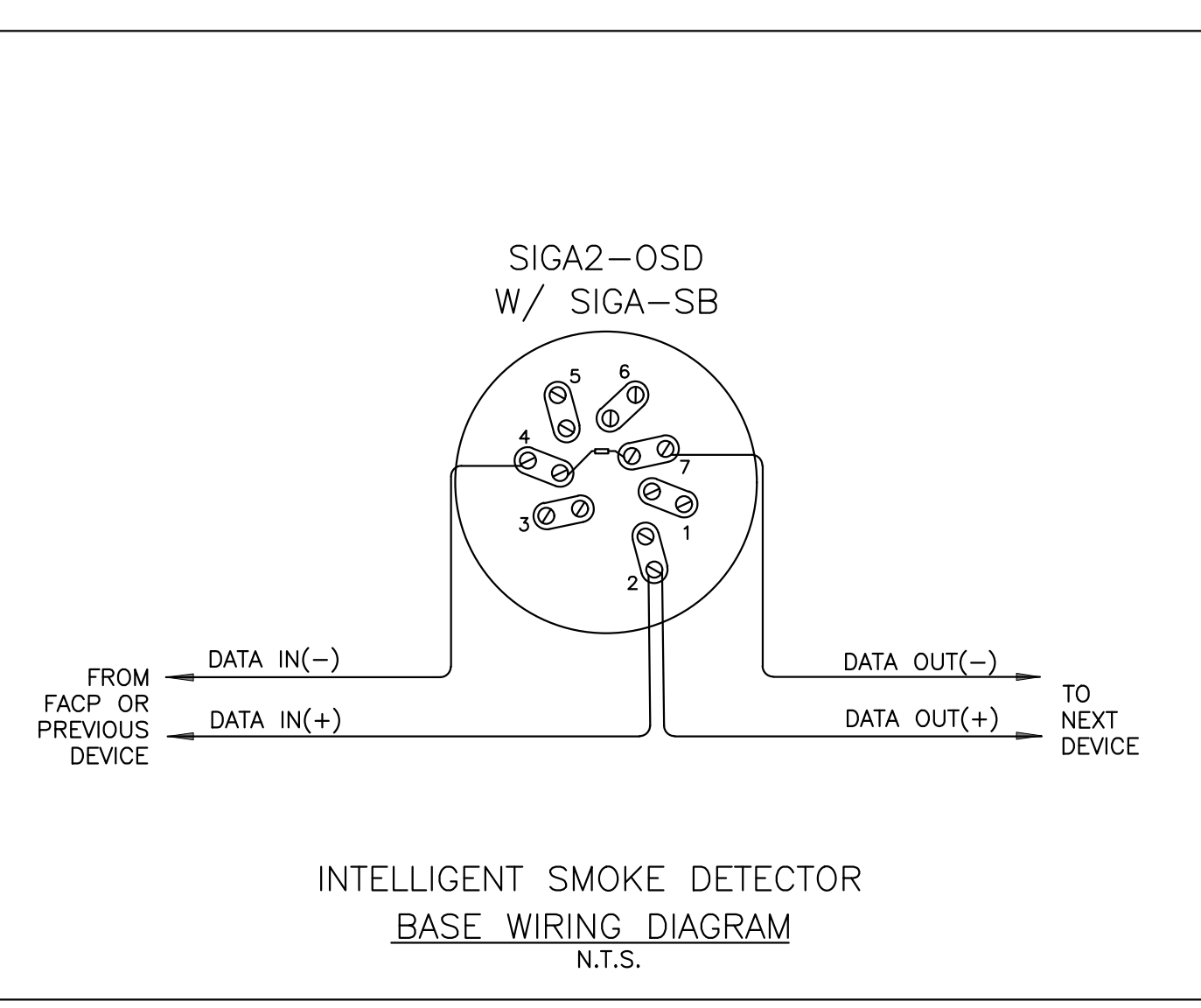
MANUAL PULL STATION SINGLE STAGE WIRING DIAGRAM N.T.S.



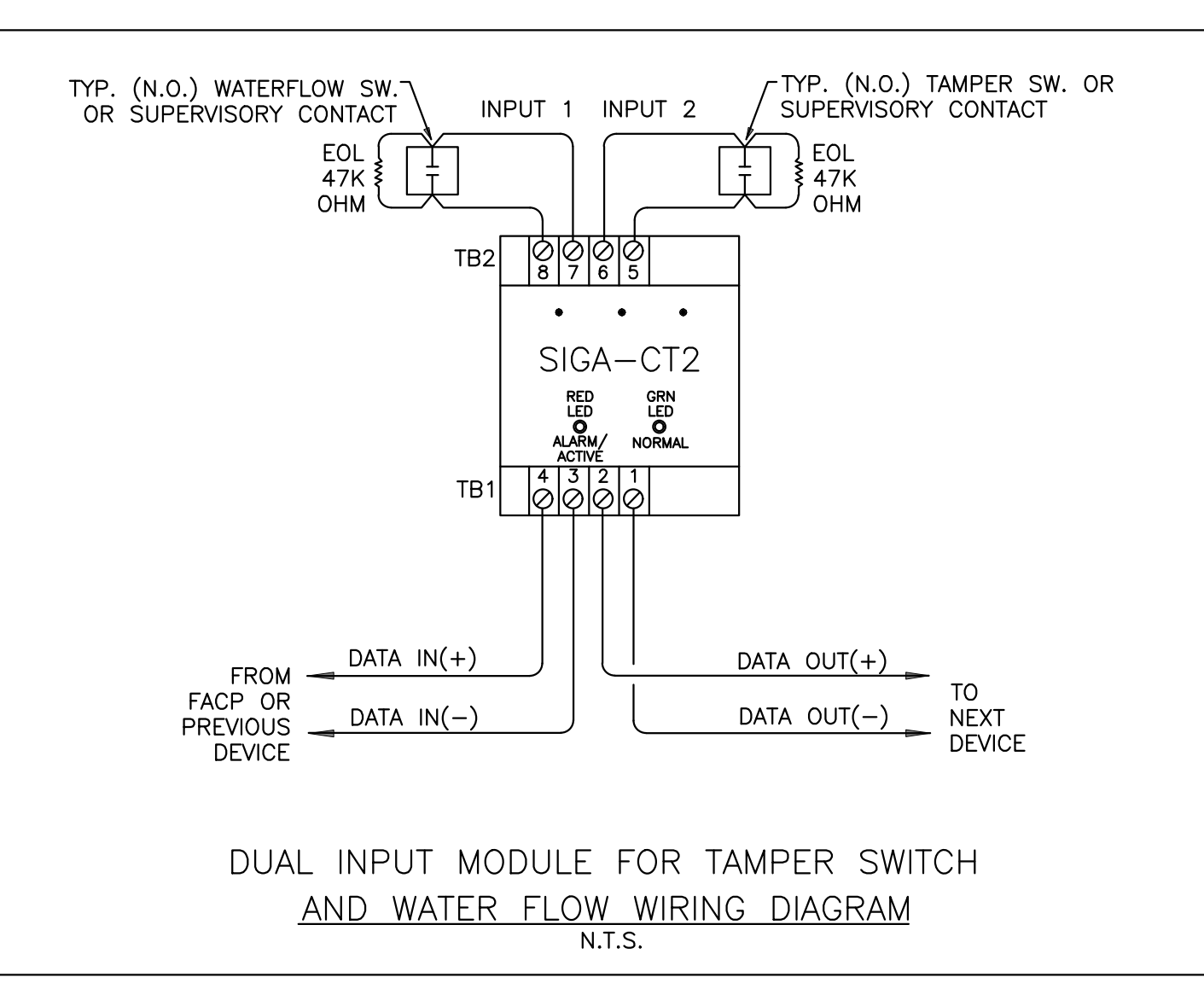
SINGLE INPUT RISER MODULE WIRING DIAGRAM N.T.S.



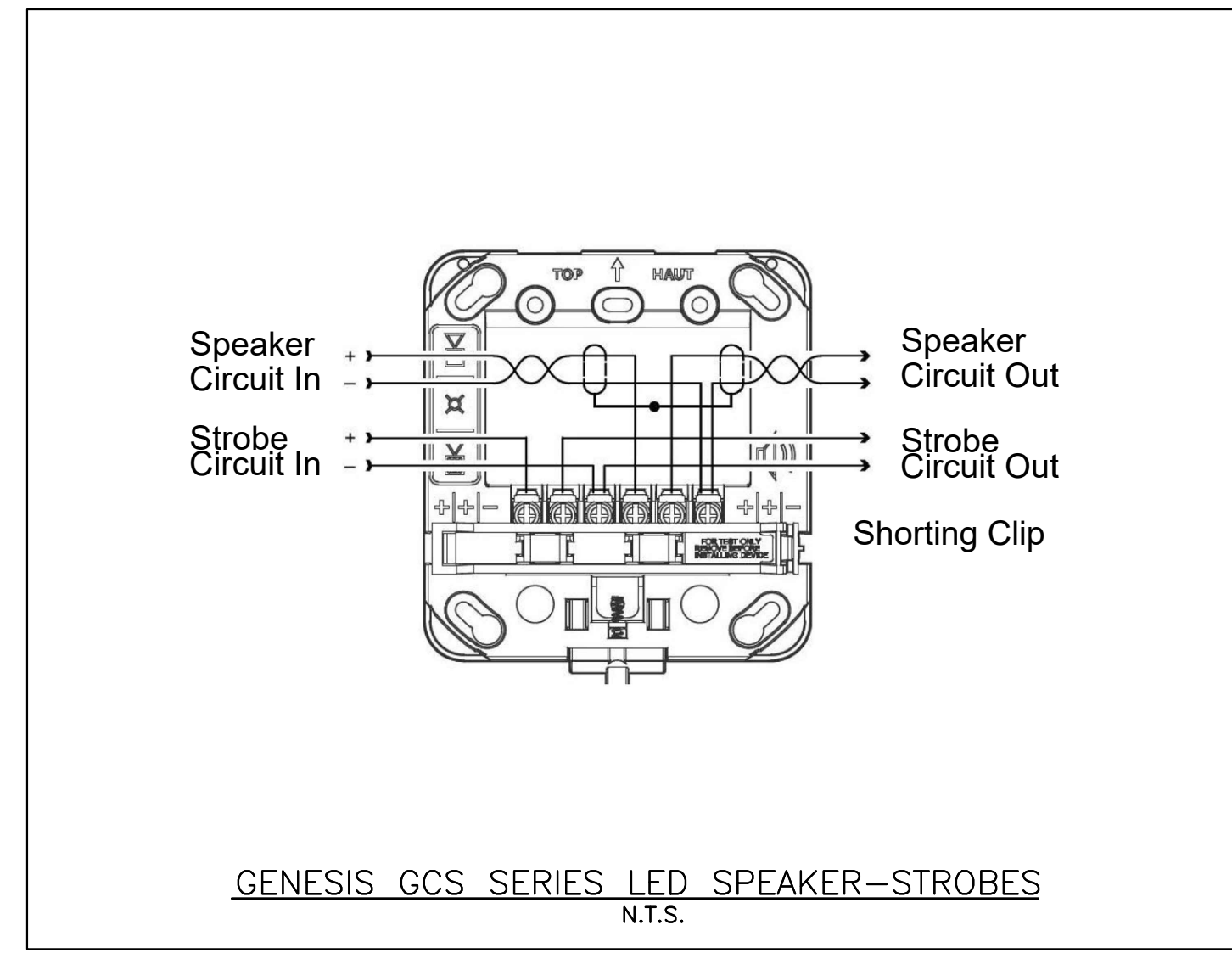
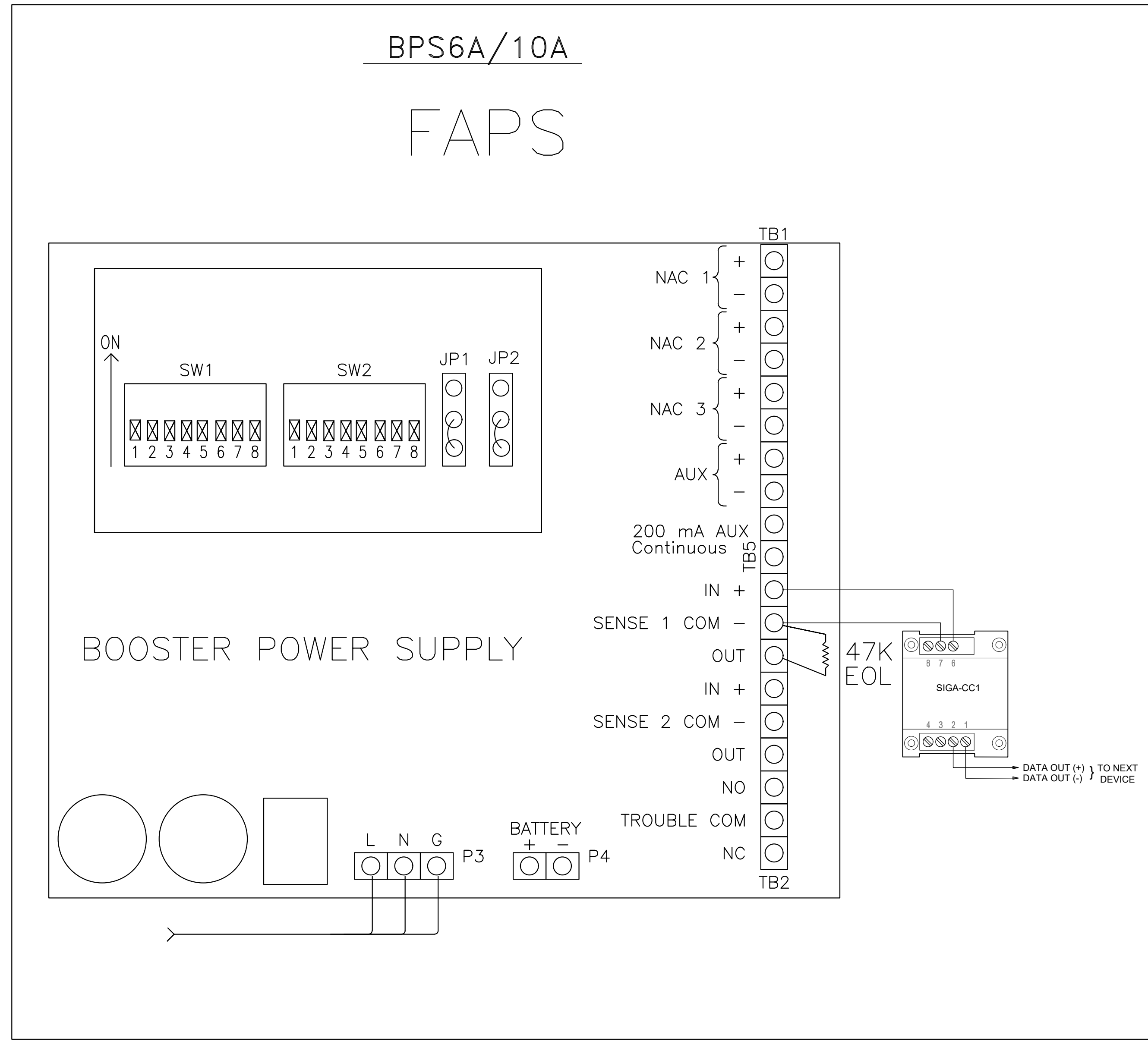
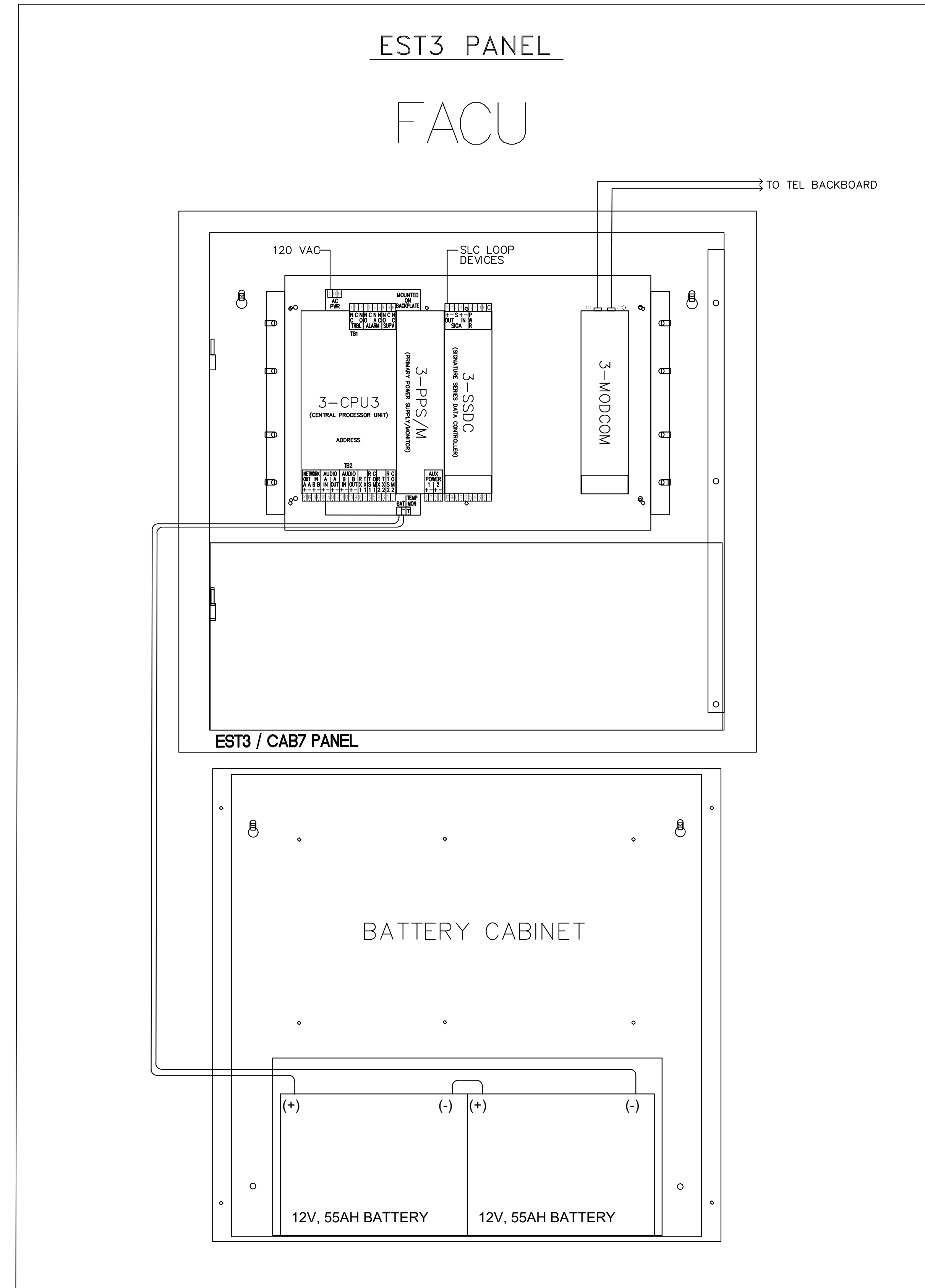
GENESIS GC SERIES LED STROBE N.T.S.



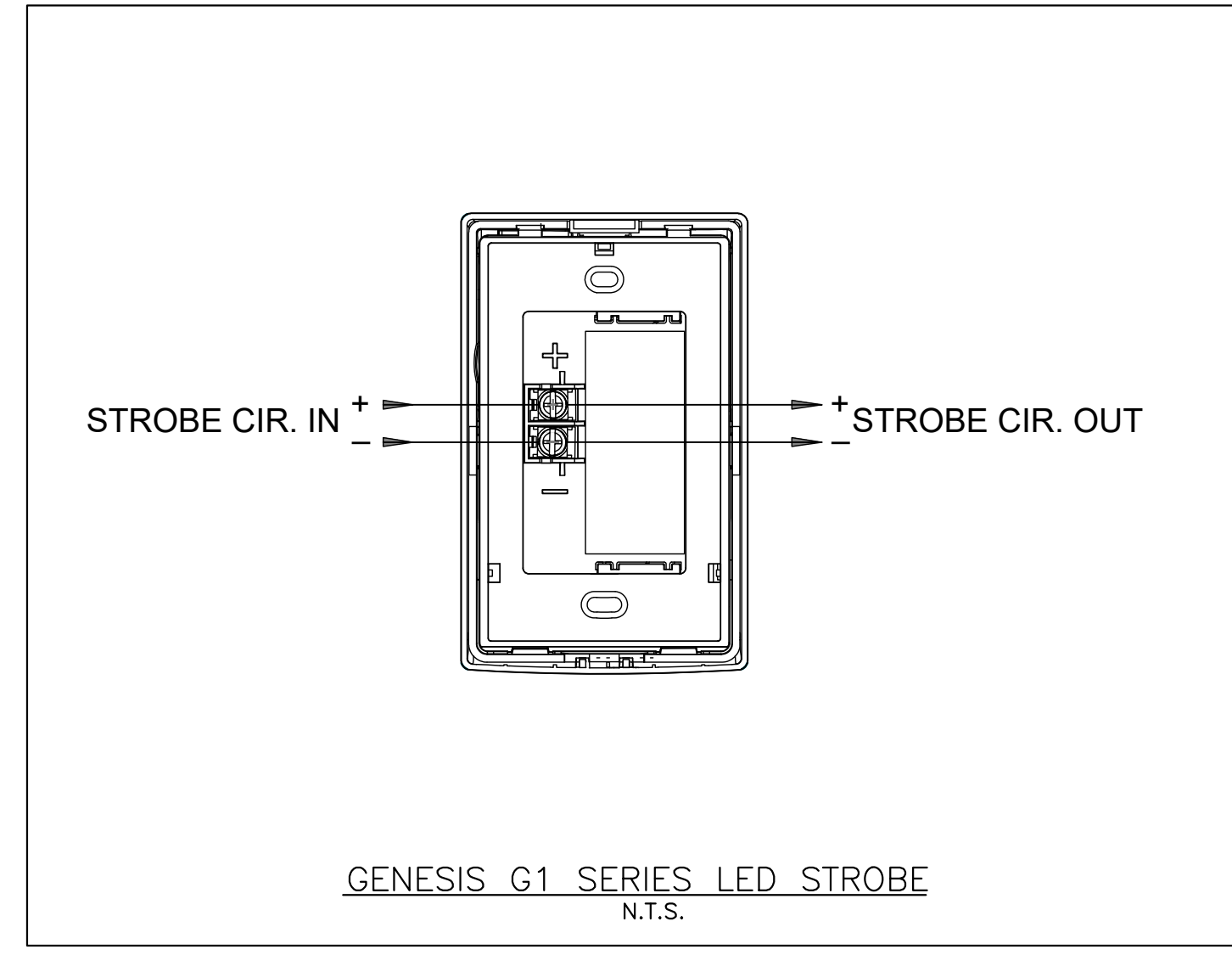
INTELLIGENT SMOKE DETECTOR BASE WIRING DIAGRAM N.T.S.



DUAL INPUT MODULE FOR TAMPER SWITCH AND WATER FLOW WIRING DIAGRAM N.T.S.



GENESIS GCS SERIES LED SPEAKER-STROBES N.T.S.



GENESIS G1 SERIES LED STROBE N.T.S.

Project: 550 WEST CORR Job # 4221320/4221321

FACP CALCULATION (EX EST)

ALL EXISTING/ADDED COMPONENTS Device or Control	Standby Current in mA			Alarm Current in mA		
	Qty.	Current	Total	Qty.	Current	Total
3-CPU3 (Central Processor Unit)	1	155.000	155.000	1	185.000	185.000
3-LCD (Liquid Crystal Display for 3-CPU3)	1	40.000	40.000	1	42.000	42.000
3-SD2C1 (Dual Signature Drive Ctr) / NOTE 1	2	204.000	408.000	2	238.000	476.000
3-RS485B (Network/Audio Circuit)	1	98.000	98.000	1	98.000	98.000
3-RS232 (Communication Card)	1	58.000	58.000	1	58.000	58.000
3-PPS1M (Primary Power Supply)	INCLUDED					
3-MC2000M (Modem Communication)	1	60.000	60.000	1	95.000	95.000
3-ASLU4 (Audio Source Unit)	1	80.000	80.000	1	80.000	80.000
3-ZAGA (40 Watt Zone Audio Amp)	5	62.000	310.000	5	2480.000	12400.000
3-1251GY (12 Switches, 1 Green, 1 Yellow)	1	2.000	2.000	1	30.000	30.000
Standby Total			1331.000			Alarm Total 13646.000
Standby:	1331 mA X	24 hrs. =	31.94 A			
Alarm:	13646 mA X	0.25 hrs. =	3.41 A			
Sub Total:			35.36 A			
Surplus:	20%		7.07 A			
Total Requirement:			42.43 Ah			
Battery Supplied:	2ea.	12V SEALED LEAD ACID	65 Ah			
Spare:		BATTERIES WIRED IN SERIES	34.73%			
		MAX CHARGING CAPACITY - 65 Ah				

NOTE 1 - Current Shown For a Fully Loaded Loop

Point to Point Method

Project Name: 550 West Corridor 14th Fl
Date: 14/09/2022

CIRCUIT IS WITHIN LIMITS
AMPS ARE WITHIN LIMITS

Notes: Wire resistance is doubled in the calculations for two wires (Positive and Negative). The voltage calculated to the last device must not be lower than the manufactures listed minimum operating voltage (ie. rated operating voltage 16-33 VDC).

Area Covered	Current	Distance	Drop
Corridor	20.40	0.176	370
End of Line Voltage	16.00		20.28
Minimum Device Voltage	16.88		
Minimum Circuit Voltage		Percent Drop	0.62%

Standard Wire Resistance in Ohms per 1000 feet:
18-14 Awg = Solid Conductors 12-10 Awg = Stranded Conductors

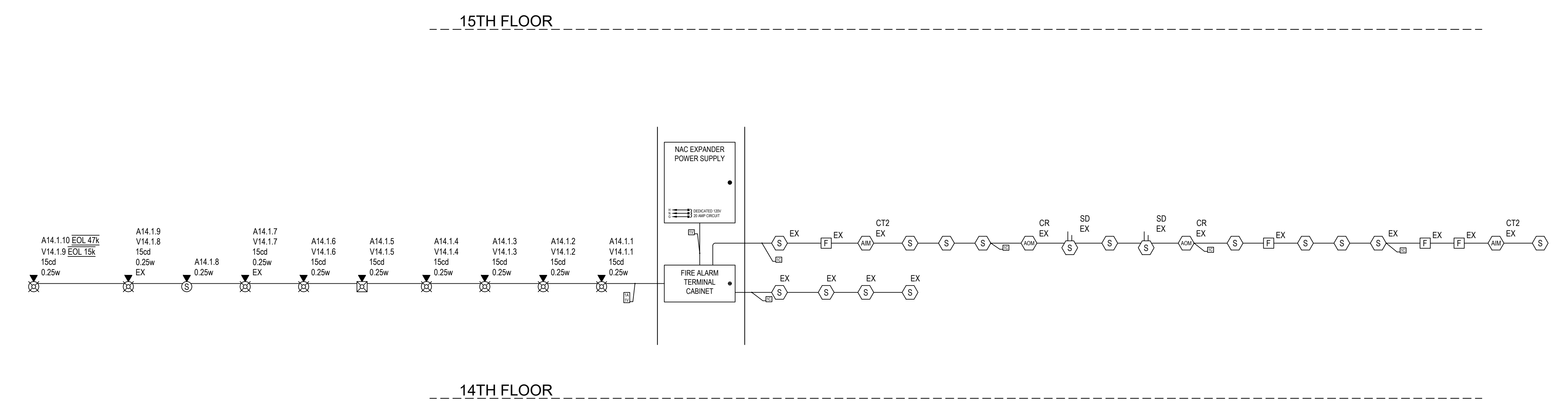
Device	Device Number	Device Current	Device Voltage	Device Manufacturer	EST	Device Manufacturer	EST
Device 1	0.022	55	20.36	0.038	0.19%	ELSPSTWC (15)	15
Device 2	0.022	25	20.35	0.054	0.26%	ELSPSTWC (15)	15
Device 3	0.022	40	20.33	0.074	0.37%	ELSPSTWC (15)	15
Device 4	0.022	40	20.31	0.092	0.45%	ELSPSTWC (15)	15
Device 5	0.022	25	20.30	0.101	0.49%	ELSPSTWC (15)	15
Device 6	0.022	40	20.29	0.111	0.54%	ELSPSTWC (15)	15
Ex Device	0.022	85	20.28	0.115	0.57%	ELSPSTWC (15)	15
Ex Device	0.022	85	20.28	0.123	0.60%	ELSPSTWC (15)	15
Device 9	0.000	35	20.28	0.123	0.60%	Not Used	0
Totals	0.176	370	End of Line Voltage	20.28	0.62%	Spare	Enter % Returned Here >>

Project: 550 West Corridor 14th Fl Job Number: 4221846

FAPS-V14 CALCULATION (EX BPS10A) ON 14th Floor

Device or Control	Standby Current in mA			Alarm Current in mA		
	Qty.	Current	Total	Qty.	Current	Total
EX BPS10A (Booster Power Supply)	1	70.000	70.000	1	270.000	270.000
V14.1	1	0.000	0.000	1	176.000	176.000
V14.2	1	0.000	0.000	1	0.000	0.000
V14.3	1	0.000	0.000	1	0.000	0.000
V14.4	1	0.000	0.000	1	0.000	0.000
Standby Total			70.000			Alarm total 446.000
Standby:	70 mA X	24 hrs. =	1.68 Ah			
Alarm:	446 mA X	0.25 hrs. =	0.11 Ah			
Sub Total:			1.79 Ah			
Surplus:	20%		0.36 Ah			
Total Requirement:			2.15 Ah			
Battery Supplied:	2ea.	12V SEALED LEAD ACID	7 Ah			
Spare:		BATTERIES WIRED IN SERIES	69.29%			
		MAX CHARGING CAPACITY - 24 Ah				

1 CALCULATIONS



2 RISER DIAGRAM

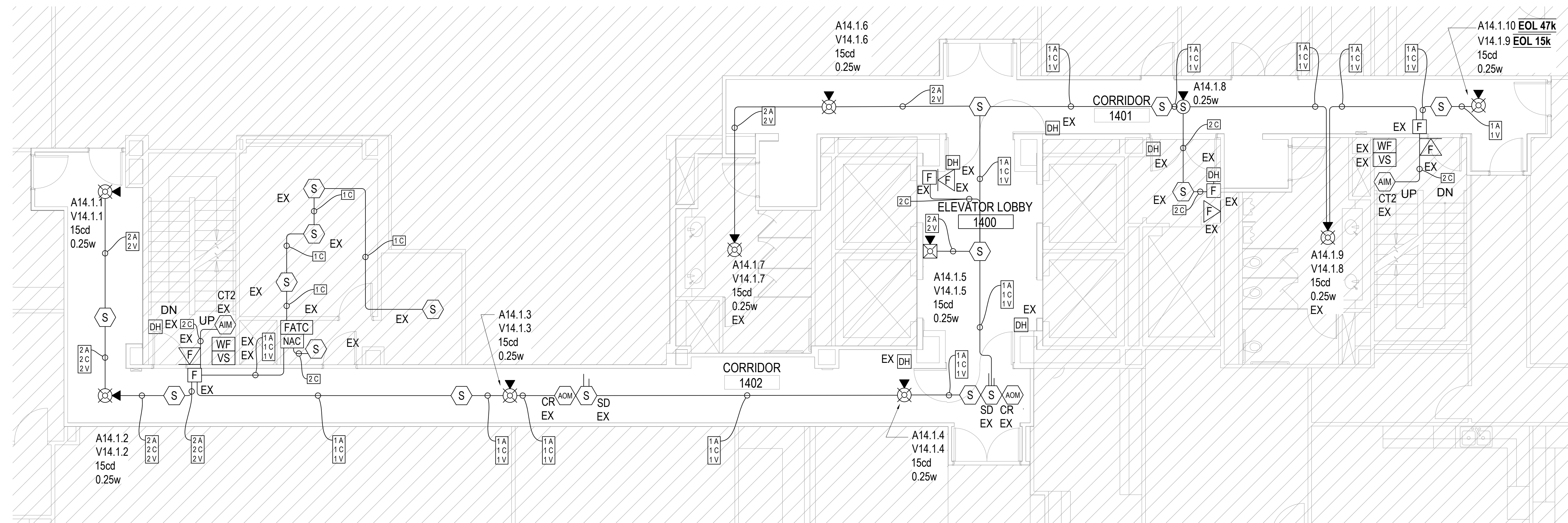
SYMBOL LIST

SYMBOL	DESCRIPTION
[FATC]	EST 3 MODULAR CONTROL PANEL
[NAC]	REMOTE BOOSTER POWER SUPPLY, 10A
[F]	FIRE ALARM PULL STATION
[CT2]	DUAL INPUT MODULE
[CR]	CONTROL RELAY MODULE
[SD]	SUPERDUCT DETECTOR
[OSD]	INTELLIGENT OPTICAL SMOKE DETECTOR
[S]	SPEAKER STROBE, CEILING, WHITE
[S]	SPEAKER, CEILING, WHITE
[DH]	DOOR HOLDER
[V]	FIRE PHONE JACK

NOTE: #CD = Cardella setting

FA CABLE LEGEND

LABEL	AWG	DESCRIPTION
V	12	STROBE CIRCUIT (NAC)
C	16	SIGNAL LINE CIRCUIT (SLC)
A	14	SPEAKER CIRCUIT (AUDIO)



1 FIRE ALARM PLAN - LEVEL 14

