

Douglas Station

19 NE Sycamore Street
Lee's Summit, MO 64064

Addressable Fire Alarm System



General Fire Alarm Notes:

- 1. All smoke detectors shall be located a minimum of three (3) feet from any HVAC diffuser.
- 2. Operable part of manual pull stations shall not be located less than 42 inches or more than 48 inches above the finished floor.
- 3. Wall mount strobes and horn/strobes shall be located so the bottom of the device is not less than 80 inches above the finished floor and not greater the 96 inches above the finished floor.
- 4. Wall wall mount notification devices shall be located not less than 6 inches below the finished ceiling.
- 5. Ceiling mount visible notification devices shall be mounted no higher than 30 feet above finished floor. If ceiling heights exceeds 30 feet, device must be suspended at or below 30 feet above finished floor.
- 6. Candela rating of strobes and horn/strobes shall be shown on the drawings.
- 7. Location of notification devices shall be a uniform height for all notification devices.
- 8. Cables, conduits and wire mold shall be securely fastened to the structure.
- 9. Fire alarm devices are to be installed in accordance with; IFC 2018, NFPA72 2016, ADA and manufacture requirements.
- 10. Smoke detectors shall be located on the ceiling not less than 4 inches form a sidewall to the nearest edge of the detector.
- 11. Drawings indicate general fire alarm device locations. Field verify device locations with minimal deviations and document any changes.
- 12. FACP Panel shall be on a dedicated 120V circuit with 20amp circuit breaker marked red with lock-on position.
- 13. All fire alarm wiring shall be installed in accordance with NFPA 70 (NEC).
- 14. Fire Alarm wire paths are reserved for fire alarm cabling only
- 15. Integration of future visible notification devices for office spaces, per 2010 ADA Standards for Accessible Design 215.3, capable by accessing fire alarm cabling above drop ceiling.

General Project Information:
Project Name: Douglas Station
Project Address: Lee's Summit, MO 64086
Project Description: Multi-family development with two buidling types (one has integrated clubhouse) and detached garages.

Applicable Building Codes:
2018 International Building Code
2018 International Fire Code
2017 National Electrical Code
2018 International Mechanical Code
2018 International Fire Code
2018 Fuel Gas Code

BUILDING TYPE A
DESCRIPTION:
3 Story Multi-Family Residential
CLASSIFICATION SUMMARY:
Occupancy Type: R-2
Construction Type: V-A
Automatic Sprinkler System: Building is Fully Sprinkled, NFPA ESFR 13 System
BUILDING HEIGHT AND NUMBER OF STORIES:
Allowable Height Above Grade Plane (R-2): 60'
Actual Height Above Grade Plane: 42'
Allowable Stories Above Grade Plane: 4 Stories
Actual Stories Above Grade Plane: 3 Stories
Basement: No

BUILDING TYPE C
DESCRIPTION:
3 Story Multi-Family Residential
CLASSIFICATION SUMMARY:
Occupancy Type: R-2
Construction Type: V-A
Automatic Sprinkler System: Building is Fully Sprinkled, NFPA ESFR 13 System
BUILDING HEIGHT AND NUMBER OF STORIES:
Allowable Height Above Grade Plane (R-2): 60'
Actual Height Above Grade Plane: 42'
Allowable Stories Above Grade Plane: 4 Stories
Actual Stories Above Grade Plane: 3 Stories
Basement: No

BUILDING 5
DESCRIPTION:
3 Story Multi-Family Residential
CLASSIFICATION SUMMARY:
Occupancy Type: R-2 & A-3
Construction Type: V-A
Automatic Sprinkler System: Building is Fully Sprinkled, NFPA ESFR 13 System
BUILDING HEIGHT AND NUMBER OF STORIES:
Allowable Height Above Grade Plane (R-2): 60'
Actual Height Above Grade Plane: 42'
Allowable Stories Above Grade Plane: 4 Stories
Actual Stories Above Grade Plane: 3 Stories
Basement: No



Michael A Panethiere, Ph.D., P.E.

M&S Electric
3026 SW East US 40 Hwy
Blue Springs, MO 64015

REVISION 1:

REVISION 2:

REVISION 3:

Drawing2

Fire Alarm Site Plan

DESIGNED BY:
AR

DATE:
12/20/24

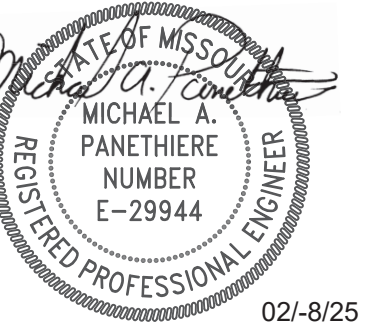
JOB NUMBER:
407

SHEET NUMBER:
2 of 10



Fire Alarm Site Plan

Scale: 1/32" = 1'



02/8/25
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REVISION 1:

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Drawing2

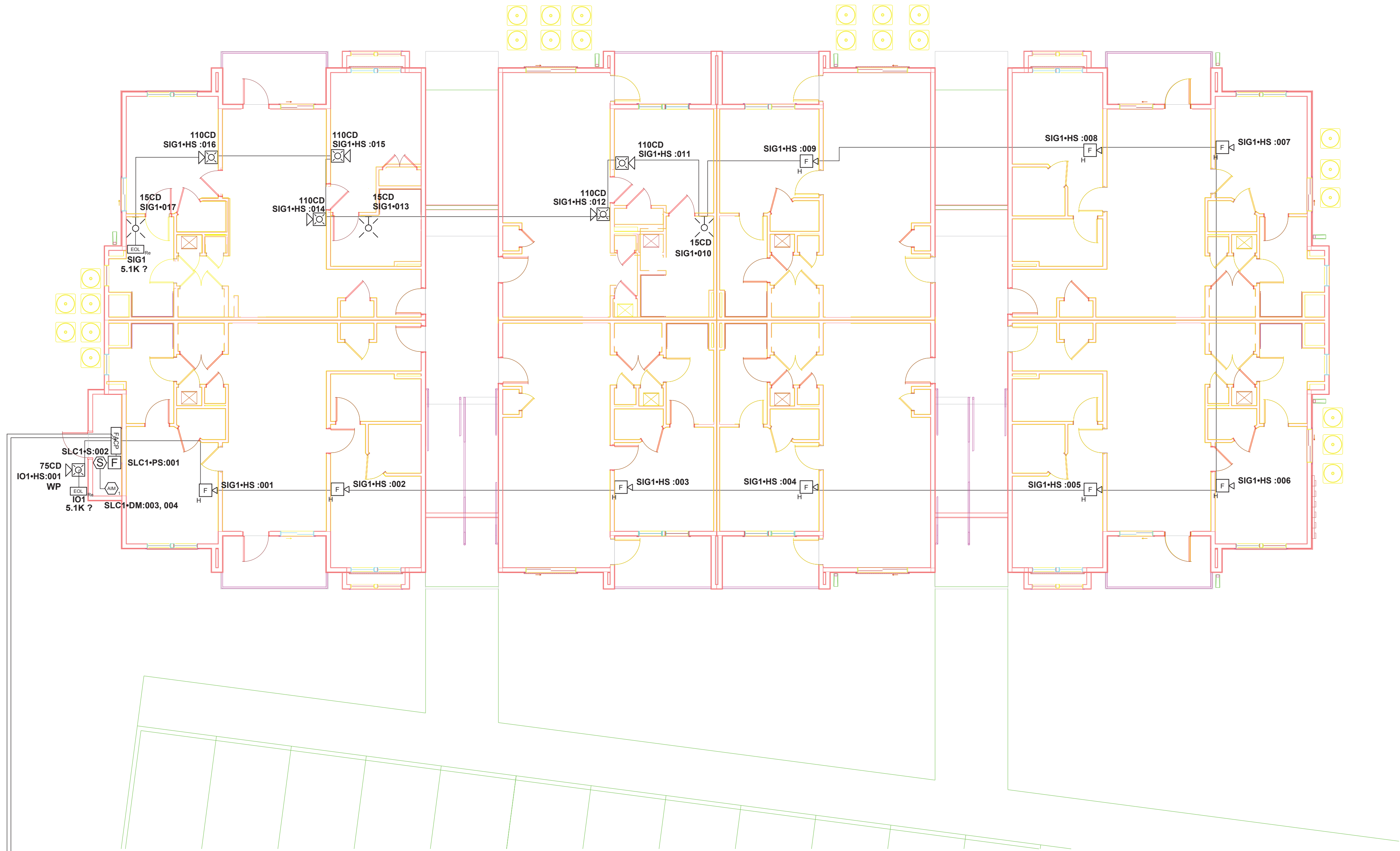
Fire Alarm Type A Floor Plan

DESIGNED BY:
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DATE:
12/20/24

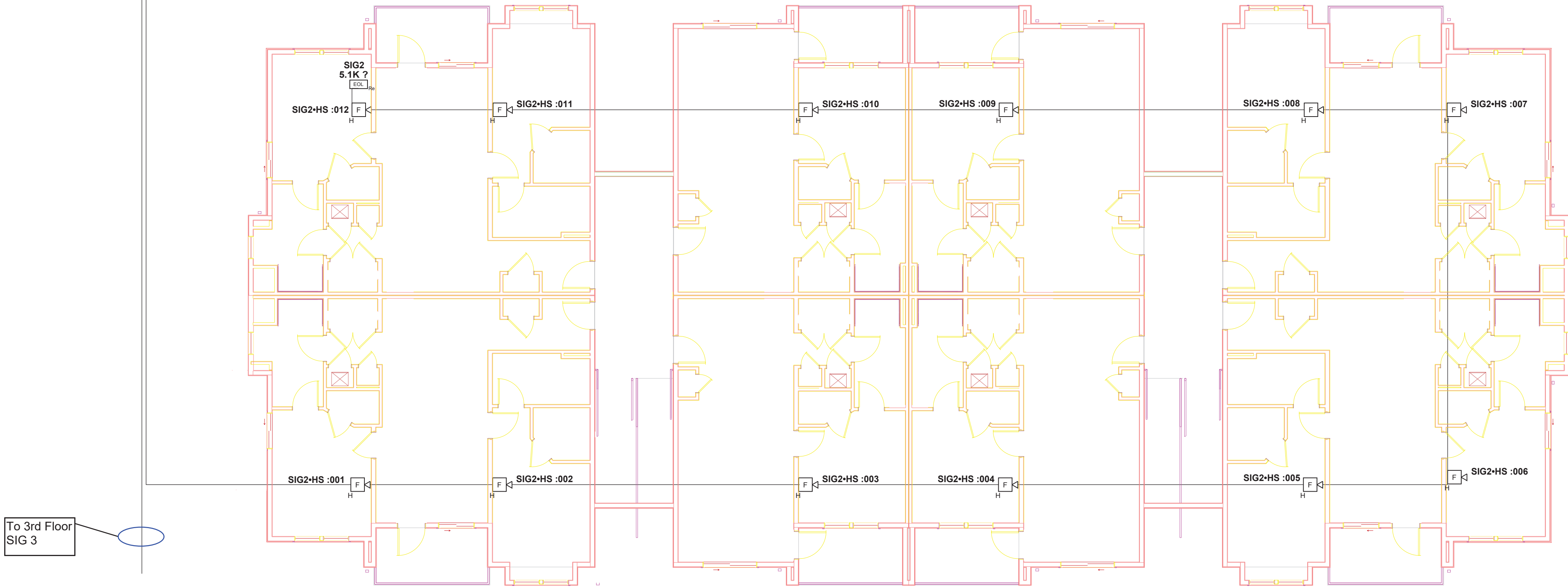
JOB NUMBER:
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SHEET NUMBER:
3 of 10



Fire Alarm - Type A - Building 3 & 4 - Ground Floor Plan

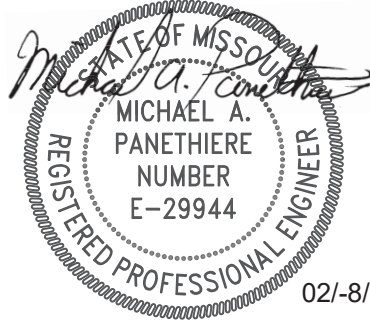
Scale: 1/8" = 1'



Fire Alarm - Type A - Building 3 & 4 - Second Floor Plan

Scale: 1/8" = 1'





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REVISION 1:

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Drawing2

Fire Alarm Type A Floor Plan

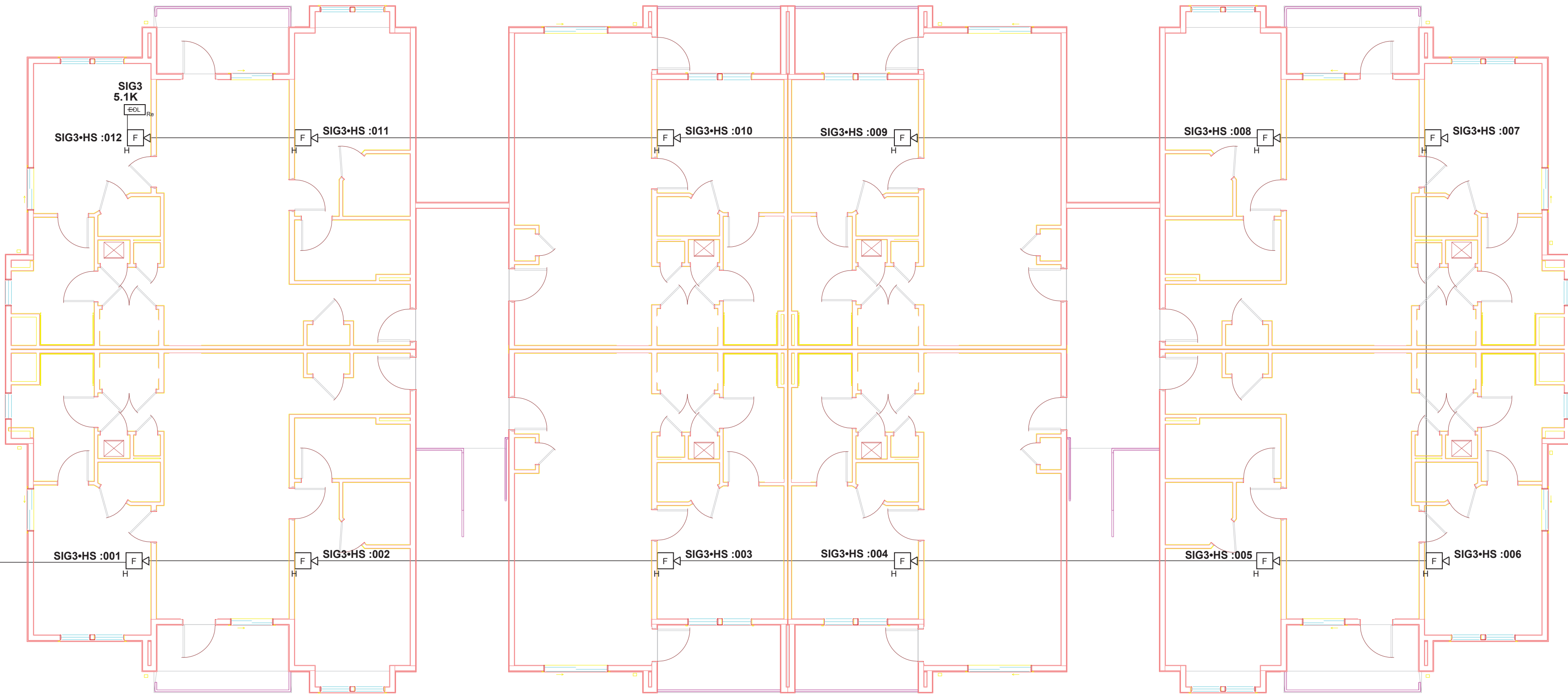
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407

SHEET NUMBER:
4 of 10

To FACP
SIG 3



North

Fire Alarm - Type A - Building 3 & 4 - Third Floor Plan

Scale: 1/8" = 1'



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REVISION 1:

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REVISION 3:

Drawing2

Fire Alarm Type C Floor Plan

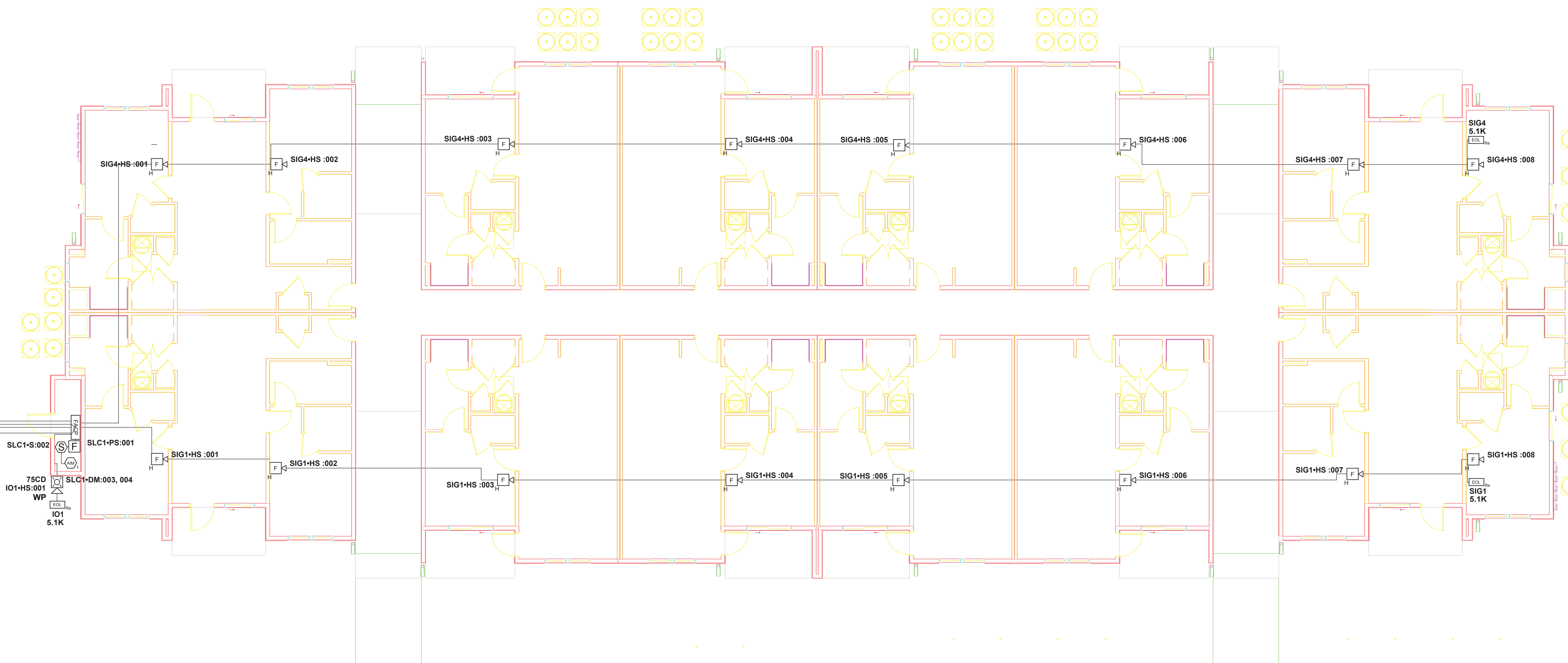
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DATE:
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JOB NUMBER:
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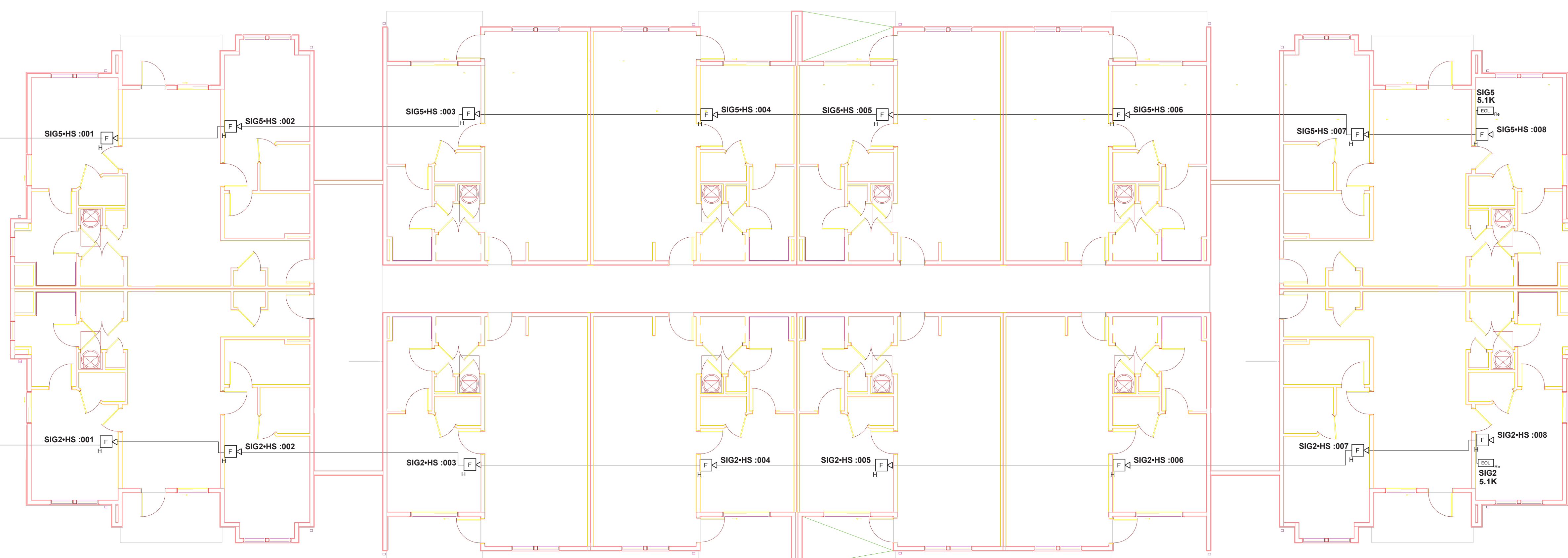
SHEET NUMBER:
5 of 10

To 3rd Floor
SIG 3
SIG 6



Fire Alarm - Type C - Building 1 & 2 - Ground Floor Plan

Scale: 1/8" = 1'



Fire Alarm - Type C - Building 1 & 2 - Second Floor Plan

Scale: 1/8" = 1'



North

Building 1



North

Building 2



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REVISION 1:

REVISION 2:

REVISION 3:

Drawing2

Fire Alarm Type C Floor Plan

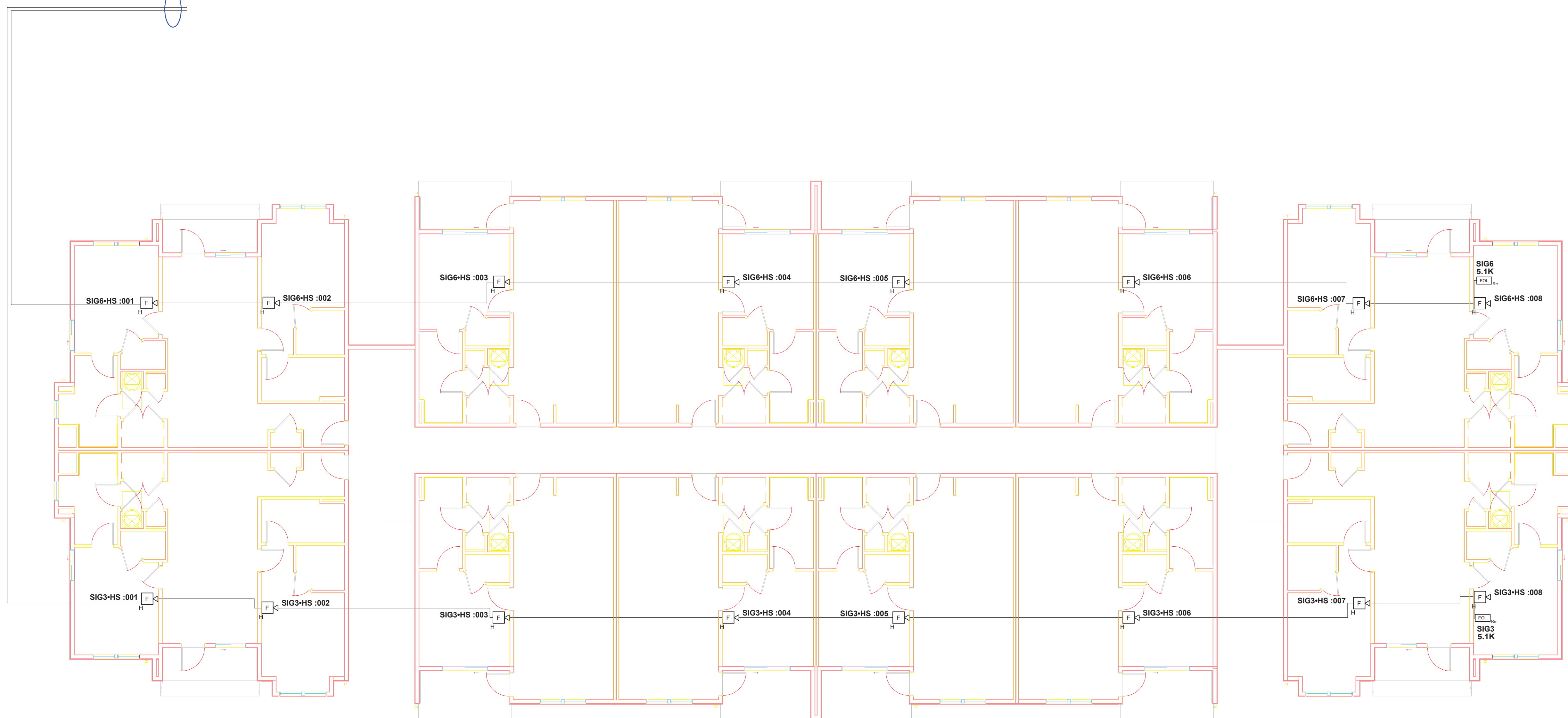
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DATE:
12/20/24

JOB NUMBER:
407

SHEET NUMBER:
6 of 10

To FACP
SIG 3
SIG 6



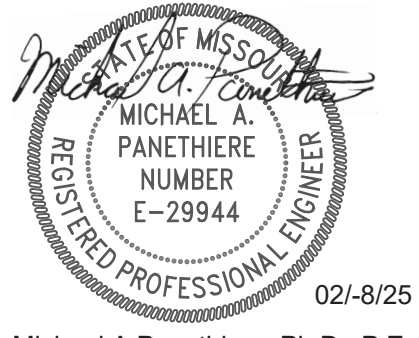
North
Building 1



North
Building 2

Fire Alarm - Type C - Building 1 & 2 - Third Floor Plan

Scale: 1/8" = 1'



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REVISION 1:

REVISION 2:

REVISION 3:

Drawing4

Fire Alarm Type C Floor Plan

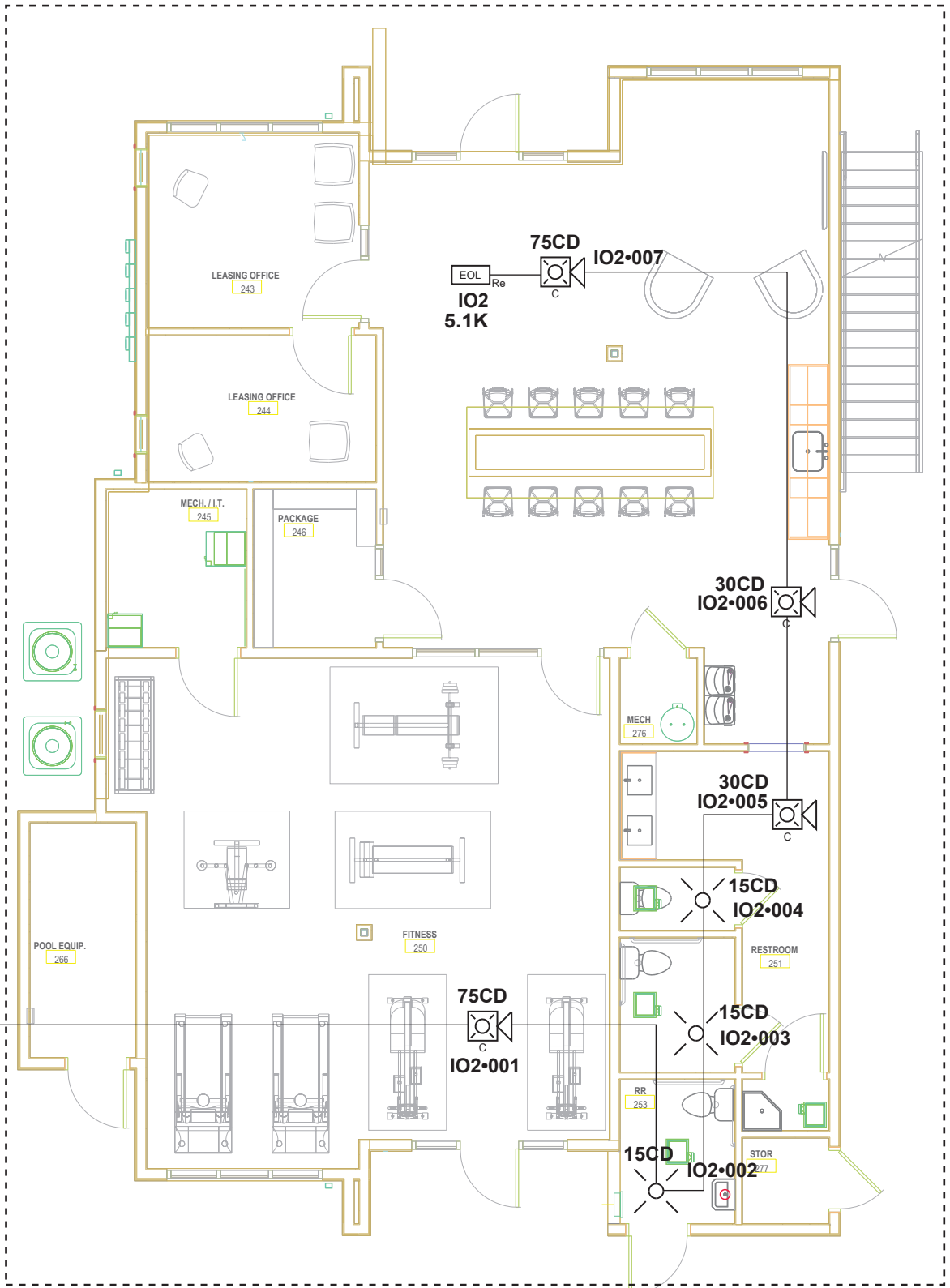
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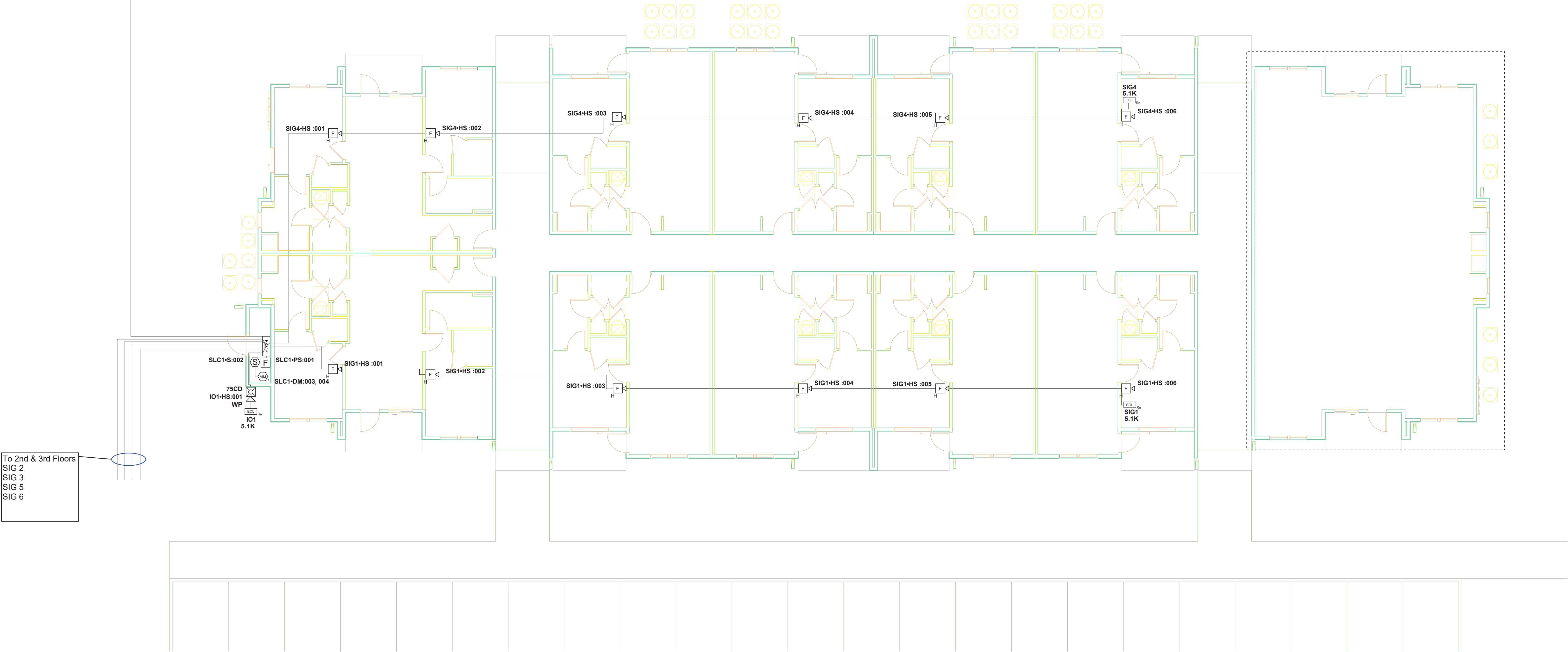
JOB NUMBER:
407

SHEET NUMBER:
7 of 10

Symbol Legend			
SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER
	IPA-4000, 4064 POINT RELEASING FACP	POTTER ELECTRIC SIGNAL	IPA-4000
	PHOTOELECTRIC SMOKE DETECTOR	POTTER ELECTRIC SIGNAL	PAD300-PD
	DUAL INPUT MODULE	POTTER ELECTRIC SIGNAL	PAD100-DIM
	ADDRESSABLE PULL STATION, DUAL ACTION	POTTER ELECTRIC SIGNAL	PAD100-PSDA
	HS-24WR-WP, 75CD, OUTDOOR HORN/STROBE, S/HS-WP SERIES	POTTER ELECTRIC SIGNAL	HS-24WR-WP
	LOW FREQUENCY AUDIBLE SOUNDER RED	POTTER ELECTRIC SIGNAL	LFH-24R
	STROBE, M-C, RED, CEILING	POTTER ELECTRIC SIGNAL	CS-24R
	HORN/STROBE, 2 WIRE, M-C, RED, CEILING	POTTER ELECTRIC SIGNAL	CHS-24R
	110CD LFHS-110R, LFHS SERIES	POTTER ELECTRIC SIGNAL	LFHS-110R
	EOL 5.1K	POTTER ELECTRIC SIGNAL	EOL-5.1



Fire Alarm - Clubhouse- Ground Floor Plan



Fire Alarm - Type C - Building 5 - Ground Floor Plan

Scale: 1/8" = 1'

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Drawing4

Fire Alarm Type C Floor Plan

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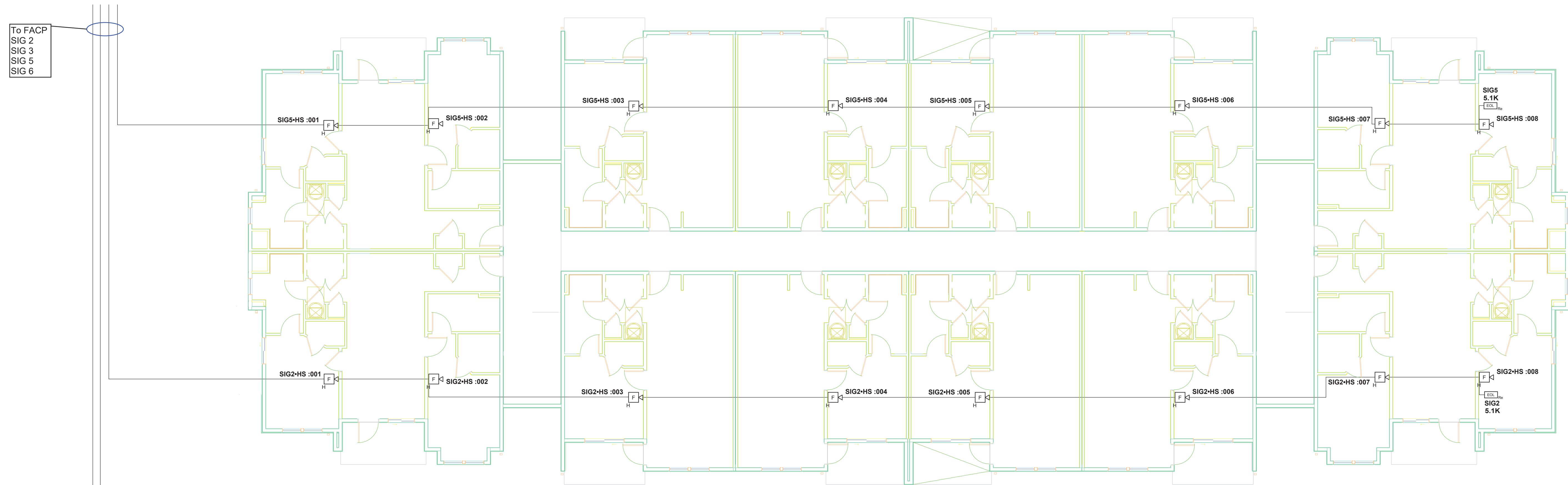
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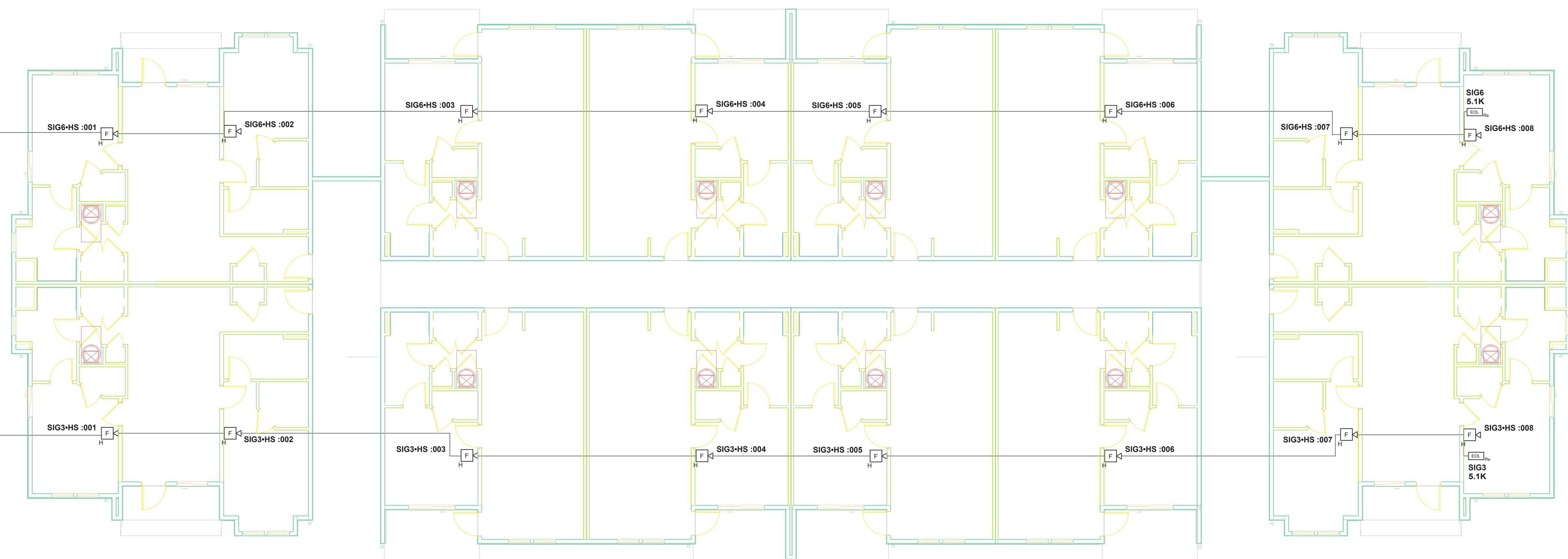
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Fire Alarm - Type C - Building 5 - Second Floor Plan

Scale: 1/8" = 1'



Fire Alarm - Type C - Building 5 - Third Floor Plan

Scale: 1/8" = 1'



North

Battery Calculations for Panel: P2						
Part No:IPA-4000 - IPA-4000, 4064 POINT RELEASING FACP						
Job number: 1	Job name: Drawing2					
Part No.	Qty.	Panel Equipment	Description	Standby	Total Standby	Alarm
IPA4000_MB	1	IPA4000_MB		130.0000mA	130.0000mA	220.0000mA
Total Panel Sbsty				130.0000mA	220.0000mA	220.0000mA
Peripheral Devices						
EOL-5.1	7	EOL 5.1K (Notification)		0.0000mA	0.0000mA	0.0000mA
HS-24WR-WP	1	HS-24WR-WP, 75CD,OUTDOOR HORNSTROBE,SHS-WP SERIES (Notification) 75CD 760B		0.0000mA	0.0000mA	195.0000mA
LFH-24R	48	LOW FREQUENCY AUDIBLE SOUNDER RED (Notification) 77AB		0.0000mA	0.0000mA	195.0000mA
PAD100-PSDA	1	ADDRESSABLE PULL STATION, DUAL ACTION (Signaling line)		0.2000mA	0.2000mA	0.2000mA
PAD300-PD	1	PHOTOELECTRIC SMOKE DETECTOR (Signaling line)		0.3000mA	0.3000mA	0.3000mA
PAD100-DIM	1	DUAL INPUT MODULE (Signaling line)		0.2400mA	0.2400mA	0.2400mA
Total Peripheral Sbsty				0.7400mA	Total Pergh Alarm	3656.5400mA
Total Standby Amps				130.7400mA	Total Alarm Amps	3676.5400mA
Standby time: 24 Hrs Alarm time: 5 Min Battery requirement: 3.464Ah						
Compensation Factors - Standby:1.25 Alarm:1.25 Requirement with compensation: 4.326Ah						

Battery Calculations for Panel: P1						
Part No:IPA-4000 - IPA-4000, 4064 POINT RELEASING FACP						
Job number: 1	Job name: Drawing2					
Part No.	Qty.	Panel Equipment	Description	Standby	Total Standby	Alarm
IPA4000_MB	1	IPA4000_MB		130.0000mA	130.0000mA	220.0000mA
Total Panel Sbsty				130.0000mA	220.0000mA	220.0000mA
Peripheral Devices						
EOL-5.1	4	EOL 5.1K (Notification)		0.0000mA	0.0000mA	0.0000mA
HS-24WR-WP	1	HS-24WR-WP, 75CD,OUTDOOR HORNSTROBE,SHS-WP SERIES (Notification) 75CD 760B		0.0000mA	0.0000mA	195.0000mA
CS-24R	3	STROBE, M.C. RED, WALL (Notification) 15CD		0.0000mA	0.0000mA	42.0000mA
LFHS-110R	5	110CD LFHS-110R, LFHS SERIES (Notification) 110C 76AB		0.0000mA	0.0000mA	965.0000mA
LFH-24R	33	LOW FREQUENCY AUDIBLE SOUNDER RED (Notification) 77AB		0.0000mA	0.0000mA	72.1000mA
PAD100-PSDA	1	ADDRESSABLE PULL STATION, DUAL ACTION (Signaling line)		0.2000mA	0.2000mA	0.2000mA
PAD300-PD	1	PHOTOELECTRIC SMOKE DETECTOR (Signaling line)		0.3000mA	0.3000mA	0.3000mA
PAD100-DIM	1	DUAL INPUT MODULE (Signaling line)		0.2400mA	0.2400mA	0.2400mA
Total Peripheral Sbsty				0.7400mA	Total Pergh Alarm	3666.5400mA
Total Standby Amps				130.7400mA	Total Alarm Amps	3886.5400mA
Standby time: 24 Hrs Alarm time: 5 Min Battery requirement: 3.464Ah						
Compensation Factors - Standby:1.25 Alarm:1.25 Requirement with compensation: 4.327Ah						

Battery Calculations for Panel: P1						
Part No:IPA-4000 - IPA-4000, 4064 POINT RELEASING FACP						
Job number: 1	Job name: Drawing2					
Part No.	Qty.	Panel Equipment	Description	Standby	Total Standby	Alarm
IPA4000_MB	1	IPA4000_MB		130.0000mA	130.0000mA	220.0000mA
Total Panel Sbsty				130.0000mA	220.0000mA	220.0000mA
Peripheral Devices						
EOL-5.1	8	EOL 5.1K (Notification)		0.0000mA	0.0000mA	0.0000mA
HS-24WR-WP	1	HS-24WR-WP, 75CD,OUTDOOR HORNSTROBE,SHS-WP SERIES (Notification) 75CD 760B		0.0000mA	0.0000mA	195.0000mA
CS-24R	3	STROBE, M.C. RED, CEILING (Notification) 15CD		0.0000mA	0.0000mA	126.0000mA
CHS-24R	2	HORNSTROBE, 2 WIRE, M.C. RED, CEILING (Notification) 75CD 81AB		0.0000mA	0.0000mA	222.0000mA
LFH-24R	44	LOW FREQUENCY AUDIBLE SOUNDER RED (Notification) 77AB		0.0000mA	0.0000mA	72.1000mA
PAD100-PSDA	1	ADDRESSABLE PULL STATION, DUAL ACTION (Signaling line)		0.2000mA	0.2000mA	0.2000mA
PAD300-PD	1	PHOTOELECTRIC SMOKE DETECTOR (Signaling line)		0.3000mA	0.3000mA	0.3000mA
PAD100-DIM	1	DUAL INPUT MODULE (Signaling line)		0.2400mA	0.2400mA	0.2400mA
Total Peripheral Sbsty				0.7400mA	Total Pergh Alarm	4658.1400mA
Total Standby Amps				130.7400mA	Total Alarm Amps	4667.1400mA
Standby time: 24 Hrs Alarm time: 5 Min Battery requirement: 3.528Ah						
Compensation Factors - Standby:1.25 Alarm:1.25 Requirement with compensation: 4.741Ah						

Circuit Calculations Panel: P1 Card: 00 Circuit:IO1						
Circuit Name: IO1 Circuit Type: Notification Terminal Voltage: 20.4V/DC Amperage: 3.0000A Cable: 16 AWG 2 CONDUCTOR BARE COPPER, TWISTED, SHIELDED, PLENUM FA, FPLP #16 Calculations based on Running Total Length. Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16% WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc	Distance	Current	Voltage Voltage Drop
HS-001	IPA-4000	Panel				
HS-001	HS-24WR-WP	HS-24WR-WP, 75CD,OUTDOOR HORNSTROBE,SHS-WP SERIES, 75CD	7'-2"	195.0000mA	20.3922V	(0.0069V)
EOL-5.1 EOL 5.1K				10'-5"	195.0000mA	
						Total Current: 195.0000mA
						(Total VDrop Percent:0.035%) Total Voltage Drop: 0.0069V

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG1						
Circuit Name: SIG1 Circuit Type: Notification Terminal Voltage: 20.4V/DC Amperage: 3.0000A Cable: 16 AWG 2 CONDUCTOR BARE COPPER, TWISTED, SHIELDED, PLENUM FA, FPLP #16 Calculations based on Running Total Length. Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16% WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc	Distance	Current	Voltage Voltage Drop
HS-001	IPA-4000	Panel				
HS-001	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-11"	72.1000mA	20.2695V	(0.1359V)
HS-002	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-7"	72.1000mA	20.1444V	(0.1251V)
HS-003	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-9"	72.1000mA	19.8811V	(0.2633V)
HS-004	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-10"	72.1000mA	19.8474V	(0.2359V)
HS-005	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-9"	72.1000mA	19.3708V	(0.1035V)
HS-006	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	40'-18"	72.1000mA	18.1091V	(0.2815V)
HS-007	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-9"	72.1000mA	19.9165V	(0.0926V)
HS-008	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	35'-4"	72.1000mA	18.8129V	(0.2035V)
HS-009	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	17'-7"	42.0000mA	18.7203V	(0.0827V)
HS-010	S-24WR	STROBE, M.C. RED, WALL, 15CD	17'-7"	193.0000mA	18.6311V	(0.0882V)
HS-011	LFHS-110R	110CD LFHS-110R, LFHS SERIES, 110CD	7'-4"	193.0000mA	18.6011V	(0.0829V)
HS-012	S-24WR	STROBE, M.C. RED, WALL, 15CD	39'-0"	42.0000mA	16.0853V	(0.0920V)
HS-013	LFHS-110R	110CD LFHS-110R, LFHS SERIES, 110CD	9'-1"	193.0000mA	16.4827V	(0.0158V)
HS-014	LFHS-110R	110CD LFHS-110R, LFHS SERIES, 110CD	8'-2"	193.0000mA	16.4798V	(0.0171V)
HS-015	LFHS-110R	110CD LFHS-110R, LFHS SERIES, 110CD	13'-6"	193.0000mA	16.4602V	(0.0151V)
HS-016	S-24WR	STROBE, M.C. RED, WALL, 15CD	16'-10"	42.0000mA	15.4875V	(0.0034V)
EOL-5.1 EOL 5.1K				5'-10"	0.0000mA	15.4875V
				348'-5"	1739.9000mA	
						Total Current: 1739.9000mA
						(Total VDrop Percent:3.525%) Total Voltage Drop: 1.9439V

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG2						
Circuit Name: SIG2 Circuit Type: Notification Terminal Voltage: 20.4V/DC Amperage: 3.0000A Cable: 16 AWG 2 CONDUCTOR BARE COPPER, TWISTED, SHIELDED, PLENUM FA, FPLP #16 Calculations based on Running Total Length. Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16% WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc	Distance	Current	Voltage Voltage Drop
HS-001	IPA-4000	Panel				
HS-001	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	189'-11"	72.1000mA	16.7323V	(0.6878V)
HS-002	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-8"	72.1000mA	16.6827V	(0.0959V)
HS-003	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-9"	72.1000mA	16.5337V	(0.119V)
HS-004	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	21'-11"	72.1000mA	16.4688V	(0.0818V)
HS-005	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-8"	72.1000mA	16.3786V	(0.0923V)
HS-006	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	16'-11"	72.1000mA	16.3326V	(0.0379V)
HS-007	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	47'-5"	72.1000mA	16.2409V	(0.0887V)
HS-008	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-10"	72.1000mA	16.2188V	(0.027V)
HS-009	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-8"	72.1000mA	16.1803V	(0.0476V)
HS-010	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	22'-11"	72.1000mA	16.1459V	(0.0238V)
HS-011	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-8"	72.1000mA	16.1217V	(0.0238V)
HS-012	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	16'-7"	72.1000mA	16.1163V	(0.0054V)
EOL-5.1 EOL 5.1K				445'-8"	885.0000mA	
						Total Current: 885.0000mA
						(Total VDrop Percent:5.29%) Total Voltage Drop: 1.3537V

Circuit Calculations Panel: P1 Card: 00 Circuit:SIG3						
Circuit Name: SIG3 Circuit Type: Notification Terminal Voltage: 20.4V/DC Amperage: 3.0000A Cable: 16 AWG 2 CONDUCTOR BARE COPPER, TWISTED, SHIELDED, PLENUM FA, FPLP #16 Calculations based on Running Total Length. Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16% WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc	Distance	Current	Voltage Voltage Drop
HS-001	IPA-4000	Panel				
HS-001	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	274'-10"	72.1000mA	16.2147V	(1.1853V)
HS-002	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-8"	72.1000mA	16.1827V	(0.0959V)
HS-003	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-9"	72.1000mA	16.0326V	(0.119V)
HS-004	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	22'-11"	72.1000mA	15.9688V	(0.0714V)
HS-005	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-8"	72.1000mA	15.8897V	(0.0823V)
HS-006	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-9"	72.1000mA	16.8316V	(0.0379V)
HS-007	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	39'-5"	72.1000mA	16.7479V	(0.0844V)
HS-008	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-7"	72.1000mA	16.7288V	(0.027V)
HS-009	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-10"	72.1000mA	16.6728V	(0.0476V)
HS-010	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	22'-11"	72.1000mA	16.6451V	(0.0238V)
HS-011	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	33'-8"	72.1000mA	16.6235V	(0.0238V)
HS-012	LFH-24R	LOW FREQUENCY AUDIBLE SOUNDER RED	15'-8"	72.1000mA	16.6198V	(0.0054V)
EOL-5.1 EOL 5.1K				277'-0"	0.0000mA	16.6198V
				889'-8"	885.0000mA	
						Total Current: 885.0000mA
						(Total VDrop Percent:7.73%) Total Voltage Drop: 1.7619V

Circuit Calculations Panel: P1 Card: 00 Circuit:SLC1						
Circuit Name: SLC1 Circuit Type: Signaling Inne/Potter - SLC Terminal Voltage: 20.4V/DC Amperage: 1.0000A Cable: 18 2C STR TWISTED COPPER/PLP #16 Calculations based on Running Total Length. Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16% WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc	Distance	Current	Voltage Voltage Drop
PS-001	IPA-4000	Panel				
PS-001	PAD100-PSDA	ADDRESSABLE PULL STATION, DUAL ACTION	2'-7"	0.2000mA	20.4V	(0V)
PS-002	PAD300-PD	PHOTOELECTRIC SMOKE DETECTOR	1'-11"	0.3000mA	20.4V	(0V)
DM-003_004	PAD100-DIM	DUAL INPUT MODULE	4'-5"	0.2400mA	20.4V	(0V)
				8'-11"	0.7400mA	
						Total Current: 0.7400mA
						(Total VDrop Percent:0.001%) Total Voltage Drop: 0V

Circuit Calculations							Panel: P2	Card: 01	Circuit:IO1
			Circuit Name: IO1						
			Circuit Type: Notification				Terminal Voltage: 20.4V/NA Amperage: 1.0000A		
			Cable: 16 AWG 2 CONDUCTOR BARE COPPER, TWISTED, SHIELDED, PLENUM FA, FPLP #16						
			Calculations based on Running Total Length.						
			Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 16%						
			WARNING: Maximum current load exceeded for circuit.						
Device	Part No	Panel	Appliance Desc		Distance	Current	Voltage	Voltage Drop	
HS-001	IPA-4000	Panel					20.4V		
HS-001	HS-24WR-WP	HS-24WR-WP, 75CD,OUTDOOR HORNSTROBE,SHS-WP SERIES, 75CD			8'-1"	195.0000mA	20.3922V	(0.0078V)	
			EOL-5.1K		3'-8"	0.0000mA	20.3922V	(0V)	
					11'-11"				
						Total Current:	195.0000mA		
						Total Voltage Drop:	0.0078V		
						Total Voltage Drop Percent:0.04%			

