

ST. LUKE'S EAST LAB REMODEL

FIRE ALARM DRAWINGS

SITE

ST. LUKE'S EAST HOSPITAL
LAB REMODEL
LEE'S SUMMIT, MO 64086

OWNER

ST. LUKE'S EAST HOSPITAL
100 NE SAINT LUKE'S BLVD.
LEE'S SUMMIT, MO 64086

ENGINEER

W. L. CASSELL & ASSOCIATES, INC. NOW IMEG
1600 BALTIMORE, SUITE 300
KANSAS CITY, MO 64108

ELECTRICAL CONTRACTOR

P1 GROUP, INC.
13605 W. 96TH TERRACE
LENEXA, KS 66215



11019 STRANG LINE ROAD
LENEXA, KANSAS 66215

SALES: 913-894-0010
SERVICE: 913-894-0010
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SALES REPRESENTATIVE
TODD WHALEN
913-894-0010

DRAWINGS PREPARED BY:
DL SERVICES, LLC
DAVID LOCKETT
816-359-9518

DEVICE LOCATION AND LAYOUT DESIGN BY:
W. L. CASSELL & ASSOCIATES NOW IMEG
816-842-8437

TITLE SHEET

[illegible]

REVIEW

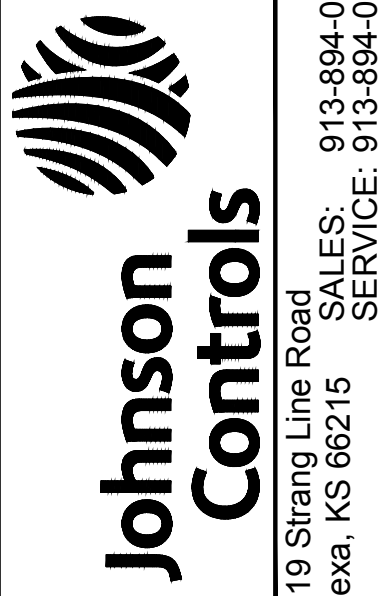
DRAWN BY:	D. LOCKETT
DESIGN BY:	D. LOCKETT
ISSUE DATE:	1/20/21
JOB NUMBER:	
PROJECT #:	650036552
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SYSTEM: FIRE ALARM

SHEET: _____

TITLE SHEET

FA-001

[illegible]

SYMBOL KEY

- OCCUPANCY TYPE: I-2 INSTITUTIONAL GROUP
- SPRINKLER PROTECTION: BUILDING IS FULLY SPRINKLED
- MODIFY EXISTING FIRE ALARM SYSTEM: PROVIDE NEW DEVICES, RELOCATE AND DEMO EXISTING DEVICES AS SHOWN ON DRAWINGS.
- ALL NEW WIRING TO BE CLASS B.
- THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DISCONNECTED OR TAKEN OUT OF SERVICE WITHOUT WRITTEN PERMISSION FROM THE OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER THE TIMING OF ANY EXISTING FIRE ALARM SYSTEM DEMOLITION WORK.

INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION
NATIONAL ELECTRIC CODE (NFPA 70), 2011 EDITION
NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72), 2010 EDITION

JURISDICTIONS WITHIN THE STATE MAY HAVE AMENDMENTS TO THE STATE ADOPTED CODE. CHECK WITH THE LOCAL JURISDICTION AUTHORITY FOR MORE DETAILS.

AC = ABOVE CEILING
C = CEILING MOUNTED
E = EXISTING TO REMAIN
RC = EXISTING TO REMOVE AND COVER
RD = EXISTING DEVICE TO BE RELOCATED
RL = RELOCATED DEVICE
RR = REMOVE EXISTING AND REPLACE W/NEW

WP = WEATHERPROOF
 XP = EXPLOSION PROOF
 H = HIGH HUMIDITY
 AFF = ABOVE FINISHED FLOOR
 AHJ = AUTHORITY HAVING JURISDICTION
 ALM = ALARM
 ANN = ANNUNCIATOR
 BMS = BUILDING MANAGEMENT SYSTEM
 CBC = CALIFORNIA BUILDING CODE
 C (eg. 15CD) = CANELDA
 CFM = CALIFORNIA STATE FIRE MARSHAL
 DET = DETECTOR
 DGP = DATA GATHERING PANEL
 EOL = END OF LINE
 EPO = EMERGENCY POWER OFF
 ACP = FIRE ALARM CONTROL PANEL
 FAF = FIRE ALARM TERMINAL CABINET
 FFI = FIRE FIGHTING EQUIPMENT
 FFI = FURNISHED BY OTHERS
 FOC = FIRE COMMAND CENTER
 FAA = FIRE ALARM ANNUNCIATOR
 FTR = FIRE ALARM TRANSDUCER
 FSD = FIRE SMOKE DAMPER

HT = HEIGHT
 HE = HEATING, VENTILATION, & AIR CONDITIONING
 NM = INFORMATION MANAGEMENT SYSTEM
 MAX = MAXIMUM
 MIN = MINIMUM
 NA = NOT APPLICABLE
 NDC = NOTIFICATION APPLIANCE CIRCUT
 NDU = NOTIFIER DISPLAY UNIT
 NEC = NATIONAL ELECTRICAL CODE
 NFA = NATIONAL FIRE PROTECTION ASSOCIATION
 NIC = NOT IN CONTRACT
 NIPS = NOTIFIER PROCESSING UNIT
 NS = NOT TO SCALE
 PAP = PRE-ALARM PANEL
 PC = PROGRAM COMMAND CENTER
 SLS = SIGNALING LINE CIRCUIT
 SMK = SMOKE
 SUP = SUPERVISORY
 TAC = TRAILER ADDRESSABLE CONTROLLER
 RBL = TROUBLE
 TS = TAMPER SWITCH
 TYP = TYPICAL
 UNF = UNLESS OTHERWISE NOTED
 VCC = VOLUME COMMAND CENTER
 VT = VOLUME TAMPER
 WF = WATER FLOW
 W = (e.g. 1/2W) WATT
 W/ = WITH
 W/O = WITHOUT

SEQUENCE OF OPERATION

FIRE ALARM WIRE LIST				
CIRCUIT DESCRIPTION		RISER RATED: FPLR	SINGLE CONDUCTOR(THHN,TFN)	PLENUM RATED: FPLP
M	1 INCH CIRCUT - 1 PAR 18 AWG UNSHEILD "J" TWISTED (SUBSCRIPT "J" IF MIXED "W" UNLESS OTHERWISE SPECIFIED)	SG ANIX/PAGE 454703ARE AREA=0.0204 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-1N-03-BX		SG ANIX/PAGE 740132R AREA=0.14 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-2N-03
S	AUDIO CIRCUIT 1 PAR 18 AWG TWISTED OVERSHIELD SHIELD	SG ANIX/PAGE 454736ARE AREA=0.0204 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-15-03		SG ANIX/PAGE 454747ARE AREA=0.0245 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-25-03
V	VISUAL/SIGNAL CIRCUIT 2 CONDUCTOR 14 AWG SOLID	SG ANIX/PAGE 454718ARE AREA=0.0380 SQ. INCH ANIXTER PART NUMBER FA-1402C-1-1N-03-BX	(2) #14 AWG AREA=0.0097 SQ. INCH (EACH)	SG ANIX/PAGE 454719ARE AREA=0.0333 SQ. INCH ANIXTER PART NUMBER FA-1402C-1-2N-03
CONDUIT SIZE		CONDUCTOR AREA	CONDUIT SIZE	CONDUCTOR AREA
1 1/2"		0.12 SQ INCH *	1 1/4"	0.60 SQ INCH *
3/4"		0.21 SQ INCH *	1 1/2"	0.62 SQ INCH *
		0.34 SQ INCH *		1.34 SQ INCH *
* 40% FILL PER N.E.C.				

Figure 1 illustrates the pin assignments for the 7-pin connector, showing three configurations: 7V1, 7S1, and 7M1A-73.

- 7V1 Configuration:**
 - Pin 1: NODE NUMBER
 - Pin 2: V DENOTES VISUAL CIRCUIT
 - Pin 3: CHANNEL NUMBER
 - Pin 4: LOOP NUMBER
 - Pin 5: DEVICE ADDRESS
 - Pin 6: CANDLEA RATING
 - Pin 7: 7V1
- 7S1 Configuration:**
 - Pin 1: NODE NUMBER
 - Pin 2: S DENOTES SPEAKER CIRCUIT
 - Pin 3: CIRCUIT NUMBER
 - Pin 4: DEVICE NUMBER
 - Pin 5: SPEAKER WATTAGE TAP
 - Pin 6: 7S1
 - Pin 7: 7S1
- 7M1A-73 Configuration:**
 - Pin 1: NODE NUMBER
 - Pin 2: DENOTES IDNET DEVICE
 - Pin 3: IDNET CHANNEL NUMBER
 - Pin 4: 7M1A-73
 - Pin 5: DEVICE ADDRESS
 - Pin 6: DENOTES IDNET LOOP
 - Pin 7: 7M1A-73

SEQUENCE OF OPERATION

[illegible]

GENERAL INFORMATION

ST. LUKE'S EAST

LAB REMODEL
LEE'S SUMMIT, MO 64086

REVIEW

DRAWN BY:	D. LOCKET
DESIGN BY:	D. LOCKET
ISSUE DATE:	1/20/21
JOB NUMBER:	
PROJECT #:	650036552
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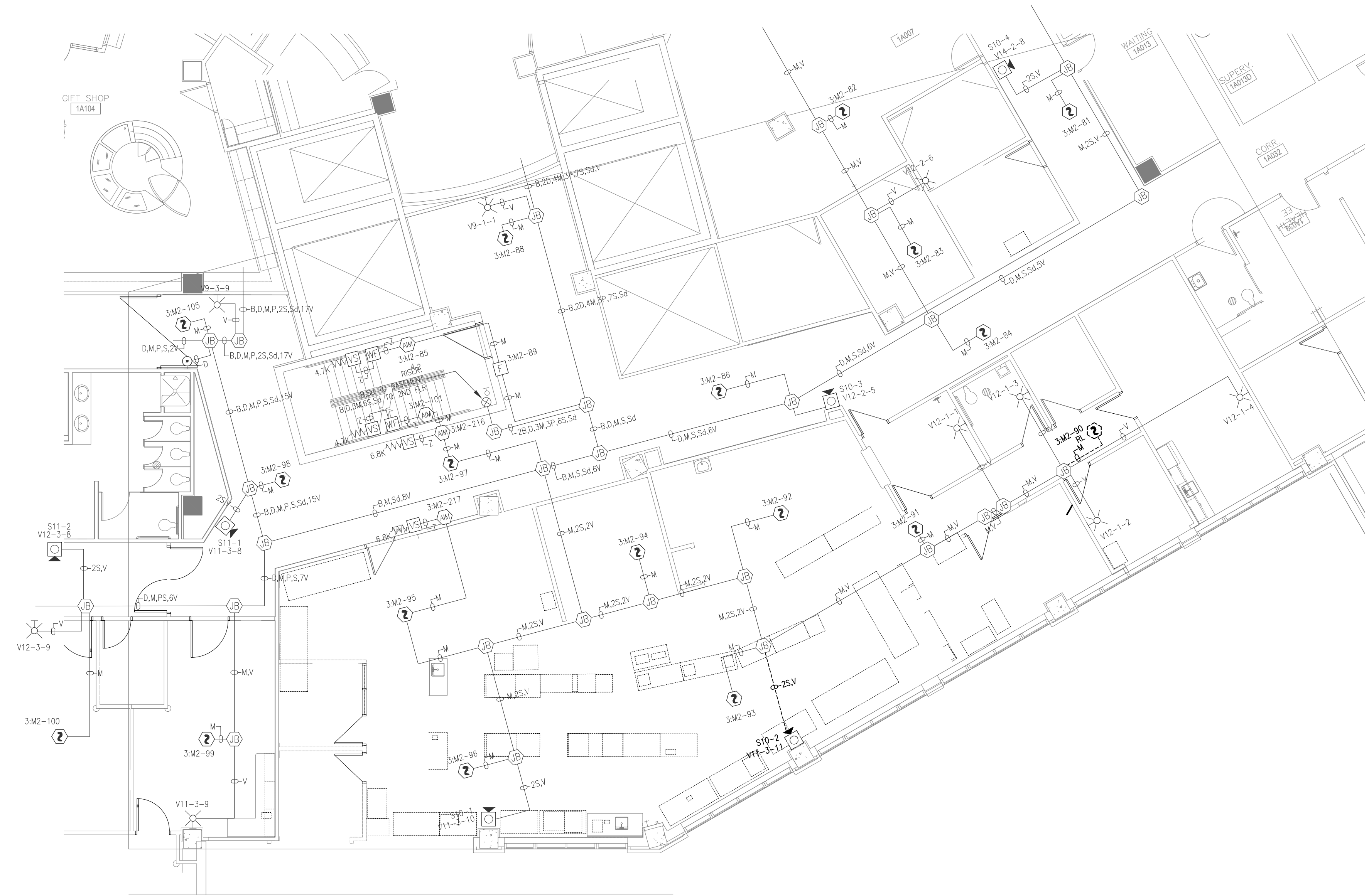
SYSTEM:
FIRE ALARM SYSTEM

SHEET:

GENERAL INFORMATION

FA-002

30" x 42" - Arch E1 Size



PARTIAL FIRST FLOOR FIRE ALARM DEMOLITION PLAN
1/8" = 1'-0"



DEMOLITION FIRE ALARM SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	SMOKE DETECTOR RL = DEVICE TO BE RELOCATED
	WALL MOUNTED SPEAKER/STROBE RL = DEVICE TO BE RELOCATED

DEMO GENERAL NOTES:

1. THE EXISTING CONDITIONS INDICATED ON THE DRAWINGS ARE TAKEN FROM THE BEST INFORMATION AVAILABLE AND FROM VISUAL SITE INSPECTIONS AND ARE NOT TO BE CONSTRUED AS "AS-BUILT" CONDITIONS. THE INFORMATION IS SHOWN TO HELP ESTABLISH THE EXTEND OF THE NEW WORK. VERIFY ALL ACTUAL EXISTING CONDITIONS AT THE PROJECT SITE AND PERFORM THE WORK AS REQUIRED TO MEET THE EXISTING CONDITIONS AND THE EXTEND OF THE WORK INDICATED.
2. LIGHT DASHED LINES INDICATE MECHANICAL OR ELECTRICAL EQUIPMENT THAT SHALL BE REMOVED. DARK SOLID LINES REPRESENT EXISTING EQUIPMENT OR MATERIAL TO REMAIN, EXCEPT WHERE OTHERWISE INDICATED.
3. DISCONNECT AND REMOVE ALL CIRCUITRY, DISCONNECTS, CONTROLLERS AND CONDUIT THAT BECOMES UNNECESSARY AS A RESULT OF THE REMOVAL OF EQUIPMENT INDICATED TO BE REMOVED. LABEL ALL CIRCUIT BREAKERS IN EXISTING PANELBOARDS NO LONGER IN USE AS SPARE. CAP ALL UNUSED CONDUIT AND WIRING BEYOND THE FLOOR LINE OR WALL LINE TO FACILITATE RESTORATION OF FINISH.
4. VERIFY AND RESTORE CONTINUITY OF ALL EXISTING CIRCUITRY INDICATED TO REMAIN IN USE. WHERE REMOVAL OF EXISTING WIRING INTERRUPTS ELECTRICAL CONTINUITY OF CIRCUITS WHICH ARE TO REMAIN, FURNISH AND INSTALL ALL REQUIRED CIRCUITRY, CONDUIT, JUNCTION BOXES, ETC TO INSURE CONTINUED ELECTRICAL CONTINUITY.
5. RELOCATE AND RECONNECT ANY MECHANICAL OR ELECTRICAL EQUIPMENT THAT MUST BE RELOCATED IN ORDER TO ACCOMPLISH THE REVISIONS INDICATED ON THE DRAWINGS OR INDICATED IN THE SPECIFICATIONS OR TO MEET NEC CODE REQUIRED CLEARANCES.
6. DISCONNECT AND REMOVE ALL ABANDONED TELEPHONE, DATA, FIRE ALARM, INTERCOM/SPEAKER CABLING, ETC. NOT REQUIRED FOR REUSE.

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PARTIAL FIRE ALARM DEMOLITION FLOOR PLAN

ST. LUKE'S EAST

LAB REMODEL
LEES SUMMIT, MO 64086

ISSUE LOG	DATE	DESCRIPTION
0	1/20/21	ISSUE FOR REVIEW

REVIEW

DRAWN BY: D. LOCKETT
DESIGN BY: D. LOCKETT
ISSUE DATE: 1/20/21
JOB NUMBER: 650036552
PROJECT #: 650036552
SYSTEM: JOHNSON CONTROLS © 2020

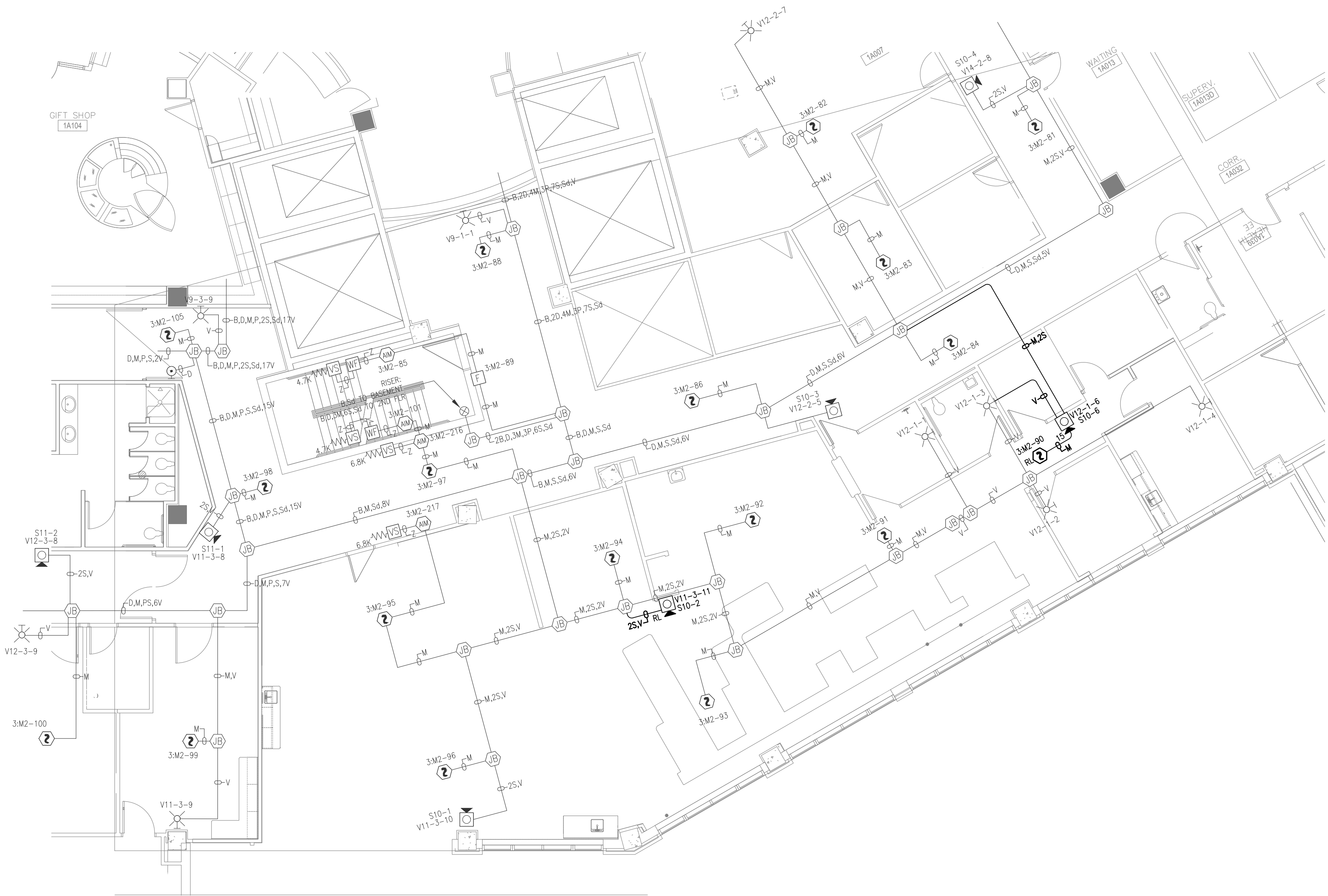
SHEET: FIRE ALARM SYSTEM

PARTIAL FLOOR PLAN

FA-101

30" x 42" - ARCH E SHD

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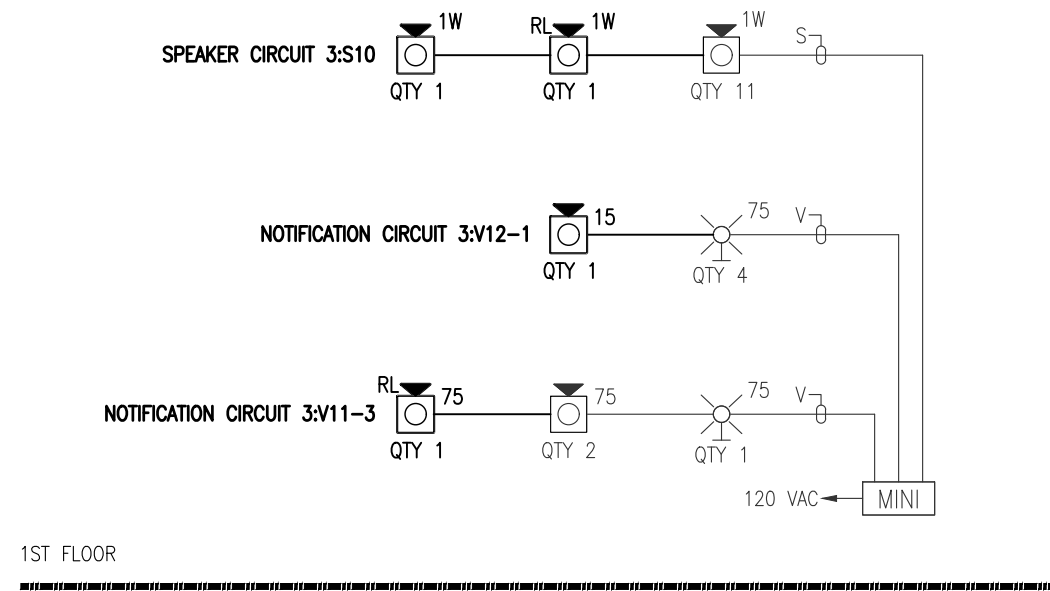
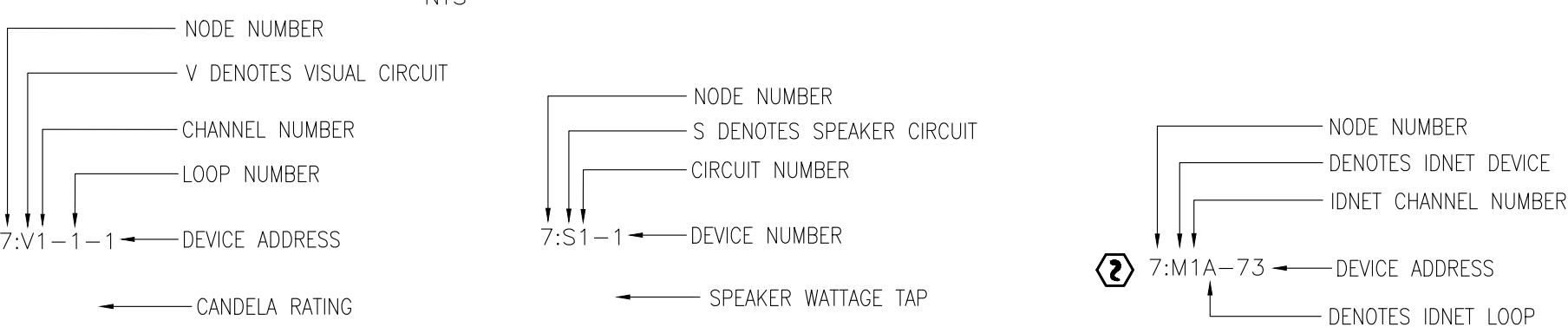
PARTIAL FIRST FLOOR FIRE ALARM PLAN
1/8" = 1'-0"



FIRE ALARM SYMBOLS LEGEND			
SYMBOL	DESCRIPTION	MODEL#	COMMONLY USED BACKBOX, REFER TO DATA SHEET FOR OTHER OPTIONS
RL ②	EXISTING RELOCATED SMOKE SENSOR / BASE	EXISTING	3 BAY CABINET SUPPLIED BY SIMPLEXGRINNELL REUSE OR MATCH EXISTING
#W ②	ADDRESSABLE SPEAKER VISIBLE APPLIANCE WALL MOUNT, RED # = CANDELA RATING, #W = SPEAKER TAP **USE 70 VOLT TAP**	SIMPLEX 4906-9253	4" SQUARE BOX 1 1/2" DEEP W/ 1 1/2" DEEP EXTENSION RING
RL ②	RELOCATED EXISTING SPEAKER STROBE	EXISTING	REUSE OR MATCH EXISTING

FIRE ALARM WIRE LIST			
CIRCUIT DESCRIPTION	RISER RATED: FPLR	SINGLE CONDUCTOR (THHN, TFFN)	PLENUM RATED: FPLP
M IDNET CIRCUIT - 1 PAIR 18 AWG UNSHIELDED TWISTED (SUBSCRIPT "U" IF MIXED W/SHIELDED)	SG ANIX/PAGE 454703ARE AREA=0.0204 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-1N-03-BX		SG ANIX/PAGE 740132R AREA=0.0141 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-2N-03
S AUDIO CIRCUIT 1 PAIR 18 AWG TWISTED OVERALL SHIELD	SG ANIX/PAGE 454738ARE AREA=0.0204 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-1S-03		SG ANIX/PAGE 454747ARE AREA=0.0246 SQ. INCH ANIXTER PART NUMBER FA-1802C-1-2S-03
V VISUAL/SIGNAL CIRCUIT 2 CONDUCTOR 14 AWG SOLID	SG ANIX/PAGE 454718ARE AREA=0.0380 SQ. INCH ANIXTER PART NUMBER FA-1402C-1-1N-03-BX	(2) #14 AWG AREA=0.0097 SQ. INCH (EACH)	SG ANIX/PAGE 454719ARE AREA=0.0333 SQ. INCH ANIXTER PART NUMBER FA-1402C-1-2N-03
CONDUIT SIZE	CONDUCTOR AREA	CONDUIT SIZE	CONDUCTOR AREA
1/2"	0.12 SQ INCH *	1-1/4"	0.60 SQ INCH *
3/4"	0.21 SQ INCH *	2"	0.82 SQ INCH *
1"	0.34 SQ INCH *		1.34 SQ INCH *
* 40% FILL PER N.E.C.			
THE CABLES SPECIFIED HERE ARE FOR REFERENCE OF REQUIRED ELECTRICAL CHARACTERISTICS AS WELL AS CODE REQUIREMENTS. ALTERNATE SUPPLIERS MAY BE SUBSTITUTED PROVIDING EQUIVALENT CHARACTERISTICS ARE MAINTAINED. ITEMS SUCH AS CAPACITANCE BETWEEN CONDUCTORS AND WIRE GAUGE CAN BE CRUCIAL TO THE CIRCUIT DESIGN OF THIS SYSTEM INSTALLATION.			
REFERENCE https://www.anixter.com/customer/lycofs FOR SG ANIXTER CABLE DATA			

DEVICE NUMBERING DETAIL



RISER DIAGRAM

SCALE: NTS

GENERAL NOTES:

- THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
- SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM WHAT IS INDICATED ON THESE DRAWINGS WHICH CAUSE MAJOR DEVIATIONS IN THE WORK SHOWN, THE CONTRACTOR SHALL CONTACT SIMPLEXGRINNELL IN A TIMELY MANNER SO AS NOT TO IMPAIR THE CONSTRUCTION SCHEDULE.
- CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
- A STAMPED SET OF APPROVED FIRE ALARM DRAWINGS SHALL BE AT THE JOB SITE AND SHALL BE USED FOR INSTALLATION.
- THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING, LOCK-ON PROVISION AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
- UPDATE THE AS-BUILT DRAWING SET DAILY WITH JOB PROGRESS. RETURN THE AS-BUILT DRAWING SET TO SIMPLEXGRINNELL NO LATER THAN 7 DAYS AFTER FINAL TEST.
- THE CONTRACTOR WILL MAINTAIN ALL AREAS OF THE BUILDING IN A NEAT AND WORKMAN LIKE MANNER.
- DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A FACTORY TRAINED SIMPLEXGRINNELL TECHNICAL REPRESENTATIVE.
- ANY SMOKE DETECTOR HEAD INSTALLED BEFORE THE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST. ANY FALSE ALARMS DUE TO DIRT CONTAMINATED HEADS SHALL BE THE RESPONSIBILITY OF THE FIRE ALARM INSTALLER.
- THE FIRE ALARM INSTALLER WILL MAINTAIN THE FIRE RESISTANCE INTEGRITY OF ALL WALL, CEILING, AND ROOF ASSEMBLIES ANY TIME THAT WORK IS NOT ACTIVELY BEING PERFORMED.
- INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. POWER LIMITED AND NON-POWER LIMITED FIELD WIRING MUST BE INSTALLED WITHIN THE FACP ENCLOSURE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND NEC.
- ALL WIRING SHALL BE INSTALLED ACCORDING TO NFPA 70 (NEC).
- FIRE ALARM CIRCUITS SHALL BE IDENTIFIED IN ACCORDANCE WITH APPROPRIATE SECTION OF NEC 760. MARK ALL FIRE ALARM WIRES IN ACCORDANCE WITH NEC 760 SECTIONS FOR POWER LIMITED AND NON-POWER LIMITED WIRE.
- FIRE ALARM CABLE INSTALLED IN DUCTS, PLENUM, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR SHALL BE TYPE FPLP.
- FIRE ALARM CABLE INSTALLED IN THE VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR OR CABLES INSTALLED IN VERTICAL RUNS IN SHAFTS SHALL BE TYPE FPLR.
- FIRE ALARM CABLE INSTALLED IN UNDERGROUND CONDUIT OR OTHER WET LOCATIONS SHALL BE UL LISTED FOR WET LOCATIONS.
- FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 ARTICLES 760, 770, 775 AND 800 WHERE APPLICABLE.
- ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
- ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.
- ONLY SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
- 120VAC IS NOT PERMITTED IN THE SAME CONDUIT WITH LOW VOLTAGE WIRING.
- MAINTAIN 40 PERCENT MAXIMUM CONDUIT FILL RATIO AS PER NEC REQUIREMENTS.
- EXISTING CONDUITS MAY BE USED BY THE INSTALLATION CONTRACTOR AS DEEMED NECESSARY, HOWEVER, ANY EXISTING CONDUIT WILL BE USED ONLY IF CONDUITS MEET CURRENT STANDARDS AND CODES. SIMPLEXGRINNELL MAKES NO STATEMENTS WRITTEN OR VERBAL AS TO THE CONDITION OF EXISTING CONDUITS.
- EXISTING DEVICES SHOWN IN LIGHT SOLID LINES. NEW DEVICES AND WIRING SHOWN IN HEAVY SOLID LINES.
- SET ALL MULTI-CANDELA DEVICE JUMPERS TO "FACP". PROGRAM ALL MULTI-CANDELA DEVICES TO CANDELA RATING SHOWN ON DRAWINGS.
- TAP ALL SPEAKERS AT 1/2 WATT, 70 VOLTS UON. USE 70 VOLT TAP FOR ALL SPEAKERS. EXISTING RELOCATED SPEAKERS ARE TAPPED AT 1 WATT, 70 VOLTS UON.
- ALL IDNET CIRCUITS, ADDRESSABLE VISUAL CIRCUITS AND ADDRESSABLE SPEAKER CIRCUITS MAY BE T-TAPPED.

SLH BLDG A 1ST FLR 1PFS2 - TPS-1 CIRCUIT SUMMARY & VOLTAGE DROP

Channel	Description	Alarm Current	% Drop	Unit Load*	Wire Length	Spare Current	Spare Voltage Drop
3V10	1ST FLR VISUAL CKT 3V10	2.050A	7.56%	10	1,170	43%	
3V11	1ST FLR VISUAL CKT 3V11	2.255A	5.87%	11	685	20%	70%
3V12	1ST FLR VISUAL CKT 3V12	2.114A	5.56%	11	710	30%	57%

POINTS SHOWN IN LIGHT GRAY TEXT REFER TO EXISTING DEVICES.

ENHANCED POWER SUPPLY - CHANNEL 3						SWITCH SETTINGS							
IDNoc Address	Device Type	PID	Setting	Custom Label (Max 40 Characters)		1	2	3	4	5	6	7	8
3V12-1-1	STRB	4904-9351		HOSP 1ST FL RM 1A04A		X							ON
3V12-1-2	STRB	4904-9351		HOSP 1ST FL RM 1A04C V12-1 15-3-2		X							ON
3V12-1-3	STRB	4904-9351		HOSP 1ST FL RM 1A04B V12-1 15-3-3		X	X						ON
3V12-1-4	STRB	4904-9351		HOSP 1ST FL RM 1A036 V12-1 15-3-4		X	X						ON
3V12-2-1	STRB	4904-9351		HOSP 1ST FL CORR @ RM 1A04L V12-2 15-3-5		X	X						ON
3V12-1-6	STRB	4906-9253	15cd	HOSP 1ST FL CORR		X	X						ON
3V12-2-7	STRB	4904-9351		HOSP 1ST FL RM 1A007 V12-2 15-3-7		X	X	X					ON
3V12-3-8	STRB	4904-9351		HOSP 1ST FL CORR @ RM 1A043 V12-3 15-3-8				X	X				ON
3V12-3-9	STRB	4904-9351		HOSP 1ST FL DECONTAM 1A044 V12-3 15-3-9		X	X		X				ON
3V12-3-10	STRB	4904-9351		HOSP 1ST FL RM 1A047 V12-3 15-3-1		X	X		X				ON
3V12-3-11	STRB	4904-9351		HOSP 1ST FL RM 1A047 V12-3 15-3-1		X	X	X	X				ON

3V12 Distributed Load Voltage Drop										
Starting Voltage: 20vdc		Min. Device Voltage: 17vdc		Primary Wire Gauge: 14ga		Wire Res. Per Ft: 0.003070		@ 75 Celsius		
Allowable % Drop: 12.8%				Home Run Wire Gauge: 14ga		Wire Res. Per Ft: 0.003070		@ 75 Celsius		
Class B Calculations										% Vdrop
Branch	Device #	From	Distance (feet)	PID	Setting	Device Draw	Current at Device	Voltage Drop	Voltage at Device	Wire Length
1	TAP1	PANEL	180	JBOX		0.0000	0.884	1.004	18.496	Branch 1: 5.56%
1	3V12-1-1	TAP1	15	4904-9351		0.2050	0.205	0.019	18.477	Length: 290'
1	TAP2	TAP1	10	JBOX		0.0000	0.679	0.042	18.454	
1	3V12-1-2	TAP2	10	4904-9351		0.2050	0.205	0.013	18.442	
1	3V12-1-3	TAP2	15	4904-9351		0.2050	0.205	0.025	18.429	
1	3V12-1-6	3V12-1-3	25	4906-9253	15cd	0.0640	0.064	0.010	18.420	
1	3V12-1-4	TAP2	30	4904-9351		0.2050	0.205	0.038	18.416	
2	TAP3	PANEL	135	JBOX		0.0000	0.410	0.340	19.160	Branch 2: 2.16%
2	3V12-2-5	TAP3	15	4903-9351		0.2050	0.205	0.019	19.141	Length: 215'
2	3V12-2-7	TAP3	65	4904-9351		0.2050	0.205	0.082	19.078	
3	TAP4	PANEL	100	JBOX		0.0000	0.620	0.503	18.997	Branch 3: 3.07%
3	3V12-3-8	TAP4	15	4903-9351		0.2050	0.205	0.019	18.978	Length: 205'
3	3V12-3-9	TAP4	15	4904-9351		0.2050	0.205	0.019	18.978	
3	TAP5	TAP4	25	JBOX		0.0000	0.410	0.063	18.934	
3	3V12-3-10	TAP5	25	4904-9351		0.2050	0.205	0.031	18.902	
3	3V12-3-11	TAP5	25	4904-9351		0.2050	0.205	0.031	18.902	



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FAX: 913-894-0020



PARTIAL FIRE ALARM FLOOR PLAN, RISER & CALCULATIONS

ST. LUKE'S EAST

LAB REMODEL
LEES SUMMIT, MO 64086

DATE	DESCRIPTION	ISSUE FOR REVIEW
0	1/20/21	0

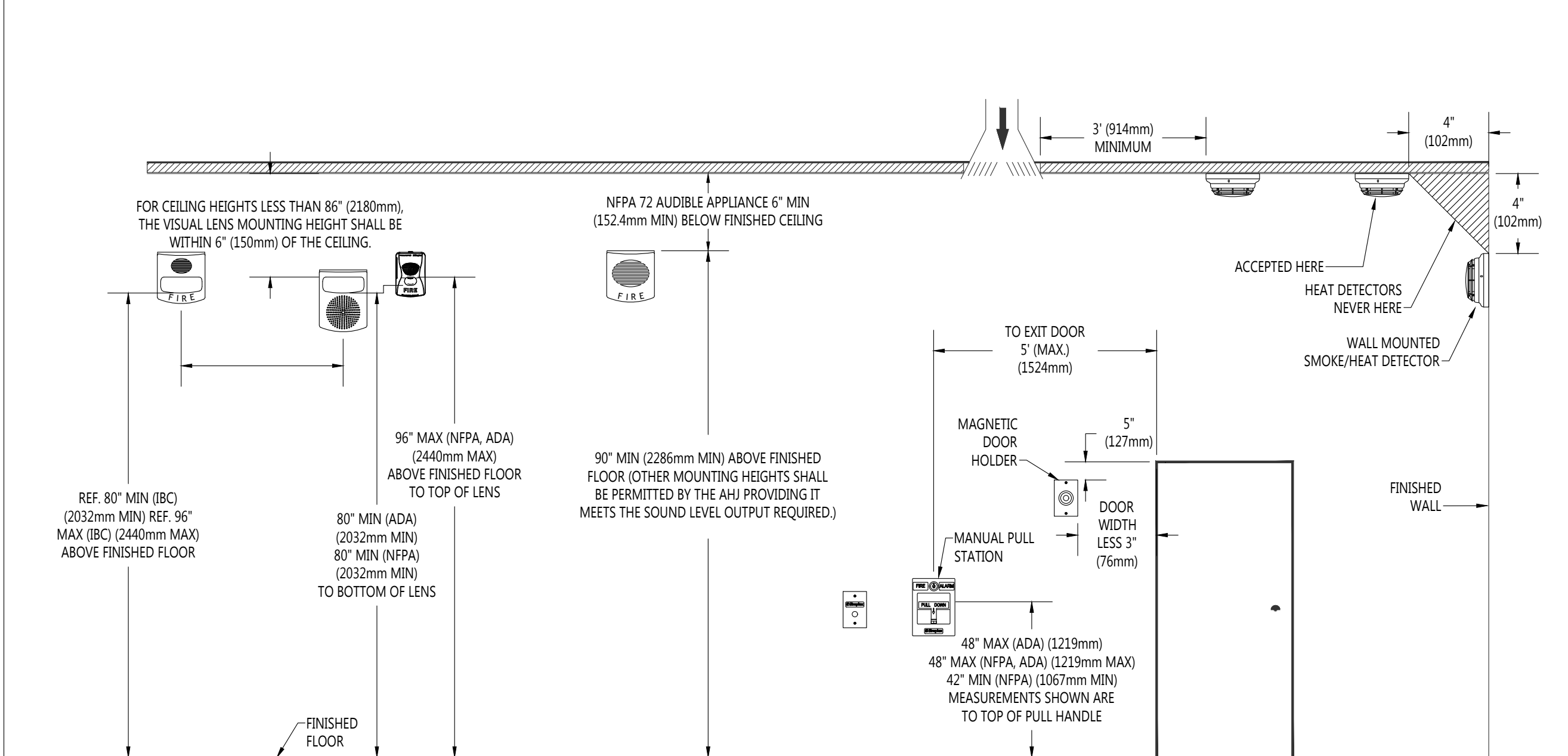
REVIEW

DRAWN BY:	D. LOCKETT
DESIGN BY:	D. LOCKETT
ISSUE DATE:	1/20/21
JOB NUMBER:	
PROJECT #:	650036552
SYSTEM:	FIRE ALARM SYSTEM
SHEET:	

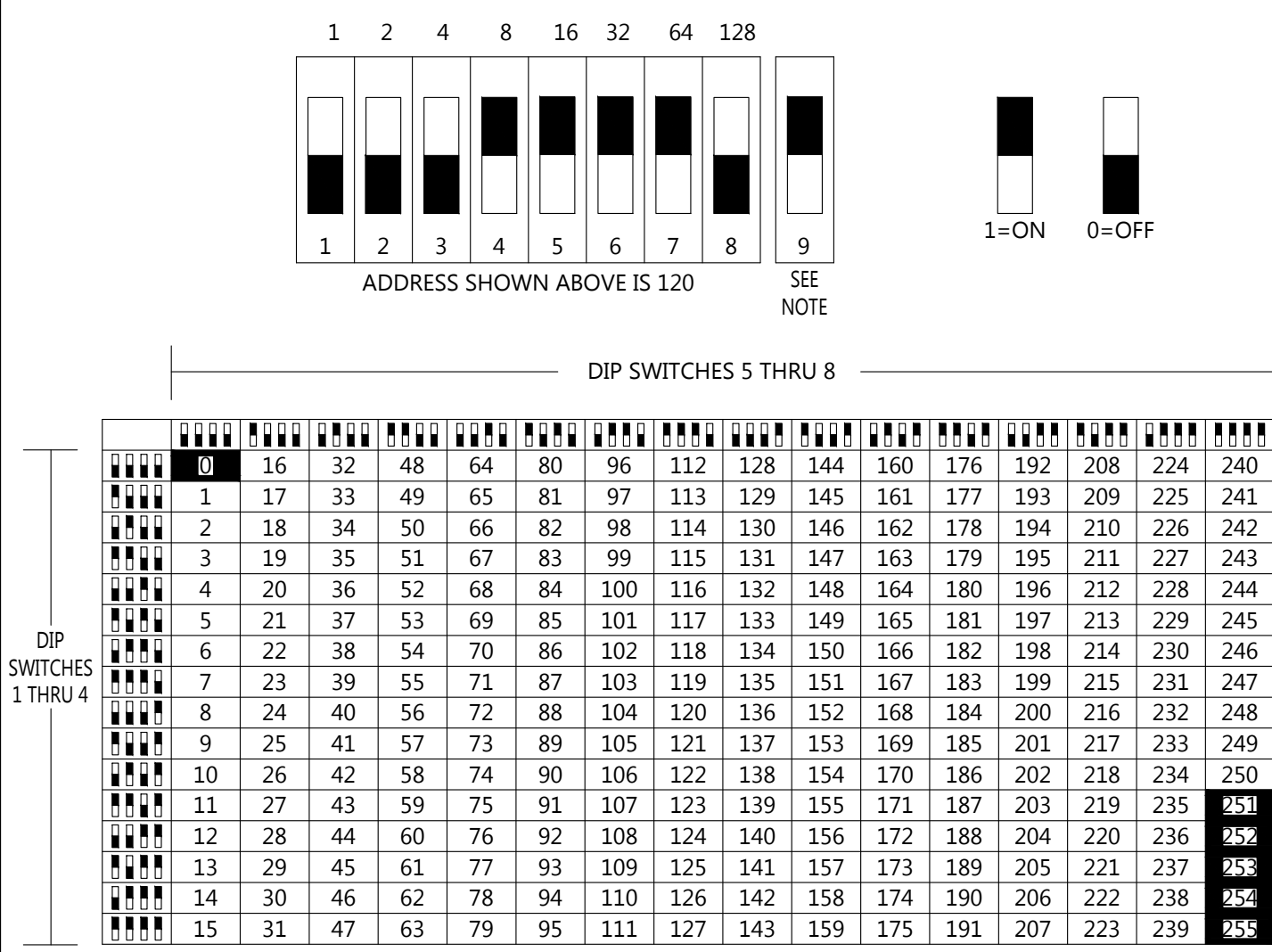
PARTIAL FLOOR PLAN

FA-102

PER NFPA 72

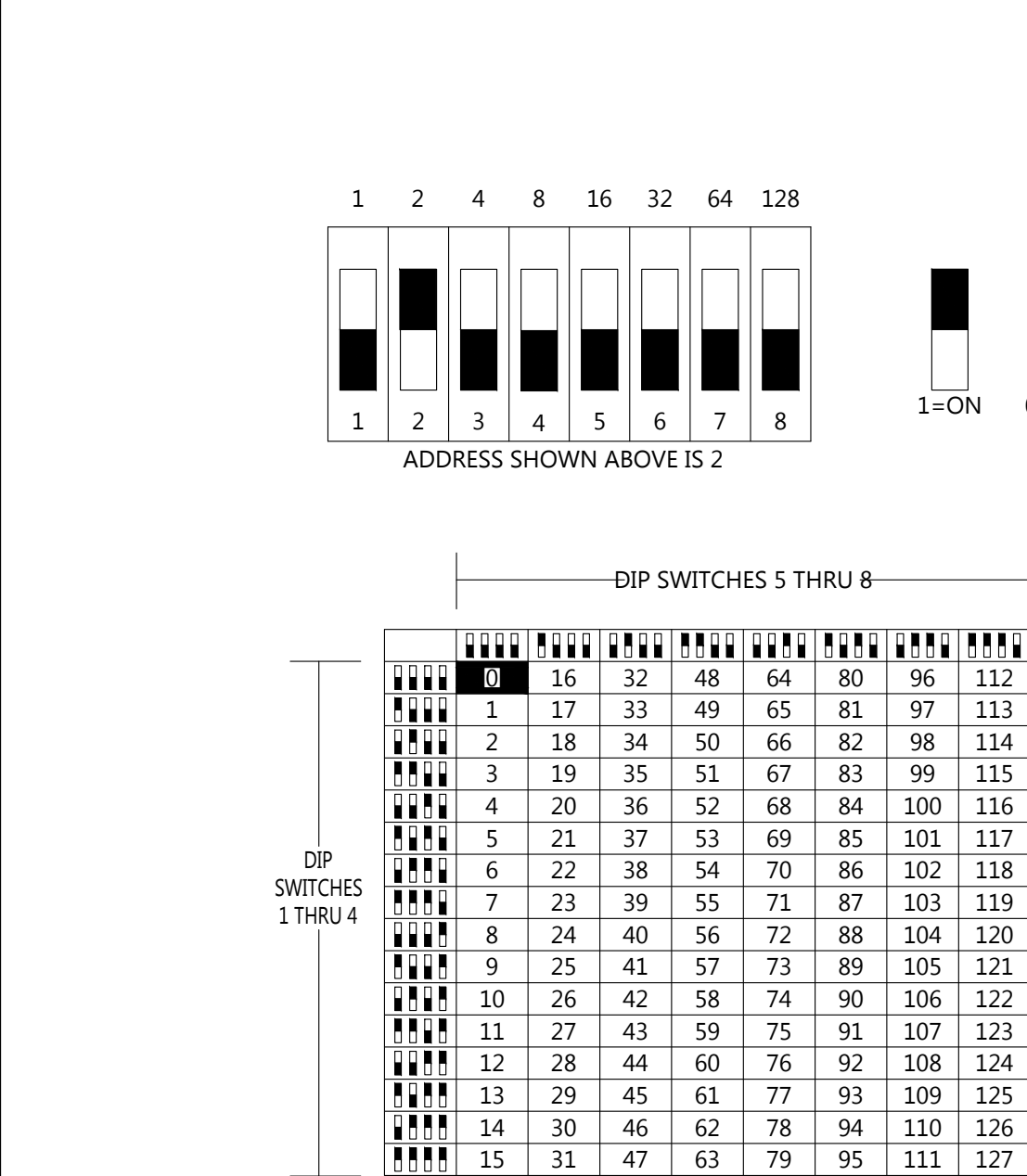
[illegible]

SIMPLEX IDNet

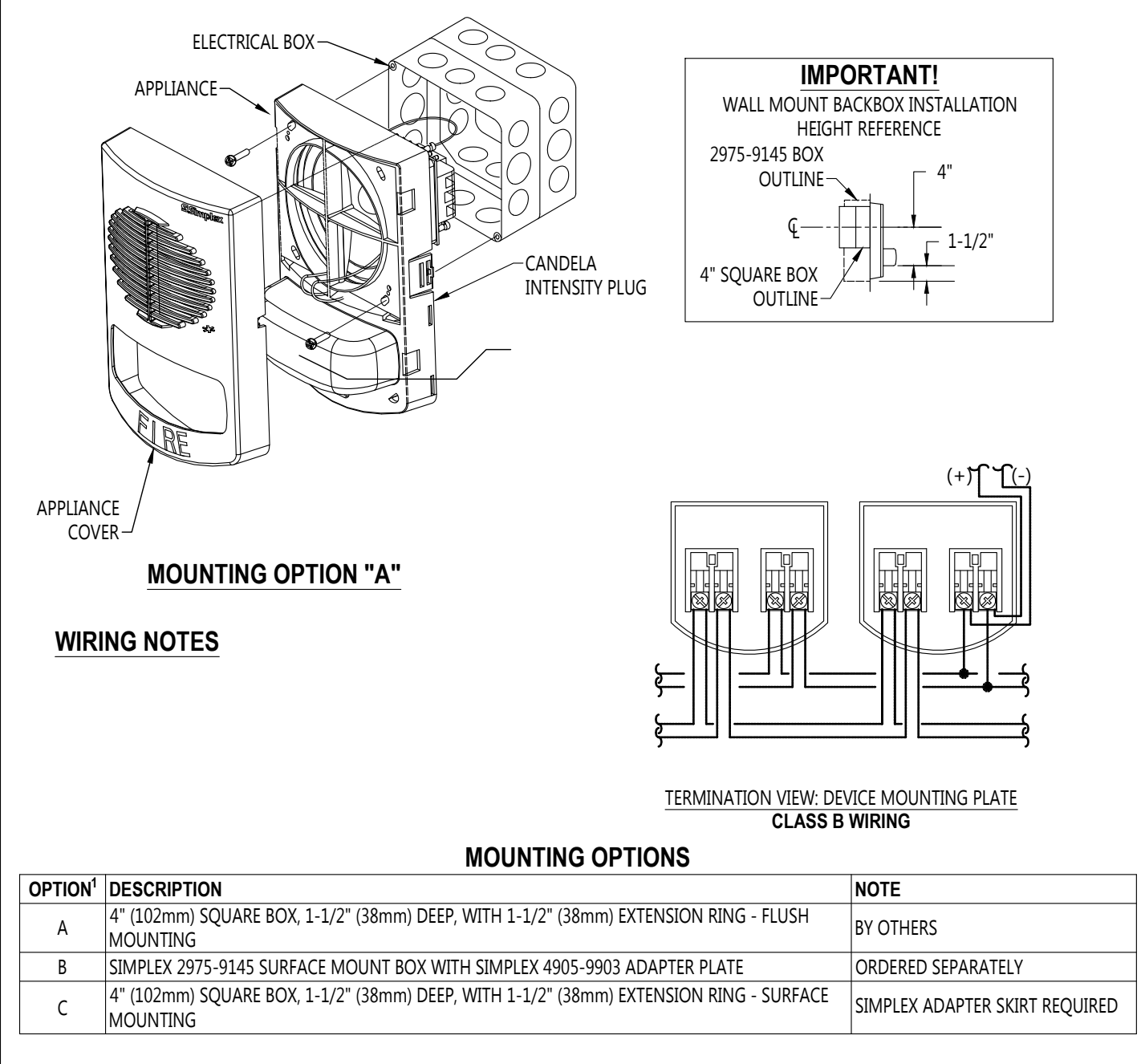


NOTE: The 4098-9771, -9794, -9795, -9798 SOUNDER BASES HAVE A 9-POSITION DIP SWITCH. THE FIRST EIGHT DIP SWITCHES SET THE SOUNDER BASE ADDRESS. DIP SWITCH POSITION 9 IS SET TO OFF OR ON DEPENDING UPON THE SOUNDER BASE POWER SOURCE. WHEN THE SOUNDER BASE IS CONNECTED TO A 24 VDC POWER SOURCE, DIP SWITCH POSITION 9 IS SET TO "OFF" AND THE 24 VDC POWER IS SUPERVISED BY THE SOUNDER BASE. WHEN THE SOUNDER BASE IS POWERED BY THE PANEL'S NOTIFICATION APPLIANCE CIRCUIT (NAC), DIP SWITCH POSITION 9 IS SET TO "ON" AND THE POWER IS SUPERVISED BY THE NAC AND NOT THE SOUNDER BASE. THE 4098-9770 AND -9797 BASES HAVE THE SAME LAYOUT, BUT DOESN'T OFFER SOUNDER FUNCTIONALITY. THEY USE AN 8-WAY DIP SWITCH ONLY.

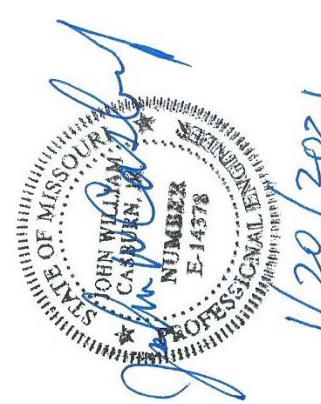
SIMPLEX TRUEALERT ES / IDNAC



SIMPLEX 4906 SERIES WALL MOUNTED SPEAKER / VISUAL



11019 Strang Line Road
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INSTALLATION INFORMATION & PERIPHERAL WIRING DETAIL

ST. LUKE'S FAST

LAB REMODEL
LEE'S SUMMIT MO 64088[illegible]

DRAWN BY:	D. LOCKETT
DESIGN BY:	D. LOCKETT
ISSUE DATE:	1/20/21
JOB NUMBER:	
PROJECT #:	650036552
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SYSTEM:
FIRE ALARM SYSTEM

SHEET:

GENERAL INSTALLATION INFORMATION

FA-701