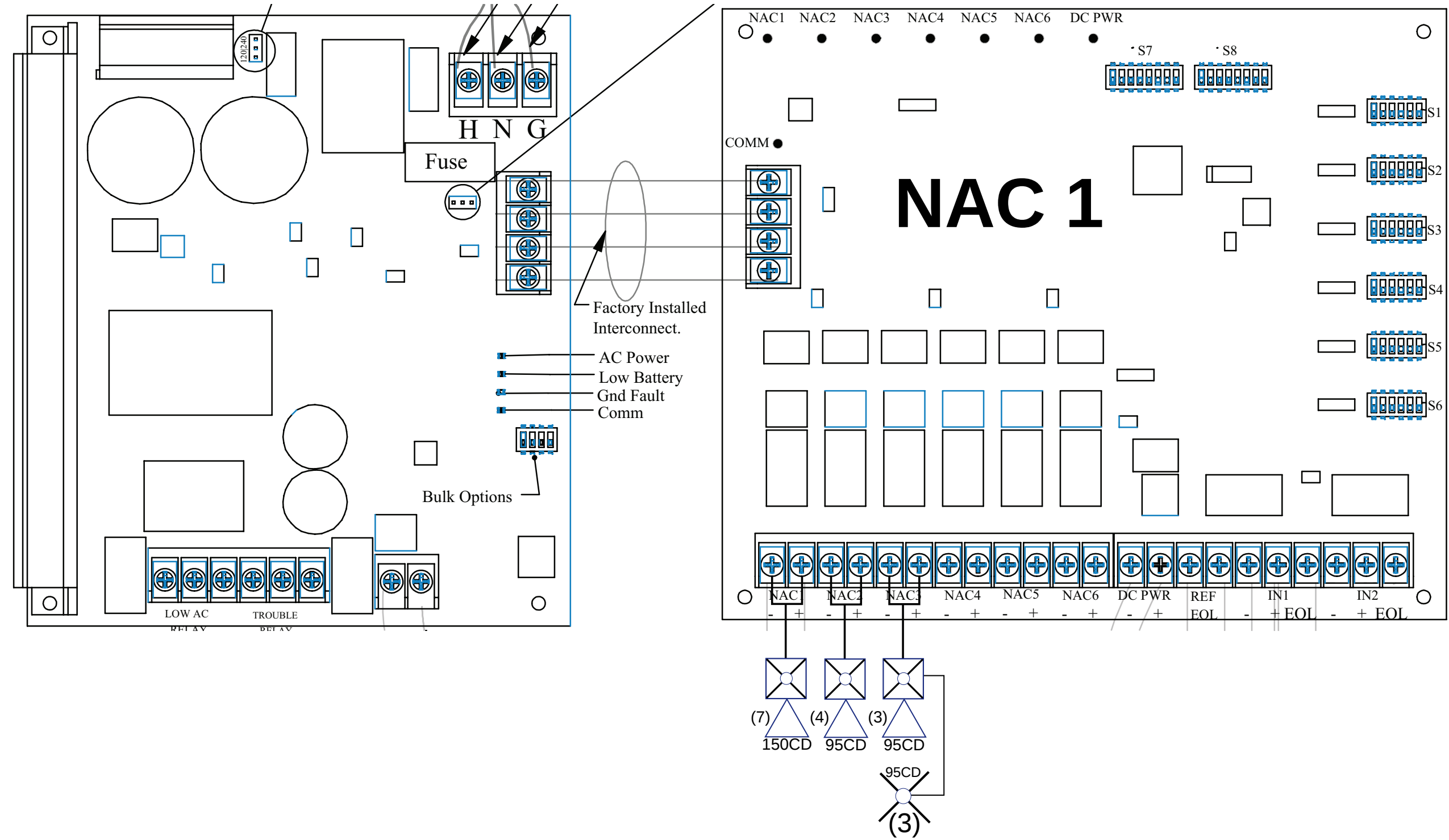


SEQUENCE OF OPERATIONS																
FIRE ALARM SYSTEM MATRIX				BUILDING SYSTEM OUTPUTS												
	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SYSTEM	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTUATE GENERAL EVACUATION SIGNAL	UNLOCK EXITS AND RELEASE DOOR HOLDERS	DISPLAY CHANGE OF STATUS	ACTIVATE EXTERNAL HORN/STROBE	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	RETURN ELEVATOR TO 2ND FLOOR	RETURN ELEVATOR TO 1ST FLOOR	
MANUAL FIRE ALARM PULL BOXES	X	X					X	X	X	X	X					
AREA SMOKE AND CARBON MONOXIDE DETECTORS	X	X					X	X	X	X	X					
BUILDING MULTI CRITERIA DETECTORS	X	X					X	X	X	X	X					
DUCT SMOKE DETECTOR			X	X			X	X				X				
FIRE ALARM A.C. POWER FAILURE					X	X	X	X	X					X		
FIRE ALARM SYSTEM LOW BATTERY					X	X	X	X						X		
OPEN CIRCUIT					X	X	X	X					X			
GROUND FAULT					X	X	X	X					X			
NOTIFICATION APPLIANCE CIRCUIT SHORT					X	X		X					X			
SPRINKLER WATER FLOW	X	X					X	X	X	X	X					
SPRINKLER TAMPER			X	X			X	X				X				

GENERAL NOTES

1. WORK SHALL COMPLY WIH ALL APPLICABLE CODES.
2. AS BUILT DRAWINGS ALONG WITH ONE YEAR WARRANTY LETTER WILL BE FORWARDED TO THE APPROPRIATE PARTY UPON COMPLETION OF PROJECT.
3. 1" CONDUIT MUST BE PROVIDED AT ALL NAC PANELS.
4. MINIMUM OF 1/2" SLEEVE MUST BE PROVIDED FOR ALL RTU 2000 CFM OR GREATER.
5. ALL WAREHOUSE HORN-STROBES SHALL BE 30 FEET FROM FINISHED FLOOR.

FIRE ALARM SYMBOL LEGEND			
	-FIRE ALARM CONTROL PANEL		-HEAT DETECTOR
	-NAC PANEL		-WATER FLOW MONITOR MODULE
	-CEILING MOUNT HORN-STROBE		-TAMPER MONITOR MODULE
	-CEILING MOUNT STROBE		- RETURN DUCT DETECTOR
	-PHOTO ELECTRIC SMOKE DETECTOR.		-RELAY
	-PULL-STATION		-END OF LINE RESISTOR
	-Remote Annunciator		- MONITOR MODULE



POTTER
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Project Name: **H&R BLOCK** Standby Hours: **24**
Alarm Mins: **5**

Installed By: **APS** Efficiency Factor: **20%**
Designed By: **APS**
Date: **6/17/2024** NAC Source Voltage: **20.4**

Model #: **PSN-106** Max Panel Current (amps): **10**
Panel ID: **NAC**
Location: **WAREHOUSE**

User assumes all responsibility to ensure the quantities and current flow values in this worksheet are accurate and/or to submit.

Qty	Panel	Description	Standby (amps) Each	Total	Alarm (amps) Each	Total
1	PSN-106	NAC Power Expander	0.075	0.075	0.075	0.075

Panel Standby: **0.075** Panel Alarm: **0.075**

Ckt	Use	Description	Class	Standby (amps) Total	Alarm (amps) Total
1	Notification	CKT 1	Class B	0.00000	1.59600
2	Notification	CKT 2	Class B	0.00000	0.65600
3	Notification	CKT 3	Class B	0.00000	0.89400
4	Unused		Class B	0.00000	0.00000
5	Unused		Class B	0.00000	0.00000
6	Unused		Class B	0.00000	0.00000

AUX: NAC Standby: **0.00000** NAC Alarm: **0.00000**

Battery Calculation Summary		Standby (amps)	Alarm (amps)
Panel Current:		0.07500	0.07500
NAC Circuit Current:		0.00000	3.14600
Total Standby:		0.07500	3.22100
Standby Hours:		14	5
AH Required:		1.80	0.27
Total Combined Standby & Alarm Amphours Required:		2.07	
Efficiency Factor:		20%	
Required Battery Amphours:		2.48	
Battery Amphours Provided:		7	

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NAC Circuit Configuration & Voltage Drop H&R BLOCK 6/17/2024

NAC 1 MAX Circuit Current (amps): **3** Source Voltage Used (VDC): **20.4**

Class: **Class B** Usage: **Notification** Description: **CKT 1**

Wire Type	Ohms/100ft	Length 3-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	3.27	2.06	1.596	17.07	16

Qty	Lookup Type	Circuit Devices	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
7	User Defined	SYSTEM SENSOR HORN-STROBE 150CD		0.000000	0.000000	0.228000	1.596000

Total Standby: **1.00000** Total Alarm: **1.59600**

NAC 2 MAX Circuit Current (amps): **1** Source Voltage Used (VDC): **20.4**

Class: **Class B** Usage: **Notification** Description: **CKT 2**

Wire Type	Ohms/100ft	Length 3-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	135	0.861	0.656	19.83	16

Qty	Lookup Type	Circuit Devices	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
4	User Defined	SYSTEM SENSOR HORN-STROBE 95CD		0.000000	0.000000	0.164000	0.656000

Total Standby: **0.00000** Total Alarm: **0.65600**

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NAC Circuit Configuration & Voltage Drop (cont'd) H&R BLOCK 6/17/2024

NAC 3 MAX Circuit Current (amps): **3** Source Voltage Used (VDC): **20.4**

Class: **Class B** Usage: **Notification** Description: **CKT 3**

Wire Type	Ohms/100ft	Length 3-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	140	0.893	0.894	19.60	16

Qty	Lookup Type	Circuit Devices	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
3	User Defined	SYSTEM SENSOR HORN-STROBE 95CD		0.000000	0.000000	0.164000	0.492000
3	User Defined	SYSTEM SENSOR STROBE 95CD		0.000000	0.000000	0.134000	0.400000

Total Standby: **1.00000** Total Alarm: **0.89600**

NAC 4 MAX Circuit Current (amps): **3** Source Voltage Used (VDC): **20.4**

Class: **Class B** Usage: **Unused** Description:

Wire Type	Ohms/100ft	Length 3-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19		0.000	0.000	20.40	16

Qty	Lookup Type	Circuit Devices	Description	Each	Standby (amps) Total	Each	Alarm (amps) Total
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Total Standby: **0.00000** Total Alarm: **0.00000**



3315 N Oak Trafficway | Kansas City, MO 64118
816 | 888 | 7380
NP Studio North, LLC
Missouri Certificate of Authorization No. A-2017040540

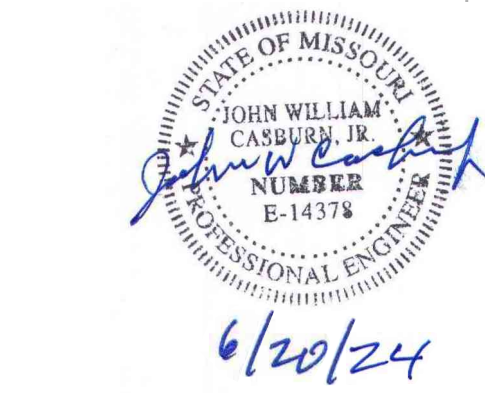
PLUMBING DESIGN-BUILD BY GEN CONTRACTOR
MECHANICAL DESIGN-BUILD BY GEN CONTRACTOR
ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR
FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR
CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main St
Lee's Summit, MO 64086

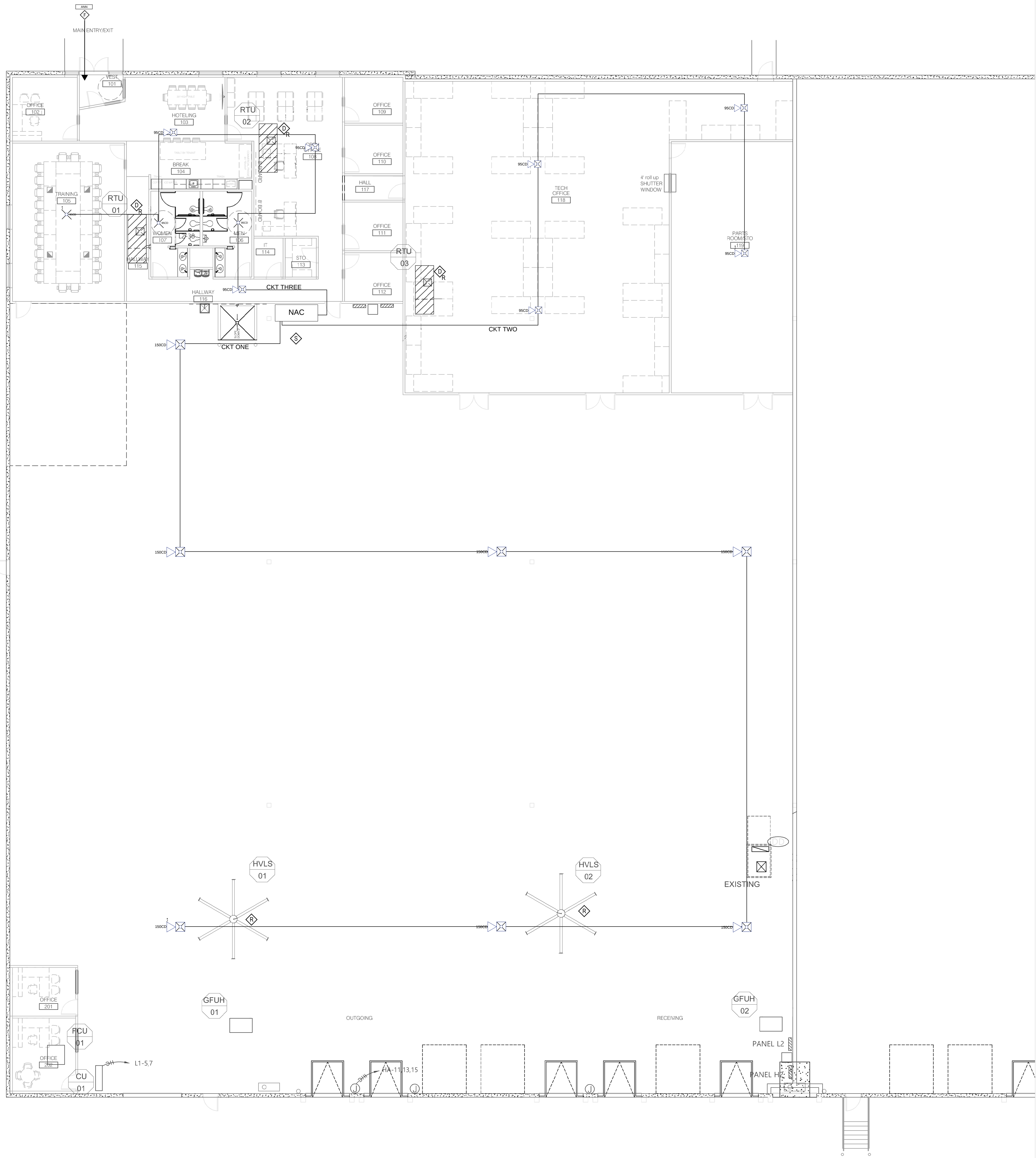
Project No. 2024-032
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Drawn By: F. Crubaugh
Reviewed By:
Revisions:
No. Date Description



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Cody: 913-258-0861
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Spring Hill, KS

FA.00

H:\COMPANY SHARED\JEREMY\AUTOCAD DRAWINGS\H&R BLOCK\H&R BLOCK DEPOT ELECTRICAL.DWG 6/9/2024 10:17:53 AM jhansen



1 FIRE ALARM LAYOUT
Scale: 1/8" = 1'-0"
PLAN TRUE



studioNorth
ARCHITECTURE

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NP Studio North, LLC
Missouri Certificate of Authorization No. A-2017040540

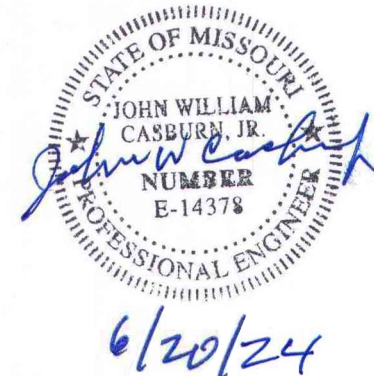
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FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR
CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

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