

Poudre School District 2022 MODULAR RELOCATIONS

RICE ELEMENTARY
7000 3rd St
Wellington, Colorado 80549
Fire Alarm System Drawings

Symbol	Description	Mounting	Manufacturer	Part #
	New Remote Power Supply	Surface Mount	Potter	PSN-106
	New Addressable Monitor Module	4 Square Deep	Notifier	FMM-1
	Existing Multi-Voltage Relay	Existing	Notifier	EOLR-1
	Existing Horn with Multi Candela Sync Strobe at 75cd	Existing	Notifier	P2RL
	Existing Conventional Photo Smoke Detector	Existing	Notifier	2W-B
	Existing Conventional Manual Pull Station	Existing	Notifier	NBG-12L
	Existing Conventional Carbon Monoxide Detector	Existing	Notifier	CO1224TR
	New Conventional Carbon Monoxide Detector	Single Gang Box	Notifier	CO1224TR
	New Surge Protector	Surface	TII	E120V-GT

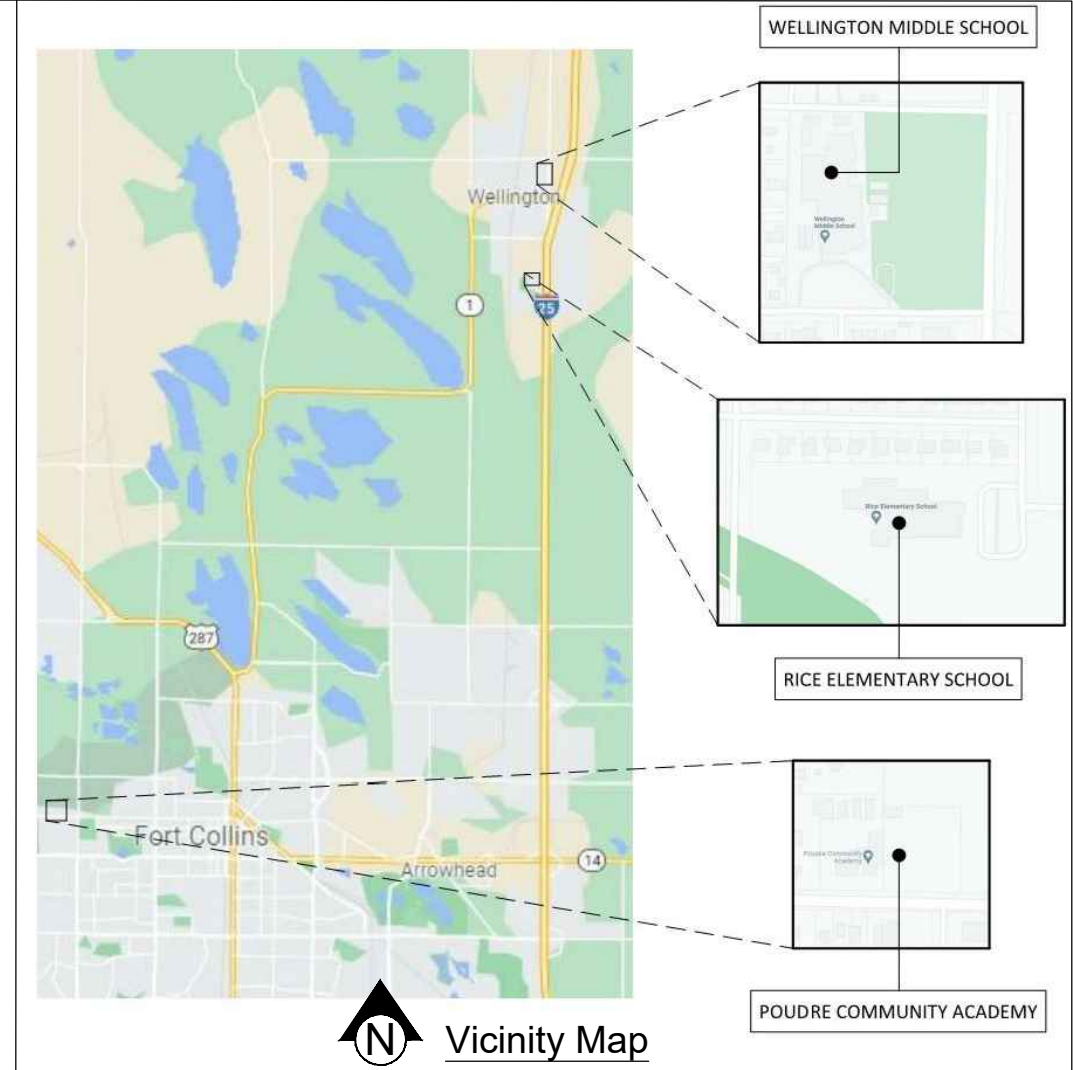
- Fire Alarm Systems General Application Notes:**
- INSTALLATION SHALL BE ACCOMPLISHED IN STRICT COMPLIANCE WITH NFPA, LOCAL AND STATE AHJ'S, NEC, AND CONTRACT DRAWINGS.
 - WIRE ROUTING IS DIAGRAMMATIC IN NATURE ONLY AND NOT INTENDED FOR ACTUAL CONDUIT ROUTING.
 - ALL CONDUIT SIZING AND ROUTING BY ELECTRICAL CONTRACTOR PER NEC AND AHJ.
 - THE SYSTEM SHALL BE MONITORED BY A UL LISTED MONITORING STATION BEFORE THE AHJ TEST.
 - FIELD VERIFY SPRINKLER WATERFLOW, SMOKE DAMPERS, AND DUCT DETECTOR LOCATIONS.
 - FIELD VERIFY ALL WIRING LOCATIONS AND REQUIREMENTS FOR HVAC AND FAN CONTROL.
 - SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN 3'-0" OF AIR DIFFUSERS.
 - NFPA 72 REQUIRES THAT NO SMOKE DETECTORS ARE TO BE INSTALLED UNTIL AFTER FINAL CONSTRUCTION CLEAN-UP. DETECTORS THAT HAVE BEEN INSTALLED PRIOR TO CLEAN-UP MUST BE CLEANED OR REPLACED ACCORDING TO NFPA 72 CHAPTER 17.7.1.11 2010 edition.
 - FACP SHALL NOT BE ENERGIZED WITHOUT THE PRESENCE OF FIRE DETECTION SYSTEMS TECHNICIANS.
 - ALL CIRCUITS WILL BE PROPERLY TAGGED AND TESTED FOR OPENS, SHORTS, GROUNDS AND PROPER END OF LINE RESISTANCE. EACH CIRCUITS METER READING MUST BE DOCUMENTED AND PRESENTED TO FIELD TECHNICIAN UPON ARRIVAL ON SITE FOR CHECKOUT.
 - A SET OF INSTALLATION AS-BUILT DRAWINGS SHOWING ACTUAL CONDUIT AND CONDUCTOR ROUTES SHALL BE KEPT BY PROJECT FOREMAN FOR USE BY FIELD TECHNICIANS.
 - NO "T" TAPPING OF SIGNALING OR INITIATING ZONE CIRCUITS ARE ALLOWED. "T" TAPPING OF STYLE 4 ADDRESSABLE CIRCUITS IS ALLOWED PROVIDING THE SPLICE IS PROFESSIONALLY INSTALLED AND POLARITY IS OBSERVED. WHERE APPLICABLE, SHIELDS SHALL BE CONTINUOUS AND FREE OF GROUNDS. SHIELDS SHALL BE TERMINATED AS SHOWN ON DRAWINGS. CABLE SHIELDS SHALL BE SPICED TOGETHER AT EVERY JUNCTION BOX FROM THE ALARM PANEL TO THE LAST DEVICE ON EACH CABLE RUN. SHIELDS AND OTHER FIRE ALARM CONDUCTORS (EXCEPT POWER GROUNDS) SHALL BE INSULATED AND COMPLETELY FREE FROM CONDUIT OR EARTH GROUNDS.
 - MOUNT AUDIBLE/VISUAL WALL DEVICE BACK BOX BETWEEN 80" AND 96" TO BOTTOM OF BACK BOX AFF SEE FLOOR PLANS FOR CANDELA RATING OF DEVICE BEING INSTALLED.
 - DO NOT ATTACH THE LAST NOTIFICATION APPLIANCE TO THE WALL UNTIL VOLTAGE READINGS ARE RECORDED ON DRAWINGS BY POUDBRE SCHOOL DISTRICT.
 - REFERENCE THE INSTALLATION MANUALS FOR THE DUCT SMOKE DETECTORS. INSTALL THE PROPER DUCT SAMPLING TUBE FOR THE WIDTH OF THE DUCT AS INDICATED IN THE INSTALLATION MANUAL. IF PROPER SAMPLE TUBES HAVE NOT BEEN SUPPLIED CALL FIRE DETECTION SYSTEMS LLC. FOR THE PROPER TUBE REQUIRED.

SCOPE OF WORK

POUDRE SCHOOL DISTRICT - WELLINGTON MIDDLE SCHOOL IS AN EXISTING TWO STORY EDUCATIONAL FACILITY THAT IS REMOVING THREE MODULAR CLASSROOMS. TWO OF THE THREE MODULAR CLASSROOMS WILL BE RELOCATED TO RICE ELEMENTARY AND THE THIRD RELOCATED TO POUDBRE COMMUNITY ACADEMY. GRAPHIC MAPS WILL BE UPDATED, PRINTED, AND INSTALLED BY POUDBRE SCHOOL DISTRICT.

RICE ELEMENTARY SCHOOL IS AN EXISTING EDUCATIONAL FACILITY THAT IS ADDING TWO MODULAR CLASSROOMS. NEW NOTIFICATION, CONVENTIONAL SMOKE DETECTORS AND CONVENTIONAL PULL STATIONS WILL BE INSTALLED IN EACH MODULAR CLASSROOM. A NEW POWER SUPPLY WILL BE INSTALLED IN MODULAR BUILDING #1. NEW CARBON MONOXIDE DETECTORS SHALL BE PROGRAMMED AS SUPERVISORY WITH A LOCAL TEMPORAL 4 SIGNAL. WET LOCATION WIRING WILL BE INSTALLED IN THE EXISTING UNDERGROUND CONDUIT BETWEEN THE EXISTING BUILDING AND THE NEW MODULARS. FIELD VERIFY DEVICE DESCRIPTORS AND APPROVE WITH PSD AND ENGINEER. GRAPHIC MAPS WILL BE UPDATED, PRINTED, AND INSTALLED BY POUDBRE SCHOOL DISTRICT.

POUDRE COMMUNITY ACADEMY IS AN EXISTING EDUCATIONAL FACILITY THAT IS ADDING ONE MODULAR CLASSROOM. NEW NOTIFICATION, CONVENTIONAL SMOKE DETECTORS AND CONVENTIONAL PULL STATIONS WILL BE INSTALLED IN EACH MODULAR CLASSROOM VIA THE EXISTING MODULAR CLASSROOM CIRCUITS. NEW CARBON MONOXIDE DETECTOR SHALL BE PROGRAMMED AS SUPERVISORY WITH A LOCAL TEMPORAL 4 SIGNAL. WET LOCATION WIRING WILL BE USED BETWEEN THE EXISTING MODULAR AND THE NEW MODULAR. FIELD VERIFY DEVICE DESCRIPTORS AND APPROVE WITH PSD AND ENGINEER. GRAPHIC MAPS WILL BE UPDATED, PRINTED, AND INSTALLED BY POUDBRE SCHOOL DISTRICT.



OWNER
POUDRE SCHOOL DISTRICT
2445 LAPORTE AVENUE
FORT COLLINS, COLORADO 80521
970(490)3017

ARCHITECT
KALERT CONSULTING GROUP, LLC
2429 STONECREST DRIVE
FORT COLLINS, COLORADO 80521
970(421)3049

FIRE PROTECTION ENGINEER
TLH FIRE
6901 SOUTH PIERCE STREET
LITTLETON, COLORADO 80128
PHONE: 303(517)9558

INSTALLING CONTRACTOR
TBD
TBD
TBD
TBD

SEQUENCE OF OPERATIONS
SEQUENCE OF OPERATIONS SHALL REMAIN UNCHANGED. CARBON MONOXIDE DETECTORS WILL INITIATE A SUPERVISORY CONDITION AND LOCAL T4. SMOKES AND PULL STATIONS WILL INITIATE AN ALARM CONDITION THROUGHOUT THE FACILITY.

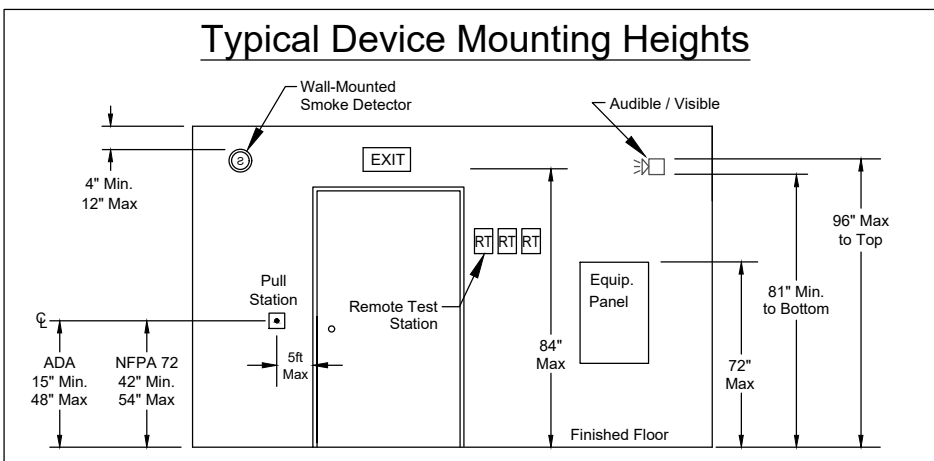
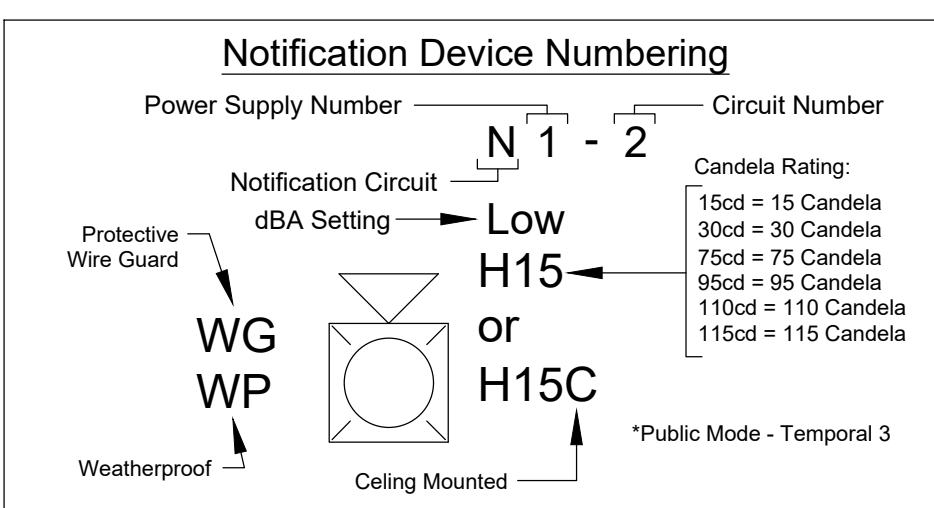
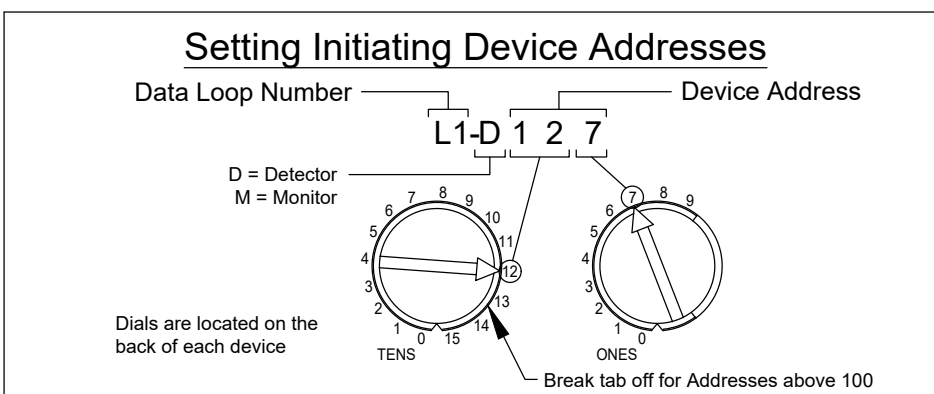
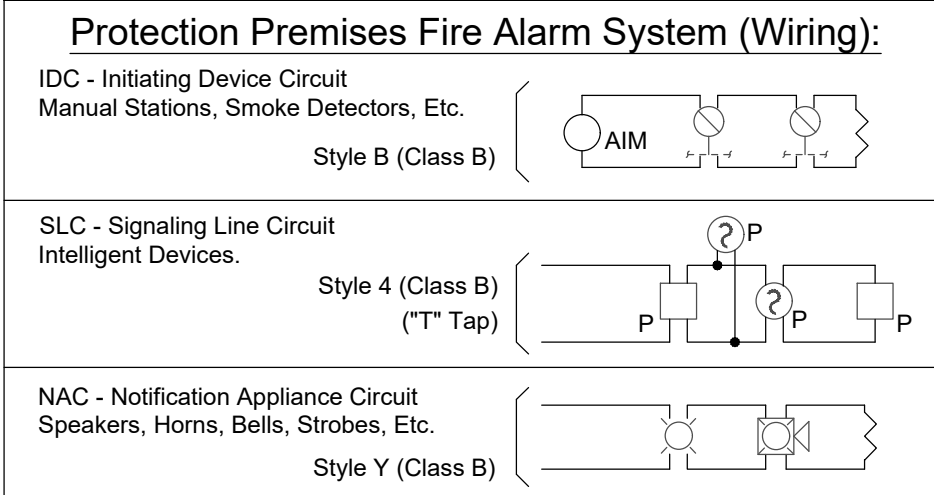
GOVERNING CODES

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2020 NATIONAL ELECTRICAL CODE
- 2021 INTERNATIONAL FIRE CODE
- 2019 NFPA 72

- CONSTRUCTION TYPE = V-B
- NUMBER OF STORIES: 1 STORY - 14' - 0"
- OCCUPANCY: E
- FIRE PROTECTION: NON-SPRINKLERED TO REMAIN
- FIRE ALARM: TEMPORAL 3 HORN
- AREA OF WORK: 1,440 +/- SF

NO.	BY	DESCRIPTION	DATE

SHEET INDEX	
F0.0	FIRE ALARM SYSTEM - COVER PAGE
F2.0	FIRE ALARM PLAN - RICE ELEMENTARY SCHOOL
F3.0	FIRE ALARM PLAN - RISER, CALCS & ADDRESS LIST
F6.0	FIRE ALARM SYSTEM - GRAPHIC MAP



Symbol	Description	MFG.	Color Coded Cable	Type of Circuit Application
IDC	1 pair 16 AWG Twisted / NON Shielded Fire Alarm Cable (FPLP)	Windy City	Brown + Black - Red Jacket w/ Brown Tracer	Conventional (IDC) Circuit Plenum
V	1 pair 14 AWG Twisted / NON Shielded Fire Alarm Cable (FPLP)	Windy City	Green + Black - Red Jacket w/ Green Tracer	Audible (NAC) Circuit Plenum
V(W)	1 pair 14 AWG Twisted / NON Shielded Fire Alarm Cable (Wet Location)	Windy City	Solid Twisted Pair (Black Jacket)	Audible (NAC) Wet Location
SLC	1 pair 16 AWG Twisted / NON Shielded Fire Alarm Cable (FPLP)	Windy City	Red + Black - Red Jacket Pre-Printed "SLC"	Data (SLC) Circuit Plenum
SLC(W)	1 pair 16 AWG Twisted / NON Shielded Fire Alarm Cable (Wet Location)	Windy City	Solid Twisted Pair (Black Jacket)	Data (SLC) Wet Locations
P	1 pair 14 AWG Twisted / NON Shielded Fire Alarm Cable (FPLP)	Windy City	Red + Black - Red Jacket w/ Purple Tracer	Resettable Aux Power Circuit Plenum
P(W)	1 pair 14 AWG Twisted / NON Shielded Fire Alarm Cable (FPLP)	Windy City	Solid Twisted Pair (Black Jacket)	Resettable Aux Power Circuit Plenum

Wire Manufacturer is for Reference Purpose Only. Consult NEC and Specifications for Wiring Methods.
THHN MAY BE USED FOR WET LOCATIONS.

KCG | LLC
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SHEET CONTENTS
FIRE ALARM PLAN
COVER PAGE

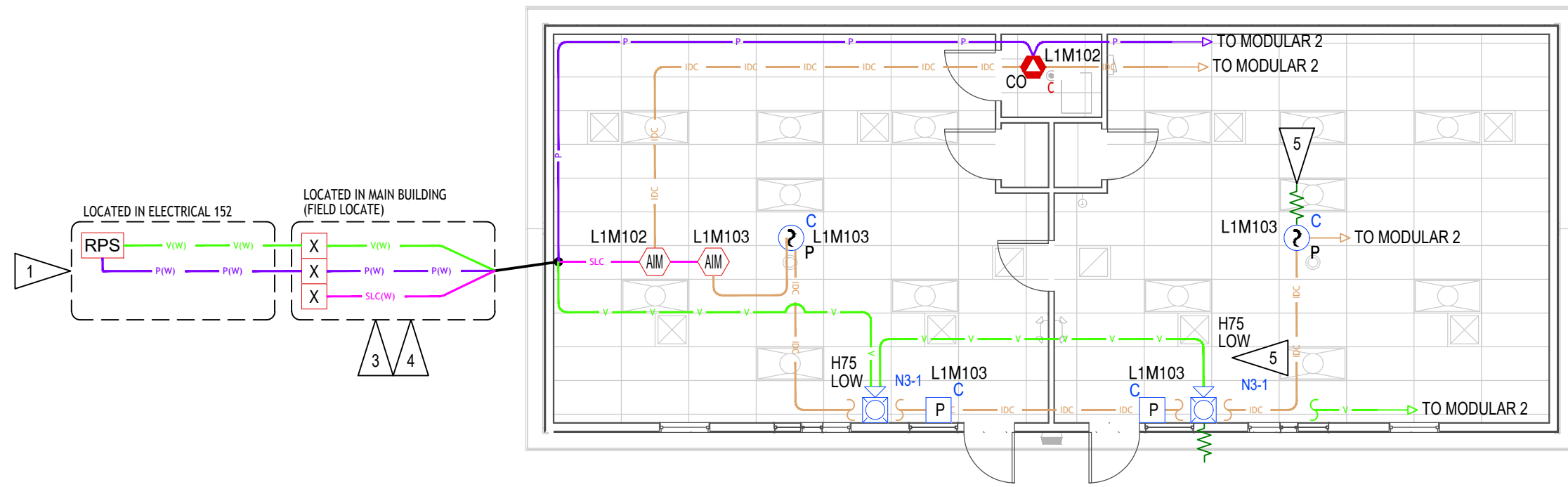
2022 CLASSROOM MODULARS
POUDRE SCHOOL DISTRICT
FORT COLLINS, COLORADO

THE DATA AND DESIGN INFORMATION HEREON, ALIEN INVIOLATION OF PROFESSIONAL LIABILITY IS THE PROPERTY OF KCG | LLC AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

ISSUE FOR PERMIT

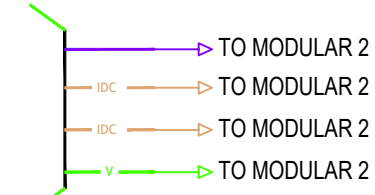
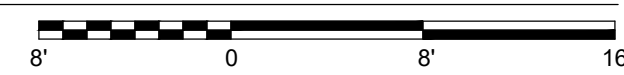
DATE: 03.11.22

REVISIONS: F0.0



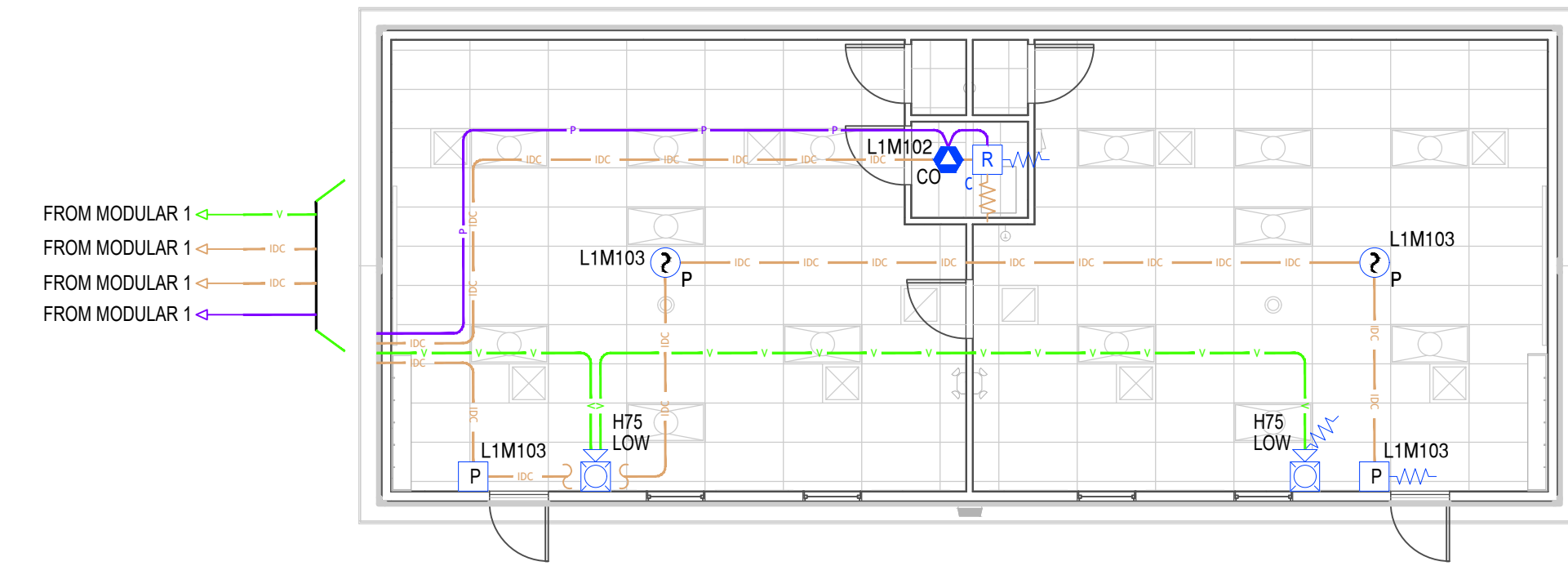
MODULAR 1 - FIRE ALARM SYSTEM PLAN

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



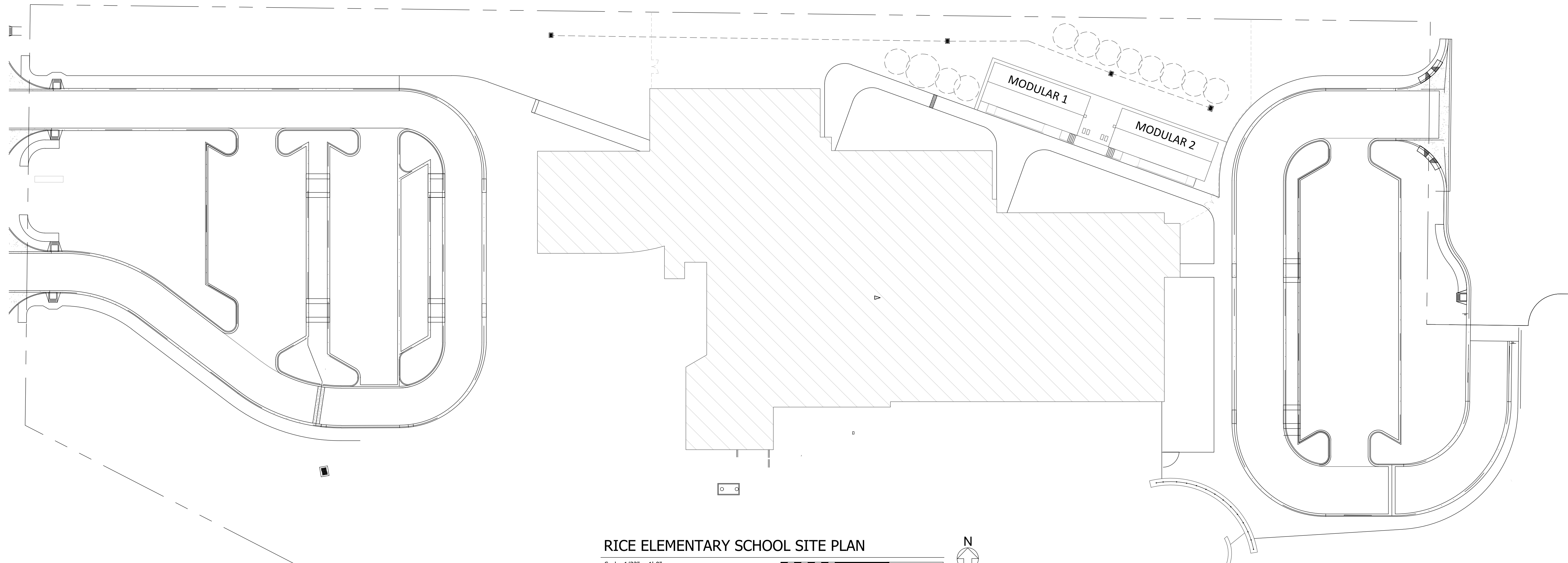
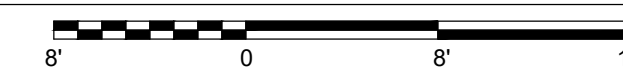
FLAG NOTES	
1	FURNISH NEW POWER SUPPLY ADJACENT TO EXISTING POWER SUPPLIES IN ELECTRICAL 152. POWER SUPPLY LOCATION SHALL BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION.
2	NOT USED.
3	CONTRACTOR SHALL CONFIRM UNDERGROUND PATHWAY. UTILIZE SPARE CONDUIT IF AVAILABLE.
4	CONTRACTOR SHALL FIELD LOCATE UNDERGROUND CONDUIT PENETRATION INTO MAIN BUILDING AND SHALL LOCATE MODULES AND TRANSIENT SUPPRESSORS ASSOCIATED WITH THE MODULAR CLASSROOM FIRE ALARM AT UNDERGROUND CONDUIT PENETRATION ON THE BUILDING SIDE.
5	REMOVE EXISTING END OF LINE RESISTOR.

NOT ALL NOTES ARE USED ON EACH PAGE



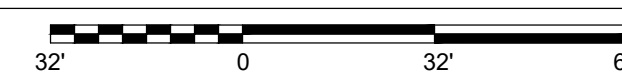
MODULAR 2 - FIRE ALARM SYSTEM PLAN

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



RICE ELEMENTARY SCHOOL SITE PLAN

Scale: 1/32" = 1'-0"



SHEET CONTENTS

FIRE ALARM PLAN
RICE ELEMENTARY SCHOOL

2022 CLASSROOM MODULARS
POUDRE SCHOOL DISTRICT
FORT COLLINS, COLORADO



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ISSUE FOR PERMIT

NO.	BY	DESCRIPTION	DATE

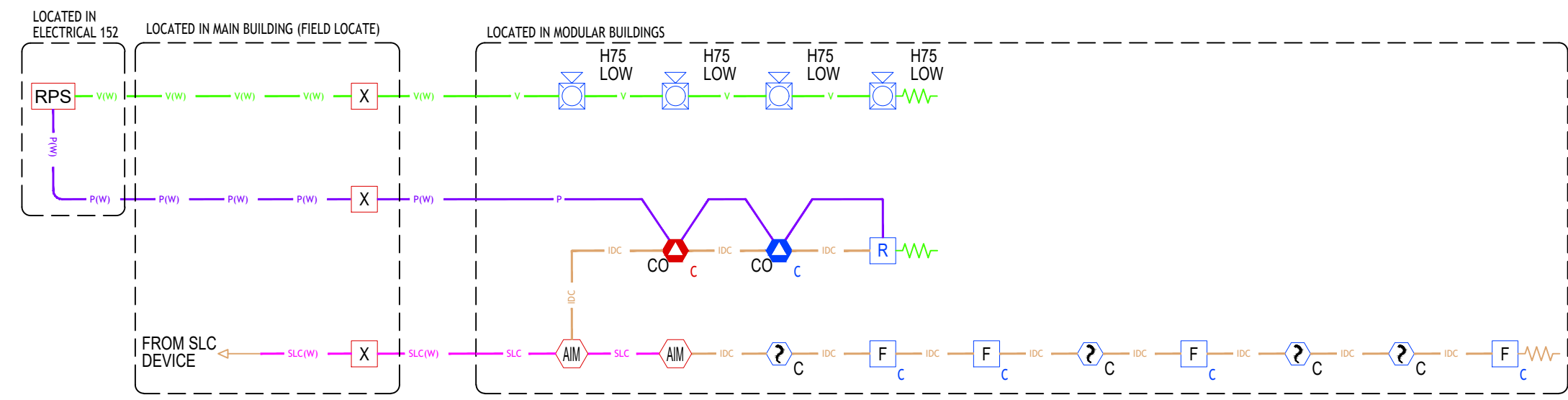
DESIGN	CHECKED	DATE	ISSUE NO.
TGS	JNH	03.11.22	F2.0

REVISIONS

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LOOP	Device ADDR	Module Type	Type Code Label	FlashScan Type	Custom Label	Extended Label	Walk Test Part.	SW INH	Silenceable	CBE 1	CBE 2	CBE 3	CBE 4	CBE 5	Waterflow Delay
1	1	Control	Relay	RELAY	EMERGENCY LIGHTING	1st FLOOR	Disab led	Disab led	No	Z99	Z0				N/A
1	2	Control	Relay	RELAY	DAMPER ART RM 102	1st FLOOR	Disab led	Disab led	No	Z99	Z10				N/A
1	3	Monitor	Pull Station	MANUAL STATION	ART ROOM 102 EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	4	Monitor	Pull Station	MANUAL STATION	MUSIC ROOM 101 EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	5	Control	Relay	RELAY	DOOR HOLDER	1st FLOOR	Disab led	Disab led	No	Z99	Z0				N/A
1	7	Monitor	Pull Station	MANUAL STATION	SOUTHWEST MAIN ENTRY	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	9	Monitor	Pull Station	MANUAL STATION	W. STAIR LOBBY EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	10	Monitor	Pull Station	MANUAL STATION	CAFETERIA HALL	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	11	Control	Relay	RELAY	MAIN ELEC RM HALLWAY	1st FLOOR	Disab led	Disab led	No	Z99	Z11				N/A
1	12	Control	Relay	RELAY	TEACH STOR 112B	1st FLOOR	Disab led	Disab led	No	Z99	Z21				N/A
1	13	Monitor	Pull Station	MANUAL STATION	WEST WING N.E. ENTRY	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	18	Monitor	Pull Station	MANUAL STATION	KITCHEN 155D EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	20	Control	Relay	RELAY	KITCHEN 155D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z13				N/A
1	22	Control	Relay	RELAY	KITCHEN 155D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z14				N/A
1	24	Control	Relay	RELAY	KITCHEN 155D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z15				N/A
1	25	Control	Relay	RELAY	KITCHEN FIRE DOOR	1st FLOOR	Disab led	Disab led	No	Z99	Z50				N/A
1	27	Control	Relay	RELAY	KITCHEN 155D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z12				N/A
1	28	Monitor	Pull Station	MANUAL STATION	CAFETERIA 155 S EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	30	Control	Relay	RELAY	MECH RM 154D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z16				N/A
1	32	Control	Relay	RELAY	MECH RM 154D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z17				N/A
1	34	Control	Relay	RELAY	MECH RM 154D DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z18				N/A
1	35	Monitor	Pull Station	MANUAL STATION	GYM SOUTH EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	36	Control	Relay	RELAY	ELEV EQUIP. DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z19				N/A
1	38	Control	Relay	RELAY	ELEV EQUIP. DAMPER	1st FLOOR	Disab led	Disab led	No	Z99	Z20				N/A
1	39	Monitor	Pull Station	MANUAL STATION	CENTER N. EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	40	Monitor	Pull Station	MANUAL STATION	MEDIA E HALL S EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	41	Control	Relay	RELAY	MAIN ELEC RM 152	1st FLOOR	Disab led	Disab led	No	Z99	Z22				N/A
1	42	Monitor	Pull Station	MANUAL STATION	KINDERG ARTEN 142	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	43	Monitor	Pull Station	MANUAL STATION	KINDERG ARTEN 140	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	44	Monitor	Pull Station	MANUAL STATION	KINDERG ARTEN 141	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	45	Monitor	Pull Station	MANUAL STATION	EAST EXIT	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	46	Monitor	Pull Station	MANUAL STATION	MECH ROOM 154D	1st FLOOR	N/A	N/A	N/A	Z0					N/A
1	48	Monitor	Trouble Mon	MONITOR	RPS 1 ELEC 152	1st FLOOR	N/A	N/A	N/A	Z7					N/A
1	49	Monitor	Trouble Mon	MONITOR	RPS 3 ELEC 152	1st FLOOR	N/A	N/A	N/A	Z7					N/A
1	50	Monitor	Monitor	MONITOR	KITCHEN HOOD SYSTEM	1st FLOOR	N/A	N/A	N/A	Z50					N/A
1	51	Monitor	Track Superv	MONITOR	ELEVATOR TAMPER	ELEV EQUIP	N/A	N/A	N/A	Z8					N/A
1	52	Monitor	Monitor	MINI/DUAL MONITOR	2nd FLOOR FLOW	BY FACP	N/A	N/A	N/A	Z9					N/A
1	53	Monitor	Monitor	MINI/DUAL MONITOR	1st FLOOR FLOW	BY FACP	N/A	N/A	N/A	Z9					N/A
1	54	Monitor	Track Superv	MINI/DUAL MONITOR	BACKFLOW TAMPER 2	BY FACP	N/A	N/A	N/A	Z8					N/A
1	55	Monitor	Track Superv	MINI/DUAL MONITOR	BACKFLOW TAMPER 1	BY FACP	N/A	N/A	N/A	Z8					N/A

LOOP	Device ADDR	Module Type	Type Code Label	FlashScan Type	Custom Label	Extended Label	Walk Test Part.	SW INH	Silenceable	CBE 1	CBE 2	CBE 3	CBE 4	CBE 5	Waterflow Delay
1	56	Monitor	Track Superv	MINI/DUAL MONITOR	2nd FLOOR TAMPER	BY FACP	N/A	N/A	N/A	Z8					N/A
1	57	Monitor	Track Superv	MINI/DUAL MONITOR	1st FLOOR TAMPER	BY FACP	N/A	N/A	N/A	Z8					N/A
1	58	Control	Relay	RELAY	TEACH STOR 132B	1st FLOOR	Disab led	Disab led	No	Z99	Z23				N/A
1	59	Control	Relay	RELAY	TEACH STOR 132B	1st FLOOR	Disab led	Disab led	No	Z99	Z24				N/A
1	60	Control	Relay	RELAY	DAMPER DATA RM 139	1st FLOOR	Disab led	Disab led	No	Z99	Z25				N/A
1	61	Control	Relay	RELAY	TEACH STORAGE 212A	2nd FLOOR	Disab led	Disab led	No	Z99	Z26				N/A
1	62	Control	Relay	RELAY	TEACH STORAGE 212A	2nd FLOOR	Disab led	Disab led	No	Z99	Z27				N/A
1	63	Control	Relay	RELAY	TEACH STORAGE 222B	2nd FLOOR	Disab led	Disab led	No	Z99	Z28				N/A
1	64	Control	Relay	RELAY	TEACH STORAGE 222B	2nd FLOOR	Disab led	Disab led	No	Z99	Z29				N/A
1	65	Control	Relay	RELAY	COOP LEARNIN G 230	2nd FLOOR	Disab led	Disab led	No	Z99	Z30				N/A
1	66	Control	Relay	RELAY	COOP LEARNIN G 230	2nd FLOOR	Disab led	Disab led	No	Z99	Z31				N/A
1	70	Monitor	Trouble Mon	MONITOR	FCPS 2 2ND FL	ELEC.RM 232	N/A	N/A	N/A	Z7					N/A
1	71	Control	Relay	RELAY	PRIMARY ELEV. RECALL	ELEV EQUIP	Disab led	Disab led	No	Z99	Z51				N/A
1	72	Control	Relay	RELAY	SEC. ELEV. RECALL	ELEV EQUIP	Disab led	Disab led	No	Z99	Z52				N/A
1	73	Control	Relay	RELAY	FIRE HAT	ELEV EQUIP	Disab led	Disab led	No	Z99	Z53				N/A
1	74	Control	Relay	RELAY	ELEV. SHUNT	ELEV EQUIP	Disab led	Disab led	No	Z99	Z54				N/A
1	76	Monitor	Pull Station	MANUAL STATION	WEST STAIRWEL	2nd FLOOR	N/A	N/A	N/A	Z0					N/A
1	77	Monitor	Pull Station	MANUAL STATION	EAST STAIRWEL	2nd FLOOR	N/A	N/A	N/A	Z0					N/A
1	79	Monitor	Pull Station	MANUAL STATION	CENTER STAIRWEL	2nd FLOOR	N/A	N/A	N/A	Z0					N/A
1	83	Control	Relay	RELAY	RTU1 SHUTDO WN 112B	1st FLOOR	Enab led	Disab led	No	Z99	Z61				N/A
1	84	Control	Relay	RELAY	RTU 2 SHUTDO WN	MECH.R M.154D	Enab led	Disab led	No	Z99	Z62				N/A
1	85	Control	Relay	RELAY	RTU 3 SHUTDO WN	MECH.R M.154D	Enab led	Disab led	No	Z99	Z63				N/A
1	87	Control	Relay	RELAY	RTU 4 SHUTDO WN	ELEC.RM 152	Enab led	Disab led	No	Z99	Z64				N/A
1	89	Control	Relay	RELAY	RTU 5 SHUTDO WN 132B	1st FLOOR	Enab led	Disab led	No	Z99	Z65				N/A
1	91	Control	Relay	RELAY	RTU 7 SHUTDO WN 112B	1st FLOOR	Enab led	Disab led	No	Z99	Z66				N/A
1	92	Control	Relay	RELAY	KITCHEN FIRE DOOR	1ST FL 155D	Disab led	Disab led	No	Z99	Z50				N/A
1	94	Monitor	Pull Station	MANUAL STATION	CLASSRO OM 235	2nd FLOOR	N/A	N/A	N/A	Z0					N/A
1	95	Monitor	Pull Station	MANUAL STATION	CLASSRO OM 236	2nd FLOOR	N/A	N/A	N/A	Z0					N/A
1	97	Monitor	Trouble Mon	MINI/DUAL MONITOR	BDA FAIL DATA RM 224	DATA RM 224	N/A	N/A	N/A						N/A
1	98	Monitor	Trouble Mon	MINI/DUAL MONITOR	BDA ANTENNA FAIL	DATA RM 224	N/A	N/A	N/A						N/A
1	99	Monitor	Trouble Mon	MONITOR	BDA COMM FAIL	DATA RM 224	N/A	N/A	N/A						N/A
1	100	Monitor	Trouble Mon	MINI/DUAL MONITOR	BDA AC FAIL	DATA RM 224	N/A	N/A	N/A						N/A
1	101	Monitor	Trouble Mon	MINI/DUAL MONITOR	BDA LOW BATTERY	DATA RM 224	N/A	N/A	N/A						N/A
1	102	Monitor	Track Superv	MONITOR	MODULAR CLASSROOMS 1&2	CO Detectors	N/A	N/A	N/A						N/A
1	103	Monitor	Monitor	MONITOR	MODULAR CLASSROOMS 1&2	Smoke/Pu II	N/A	N/A	N/A						N/A



4 ONE LINE DIAGRAM
SCALE: NONE

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NAC Circuit Configuration & Voltage Drop
Rice Elementary School 3/11/2022

NAC 1 MAX Circuit Current (amps): 3 Source Voltage Used (VDC): 20.4
Class: Class B Usage: Notification Description: Modular Classrooms

Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ EOL	Min Volts Req'd
#14 Solid	3.19	775	4.9445	0.64	17.23552	16

Qty	Lookup Type	Description	Standby (amps)		Alarm (amps)	
			Each	Total	Each	Total
4	User Defined	P2R	0	0	0.16	0.64
Total Standby:			0		Total Alarm: 0.64	

1 NAC - VOLTAGE DROP CALCULATIONS
SCALE: NONE

AUX Power MAX Circuit Current (amps): 3 Source Voltage Used (VDC): 20.4
Usage: Aux Power Description: CO Detectors

Wire Type	Ohms/1000ft	Length 1-Way	Actual Ohms	Max Load (amps)	Volts @ Last Device	Min Volts Req'd
#14 Solid	3.19	775	4.9445	0.07	20.053885	16

Qty	Lookup Type	Description	Standby (amps)		Alarm (amps)	
			Each	Total	Each	Total
2	User Defined	B200SR	0	0	0.035	0.07
Total Standby:			0		Total Alarm: 0.07	

2 AUX - VOLTAGE DROP CALCULATIONS
SCALE: NONE

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PSN-106 Battery & Voltage Drop Calculations

Project Name: Rice Elementary School Standby Hours: 24
Alarm Mins: 5
Installed By: TBD Efficiency Factor: 0.2
Designed By: TGS
Date: 3/11/2022 NAC Source Voltage: 20.4

Model #: PSN-106 Max Panel Current (amps): 10
Panel ID: RPS-3
Location: Electrical 152

User assumes all responsibility to ensure the quantities and current draw values in this worksheet are accurate prior to submit.

Qty	Panel Part #	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	

NAC Circuits (See NAC Configuration below)	Use	Description	Class	Standby (amps)		Alarm (amps)	
				Each	Total	Each	Total
1	Notification	Modular Classrooms	Class B	0		0.64	0.64
2	Unused	Spare	Class B	0		0	0
3	Unused	Spare	Class B	0		0	0
4	Unused	Spare	Class B	0		0	0
5	Unused	Spare	Class B	0		0	0
6	Unused	Spare	Class B	0		0	0
AUX	Aux Power	CO Detectors		0		0.07	0.07
NAC Standby:				0		NAC Alarm: 0.71	

Battery Calculation Summary

Standby (amps)	Alarm (amps)
Panel Current: 0.075	0.075
NAC Circuit Current: 0	0.71
Total Standby: 0.075	Total Alarm: 0.785
Standby Hours: 24	Alarm Mins: 5
AH Required: 1.8	AH Required: 0.07
Total Combined Standby & Alarm Amphours Required: 1.87	
Efficiency Factor: 0.2	
Required Battery Amphours: 2.244	
Battery Amphours Provided: 7	

3 NAC - BATTERY CALCULATIONS
SCALE: NONE

Rice Elementary



- DEVICE LEGEND**
- FIRE ALARM PANEL
 - REMOTE POWER SUPPLY
 - MAP
 - ION SMOKE
 - MANUAL PULL
 - HEAT DETECTOR
 - DUCT DETECTOR
 - TAMPER SWITCH
 - WATER FLOW SWITCH
 - FIREMAN'S CONNECTION
 - KITCHEN HOOD
 - REMOTE TEST SWITCH
 - CARBON MONOXIDE DETECTOR



FIRST FLOOR PLAN

SECOND FLOOR

ISSUE FOR PERMIT

NO.	BY	DESCRIPTION	DATE

DESIGNED BY: TGS
 CHECKED BY: JNH
 DATE: 03.11.22

SHEET NO. F6.0

REVISIONS

2022 CLASSROOM MODULARS
 Poudre School District
 Fort Collins, Colorado



SHEET CONTENTS
 FIRE ALARM SYSTEM
 GRAPHIC MAP

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