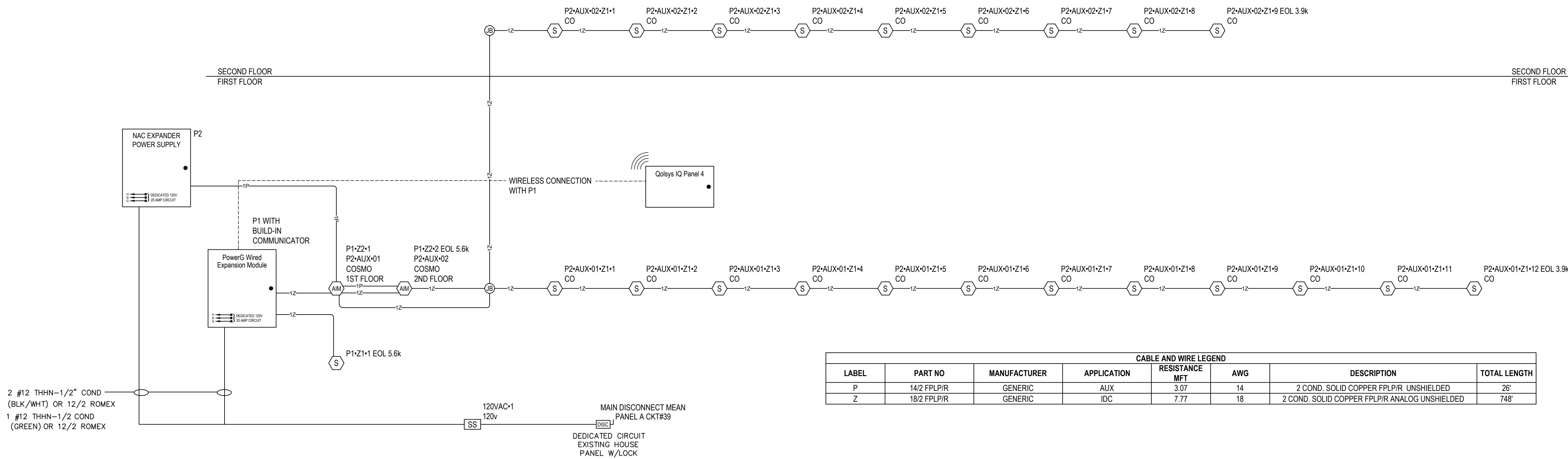


PANEL P1 (DSC PGWL5HW8) BATTERY CALCULATION							
(SECONDARY POWER SOURCE REQUIREMENTS)							
				STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	TOTAL
		1	PC4020	Mainboard	0.12	0.12	0.12
CIRCUIT	SYMBOL	QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)
P1-Z1		1	ZW-B	2-wire Standard i3 Detector	0.00005	0.00005	0.13
P1-Z2		2	COSMOD2W	2-wire interface module (required to use with COSMO-2W models)	0	0	0
					TOTAL STANDBY (A)	0.12005	TOTAL ALARM (A)
							0.25
SECONDARY STANDBY LOAD (A)				0.12005	24		2.88
SECONDARY ALARM LOAD (A)				0.25	0.08		0.02
STANDBY AND ALARM SUBTOTAL (AMP HOURS)						2.90	
DERATING FACTOR						1.25	
SECONDARY LOAD REQUIREMENTS (AMP HOURS)						3.63	
PROVIDE (2) 12V 7AH BATTERIES							

PANEL P2 (EFLOW4N) BATTERY CALCULATION							
(SECONDARY POWER SOURCE REQUIREMENTS)							
				STANDBY CURRENT (AMPS)		SECONDARY ALARM CURRENT (AMPS)	
PANEL COMPONENTS		QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	TOTAL
		1	eFlow104N Main Board	Fire Alarm Power Supply Main Board	0	0	0
CIRCUIT	SYMBOL	QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)
P2-AUX		2	COSMOD2W	2-wire interface module (required to use with COSMO-2W models)	0.061	0.122	0.181
					TOTAL STANDBY (A)	0.122	TOTAL ALARM (A)
							0.362
SECONDARY STANDBY LOAD (A)				0.122	24		2.93
SECONDARY ALARM LOAD (A)				0.362	0.08		0.03
STANDBY AND ALARM SUBTOTAL (AMP HOURS)						2.96	
DERATING FACTOR						1.25	
SECONDARY LOAD REQUIREMENTS (AMP HOURS)						3.70	

LUMP SUM REPORT SUMMARY																			
DISTANCE MEASURED USING DRAWN SEGMENT LENGTHS WITH 10.00 % ADDITIONAL LENGTH CALCULATED																			
SOURCE	CIRCUIT	PART NO	MAX. CARD CURRENT (A)	TOTAL CARD CURRENT (A)	SPARE CARD CURRENT (A)	SPARE CARD CURRENT %	MAX. CIRCUIT CURRENT (A)	TOTAL CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT %	WIRE GAUGE	WIRE RESISTANCE (D/KFT)	TOTAL CIRCUIT LENGTH (FT)	TOTAL CIRCUIT RESISTANCE (D)	STARTING CALCULATION VOLTAGE	MIN OPERATIONAL VOLTAGE	MAX. VOLTAGE DROP	END OF LINE VOLTAGE	VOLTAGE DROP %
P2 (EFLOW4N)	AUX	EFLOW4N MAIN BOARD	10	0.362	9.64	96.38 %	10	0.362	9.64	96.38 %	14	3.07	26	0.157119	20.40	16	0.06	20.34	0.28 %
CALCULATION METHODS:																			
TOTAL RESISTANCE (D) = WIRE RESISTANCE (D/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)																			
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (D) X TOTAL CIRCUIT CURRENT (A)																			



RISER DIAGRAM

SCALE: N.T.S

This item has been digitally signed and sealed by Yenan Tomas Leyva, PE on December 19th 2025.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

SEAL

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CIRCLE SECURITY SOLUTIONS, INC.
6815 SW 81st Terrace.
Miami, Florida 33143
Lic: EF0000848
PH: (305) 776-9738

Project Name and Address:
NEW RESIDENTIAL SMOKE ALARM SYSTEM FOR:
CASTRO RESIDENCE
12715 Rolling Road Drive
Pinecrest, FL 33156

FIRE ALARM
DESIGNER
& SECURITY SYSTEMS
DESIGN AND DRAWING
Phone: (786) 458 4234
e-mail: info.general@designs@yahoo.com

Revisions:

Date: 12.05.2025

CAD File: 0005

Project No: 107

Scale: AS SHOWN

FA: 3
Sheet 3 of 4