

GENERAL NOTES

1. APPLICABLE CODES:

1.1. 2023 FLORIDA BUILDING CODE, BUILDING, 8TH ED.

1.2. 2023 FLORIDA BUILDING CODE, ENERGY, 8TH ED.

1.3. 2023 FLORIDA BUILDING CODE, MECHANICAL, 8TH ED.

1.4. 2023 FLORIDA BUILDING CODE, FUEL GAS, 8TH ED.

1.5. 2023 FLORIDA BUILDING CODE, PLUMBING, 8TH ED.

1.6. 2023 FLORIDA FIRE PREVENTION CODE, 8TH ED.

1.7. 2023 FLORIDA BUILDING, ACCESSIBILITY, 8TH ED.

1.8. 2021 NFPA 70 LIFE SAFETY CODE W/ FLORIDA AMENDMENTS.

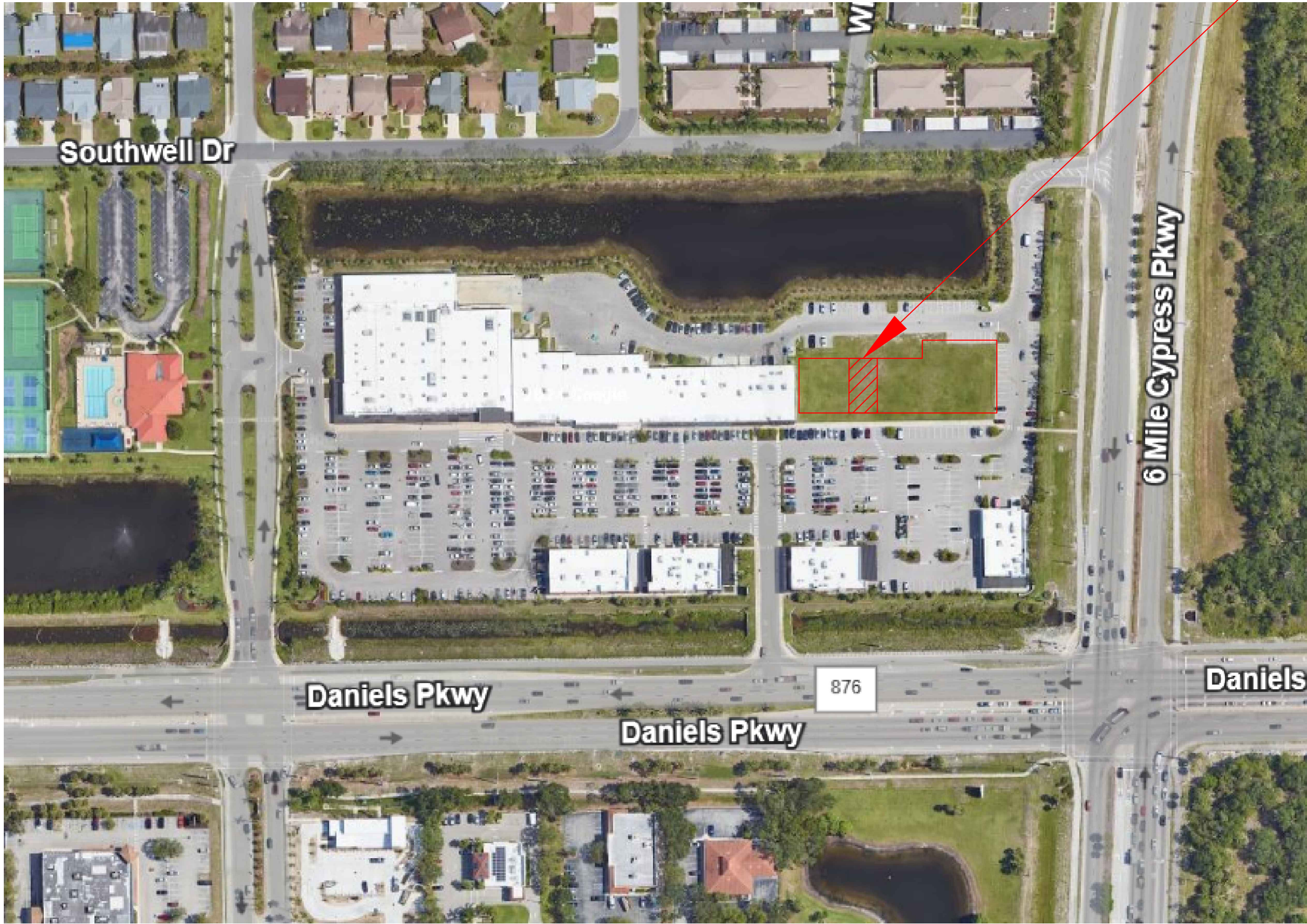
1.9. 2020 NFPA 70 NATIONAL ELECTRIC CODE.

1.10. 2019 NFPA 72 NATIONAL FIRE ALARM.
2. FIRE SPRINKLER SYSTEM: BUILDING IS FULLY SPRINKLERED.
3. SCOPE OF WORK: 1,679 SQ F.T.
4. OCCUPANCY CLASSIFICATION: MERCANTILE, BUSINESS, STORAGE/STOCK/SHIPPING.
5. CONSTRUCTION TYPE:II-B
6. OCCUPANCY LOAD: 42
7. FIRE ALARM SYSTEM CLASSIFICATION IS: CENTRAL STATION SERVICE.
8. FIRE ALARM SYSTEM TYPE IS: ADDRESSABLE.
9. ALL FIRE ALARM CIRCUITS TO BE CLASS B, POWER LIMITED.
10. VERIFY IN FIELD ALL DIMENSIONS. DO NOT SCALE THE DRAWINGS
11. ALL WORK SHALL BE OF HIGHEST QUALITY AND WORKMANSHIP.
12. NEW FIRE ALARM SYSTEM IN A PART OF THE BUILDING, THE NEW FIRE ALARM SYSTEM WILL BE INSERTED TO A PANEL AND AN EXISTING SYSTEM WITH THE SPRINKLER WATERFLOW BEING MONITORED TO ACTIVATE NOTIFICATION DEVICES UPON ALARM.
13. ALL DEVICES INSTALLED SHALL BE AS SPECIFIED IN THE DEVICE SCHEDULE, ANY INTENDED SUBSTITUTIONS SHALL FIRST BE SUBMITTED FOR REVISION AND APPROVAL.
14. INSTALLING CONTRACTOR SHALL VERIFY IN FIELD AND COORDINATE ANY INTERFERENCE WITH OTHER TRADES.
15. ALL ELECTRICAL CIRCUITS POWERING ANY AND ALL FIRE ALARM EQUIPMENT SHALL BE DEDICATED, SHALL HAVE A MEANS OF DISCONNECT EQUIPPED WITH A MECHANICAL LOCK-ON DEVICE, AND BE IDENTIFIED AS "FIRE ALARM CIRCUIT".
16. ALL CONTROL RELAYS SHALL BE LOCATED WITHIN 3' OF THE CONTROLLED DEVICE OR APPLIANCE.
17. ALL CONDUIT USED FOR FIRE ALARM SHALL BE DEDICATED FOR FIRE ALARM ONLY.
18. ALL CONDUIT AND CABLING INSTALLATION SHALL COMPLY WITH THE CURRENT NATIONAL ELECTRIC CODE N.F.P.A. 70.
19. ALL WALL, FLOOR AND CEILING PENETRATION SEALINGS SHALL BE RATED FOR THE SAME HOUR RATING AS THE WALL, FLOOR OR CEILING BEING PENETRATED.
20. ANY TWO OR MORE VISUAL NOTIFICATION APPLIANCES VISIBLE FROM THE SAME FIELD OF VIEW SHALL FLASH IN SYNCHRONIZATION.
21. FIRE ALARM SYSTEM WILL COMMUNICATE WITH CENTRAL STATION BY MEANS OF A CELLULAR COMMUNICATOR FOR THE PURPOSE OF FIRE DEPARTMENT NOTIFICATION.
22. ALL DEVICES INSTALLED IN WET LOCATIONS SHALL BE SUITABLE FOR SUCH AREA.

01 GENERAL NOTES

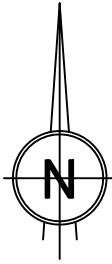
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PROJECT LOCATION



02 SITE MAP

NOT TO SCALE

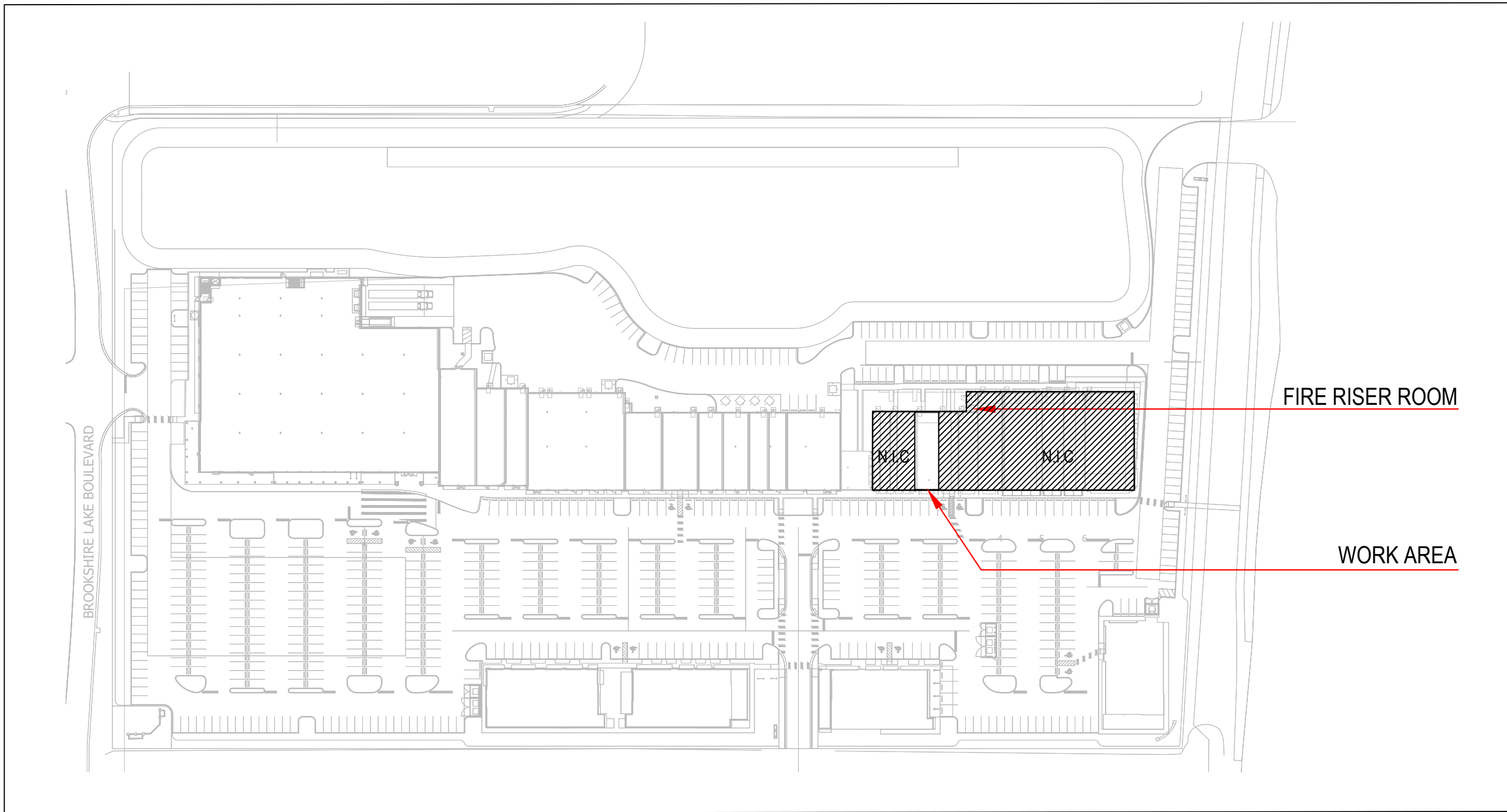


SCOPE OF WORK:

- INSTALL ALL ELECTRICAL BOXES, CONDUITS, SLEEVES AND, STUB UPS.
- INSTALL ALL CABLING.
- THE NEW DEVICES WILL BE INSTALLED IN THE EXISTING PANEL. THE COMMUNICATOR IS ALREADY INSTALLED.
- SET ALL ADDRESSES AND INSTALL ALL INITIATING DEVICES SHOWN ON THE RISER AND FLOOR PLANS..
- PROGRAM AND TEST ALL PARTS OF THE FIRE ALARM SYSTEM TO FUNCTION AS SPECIFIED IN THE SEQUENCE OF OPERATION.
- DEMONSTRATE ALL PARTS OF THE FIRE ALARM SYSTEM WORK AS INTENDED DURING INSPECTIONS WITH AUTHORITY HAVING JURISDICTION.

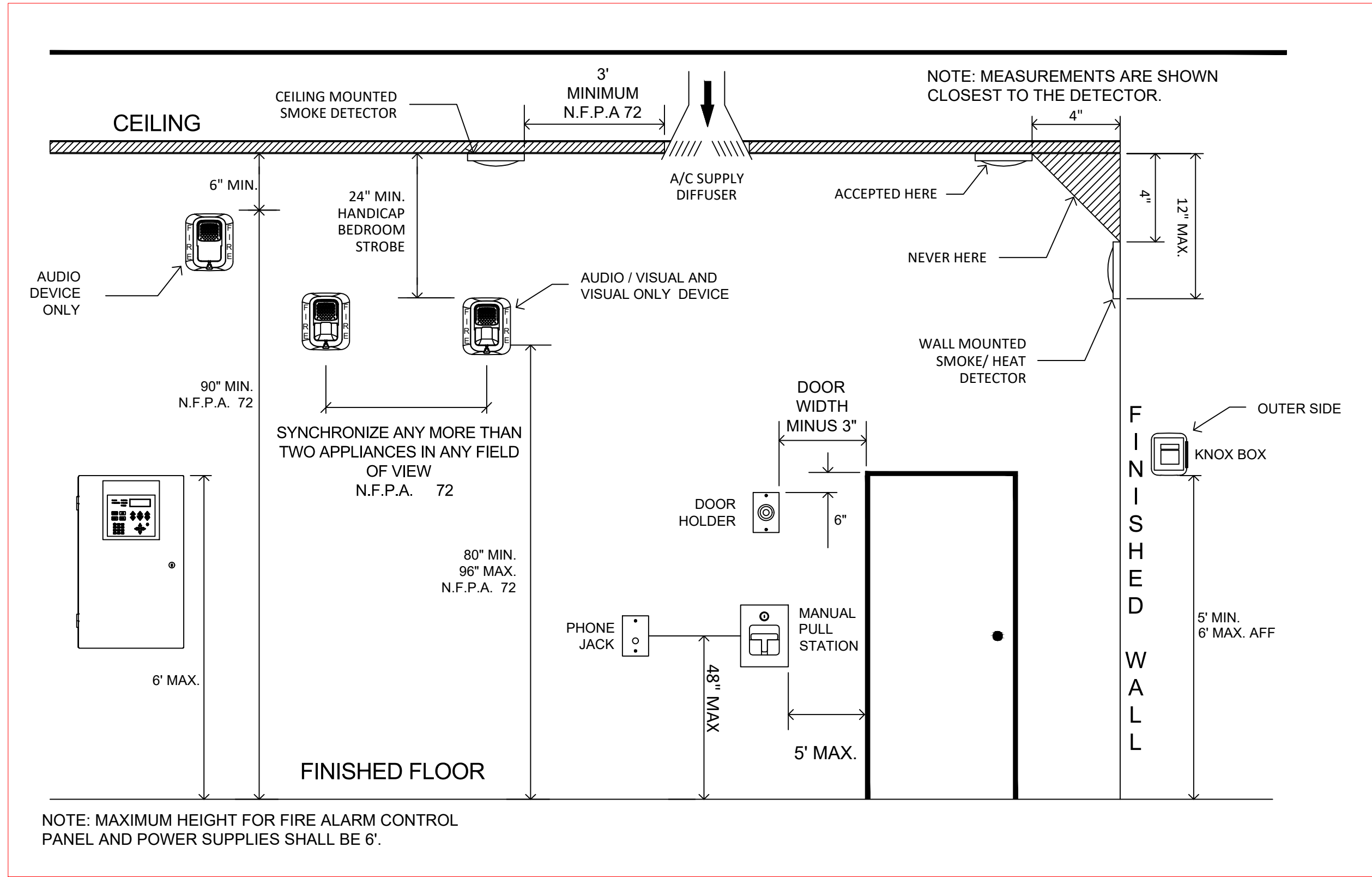
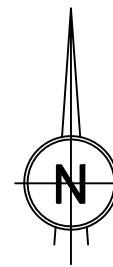
03 SCOPE OF WORK

NOT TO SCALE



04 KEY PLAN

NOT TO SCALE



05 DEVICE MOUNTING HEIGHTS

NOT TO SCALE

PROJECT:

BLUEMERCURY
FORT MYERS

REVISION SCHEDULE

REV. No.	DATE	DESCRIPTION	DRAWN BY:	REVIEWED BY:
01	12/02/2024	INITIAL REVISION	CG	BC
02	12/02/2024	COMMENTS	CG	BC

CONTRACTOR:

LEBS Electric
1144 S CONGRESS AVENUE PALM SPRINGS, FL 33406
754-268-1251 Fax 754-462-0472

PROJECT No:

DATE:

12/02/2024

DWG FILE:

BLUEMERCURY_FORT_MYERS

SCALE:

SEE DRAWINGS

Sheet:

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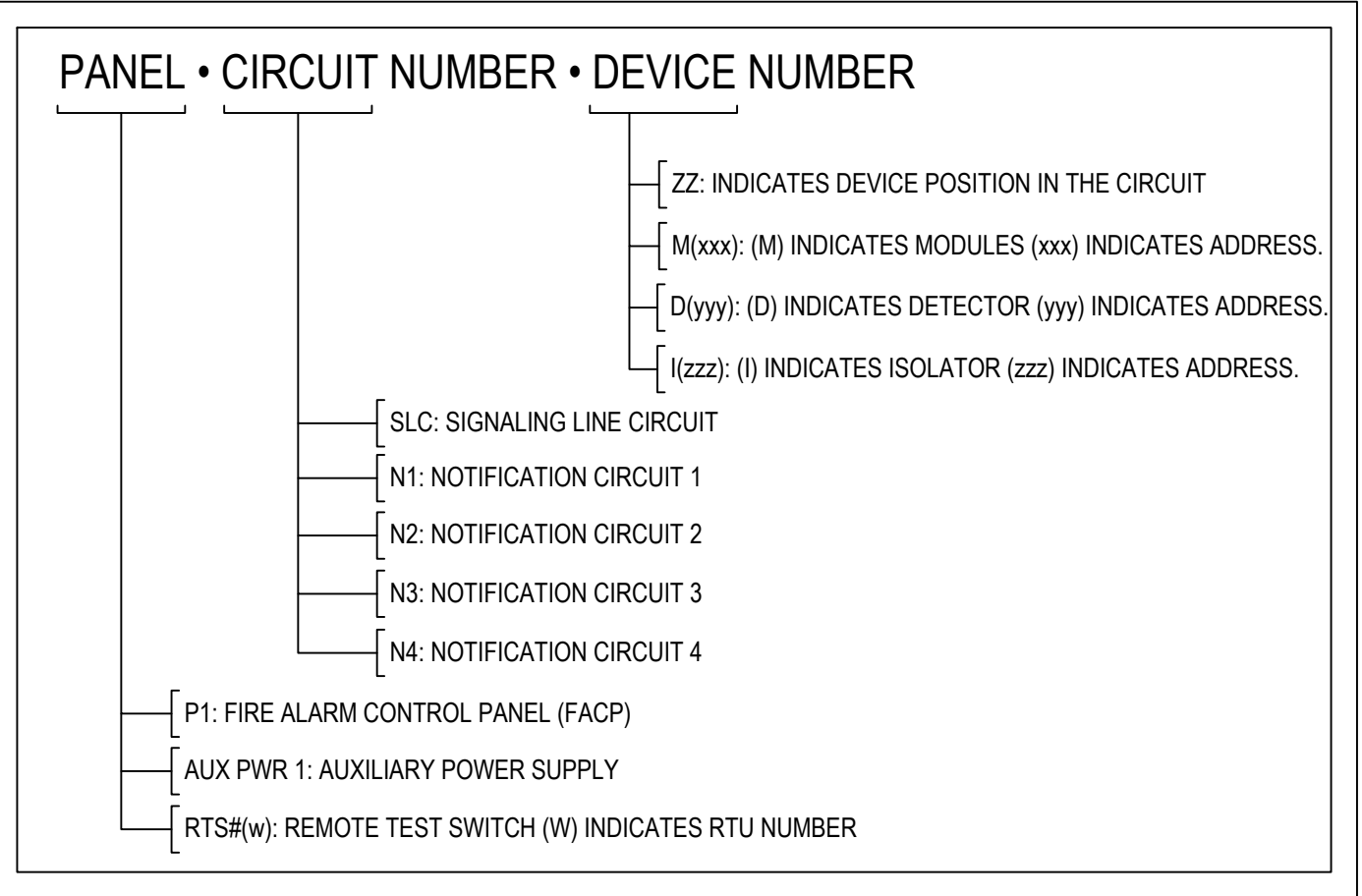
- NOTES:
1. OUTPUT POWERING FDC AUDIBLE AND VISUAL NOTIFICATION APPLIANCE SHALL BE NON-SILENCABLE.
 2. THE FIRE MARSHALL HAS THE AUTHORITY TO MODIFY THIS SEQUENCE OF OPERATION WHEN CONSIDERED NECESSARY.
 3. WHEN ANY OCCUPANT NOTIFICATION ALARM SILENCING SIGNAL MEANS ARE ACTUATED BOTH AUDIBLE AND VISUAL NOTIFICATION SHALL BE SIMULTANEOUSLY DEACTIVATED.
 4. FDC AUDIBLE AND VISUAL NOTIFICATION APPLIANCE SHALL BE ACTIVATE UPON ACTIVATION OF FLOW SWITCH ONLY.
 5. FDC AUDIBLE AND VISUAL NOTIFICATION APPLIANCE SHALL BE ACTIVATE AS LONG AS WATER IS FLOWING.
 6. FDC AUDIBLE AND VISUAL NOTIFICATION APPLIANCE SHALL NOT BE CAPABLE OF BEING SILENCED FROM THE FACP.

SYSTEM INPUTS		EVENT PRIORITY												SYSTEM OUTPUTS											
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
01	MANUAL PULL STATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02	SMOKE DETECTOR SPOT TYPE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
03	SMOKE DETECTOR DUCT MOUNTED	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
04	WATERFLOW ALARM SWITCH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
05	VALVE TAMPER SWITCH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
06	BACKFLOW VALVE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
07	KNOX BOX MONITORING	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
08	SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT OPEN CONDITION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
09	SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT SHORT CIRCUIT CONDITION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	SIGNALING LINE OR NOTIFICATION APPLIANCE CIRCUIT GROUND FAULT CONDITION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	FIRE ALARM CONTROL PANEL LOSS OF POWER	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X

01 METHOD OF OPERATION
NOT TO SCALE

CABLE AND WIRE LEGEND				
LABEL	PART NO	AWG	RESISTANCE (OHM/FT)	DESCRIPTION
A	18/4 FPLP (ANN)	18	6.50	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	18/6 FPLP (RTS)	18	6.500	RTS - 6 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	18/2 FPLP (SLC)	18	6.50	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED
E	RJ31X (PHL)	22	16.14	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED
V	14/2 FPLP (NAC)	14	2.60	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
Z	18/2 FPLP (IDC)	18	6.50	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

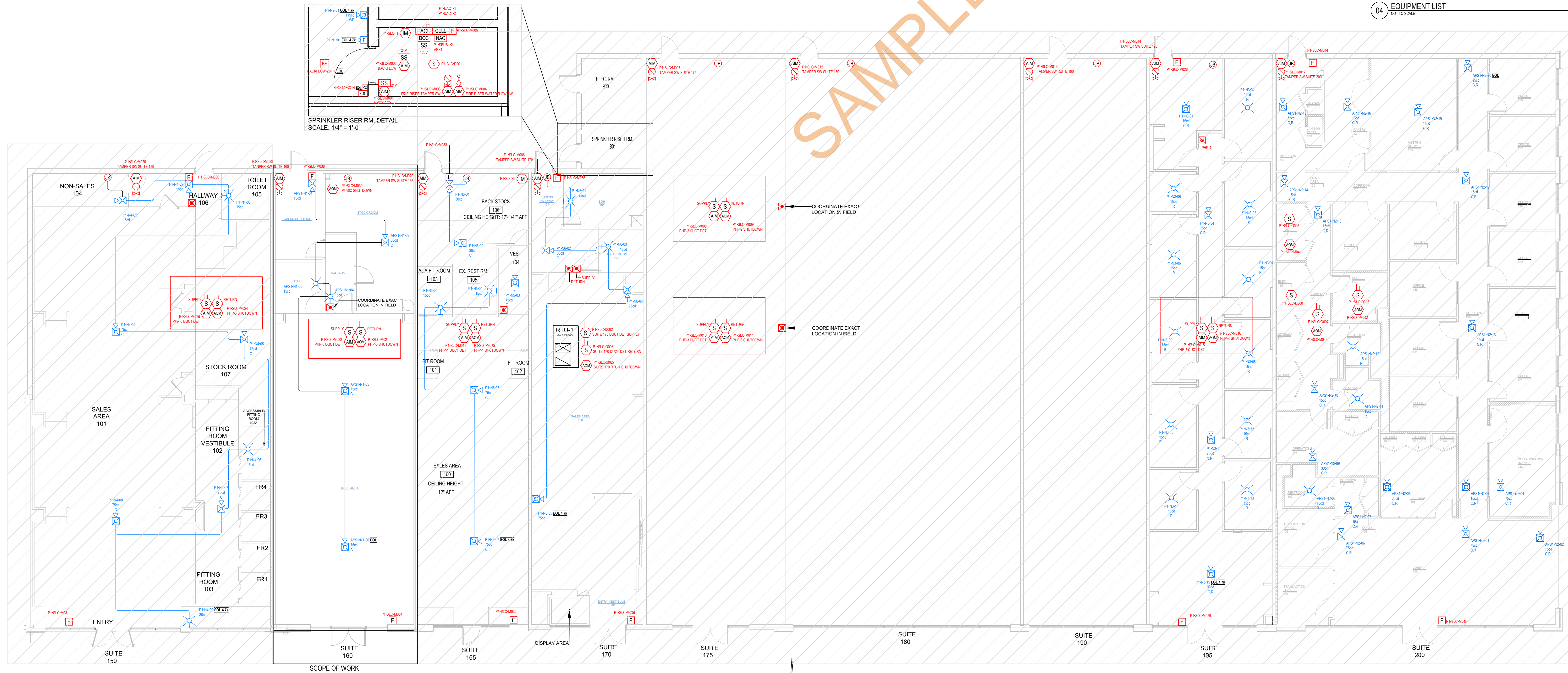
02 CABLE AND WIRE LEGEND
NOT TO SCALE



03 LABEL LEGEND
NOT TO SCALE

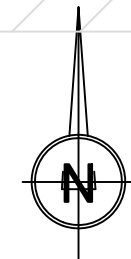
EQUIPMENT LIST					
SYMBOL	TOTAL	IN THIS SCOPE	MANUFACTURER	PART NO	DESCRIPTION
BF	1		GENERIC	BACKFLOW VALVE	BY OTHERS
S	12	2	GENERIC	GENERIC DUCT DETECTOR	(BY OTHERS)(EXISTING)
FDC	1		GENERIC	FDC	FIRE DEPARTMENT CONNECTION BY OTHERS
JB	9		GENERIC	JUNCTION BOX CEILING	
KB	1		GENERIC	KNOX BOX	BY OTHERS
SCV	10		GENERIC	SPRINKLER CONTROL VALVE	BY OTHERS
SS 120V	1		DITECK	DTK-120HW	120VAC SURGE PROTECTOR
WS	1		GENERIC	WATERFLOW SWITCH	BY OTHERS
CELL	1		NAPCO	SLE-1TV-CFB-PS	COMMERCIAL FIRE ALARM COMMUNICATOR
NAC	1		SILENT KNIGHT	5895XL	INTELLIKNIGHT POWER MODULE FOR 5820XL SA 24VDC
FACU	1		SILENT KNIGHT	6820	INTELLIGENT FIRE ALARM CONTROL PANEL WITH COMMUNICATOR
TS	7	1	SILENT KNIGHT	GENERIC	REMOTE TEST/RESET STATION, FOR DUCT DETECTOR (BY OTHERS)(EXISTING)
S	2		SILENT KNIGHT	SK-DUCT	ADDRESSABLE DUCT SMOKE DETECTOR
IM	2		SILENT KNIGHT	SK-ISO	FAULT ISOLATOR MODULE
MM	19	2	SILENT KNIGHT	SK-MONITOR	ADDRESSABLE MONITOR MODULE
S	1		SILENT KNIGHT	SK-PHOTO-W WB300-6	WHITE, LOW-PROFILE PHOTOELECTRIC SENSOR W/BASE
F	11	2	SILENT KNIGHT	SK-PULL-DA	ADDRESSABLE MANUAL PULL STATION, DOUBLE-ACTION
RR	8	1	SILENT KNIGHT	SK-RELAY	ADDRESSABLE RELAY MODULE
DOC	2		SPACE AGE ELECTRONICS	SSU00691	FIRE ALARM DOCUMENT CABINET (ACE-11), RED WITH CUSTOM LOGO
SS 24V	2		DITECK	DTK-2MHL2P24B	SURGE PROTECTOR, 24V
WP	1		SYSTEM SENSOR	P2RK	HORN/STROBE, WALL, RED, OUTDOOR
WR	6	1	SYSTEM SENSOR	P2WLED	LED HORN/STROBE, WALL, WHITE
CR	4		SYSTEM SENSOR	PC2RL	HORN/STROBE, CEILING, RED
WC	12	3	SYSTEM SENSOR	PC2WLED	LED HORN/STROBE, CEILING, WHITE
TS	6		SYSTEM SENSOR	RTS151	REMOTE TEST STATION W/ SWITCH, ALARM & POWER LEDS
R	11		SYSTEM SENSOR	SCRL	STROBE, CEILING, RED
F	1		SYSTEM SENSOR	SSM24-6	ALARM BELL 6" 24VDC, RED
SR	9	2	SYSTEM SENSOR	SWLED	LED STROBE, WALL, WHITE

04 EQUIPMENT LIST
NOT TO SCALE



05 FIRE ALARM PLAN
NOT TO SCALE

0 1' 5' 10' 15'



PROJECT:

BLUEMERCURY
FORT MYERS

bluemercury

867 DANIELS HWY #160, FORT MYERS, FL 33912

REVISION SCHEDULE		REVIEWED BY:	DATE	DESCRIPTION
DRAWN BY:	CG	BC	12/02/2024	INITIAL REVISION
CHECKED BY:	CG	BC	12/02/2024	COMMENTS

CONTRACTOR:

LEBS Electric

1144 S CONGRESS AVENUE PALM SPRINGS, FL 33406

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
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


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


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


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

CURRENT SUMMARY				POWER SUMMARY	
P1 N1 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	0.0535	MAX. VOLTAGE DROP:	0.01	
	SPARE CIRCUIT CURRENT (A):	2.95	VOLTAGE DROP %:	0.05 %	
	SPARE CIRCUIT CURRENT %:	98.22 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	20.39	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	40
				TOTAL CIRCUIT RESISTANCE (Ω):	0.208
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	1	SSM24-6	ALARM BELL 6" 24VDC, RED		0.0535
					TOTAL CURRENT (A)
					0.0535
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					

CURRENT SUMMARY				POWER SUMMARY	
P1 N2 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	0.218	MAX. VOLTAGE DROP:	0.05	
	SPARE CIRCUIT CURRENT (A):	2.78	VOLTAGE DROP %:	0.22 %	
	SPARE CIRCUIT CURRENT %:	92.73 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	20.35	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	40
				TOTAL CIRCUIT RESISTANCE (Ω):	0.208
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	1	P2RK	HORN/STROBE, WALL, RED, OUTDOOR	115CD	0.218
					TOTAL CURRENT (A)
					0.218
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					

CURRENT SUMMARY				POWER SUMMARY	
P1 N3 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	1.14	MAX. VOLTAGE DROP:	2.22	
	SPARE CIRCUIT CURRENT (A):	1.86	VOLTAGE DROP %:	10.86 %	
	SPARE CIRCUIT CURRENT %:	61.90 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	18.19	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	373
				TOTAL CIRCUIT RESISTANCE (Ω):	1.94
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	1	PC2RL	HORN/STROBE, CEILING, RED	30CD	0.09
					TOTAL CURRENT (A)
					0.09
	1	PC2RL	HORN/STROBE, CEILING, RED	15CD	0.107
					TOTAL CURRENT (A)
					0.107
	2	PC2RL	HORN/STROBE, CEILING, RED	75CD	0.143
					TOTAL CURRENT (A)
					0.286
	11	SCRL	STROBE, CEILING, RED	15CD	0.06
					TOTAL CURRENT (A)
					0.860
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					

CURRENT SUMMARY				POWER SUMMARY	
P1 N4 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	0.476	MAX. VOLTAGE DROP:	0.730	
	SPARE CIRCUIT CURRENT (A):	2.52	VOLTAGE DROP %:	3.57 %	
	SPARE CIRCUIT CURRENT %:	84.13 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	19.67	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	294
				TOTAL CIRCUIT RESISTANCE (Ω):	1.53
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	2	P2WLED	LED HORN/STROBE, WALL, WHITE	15CD	0.035
					TOTAL CURRENT (A)
					0.07
	4	PC2WLED	LED HORN/STROBE, CEILING, WHITE	75CD	0.087
					TOTAL CURRENT (A)
					0.348
	2	SWLED	LED STROBE, WALL, WHITE	15CD	0.018
					TOTAL CURRENT (A)
					0.036
	1	SWLED	LED STROBE, WALL, WHITE	30CD	0.022
					TOTAL CURRENT (A)
					0.022
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					



























CURRENT SUMMARY				POWER SUMMARY	
P1 N5 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	0.321	MAX. VOLTAGE DROP:	0.25	
	SPARE CIRCUIT CURRENT (A):	2.68	VOLTAGE DROP %:	1.21 %	
	SPARE CIRCUIT CURRENT %:	89.30 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	20.15	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	147
				TOTAL CIRCUIT RESISTANCE (Ω):	0.767
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	1	P2WLED	LED HORN/STROBE, WALL, WHITE	30CD	0.038
					TOTAL CURRENT (A)
					0.038
	1	PC2WLED	LED HORN/STROBE, CEILING, WHITE	15CD	0.035
					TOTAL CURRENT (A)
					0.035
	1	PC2WLED	LED HORN/STROBE, CEILING, WHITE	30CD	0.038
					TOTAL CURRENT (A)
					0.038
	2	PC2WLED	LED HORN/STROBE, CEILING, WHITE	75CD	0.087
					TOTAL CURRENT (A)
					0.174
	2	SWLED	LED STROBE, WALL, WHITE	15CD	0.018
					TOTAL CURRENT (A)
					0.036
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					

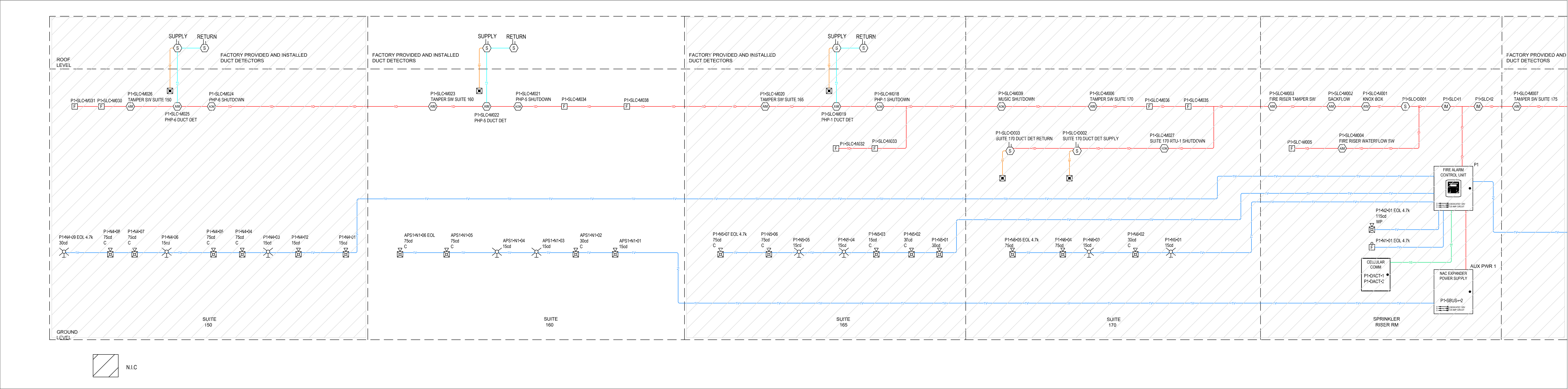
CURRENT SUMMARY				POWER SUMMARY	
P1 N6 LUMP SUM REPORT	MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40	
	TOTAL CIRCUIT CURRENT (A):	0.248	MAX. VOLTAGE DROP:	0.22	
	SPARE CIRCUIT CURRENT (A):	2.75	VOLTAGE DROP %:	1.18 %	
	SPARE CIRCUIT CURRENT %:	91.73 %	MIN. OPERATIONAL VOLTAGE:	16	
	MAX. CARD CURRENT (A):	6	END OF LINE VOLTAGE:	20.18	
	TOTAL CARD CURRENT (A):	2.51	WIRE RESISTANCE (Ω/KFT):	2.60	
				SPARE CARD CURRENT (A):	3.49
				SPARE CARD CURRENT %:	58.12 %
CIRCUIT WIRING PROPERTIES: "V" 14/2 FPLP (NAC) 80953B 14 AWG, NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED				TOTAL CIRCUIT LENGTH (FT):	173
				TOTAL CIRCUIT RESISTANCE (Ω):	0.901
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)
	2	P2WLED	LED HORN/STROBE, WALL, WHITE	75CD	0.087
					TOTAL CURRENT (A)
					0.174
	1	PC2WLED	LED HORN/STROBE, CEILING, WHITE	30CD	0.038
					TOTAL CURRENT (A)
					0.038
	2	SWLED	LED STROBE, WALL, WHITE	15CD	0.018
					TOTAL CURRENT (A)
					0.036
CALCULATION METHODS:					
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω/KFT) X 2 X TOTAL CIRCUIT LENGTH (FT)					
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)					

PANEL LOAD SUMMARY				STANDBY CURRENT (AMPS)		ALARM CURRENT (AMPS)	
PANEL COMPONENT SUMMARY	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL
	1	6820 Main Board	Main Board	1 x 0.19	= 0.19	1 x 0.25	= 0.25
CIRCUIT SUMMARY	CIRCUIT						
	DACT			1 x 0	= 0	1 x 0	= 0
	N1			1 x 0	= 0	1 x 0.0535	= 0.0535
	N2			1 x 0	= 0	1 x 0.218	= 0.218
	N3			1 x 0	= 0	1 x 1.143	= 1.143
	N4			1 x 0	= 0	1 x 0.476	= 0.476
	N5			1 x 0	= 0	1 x 0.321	= 0.321
	N6			1 x 0	= 0	1 x 0.248	= 0.248
	SBUS+			1 x 0.02	= 0.02	1 x 0.025	= 0.025
	SLC			1 x 0.01499	= 0.01499	1 x 0.02839	= 0.02839
				TOTAL STANDBY CURRENT	0.22499	TOTAL ALARM CURRENT	2.76289

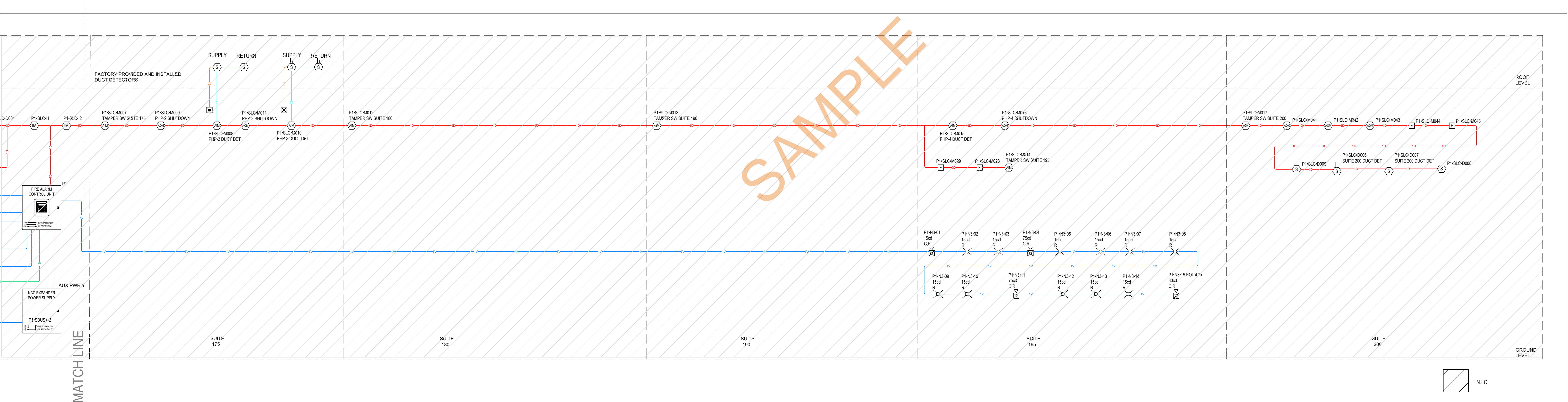
PANEL P1 (6820)
SUMMARY REPORT

PANEL P1 (6820) SUMMARY REPORT

CIRCUIT DETAILS AND CALCULATIONS									STANDBY CURRENT		ALARM CURRENT		POINT-TO-POINT VOLTAGE DROP CALCULATION SUMMARY		
SOURCE	CIRCUIT	AWG	SYMBOL	QTY	PART NO	DEVICE SETTING	CIRCUIT LENGTH	CIRCUIT RESISTANCE (Ω/ft)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	STARTING CALCULATION VOLTAGE	END OF LINE VOLTAGE	VOLTAGE DROP
6820 Main Board	N1	14		1	SSM24-6		40'	0.0026	1 x 0	= 0	1 x 0.0535	= 0.0535	20.4v	20.39v	0.01v
	N2	14	 WP	1	P2RK	115cd	40'	0.0026	1 x 0	= 0	1 x 0.218	= 0.218	20.4v	20.35v	0.05v
	N3	14		1	PC2RL	30cd	373'	0.0026	1 x 0	= 0	1 x 0.09	= 0.09	20.4v	18.79v	1.61v
				1	PC2RL	15cd			1 x 0	= 0	1 x 0.107	= 0.107			
			 C,R	2	PC2RL	75cd			2 x 0	= 0	2 x 0.143	= 0.286			
			 R	11	SCR1	15cd			11 x 0	= 0	11 x 0.06	= 0.66			
	N4	14		2	P2WLED	15cd	294'	0.0026	2 x 0	= 0	2 x 0.035	= 0.07	20.4v	19.88v	0.52v
				4	PC2WLED	75cd			4 x 0	= 0	4 x 0.087	= 0.348			
				2	SWLED	15cd			2 x 0	= 0	2 x 0.018	= 0.036			
				1	SWLED	30cd			1 x 0	= 0	1 x 0.022	= 0.022			
	N5	14		1	P2WLED	30cd	147'	0.0026	1 x 0	= 0	1 x 0.038	= 0.038	20.4v	20.22v	0.18v
				1	PC2WLED	15cd			1 x 0	= 0	1 x 0.035	= 0.035			
				1	PC2WLED	30cd			1 x 0	= 0	1 x 0.038	= 0.038			
				2	PC2WLED	75cd			2 x 0	= 0	2 x 0.087	= 0.174			
				2	SWLED	15cd			2 x 0	= 0	2 x 0.018	= 0.036			
				2	P2WLED	75cd			2 x 0	= 0	2 x 0.087	= 0.174			
	N6	14		2	P2WLED	75cd	173'	0.0026	2 x 0	= 0	2 x 0.087	= 0.174	20.4v	20.23v	0.17v
			 C	1	PC2WLED	30cd			1 x 0	= 0	1 x 0.038	= 0.038			
				2	SWLED	15cd			2 x 0	= 0	2 x 0.018	= 0.036			
	SBUS+	18		1	5895XL		9'	0.0065	1 x 0.02	= 0.02	1 x 0.025	= 0.025			
SLC	18		2	SK-DUCT		1884'	0.0065	2 x 0.0003	= 0.0006	2 x 0.0003	= 0.0006				
			2	SK-ISO				2 x 0.00045	= 0.0009	2 x 0.005	= 0.01				
			19	SK-MONITOR				19 x 0.000375	= 0.007125	19 x 0.000375	= 0.007125				
			1	SK-PHOTO-W w/B300-6				1 x 0.0002	= 0.0002	1 x 0.0045	= 0.0045				
			11	SK-PULL-DA				11 x 0.000375	= 0.004125	11 x 0.000375	= 0.004125				
			8	SK-RELAY				8 x 0.000255	= 0.00204	8 x 0.000255	= 0.00204				



01 PARTIAL RISER DIAGRAM
NOT TO SCALE



02 PARTIAL RISER DIAGRAM
NOT TO SCALE

CABLE AND WIRE LEGEND				
LABEL	PART NO	AWG	RESISTANCE (OHM/FT)	DESCRIPTION
A	1814 FPLP (ANN)	18	6.50	ANNUNCIATOR - 4 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
B	1816 FPLP (RTS)	18	6.500	RTS - 6 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
D	1812 FPLP (SLC)	18	6.50	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED
E	RJ31X (PHL)	22	16.14	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED
V	1412 FPLP (NAC)	14	2.60	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
Z	1812 FPLP (IDC)	18	6.50	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

03 CABLE AND WIRE LEGEND
NOT TO SCALE

PROJECT:

BLUEMERCURY
FORT MYERS

PROJECT ADDRESS:

867 DANIELS HWY #160 FORT MYERS, FL 33912

REVISION SCHEDULE

REV NO	DATE	DESCRIPTION	DRAWN BY	REVIEWED BY
01	12/02/2024	INITIAL REVISION	CG	BC
02	12/02/2024	COMMENTS	CG	BC

CONTRACTOR:

LEBS Electric

1144 S CONGRESS AVENUE PALM SPRINGS, FL 33406
754-428-1231 Fax 754-462-0472

PROJECT No:

DATE:

12/02/2024

DWG FILE:

BLUEMERCURY_FORT_MYERS

SCALE:

SEE DRAWINGS

Sheet:

FA-04