EQUIPMENT FEEDER SCHEDULE:

* WIRE SIZES ARE BASED ON NFPA 70 TABLE 310.15(B)(16) 60 DEGREE CU COLUMN FOR SIZES OF 100A OR LESS, ALL OTHERS BASED ON 75 DEGREE COLUMN.
**DISTANCE SHOWN FOR VOLTAGE DROP CALCULATION ONLY. ACTUAL DISTANCE MAY VARY DEPENDENT ON ROUTING.

EQUIPMENT DESCRIPTION	VOLTS	PH	NEUT Y/N	MOTOR (LARGEST) H.P.	MOTOR (LARGEST) FLA	ADDITIONAL MOTORS H.P.	ADDITIONAL MOTORS FLA	HEAT STRIPS KW	HEAT STRIPS AMPS	MISC AMPS	TOTAL AMPS	MIN CKT A MCA	FNL C.B. SIZE	DISCONNECT SIZE	DISCONNECT OCPD	STARTER SIZE	STARTER NEMA TYPE	WIRE PER PHASE*	NEUT WIRE	GND WIRE	# OF RUNS	CONDUIT SIZE	APPROX DIST.** FT	VOLT DROP VD%	NOTES
EWH-1	208	1	Y					3.0	14.4		14.4	18.0	20	30			1	#12	#12	#12	1	3/4"		0.00%	
CP-1	120	1	Y	0.05	0.80						0.8	1.0	15	MMS			1	#12	#12	#12	1	3/4"		0.00%	
AHU-1 / CU-1	208	1	Y		7.00		0.83				7.8	9.6	15	MMS			3R	#12	#12	#12	1	3/4"		0.00%	
EF-1	120	1	Y		0.46						0.5	0.6	15	MMS			1	#12	#12	#12	1	3/4"		0.00%	
EF-2	120	1	Y		0.30						0.3	0.4	15	MMS			1	#12	#12	#12	1	3/4"		0.00%	
FOUNTAIN CONTROL PANEL	208	3	Y	3.00	10.60					13.4	24.0	30.0	30	30			3R	#10	#10	#10	1	3/4"		0.00%	

GENERAL NOTES:
(1) - PROVIDE DISC. SW. AT ALL PIECES OF EQUIPMENT NOT WITHIN SIGHT OF THE OVERCURRENT PROTECTIVE DEVICE.
(2) - FUSES SHOWN FOR REFERENCE ONLY. PROVIDE FUSES AS RECOMMENDED BY EQUIP. MANUF.
(3) - PROVIDE NEMA OUTDOOR RATED ENCLOSURES FOR ALL DISC. SWS MOUNTED OUTDOORS.
(4) - COORDINATE STARTER TYPE WITH MECHANICAL EQUIPMENT.
(5) - COORDINATE ALL OVERCURRENT PROTECTIVE DEVICES WITH THE ACTUAL EQUIPMENT BEING SUPPLIED. NOTIFY THE ENGINEER IF DESCREPINCIES ARE FOUND.
(6) - DISCONNECTS BETWEENS MOTORS AND VFCS SHALL BE PROVIDED WITH AN AUXILARY CONTACT AND WIRED TO THE E-STOP OF THE VFD.

NOTES:
(a)

PANEL FEEDER SCHEDULE:

* WIRE SIZES ARE BASED ON NFPA 70 TABLE 310.15(B)(16) 60 DEGREE CU COLUMN FOR SIZES OF 100A AND LESS, ALL OTHERS BASED ON 75 DEGREE COLUMN.
**LOAD AMPS AND DISTANCE SHOWN FOR VD CALCULATION ONLY. SEE PANEL SCHEDULE FOR ACTUAL LOAD. ACTUAL DISTANCE MAY VARY DEPENDENT ON ROUTING.

FEEDER DESCRIPTION SOURCE	FEEDER DESCRIPTION LOAD	VOLTS	PH	NEUT Y/N	200% NEUT Y/N	GRND Y/N	ISO GND Y/N	MAIN OCP RATING	LOAD AMPS**	DISCONNECT SIZE	DISCONNECT FUSE	DISCONNECT NEMA	WIRE PER PHASE*	NEUT WIRE	A.DD. NEUT	GND WIRE	ISO GND	SYST BOND JUMP	# OF RUNS	CONDUIT SIZE	APPROX DIST.** FT	VOLT DROP VD%	NOTES
UTILITY XFMR	PANEL GM	208	3	Y	N	N	N	200	200				#3/0	#3/0				#4	1	2"			

GENERAL NOTES:
(1) - PROVIDE DISC. SW. AT ALL PIECES OF EQUIPMENT. UNLESS OTHERWISE NOTED ON THIS SCHEDULE.
(2) - FUSES SHOWN FOR REFERENCE ONLY. PROVIDE FUSES AS RECOMMENDED BY EQUIP. MANUF.
(3) - PROVIDE NEMA OUTDOOR RATED ENCLOSURES FOR ALL DISC. SWS MOUNTED OUTDOORS.
(4) - COORDINATE STARTER TYPE WITH MECHANICAL EQUIPMENT INSTALLER.
(5) - E.C. TO VERIFY THAT C.B. FOR COMPRESSORS IS SUFFICIENT TO ALLOW STARTING OF UNIT, IF

(6) - #12 FEEDERS SHOWN AND OVER 50FT. LONG TO BE #10 WIRE FOR 120V CIRCUITS.
#12 FEEDERS SHOWN AND OVER 100FT. LONG TO BE #10 WIRE FOR 277V CIRCUITS.

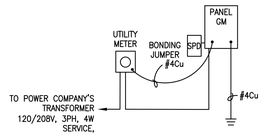
ABBREVIATIONS:
N.F. = NON-FUSED
ECB = ENCLOSED CIRCUIT BREAKER
3R = NEMA 3R ENCLOSURE
4X = NEMA 4 W.P. STAINLESS STEEL ENCL.

NOTES:
(a) - ROUTE ALL FEEDERS CONCEALED FROM PUBLIC VIEW

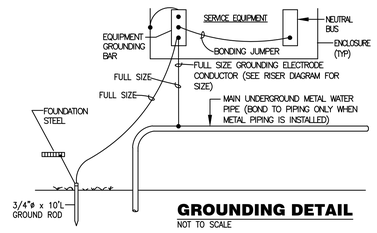
SITE LIGHTING CIRCUIT SCHEDULE:

*DISTANCE SHOWN FOR VOLTAGE DROP CALCULATION ONLY.
ACTUAL DISTANCE MAY VARY DEPENDENT ON ROUTING.

PANEL CIRCUIT	VOLTS	PH	NEUT Y/N	LOAD KW	LOAD AMPS	WIRE PER PHASE*	NEUT WIRE	GND WIRE	APPROX DIST.* FT	VOLT DROP VD%	NOTES
GM-17:19	208	1	Y	0.9	4.3	#6	#6	#6	1200	2.45%	
GM-21:23	208	1	Y	0.6	2.8	#8	#8	#8	1000	2.07%	
GM-22	120	1	Y	0.2	1.4	#12	#12	#12	230	1.09%	



POWER RISER
NOT TO SCALE



GROUNDING DETAIL
NOT TO SCALE

MANUFACTURER:
TYPE:
AIC RATING: 14 K AMPS
VOLTS L-N: 120 V
VOLTS L-L: 208 V
PHASE 3

MAIN OPTIONS REQUIRED
MCB: 200 AMPS
MLO: N/A AMPS
S.E RATED: YES
GFI PROT: NO
SHUNT TRIP: N/A

PANEL NAME: PANEL GM
LOCATION:
MOUNTING: SURFACE
NEMA TYPE: 1
WIDTH : IN
DEPTH : IN

NOTES	CKT NO.	IDENTIFICATION	LOAD	LOAD/PHASE (KVA) A	B	C	CIRCUIT BREAKER TRIP	P	P	LOAD/PHASE (KVA) TRIP	A	B	C	LOAD	IDENTIFICATION	CKT NO.	NOTES
	1	LIGHTING	L	0.88			20	1	1	20	0.57			L	LIGHTING	2	
	3	RECEPTS	R		1.08		20	1	1	20		0.15		L	EXTERIOR LIGHTING	4	
	5	EXTERIOR RECEPTS	R			0.54	20	1	1	20			0.90	R	RECEPTS	6	
	7	AHU-1 / CU-1	H	0.81			15	2	1	20	1.00			E	EWC	8	
	9		H		0.81				1	20		1.50		E	EWH-1	10	
	11	EF-2	E			0.04	15	1					1.50	E		12	
	13	VENDING MACHINE	E	1.00			20	1	1	15	0.10			E	CP-1	14	
	15	SIGN & FOUNTAIN LIGHTING	L		0.29		20	1				2.88		E		16	
	17	PATH LIGHTING	L			0.41	20	2	3	40			2.88	E	FOUNTAIN CONTROL PANEL	18	
	19		L	0.41							2.88			E		20	
	21	PARKING & PATH LIGHTING	L		0.29		20	2	1	20		0.17		L	HERITAGE OAK LIGHTING	22	
	23		L			0.29			1	20						24	
	25						20	1	1	20						26	
	27						20	1	1	20						28	
	29						20	1	1	20						30	
	31						20	1	1	20						32	
	33						20	1	1							34	
	35						20	1	1	20						36	
	37						20	1								38	
	39						20	1	3	30					SURGE PROTECTION	40	
	41						20	1								42	
				3.1	2.5	1.3					4.6	4.7	5.3				

	CONN LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
LIGHTING (L)	3.46	1.25	4.32
RECEPTACLES 1ST 10 KVA(R)	2.52	1.00	2.52
RECEPTACLES OVER 10KVA(R)	0.00	0.50	0.00
HVAC EQUIPMENT (H)	1.62	1.00	1.62
APPLIANCES (A)	0.00	1.00	0.00
EQUIPMENT (E)	13.78	1.00	13.78
LARGEST MOTOR (M)	0.00	1.25	0.00
OTHER (O)	0.00	1.00	0.00
SPARE (S)	0.00	1.00	0.00
LINKED PANEL (P)	INCLUDED IN ABOVE TOTALS		

TOTAL CONNECTED KVA: 21.38
TOTAL CONNECTED AMPS/PH: 59
TOTAL DEMAND KVA: 22.24
TOTAL DEMAND AMPS/PH: 62

GENERAL NOTES:
a. PROVIDE ARC FLASH LABELING FOR THE PANEL IN ACCORDANCE WITH NFPA 70 & 70E AS SPECIFIED.
SCHEDULE NOTES:

Fault Current

Project Name: Gary Matzner Park
Project Number: 2024-256
Designed By: MB
Item Name: Panel GM Fault Current
Notes: -NONE-

Calculation of Fault Current
Fault SCA Source = TA Secondary
SCA Available = 12322
Length Units = Feet
Motor Load = None
Motor SCA = None
Motor SCA Treatment = Motor SCA Not Included
System Voltage = 208
System Phase = 3 Phase
Transformers

Name	PH	Size	Pri.V	Sec.V	%Z	SCA,3PH
TA UTILITY	3-PH	15		208		12322

Name	Cond	Cable	Size	Qty	Feet	SCA,3PH
S/F PANEL GM	PVC, ABS	1/c,CU	3/0	1	45	9,254

Main-Feeders

Name	Cond	Cable	Size	Qty	Feet	SCA,3PH

File Name: Not Saved

Date Created: Not Saved
Date Modified: Not Saved

Source: EDR, Electrical Designer's Reference

FPL

October 1, 2024

Bobby Braun
935 Lake Baldwin Ln
Orlando, FL 32814

Re: Available Fault Current for Gary Matzner Park

Dear Bobby Baun:

Thank you for contacting FPL about the available fault current at Gary Matzner Park. Based on the plans you have provided dated October 01 2024, the maximum available fault current at the transformer secondary terminals is estimated to be 12322 symmetrical amperes at 120/208 volts. The protective device on the line side of the transformer currently in place or to be installed and serving your property located at the subject location is a 15 amp type Bayonet fuse. The primary service voltage is 13.2kV L-L. This calculated symmetrical fault current is not intended for use as the basis for motor starting calculations and does not include:

- Consideration for any motor contribution or
- Fault current asymmetry.

The FPL equipment currently serving or planned to serve your facility may change over time as a result of any number of factors, including but not limited to transformer replacements due to load growth, electrical grid changes or emergencies. As a result, although we are providing you with this information for the sole purpose of assisting you in the completion of your study, you and your client should not design, install or operate your system in reliance upon any expectation that the specific size and type of equipment currently in place will remain so. If and when the size and type of the equipment changes, our employees are not always in a position to immediately notify customers.

As the construction project progresses, any questions or information you may need can be communicated through me. I have enclosed my business card for easy reference and look forward to hearing from you in the near future.

Sincerely,

FAVYAN TORRES

Favyan Torres
Distribution Engineer

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POMPANO BEACH, FL 33060
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Florida Surveyor and Mapper Business License: LB6860
Florida Landscape Architecture Business License: LC26000457

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MECHANICAL, PLUMBING, & ELECTRICAL ENGINEERING:
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5301 WATERFORD DISTRICT DR.
SUITE 750
954-421-1944
SGMENGINEERING.COM CA-00006208

REVISIONS

NO.	DESCRIPTION	DATE

PRELIMINARY PLAN NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS.

ISSUE DATE: XX/XX/20
DESIGNED BY: XXX
DRAWN BY: XXX
CHECKED BY: XXX

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

CLIENT
VILLAGE OF PINECREST
PINECREST PARKS & RECREATION

PROJECT

SHEET TITLE
ELECTRICAL SCHEDULES

SHEET NUMBER E701

KEITH PROJECT NUMBER 13861.00

CRAIG W. THOMPSON LICENSE No. 92233 STATE OF FLORIDA PROFESSIONAL ENGINEER
CRAIG W. THOMPSON - FL92233

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SGM #: 2024-256

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STATUS: PRELIMINARY

Drawing name: Q:\PROJECT FILES\2024\2024-256 Village of Pinecrest- Gary Matzner Park\Drawings\1600-E701-2024256.dwg

Plotted by: mlich On 11/1/2024 4:23 PM