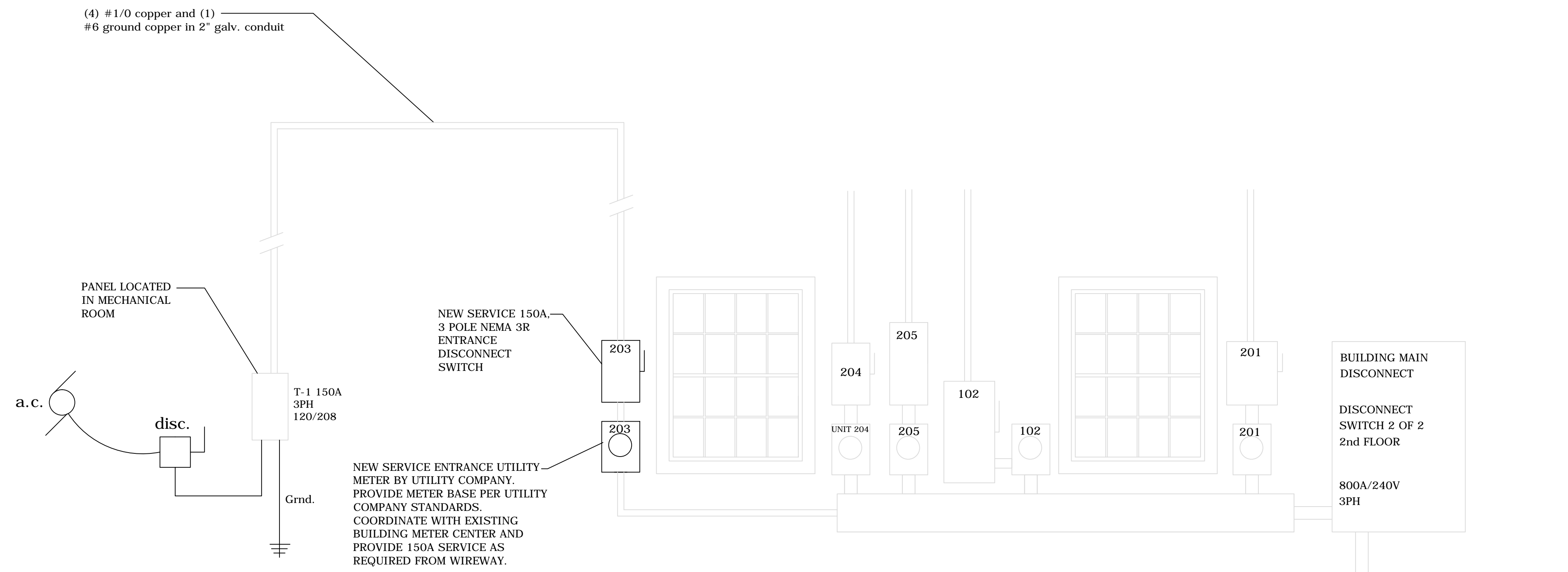


GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, THE FLORIDA BUILDING CODE, THE NATIONAL FIRE CODES, AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
- THE CONTRACTOR SHALL THOROUGHLY REVIEW THE PROJECT TO ENSURE THAT ALL WORKS SHALL MEET OR EXCEED THE ABOVE REQUIREMENTS. ANY ALLEGED DISCREPANCIES SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO BID.
- THE CONTRACTOR SHALL THOROUGHLY REVIEW THE ARCHITECTURAL AND MECHANICAL PLANS TO ASSURE THAT ELECTRICAL SERVICE FOR ALL ITEMS AND/OR EQUIPMENT REQUIRING ELECTRICAL SERVICE IS INCLUDED IN BID. ANY ITEM AND/OR EQUIPMENT NOT PROVIDED WITH ELECTRICAL SERVICE, REQUIRING ELECTRICAL SERVICE, SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO BID.
- THE CONTRACTOR IS DIRECTED TO OBTAIN COPIES OF ALL RELATED PLANS, SPECIFICATIONS, SHOP DRAWINGS AND ADDENDUMS TO COORDINATE THE RELATED WORK AND SCHEDULING.
- THE DRAWINGS ARE INTENDED TO BE DRAWN TO SCALE BUT ARE NOT INTENDED TO BE SCALED. ALL ELECTRICAL OUTLETS SHALL BE LOCATED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE; ESPECIALLY ARTICLE 210. RECEPTACLE SPACING SHALL COMPLY WITH ARTICLE 210 AND UTILIZE THE EXISTING RECEPTACLE OPENINGS WHERE FEASIBLE.
- THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL SERVICE MODIFICATIONS WITH THE APPROPRIATE UTILITY --
 - POWER
 - TELEPHONE
 TO INCLUDE ALL UTILITY REQUIREMENTS IN BID.
- ELECTRICAL POWER SERVICE DROP AND METER LOCATION SHALL BE LOCATED BY THE ELECTRICAL UTILITY COMPANY AND ARCHITECT; THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND INCLUDE COST IN BID.
- ELECTRICAL SURGE PROTECTION SHALL BE PROVIDED ON ALL ELECTRICAL/COMMUNICATION SERVICE ENTRANCES.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A SERVICE GROUND WHICH IS LESS THAN 5 OHMS.
- ALL SERVICE ENTRANCE DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE WITH BUSSMAN TIME DELAY, DUAL ELEMENT, AND CURRENT LIMITING FUSES.
- THE CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL EQUIPMENT SUPPLIER TO PROVIDE ELECTRICAL CONNECTIONS COMPATIBLE WITH THE ELECTRICAL SERVICE PROVIDED, AND PROVIDE THE NATIONAL ELECTRICAL CODE WORKING CLEARANCES REQUIRED FOR THE ELECTRICAL EQUIPMENT.
- THE CONTRACTOR IS REMINDED THAT ELECTRICAL SERVICE TO AND FOR MECHANICAL AND OTHER EQUIPMENT ARE BASED ON EQUIPMENT DESIGN DATA. THE VALUES MAY DIFFER DEPENDING UPON THE ACTUAL EQUIPMENT TO BE FURNISHED; ANY MODIFICATION TO THE ELECTRICAL BASED UPON ACTUAL EQUIPMENT SELECTION, SHALL RESULT IN NO ADDITIONAL COST TO THE OWNER.
- MECHANICAL AND ELECTRICAL EQUIPMENT HAVE BEEN LOCATED AND ARRANGED TO MINIMIZE THE INTERFERENCES OF EQUIPMENT AND STRUCTURE. THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORK TO BE PERFORMED BY OTHER TRADES AND THE PHYSICAL CHARACTERISTICS OF THE STRUCTURE IN ORDER TO SCHEDULE AND INSTALL EQUIPMENT AND TO MINIMIZE POSSIBLE INTERFERENCE. FAILURE TO PROPERLY COMMUNICATE AND SCHEDULE WORK WITH OTHER TRADES RESULTING IN ADDITIONAL WORK AND MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL SPECIFICALLY VERIFY THAT OPERATING VOLTAGES OF ALL ELECTRICAL EQUIPMENT MATCHES SYSTEM/BRANCH CIRCUIT OPERATING VOLTAGE PRIOR TO INSTALLATION.
- ALL CONDUCTOR METAL SHALL BE COPPER WITH 600 VOLT INSULATION THE MINIMUM CONDUCTOR SIZES SHALL BE BASED UPON OVER-CURRENT DEVICE INSTALLED UP-STREAM:
 - 20 AMPERE CIRCUIT BREAKER: #12 AWG
 - 25 AMPERE CIRCUIT BREAKER: #10 AWG
 - 30 AMPERE CIRCUIT BREAKER: #10 AWG
 - 40 AMPERE CIRCUIT BREAKER: # 8 AWG
 - 50 AMPERE CIRCUIT BREAKER: # 8 AWG
 - 60 AMPERE CIRCUIT BREAKER: # 6 AWG
 TYPE THW, THHN/THWN, OR THW/THHN/THWN. (MINIMUM SIZE SHALL BE #12AWG.)
- ELECTRICAL OUTLETS AND RECEPTACLES SHALL BE CIRCUITED IN FULL COMPLIANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION; ALL LOCAL CODES AND ORDINANCES, AND THE NATIONAL ELECTRICAL CODE. CIRCUITS SHALL NOT BE FULLY LOADED TO QUANTITY AND/OR CAPACITY PERMITTED BY THE ABOVE NAMED AUTHORITIES BUT PROVIDE FOR A MINIMUM OF 20% SPARE IN EACH CIRCUIT.
 - COMMUNICATION CABLES EXCEPT; NONMETALLIC-SHEATHED CABLE MAY BE USED
- ALL CONDUIT RUNS SHALL BE CONCEALED UNLESS SPECIFICALLY NOTED OTHERWISE.
- MINIMUM TRADE SIZE CONDUIT PERMITTED SHALL BE 1/2 INCH UNLESS OTHERWISE NOTED.
- THE PLANS INDICATE THE DESIRED ARRANGEMENT AND GENERAL LOCATIONS OF THE LIGHT FIXTURES.
- ALL LIGHT SWITCHES AND DUPLEX RECEPTACLES SHALL BE RATED FOR 20 AMPERE AT 125 VOLTS A/C. WIRING DEVICES SHALL BE MANUFACTURED BY HUBBELL OR APPROVED EQUAL.
- ALL SPECIAL PURPOSE OUTLETS SHALL BE PROVIDED TO MATCH EQUIPMENT TO BE SUPPLIED.
- ALL CONDUITS SHALL HAVE A SEPARATE GREEN GROUND CONDUCTOR INSTALLED FOR GROUNDING.
- ELECTRICAL OUTLETS WITH GROUND-FAULT CIRCUIT-INTERRUPTION SHALL BE PROVIDED IN ALL LOCATIONS REQUIRED BY THE NATIONAL ELECTRICAL CODE, WHETHER SHOWN OR NOT; IF NOT SHOWN, INCLUDE IN BID.

SUITE 203, 120/208V, 3PH, 4 WIRE, 150A													
CKT	LOAD	DESCRIPTION	NOTE	POLE	TOTAL KW PER PHASE			AMP	POLE	DESCRIPTION	LOAD	CKT	
					A	B	C						KW
1	1.08	OUTLETS OFFICE 105 & 106		1	20	1.44		20	1	QUAD OUTLETS OFFICE 105 & 106	0.36	2	
3	0.90	OUTLETS CONFERENCE ROOM/BREAK ROOM		1	20	1.26		20	1	QUAD OUTLETS CONFERENCE ROOM	0.36	4	
5	1.08	OUTLETS HALLWAY/RR		1	20		2.34	20	1	OUTLETS OFFICE 103 & 104	1.26	6	
7	0.36	QUAD OUTLETS 104 & 103		1	20	1.26		20	1	RECEPTION OUTLETS	0.90	8	
9	0.36	RECEPTION OUTLETS		1	20	0.72		20	1	BREAK ROOM GFCI OUTLETS	0.36	10	
11	0.40	REFRIGERATOR		1	20		0.60	20	1	WATER COOLER	0.20	12	
13	3.00	WATER HEATER		2	40	6.90		45	2	AHU	3.90	14	
15	3.00	WATER HEATER		-	-	6.90		-	-	AHU	3.90	16	
17	2.66	CONDENSER		2	50		3.26	20	1	HALL LIGHTS	0.60	18	
19	2.66	CONDENSER		-	-	3.36		20	1	104,105,106,107,108 LIGHTING	0.70	20	
21	0.50	101,103 LIGHTING		1	20		0.54	20	1	BATHROOM EXHAUSTS	0.04	22	
23	0.40	102,109,110 LIGHTING		1	20			20	1	QUAD OUTLET MECHANICAL ROOM	0.36	24	
25	2.00	BRANSWAY 105		1	20	2							
27													
29													
TOTAL =					14.96	9.42	6.20						
TOTAL CONNECTED LOAD (KW)					30.58								
TOTAL CONNECTED LOAD (AMPS)					84.88								

SERVICE LOAD SUMMARY	CONN LOAD	FACTOR	DEMAND LOAD	NOTES
LIGHTING	L = 1.55 KW	X 1.25 =	1.94 KW	ENCLOSURE: SURFACE MOUNTED NEMA 1 MAIN TYPE: 150 MCB KALC RATING: VERIFY WITH UTILITY COMPANY PROVIDE EQUIPMENT TO MEET OR EXCEED ESTIMATED AVAILABLE SCA AT UTILITY TRANSFORMER
FIRST 10KW RECEPTACLES	R = 6.84 KW	X 1.00 =	6.84 KW	
REMAINING RECEPTACLES	R = 0.00 KW	X .50 =	0.00 KW	
HVAC EQUIP	HV = 13.12 KW	X 1.00 =	13.12 KW	
25% OF LARGEST MOTOR	HV = 0.00 KW	X .25 =	0.00 KW	
MISCELLANEOUS	M = 7.00 KW	X 1.00 =	7.00 KW	
KITCHEN EQUIPMENT	K = 0.00 KW	X 1.00 =	0.00 KW**	
** KITCHEN LOAD PER 2014 NEC TABLE 220.1	TOTAL = 28.51 KW		TOTAL = 28.90 KW	
	TOTAL = 79.14 AMPS		TOTAL = 80.21 AMPS	



ELECTRICAL RISER
NOT TO SCALE

SUMMIT
DESIGN & FORENSICS, INC.
725 SE PORT SAINT LUCIE BLVD.
SUITE 203
PORT SAINT LUCIE FL 34984
(772) 285-0572

BRIAN J. MASKOL
FL PE #66080

BRIAN J. MASKOL
LICENSE
No. 66080
STATE OF FLORIDA
PROFESSIONAL ENGINEER

REVISION	DATE	DESCRIPTION

Psychiatry of the Palm Beaches
266 NW Peacock Boulevard, Suite 203
Port St. Lucie, Florida
ELECTRICAL ONE LINE DIAGRAM
AND DETAILS

	DATE
DESIGNED BJM	02-28-23
DRAWN M/JN	02-28-23
CHECKED	

JOB NO.
2023-053

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