

PROJECT NAME:

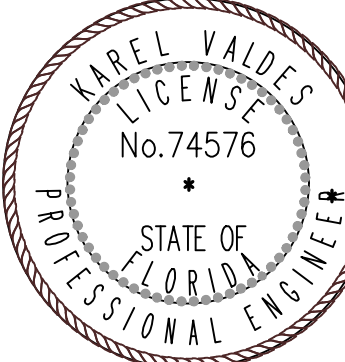
NEW RESIDENCE
5125 SW 98 TH CT, MIAMI, FL 33165
4755 COLLINS AVENUE MIAMI BEACH, FLORIDA 33140

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APPEARING ON THESE PLANS (c) 2022.

Issue		
No.	Date	Description

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SIGN & SEAL



THIS DRAWING HAS BEEN ELECTRONICALLY
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SHEET TITLE:

GENERAL NOTES
SCHEDULE &
RISER

Drawn by	A.M
Checked by	K.V
Project Number	021123A
Issued for	
Issue date	02/11/23
Scale	SEE DWG.
Sheet #	E-3
3 OF 3	

GENERAL ELECTRICAL NOTES

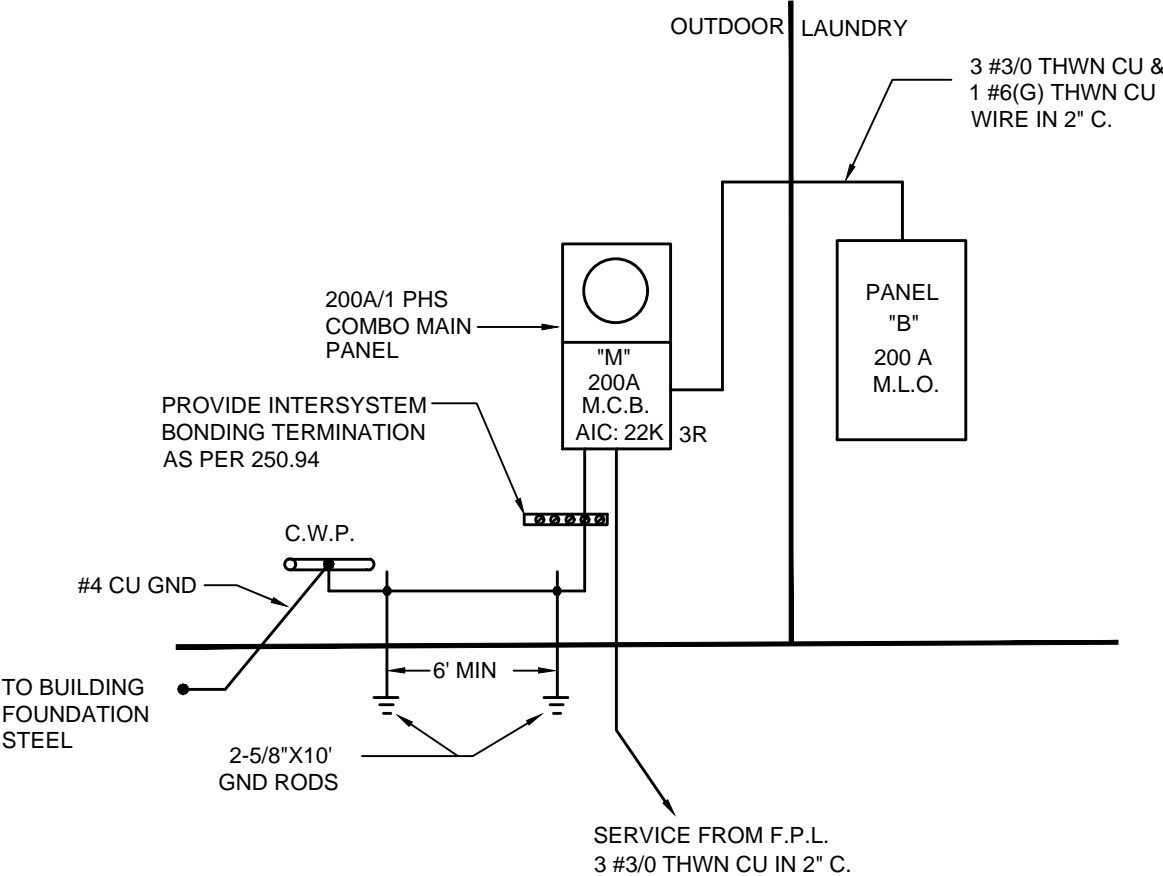
- ALL ELECTRICAL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH NEC 2017, FBC 2020 (7TH EDITION) AND LOCAL CODES AND ORDINANCES AND ALL STANDARDS OF CONSTRUCTION ESTABLISHED BY THE OWNER.
- SUBMIT SHOP DRAWINGS FOR ACCEPTANCE BY THE ARCHITECT AND/OR ENGINEER BEFORE PROCEEDING WITH THE PURCHASE OR INSTALLATION OF THE EQUIPMENT AND MATERIALS. NO FACSIMILES OR FACSIMILE COPIES SHALL BE ACCEPTED.
- ALL CONDUCTORS SHALL BE THW OR THWN COPPER. ALL EXPOSED CONDUITS SHALL BE RUN AS NEAT AS POSSIBLE. P.V.C. CONDUIT SHALL ONLY BE USED IN SLAB OR UNDERGROUND AT A MINIMUM DEPTH OF 24 INCHES.
- FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTION TO ALL VIBRATING EQUIPMENT SUCH AS MOTORS, ETC.
- ALL WIRING DEVICES SHALL BE LEVITON "DECORA" SERIES OR EQUAL AS PROVIDED BY OWNER. COLOR SELECTED BY OWNER.
- ALL RECEPTACLES SHALL BE INSTALLED AT 12" A.F.F. UNLESS OTHERWISE NOTED.
- ELECTRICAL POWER AND CONTROL WIRING FOR H.V.A.C. AND MECHANICAL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL VERIFY THE CEILING FINISHES AND SUSPENSION SYSTEMS FOR SELECTION OF THE PROPER TRIM AND SUPPORT ARRANGEMENTS OF FIXTURES.
- ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OWNER BEFORE ROUGH INSTALLATION OF LIGHTS, RECEPTACLES, SWITCHES AND EQUIPMENT FOR EXACT LOCATION.
- ALL SMOKE DETECTORS SHALL BE INTERLOCKED, SERVED FROM BEDROOM OR BATHROOM LIGHTING BRANCH AND SHALL BE INSTALLED AT LEAST 36" FROM ANY HVAC DIFFUSER GRILL AND PROTECTED BY AFC BREAKER
- ALL ELECTRICAL EQUIPMENT MUST BE U.L. APPROVED.
- BEDROOM BRANCH CIRCUITS MUST BE PROTECTED WITH "AFC" TYPE BREAKERS AS PER NEC 210-12
- ALL RECEPTACLES WITHIN DWELLING UNITS ARE REQUIRED TO BE TAMPER RESISTANT RECEPTACLES IN ACCORDANCE TO NEC 406.11.
- ALL RECEPTACLES WITHIN DWELLING UNITS ARE REQUIRED TO BE TAMPER RESISTANT RECEPTACLES IN ACCORDANCE TO NEC 406.11.
- 75% OF PERMANENT INSTALLED LIGHTING FIXTURES SHALL BE ENERGY EFFICIENT IN COMPLIANCE WITH RESIDENTIAL ENERGY EFFICIENCY CHAPTER 4. 404 FBC
- ALL BATHROOMS SHALL HAVE INDEPENDENT SEPARATE SWITCHING IN COMPLIANCE TO RESIDENTIAL FLORIDA BUILDING CODE APPENDIX F 307.3.1.
- RESIDENTIAL STAIRS SHALL COMPLY WITH 1 FOOT CANDLE MINIMUM INSIDE AND OUTSIDE STAIRS FBC R303.6.
- SMOKE DETECTORS REQUIRED INSIDE AND OUTSIDE ALL SLEEPING AREAS. FBC 907

GENERAL LIGHTING NOTES

- ALL FLUORESCENT FIXTURES SHALL HAVE EACH BALLAST FUSED.
- ALL FIXTURES SHALL BE PROPERLY SECURED TO CEILING GRID SYSTEM.
- VERIFY ALL DIMENSIONS AND LOCATIONS WITH TENANT PRIOR TO ROUGH-IN.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES AND STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING/BIDDING WORK.
- THE CONTRACTOR SHALL SATISFACTORILY REPAIR/REPLACE EQUIPMENT OR PART OF STRUCTURE DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHED AREAS SHALL BE RESTORED TO MATCH ADJACENT AREAS.
- APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CUTTING OR DRILLING ANY STRUCTURAL SUPPORT MEMBER.
- ALL CONDUCTORS SHALL BE COPPER.
- ALL MATERIALS SHALL BE U.L. APPROVED.
- ALL LUMINARIES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING SYSTEM MANUFACTURER RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.
- ALL LIGHTING CIRCUITS WHICH CONTROL AND/OR OPERATE LIGHTING FIXTURES WITH ELECTRONIC BALLAST SHALL BE PROVIDED WITH A SEPARATE NEUTRAL WIRE PER EACH PHASE.
- ALL BRANCH CIRCUITS SHALL BE SIZED IN ACCORDANCE WITH N.E.C. 210-19 REGARDLESS OF SIZES SHOWN ON PLANS OR PANEL SCHEDULES.

TYPE: BY CONTRACTOR		BUS: 225A	
MOUNTING: FLUSH		MAINS M.L.O.	
LOCATION: LAUNDRY		VOLTS: 120/240V, 1Ø, 3W.	
FEEDER: SEE RISER		AIC: 22,000	
NO. POLE KVA DESCRIPTION		CU BUS/GND BUS	
1 2/60 11.44 AHU-1		#6, 3/4" 2 2/40 NC CU-1	
3		4	
5 2/40 9.00 IWH-1		#8, 3/4" 6 2/50 8.00 RANGE	
7		8	
9 2/40 9.00 IWH-1		#8, 3/4" 10 2/30 4.00 OVEN	
11		12	
13 2/30 5.00 DRYER		#10, 3/4" 14 1/20 0.80 HOOD	
15		16 1/20 1.20 MICROWAVE	
17 1/20 1.50 WASHER		#12, 1/2" 18 1/20 1.20 REFRIGERATOR	
19		20 1/20 1.20 DISHWASHER	
A-) 21 1/20 * LAUNDRY RECEPT		#12, 1/2" 22 1/20 0.80 GARBAGE DISPOSER	
A-) 23 1/20 * DINING ROOM RECEPT		#12, 1/2" 24 1/20 1.50 SMALL APPLIANCES	
A-) 25 1/20 * HALLWAY LIGHTING		#12, 1/2" 26 1/20 1.50 SMALL APPLIANCES	
A-) 26 1/20 * FAMILY ROOM LIGHTING		#12, 1/2" 28 1/20 * KITCHEN/DINING LIGHTS	
A-) 27 1/20 * PLAYROOM LIGHTING		#12, 1/2" 30 1/20 * OUTDOOR LIGHTS	
A-) 29 1/20 * MASTER ROOM LIGHTING		#12, 1/2" 32 1/20 * OUTDOOR RECEPTS	
A-) 31 1/20 * BEDROOM 2 LIGHTING		#12, 1/2" 34 1/20 1.00 FLOOD LIGHTS	
A-) 33 1/20 * BEDROOM 3 LIGHTING		#12, 1/2" 36 1/20 1.20 SEPTICTANK'S PUMP	
A-) 35 1/20 * BATHROOM RECEPTS		40	
37		42	
39		42	
41		42	
SEE LOAD CALCULATIONS		DEMAND	
DEMAND		157.9 AMPS	

(*)-. 0.46 KVA AVERAGE AT 3 VA PER SQFT GENERAL LIGHTING BRANCH. SEE LOAD CALCULATIONS
A-) CONTRACTOR TO PROVIDE AFCI TYPE BREAKERS PER NEC-210.12.
H-) PROVIDE HVAC RATED CIRCUIT BREAKER
NC-) NON - CONCURRENT
P-) PHOTOCELL CONTROL



ELECTRICAL RISER DIAGRAM

N.T.S.

NOTES:

- ENGINEER CALCULATED A FAULT CURRENT OF 12.2 KAIC BASE ON CALCULATED FAULT CURRENT WE RECOMMENDS 22 KAIC. CONTRACTOR SHALL COORDINATE WITH FPL FOR ACTUAL FAULT CURRENT. EQUIPMENT INSTALLED SHALL WITHSTAND FPL'S AVAILABLE FAULT CURRENT. PRIOR TO ORDERING THE ELECTRICAL SWITCHGEAR THE CONTRACTOR SHALL OBTAIN FROM FPL A LETTER STATING THE AVAILABLE FAULT CURRENT. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
- ALL EQUIPMENT TO BE MOUNTED ABOVE FLOOD CRITERIA.
- COORDINATE NEW SERVICE REQUIREMENTS WITH FPL.

Calculated Fault Current Calculation

I = KVA x 1000 = trans. FLA		kVA	750
E		E	240
trans. FLA =		trans. FLA =	3125
Isca = trans. FLA x 100 =		3125	
transformer Z		5	%
Isca = ampere short-circuit current RMS symmetrical.		Isca =	62,500 amperes
Fault Current from		POINT TO POINT METHOD	
Length (distance) FEET		L =	110 Single Phase 240/120
# conductors per phase		N =	62,500
Phase conductor constant		C =	13.923 Phase Conductor
Volt Line to Line		E L - L =	240 Volt
f' factor = 2 x L x I		f =	4.115
N x C x E L - N		C =	13.923 Neutral Conductor
Neutral conductor constant		E L - N =	120 Volt
Volt Line to Neutral		f =	8.230
Multiplier M = 1		M =	0.196
Line to Line		M =	0.108
Line to Neutral			
Isca x M = fault current at terminals of main disconnect L - L =			12,219 amperes
Isca x M = fault current at terminals of main disconnect L - N =			10,157 amperes