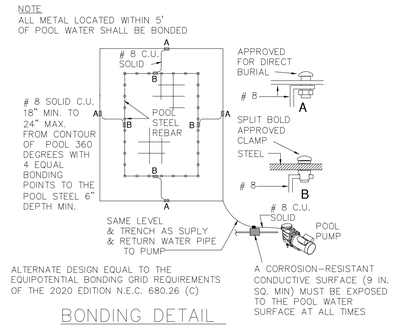
PLUMBING NOTES:

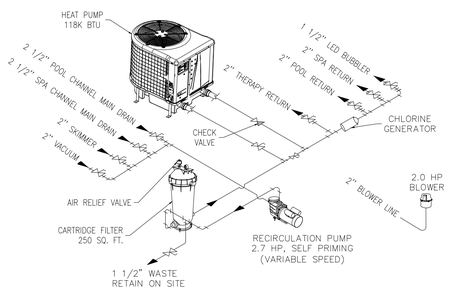
1. ALL POOL EQUIPMENT PIPING SHALL BE SCHEDULE 40 PVC–PW, NSF APPROVED, AND SHALL BE INSTALLED AND SUPPORTED IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE, PLUMBING.
2. ALL SUCTION PIPING SHALL BE 2" DIAMETER MINIMUM, AND ALL PRESSURE PIPING SHALL BE 1–1/2" DIAMETER MINIMUM, UNLESS OTHERWISE NOTED.
3. POOL WATER DISPOSAL SHALL BE CONTAINED ON SITE BY APPROVED METHOD IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND LOCAL JURISDICTION REQUIREMENTS.
4. ALL SUCTION OUTLET FITTINGS SHALL BE LISTED, LABELED, AND INSTALLED IN ACCORDANCE WITH ANSI/APSP/ICC 16 AND THE FLORIDA BUILDING CODE.
5. ANTI–VORTEX MAIN DRAIN COVERS SHALL BE SECURELY FASTENED WITH TAMPER–RESISTANT SCREWS.
6. WALL VACUUM FITTINGS SHALL BE SELF–CLOSING AND SELF–LATCHING, OR PROVIDED WITH AN APPROVED SPRING–LOADED SAFETY CAP, IN ACCORDANCE WITH ANSI/PHTA/ICC 7 AND THE FLORIDA BUILDING CODE.
7. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE, INCLUDING REQUIREMENTS FOR BUOYANCY, PIPE RESTRAINT, AND SUPPORT WHERE APPLICABLE.
8. THE WATER VELOCITY THROUGH ALL SUCTION PIPING SHALL NOT EXCEED 8 FEET PER SECOND.
9. THE WATER VELOCITY THROUGH ALL PRESSURE PIPING SHALL NOT EXCEED 10 FEET PER SECOND.
10. ALL EXPOSED PIPING SHALL BE SUITABLE FOR EXPOSURE TO ULTRAVIOLET RADIATION AND NORMAL OPERATING TEMPERATURES.
11. ENTRAPMENT PROTECTION FOR SUCTION OUTLETS SHALL BE PROVIDED IN ACCORDANCE WITH ANSI/PHTA/ICC 7 AND THE FLORIDA BUILDING CODE.
12. THE MAXIMUM SYSTEM FLOW RATE SHALL NOT EXCEED THE LISTED FLOW RATING OF ANY SUCTION OUTLET FITTING.
13. IN AREAS SUBJECT TO HIGH GROUND WATER, THE POOL SHALL BE PROVIDED WITH AN APPROVED HYDROSTATIC RELIEF DEVICE OR DESIGNED TO RESIST HYDROSTATIC UPLIFT, AS REQUIRED BY SITE CONDITIONS.

LOAD CALCULATIONS (SERVICE 200 AMP)

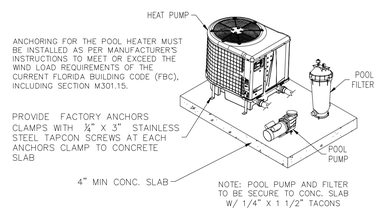
	VA
GENERAL LIGHTING 3537 SQ. FT. @3W/SQ. FT.	10611
APPLIANCES CIRCUITS & LAUNDRY	4500
EXIST. RANGE	10000
EXIST. DISHWASHER	960
EXIST. REFRIDGERATOR	1200
EXIST. DRYER	5000
EXIST. WATER HEATER	4500
SUBTOTAL	36771
** NEW POOL PUMP	2800
** NEW POOL LIGHTING	100
** NEW POOL SALT CHLORIDE SYSTEM	300
** NEW POOL BLOWER	600
TOTAL	40571
FIRST 10KW @ 100%	10000
REMAINING @ 40%	12228
** NEW POOL HEAT PUMP	6600
A/C LOAD	10000
TOTAL	38828
38828 W / 240 V =	161.8 A



BONDING DETAIL
NTS



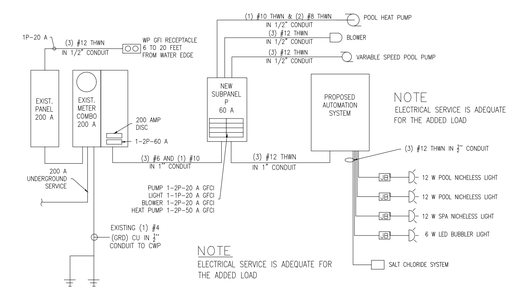
POOL PIPING ISOMETRIC
NTS



EQUIPMENT HOLD DOWN
NTS

ELECTRICAL NOTES:

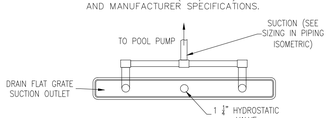
1. ALL POOL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE AND NFPA 70 (NEC 2020), ARTICLE 680.
2. ALL POOL ELECTRICAL EQUIPMENT, GROUNDING, AND BONDING SHALL COMPLY WITH NEC 2020, ARTICLE 680.
3. AT LEAST ONE GFCI–PROTECTED, 125–VOLT, 15– OR 20–AMPERE RECEPTACLE SHALL BE LOCATED NOT LESS THAN 6 FEET AND NOT MORE THAN 20 FEET FROM THE INSIDE WALL OF THE POOL. NEC 680.22(A)(1).
4. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE AN INSULATED COPPER CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250.122 AND NEC ARTICLE 680.
5. EQUIPOTENTIAL BONDING SHALL BE PROVIDED IN ACCORDANCE WITH NEC 680.26 AND SHALL EXTEND TO THE PERIMETER SURFACE FOR A DISTANCE OF 3 FEET HORIZONTALLY BEYOND THE INSIDE WALLS OF THE POOL.
6. RECEPTACLE OUTLETS SHALL NOT BE LOCATED LESS THAN 6 FEET FROM THE INSIDE WALL OF THE POOL, EXCEPT AS PERMITTED BY NEC 680.22(A)(1).
7. POOL PUMP MOTOR CIRCUITS SHALL BE PROVIDED WITH GFCI PROTECTION. NEC 680.21(C).
8. LIGHTING OUTLETS, CEILING FANS, AND PADDLE FANS SHALL BE INSTALLED NOT LESS THAN 5 FEET HORIZONTALLY FROM THE INSIDE WALL OF THE POOL, OR SHALL COMPLY WITH THE VERTICAL CLEARANCES OF NEC 680.22(B).
9. OVERHEAD CONDUCTORS SHALL NOT BE INSTALLED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY OF THE INSIDE WALL OF THE POOL UNLESS CLEARANCES COMPLY WITH NEC 680.9.
10. UNDERWATER LIGHTING FIXTURES SHALL BE LISTED FOR POOL USE AND INSTALLED IN ACCORDANCE WITH NEC 680.23.
11. AT LEAST ONE CONDUCTIVE ELEMENT OF THE BONDING SYSTEM SHALL BE IN DIRECT CONTACT WITH THE POOL WATER IN ACCORDANCE WITH NEC 680.26(C).
12. ALL FIXED METAL PARTS LOCATED WITHIN 5 FEET HORIZONTALLY OF THE INSIDE WALL OF THE POOL SHALL BE BONDED TO THE COMMON BONDING GRID IN ACCORDANCE WITH NEC 680.26(B)(5).
13. THE EQUIPOTENTIAL BONDING GRID SHALL INCLUDE A MINIMUM OF FOUR (4) POINTS OF CONNECTION AROUND THE POOL, PROVIDING CONTINUOUS 360–DEGREE BONDING AS REQUIRED BY NEC 680.26.



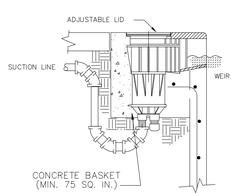
NOTES
A. POOL PUMP TO COMPLY WITH FBC E 403.
B. POOL MOTORS REQUIRE OVERLOAD PROTECTION TO COMPLY WITH NEC 430.32.

ELECTRIC DIAGRAM
NTS

ALL POOL AND SPA SUCTION OUTLET (DRAIN) COVERS SHALL BE LISTED AND LABELED AND COMPLY WITH ANSI/APSP/ICC–16 2017 STANDARD. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. MAXIMUM WATER VELOCITY THROUGH SUCTION OUTLETS SHALL COMPLY WITH THE FLORIDA BUILDING CODE –RESIDENTIAL (FBC/R4501) AND MANUFACTURER SPECIFICATIONS.



CHANNEL MAIN DRAIN DETAIL
NTS



SKIMMER
NTS

NEW POOL PANEL

TYPE: WALL MOUNTED
VOLTAGE: 1ø, 120 / 240
MAIN: 2P–60 A M.L.O.
ENCLOSURE: NEMA 3
LOCATION: AS SHOWN
FED FROM: METER COMBO

DESCRIPTION	WIRE (#)	LOAD (VA)	POLES	AMPS	CIR. No.			CIR. No.	AMPS	POLES	LOAD (VA)	WIRE (#)	DESCRIPTION
HEAT PUMP	8	6600	2	50	1			2	20	1	100	12	LIGHTS
					3			4	20	2	2800	12	POOL PUMP
BLOWER	12	600	2	20	5			6					
					7								

TOTAL CONNECTED LOAD	10100 VA
10100 VA / 240 V =	42.1 A

DCM PATIO DESIGNS
denia@dcmpatiodesigns.com
3055879995

REVISIONS

NUMBER	DATE

CLM Structural Engineering, Corp.
Chau M Luong PE
Structural Engineer
Florida License 68215
6720 NW 174 TER
Hialeah, FL 33015
Ph: (786)547-7921

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CHAU M LUONG ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED, AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CHAU M LUONG LICENSE NO. 68215 STATE OF FLORIDA PROFESSIONAL ENGINEER

Project
Proposed Swimming Pool
JUAN GABRIEL ALDANA
15450 NW 88 CT
MIAMI LAKES, FL 33018

JOB No:
DESIGNED BY: CLM
CHECKED BY: CLM
SCALE: AS SHOWN
DATE: 06/01/2026