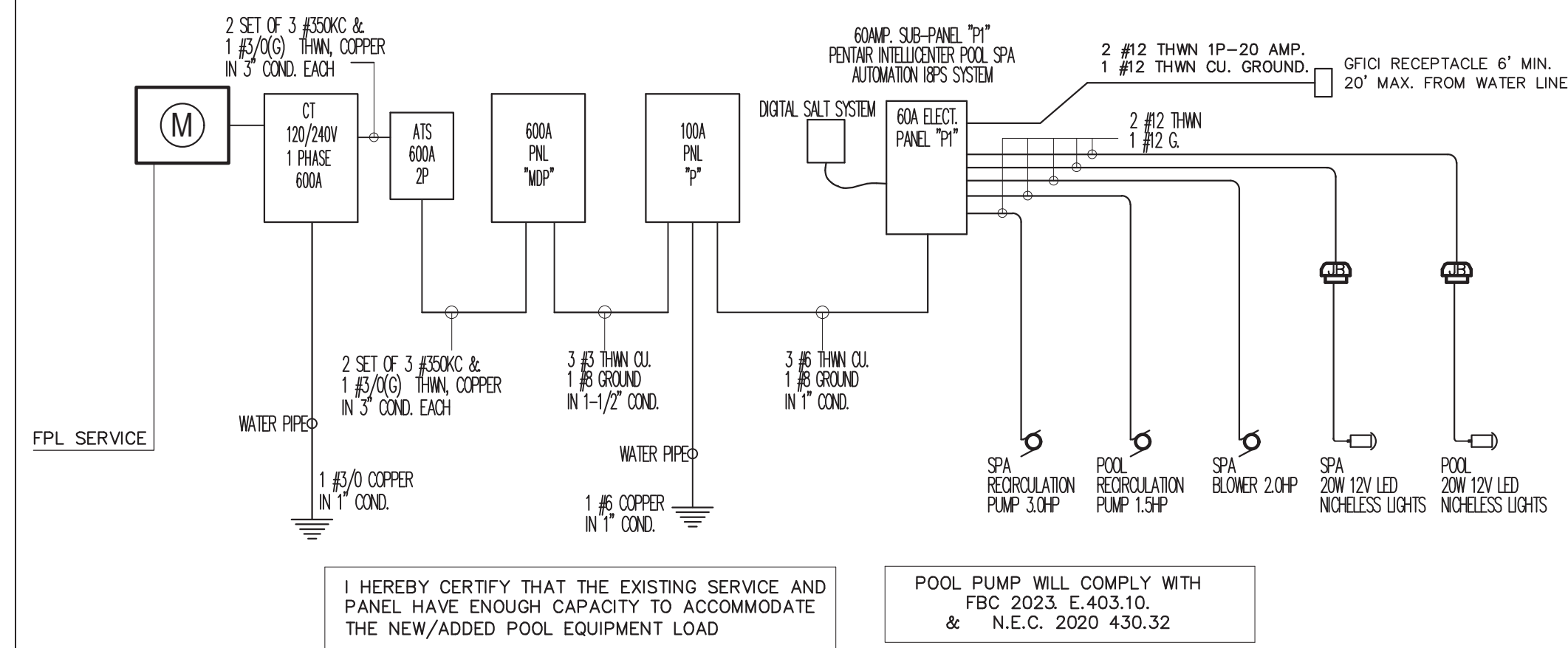
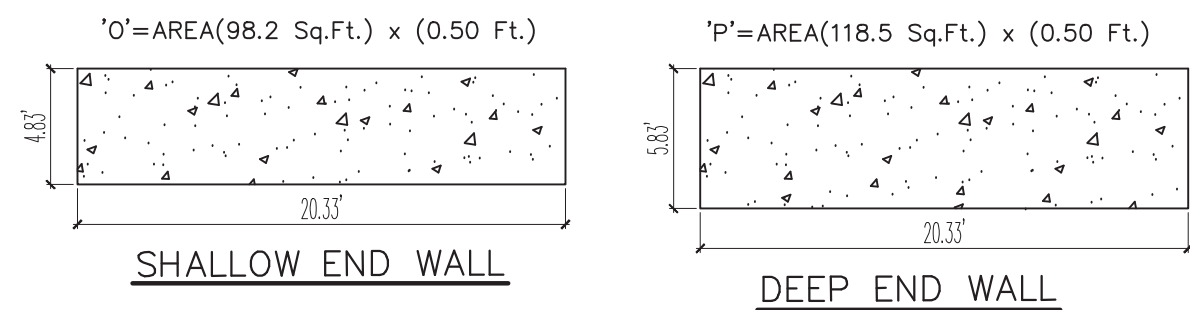




SPA / POOL - ELECTRICAL RISER DIAGRAM

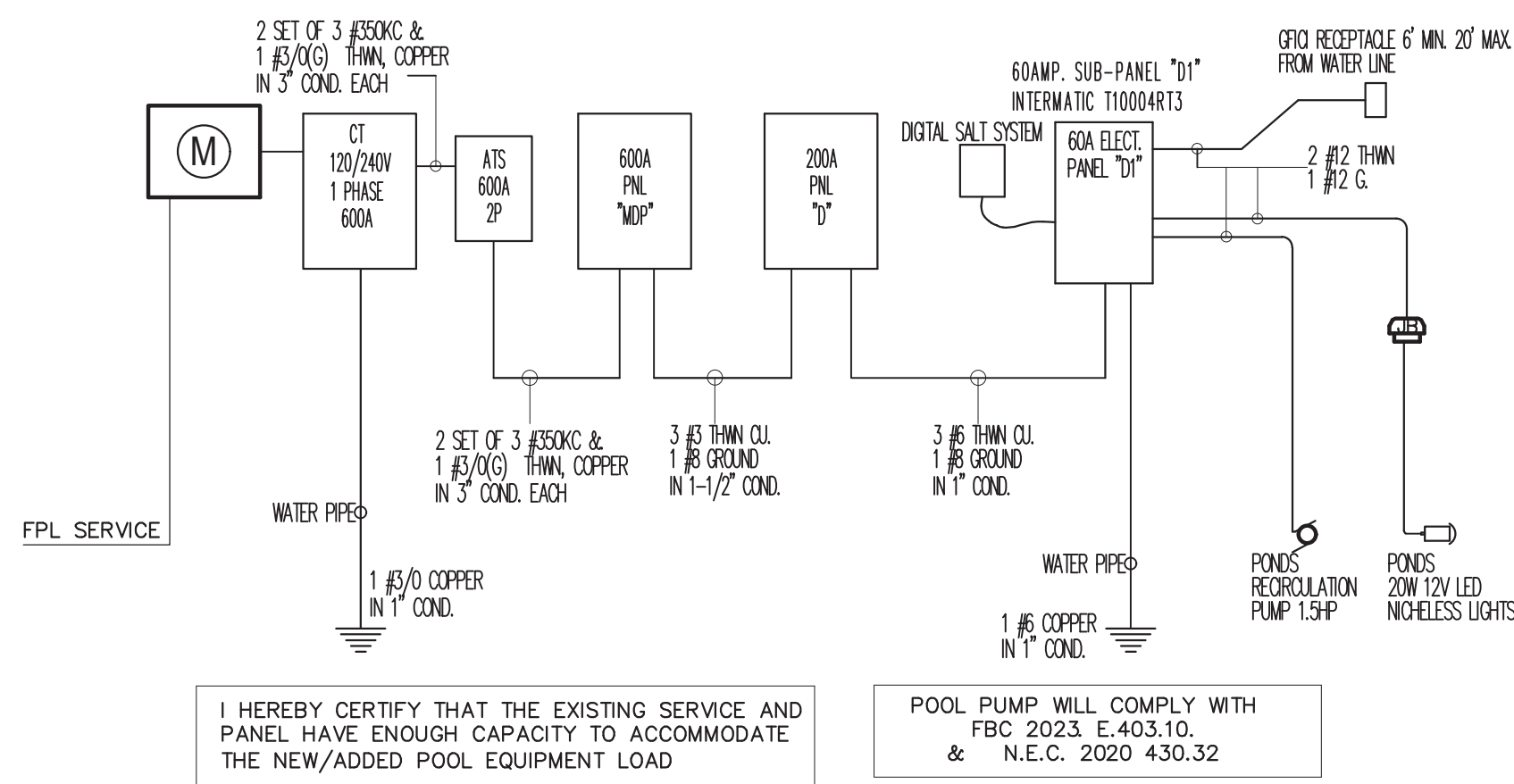
ELECTRICAL NOTES:

1. ALL POOL ELECTRICAL WORK SHALL BE ACCOMPLISHED IN COMPLIANCE WITH FBC 2023, 8th EDITION, CHAPTER 42
2. ALL POOL ELECTRICAL WORKS, GROUNDING AND BONDING MUST BE CONFORM WITH THE NEC 2020. ART. 680
3. AT LEAST ONE GFCI PROTECTED, 125-VOLT RECEPTACLE OUTLET IS REQUIRED BETWEEN 6 AND 20 FEET OF THE INSIDE WALL OF THE POOL. NEC 680.22(A)(1)(RESIDENTIAL AND COMMERCIAL)
4. THE EQUIPMENT GROUNDING CONDUCTOR MUST BE A MINIMUM 12 AWG COPPER. NEC 680.21(A)(1); 680.23(F)(2); 680.25(B)(1)
5. EQUIPMENTAL BONDING TO COMPLY WITH 2014 NEC 680.26(8) SHALL BE INSTALLED IN OR UNDER PAVED WALKING SURFACES FOR THREE FEET HORIZONTALLY BEYOND THE WALLS OF THE POOL. NEC 680.26(C) [4 POINTS & DECK BONDING (360 DEGREES)]
6. RECEPTACLE OUTLETS ARE NOT PERMITTED WITHIN 6 FEET OF THE INSIDE WALLS OF A POOL. NEC 680.22(A)(2)
7. POOL PUMP MOTOR CIRCUITS, MUST BE PROVIDED WITH GFCI PROTECTION. NEC 680.21(C)
8. LIGHTING OUTLETS MUST BE LOCATED A MINIMUM OF 5 FEET FROM THE INSIDE WALL OF A POOL OR MOUNTED A MINIMUM OF 12 FEET ABOVE THE MAXIMUM WATER LEVEL. NEC 680.22(8)(1.)
9. OVERHEAD CONDUCTORS ARE NOT PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL. FBC 424.1.4.2.4
10. OVERHEAD CONDUCTORS SHALL NOT BE PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL UNLESS PROVIDED WITH CLEARANCE TO COMPLY WITH NEC 680.8.
11. A CONDUCTIVE ELEMENT THAT IS PART OF THE POOL BONDING SYSTEM MUST BE IN DIRECT CONTACT WITH THE POOL WATER. IN THE ABSENCE OF RAILS, LADDERS OR NICHES, A WATER BONDING SHALL MEET THE REQUIREMENT. NEC 680.26(C)
12. ALL METAL PARTS WITHIN 5 FEET OF THE POOL MUST BE BONDED TO A COMMON BONDING GRID. NEC 680.26(B)(5)

ELECTRICAL PANEL SCHEDULE "P1" (PENTAIR INTELLICENTER POOL SPA AUTOMATION)																
Type: M.L.O. Mounting: SURFACE Location: See Plan Enclosure: Nema 3R										Mains: See Riser Bus Rating: 60 Amps Rating: 10 KAIC Voltage: 120/240 V, 1PH, 3W						
Remarks	Cond Size	Wire	Load (VA)	100%	Pole	Trip	Ckt No	Ckt No	Trip	Pole	Load (VA)	100%	Wire	Cond Size	Remarks	
POOL PUMP 1.5 HP (GFCI)	1/2"	12	1,500	2	20	1	2	4	20	2	2,000	12	1/2"		SPA PUMP 3.0 HP (GFCI)	
GFCI RECEPTACLE	1/2"	12	1,000	1	20	5	6	20	2	1,500	12	1/2"			SPA PUMP 1.5 HP (GFCI)	
HEATER CONTROL	1/2"	14	150	1	15	7	8	10	20	1	170	12	1/2"		SPA LIGHTS	
BLOWER 2 HP (GFCI)	1/2"	12	1,500	2	20	11	12	20	1	170	12	1/2"			POOL LIGHTS	
SPACE						13	14								SPACE	
SPACE						15	16								SPACE	
TOTAL LOAD @ 100%: 7,990 VA 33.3A OK																
FEEDER: 3 #6 THWN																
GROUND: 1#6 COPPER 1" CONDUIT																

ELECTRICAL PANEL SCHEDULE "D1" (INTERMATIC T10004RT3)													
Type: M.L.O. Mounting: SURFACE Location: See Plan Enclosure: Nema 3R										Mains: See Riser Bus Rating: 60 Amps Rating: 10 KAIC Voltage: 120/240 V, 1PH, 3W			
Remarks	Cond Size	Wire	LOAD (VA) 100%	Pole	Trip	Ckt No	No	Trip	LOAD (VA) 100%	Wire	Cond Size	Remarks	
PONDS PUMP 1.5 HP (GFCI)	1/2"	12	1,500	2	20	1	2	20	170	12	1/2"	PONDS LIGHTS	
GFCI RECEPTACLE	1/2"	12	1,000	1	20	5	3					SPACE	
SPACE						7	8					SPACE	

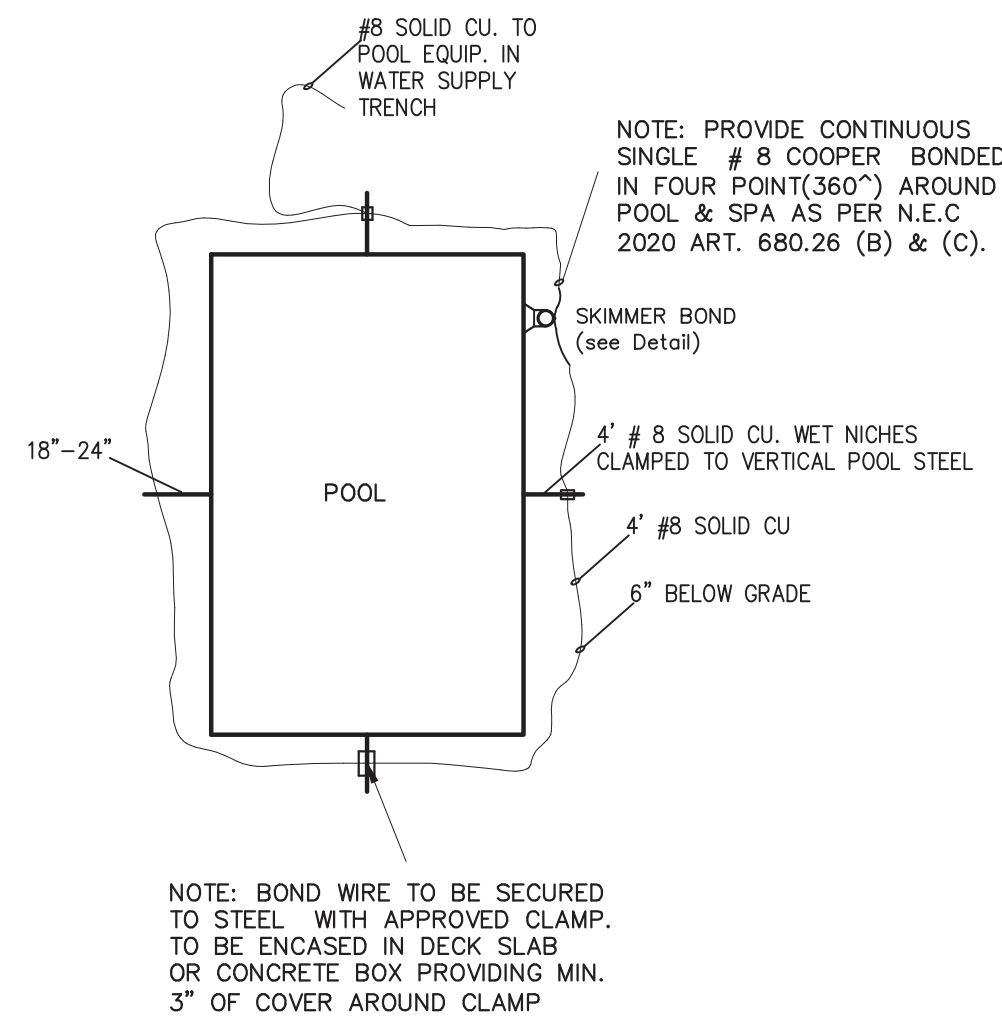
TOTAL LOAD @ 100% :2,670 VA 11.1A OK
FEEDER: 3 #6 THWN
GROUND: 1#8 COPPER 1" CONDUIT



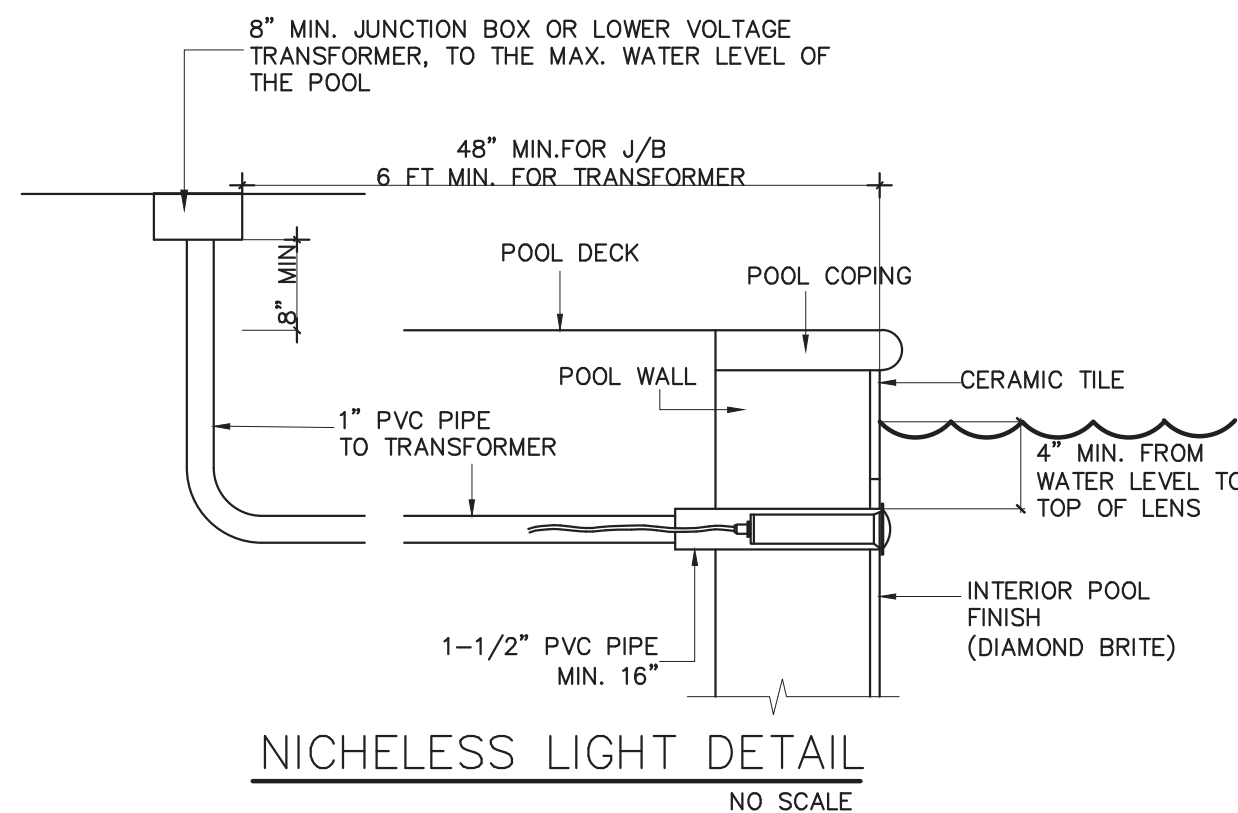
PONDS - ELECTRICAL RISER DIAGRAM

NOTE: Bonding Within 5 feet of the Pool Wall

Once the grid or conductor material is under the walkway surrounding the pool and connected to the outer pool shell, any exposed metal within 5 feet of the surrounding interior pool wall must also be bonded to that underground conductor system by a No. 8 AWG copper conductor. This includes metal pool ladders, metal fencing, doors, window frames, and even steel conduit or cable within the first 5 feet surrounding the pool. This bonding requirement also extends to the pool electrical equipment and applicable lighting, minus any double-insulated water pump motors and pool water heaters greater than 50 amps, that have their own special bonding requirements from the manufacturer. (2020 NEC 680.4)



POOL BOND SCHEMATIC



PH: 786-554-5741
PH: 786-451-5076



JUAN MEDINA ALFONSO P.E.

MA ENGINEERING SOLUTION, CORP.
LICENCE# 73236

THIS ITEM HAS BEEN DIGITALLY SIGNED
AND SEALED BY JUAN MEDINA ALFONSO,
PE 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.
DATE: 11/03/2025

ECT
- SWIMMING POOL WITH SPA
- TWO FRONT PONDS

OWNER
9601 SW 53 AVE. LLC
9601 SW 53 AVENUE
MIAMI, FL 33156

REVISIONS

NO.	DATE

DATE: 11/03/2025

SCALE: AS PER PLAN

NO. SHEET 1 OF 1

DRAWING NO.

SP-4