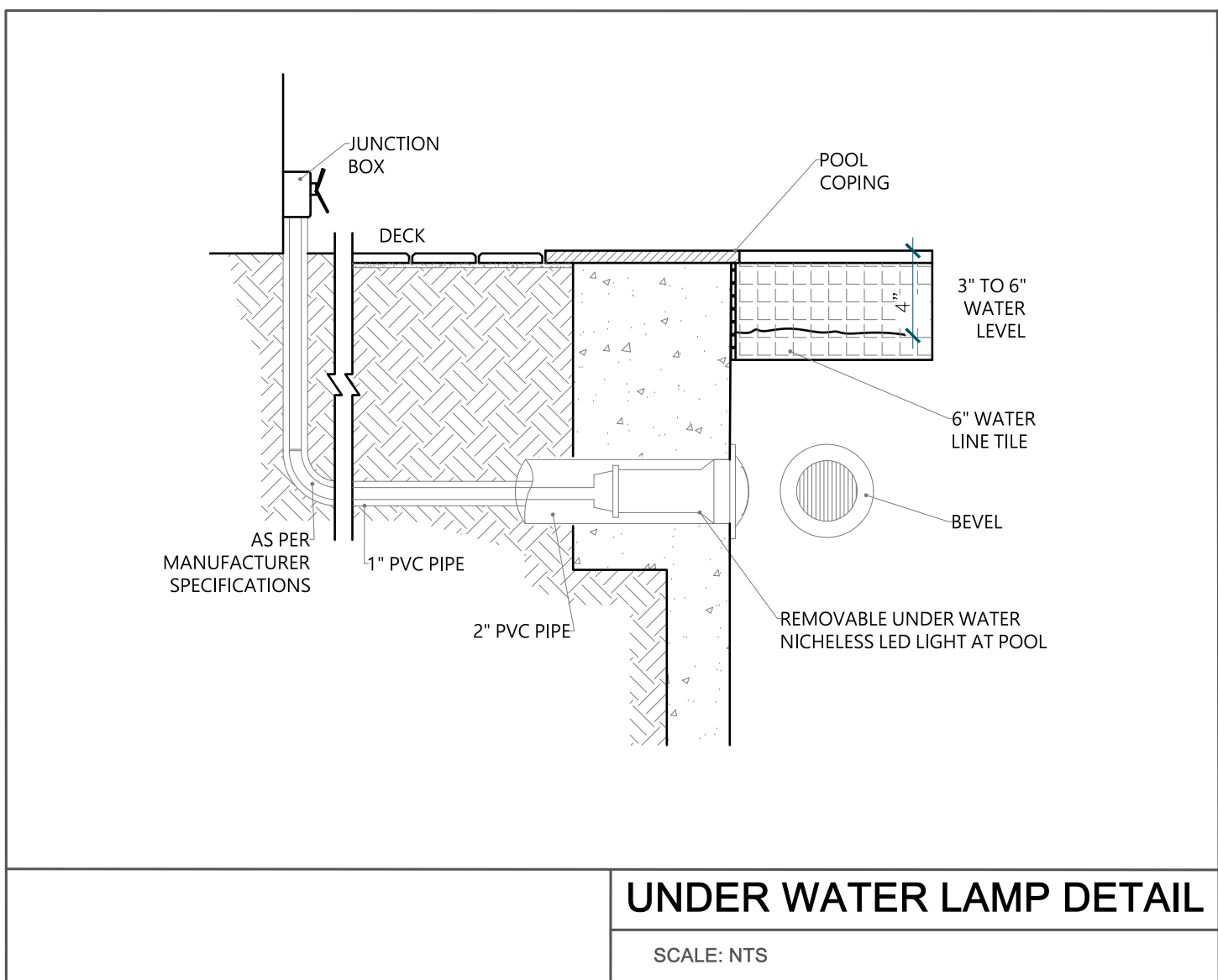
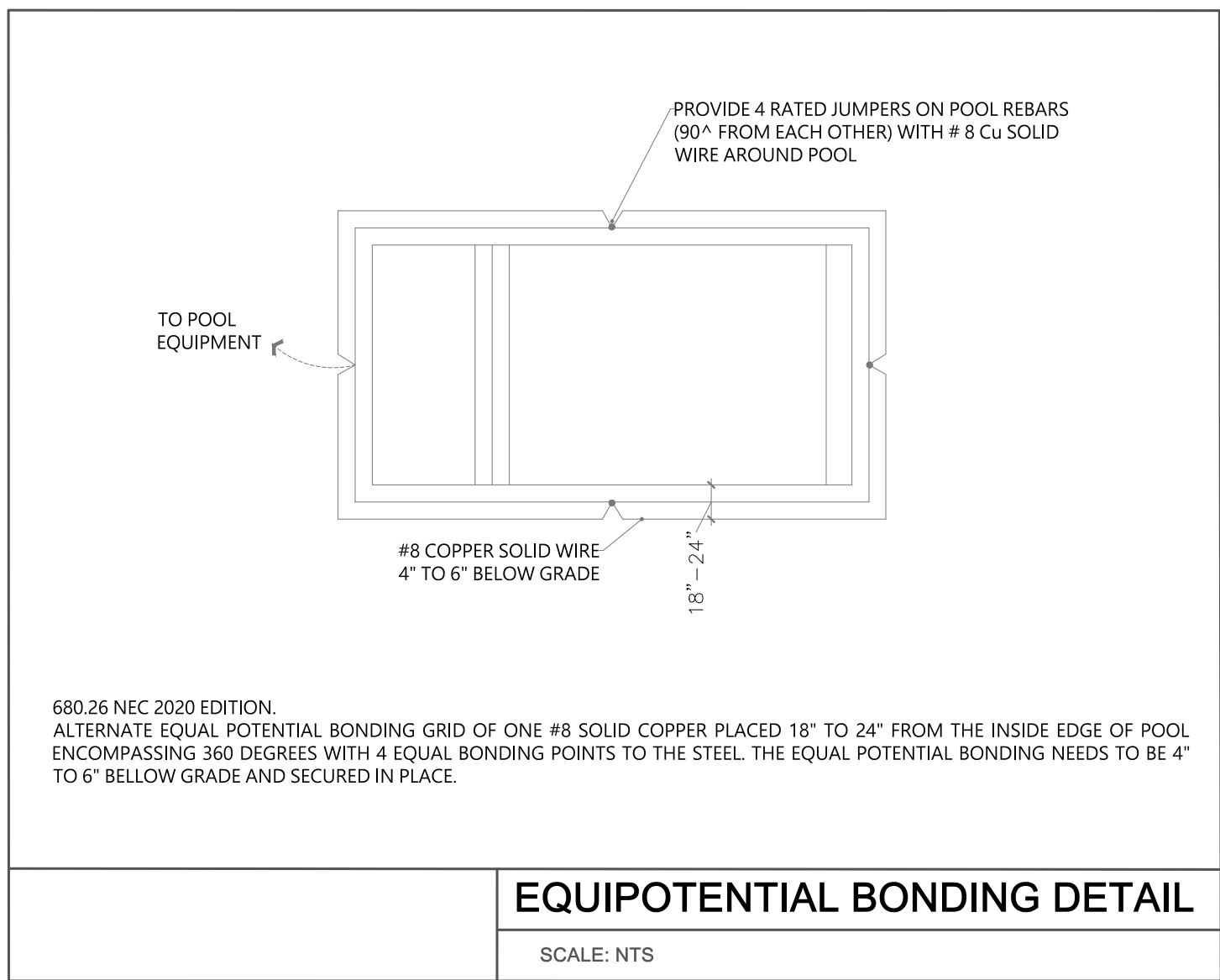
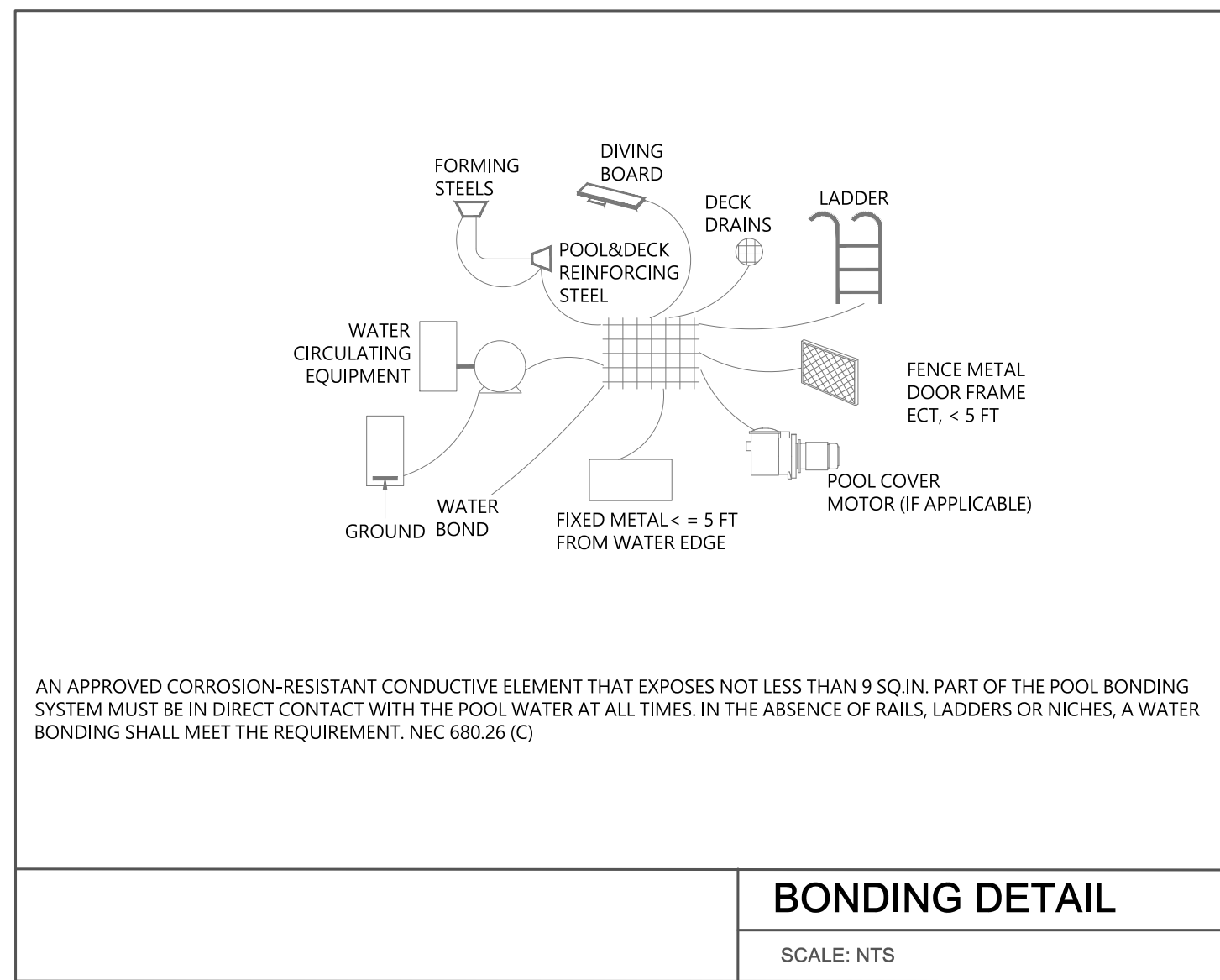




PROPERTY DESCRIPTION

ADDRESS: 7725 SW 114TH ST , MIAMI, FL 33156
FOLIO/ID: 03-4132-005-1780
ZONING CODE: SFR-SINGLE-FAMILY RESIDENTIAL DISTRICT

LEGAL DESCRIPTION

10 55 40
SUNILAND ESTS 1ST ADD PB 50-58
LOT 14 BLK 14
LOT SIZE IRREGULAR
F/A/U 30-5010-002-1030

FLOOD ZONE INFORMATION

FLOOD ZONE: X

APPLICABLE CODES

(F.B.C) 2023 FL BUILDING CODE

BONDING NOTES

EQUIPMENTAL BONDING SHALL BE REQUIRED, THE PARTS (CONDUCTIVE POOLS) SHELLS, PERIMETER SURFACES, METAL COMPONENTS (SUCH AS LIGHT NICHE OR LIGHT FIXTURES, LIGHT FIXTURE HOUSING, LIGHT FIXTURE MOUNTING BRACKET, ETC.) AND ALL FIXED METAL PARTS) SHALL BE BONDED USING A SINGLE SOLID #8 AWG BONDING WIRE, PLACED AROUND THE PERIMETER 18" TO 24" FROM THE POOLS WATER EDGE, PLACED 4" TO 6" BELOW GRADE, FOLLOWING THE CONTOUR OF THE PERIMETER OF THE POOL. THE BONDING WIRE SHALL BE SECURED TO THE POOL SURFACE UNIFORMLY SPACED LOCATIONS BY EXOTHERMIC WELDING OR BY LISTED PRESSURE CONNECTORS OR CLAMPS THAT ARE LABELED AS BEING SUITABLE FOR THIS PURPOSE AND ARE OF STAINLESS STEEL, BRASS, COPPER OR COPPER ALLOY. THIS SINGLE SOLID BONDING WIRE SHALL BE USED TO BOND ALL METAL PARTS OF THE POOL SURFACE WHERE NONE OF THE BONDED PARTS IS IN DIRECT CONNECTION WITH THE POOL WATER. THE POOL WATER SHALL BE IN DIRECT CONTACT WITH AN APPROVED CORROSION-RESISTANT CONDUCTIVE SURFACE THAT EXPOSES NOT LESS THAN 9 IN² OF SURFACE AREA PER LINEAL FOOT OF POOL PERIMETER. THE BONDING WIRE ACCOMPISHED BY THE BONDED ITEMS ABOVE, A POOL BOND #28-2000 (10.1 SI), OR EQUAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS IN A RETURN LINE. GFCI PROTECTION SHALL BE PROVIDED FOR POOL ELECTRICAL EQUIPMENT. WIRING AND INSTALLATION, INCLUDING THE BONDING AND GROUNDING OF POOL COMPONENTS SHALL COMPLY WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, BUILDING, OUTLETS SUPPLYING POOL PUMP MOTORS SHALL BE PROTECTED BY GROUND-FULT CIRCUIT INTERRUPTER (GFCI) PROTECTION. WHETHER BY RECEPTACLE OR BY DIRECT CONNECTION, AND OUTLETS SUPPLYING OTHER ELECTRICAL EQUIPMENT AND UNDERWATER LUMINARIES OPERATING AT VOLTAGES GREATER THAN THE LOW VOLTAGE CONTACT LIMIT, CONNECTED TO THE POOL ELECTRICAL SYSTEM SHALL BE PROTECTED BY GROUND-FULT CIRCUIT AMPERES, WHETHER BY RECEPTACLE OR BY DIRECT CONNECTION, SHALL BE PROVIDED WITH GROUND-FULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL. 2020 NATIONAL ELECTRICAL CODE (NEC), NPFA 70 SHALL GOVERN OUTSIDE OF THE POOL ELECTRICAL SYSTEM. GFCI PROTECTION SHALL BE PROVIDED FOR POOL PUMP MOTORS SHALL HAVE OVERLOAD PROTECTION.

ENGINEER:

REINALDO REMEDIOS, P.E.
LICENSE No. 67772

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED ON THE DATE ADJACENT TO THE SEAL USING A AUTHENTICATION CODE .

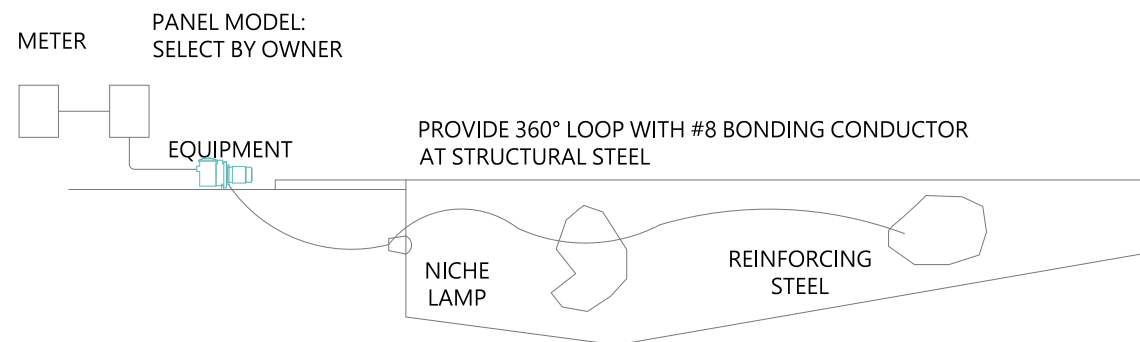
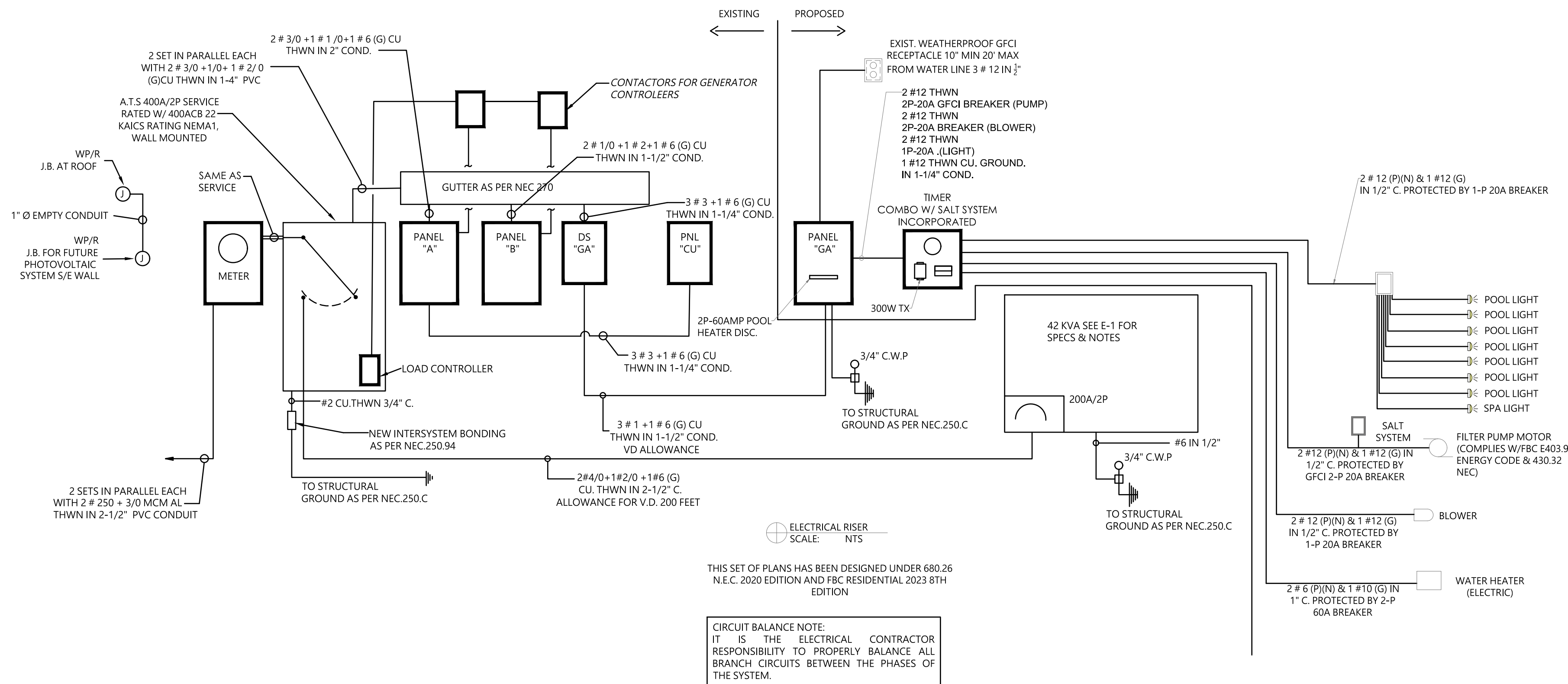
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VERIFIED ON ANY ELECTRONIC COPIES.

SCOPE OF WORK:

CONSTRUCTION DOCUMENTS FOR PROPOSED POOL, SPA & SUNKEN AREA

SHEET No:

E-1



N.E.C 2020 EDITION CHAPTER 680-25

680.25 FEEDERS. THESE PROVISIONS SHALL APPLY TO ANY FEEDER ON THE SUPPLY SIDE OF PANELBOARDS SUPPLYING BRANCH CIRCUITS FOR POOL EQUIPMENT COVERED IN PART II OF THIS ARTICLE AND ON THE LOAD SIDE OF THE SERVICE EQUIPMENT OR THE SOURCE OF A SEPARATELY DERIVED SYSTEM.

(A) WIRING METHODS. FEEDERS SHALL BE INSTALLED IN RIGID METAL CONDUIT, INTERMEDIATE METAL CONDUIT, LIQUIDTIGHT, FLEXIBLE NONMETALLIC CONDUIT, OR RIGID NONMETALLIC CONDUIT. ELECTRICAL METALLIC TUBING SHALL BE PERMITTED WHERE INSTALLED ON OR WITHIN A BUILDING, AND ELECTRICAL NONMETALLIC TUBING SHALL BE PERMITTED WHERE INSTALLED WITHIN A BUILDING.

EXCEPTION: AN EXISTING FEEDER BETWEEN AN EXISTING REMOTE PANEL BOARD AND SERVICE EQUIPMENT SHALL BE PERMITTED TO RUN IN FLEXIBLE METAL CONDUIT OR AN APPROVED CABLE ASSEMBLY THAT INCLUDES AN EQUIPMENT GROUNDING CONDUCTOR WITHIN ITS OUTER SHEATH. THE EQUIPMENT GROUNDING CONDUCTOR SHALL COMPLY WITH 250.34(A)(5).

(8) GROUNDING. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH THE FEEDER CONDUCTORS BETWEEN THE GROUNDING TERMINAL OF THE POOL EQUIPMENT PANEL BOARD AND THE GROUNDING TERMINAL OF THE APPLICABLE SERVICE EQUIPMENT OR SOURCE OF A SEPARATELY DERIVED SYSTEM. FOR OTHER THAN (1) EXISTING FEEDERS COVERED IN 680.25(A), EXCEPTION, OR (2) FEEDERS TO SEPARATE BUILDINGS THAT DO NOT UTILIZE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH 680.25(B)(2), THIS EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSULATED.

TYPE: LOADCENTER NEMA 3 R

SERVICE: GAZEBO REAR

VOLTAGE: 120/240V 1Ø/3W

MORNING: SURFACE

PANEL "GA"

MAIN BUS: 120A

NEUTRAL: 100A

MAIN: 100 A / 2P MCB

AKCI: 10k

AMPS	POLES	TOTAL V.A.	COND. SIZE	WIRE SIZE	REMARKS	CAT NO	CAT NO	REMARKS	WIRE COND. SIZE	TOTAL V.A.	POLES	AMPS	
20	2	3200	1/2	10	MIN SP1 "GA"	1	2	INSTANT WATER HEATER	8	1	9000	2	40
20	2	1875	1/2	12	(G) POOL PUMP	7	6	SMALL APPLIANCES /A/G	12	1	"	1	20
20	2	1875	1/2	12	(G) RECIRCULATING PUMP	7	8	SMALL APPLIANCES /A/G	12	1	"	1	20
1	1	1875	1/2	12	(G) RECIRCULATING PUMP	7	10	U.C. REFRIGERATOR /A/G	12	1	650	1	20
20	2	10,000	1	6	(A/G) POOL HEATER	13	12	U.C ICE MAKER /A/G	12	1	650	1	20
60	1	"	1/2	12	(A/G) POOL LIGHTS	17	14	GR BATH	12	1	"	1	20
"	"	"	"	"	SPACE 17	18	16	RECEPTACLES/LIGHTS /A	12	1	"	1	20
"	"	"	"	"	SPACE 17	18	18	GR RECEPTACLE /G	12	1	"	1	20
"	"	"	"	"	SPACE 17	20	20	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	21	22	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	22	23	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	23	24	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	24	25	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	25	26	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	26	28	SPACE	"	"	"	"	"
"	"	"	"	"	SPACE 20	27	30	SPACE	"	"	"	"	"

LOAD CALCULATION: SEE LOAD CALCULATION

FEEDER: SEE REGR

FED FROM: SEE REGR

(A/G) COMBINATION ARCH / GFI CIRCUIT BREAKERS

(A) ARCH CIRCUIT BREAKERS

(ST) CONTACTOR "OFF" IN GENERATOR MODE

LOAD CALCULATION	PNL "A"	PNL "B"	PNL "GA"	SERVICE	GENER.
SQUARE FEET OF CONDITION SPACE	3,960	2,370	550	6,880	6,880
GENERAL LIGHTING AT 3 W.S.F	11,880	7,110	1,650	20,640	20,640
SMALL APPLIANCES CIRCUITS	6	0	2	8	4
SMALL APPLIANCES LOAD	9,000	0	3,000	12,000	6,000
GARAGE DOOR & GATE MOTOR	1,700	0	0	1,700	1,700
LAUNDRY / WASHER	3,000	0	0	3,000	1,500
DOUBLE OVEN / MICRO / COFFEE	12,000	0	0	12,000	0
COOKTOP	6,000	0	0	6,000	0
DRYER	5,000	0	0	5,000	0
POOL EQUIPMENT	0	0	12,600	12,600	0
HOT WATER HEATER	0	0	9,000	9,000	9,000
STEAM UNIT	0	12,000	0	12,000	0
REFRIGERATOR / ICE MACHINE / WINE	6,250	0	6,500	6,900	6,900
DESHAWER	1,200	0	2,400	2,400	2,400
DISPOSAL / GARBAGE DISPOSAL	750	0	1,400	750	750
IRIGATION PUMP	0	1,840	0	1,840	0
A/C @ 100 %	16,150	5,575	3,575	25,300	10,575
DEMAND					
GEN/LIGHT, LAUNDRY & SMALL APPLIANCES	25,580	7,110	4,650	37,340	28,140
FIRST 3 KVA @ 100%	3,000	3,000	3,000	3,000	3,000
NEXT 117 KVA @ 35%	7,903	1,439	578	12,019	8,799
REMAINDER @ 25%	0	0	0	0	0
HEATING OR A/C @ 65%	16,150	5,575	3,575	25,300	10,575
APPLIANCE LOAD (75% IF > 4 APPLIANCES)	12,900	0	10,875	23,775	18,788
DRYER	5,000	0	5,000	5,000	5,000
COOKTOP/OVEN	12,000	0	0	12,000	0
TOTAL	56,953	10,014	18,028	81,094	41,162
AT 240 VOLT	237	42	75	338	172
NEUTRAL LOAD CALCULATION					
GENERAL LIGHT, WASHER AND SMALL APPL.	25,580	7,110	4,650	37,340	49,100
FIRST 300K AT 100%	3,000	0	3,000	3,000	3,000
REST @ 35%	7,903	2,489	578	12,019	17,185
RANGE AT 70%	8,400	0	0	8,400	8,400
DRYER AT 70%	3,500	0	0	3,500	3,500
OTHER LOAD	0	1,840	12,600	14,440	0
TOTAL NEUTRAL LOAD	22,893	4,329	16,781	41,921	29,065
AT 240 VOLT	95	18	67	172	121