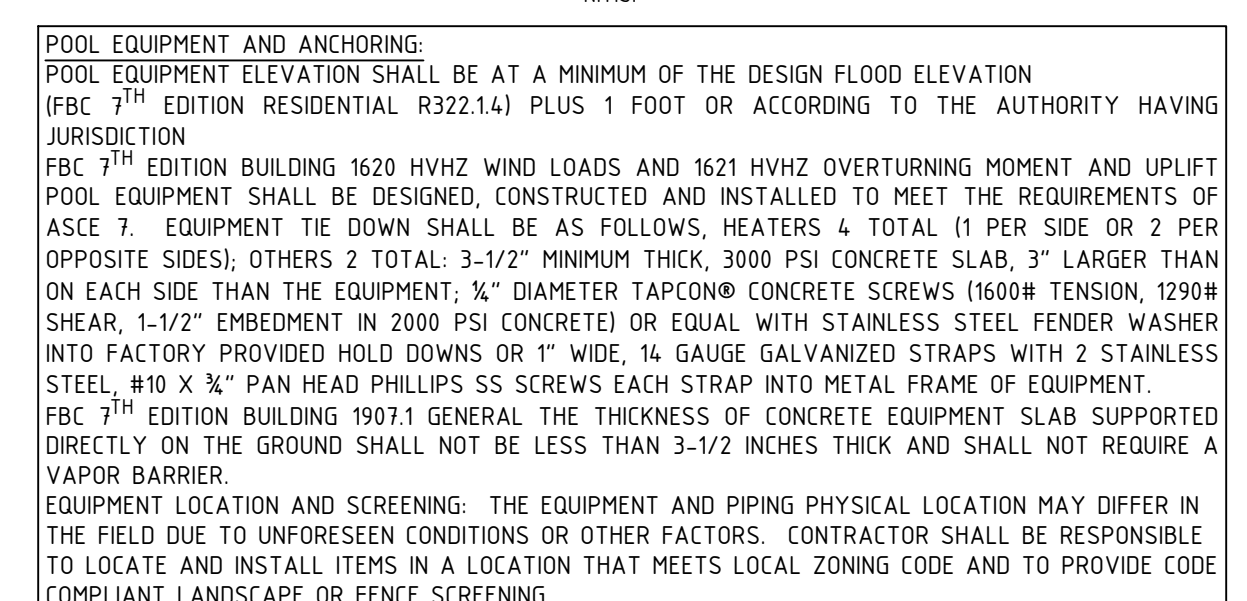
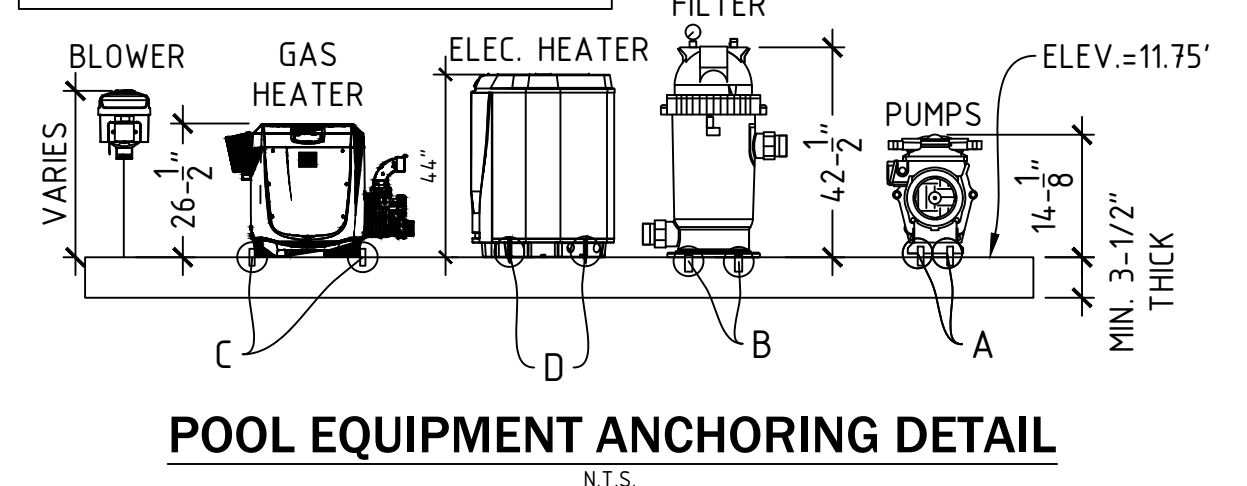
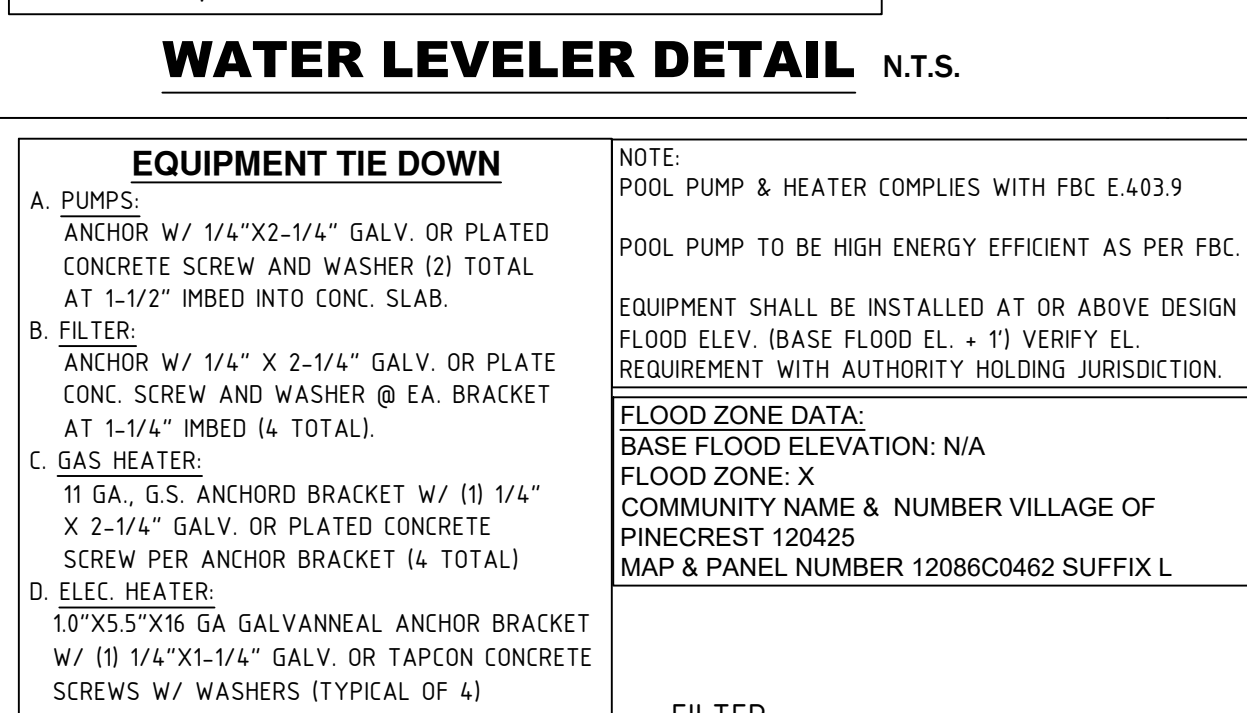
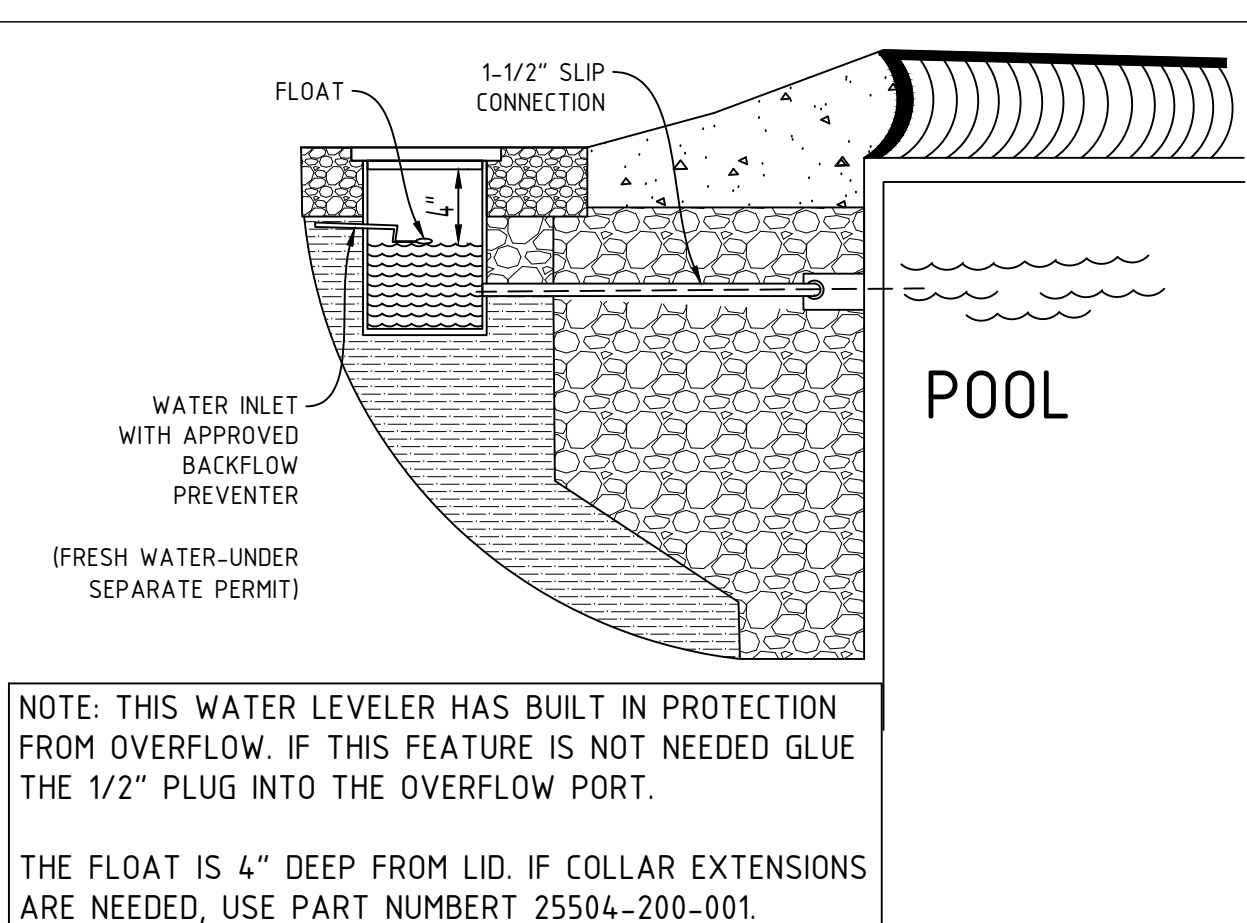
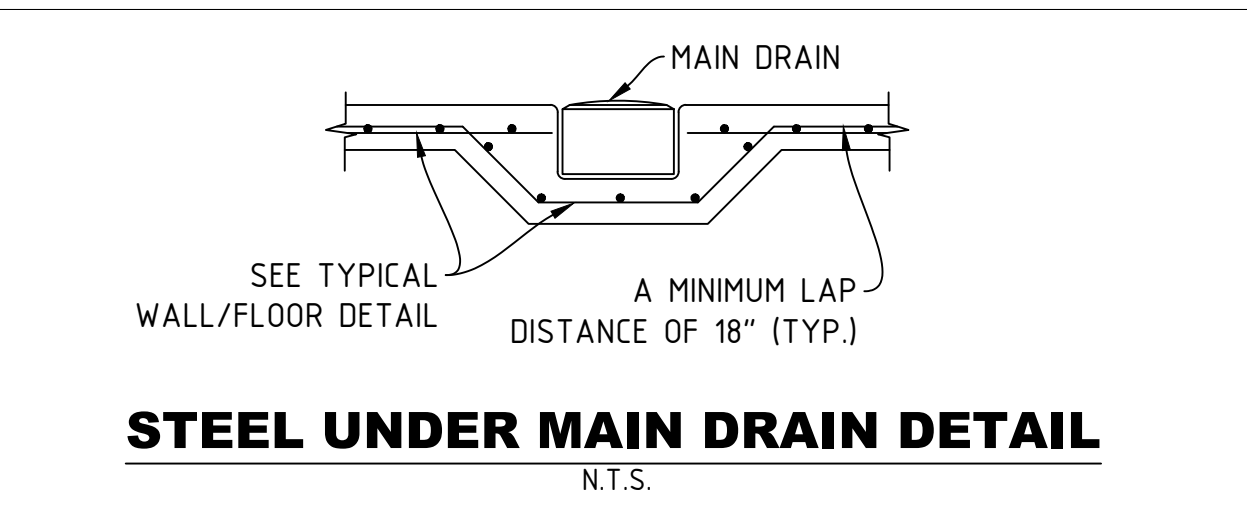
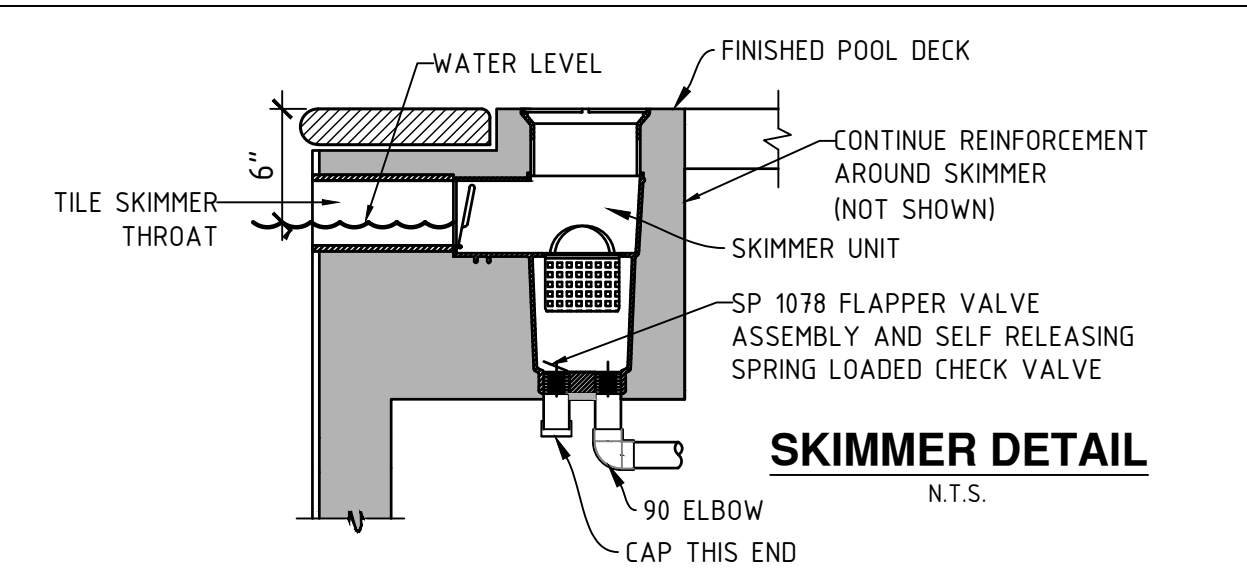




SHEET 4

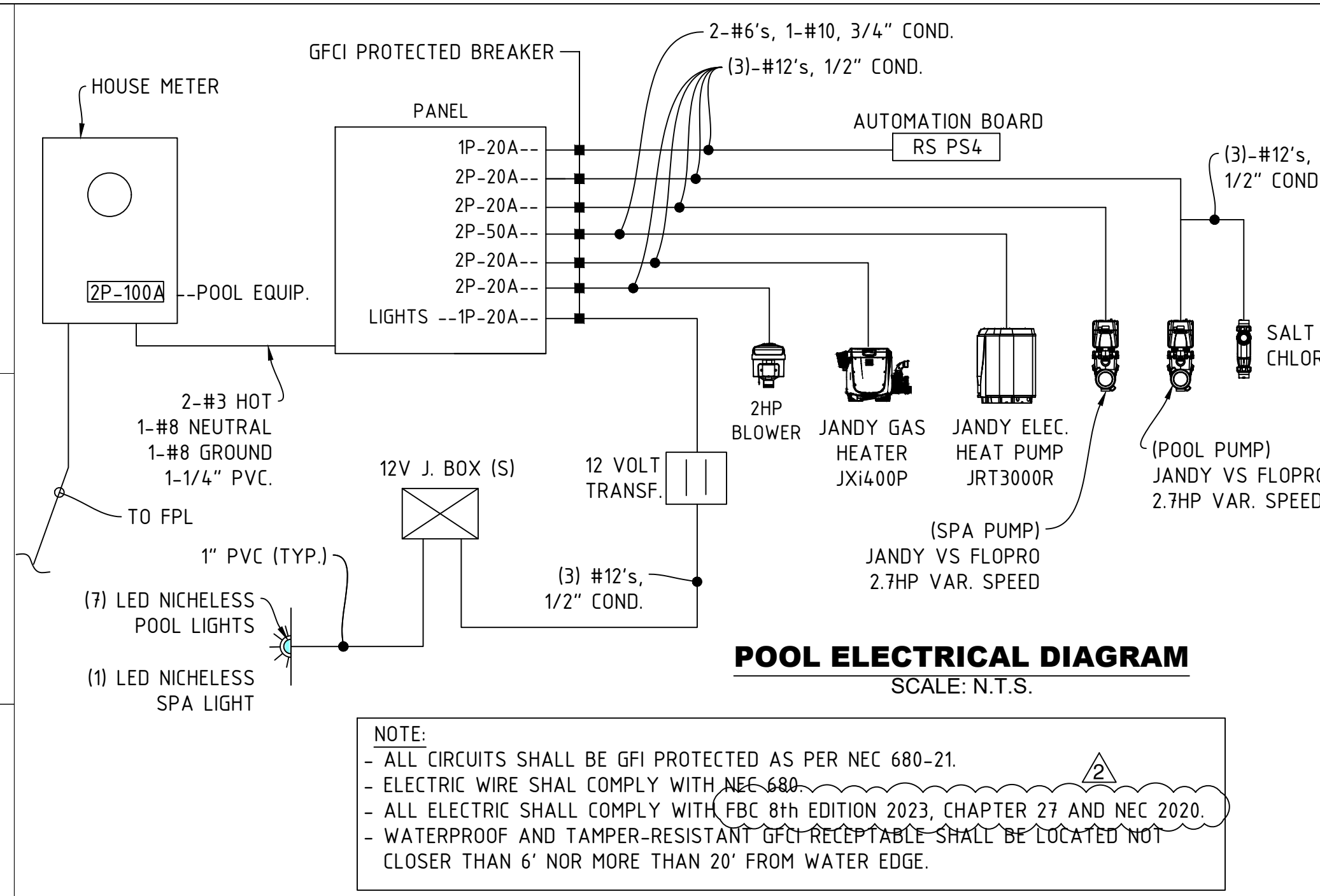
DRAWN DATE: 10/01/2025

ORDER: N/A

JOB NO. : HUBE-25-133

SALESMAN: KVK

DRAWN BY: ML



ELECTRICAL CODE AND NOTES:

2020 NFPA 70 NATIONAL ELECTRICAL CODE, SHALL SPECIFICALLY GOVERN AND ARTICLE 680 SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS ARTICLE 430.32 CONTINUOUS-DUTY MOTORS. EACH MOTOR USED IN CONTINUOUS DUTY APPLICATION SHALL BE PROTECTED AGAINST OVERLOAD

ARTICLE 680.6 GROUNDING ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH PARTS V, VI AND VII OF ARTICLE 250 AND CONNECTED BY WIRING METHODS OF CHAPTER 3, EXCEPT AS MODIFIED BY THIS ARTICLE. THE FOLLOWING EQUIPMENT SHALL BE GROUNDED: (1) THROUGH-WALL LIGHTING ASSEMBLIES AND UNDERWATER LUMINAIRES, OTHER THAN THOSE LOW-VOLTAGE LIGHTING PRODUCTS LISTED FOR THE APPLICATION WITHOUT A GROUNDING CONDUCTOR (2) ALL ELECTRICAL EQUIPMENT LOCATED WITHIN 15 M (5 FT) OF THE INSIDE WALL OF THE SPECIFIED BODY OF WATER (3) ALL ELECTRICAL EQUIPMENT ASSOCIATED WITH THE RECIRCULATING SYSTEM OF THE SPECIFIED BODY OF WATER (4) JUNCTION BOXES (5) TRANSFORMER AND POWER SUPPLY ENCLOSURES (6) GROUND-FAULT CIRCUIT INTERRUPTERS (7) PANELBOARDS THAT ARE NOT PART OF THE SERVICE EQUIPMENT AND THAT SUPPLY ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH THE BODY OF WATER

ARTICLE 680.9 OVERHEAD CONDUCTOR CLEARANCES. OVERHEAD CONDUCTORS SHALL MEET THE CLEARANCE REQUIREMENTS IN THIS SECTION. WHERE A MINIMUM CLEARANCE FROM THE WATER LEVEL IS GIVEN, THE MEASUREMENT SHALL BE TAKEN FROM THE MAXIMUM WATER LEVEL OF THE SPECIFIED BODY OF WATER. (A) POWER, WITH RESPECT TO SERVICE-DROP CONDUCTORS, OVERHEAD SERVICE CONDUCTORS, AND OPEN OVERHEAD WIRING, SWIMMING POOL AND SIMILAR INSTALLATIONS SHALL COMPLY WITH THE MINIMUM CLEARANCES GIVEN IN TABLE 680.9(A) AND ILLUSTRATED IN FIGURE 680.9(A). (B) COMMUNICATIONS SYSTEMS, COMMUNICATIONS, RADIO, AND TELEVISION COAXIAL CABLES WITHIN THE SCOPE OF ARTICLES 800 TO 820 SHALL BE PERMITTED AT A HEIGHT OF NOT LESS THAN 3.0 M (10 FT) ABOVE SWIMMING AND WADING POOLS, DIVING STRUCTURES, AND OBSERVATION STANDS, TOWERS, OR PLATFORMS. (C) NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS. THE MINIMUM CLEARANCES FOR OVERHEAD NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS CONDUCTORS FROM POOLS OR FOUNTAINS SHALL COMPLY WITH THE PROVISIONS IN TABLE 680.9(A) FOR CONDUCTORS OPERATING AT 0 TO 750 VOLTS TO GROUND

ARTICLE 680.10 ELECTRIC POOL WATER HEATERS. ALL ELECTRIC POOL WATER HEATERS SHALL HAVE THE HEATING ELEMENTS SUBDIVIDED INTO LOADS NOT EXCEEDING 48 AMPERES AND PROTECTED AT NOT OVER 60 AMPERES. THE AMPLACITY OF THE BRANCH-CIRCUIT CONDUCTORS AND THE RATING OR SETTING OF OVERCURRENT PROTECTIVE DEVICES SHALL NOT BE LESS THAN 125 PERCENT OF THE TOTAL NAMEPLATE-RATED LOAD

ARTICLE 680.11 UNDERGROUND WIRING LOCATION. UNDERGROUND WIRING SHALL BE PERMITTED WHERE INSTALLED IN RIGID METAL CONDUIT, INTERMEDIATE METAL CONDUIT, RIGID POLYVINYL CHLORIDE CONDUIT, REINFORCED THERMOSETTING RESIN CONDUIT, OR TYPE MC CABLE, SUITABLE FOR THE CONDITIONS SUBJECT TO THAT LOCATION. UNDERGROUND WIRING SHALL NOT BE PERMITTED UNDER THE POOL UNLESS THIS WIRING IS NECESSARY TO SUPPLY POOL EQUIPMENT PERMITTED BY THIS ARTICLE. MINIMUM COVER DEPTHS SHALL BE AS GIVEN IN TABLE 300.5

ARTICLE 680.22 LIGHTING, RECEPTACLES, AND EQUIPMENT. (A) RECEPTACLES. (1) REQUIRED RECEPTACLE, LOCATION. WHERE A PERMANENTLY INSTALLED POOL IS INSTALLED, NO FEWER THAN ONE 125-VOLT, 15- OR 20-AMPERE RECEPTACLE ON A GENERAL-PURPOSE BRANCH CIRCUIT SHALL BE LOCATED NOT MORE THAN 1.83 M (6 FT) FROM, AND NOT MORE THAN 6.0 M (20 FT) FROM, THE INSIDE WALL OF THE POOL. THIS RECEPTACLE SHALL BE LOCATED NOT MORE THAN 2.0 M (6 FT 6 IN) ABOVE THE FLOOR, PLATFORM, OR GRADE LEVEL SERVING THE POOL. (2) CIRCULATION AND SANITATION SYSTEM. LOCATION. RECEPTACLES THAT PROVIDE POWER FOR WATER-PUMP MOTORS OR FOR OTHER LOADS DIRECTLY RELATED TO THE CIRCULATION AND SANITATION SYSTEM SHALL BE LOCATED AT LEAST 1.83 M (6 FT) FROM THE INSIDE WALLS OF THE POOL. THESE RECEPTACLES SHALL HAVE GFCI PROTECTION AND BE OF THE GROUNDING TYPE. (3) OTHER RECEPTACLES, LOCATION. OTHER RECEPTACLES SHALL BE NOT LESS THAN 1.83 M (6 FT) FROM THE INSIDE WALLS OF A POOL. (4) GFCI PROTECTION. ALL 15- AND 20-AMPERE, SINGLE-PHASE, 125-VOLT RECEPTACLES LOCATED WITHIN 6.0 M (20 FT) OF THE INSIDE WALLS OF A POOL SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT INTERRUPTER

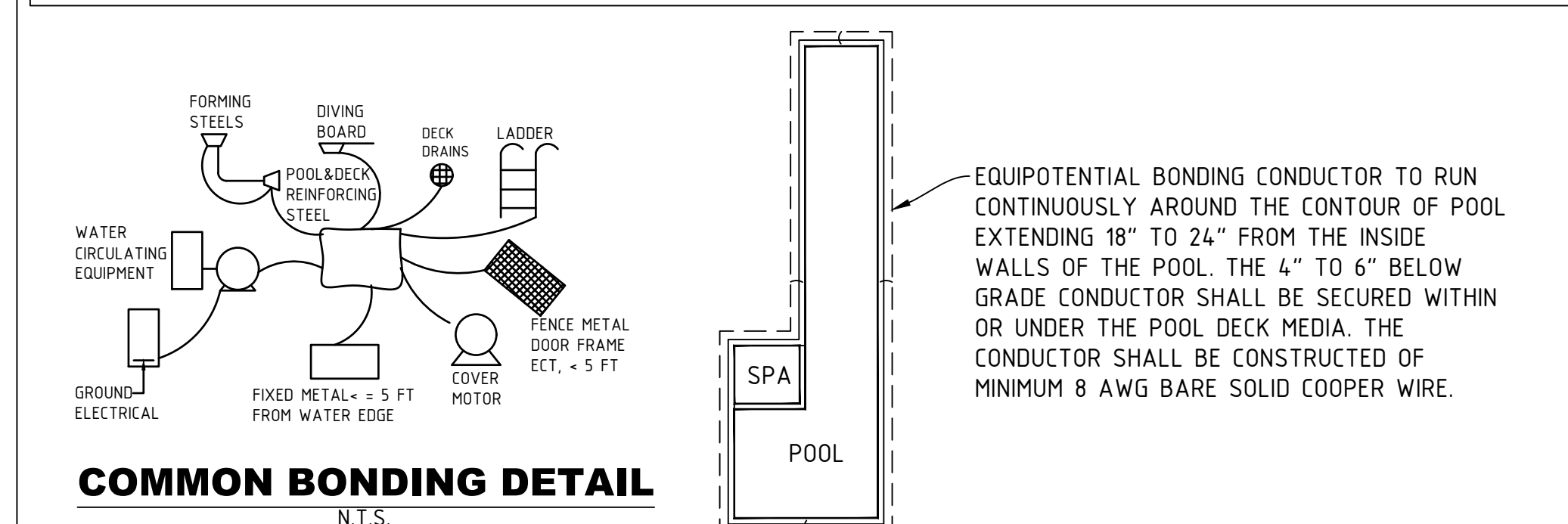
ARTICLE 680.26 EQUIPOTENTIAL BONDING. (A) PERFORMANCE. THE EQUIPOTENTIAL BONDING REQUIRED BY THIS SECTION SHALL BE INSTALLED TO REDUCE VOLTAGE GRADIENTS IN THE POOL AREA. (B) BONDED PARTS (CONDUCTIVE POOL SHELLS, PERIMETER SURFACES, METALLIC COMPONENTS, METAL FITTINGS, ELECTRICAL EQUIPMENT AND FIXED METAL PARTS) SHALL BE BONDED TOGETHER USING SOLID COPPER CONDUCTORS, INSULATED COVERED, OR BARE, NOT SMALLER THAN 8 AWG OR WITH RIGID METAL CONDUIT OF BRASS OR OTHER IDENTIFIED CORROSION-RESISTANT METAL. CONNECTIONS TO BONDED PARTS SHALL BE MADE IN ACCORDANCE WITH 250.8. AN 8 AWG OR LARGER SOLID COPPER BONDING CONDUCTOR PROVIDED TO REDUCE VOLTAGE GRADIENTS IN THE POOL AREA SHALL NOT BE REQUIRED TO BE EXTENDED OR ATTACHED TO REMOTE PANELBOARDS, SERVICE EQUIPMENT, OR ELECTRODES. VINYL LINERS AND FIBERGLASS COMPOSITE SHELLS SHALL BE CONSIDERED TO BE NONCONDUCTIVE MATERIALS AND BONDING AT FOUR POINTS SHALL NOT BE REQUIRED. (C) POOL WATER. 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 5800 MM SQUARED (9 SQUARE INCHES) OF SURFACE AREA TO THE POOL WATER AT ALL TIMES. THE CONDUCTIVE SURFACE SHALL BE LOCATED WHERE IT IS NOT EXPOSED TO PHYSICAL DAMAGE OR DISLODGE DURING USUAL POOL ACTIVITIES, AND IT SHALL BE BONDED IN ACCORDANCE WITH 680.26(B)

ARTICLE 680.28 GAS-FIRED WATER HEATER. CIRCUITS SERVING GAS-FIRED SWIMMING POOL AND SPA WATER HEATERS OPERATING AT VOLTAGES ABOVE THE LOW-VOLTAGE CONTACT LIMIT SHALL BE PROVIDED WITH GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL

NOTES:

ELECTRICAL CONTRACTOR SHALL VERIFY THAT THE EXISTING OR NEW SERVICE, AND PANEL HAS ENOUGH CAPACITY TO ACCOMMODATE THE ADDED POOL EQUIPMENT LOAD PER NEC 220.82

ALL METAL WITHIN 5 FEET OF THE POOL WATER SHALL BE BONDED



HUBER RESIDENCE

SUBD.: SUNILAND ESTATES
LOT 2 BLK 2
ADDRESS: 12020 SW 77th AVENUE
CITY: PINECREST, FL. 33156

DATE

10/24/2025

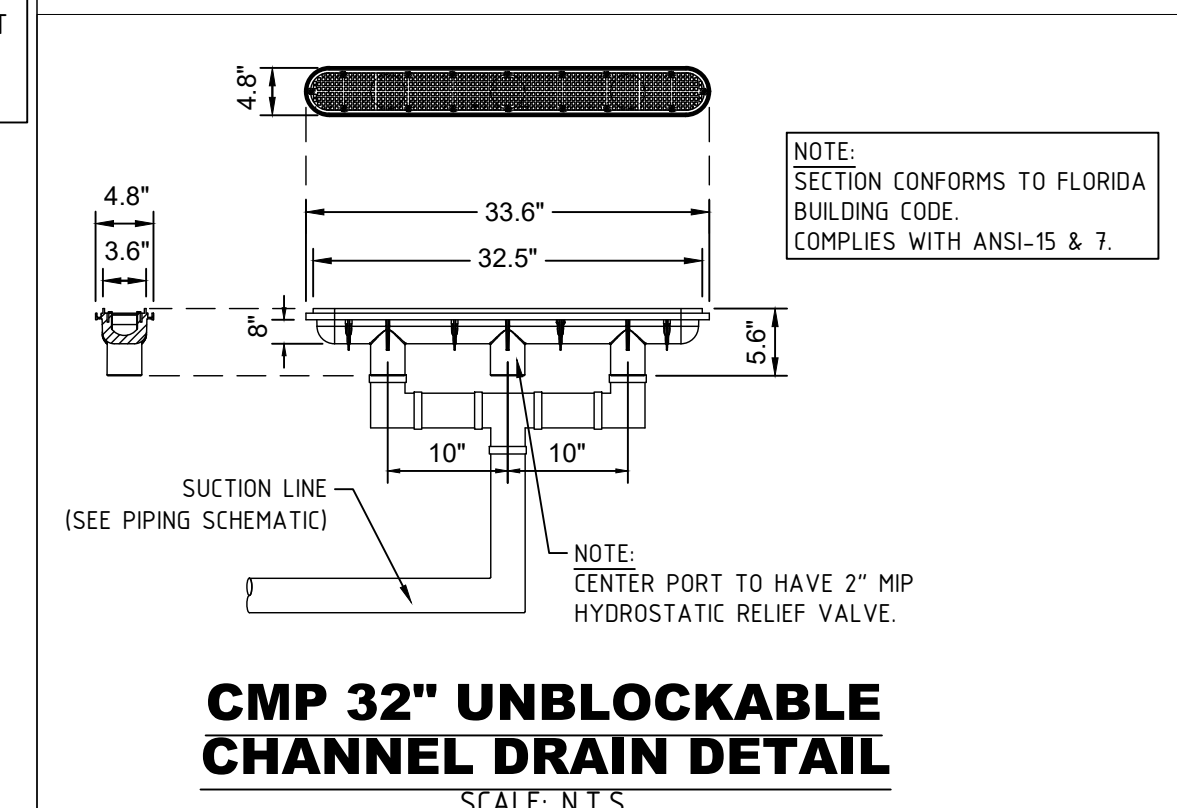
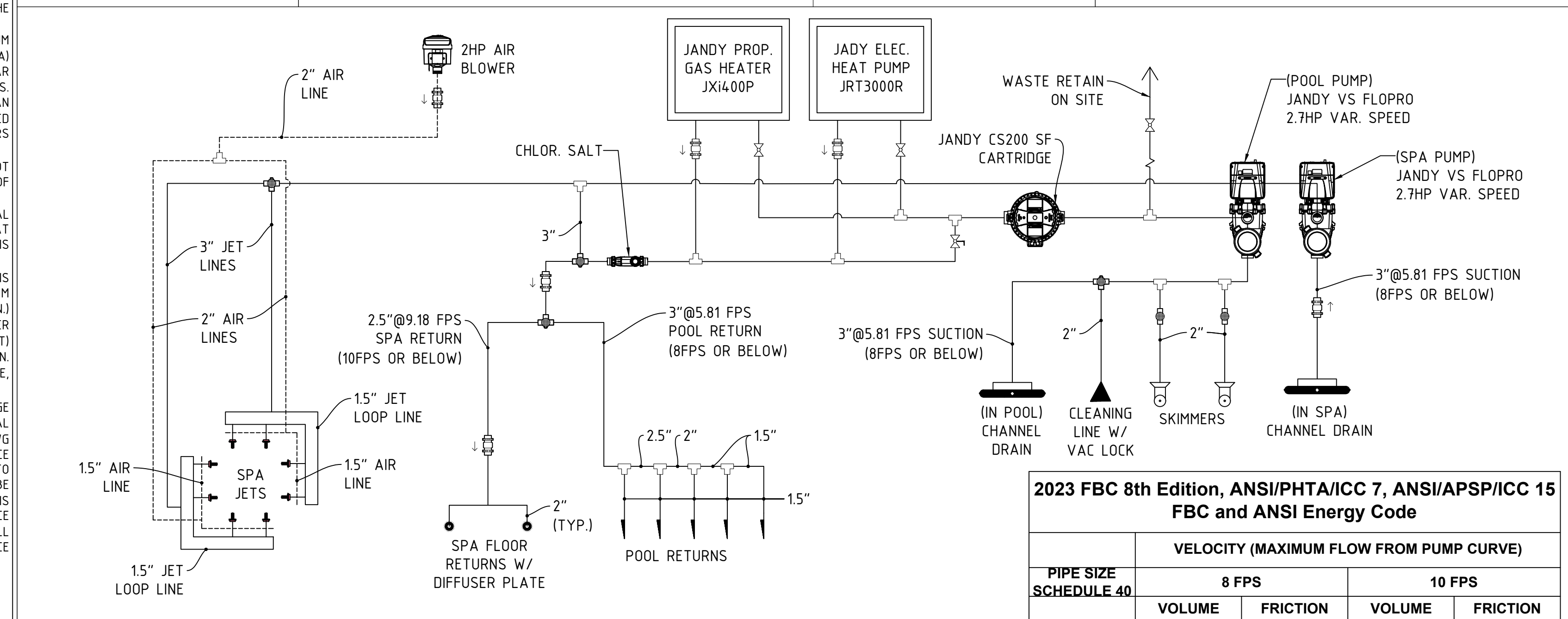
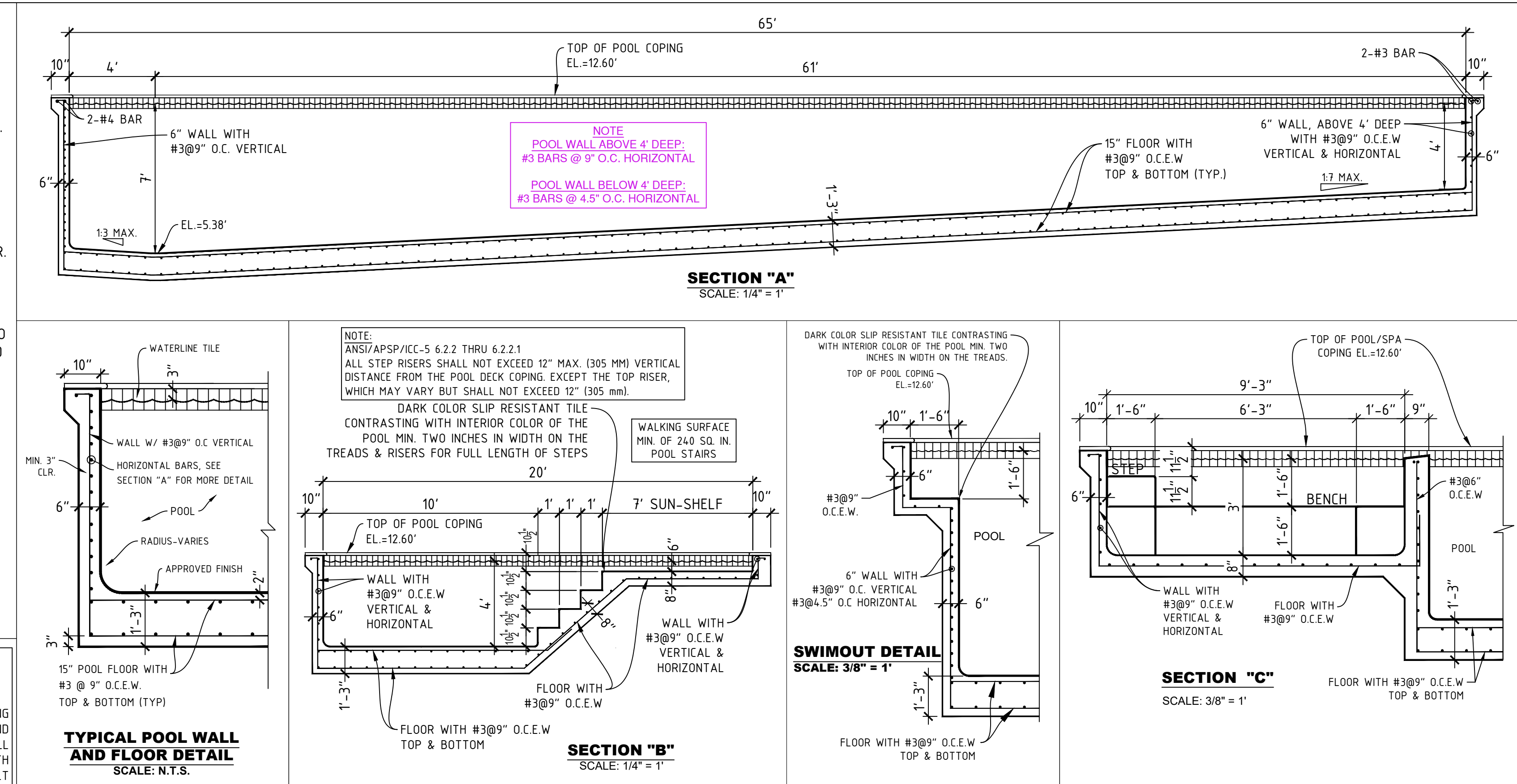
ADD ELECTRIC HEAT PUMP.

12/17/2025

ZONING COMMENTS.

02/03/2026

UPDATED FENCE INFO / ELECTRICAL NOTES UPDATED.



2023 FBC 8th Edition, ANSI/PHTA/ICC 7, ANSI/APSP/ICC 15 FBC and ANSI Energy Code

PIPE SIZE SCHEDULE 40	VELOCITY (MAXIMUM FLOW FROM PUMP CURVE)			
	8 FPS		10 FPS	
	VOLUME GPM	FRICTION FT / 100 FT	VOLUME GPM	FRICTION FT / 100 FT
1"	21	23.8	26	35.4
1.5"	50	14.3	62	20
2"	82	9.9	103	15
2.5"	117	8.5	148	13.4
3"	181	6.5	227	9.9
4"	313	4.8	392	7.5
6"	712	0.8		

2023 FBC 8TH EDITION R4501.6.3 WATER VELOCITY: POOL PIPING SHALL BE DESIGNED SO THAT THE WATER VELOCITY WILL NOT EXCEED 10 FPS FOR PRESSURE PIPING AND 8 FPS FOR SUCTION PIPING

ANSI/APSP/ICC 3: 7.6 WATER VELOCITY. THE WATER VELOCITY IN THE SPA PIPING SHALL NOT EXCEED 8 FPS FOR BOTH SUCTION AND PRESSURE PIPING

MAIN SUCTION OUTLET VELOCITY MUST COMPLY WITH ANSI/PHTA/ICC 7

Van Kirk & Sons POOLS & SPAS

3144 SW 13th DRIVE
DEERFIELD BEACH, FL. 33442
(954) 755-4402

DATE: 02/19/2026

ZAKARY JAMES LATA
P.E. # 79443
PlanZDesigns@outlook.com

This item has been digitally signed and sealed by Zakary James Lata (P.E. # 79443) on the date indicated herein. Printed copies are not considered signed and sealed, and the signature must be verified on any electronic copies. Email: PlanZDesigns@outlook.com 2026.02.19 13:26:43-0500'

If signed digitally above, printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.