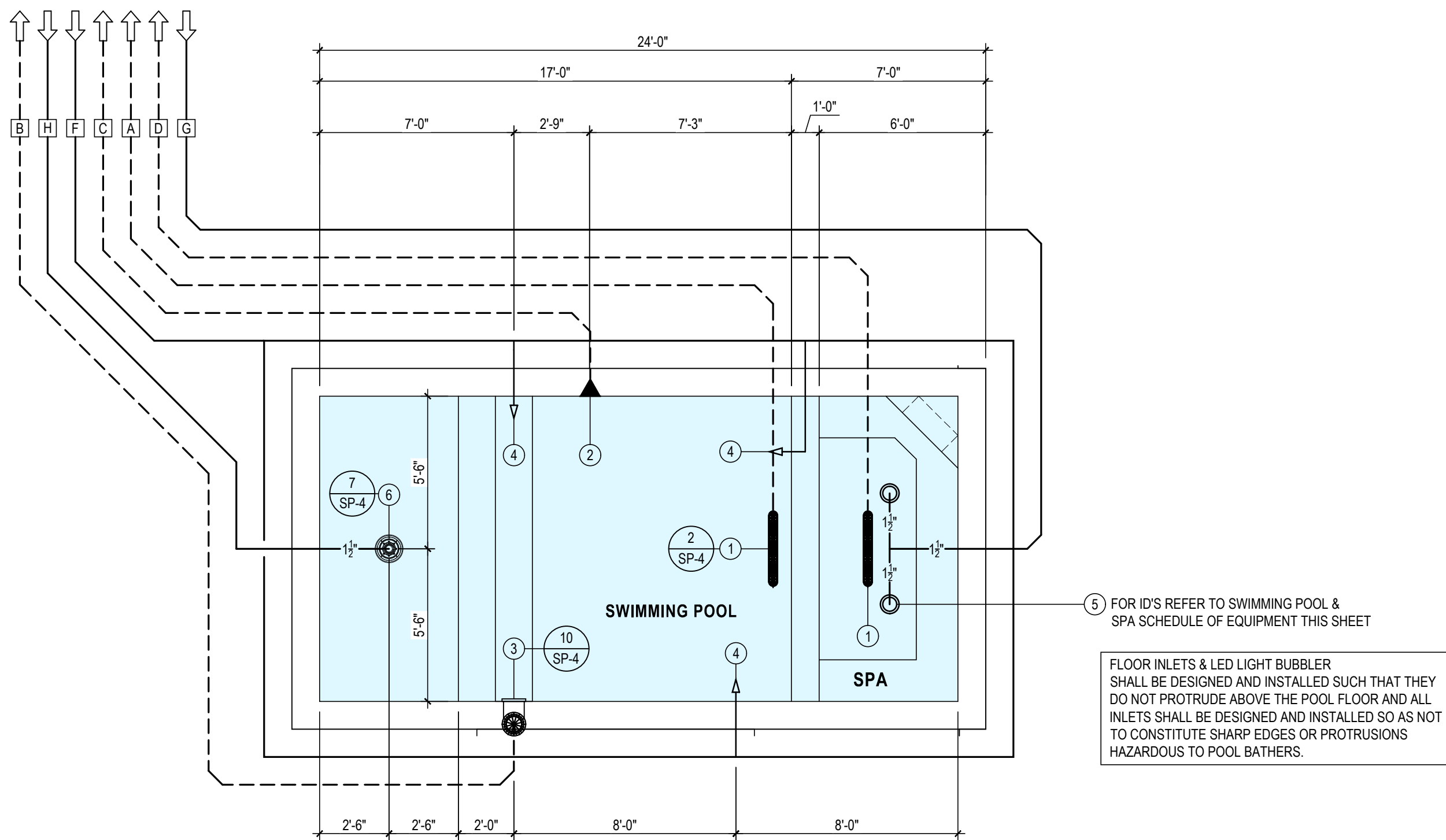
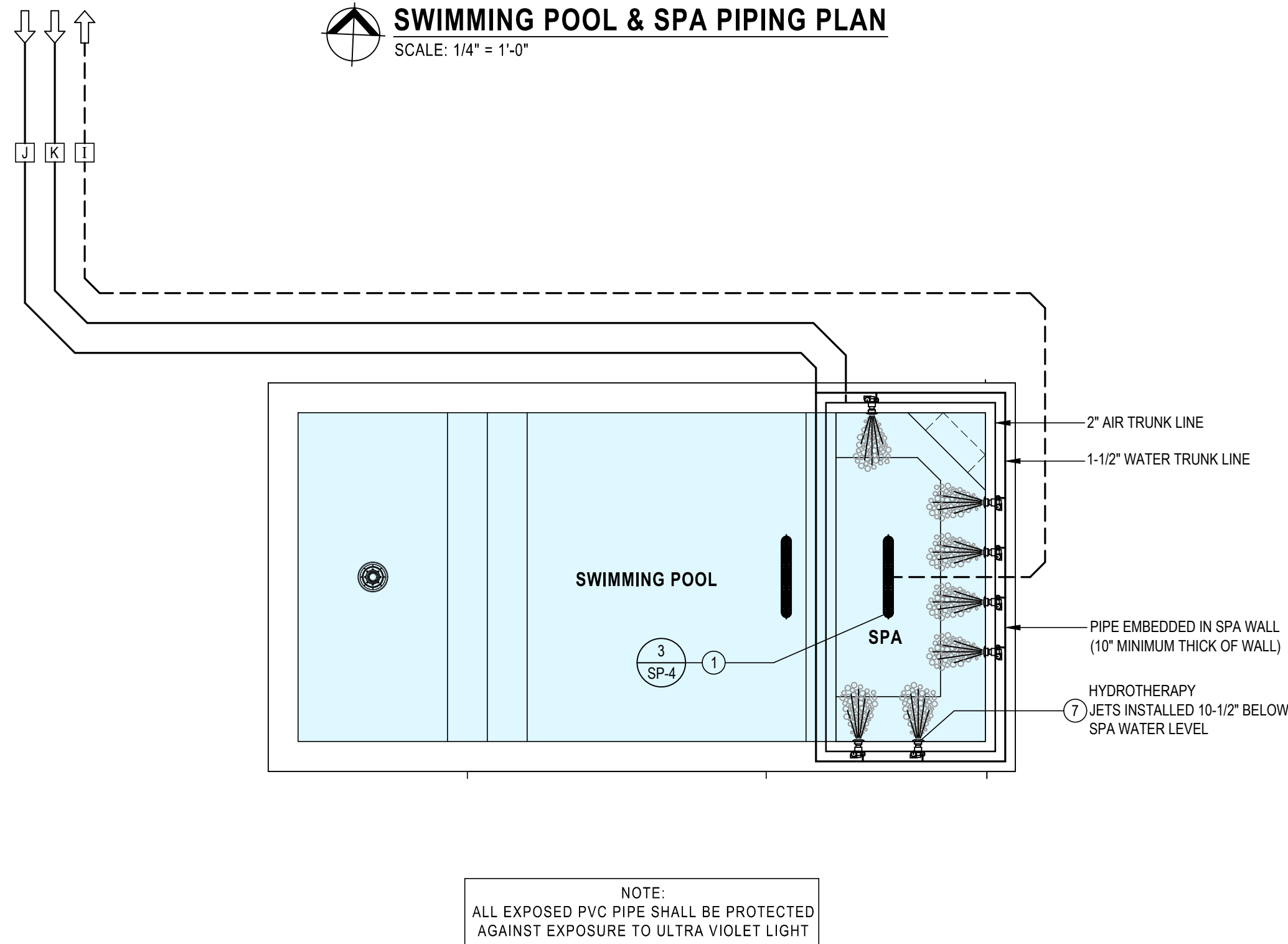




SWIMMING POOL & SPA PIPING PLAN
SCALE: 1/4" = 1'-0"



SPA HYDROTHERAPY JET SYSTEM PIPING PLAN
SCALE: 1/4" = 1'-0"

- NOTES:
- FLOOR INLETS, DECK JETS & LED LIGHT BUBBLER SHALL BE DESIGNED AND INSTALLED SUCH THAT THEY DO NOT PROTRUDE ABOVE THE POOL FLOOR AND ALL INLETS SHALL BE DESIGNED AND INSTALLED SO AS NOT TO CONSTITUTE SHARP EDGES OR PROTRUSIONS HAZARDOUS TO POOL BATHES.
 - A WALL INLET FITTING SHALL BE PROVIDED DIRECTLY ACROSS FROM SKIMMER. WALL INLETS SHALL BE INSTALLED A MINIMUM OF 12 INCHES BELOW THE NORMAL OPERATING WATER LEVEL.
 - ALL EXPOSED PVC PIPE SHALL BE PROTECTED AGAINST EXPOSURE TO ULTRA VIOLET LIGHT.

POOL DATA CHART	
POOL SHAPE	RECTANGULAR
MAXIMUM LENGTH	17 FEET
MAXIMUM WIDTH	11 FEET
POOL DEPTH AT DEEP END	4.50 FEET
POOL DEPTH SUN SHELF	9 INCHES
POOL DEPTH AT SHALLOW END	3.50 FEET
POOL AREA (WITHOUT SPA)	187 SQFT
POOL PERIMETER	56 LNFT
POOL VOLUME	3,900 GALLON
POOL FILTER RATE	65 GPM
POOL TURNOVER RATE	1 HOUR
POOL INTERIOR FINISH	DIAMOND BRITE
POOL WATERLINE TILE	YES
POOL DECK	PAVER ON SAND
POOL DECK AREA	520 SQFT

SPA DATA CHART	
SPA SHAPE	RECTANGULAR
MAXIMUM LENGTH	11 FEET
MAXIMUM WIDTH	5 FEET
SPA DEPTH	2.92 FEET
SPA AREA	55 SQFT
SPA PERIMETER	32 LNFT
SPA VOLUME	940 GALLON
SPA FILTER RATE	65 GPM
SPA TURNOVER RATE	14.46 MINUTES
SPA INTERIOR FINISH	DIAMOND BRITE
SPA WATERLINE TILE	YES

PIPING LEGEND		
I.D. No.	DESCRIPTION	SIZE
[A]	FILTER PUMP SUCTION LINE (65 GPM @ 8 FPS)	2"
[B]	FILTER PUMP SKIMMER LINE	2"
[C]	FILTER PUMP VACUUM LINE	2"
[D]	SPA FILTER PUMP SUCTION LINE (65 GPM @ 8 FPS)	2"
[E]	FILTER PUMP DISCHARGE LINE (65 GPM @ 10 FPS)	2"
[F]	FILTERED WATER TO POOL RETURN FTGS	2"
[G]	FILTERED WATER TO SPA RETURN FTGS	1-1/2"
[H]	FILTERED WATER TO LED LIGHT BUBBLER	1-1/2"
[I]	SPA JET PUMP SUCTION LINE (84 GPM @ 8 FPS)	2-1/2"
[J]	FILTERED WATER TO SPA HYDROTHERAPY JETS	2"
[K]	SPA AIR SUPPLY LINE FROM AIR BLOWER	2"
[L]	POOL MAINTENANCE DRAIN LINE TO WASTE	1-1/2"
[M]	TO POOL HEAT PUMP	2"
[N]	FROM POOL HEAT PUMP WITH CHECK VALVE	2"

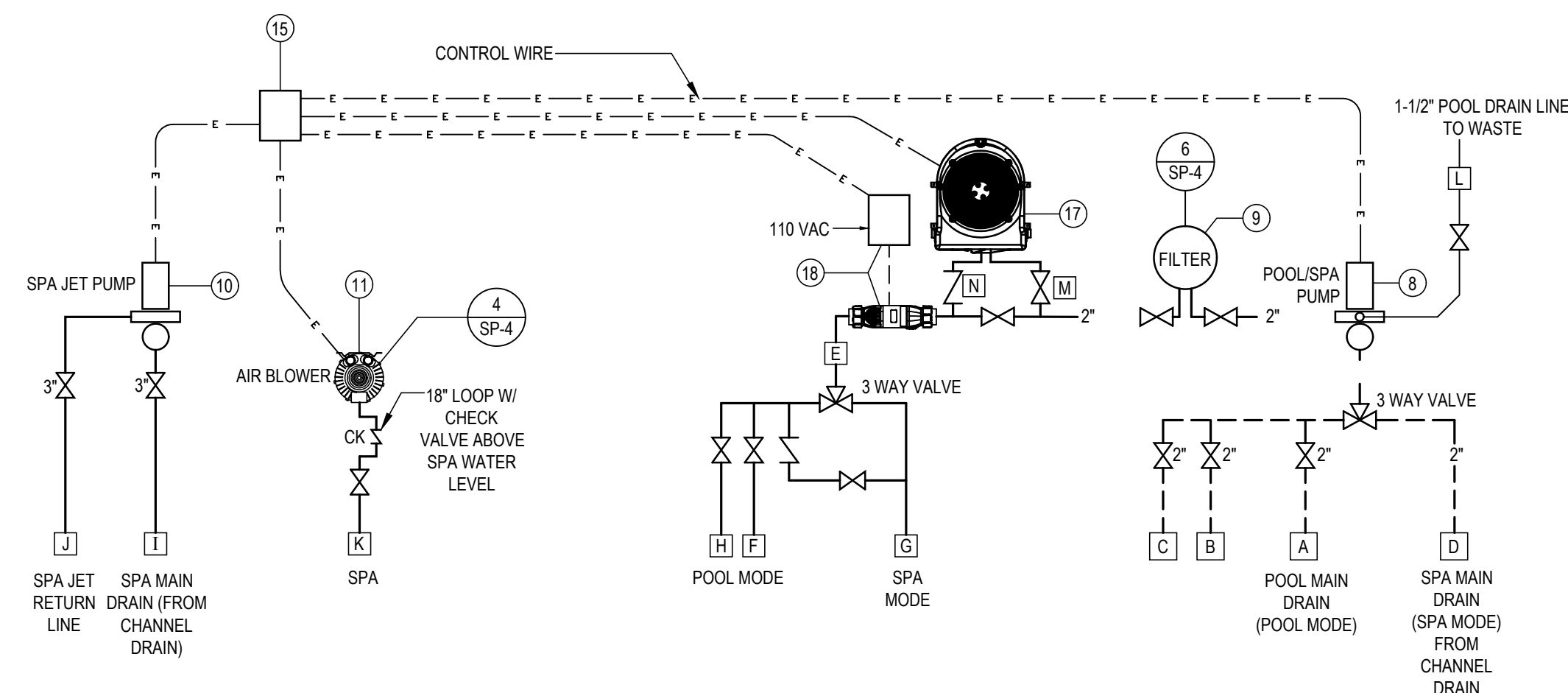
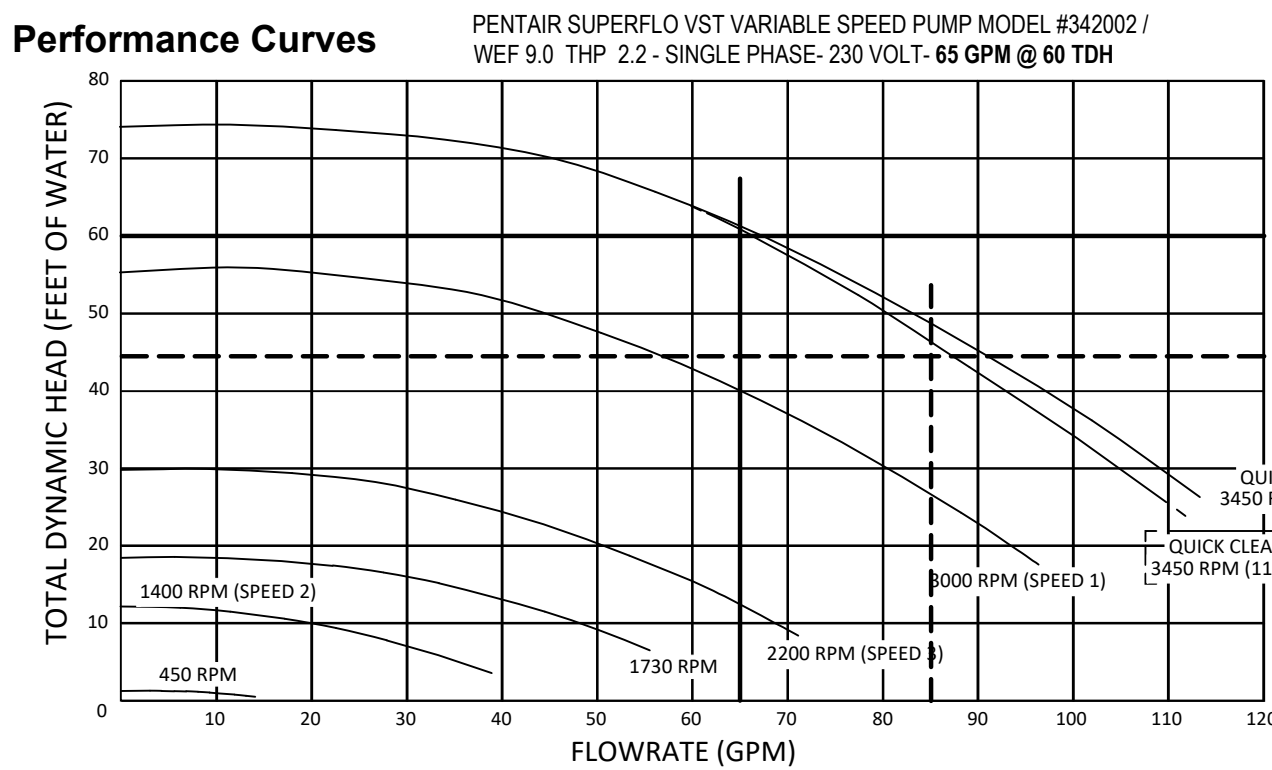
- NOTES:
- CLEARANCES TO PUMP AND FILTER FROM WALLS SHALL BE AS SPECIFIED BY THE MANUFACTURER.
 - ALL FACE PIPING SHALL BE PVC SCHEDULE 40 NSF-PW. ALL JOINTS SHALL BE NON-THREADED SOLVENT WELD TYPE.
 - ALL VALVES 3" & SMALLER SHALL BE SPEARS TRUE UNION VALVES OR EQUAL.
 - ALL VALVES 4" & LARGER SHALL BE ASTRAL EPDM BUTTERFLY VALVES OR EQUAL.
 - ALL EXPOSED PVC PIPE SHALL BE TREATED AGAINST U. V. LIGHT.
 - ALL POOL EQUIPMENT INDICATED IS APPROVED BY MANUFACTURER FOR OUTDOOR USE.

DESIGN VELOCITIES	
—	PVC SCHEDULE 40 NSF APPROVED PIPE (SUPPLY LINE) MAX VELOCITY 10 F.P.S.
- - -	PVC SCHEDULE 40 NSF APPROVED PIPE (SUCTION LINE) MAX VELOCITY 8 F.P.S.
NOTE: THE PIPING SHOWN IS A GRAPHIC REPRESENTATION OF PIPE ROUTE. ACTUAL ROUTING OF PIPING AROUND POOL MAY DIFFER FROM THIS PLAN	

SWIMMING POOL & SPA SCHEDULE OF EQUIPMENT			
MARK	QTY.	ITEM	DESCRIPTION
①	2	POOL & SPA MAIN DRAIN SYSTEM	AQUASTAR POOL PRODUCTS- MODEL: 32CDFLxxx UNBLOCKABLE 32" CHANNEL DRAIN FLAT GRATE ANTI-ENTRAPMENT SUCTION OUTLET COVER WITH THREE-PORT SUMP COMPLIANT WITH THE VIRGINIA GRAEME- BAKER POOL AND SPA SAFETY ACT (ANSI/APSP 16-2011 AND NSF/ANSI 50-2009A). FLOOR 316 GPM AT 3.9 FPS
②	1	POOL VACUUM FITTING	WATERWAY PLASTICS- MODEL: 600-2200 VAC-LOCK SAFETY FITTING FOR SUCTION SIDE AUTOMATIC POOL CLEANERS. VACUUM FTG 1-1/2" X 2" SLIP SOCKET. VACUUM FITTINGS SHALL BE MOUNTED NO MORE THAN 15 INCHES BELOW THE WATER LEVEL, FLUSH WITH THE POOL WALLS, AND SHALL BE PROVIDED WITH A SPRING LOADED SAFETY COVER WHICH SHALL BE IN PLACE AT ALL TIMES.
③	1	POOL SKIMMER UNIT	WATERWAY PLASTICS- MODEL: SP-1082-1R SKIMMER TOP LOADING NSF APPROVED ASSEMBLY WITH EQUALIZER FITTING OULET CONNECTION, WHITE ABS PLASTIC.
④	3	WALL RETURN FITTINGS	WATERWAY PLASTICS- MODEL: 550-9230 SELF-ALIGNING RETURN FITTING 3/4" EYE (FITS INSIDE 1 1/2" PIPE). WHITE COLOR. DIRECTIONALLY ADJUSTABLE. EYEBALL RETURN FITTING ON WALL.
⑤	2	IN-FLOOR RETURN FITTINGS	WATERWAY PLASTICS- MODEL: 640-9000. FLOW ADJUSTABLE, FLUSH MOUNTED (1-1/2" SKT x 2" MIP) WHITE COLOR
⑥	1	LED LIGHT BUBBLER	PENTAIR COLORVISION® BUBBLER UNDERWATER COLOR CHANGING LED LIGHT. 5 FIXED COLORS; 7 DAZZLING LIGHT SHOWS PLUME HEIGHT UP TO 24 IN. LOW-VOLTAGE OPERATION OF 12VAC15W. NICHE PROVIDES FOR FLUSH MOUNTING. GLOBRITE LED LIGHT CORD LENGTH 100 FT. INSTALLING THE GLOBRITE® LIGHT ASSEMBLY (AFTER NICHE INSTALLATION)
⑦	7	SPA HYDROTHERAPY JETS	WATERWAY- 212-3300 (OR EQUAL) GUNITE DOUBLE TEE BODY ASSEMBLY - 1 1/2 SPIGOT. 5/16" ORIFICE (12 GPM EACH) WITH POOL EYEBALL FITTING #25609-300-00. 1.5 IN. SLIP W/ SNAP-IN OPENING INSERTS 3/8", 3/4", 1" INSERTS - WHITE
⑧	1	POOL/SPA FILTER PUMP	PENTAIR SUPERFLO VST VARIABLE SPEED PUMP MODEL #342002 / WEF 9.0 THP 2.2 - SINGLE PHASE- 230 VOLT- 65 GPM @ 60 TDH
⑨	1	POOL/SPA FILTER UNIT	PENTAIR CLEAN & CLEAR CARTRIDGE FILTER- MODEL CC 150. 150 SF FILTER AREA PROVIDED
⑩	1	SPA JET PUMP	PENTAIR SUPERFLO VST VARIABLE SPEED PUMP MODEL #342002 / WEF 9.0 THP 2.2 - SINGLE PHASE- 230 VOLT- 84 GPM @ 45 TDH
⑪	1	SPA AIR BLOWER	SILENCER QUIET AIR BLOWER AIR SUPPLY MODEL #6320241 2 HP 240V (OR EQUAL)
⑫	3	POOL/ SPA UNDERWATER LIGHT	PENTAIR GLOBRITE® COLOR CHANGING LED LIGHTS MODEL #602055- 15W 100' CORD, 12 VOLT. #620040- GUNITE NICHE FOR GLOBRITE.
⑬	5	JUNCTION BOX	PENTAIR- MODEL: 78310500- JUNCTION BOX IN WEATHER PROOF NON-CORROSIVE ENCLOSURE REQUIRED. (3) 1/2" PORTS
⑭	N/A	TRANSFORMER BOX	
⑮	1	TIMER	INTERMATIC T4000 CONTROL SYSTEM WITH TRANSFORMER AND POWER OR LOAD CENTER. NEMA 3R
⑯	1	UMBRELLA SLEEVE FOR CONCRETE	WATERWAY - MODEL 540-6709-BEI PLASTICS WITH CAP FLUSH PLUG. COVER THAT SETS FLUSH WITH THE CONCRETE WHEN NOT IN USE AND A REPLACEABLE PRESS-FIT FLANGE IN CASE OF DAMAGE
⑰	1	POOL HEAT PUMP	PENTAIR ULTRATEMP® HIGH PERFORMANCE POOL HEAT PUMP ULTRATEMP 120-127,000 BTU- 5.7 COP. SINGLE PHASE, 230 VOLT, 42 AMPS. RECOMMENDED MINIMUM CIRCUIT BREAKER: 50 AMPS.
⑱	1	SALT CHLORINE GENERATOR	PENTAIR ICHLOR SALT CHLORINE GENERATOR MODEL # ICHLOR30. SINGLE PHASE, 110 VOLT. UP TO 30,000 POOL GALLON CAPACITY.

Filter Pump Specifications

Overall Ratings	
Input Voltage	115-230 Vrms nominal
Input Current	13.6/6.2/3.1 A
Input Frequency	Single phase, 50 or 60 Hz
Control Terminals	18-30V AC (24V AC +/-20%) or 9-30V DC (12/24V DC +/-20%)
Maximum Continuous Load	WEF 9.0 THP: 2.2
Speed Range	450 - 3450 RPM
Environmental Rating	NEMA Type 3



PROCESS FLOW DIAGRAM - POOL & SPA (2) PUMP SYSTEM
SCALE: N.T.S.

Alejandro F Pino
Digitally signed by Alejandro F Pino
DN: C=US, O=Pino Curtis PE Corp, dnQualifier=A01410C000019437A2D240001FD1DC, CN=Alejandro F Pino
Reason: I am the author of this document
Location: your signing location here
Date: 2026-05-23 16:48:13
TurboPDF Version: 9.7.2

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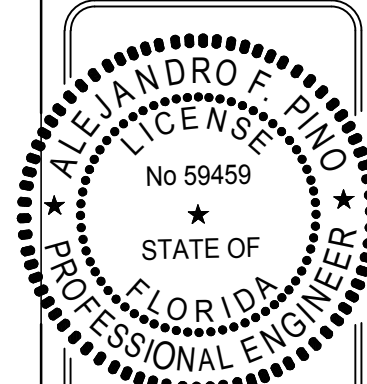
CONSULTANT

REVISIONS

SWIMMING POOL & SPA
PIPING PLAN

NEW SWIMMING POOL & SPA FOR:
JAMES & ALEXIS GARELLI RESIDENCE
8752 NW 157th Terrace, Miami Lakes, FL 33018

PROJECT



ALEJANDRO F. PINO
P.E. LICENSE #59459

CHECKED A.P.
DATE 05-22-2026
SCALE AS NOTED
JOB NO.
SHEET

SP-3