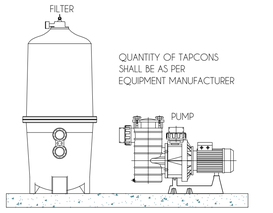
PLUMBING NOTES:

1. ALL POOL AND EQUIPMENT PIPING SHALL BE SCHEDULE 40 PVC-PLU, NON-THREADED, NSF APPROVED SUPPORTED CONTINUOUSLY ON GROUND OR ON MAXIMUM 4'-0" CENTERS WITH CLEVIS HANGERS.
2. ALL SUCTION PIPING SHALL BE 2" DIAMETER AND ALL PRESSURE PIPING 1 ½" DIAMETER UNLESS OTHERWISE NOTED.
3. POOL WATER DISPOSAL SHALL BE IN ACCORDANCE WITH LOCAL BUILDING DEPARTMENT REQUIREMENTS.
4. ANTI VORTEX MAIN DRAIN SHALL HAVE ITS PLATE SECURELY FASTENED WITH TAMPERPROOF SCREWS.
5. POOL VACUUM SHALL HAVE SPRING LOADED CAP IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
6. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE-PLUMBING SECTION SECTION 309.
7. THE WATER VELOCITY THROUGH ALL SUCTION PIPING SHALL BE LESS THAN 8 FEET PER SECOND.
8. THE WATER VELOCITY THROUGHOUT ALL PRESSURE PIPING SHALL BE LESS THAN 10 FEET PER SECOND.
9. ALL PIPING SHALL BE SUITABLE FOR EXPOSURE TO ULTRA VIOLET RADIATION AND NORMAL OPERATING TEMPERATURES.
10. VACUUM SHALL BE EQUIPPED WITH SELF-CLOSING SAFETY COVER REQUIRING TOOLS FOR REMOVAL.

WATER VELOCITY

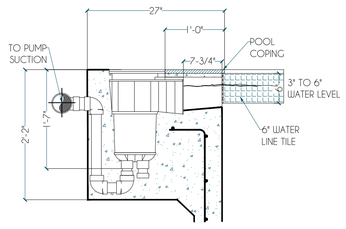
WATER VELOCITY TO COMPLY WITH FBC 2023 8TH EDITION:

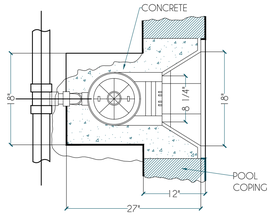
POOL PIPING SHALL BE DESIGNED SO THE WATER VELOCITY WILL NOT EXCEED 10 FEET PER SECOND (3048 MM/S) FOR PRESSURE PIPING AND 8 FEET PER SECOND (2438 MM/S) FOR SUCTION PIPING, EXCEPT THAT THE WATER VELOCITY SHALL NOT EXCEED 8 FEET PER SECOND (2438 MM/S) IN COPPER TUBING. MAIN SUCTION OUTLET VELOCITY MUST COMPLY WITH ANSI/APSP/ICC 7.



POOL EQUIPMENT TIE-DOWN
SCALE:NTS

ANY POOL EQUIPMENT SHOULD BE SECURELY ANCHORED TO A PLATFORM, THE ELEVATION OF THE PLATFORM SHOULD BE TO OR ABOVE THE BASE FLOOD ELEVATION ESTABLISHED FOR THE ZONE.





(TYP) SKIMMER DETAIL
SCALE:NTS

A — OPTIONAL: PROVIDE CONTRASTING TILE OR BULLNOSE TILE ON STEPS & BENCH EDGE

B — THE PIPING SHOWN IN GRAPHIC REPRESENTATION OF PIPE ROUTE, ACTUAL ROUTING OF PIPING AROUND POOL AND TO POOL EQUIPMENT MAY DIFFER FROM THIS PLANS

	PUMPING FLOW RATES @ 60 TDH	
	3/4 HP	26 GPM
	1.0 HP	48 GPM
SPA PUMP	1.5 HP	55 GPM
	1.85 HP	68GPM
	2.0 HP	78 GPM
	2.5 HP	108 GPM
POOL PUMP	2.7 HP	116 GPM
	3.0 HP	120 GPM
	BASED UPON JANDY FLOPRO & PENTAIR INTELLIFLO PUMPS	

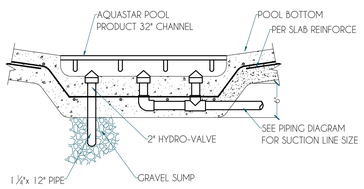
	LEGEND	QTY
1	CHANNEL DRAIN	2
2	SKIMMER	2
3	VACUUM W/SPRING LOADED COVER	1
4	NICHELESS LIGHT	7
5	POOL RETURNS	5
6	SPA RETURNS	2
7	HYDROTHERAPY JETS	7

POOL SPECIFICATION TABLE		
SIZE	20 X 69	FT
SHALLOW END	3.00	FT
BOTTOM OF POOL	5.00	FT
PERIMETER	178	LF
AREA	1380	SQFT
CAPACITY	41,290	GLS
PUMP*	2.7	HP
FILTER	300	SQ.FT
TILE	6" (BY OWNER)	
TYPE OF PATIO	SLIP RESISTANT	
BLOWER	N/A	HP
WATER HEATER (GAS)	400,000	BTU
TURNOVER RATE	5.93	HRS

*RESIDENTIAL POOL FILTER PUMP MOTORS WITH A CAPACITY OF 1 HP OR GREATER SHALL HAVE THE CAPABILITY OF OPERATING AT TWO OR MORE SPEEDS PER FBC RE R403.12

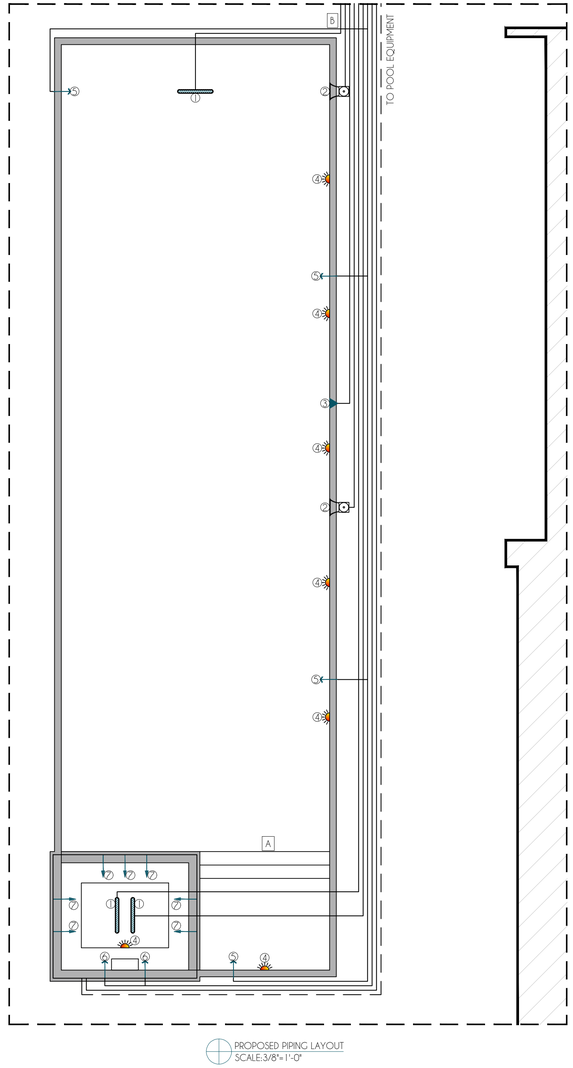
SPA SPECIFICATION TABLE		
SIZE	8 X 9.5	FT
DEPTH	3.00	FT
PERIMETER	35.00	LF
AREA	76	SQFT
CAPACITY	1706	GLS
PUMP*	1.50	HP
FILTER	SAME AS POOL	SQ.FT
TILE	6" (BY OWNER)	
TYPE OF PATIO	SLIP RESISTANT	
BLOWER	2	HP
WATER HEATER (GAS)	400000	BTU
TURNOVER RATE	0.52	HRS

*RESIDENTIAL POOL FILTER PUMP MOTORS WITH A CAPACITY OF 1 HP OR GREATER SHALL HAVE THE CAPABILITY OF OPERATING AT TWO OR MORE SPEEDS PER FBC RE R403.12

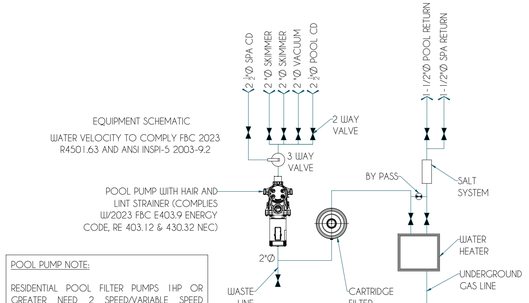


CHANNEL DRAIN DETAIL
SCALE:NTS

AQUASTAR POOL PRODUCT 32" CHANNEL DRAIN FLAT GRATE ANTI-ENTRAPMENT SUCTION OUTLET COVER AND THREE PORT MANUFACTURERS MODEL 32CDFL COMPLY W/ PROVISIONS OF THE ANSI/ASME A112.19.8-2009 (VIRGINIA GRAHAM BAKER)



PROPOSED PIPING LAYOUT
SCALE:3/8"= 1'-0"

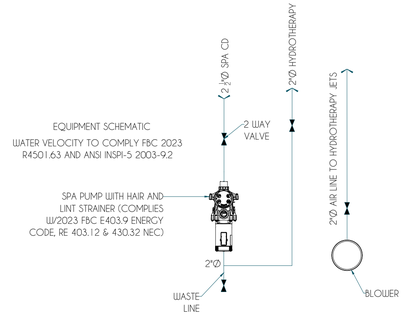


POOL PUMP NOTE:

RESIDENTIAL POOL FILTER PUMPS 1HP OR GREATER NEED 2 SPEED/VARIABLE SPEED MOTORS PER FBC RE R403.12.

POOL PIPING DIAGRAM
SCALE:NTS

NOTE: SCOPE OF WORK UNDER THIS PERMIT ONLY INCLUDES THE INSTALLATION OF POOL GAS WATER HEATER (THE UNIT). GAS LINE TO POOL EQUIPMENT UNDER SEPARATE PERMIT



SPA PIPING DIAGRAM
SCALE:NTS

REVISION:

NO. DESCRIPTION

ENGINEER

VICTOR RAMOS P.E.LIC No: 87496
7700 N KENDALL DR, SUITE 706, MIAMI FL 33156
(786) 830-3551

Victor Ramos
Digitally signed by Victor Ramos
Date: 2025.05.15 14:04:34 -04'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY VICTOR RAMOS, P.E. ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.

DESIGNER:

TERRA ENGINEERING CONSULTING

PROJECT:

NEW CONCRETE SWIMMING POOL & SPA

ADDRESS:

6200 SW 123RD TERRACE, MIAMI, FL 33156

PROJECT DATE:5.10.2025
DRAWING BY: MR
CHECKED: FD

SHEET TITLE:

PLUMBING PLAN

SHEET No:

P. 1