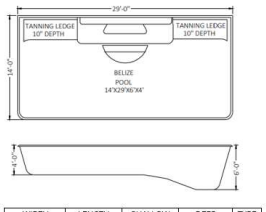
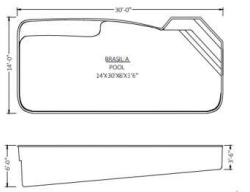
BELIZE



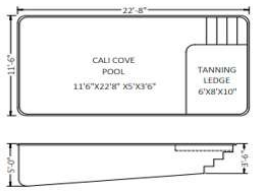
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
14'	29'	4'	6'	O
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
4,000	11,500	385	86	

BRASILIA



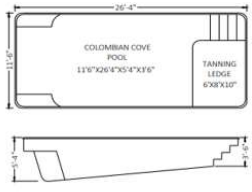
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
14'	30'	3'6"	6	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
3,500	11,500	345	78	

CALI COVE



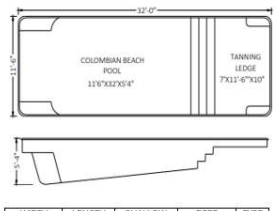
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
11'6"	22'8"	3'6"	5'	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,500	7,000	260	68	

COLOMBIAN COVE



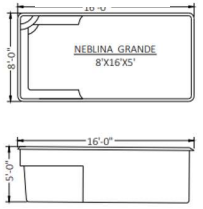
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
11'6"	26'4"	3'6"	5'4"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
3,000	8,900	305	75	

COLOMBIAN BEACH



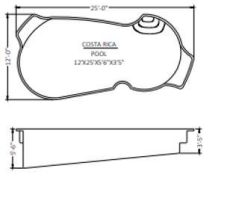
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
11'6"	32'6"	3'6"	5'4"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
3,000	9,000	373	88	

NEBLINA GRANDE



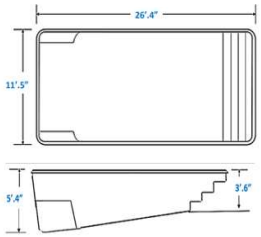
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	16'	5'	5'	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
1,500	3,500	120	46	

COSTA RICA



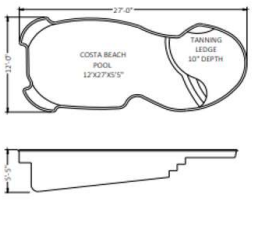
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
12'	25'	3'7"	5'5"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,000	7,000	213	62	

COLOMBIAN



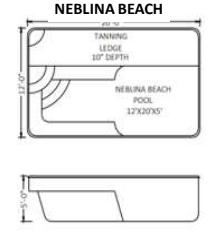
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
11'5"	26'4"	3'6"	5'4"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
3,000	8,000	306	76	

COSTA BEACH



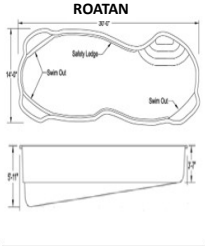
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
12'	27'	4'	5'6"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,000	7,000	300	75	

NEBLINA BEACH



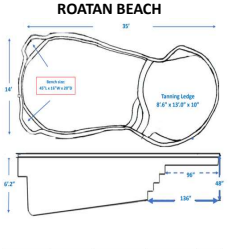
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
12'	20'	5'	5'	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,300	7,000	225	62	

ROATAN



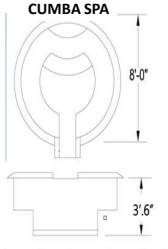
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
14'	30'	3'7"	5'11"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,300	10,000	314	79	

ROATAN BEACH



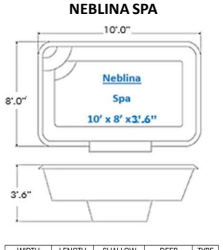
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
14'	35'	4'	6'2"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
2,300	7,500	314	79	

CUMBA SPA



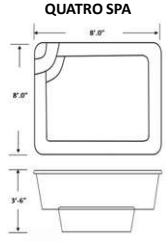
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	8'	3'6"	3'6"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
400	800	50'	26	

NEBLINA SPA



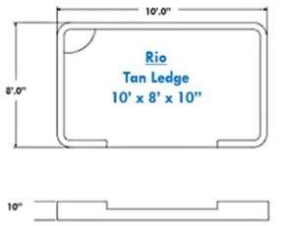
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	10'	3'6"	3'6"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
400	950	72	34	

QUATRO SPA



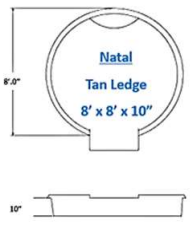
WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	8'	3'6"	3'6"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
500	800	64'	32'	

RIO TANNING LEDGE



WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	10'	10"	10"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
250	400	72'	34'	

NATAL TANNING LEDGE



WIDTH	LENGTH	SHALLOW	DEEP	TYPE
8'	8'	10"	10"	0
SHELL LBS	VOLUME	SURF AREA	PERIMETER	
250	250	50'	26'	

MODEL	W	L	Depth	Gals	Lbs	LF	SFC	I W	I L	Type
Brasilia	14	30	3'6"-6'	9,400	3,500	82	347	13'5"	29'5"	O
Belize	14	92	4'1"->6'1"	8,200	4,000	88	379	13'10	28'10"	O
Brasilia	14	30	3'6"-6'	9,400	3,500	82	347	13'5"	29'5"	O
Cali Cove	12	23	3'3"-5'1"	4,800	2,500	71	226	11'4"	22'6"	O
Columbian	12	27	3'6"-5'4"	6,600	3,000	80	271	11'5"	26'6"	O
Columbian Beach	12	33	3'6"-5'4"	6,700	3,300	91	329	11'3"	32'5"	O
Columbian Cove	12	27	3'6"-5'4"	5,900	3,000	79	268	11'4"	26'7"	O
Costa Beach	12	27	4'-5'6"	4,300	2,800	72	234	11'8"	25'9"	
Costa Rica	12	25	3'5"-5'6"	5,300	2,500	65	220	11'6"	24'6"	O
Ledge: Natal	8	8	10"	220	200	27	39	7'7"	8'1"	O
Ledge: Rio	8	10	10"	400	250	36	63	7'8"	9'7"	O
Neblina Beach	12	20	5' Flat	3,300	2,300	65	193	11'6"	19'4"	O
Neblina Grande	8	16	5' Flat	2,500	1,500	49	105	7'7"	15'10"	O
Roatan	14	30	3'7"-5'11"	8,300	3,000	82	324	13'9"	29'9"	O
Roatan Beach	14	35	3'6"-5'11"	8,100	3,800	94	376	14'	34'7"	O
Spa: Cumba	8	8	3'7"	470	400	27	45	7'7"	8'1"	O
Spa: Neblina	8	10	3'6"	860	800	36	64	7'8"	9'8"	O
Spa: Quatro	8	8	3'6"	650	500	33	52	7'7"	7'11"	O

Rainforest Pools -N- Composites	RAINFOREST POOLS –N-COMPOSITES 263 Hunt Park Cove Longwood, FL www.RainforestPoolsUSA.com 386.277.2202	**ICC-ES PMG-1695** 2024, 2021, 2018, 2015,2012 and 2009 Internation Building Code (IBC) 2021, 2018, 2015, 2012 and 2009 International Building Code (IRC) 2024, 2021 2018 and 2015 International Swimming Pool and Spa Code (ISPSC) 2024, 2024, 2018, 2015, 2012 and 2009 Uniform Swimming Pool, Spa and Hot Tub Code (USPSHC)	APSP/ASNSI/ICC 5-2011 Standard for Residential Inground Swimming Pools AC 274, ICC-ES Acceptance Criteria for In-Ground, Residential, Fiber-reinforced Plastic Swimming Pools and Permanently installed Plastic Spas dated December 2006 (editorially revised July (2017)	

General Notes:

Identification: The pool and spa shells are identified by an encoded number on or near the underside of the flange on the outside of the pool. This encoded number contains the information for the manufacturer's name, model designation, a serial number and the ICC-ES listing. A permanent sign, bearing the following statement, must be attached to the pumping equipment:

Notice: The pool or shell is designed to remain full of water at all time. The shell may be damaged if the water level is allowed to drop below the skimmer line. When appreciable draw-down is noticed or if it becomes necessary to drain the pool, contact Rainforest Pools –N- Composites for instructions. A permanent label must be attached adjacent to the above sign indicating the manufacture's name, distributors name, address and telephone number and the ICC-ES PMG listing mark.

Installation: The pool or spa shells must be permanently installed in-ground in accordance with this report and the manufacturer's published installation instructions. All plumbing and electrical installations must comply with the applicable codes in effect at the construction site.

Subject to the code official's approval, the pool or spa shell may be installed without a soil investigation by a registered design professional, unless any of the conditions is encountered at the site:

1. The existence of an uncompacted fill in contact with any portion of the pool shell.
2. The existence of any expansive-type soils unless the pool manufacturer has provided specific instructions regarding expansive soils within their installation instructions.
3. The existence of any soil types with an angle of repose that will not support the walls of the excavation at desired slopes.
4. Danger to adjacent structures posed by the proposed pool location.

If any of the above conditions are encountered, excavation must cease immediately. The site conditions must then be reviewed, and recommendations made, by a registered design professional, The code official must approve registered design professional's recommendation report before work is resumed.

Details specifically for installations in expansive, clay or adobe soils only when supported by the registered design professional's recommendations and approved by the code official.

The pool excavation profile must coincide with the contours of the pool. The over excavation is approximately 6 to 12 inches on the sides and ends. The over excavation of the bottom is approximately 6 inches. The base for the pool layer is a minimum of 4 inch thick ¼ to 1 ½ inch clean chipped stone with no fines matching the pool profile. This chipped stone layer is compacted using a manual tamper or plate compactor. The pool shell must sit firmly on the chipped stone and be within 1" of level. Simultaneous water fill and backfill operations then commence. The installer must ensure that the backfill level and water level are approximately the same throughout the filling procedure.

After completion of the backfill, the bond beam and decking must be installed in accordance with manufacturer's published installation instructions and as approved by the code official.

Expansive Soil: (a) Provide 8" thick bedding layer of non-cohesive permeable material. (b) Provide 8" thick backfill layer of sand, 1/8" – ¾" pea gravel, lime chip or other non-abrasive compacted material. (c) The 1"-2" wide coping shall be 11 ½" thick with two layers #3 rebar with #4 ties at 2' intervals in predrilled holes around the flange extending 3' from waters edge and bonded to bonding grid with #8 solid copper 3,000 psi concrete min.

Models: The fiberglass pool and spa shells are permanently installed in-ground and are intended for recreational use as swimming pools in residential applications with water circulated through a filter in a closed system. The pools comply with ASNS-NSPI APSP/ANSI-5 as Type O pools.

The fiberglass and spa shells shall consist of one-piece fiberglass construction shop-formed over a mold. The material is a minimum ¼ inch thick fiberglass reinforced plastic (FRP), composed of unsaturated polyester marine grade gel coat, vinyl ester resin barrier coat, chopped and hand applied fiberglass roving. The surface finish in a 30 mil marine grade polyester resin-based gel coat.

Notice: The pool or shell is designed to remain full of water at all time. The shell may be damaged if the water level is allowed to drop below the skimmer line. When appreciable draw-down is noticed or if it becomes necessary to drain the pool, contact Rainforest Pools –N- Composites for instructions.

Conditions of Listing: The pool and spa shells described in this report comply with, or are suitable alternatives to what is specified in, those codes referenced , in this report subject to the following conditions:
1. The pool or spa shells must be constructed and installed in accordance with this report and the manufacturer's published installation instructions. In the event of a conflict, this report governs.
2. Electrical and plumbing installations must comply with the applicable codes in effect at the construction site at the time of construction.
3. Clearances of the pools from slopes set forth in IBC Section 1808.7, CRC Section R403.1.7 or IRC Section R403.1.7 must be observed.
4. A barrier must be installed in accordance with IBC Section 3109, ISPSC Section 305, CRC Section AG105 or IRC Section AG105 as applicable.
5. Slip resistance is outside the scope of this evaluation report. Reports of slip resistance tests that demonstrate compliance with Section 8.1 of ANSI/NSPI APSP/ANSI-5 must be submitted for approval by code official.
6. Pools which are classified as Type O are not intended for use with diving boards or other diving equipment.
7. Pools located in flood hazard areas established in accordance with Table R301.2(1) of the IRC must comply with Sections AG101.2 and AG103.3 of the IRC Section AG101.2 of the CRC or Section 304 of the ISPSC.
8. Suction outlets shall be installed in accordance with IBC Section 3109.5, CBC Section 3137B, CRC Section AG106, ISPSC Section 310 and IRC Section AG106.1, if used..
9. The fiberglass pool or spa shells are manufactured under a quality control program with surveillance inspections annually by ICC-ES.

FLORIDA:
1) Pool clearances to buildings and property lines shall be in accordance with local and state requirements
2) This plan does not include pool location on property, grading, fencing, walls or other site information.
3) All construction shall be done in accordance with all locate and state regulations.
4) Contractor shall verify buried utilizes within surrounds of installation area.
5) Contractor to install per manufacturer specifications.

POOL COMPLIES TO AMERICAN STANDARD FOR INGROUND SWIMMING POOLS ANSI/APSP/ICC-5 2011

If pool is furnished with drains or submerged suction outlets, than compliance to the Virginia Graeme Baker Pool and Safety Act is required: Drain covers are ASME A112.19.8 3007 at 3'0" min apart and entrapment avoidance must be installed per R 4501.6.6

CODE COMPLIANCE:
Florida Building Code 8th Edition (2023)
--Based on International Building Code 2021, International Swimming Pool & Spa Code 2021

ELECTRIC & PLUMBING:

The construction and installation of electric wiring, grounding and bonding and equipment are subject to the state code and to the current adopted National Electric Code Requirements. All plumbing must comply with the current adopted state code.

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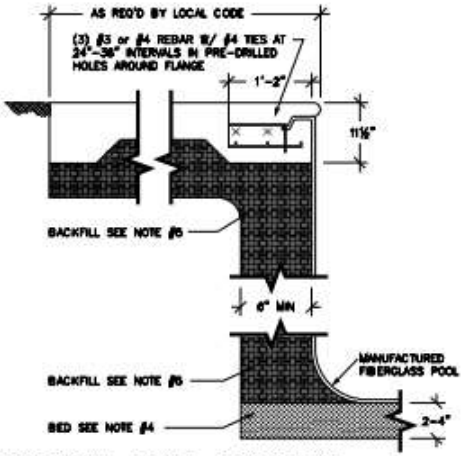
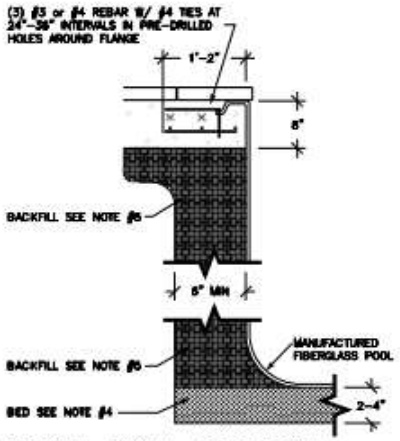
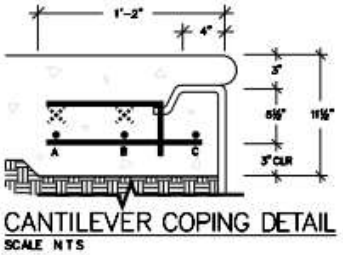


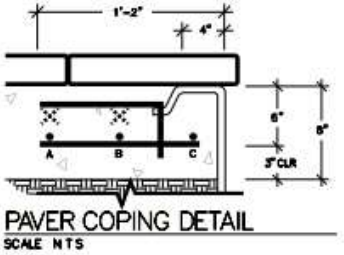
TYPICAL WALL SECTION
SCALE NTS



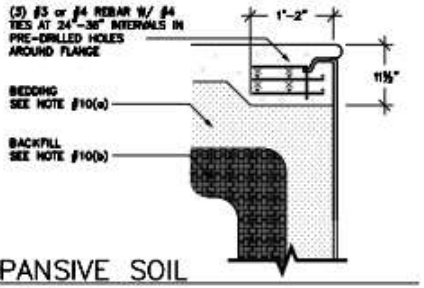
OPTIONAL WALL SECTION
SCALE NTS



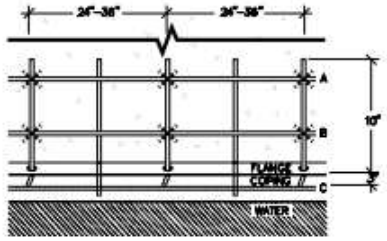
CANTILEVER COPING DETAIL
SCALE NTS



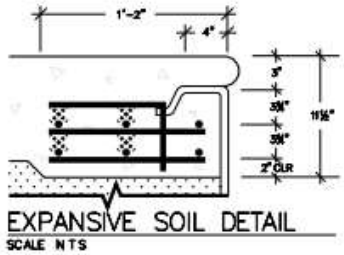
PAVER COPING DETAIL
SCALE NTS



EXPANSIVE SOIL
SCALE NTS



TOP-DOWN VIEW
SCALE NTS



EXPANSIVE SOIL DETAIL
SCALE NTS

NOTES

1. The fiberglass pool shell be manufactured by Rainforest Pools N Composites, Inc and installed by a qualified and licensed pool contractor
2. 2. Pool shall conform to requirements as shown in design criteria
3. 3. The pool shell may be damaged if the pool water is dropped below normal operating level. Consult the manufacturer prior to emptying the pool shell
4. 4. Pool shall be placed on compacted 2-4" thick bed of sand, 1/8" – 1/2" pea gravel, lime chip or other non-abrasive compactable material. Bed shall be placed on undisturbed soil with a minimum bearing capacity of 1,500psi.
5. 5. Walls shall be backfilled with sand, 1/8" - 3/4" pea gravel, lime chip or other non- abrasive compactable material. Backfill shall be installed in 1' lifts. Maintain water and backfill level within 1' of each other.
6. Steps or ladders shall be provided per local code.
7. 7. Installation contractor shall provide pool deck and pool barriers as required by local code.
8. 8. All reinforcing steels hall have a minimum yield strength of 60,000 psi and shall be bonded to grounding grid with approved UL listed connectors and #8 solid copper wire.

CANTILEVER/TYPICAL
(a). The 1'-2" wide coping shall be 11½" thick with two layers of [3] #3 or #4 rebar with #4 ties at 24"-36" intervals in pre-drilled holes around flange extending 3' from waters- edge and bonded to bonding grid with #8 solid copper 3,000psi concrete min.
(b). Concrete shall be min. 3,000psi at 28 days

PAVER (a). The 1'-2" wide coping shall be 8" thick with one layer of [3] #3 or #4 rebar with #4 ties at 24"-36" intervals in pre-drilled holes around flange extending 3' from waters- edge and bonded to bonding grid with #8 solid copper 3,000psi concrete min.
(b). Concrete shall be min. 3,000psi at 28 days
(c). Tile adhesive to be used to secure tile to beam

TOP-DOWN VIEW
(a). X on drawing denotes mandatory steel wire tie location

EXPANSIVE SOIL:
(a). Provide a 8" thick bedding layer of non-cohesive permeable material.
(b). Provide a 8" thick backfill layer of sand, 1/8" – 3/4" pea gravel, lime chip or other non-abrasive compacted material
(c). The 1'-2" wide coping shall be 11½" thick with two layers of (3)#3 rebar with #4 ties at 2' intervals in pre-drilled holes around flange extending 3' from waters-edge and bonded to bonding grid with #8 solid copper 3,000psi concrete min.
(d). Provide flexible couplings to plumbing

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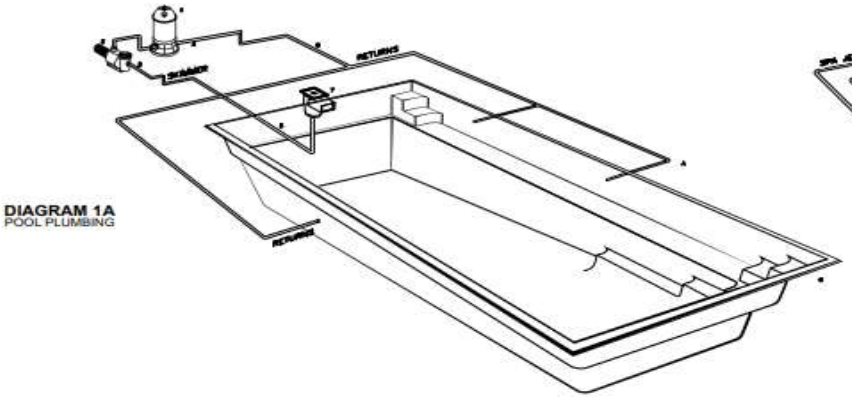

DIAGRAM 1A
POOL PLUMBING

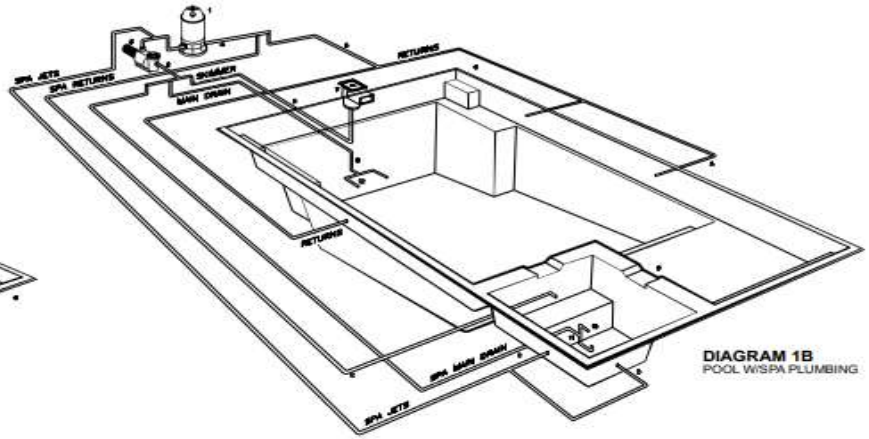

DIAGRAM 1B
POOL W/SPA PLUMBING

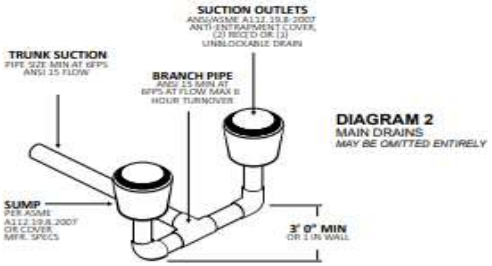

DIAGRAM 2
MAIN DRAINS
MAY BE OMITTED ENTIRELY

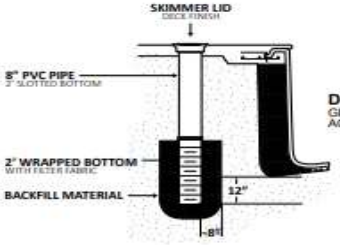

DIAGRAM 3
GROUNDWATER
ACCESS PIPE

NOTES: This plan is a schematic and piping shall be connected to provide a functioning system.
Pool piping shall hold a static water or air pressure not less than 35 psi for 15 minutes, per R4501.12.1
Pools shall have pumps selected to provide minimum 12hr turnover and maximum 6 hour turnover
Determine pipe sizing from chart [SEE RIGHT]
The dual main drains shall have a minimum separation of 3ft, unless one is located on the vertical wall or a single unblockable drain is used
All suction covers shall meet ANSI/ASME A112.19.8-2007
All piping shall be NSF-PW approved and meet the requirements of Local Building Code
Electrical equipment, wiring and installation shall conform to the National Electrical Code
Bonding of pool steel and light to footing steel shall be continued to and include all pumps and heaters
Temporary fencing shall be installed and maintained until permanent child safety features are installed
There shall be a passing electrical and child safety final inspection prior to filling the pool or spa with water
Pool shall meet the applicable criteria in ANSI/APSP 3,4,5,6,7 and 15 standards
A. Recirculation return split ANSI 15 flow at 8fps
B. Main drain ANSI 15 flow at 6fps
D. Spa suction ANSI 5 flow at 8fps
E. Spa jet supply (aux.) ANSI 5 flow at 8fps
F. Spa supply (aux.) ANSI 5 flow at 8fps
1. Minimum filter size at ANSI 15 flow
2. 2. [4] pipe diameter minimum straight pipe sized by ANSI 15 flow at 6fps
3. 3. Pump sized by ansi 15 selected from apsp listing at ANSI 15 filtration flow (at low speed)
4. 4. Minimum 18" straight (horizontal or vertical) for future solar prior to heater
5. Recirculation returns minimum size ANSI 15 flow at 8fps
6. Skimmer suction minimum size ANSI 15 flow at 6fps
7. Surface skimmer
   (a). [1] Minimum per 800sqft
   (b). Suction minimum size ANSI 15 flow at 6fps
   (c). May be omitted if negative edge or other weir used
8. #8 AWG solid copper bond wire around pool/spa 4"-6" below sub grade 18"-24" from shell and bonded at [4] points minimum to pool per alternative means 680.26(B)(2)(b) NEC
9. If no weir overflow to pool a skimmer must be used in spa
10. Suction outlets ANSI 7 flow
11. Drain branch piping minimum size ANSI 15 flow at 6 fps
13. Drain branch minimum size ANSI 15 flow at 6fps [DIAGRAM 2]

Regardless of the criteria here, the project shall comply with all sections of the BC 6th Edition – Residential, Building, Mechanical, Plumbing and Gas Codes, as applicable respectively and amended. See information attached to the attached to this permit package for site specific details showing ANSI 7 & 15 and FBC compliance.

PIPE FLOW AT GIVEN VELOCITY (GPM)

PIPE	6FPS	8FPS
1"	16	22
1½"	36	51
2"	63	84
2½"	90	119
3"	138	184
4"	238	317
6"	540	720

"ANSI 7 FLOW"
DETERMINED BY TDH METHOD
"ANSI 15 FILTRATION FLOW"
6HR TURNOVER, MIN. 350GPM
"ANSI 15 AUXILIARY FLOW"
GREATER OF SPA JET OR OTHER FEATURE FLOW
"ANSI 5 FLOW"
12HR TURNOVER OR OTHER "ESTIMATED/DESIGN" FLOW

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