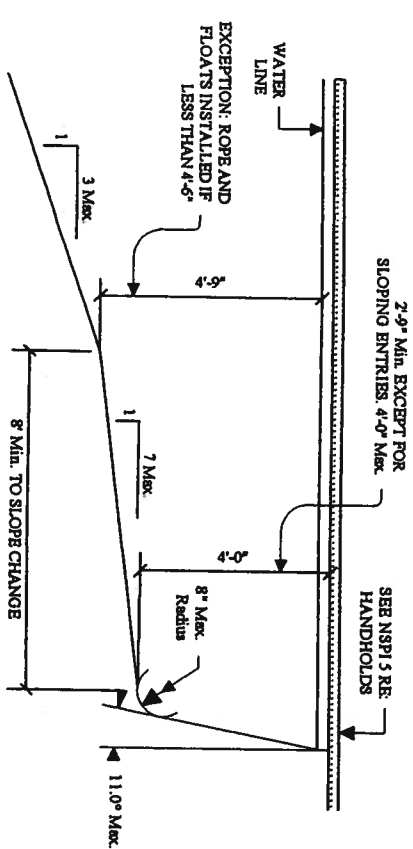


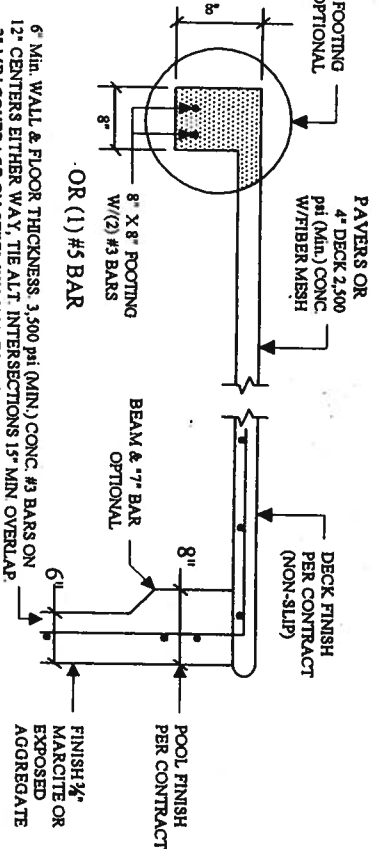
# GENERAL POOL PLAN

1/8" = 1'



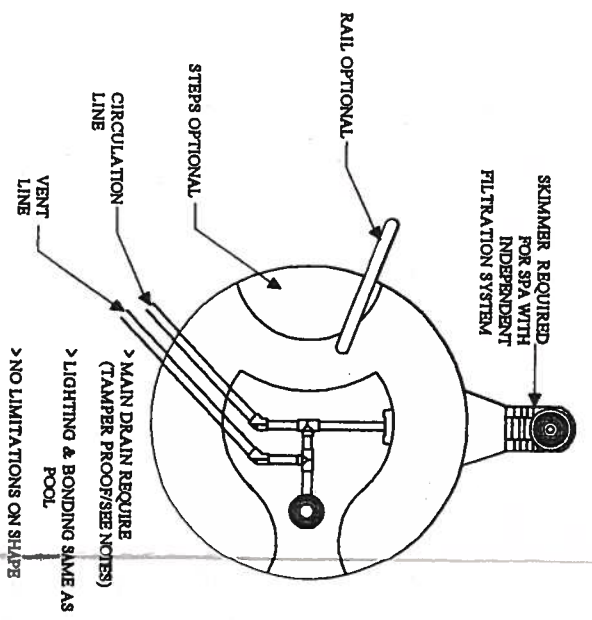
# POOL SECTION DETAIL

1/4" = 1'



# POOL/SPA, DECK, BEAM, WALL, FLOOR

1/2" = 1"



# GENERAL SPA PLAN

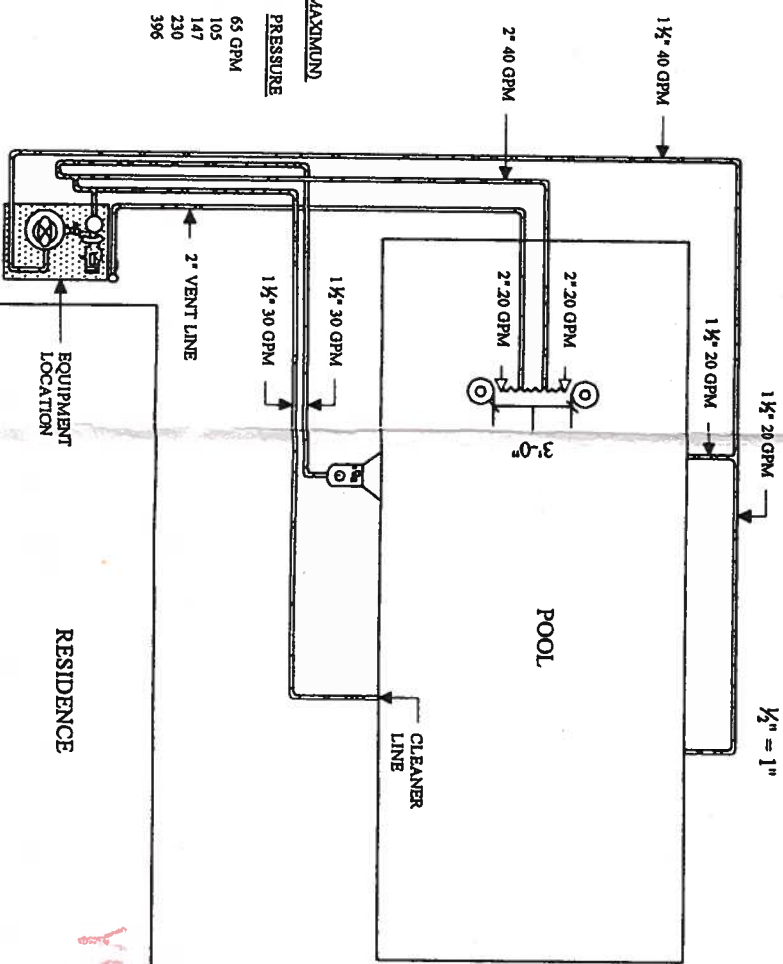
1/2" = 1'

SAMPLE ONLY. EACH APPLICATION FOR PERMIT SHALL BE BASED ON A TOTAL DYNAMIC HEAD OF 60 FT.

POOL VOLUME 15,000 GALS  
PUMP: STARLITE PHEASD, 1/2 HP 40 GPM 60' TURN OVER: 40 X 60 - 2400 15,000/2400 = 6.25 HOURS  
FILTER: STARLITE PTM 50, 50 GPM CAPACITY  
MAIN DRAIN: HAYWARD SP 1035AVS  
CLEANER: HAYWARD VACLOC  
VENT SCREEN: HAYWARD SP 1026

PIPE SIZING CHART (MAXIMUM)

PIPE	SUCTION	PRESSURE
1 1/2"	50 GPM	65 GPM
2"	83	105
2 1/2"	119	147
3"	184	230
4"	317	396



# GENERAL DESIGN REQUIREMENTS

- DESIGN CONSTRUCTION AND WORKMANSHIP SHALL BE IN CONFORMITY WITH THE REQUIREMENTS OF ANS/NSPI 3, ANS/NSPI 4, ANS/NSPI 5, AND ANS/NSPI 6 BASED ON THE POOL TYPE. SEE NSPI FOR DIVING WATER ENVELOPES.
- SLIDES SHALL MEET THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
- ENTRY/EXIT: REQUIRED AT THE SHALLOW END AND DEEP END IF OVER 5 FEET DEEP. ACCEPTABLE ARE STAIRS (10" MIN TREAD WITH 240 SQUARE INCH MIN. AREA, 12" MAX. RISER WITH INTERMEDIATE TREADS AND RISERS UNIFORM), LADDERS, UNDERWATER SEATS, AND SWIM OUTS (MAX. 20' BELOW WATER). CIRCULATION SYSTEMS, COMPONENTS AND EQUIPMENT SHALL COMPLY WITH NSF 50.
- THE MAXIMUM TURNOVER RATE IS 12 HOURS.
- FILTERS SHALL HAVE AN AIR RELEASE AND PRESSURE GAGE.
- PUMPS 3 HP AND LESS SHALL MEET ANS/UL 1081 CORROSION RESISTANT WITH STRAINER AND MEET THE REQUIRED FLOW.
- SURFACE SKIMMERS SHALL MEET NSF 50 AND THERE SHALL BE ONE FOR EVERY 800 SQUARE FEET OF SURFACE AREA.
- RETURN INLETS SHALL BE A MINIMUM OF ONE FOR EVERY 300 SQUARE FEET.
- HEATER SHALL MEET ANS/UL 221.56 OR UL 1261 OR UL 559.
- DISINFECTANT EQUIPMENT SHALL COMPLY WITH NSF 50.
- PRESSURE TEST PIPING AT 35 PSI FOR 15 MINUTES OR MEET LOCAL CODE IF GREATER.

# SPECIAL SPA REQUIREMENTS:

- MAXIMUM WATER DEPTH 4', MAXIMUM SEAT DEPTH 28", MAX.
- FLOOR SLOPE 1:12
- STEPS: MIN. TREAD 10" X 12", 7" MIN. RISER, 12" MAX. RISER EXCEPT THE BOTTOM STEP MAY BE 14" IF IT IS BE UNIFORM. IF THE SPA IS OPERATED INTERMITTENTLY IT SHALL HAVE A ONE HOUR TURNOVER. IF CONTINUOUS A SIX HOUR TURNOVER. MAXIMUM TEMPERATURE 104 DEGREES.
- MEET ANS/NSPI ARTICLE XVI, SAFETY INSTRUCTIONS/SAFETY SIGNS.
- PRESSURE TEST PIPING AT 35 PSI FOR 15 MINUTES OR MEET LOCAL CODE IF GREATER.

# ELECTRICAL REQUIREMENTS:

- WIRING AND BONDING AND ALL ELECTRICAL TO COMPLY WITH CHAPTER 27, FLORIDA BUILDING CODE FBC2004, 2005 NEC AND THE 2006 SUPPLEMENT, CHAPTER 27 ELECTRICAL, NEC SECTION 680.26(C).
- NO OUTLET OR OVERHEAD POWER WITHIN 10' IF WITHIN 15' PROTECT BY GFI, TRANSFORMER MIN. 10' FROM POOL, 8" ABOVE WATER, 1 BOX 4 FROM POOL, BRASS TO J BOX OR TRANSFORMER WHICH EVER IS FIRST EXCEPT WHERE PVC IS APPROVED.

# FLORIDA BUILDING CODE R4101

THE POOL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL DETAIL DESIGN REQUIREMENTS FOR EACH INDIVIDUAL POOL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND ALL CONSTRUCTION SHALL MEET ALL APPLICABLE CODES INCLUDING PLUMBING, ELECTRICAL AND GAS. PIPING SHALL BE SCH. 40 PVC, NSFPM, MAX. PRESSURE VELOCITY 10 FPS, SUCTION 6 TO 8 FPS. THE POOL PLAN SHALL SHOW THE DESIGN PLUMBING AS PER THE SAMPLE WITH THE INFORMATION REQUIRED SHOWN. MAIN DRAIN PLUMBING SHALL BE TWO DRAINS SEPARATED BY 3' WITH APPROVED ANS/ASME A112.19.8M COVERS. AS AN ALTERNATE THE APPROVED DRAINS MAY BE PLACED ON DIFFERENT PLANES. THE TWO DRAINS SHALL HAVE A COMMON SUCTION LINE. SECTION GRATES MAY BE USED IF APPROVED AT A MAXIMUM OF 1 1/2 FPS AND THE SUCTION PIPING IS RECESSED FROM THE GRATE THE DISTANCE EQUAL TO THE SUCTON PIPE SIZE. IN ADDITION A SAFETY VACUUM RELEASE SYSTEM MUST BE INSTALLED. THIS MAY CONSIST OF AN AIR RELEASE SYSTEM. THE VENT PIPE SHALL BE TIED TO THE MAIN DRAIN LINES, SIZED THE SAME AS THE MAIN DRAIN SUCTION LINE AND BROUGHT BACK TO THE FILTER LOCATION, ELBOWED UP AND OVER WITH A GRATE FOR PROTECTION AND LABELED "SAFETY VENT". SKIMMERS DO NOT REQUIRE PROTECTION AND MUST BE DESIGNED FOR A MINIMUM 25 GPM. THE FOLLOWING SHALL BE LABELED WITH LABEL MARKER TAPE AT THE FILTER LOCATION: PIPES, VALVES, "SAFETY VENT" OR "SAFETY DEVICE", PUMP(S) OFF SWITCH.

IT HAS BEEN CERTIFIED THAT THESE DESIGN REQUIREMENTS ARE IN COMPLIANCE WITH THE FLORIDA BUILDING CODE R4101, 424.2-2004, ANS/NSPI 3, ANS/NSPI 4, ANS/NSPI 5, AND ANS/NSPI 6.

# H2O INDUSTRIES

Standard Residential  
Pool and / or Spa  
Design

Gardner B. Collins, P.E.  
Professional Engineer 9702 FL

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