



PERMIT CARD - PLEASE POST AT JOB SITE

THIS DOCUMENT BECOMES YOUR PERMIT WHEN PROPERLY VALIDATED

Per FBC 105.3.3: An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies." The issuance of this permit does not grant permission to violate any applicable City, Orange County, State of Florida and/or Federal codes and/or ordinances. Separate permits are required for Signs, Roofing, Electrical, Gas, Plumbing and Mechanical services. This permit becomes VOID if the work authorized is not commenced within 6 months, or is suspended or abandoned for a period of 6 months after commencement. WORK SHALL BE CONSIDERED SUSPENDED IF AN APPROVED INSPECTION HAS NOT BEEN MADE WITHIN A 6 MONTH PERIOD. PERMISSION IS GRANTED TO DO THE FOLLOWING WORK ACCORDING TO THE CONDITIONS HEREON AND THE APPROVED PLANS AND SPECIFICATIONS, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF BELLE ISLE, FLORIDA.

Scope of Work: BUILDING: swimming pool

Comments: None

Project Information
 Address: 4106 Isle Vista Avenue, Belle Isle, FL 32812
 Parcel ID: 20-23-30-0668-00-320
 Property Owner: JPC Construction
 Phone Number: none

 Company Name: Bob's Pools & Screens
 Contractor Name: Wendorf, Elyse
 License Number: CPC1457513
 Address: 850 E Semoran Blvd, Casselberry, FL 32707
 Phone Number: 407-834-3197

Permit Number: 2015-11-014
Date of Application: 11/12/2014
Date Permit Issued: 11/19/2014

WARNING TO OWNER: "YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT." ON THE JOB INSPECTION(S) MUST BE MADE BEFORE PROCEEDING WITH SUBSEQUENT WORK. THIS CARD MUST BE DISPLAYED OUTSIDE AND BE PROTECTED FROM THE WEATHER WHILE BEING VISIBLE FROM THE STREET UNTIL THE FINAL INSPECTIONS HAVE BEEN APPROVED.

BUILDING FEATURES

<p>IMPACT FEES</p> <p>School \$ Traffic \$</p> <p>ZONING FEES</p> <p>Zoning Fee \$165.00</p> <p>UNIVERSAL ENG - BUILDING FEES</p> <p>Cert of Occ \$ Demo \$ Building \$ Fence \$ Driveway \$ Shed \$ Window(s) \$ Door(s) \$ PrePower \$ Electrical \$ Temp Pole \$ Plumbing \$ Mechanical \$ Gas \$ Roofing \$ Boat Dock \$ Screen End \$ Swimming Pool \$151.50 Sign \$</p> <p>SURCHARGE FEES</p> <p>Surcharge Fee \$2.00 Surcharge Fee \$2.00</p> <p>TOTAL FEES \$320.50</p> <p>Date Paid 12-4-14 CC or Check # 37669 Amount Paid 320.50</p> <p>The person accepting this permit shall conform to the terms of the application on file and construction shall conform to the requirements of the Florida Building Code (FS 553).</p>	<p>BUILDING INSPECTOR USE ONLY</p> <p>IF APPLICABLE: Have Zoning Approval Conditions Been Met? YES NO Have Stormwater Approval Conditions Been Met? YES NO Silt fencing in place? YES NO Turbidity Barrier in place? YES NO</p> <p><input type="checkbox"/> BUILDING Survey specific foundation plan must be onsite before siab pour. Approved Plan on Site? _____ 1st _____ (Footing/Foundation) 2nd _____ (Slab) 3rd _____ (Lintel)(Wall Reinforcing on Masonry Building) 4th _____ (Exterior Framing)(Roof/Wall Sheathing) 5th _____ (Framing) (To be made after Plumbing/Mechanical/Electrical Rough-ins & Windows/Doors Installed) 6th _____ (Insulation to be Made After Roof Installed) 7th _____ (Drywall) 8th _____ (Sidewalk/Driveway) 9th _____ (Other) 10th _____ (Final - After MEP and Other Applicable Finals)</p> <p><input type="checkbox"/> ROOFING 1ST ROOFING Deck Nailing/Dry-in/Flashing _____ 2ND ROOFING Covering In-Progress _____ 3RD ROOFING Covering Final _____</p> <p><input type="checkbox"/> PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...) 1ST _____ (Underground) 2ND _____ (Sewer) 3RD _____ (Rough-In/Tub Set) 4TH _____ (Final)</p> <p>CHECK APPROPRIATE BOX <input type="checkbox"/> GAS ___LP <input type="checkbox"/> MECHANICAL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> LOW VOLTAGE 1ST _____ (Rough-In) 2ND _____ (Final)</p>
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Inspection requests are to be emailed to BiDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 1pm. Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.

For a copy of your permit, or to check inspection results, please visit <https://universalengineering.sharefile.com/f/fo94edc4-832d-44bd-9809-ect32f9e2e63>
 login ID = cobi@universalengineering.com password = universal13

PROJECT NUMBER 0115, 1400431, 0000

TASK NUMBER 11

CITY OF BELLE ISLE
Permit Application Review Sheet

Permit Number	2015-11-014
Property Owner	JPC Construction
Address	4106 Isle Vista Ave
Nature of Improvement	Building: pool
Received Application	11-12-14
Sent for Stormwater Review	
Stormwater Approved	
Sent for Zoning Review	11-13-14 WO # 44076
Zoning Approved	approved 11-18-14
Applied for Variance	
Variance Approved	
Sent to BO for Review	11-18-14
Building Official Approved	11-19-2014
Comments	
1.	Susan 11-18-14 review WO # 44313
2.	Susan 11-19-14 amended it's ready ✓
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	permit typed



City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Building Permit (Land Use) Application

DATE: 10/21/2014

PERMIT # 2015-11-014

PROJECT ADDRESS 4106 Isle Vista Ave, Belle Isle, FL 32809 32812

PROPERTY OWNER Jpc Construction Inc PHONE _____ VALUE OF WORK (labor & material) \$ 20,000

PLEASE LIST THE NATURE OF YOUR PROPOSED IMPROVEMENTS

INSTALL POOL

Please provide information, if applicable.

- Survey specific foundation plan required to show compliance with zoning setbacks
- **BOAT DOCK:** DEP Clearance Required with Application (Call 407-897-4100); please provide a copy of their report
- **SEPTIC SYSTEM (RESIDENTIAL):** - Provide verification of OC Health Dept approval for on-site septic tank system, per FAC Chap. 64E-6
- Homeowners will be required to have a contractor on record for homes that are rented and/or not homestead

Please Complete for the City of Belle Isle Zoning Review: Parcel Id Number: 20-23-30-0668-00-320

To obtain this information, please visit <http://www.ocpafl.org/Searches/ParcelSearch.aspx>

SPECIAL CONDITIONS: STRUCTURES MAY NOT ENCR OACH INTO ANY EASEMENT OR REQUIRED SETBACK. Note, this Zoning Approval MAY or MAY NOT be in conflict with your Deed Restrictions. For New Single Family Residence, a Traffic Impact Fee and School Impact will be assessed.

Date: 11/14/14 By: [Signature]
City of Belle Isle

Attached Survey 2 SETS and Construction Plans 2 SETS

PLANNING & ZONING APPROVAL:

DATE _____

PLEASE COMPLETE for Building Review

CONSTRUCTION TYPE _____

OCCUPANCY GROUP Comm Res: Single Fam Multi Fam

#BLDG. _____ #UNITS _____ #STORIES _____ TOTAL SQ.FT. _____

MAX. FLOOR LOAD _____ MAX. OCCUPANCY _____

MIN. FLOOD ELEV. _____ LOW FLOOR ELEV. _____

WATER SERVICE _____ WELL _____ SEPTIC _____

BUILDING REVIEWER Angel Perez DATE 11-19-2014

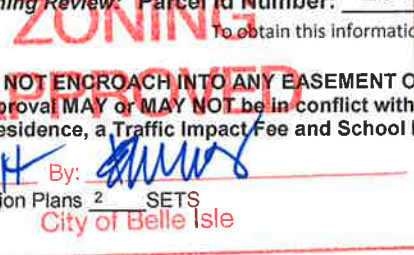
VERIFIED CONTRACTOR'S LICENSE & INSURANCE ARE ON FILE _____ DATE _____

Per FSS 105.3.3:

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Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city limits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Failure to comply will result in a stop work order.

SEPARATE PERMITS ARE REQUIRED FOR ROOFING, ELECTRICAL, PLUMBING, GAS, MECHANICAL, SIGNS, POOLS, ENCLOSURES, ETC.



Wind Exposure Category: B C D

SPRINKLERS REQ'D Y N

If Required - SUBMIT COPY OF PLANS FOR FIRE REVIEW Date: Sent _____ RCD _____

REVIEW

ZONING	Y	N	\$165.00
CERT OF OCC	Y	N	\$
TRAFFIC	Y	N	\$
SCHOOL	Y	N	\$
FIRE	Y	N	\$
SWIMMING POOL	<input checked="" type="checkbox"/>	N	\$151.50
SCREEN ENCLOSURE	Y	N	\$
ROOFING	Y	N	\$
BOAT DOCK	Y	N	\$
BUILDING	Y	N	\$
WINDOW(S)	Y	N	\$
DOOR(S)	Y	N	\$
FENCE	Y	N	\$
SHED	Y	N	\$
DRIVEWAY	Y	N	\$
OTHER	Y	N	\$

3% FL SURCHARGE _____ 4.00

TOTAL _____

By Owner Form Y NA

Notice of Commencement Y NA

Power of Attorney Y NA

Contractor Packet Included? Y N

OTHER PERMITS REQUIRED:

ELECTRICAL	<input checked="" type="checkbox"/>	NA
PREPOWER	Y	NA
MECHANICAL	Y	NA
PLUMBING	<input checked="" type="checkbox"/>	NA
ROOFING	Y	NA
GAS	Y	NA

building permit # 2014-08-086



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Building Permit (Land Use) Application

To be completed as required by State Statute Section 713 and other applicable sections.

PERMIT # 2015-11-014

Owner's Name Jpc Construction Inc


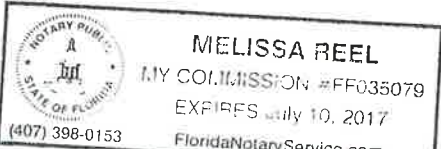
Owner's Address 4210 Kezar Ct Belle Isle, FL 32812-3628

Contractor Name <u>ELYSE WENDORF</u>	Company Name <u>BOBS POOLS AND SCREENS</u>
License # <u>CPC1457513</u>	Company Address <u>850 E SEMORAN BLVD</u>
Contact Phone/Cell <u>407-834-7100</u>	City, State, ZIP <u>CASSELBERRY, FL 32707</u>
Contact Email <u>ERICA_WENDORF@YAHOO.COM</u>	Contact Fax <u>407-834-3197</u>

WARNING TO OWNER: Your failure to record a Notice of Commencement may result in your paying twice for improvements to your property. A notice of commencement must be recorded if job is \$2500(+) or if A/C Replacement \$7500(+) and posted on the job site before the first inspection. If you intend to obtain financing, consult with your lender or an attorney before recording your Notice of Commencement.

I hereby make Application for Permit as outlined above, and if same is granted I agree to conform to all Division of Building Safety Regulations (www.floridabuilding.org) and City Ordinances (www.municode.com) regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable City and/or State of Florida codes and/or ordinances. Application is hereby made to obtain a permit to do the work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for all other construction including ROOFING, ELECTRICAL, MECHANICAL, PLUMBING, GAS, SIGNS, POOLS, SCREEN ENCLOSURES, ETC.

OWNER'S AFFIDAVIT: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

<p>Owner Signature</p> <p>The foregoing instrument was acknowledged before me this <u>10/21/14</u> by <u>JOHN CARR</u> who is personally known to me and who produced _____ as identification and who did not take an oath.</p> <p>Notary as to Owner State of Florida County of Orange</p> 	<p align="center">Impervious Surface Ratio Worksheet Development Zoned A-1, A-2, R-1-AAA, R-1-AA, R-1-A, R-1 per City Code, Section 50-74: Impervious Surface Ratio</p> <p>1. Total Lot Area (sqft) X 0.35 = Allowable Impervious Area (BASE). Total Lot Area _____ X 0.35 = Allowable Impervious Area (BASE) _____</p> <p>2. Calculate the "proposed" impervious area on the lot. This includes the sum of all areas that do not allow direct percolation of rainwater. Examples include house, pool, deck, driveway, accessory building, etc.</p> <ul style="list-style-type: none"> • House _____ • Driveway _____ • Walkway _____ • Accessory Buildings _____ • Pool & Spa _____ • Deck & Patio _____ • Other _____ <p>Actual Impervious Area (AIA) _____</p> <p>3. If AIA is less than BASE, subtract AIA from BASE to determine the amount of impervious area that may be added without providing onsite retention.</p> <p>4. If AIA is greater than BASE, then onsite retention must be provided.</p> <p><u>Assuming 7.5 inches of rainfall based on a 24hr 10 year Rain Event (TP40), the formula is: (7.5 inches rainfall/12 inches p/foot) X (result from line 4) = cubic feet of storage volume needed</u></p>
<p>Contractor Signature</p> <p>COMPANY NAME <u>BOBS POOLS AND SCREENS</u></p> <p>The foregoing instrument was acknowledged before me this <u>10/21/14</u> by <u>ELYSE WENDORF</u> who is personally known to me and who produced _____ as identification and who did not take an oath.</p> <p>Notary as to Owner State of Florida County of Orange</p> 	



COBI Permit Fee Calculation Form



Reviewer Signature: AP. Date: 11/19/2014

Permit Type: Pool Job Cost: \$20,000-

Permit Fee: \$ 101-

Plans Review Fee: \$ 50.50 (50% of permit fee – excluding ReRoofs)

1.5% State Fee: \$ 2.00

1.5% State Fee: \$ 2.00

TOTAL BUILDING FEE: \$ 155.50 (does not include Zoning fees or Deposits)
 Note: Total gets doubled for SWO/AFT permits

$$\$25 + (\$19 \times 4) = 76 + 25 = \$101 -$$

$$\$101 \times .50 = \$50.50$$

$$\begin{array}{r}
 101.00 \\
 4.00 \\
 \hline
 \$155.50 \\
 (65.00) \\
 \hline
 \end{array}$$

$$320.50 + \$328.50$$



CITY OF BELLE ISLE, FLORIDA

1600 Nela Avenue
Belle Isle, Florida 32809
(407) 851-7730 • FAX (407) 240-2222
www.cityofbelleislefl.org

RESIDENTIAL SWIMMING POOL SAFETY AFFIRMATION

Date: 10/29/14

Permit #: _____

I, ELYSE WENDORF, License # CPC1457513 (print contractor's name)

hereby affirm that the pool will be isolated from access from within the dwelling AND from adjacent properties by a barrier that meets the pool barrier requirements of Florida Statute 515.29 and the 2010 Florida Building Code, Residential Section R4101.17.

Check the applicable barrier requirements from the following options and show on the site plan:

_____ The pool will be equipped with an approved safety pool cover that complies with ASTM F1346 (Standard Performance Specifications for Safety Covers for Swimming Pools, Spas and Hot Tubs) per FBC R4101.17, Exception.

X _____ The pool will be isolated from access by a mesh safety barrier that meets the requirements of FBC R4101.17.1.15.

_____ The pool will be isolated from access by a screen enclosure that meets the requirements of FBC R4101.1.1 through R4101.1.8.

_____ The pool will be isolated from access by a fence and pedestrian gates that meet the requirements of FBC R4101.1.1 through R4101.1.8.

Does any part of the barrier consist of dwelling walls which contain doors or windows?

Yes _____ No X If yes, then check which of the two options below are applicable:

_____ All doors and windows providing direct access from the dwelling to the pool will be equipped with an exit alarm that meets the requirements of FBC R4101.17.1.9(1) unless Exceptions a, b or c apply.

_____ All doors providing direct access from the dwelling to the pool will be equipped with self-closing, self-latching devices installed 54" above the threshold that meet the requirements of FBC R4101.17.1.9, exception 2.

I understand that the above indicated shall be installed before the time of pool safety inspection per FBC R4101.19.

(contractor's signature)

(property owner's signature)



Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

October 10, 2012

Baby Guard, Inc.
5299 Hiatus Road
Sunrise, FL 33351
Attn: Michael Schatzberg

Re: Verification Testing & Inspection

Dear Mr. Schatzberg:

Baby Guard, Inc. retained Nutting Engineers of Florida Inc. to test The Baby Guard Product line to verify their conformity with ASTM Standard F-2286-05 and 2010 Florida Building Code Section 424.2.17.1.1 through 424.2.17.1.14

The test specimens consisted of fifteen (15) foot sections of representative safety fencing. The section tested measured forty-eight (48) inches high. They were installed with horizontal spacing of thirty-six (36) inches. The representative samples were installed as per the ASTM Standard F-2286-05 Section 4.

We have completed the performance tests for vertical load and impact testing in our facility based on the noted ASTM Standard as well as reviewing test results from Q-Lab and Diversified Testing Lab.

Conclusion:

Based on our testing and the information provided to us for review the products were found to meet all minimum requirements put forth by ASTM F-2286-05 and Section 424.2.17.1.1 through 424.2.17.1.14 of the 2010 Florida Building Code.

Sincerely
NUTTING ENGINEERS OF FLORIDA, INC.

Dan Hartke
Director of Operations

Richard C. Wohlfarth P.E. # 50858
Principal Engineer



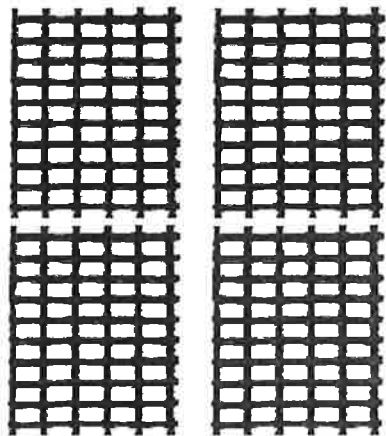
- [Home](#)
- [About Us](#)
- [Products](#)
- [Locations](#)
- [Fence Parts](#)
- [Gallery](#)
- [Contact](#)

Baby Guard's Pool Fence Products

Baby Guard swimming pool fences have been proven to meet or exceed the requirements of [ASTM F 2286-05](#), the design and performance specification for removable mesh fencing for swimming pools. Our fencing also exceeds [National Safety Council](#) guidelines, and is available in heights of 4 or 5 feet. It can be installed on virtually every deck surface, including wood, tile, acrylic, brick pavers and seawalls. Only Baby Guard pool fences offer you *all* of the following:

While most other pool fence companies offer only one style of mesh, with a limited number of color options. Baby Guard offers 3 different styles of mesh, coming in a multitude of different color combinations. At Baby Guard, we believe that you, our customer, should have the opportunity to select the most aesthetically pleasing pool fence possible.

Baby Guard's Premium Pool Fence



The Baby Guard premium pool fence is by far the strongest and safest pool fence that we offer. **Poles are spaced every 30 inches** for added support. Baby Guard's premium mesh is an updated, stronger and improved version of what has been available. This mesh is only available through Baby Guard. With 3 layers of coating, ultra violet inhibitors, and mildew retardants built in, this mesh by far the strongest. Guaranteed not to shrink, stretch, fade or dry rot.

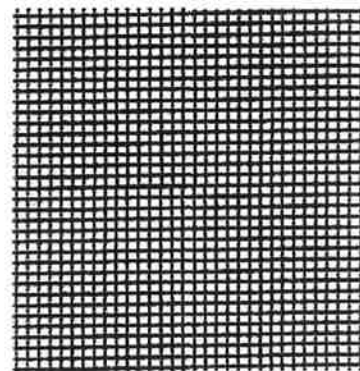
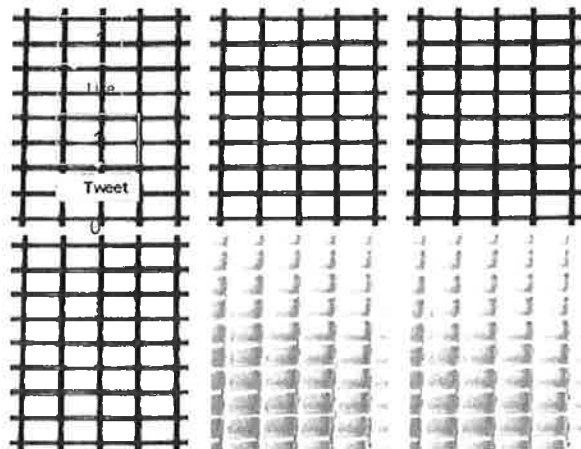
Premium Pool Fence is available in *black, green, blue, and brown*.

Baby Guard's Clear View Pool Fence

This pool fence is considered one of the most see through fences available and one of the most requested style of pool fencing. Unlike standard free woven designs, this mesh is twisted and knotted together. With poles **Spaced every 36 inches** this mesh fence is virtually invisible.

Clearview Pool Fence is available in *black, brown, blue, green, white, and beige*.

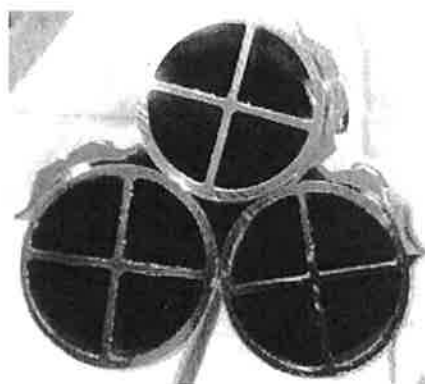
Baby Guard's Standard Pool Fence



This fence is made with a durable free woven mesh with **poles spaced every 36 inches**. Many older pool fences use this material and some customers still prefer it because they had it before. This fence comes with a complete lifetime warranty.

Standard Pool Fence is available in *black* only.

Reinforced Poles



Baby Guard pool fence poles are constructed using non-corrosive, rust-proof **XT-6000™** fully reinforced aluminum, which are the strongest poles in their class. This pole is available in colors to match or coordinate with our exclusive Baby Guard Premium Interlock mesh. The color is powder-coated to the pole to prevent scratching, peeling and chipping.

We also offer fully reinforced composite poles which are strong and durable. Both poles can withstand nature's elements.

[Order Replacement Poles.](#)

Child-Proof Locks



Baby Guard pool fence offers the ultimate child-proof locks. Our **patent pending** safety solution is effective even for children of swimming age. The key-lockable system offers you peace of mind knowing that your pool is secure from any unwanted intrusions, even for an extended period of time. Children will not be able to open any section of the pool fence as long as it is locked. Insist on key-lockable latches to be sure a child cannot open your fence.

[Order Replacement Gate Latches/Eye Hooks.](#)

Baby Guard's Self-Closing Gates

Baby Guard Pool Fence Company's patented self-closing gate (patent #US6789786B1) has revolutionized pool fencing. Baby Guard's self-closing gates can be retrofitted to any existing pool fence without the need of drilling additional holes. This means that you will be able to add one to your existing pool fence later on if you choose to do so. It has a special support system that does not require adjustments when removing and replacing the gate.

To order a self closing gate for you fence, please call us at 1-888-919-2229.

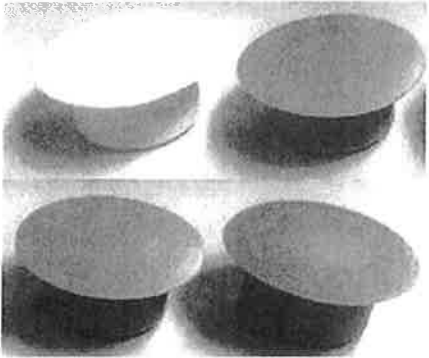


Top Pull Magna Latch



The Top Pull Model is designed especially for swimming pool gates but can be installed on any gate where child safety is important. It is designed to extend above the height of the fence to keep the release knob out of reach of children, and is also key-lockable for added safety. Tested to over 400,000 cycles, the Top Pull Model has been independently verified to meet stringent international safety codes, and has also received several prestigious design awards. [Click here](#) for more information about the Magna Latch.

Deck Caps (Hole Covers)



When you decide to take your fence down you may want to put 'deck caps' in the holes until you are ready to put the fence back up. We have deck caps in four different colors to help match your pavers.

[Order Deck Caps here.](#) or [Deck Sleeves.](#)

Highest Quality Components



All of the parts used to construct the Baby Guard pool safety fence are of the highest quality. Baby Guard pool fence uses stainless steel latches and screws and heavy molded sleeve inserts. Matching deck caps are provided to cover holes when the fence is removed. Baby Guard fences are designed to stand up to any environmental element.

Professional Installation



All Installers are independently owned and operated Baby Guard dealers. They are exclusively licensed to use all Baby Guard products, trademarks, names, and patents. The Baby Guard name can assure you of a quality installation every time.

[Click here](#) to find a professional Baby Guard pool fence installer near you!



INSTALLATION MANUAL

LAYOUT-

The most important part of the installation is the layout of where the holes will be drilled. The measurements between the poles needs to be very precise for the fence to fit properly. This cannot be stressed strongly enough. All references to measurements are made from the perspective that you are facing the pool. As a result the fence is manufactured, it is recommended that you face the pool when measuring and marking your holes.

1). The first consideration during layout is the location of the gate. In most cases the steps leading down into the pool is the best place for the gate. The only difference between a gate section and where two sections meet are the additional fall back holes which should be drilled at the gate to create a set opening for exit and entrance of pool.

2). Begin your layout where you want the gate to be, by placing your bullseye down in front of the steps, measuring the side of the circle closest to the pool, the distance you desire. 18-24" (inches) is recommended to provide ample walking space between the fence and the water. Draw a circle and draw a centerline down the middle of the circle. All measurements between circles is from centerline to centerline. This is very important. Measure from the centerline 2 1/2" over and draw another circle also measuring desired distance from the edge of the pool. Then select a direction to continue layout and measure 30" for the next hole. Measurements between poles needs to be precise as well as keeping an even distance from the edge of the pool. If you measure more than 30" the fence will be very tight. If you measure less than 30" the fence will be very loose and unsafe. Most sections are made on 10' (5 pole) lengths. As you continue to layout, remember to stop when you finish laying out a five pole section. From the fifth pole, measure 2 1/2" for the first hole of the next section. Continue this process around half of the pool, then stop and pick back up where you started at the steps and continue around the other side of the pool.

The final hole you mark will most likely measure less than 30" from the last hole you marked before you continued back at the steps. After this part of the layout is complete, mark the extra fall back holes that your gate section poles will fit into when the gate is opened.

3). The last section you laid out most likely needs to be cut back from a standard section. Note whether you will be cutting from the right or left side of section. Measure centerline distance between odd panel, add 1/4" to this measurement and write it down. Count the number of holes on this section and mark on this section the measurement of the odd panel (with a china marker) and cut the material on that mark. Staple the border material onto the panel you just cut. Attach a pole onto the border you just stapled.



DRILLING-

Do not attempt to install the baby guard pool fence with a hammer drill, or a hand drill. In order to produce a correctly installed pool fence with the proper amount of tension, you need a full size core drill with leveling adjustments and a bubble level.

- 1). Set up the drill on the pool deck. Attach water hoses and electrical cords.
- 2). Since your layout measurements are very precise, you must be equally precise setting the drill bit down on the drawn circles. Any indifference with the drilling in relation to the layout will result in the fence not fitting properly.
- 3). Taping the drill bit 4" from the bottom provides a good method of measuring for drill depth.
- 4). Set the water spigot at a medium flow. If the flow is too heavy, water will spray up from the hole and you will get "soaked". If the water flow is too weak, the core that you drill will get stuck inside the bit on every hole.
- 5). When drilling a straight run, simply center the drill bit on the hole drawn, center the leveling bubble on the drill "dead center" using the drill's adjustment screws. Set the drill bit down slowly on the circle while putting pressure down on the motor, in order to get the hole started.
- 6). When drilling turns, adjust the drill with the adjustment screws to lean the drill to the opposite of the angle of the pool. What this means is: If the pool curves to the right, the drill needs to lean to the left with the leveling bubble pointing toward the pool. If the pool curves to the left, the drill needs to lean to the right with the bubble pointing away from the pool.
- 7). As far as drilling the proper angle, it is recommended that you drill the double holes (where two sections meet) slightly towards each other, this makes it easier to squeeze the poles together. As far as how hard you drill the turns, this simple rule applies: The harder the turn, the harder the angle - the easier the turn, the easier the angle.
- 8). After you have finished drilling all of the holes, with the needle nose pliers, go around and pull out all the cores. Then insert the plastic sleeves. If the drill bit you used was new, you will need to wrap the neck (under the lip) of the sleeve with a few wraps of electrical tape.
- 9). Once the sleeves are in place, put all of the sections up. You may need to give the poles a slight twist to achieve the proper tension.
- 10). Once the sections are up, put the 5/32 metal drill bit on the hand drill. On the last pole of each section, there is a hole without a screw, ream out that hole a little with the bit. If you don't, the brass hook and eyes will break.
- 11). Twist on all the locks and eyes, then lock the entire fence.
- 12). If the pool fence seems unusually loose or tight, you can easily adjust any panel by simply taking the screws out a few at a time and either slide the border out to tighten or slide the border in to loosen.



Baby Guard of Central Florida, Inc.
Supplement to Baby Guard, Inc. Installation Manual
Re: Ground Installation & Paver Installation

Ground Installation: When installing the Baby Guard pool safety fencing system in the ground (ie. Dirt, grass, etc.) installers shall use schedule 40 PVC pipe, minimum length of 18". The pipe shall be hammered into the ground for the fence poles to be installed. Two inches of cement poured around the top of the PVC is necessary in cases where more than two consecutive poles are being installed in the ground.

Pavers: In most cases installation in paver decks where the individual pavers are over two inches thick the standard Baby Guard deck installation should be sufficient. The installer should check the fence to ensure it is safely installed and cement down any pavers where the fence is loose.

In most cases where individual pavers are under two inches thick, all pavers should have cement installed underneath the paver prior to drilling.



VACUUM (EXISTING PUMP)

Lot 32 Bell Vista

Data assumes 2" suction line (2 1/2" for 3hp) 40' long, minimal fitting, 1-2" valve and full rated pump. (Excludes Northstar)

Max Flow rates at 8 Feet Per Sec

- 3/4 hp pump 4.5 to 5.5 feet of water
- 1 hp pump 7 to 9 feet of water
- 1 1/2hp pump 10 to 12.5 feet of water
- 2hp pump 13.5 to 16 feet of water
- 3hp pump 14.5 to 17 feet of water.

1.5" Pipe	51 gpm
2" Pipe	84 gpm
2.5" Pipe	120 gpm
3" Pipe	184 gpm
4" Pipe	317 gpm

FILTERS

All NSF approved filters may be calculated at 7 feet of head or refer to owners guides.

Heaters ED1, ED2, IDL, IDL2

40 GPM	5.12	60 GPM	7.23	80 GPM	7.80	100 GPM	9.86
50 GPM	6.16	70 GPM	7.50	90 GPM	8.84	110 GPM	13.00

Universal Forced Draft

40 GPM	2.72	60 GPM	3.70	80 GPM	5.06	100 GPM	6.42
50 GPM	3.12	70 GPM	4.30	90 GPM	5.54	110 GPM	6.98

BACKWASH VALVES

Multiport	1 1/2"	2"
40 to 60 GPM	9.0	4.0
70 to 80 GPM	NR	10.0

Push Pull	1 1/2"	2"
40 to 60 GPM	6.0	5.0
70 to 80 GPM	NR	6.0

AQUA RITE CHLORINE GENERATOR

40GPM	60GPM	80GPM	100GPM
.40	1	1.45	2.31

SKIMMERS AND MAIN DRAINS (all 2")

GPM	Main Drain	Skimmer
40	1	2
50	1 1/2	3
60	2	4
70	3	5

RETURN FITTINGS OR EXIT LOSS (head Loss)

GPM	1/2"	3/4"	1"
10	4.15	.82	
15	9.34	1.85	.58
20	16.61	3.28	1.04
25		5.13	1.62

Single LOCKING NUT securely fastens filter head to filter tank, eliminating clamps or bolts.

Filter Head provides easy access to cartridge element. May be rotated to conveniently position gauge and manual air relief valve.

Heavy-Duty Filter Tank is injection molded of high-strength PermaGlass XL™ for dependable, corrosion-free performance.

Automatic Air Relief purges any trapped air during filter operation.

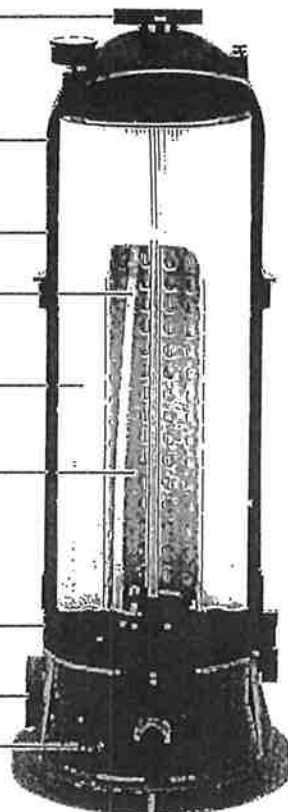
Single-Element Cartridge is engineered of high-quality reinforced polyester, with gasketed molded end caps, for maximum efficiency, easier cleaning and longer life.

Precision-Engineered Extruded Core provides extra strength and superior flow.

Elevated Filtered Water Collector with Debris Sump prevents accidental bypass of heavy debris to pool or spa when cartridge is removed for cleaning.

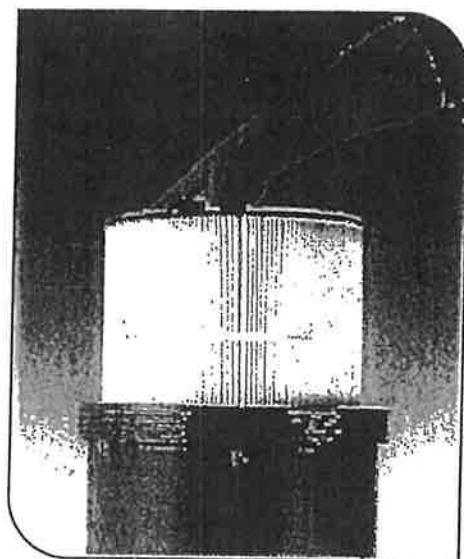
1½" or 2" FIP, or 2" SKT Connections (adapters provided) for plumbing versatility.

½" 14 NPSM Filter Drain for fast draining. Also accepts standard spigot valve.



SPECIFICATIONS — STAR-CLEAR PLUS CARTRIDGE FILTERS	
FILTER TYPE	Cartridge Element: 75 ft. ² , 90 ft. ² , 120 ft. ² , 175 ft. ² (6.97 m ² , 8.37 m ² , 11.15 m ² and 16.26 m ²)
FILTER TANK	High-Strength, Injection-Molded PermaGlass™
FILTER ELEMENT	Reinforced Polyester
PERFORMANCE RANGE	½ to 3 HP (75 to 120 GPM) 0.37 to 2.20 KW (284 to 455 LPM)
DIMENSIONS	C751-30" H x 13 3/8" W (762 mm x 340 mm) C900-30" H x 13 3/8" W (762 mm x 340 mm) C1200-36" H x 13 3/8" W (914 mm x 340 mm) C17502-43" H x 13 3/8" W (1,080 mm x 340 mm)

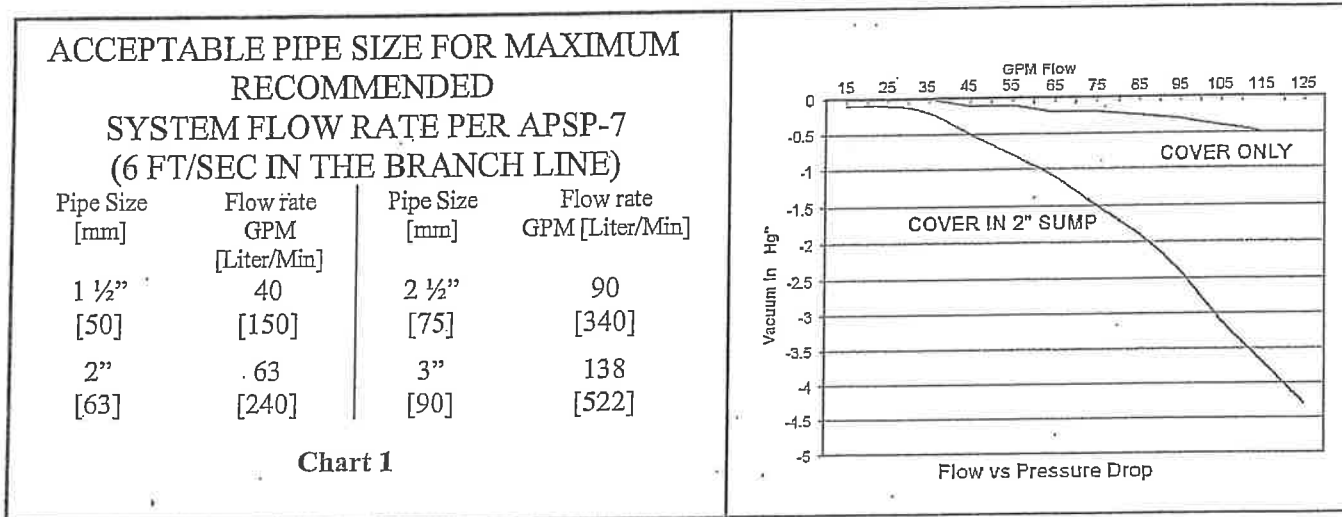
PERFORMANCE DATA								
MODEL NUMBER	EFFECTIVE FILTRATION AREA		DESIGN FLOW RATE*		TURNOVER			
	ft. ²	m ²	GPM	LPM	GALLONS		KILOLITERS	
					8 hrs.	10 hrs.	8 hrs.	10 hrs.
RESIDENTIAL								
C751	75	6.97	75	284	36,000	45,000	136	171
C900	90	8.36	90	341	43,200	54,000	164	205
C1200	120	11.15	120	455	57,600	72,000	218	273
C17502	175	16.26	120	455	57,600	72,000	218	273
PUBLIC								
C751	75	6.97	28	107	13,500	16,875	51	64
C900	90	8.36	34	128	16,200	20,250	61	77
C1200	120	11.15	45	171	21,600	27,000	82	102
C17502	175	16.26	66	249	31,680	39,600	119	149



Easy-to-clean cartridge elements
Hayward cartridges have extra dirt-holding capacity and are engineered of durable, high-quality materials to last for years with only minimal care. Simply remove the cartridge element and hose off with Hayward's EC2024 Jet-Action Cleaning Wand to restore the filter to clean operating condition.

*Determined by pump size and piping system hydraulics; 2" piping is recommended for flow rates of 90 GPM (341 LPM). Public Design Flow rates based on .375 GPM/ft.² (15.26 LPM/m²).

• RECOMMENDED SYSTEM SPECIFICATIONS:



WG1048E Suction Outlet Covers are rated for Floor Only at 125 GPM

FIG 1

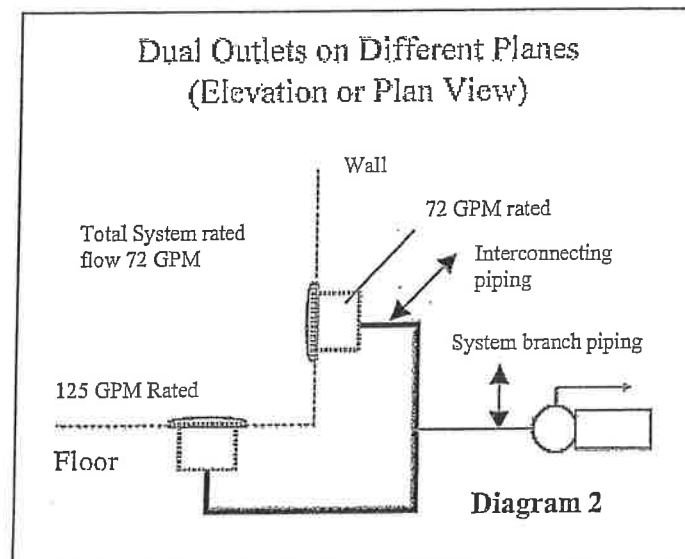
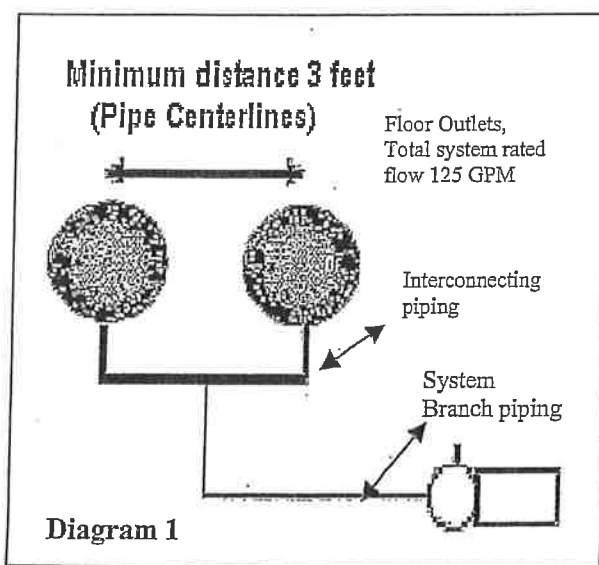
Note: 1" Hg = 1.13 Ft of Head

WG1048EW Suction Outlet Covers are rated for Wall or Floor at 72 GPM

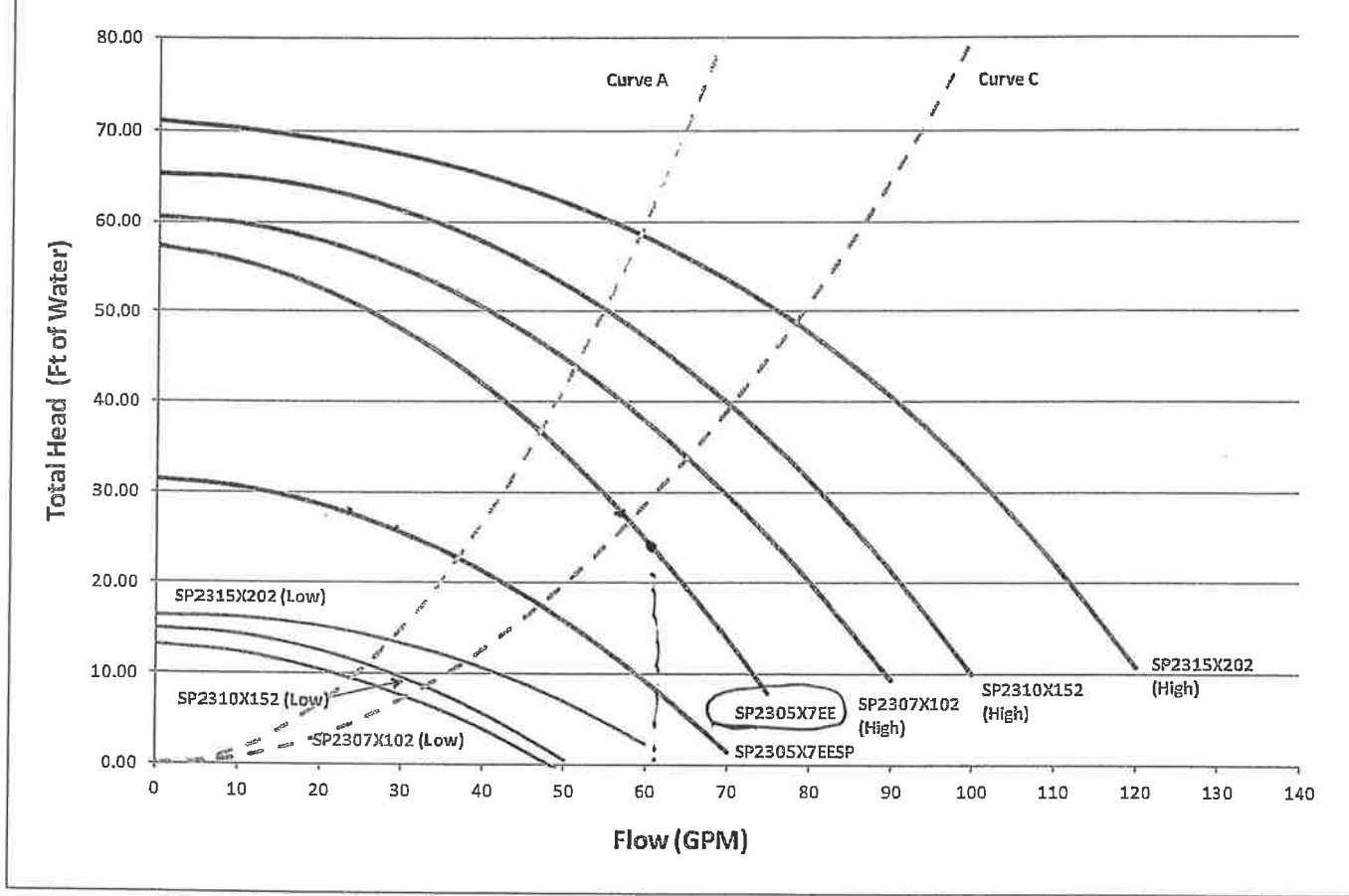
In the event of one suction outlet being blocked, the remaining suction outlets serving that system shall have a flow rating capable of the full flow of the pump(s) for the specific suction system.

Example: In the System shown in **Diagram 1**, two (2) "Floor Only" suction outlet covers are selected and mounted. These covers are individually rated for 125 GPM. For a desired flow rate through the pump of 100 GPM, a minimum pipe size from the **Chart 1** is selected at 3". At the desired flow of 100 GPM one cover could be partially blocked and the other suction outlet flow would be below the rated 125 GPM of the "Floor" mounted suction outlet cover. Since there are two outlets flowing in normal operation, and the allowable velocity in the interconnecting piping is only 3ft/sec, the same pipe size is required in the interconnecting piping.

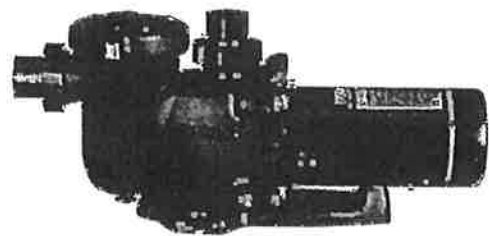
Example: In the System shown in **Diagram 2**, one (1) "Floor Only" suction outlet cover, rated at 125 GPM, and one (1) "Wall or Floor" suction outlet cover, rated at 72 GPM are selected and mounted. For a desired flow rate through the pump of 50 GPM, a minimum pipe size from the **Chart 1** is selected at 2". At the desired flow of 50 GPM either cover could be totally blocked and the other suction outlet flow would be below the rated 72 GPM of the wall mounted suction outlet cover. Note: Flow may be limited by entrapping force in dual suction systems.



Max-Flo XL Flow vs. Total Head



To take a closer look at Max-Flo XL or other Hayward products, go to www.hayward.com or call 1-888-HAYWARD



Max-Flo XL Series Pumps are listed by:



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Pentair and SuperFlo are registered trademarks of Pentair Water Pool and Spa, Inc.

CERTIFICATION OF COMPLIANCE

Contains: WG1048E, WG1048EBLK, WG1048EGR, or WG1048EDGR
 Description: 8" Round Suction Outlet Cover

Ratings: Floor: 125 GPM Wall: 72 GPM Open Area: 8.1 sq-in
 Certified to Comply with Section 1404 of the Virginia Graeme Baker Act (VGB) Pool & Spa Safety Act codified at 16 CFR part 1450. Initial Certification May 2011.

Manufactured: After September 10, 2009, by a Division of Hayward Industries, Inc. at K4-A, 214028 Block K4- A, Export Processing Zone Wuxi New District Jiangsu Province PRC 214028, China; or at One Hayward Industrial Drive, Clemmons, NC 27012.
 Certified by Hayward Pool Products, 620 Division Street, Elizabeth, NJ 07207, Phone 908-355-7995
 Contact at www.haywardnet.com

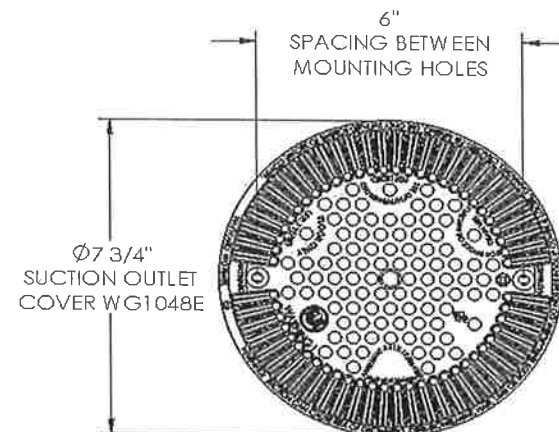
Record Custodian is Customer Service at www.haywardnet.com.
 Hayward Pool Products P.O. Box 5100 Clemmons, NC 27012-5100, Phone: 336-712-9900
<http://www.hayward-pool.com/pdf/literature/8inroundCOC.pdf>

Date of Mfr: The Lot Number shown on the product label contains the Year & Month of manufacture. The first number represents the year (ex 1 = 2011) and the second character the month (A=Jan, B=Feb, H=Aug, I is skipped, J=Sep, etc)

Tested to: ANSI/APSP 16 (ANSI/ASME 112.19.8-2007 (addendum 9b-2009)) per Section 1404 of the Virginia Graeme Baker Act (VGB) Pool & Spa Safety Act. Tested by NSF International, 789 Dixboro Road, Ann Arbor, MI 48113, Phone 734-769-8010 in April 2011. Certificate at:
<http://info.nsf.org/Certified/Pool/ Listings.asp?Company=21600&Standard=ASME1908>

Date of Installation: _____
 Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every 7 years or if found to be damaged, broken, cracked, missing, or not securely attached.

Hayward Pool Products acknowledges that it is a federal crime to knowingly and willingly make materially false, fictitious, or fraudulent statements, representations, or omissions on this certification.

**USED ON FOLLOWING SERIES:**

WG1030AVPAK2	SP1030AVPAK2
WG1048AVPAK2	SP1048AVPAK2
WG1049AVPAK2	SP1049AVPAK2
WG1051AVPAK2	SP1051AVPAK2
WG1052AVPAK2	SP1052AVPAK2
WG1053AVPAK2	SP1053AVPAK2
WG1054AVPAK2	SP1054AVPAK2
WG1153AVPAK2	SP1153AVPAK2
WG1154AVPAK2	SP1154AVPAK2

▲ Warning – Suction Entrapment Hazard.

Suction in suction outlets and/or suction outlet covers which are installed in a small area and/or below the surrounding surface can cause severe injury or death due to body entrapment hazard.
 To reduce the risk of body entrapment, installation of the field fabricated sumps must be such that the top of the mounted cover is a minimum of 1 1/2" above the finished pool surface over an area larger than 40" on a diagonal.



Concrete - Standard Body

Product Description

For use on residential and commercial pool, spa or water feature applications with various plumbing and color considerations. These suction outlets are VBG compliant, tested to ANSI/APSP-16 standards and meet all CPSC requirements.



Models Specs Brochures Manuals Accessories

Select 2-4 items to Compare

Compare

Choose a Model

Filter Models

Cover Style Pool Type Application

Model	Description	Ctn. Qty.	Ctn. Weight	Select
WG1030AVBLKPAK2 Compare	8in Round Suction Outlet Frame & Cover-Black			
WG1030AVGRPAK2 Compare	8in Round Suction Outlet Frame & Cover-Gray			
WG1030AVPAK2 Compare	8in Round Suction Outlet Frame & Cover-White			
WG1051AVPAK2 Compare	1.5in x 1.5in Suction Outlet Assembly-White			
WG1052AVPAK2 Compare	2in x 1.5in Suction Outlet Assembly-White			
WG1053AVPAK2 Compare	1.5in x 2in Suction Outlet Assembly-White			
WG1054AVPAK2 Compare	2in x 2in Suction Outlet Assembly-White			
WG1030AVDGRPAK2	8in Round Suction Outlet			

NOT INCLUDED IN BOB'S POOLS AND SCREENS SCOPE OF WORK OR ORDER SHEET

Expense for site work, landscaping, re-sod work, irrigation adjustments, stucco and paint touch-up.

I have reviewed and I give my approval to proceed with the construction of this project.

X _____
Customer Approval

TO BE REMOVED:
SOD: 0 FENCE: 0 TREES: 0
SLAB: 0 OTHER: —

ELEVATION 2 1/4 " BELOW
OF TOP OF SHELL: _____ OF _____

BRANCH: 2 @ DIG: _____
TRUNK/SUCTION: 2 HAUL: _____
RETURN: 1 1/2 DROP: X

SPECIAL NOTES

INSTALL DRIVEWAY 1188
INSTALL Covered ENTRY 144
Brick Coping
2' SHEER
1 bubbler in Sunshelf
5' ALUMINUM FENCE 2 GATES
LONG ISLANDER
122 LINAR Feet
Pool Provice on left
SIDE OF HOUSE

BABY FENCE: LN. FT. 81
ALARMS: HOW MANY? _____

FIELD SUPER:
Scott Thomson
PHONE: 407-927-1437

Please Contact me for any Questions:
Mark Mills

JOB #: 1221
LOT #: 32
SUB: Belle Vista

GENERAL SPECIFICATIONS

POOL SIZE: 14 x 28 AREA: 312 PERIMETER: 75 FT.
CAPACITY: 9335 GALLONS: POOL DEPTH: 3' to 6'
SPA SIZE: 0 x 0 AREA: 0 PERIMETER: 0 FT.
THERAPY JETS IN SPA: 0 SPA LIGHT: YES NO
STEPS: 21 LN. FT. BENCH: 8 LN. FT. SPA BENCH: 0 LN. FT.

PUMP: MaxFlo XL SP2305X7EF SIZE: Single speed 3/4 HP
AUX PUMP: None SIZE: _____ HP
FILTER: CARRIAGE SIZE: 1200
HEATER: NONE CHLORINATOR: IN LINE

TOTAL 6" OF TILE: 105 LN. FT. TILE SUPPLIER: _____
TILE COLOR: _____ GROUT COLOR: _____
STEP TILE: DIAMOND INLAYS: X 1/3 INLAYS: _____ BULLNOSE: _____

AREA: 753 RE-TOP: 756 SQ. FT. DECK RISER: 10' LN. FT.
DECKING: PAVERS COLOR: HARVEST BLEND
COPING: Brick COLOR: _____
PAVER STYLE: _____ PAVER PATTERN: ADIAN
DECK-O-DRAIN: 55 LN. FT.

POOL FINISH: QUARTZ COLOR: _____
POOL LT: White Wed 12 VT 120 VT SCREEN COLOR: NONE
SPA LT: NONE 12 VT 120 VT STYLE: 0 ELITE:
WTR FT LT: NONE 12 VT 120 VT APPROX SQ. FT. 0
 SWITCH OR REMOTE SOFFIT: DOORS:
TIME CLOCK: INC 1 STORY: 2 STORY:

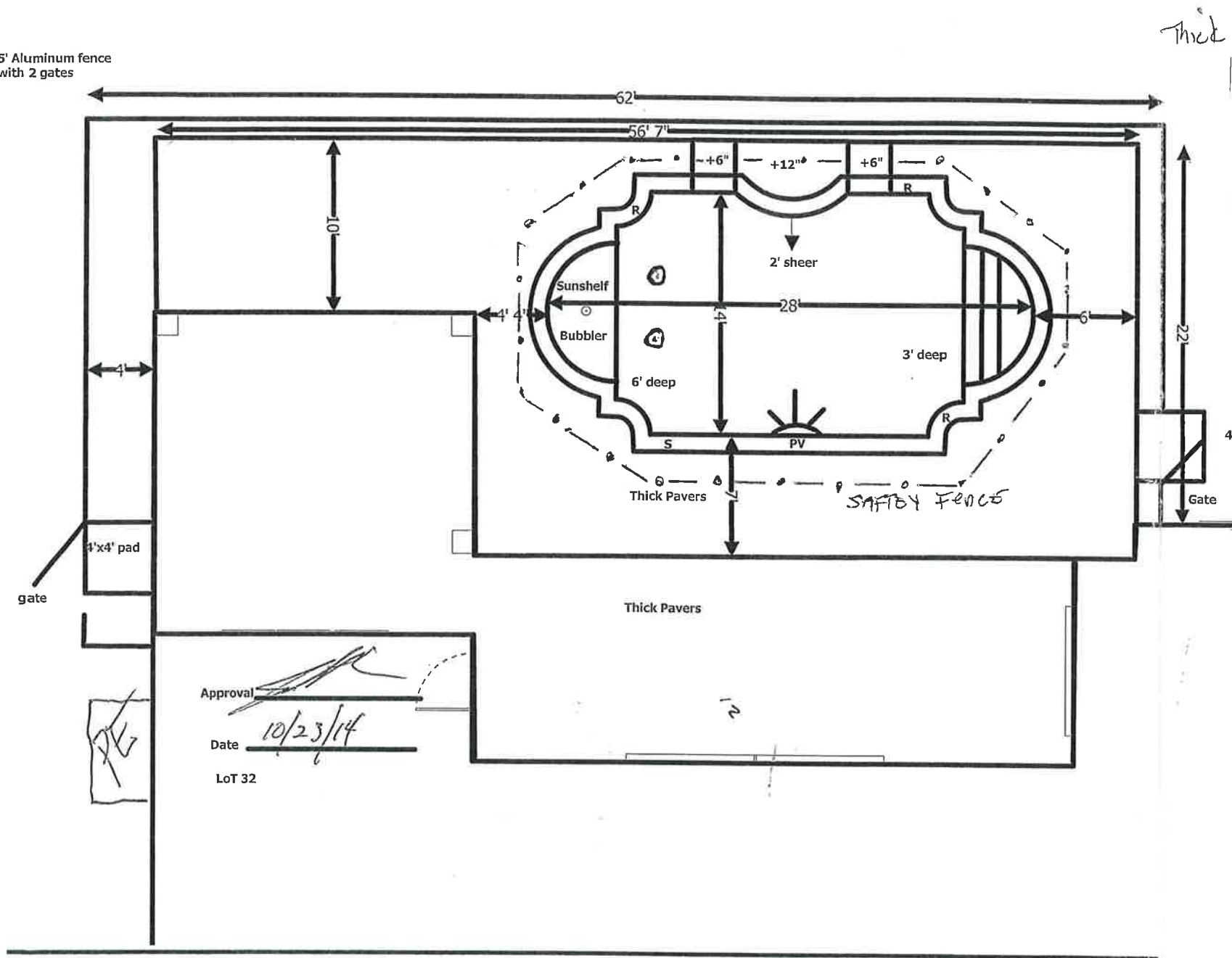
POOL CLEANER: NONE

Map: EAST-WEST EXPRESSWAY, CONWAY ROAD, SEMORAN BLVD, HOFFNER AVE, BEELINE. Distances: 0.3 MILES, 4 MILES, 2 MILES, 1.2 MILES.

Reviewed for Code Compliance
Universal Engineering Sciences

NAME: John CARL
ADDRESS: 4106 Belle Vista Isle
CITY: Belle Isle FL ZIP: 32812
PHONE: _____ CELL: 407-947-5400
EMAIL ADDRESS: JPC.CONSTRUCTION@AOL.COM

SCALE 1" = 8'
THIS RENDERING IS SUBJECT TO CHANGE:
Measurements of the pool, pool deck, and the position of the pool deck were based upon a preliminary plot plan. The plot plan may be different than the actual measurements and position of the home once the home is built. Bob's Pools and Screens reserves the right to modify all pool plans, specifications, and location of the swimming pool in order to accommodate any variations between the preliminary plot plans, this may result in additional cost to the homeowner. Retaining footer wall and raised beams required due to unusual lot grading falling to or away from residence may result in additional cost to homeowner or builder as well.



5' Aluminum fence with 2 gates

Thick Pavers

4' x 4' pad

gate

Gate

Swimming Pool Energy Efficiency Compliance Information

Note: These Requirements apply ONLY to the Filtration Pump

ANSI / ASPC / ICC-15 2011

Flow Calculations:

Pool water volume 9335 / 360 = 26 gpm - this is the calculated flow rate

Note: for pools under 13,000 gals. the calculated flow rate or 36 gpm whichever is greater = the filtration flow rate

Note: Is there an Auxiliary load on the filtration pump? Yes No

If so, what is the calculated auxiliary flow rate 40 gpm

Flow rate (low speed) N/A gpm @ N/A rpm

Minimum suction side pipe size @ 6 fps 1 1/2 in. Minimum suction side branch pipe size @ 6 fps 1 1/2 in.

Minimum return side pipe size @ 8 fps 1 1/2 in. Minimum return side branch pipe size @ 6 fps 1 1/2 in.

Determine Filter Size:

Filter Factors (GPM/SF): Cartridge (0.375) D E (2.0) Sand (15)

Filter Size: 40 / 0.375 = 106 1200
(Flow Rate) (Filter Fact) (Filter Size) (Filter Make and Model)

Pump Controls:

Filtration pump has no auxiliary load- standard time clock

Filtration pump with auxiliary load-Control model for low speed default within 24 hrs N/A

Heater Model: N/A
(Make, Model and Size)

Gas Heater Efficiency Rating N/A (No Pilot Light)

Heater Pump Efficiency C.O.P N/A

ANSI 5 & ANSI 7 Compliance Work Sheet

Determine Simplified TDH:

- Distance from pool to pump in feet: 36
- Friction loss (in suction pipe) in 2 inch pipe per 1 ft. @ 40 gpm = 0.10 (from pipe flow/friction loss chart)
- Friction loss (in return pipe) in 1 1/2 inch pipe per 1 ft. @ 40 gpm = 0.21 (from pipe flow/friction loss chart)

Determine Simplified TDH (CONTINUED):

- 36 x 0.10 = 3.6
(Length of Suct. Pipe) (Fr. loss/ft of Pipe) (TDH Suct. Pipe)
 - 36 x 0.21 = 7.56
(Length of Return Pipe) (Fr. loss/ft of Pipe) (TDH Return Pipe)
- TDH in Piping: 11.16
Filter / Heater loss in TDH: 7.00
All other losses: 6.00
- Total Dynamic Head (TDH): 24.16

Determine Pipe Sizes:

Branch Piping to be 2 inch to keep velocity @ 6 fps max. at 40 gpm System Flow Rate.
Trunk, Skimmer & Suction Piping to be 3 inch to keep velocity @ 8 fps max. at 40 gpm System Flow Rate.
Return Piping to be 1 1/2 inch to keep velocity @ 10 fps max. at 40 gpm System Flow Rate.

Pump Selection: as Listed on Curve A or C (circle one)

Filtration Pump SP2305X7EE Maximum Flow Rate 40 gpm
Single Speed 3/4 HP

Main Drain Cover WG1048E
(Make and Model)

Determine the Number and Type of Required In-Floor Suction Outlets:

Check all that apply.

3'-0" 2 Floor suction outlets @ 125 gpm max. flow

3 suction outlets @ gpm max. flow

channel drain @ gpm w/ ports

Total Head In Feet Conversion Chart											
Inches Mercury (Vacuum Gauge)											
	0	2	4	6	8	10	12	14	16	18	
0	0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1	20.3	
1	2.3	4.6	6.8	9.1	11.4	13.6	15.9	18.1	20.4	22.7	
2	4.6	6.9	9.1	11.4	13.7	15.9	18.2	20.4	22.7	25.0	
3	6.9	9.2	11.5	13.7	16.0	18.2	20.5	22.8	25.0	27.3	
4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1	27.3	29.6	
5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.6	31.9	
6	13.9	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9	34.2	
7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0	34.3	36.5	
8	18.5	20.7	23.0	25.3	27.5	29.8	32.0	34.3	36.6	38.8	
9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.9	41.1	
10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.2	43.4	
11	25.4	27.7	29.9	32.2	34.5	36.7	39.0	41.2	43.5	45.8	
12	27.7	30.0	32.2	34.5	36.8	39.0	41.3	43.5	45.8	48.1	
13	30.0	32.3	34.6	36.8	39.1	41.3	43.6	45.9	48.1	50.4	
14	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.2	50.4	52.7	
15	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.5	52.7	55.0	
16	37.0	39.2	41.5	43.7	46.0	48.3	50.5	52.8	55.0	57.3	
17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.4	59.6	
18	41.6	43.8	46.1	48.4	50.6	52.9	55.1	57.4	59.7	61.9	
19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	62.0	64.2	
20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0	64.3	66.5	
21	48.5	50.8	53.0	55.3	57.6	59.8	62.1	64.3	66.6	68.9	
22	50.8	53.1	55.3	57.6	59.9	62.1	64.4	66.6	68.9	71.2	
23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0	71.2	73.5	
24	55.4	57.7	60.0	62.2	64.5	66.7	69.0	71.3	73.5	75.8	
25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.8	78.1	
26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9	78.1	80.4	
27	62.4	64.6	66.9	69.2	71.4	73.7	75.9	78.2	80.5	82.7	
28	64.7	66.9	69.2	71.5	73.7	76.0	78.2	80.5	82.8	85.0	
29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.1	87.3	
30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.4	89.6	
31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.7	92.0	
32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	92.0	94.3	
33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.3	96.6	
34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4	96.6	98.9	
35	80.9	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9	101.2	

*NOTE: FIELD TDH MUST BE EQUAL TO OR HIGHER THAN THE CALCULATED TDH.

Flow and Friction Loss Per Foot Schedule 40 PVC Pipe					
Pipe Size	Velocity - Feet Per Second				
	6 fps	8 fps		10 fps	
1"	16 gpm	0.14'	21 gpm	0.23'	26 gpm
1.5"	37 gpm	0.08'	50 gpm	0.14'	62 gpm
2"	62 gpm	0.06'	82 gpm	0.10'	103 gpm
2.5"	88 gpm	0.05'	117 gpm	0.09'	146 gpm
3"	136 gpm	0.04'	181 gpm	0.07'	227 gpm
4"	234 gpm	0.03'	313 gpm	0.05'	392 gpm
6"	534 gpm	0.02'	712 gpm	0.03'	

TDH Calculation Options
For each pump

Check one.

Simplified Total Dynamic Head (STDH)
Complete STDH Worksheet - Fill in all blanks.

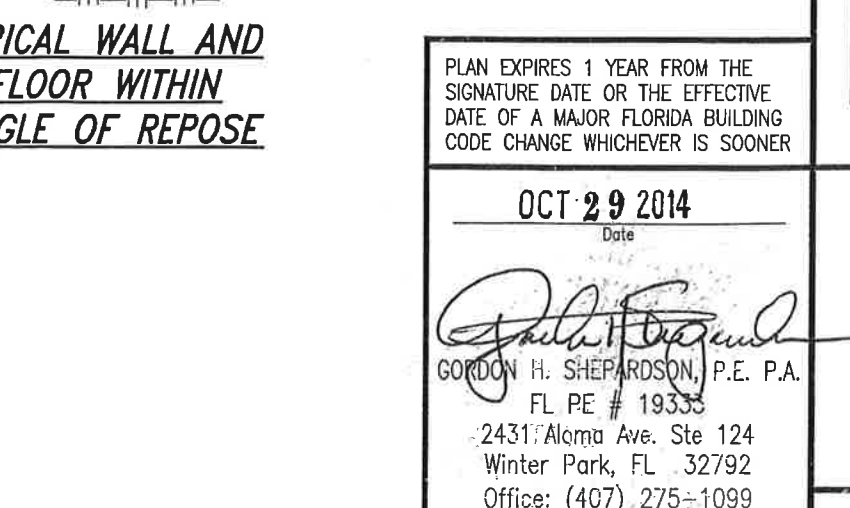
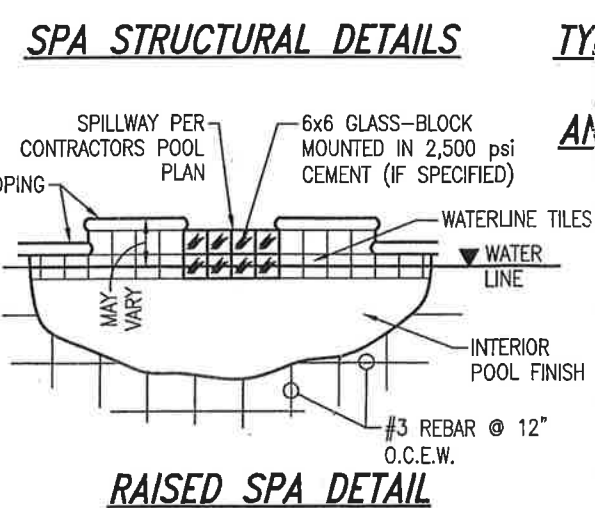
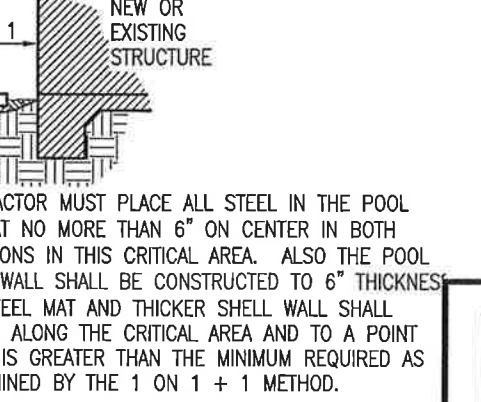
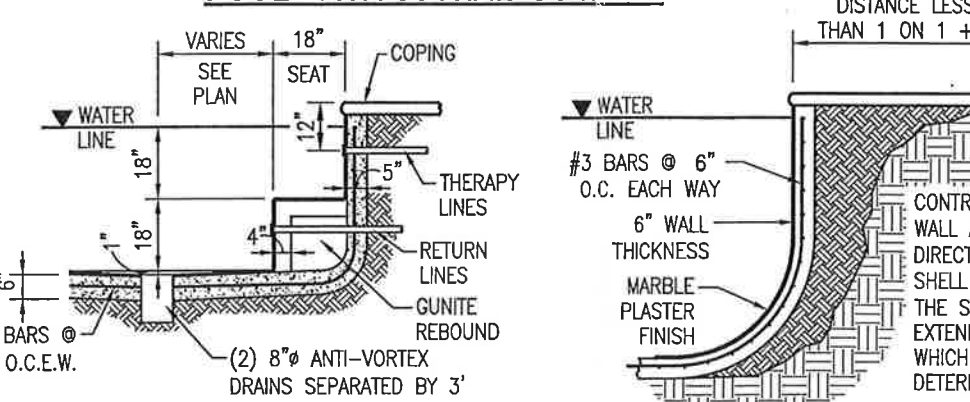
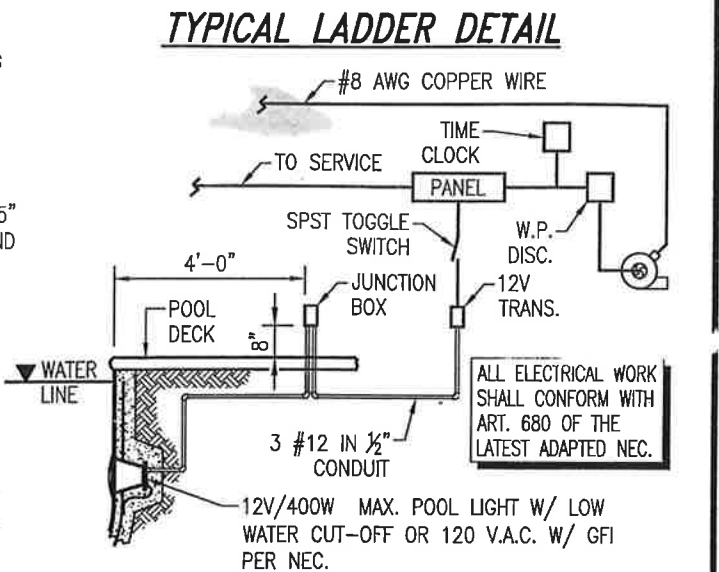
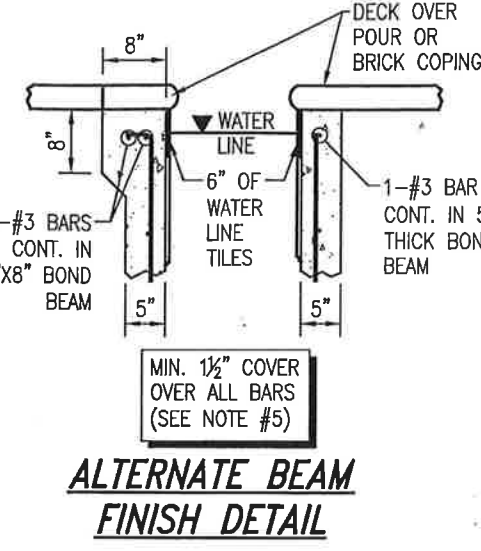
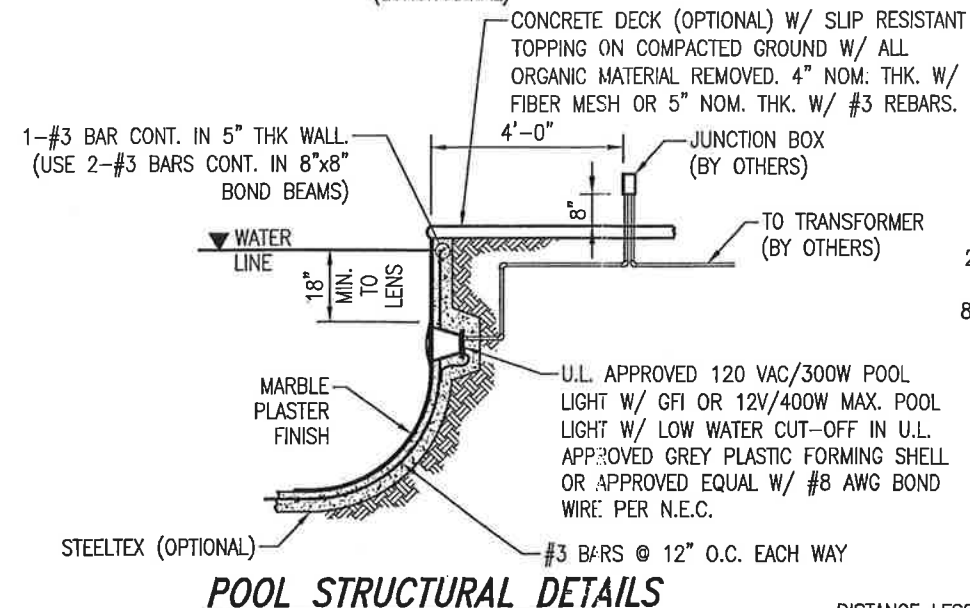
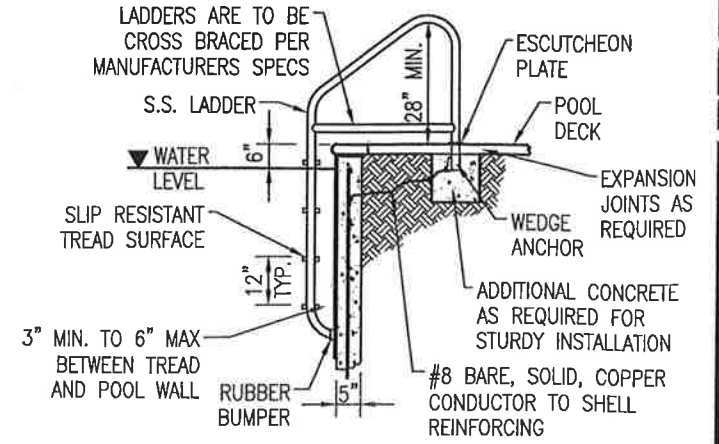
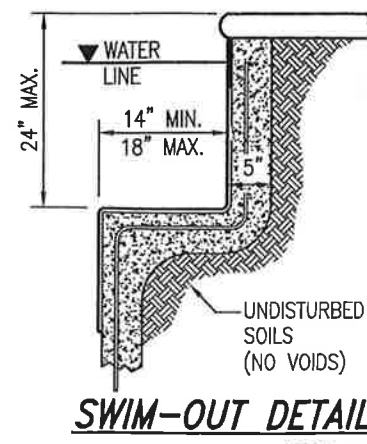
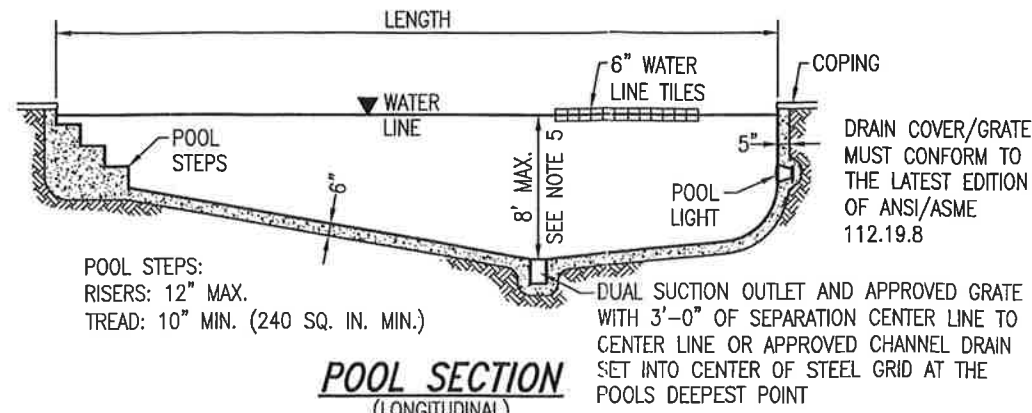
Total Dynamic Head (TDH)
Complete Program or other calcs. Fill in required blanks on worksheet & attach calculations.

Maximum Flow Capacity
of the new or replacement pump.

Date	owner
	Lot 32
Contractors Signature	Bell Vista
CPC1457513	
<small>Contractors Cert. No.</small>	
407-834-7100	
<small>Contractors Telephone No.</small>	Scale: None

GENERAL NOTES

- For pool plan, size, deck, and special details, see Contractor's Pool Plan.
- Pool Walls shall be 5" thick and Floors shall be 6" thick and shall be pneumatically applied Concrete with a Compressive Strength of 3,000 psi in 28 days. Concrete Decks shall be 2,500 psi. Concrete construction will conform to ACI Standard 318.
- All Pool construction shall comply with Florida Building Code Building 2010 and Florida Building Code Residential 2010, ANSI/NSP National Standard-5 for Residential Inground Swimming Pools, ANSI/NSP National Standard-3 for Permanently Installed Residential Spas, ANSI/APSP-7 American National Standard for Suction Entrapment Avoidance In Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins ANSI/APSP/ICC-15 American National Standard for Residential Swimming Pool and Spa Energy Efficiency and the National Adapted National Electric Code 2008 (NEC).
- All Pool Piping to be Schedule 40 PVC, bearing the mark of NSF Approval unless otherwise noted.
- All Reinforcing Steel to conform to ASTM 615, Grade 40. Reinforcing shall be #3 bars at 12" on center in each direction, w/ 15" lap joints in walls and floors up to 6'. Over 6' use #3 bars at 6" on center in each direction in the areas over 6'.
If Concrete is cast against Bare Earth without a Separation Barrier, the minimum cover shall be 3". With a Barrier (SteelTex) between Concrete and Earth, the minimum cover shall be 1 1/2".
- All Metallic Pool Fittings within 5' of the inside wall and deck reinforcing steel to be bonded to the Pool Reinforcing Steel with #8 AWG Copper Wire. The #8 Copper Wire to be run internally and externally with the NEC approved PVC Light Conduit from the Light Niche to the Junction Box. Completion of the pool grounding to the Electrical Panel Ground to be by Electrician.
- Bond all Sheathed Cables, Raceways, Metal Piping and all Fixed Metal Parts not separated by a permanent barrier, if within 5'-0" Horizontally from Water and 12'-0" Vertically of Maximum Water Level.
- Equipotential Bonding to be accomplished in accordance with Article 680 of the National Adapted Electrical Code 2008 (NEC).
- Pool or Patio shall bear only on Rock or Clean Sand, which shall be compacted to provide a Structurally Safe Bearing Capacity. Any Unsuitable Material encountered in excavation shall be removed in its entirety and the area shall be backfilled with acceptable material and properly compacted. Where unsuitable Material cannot be removed, the pool must be redesigned.
- The Contractor must protect Existing Structures from failure by acceptable methods if required. The Engineer accepts no responsibility for the safety of Existing Structures.
- The Design Engineer assumes no responsibility for pool construction in Easements or Required Setback areas. Pool Contractor and/or Owner shall verify the layout and all dimensions shown prior to construction.
- Contractor shall determine the location of all Utilities in relation to the Pool and its Equipment and ensure minimum clearances in accordance with Local Regulations and Ordinances.
- Contractor shall provide adequate Temporary Fencing around the construction area to prevent unauthorized entry into the Pool Area.
- If a water supply is provided, a minimum 3" Atmospheric Break will be provided.
- All Structural, Filtration and Electrical details outlined in these drawings also relate to Spa Construction.
- All Pool and Spa Heaters shall be equipped with an On/Off Switch mounted for easy access to allow the Heater to be Shut Off without adjusting the Thermostat settings and to allow restarting without relighting the Pilot Light.
- WARNING!** To empty the Pool for any reason, the Hydrostatic Uplift Pressure must be eliminated. The Owner must consult a Contractor experienced in eliminating Uplift Pressure.



BOB'S POOL SERVICE, INC.

850 E. SEMORAN BLVD.
CASSELBERRY FL 32707
(407) 834-7100
CPC 1457513

PLAN EXPIRES 1 YEAR FROM THE SIGNATURE DATE OR THE EFFECTIVE DATE OF A MAJOR FLORIDA BUILDING CODE CHANGE WHICHEVER IS SOONER

OCT 29 2014
Date

Gordon H. Shepardson, P.E. P.A.
FL PE # 19335
24317 Alama Ave. Ste 124
Winter Park, FL 32792
Office: (407) 275-1099
Fax: (407) 275-1015

RESIDENTIAL SWIMMING POOL MASTER SPECIFICATION DRAWING FOR BELLE ISLE

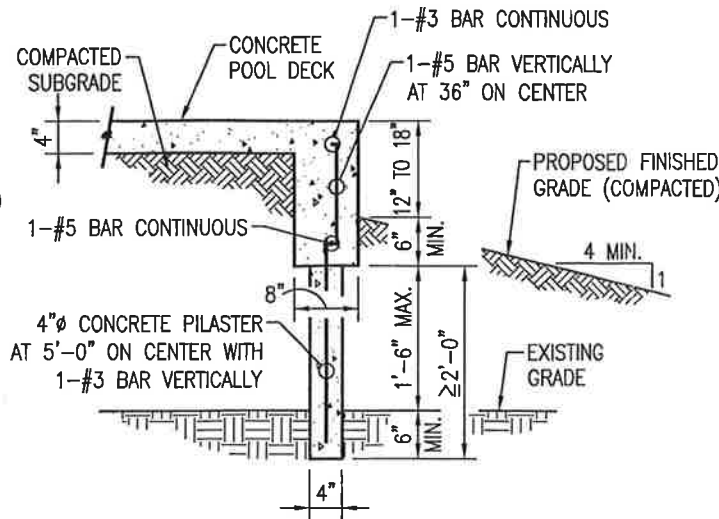
Scale: None Rev 9 - 03/14/12 T

TURNDOWN NOTES

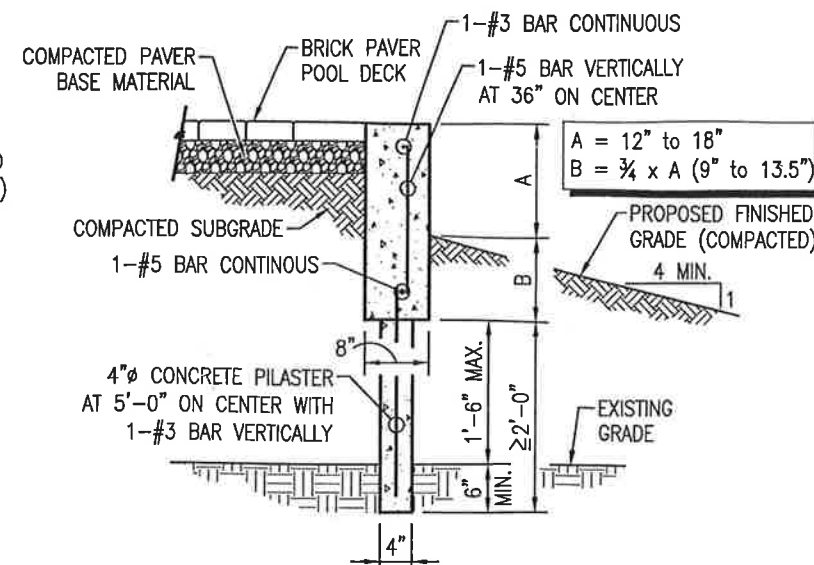
1. Detail is based on NO surcharge behind the Turndown and the Ground away from the Turndown is Level (>4 to 1). Turndown may abut Ribbon Footer and be tied into Footer if Appropriate, with #3 Rebar.
2. Turndown shall bear on Rock, Clean Sand or Structurally Sound Soils (>1,500 PSF) that shall be compacted to provide Optimum Bearing Capacity and prevent Settling or Shifting.
3. All Reinforcing Steel is to Conform to ASTM 615, Grade 40.
4. Concrete shall contain Fiber Mesh and have a 28 Day Compressive Strength of 2,500 PSI.
5. All Construction to Conform to Florida Building Code Building 2010, Florida Building Code Residential 2010.
6. Refer to Contractor's Plan on file with the Building Department for Details on Turndown Location.
7. If the Base of the Turndown does not extend into the Old (Existing) Ground, a 4"Ø Pilaster will be required every 5'-0" that will be either 2'-0" into the Ground or to 6" into the Indigenous Material, Whichever is Deeper. The Pilaster will have a #3 Rebar tied into the #5 Rebar in the base of the Vertical Pour.
8. A Deck Turndown is NOT intended to be a substitute for a Retaining Wall. If the Vertical Dimension from the Top of the Concrete Deck to the Old (Existing) Ground reaches 42" for a 12" Turndown, 48" for a 18" Turndown, for more than 20% of the Turndown Length or the Finished Grade Slope exceeds (steeper than) 4' Horizontally and 1' Vertically, a Turndown should not be used.
9. For a Paver Deck, if the Vertical Dimension from the Top of the Deck to the Old (Existing) Ground reaches 30.0" for a 12" Turndown, 36.0" for a 18" Turndown, for more than 20% of the Turndown Length or the Finished Grade Slope exceeds (steeper than) 4' Horizontally and 1' Vertically, a Turndown shall not be used.
10. A Screen Enclosure is not to be installed on top of any of the depicted Turndowns.

FOOTER NOTES

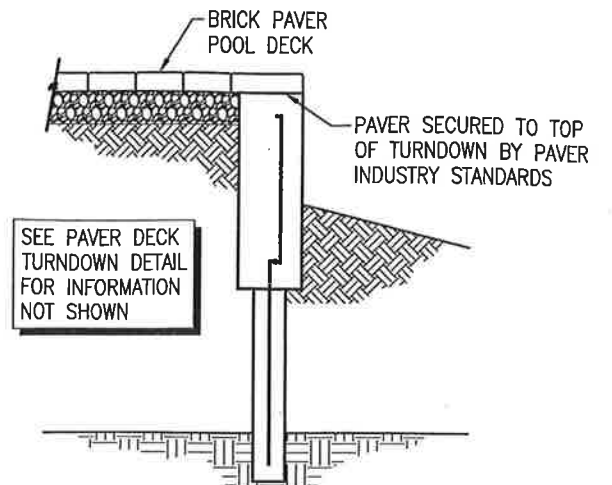
1. If a Screen Enclosure is to be installed, the Swimming Pool Contractor must Coordinate Design and Construction of any required Footer with the Screen Contractor. Specific Details for Footer to be Provided by the screen Enclosure Engineer.
2. Footer shall bear on Rock, Sand or Structurally Sound Soils (>1,500 PSF) that shall be compacted to provide Optimum Bearing Capacity and prevent Settling or Shifting.
3. Concrete shall have a 28 Day Compressive Strength of 2,500 PSI with Fiber Mesh or 6x6-10x10 W.W. Mesh.
4. (3) #3 Rebars is Equivalent to (1) #5 Rebar.
5. A Footer may be installed with a Brick Paver Pool Deck if required by the Jurisdiction or at the Option of the Contractor and may be placed over the Top of the Footer or Abutting the Side of the Footer.



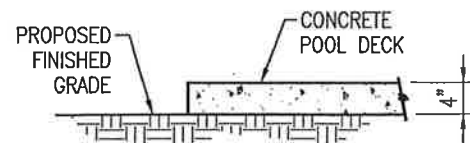
CONCRETE DECK TURNDOWN



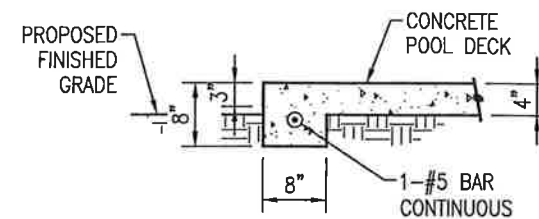
PAVER DECK TURNDOWN



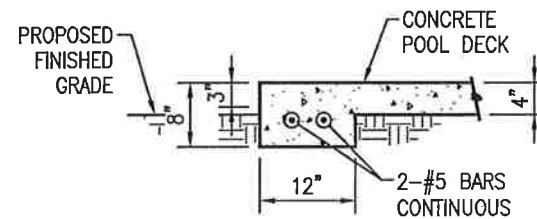
ALTERNATE PAVER ON TURNDOWN



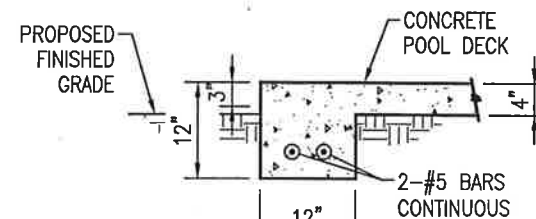
NO FOOTER



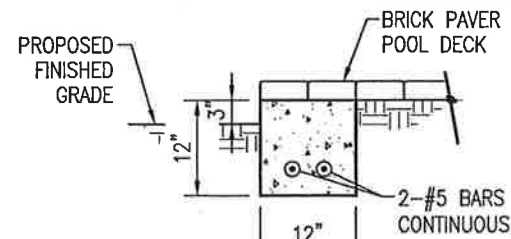
8" x 8" FOOTER



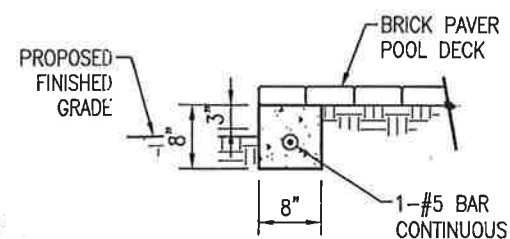
8" x 12" FOOTER



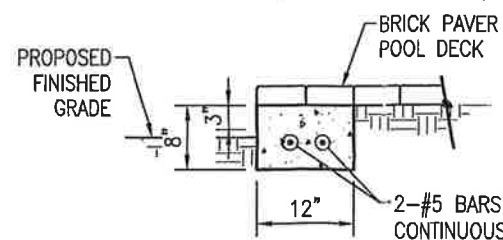
12" x 12" FOOTER



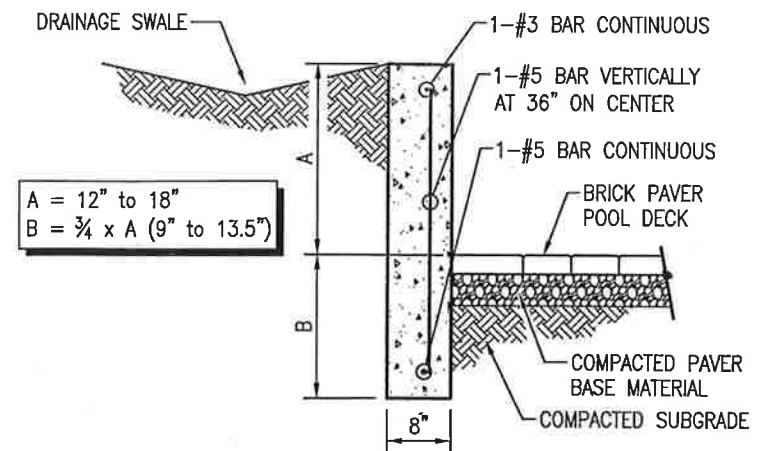
12" x 12" FOOTER W/ PAVER DECK



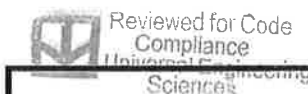
8" x 8" FOOTER W/ PAVER DECK



8" x 12" FOOTER W/ PAVER DECK



ALTERNATE PAVER LOCATION



BOB'S POOL SERVICE, INC.

850 E. SEMORAN BLVD.
CASSELBERRY FL 32707
(407) 834-7100
CPC1457513

OCT 29 2014
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FL PE # 19553
2431 Aloma Ave. Ste. 124
Winter Park, FL 32792
Office: (407) 275-1099
Fax: (407) 275-1015

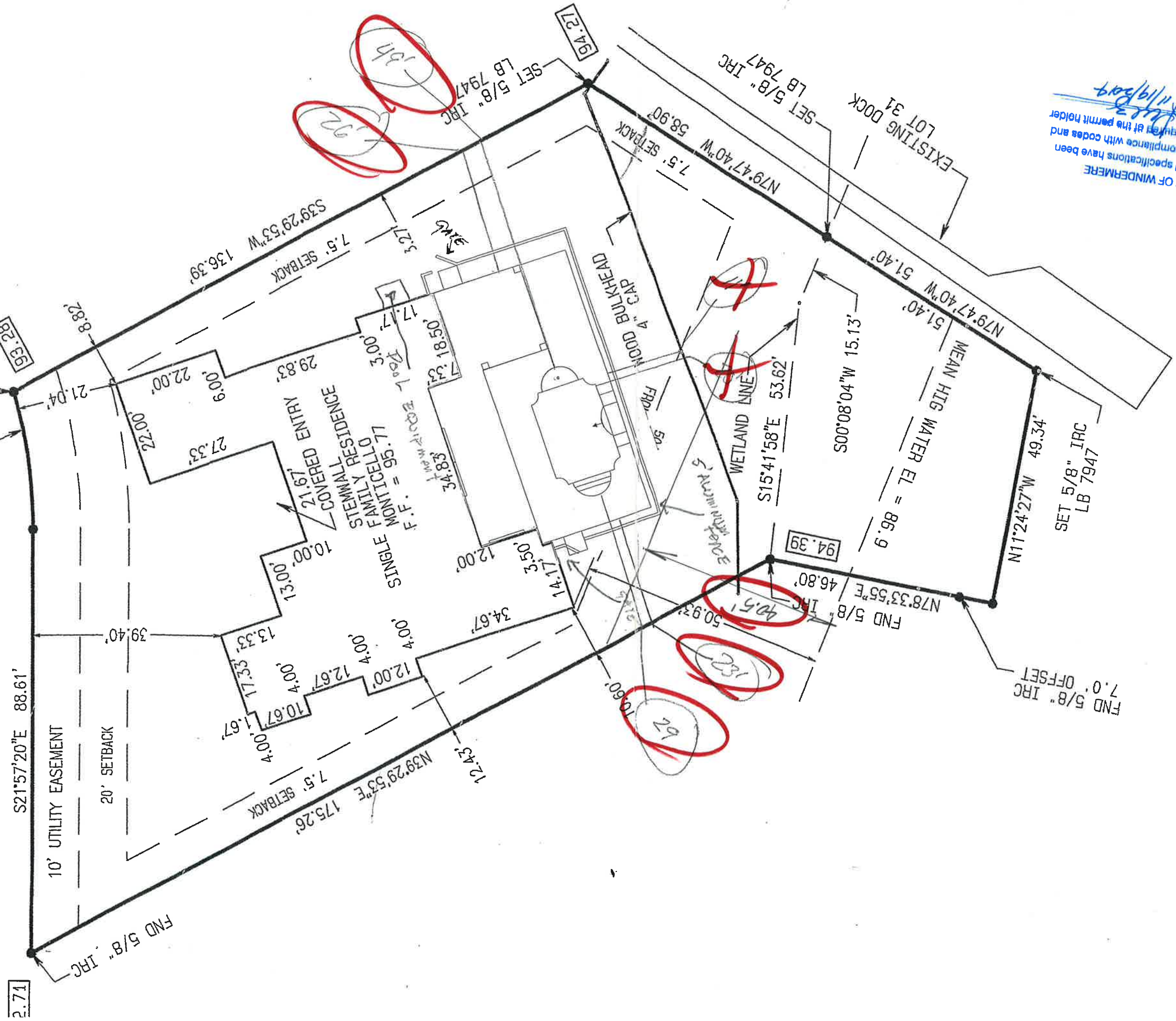
RESIDENTIAL SWIMMING POOL MASTER SPECIFICATION DRAWING FOR BELLE ISLE

Scale: None Rev 9 - 03/14/12 T

ISLA VISTA AVENUE

50' R.O.W. PER PLAT

CA = 16°38'22" A=29.04'
R=100.00'
SET 5/8" IRC
LB 7947



Amber Miller 3
 11/19/2014
 The plans and specifications have been reviewed. Full compliance with codes and regulations are required at the permit holder.

ZONING APPROVED
 Date: 11/19/14 By: *AMM*
 City of Belle Isle

* SEDIMENT FENCE MUST BE MAINTAINED DURING CONSTRUCTION.