

DATE 14/2010

Columbia County Building Permit
This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000029066

APPLICANT DEREK DIXON PHONE 904.651.9873
ADDRESS 1090 KENSINGTON PARK DRIVE ALTAMONTE SPRINGS FL 32714
OWNER KENNETH & BARBARA SWEENEY PHONE 352-316-3463
ADDRESS 918 SW CR 778 HIGH SPRINGS FL 32669
CONTRACTOR E. MICHAEL HOLLAND PHONE 407.830.5327
LOCATION OF PROPERTY 441-S TO C-778,TR PROPERTY ON L, 2ND LOT PAST MARYNIK
DR(OR) 2ND LOT BACK FROM SCRUBTOWN ROAD.
TYPE DEVELOPMENT SWIMMING POOL ESTIMATED COST OF CONSTRUCTION 45000.00
HEATED FLOOR AREA _____ TOTAL AREA _____ HEIGHT _____ STORIES _____
FOUNDATION _____ WALLS _____ ROOF PITCH _____ FLOOR _____
LAND USE & ZONING A-3 MAX. HEIGHT _____
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00
NO. EX.D.U. 0 FLOOD ZONE _____ DEVELOPMENT PERMIT NO. _____

PARCEL ID 16-7S-17-10006-102 SUBDIVISION SUMMER'S ACRES UNREC.
LOT 2 BLOCK _____ PHASE _____ UNIT _____ TOTAL ACRES 10.54

CPC056809
Culvert Permit No. _____ Culvert Waiver _____ Contractor's License Number _____ Applicant/Owner/Contractor _____
N/A _____ BLK _____ TC _____ Y _____
Driveway Connection _____ Septic Tank Number _____ LU & Zoning checked by _____ Approved for Issuance _____ New Resident _____

COMMENTS: NO8 ON FILE. ACCESSORY USE.

Check # or Cash 53833

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ Foundation _____ Monolithic _____
date/app. by _____ date/app. by _____ date/app. by _____
Under slab rough-in plumbing _____ Slab _____ Sheathing/Nailing _____
date/app. by _____ date/app. by _____ date/app. by _____
Framing _____ Insulation _____
date/app. by _____ date/app. by _____
Rough-in plumbing above slab and below wood floor _____ Electrical rough-in _____
date/app. by _____ date/app. by _____
Heat & Air Duct _____ Peri. beam (Lintel) _____ Pool _____
date/app. by _____ date/app. by _____ date/app. by _____
Permanent power _____ C.O. Final _____ Culvert _____
date/app. by _____ date/app. by _____ date/app. by _____
Pump pole _____ Utility Pole _____ M/H tie downs, blocking, electricity and plumbing _____
date/app. by _____ date/app. by _____ date/app. by _____
Reconnection _____ RV _____ Re-roof _____
date/app. by _____ date/app. by _____ date/app. by _____

BUILDING PERMIT FEE \$ 225.00 CERTIFICATION FEE \$ 0.00 SURCHARGE FEE \$ 0.00
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$ _____
FLOOD DEVELOPMENT FEE \$ _____ FLOOD ZONE FEE \$ _____ CULVERT FEE \$ _____ **TOTAL FEE** 275.00
INSPECTORS OFFICE _____ CLERKS OFFICE _____

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.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR 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."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

For Office Use Only Application # 1012-06 Date Received 12-6-10 By LH Permit # 29066
 Zoning Official BLK Date 10-12-10 Flood Zone N/A Land Use A-3 Zoning A-3
 FEMA Map # N/A Elevation N/A MFE N/A River N/A Plans Examiner T.C. Date 12-8-10
 Comments _____
☒ NOC ☒ DEH ☒ Deed or PA ☒ Site Plan ☒ State Road Info ☐ Parent Parcel # _____
☐ Dev Permit # _____ ☐ In Floodway ☒ Letter of Auth. from Contractor ☐ F W Comp. letter
 IMPACT FEES: EMS _____ Fire _____ Corr In File Road/Code _____
 School _____ = TOTAL N/A accessing use

Septic Permit No. N/A Fax 407-830-6404 Call
 Name Authorized Person Signing Permit Derek Dixon for Holland Pools Phone 407-830-5327 904-651-9873
 Address 1090 KENSINGTON PARK DR, AUSTIN, TEXAS 78714
 Owners Name Barbara Sweeney Phone 352-318-1530
 911 Address 918 SW County Rd 778, Nish Springs, FL 32699
 Contractors Name E. Michael Holland/Holland Pools Phone 407-830-5327
 Address 1090 Kensington Park Dr., AUSTIN, TEXAS 78714

Fee Simple Owner Name & Address _____
 Bonding Co. Name & Address _____
 Architect/Engineer Name & Address Gordon Shepardsen 672 N. Semoran Blvd, Ori., Fl.
 Mortgage Lenders Name & Address _____

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy

Property ID Number 16-75-17-10006-102 Estimated Cost of Construction \$45,000.00

Subdivision Name Summers Acres Lot 2 Block _____ Unit _____ Phase _____

Driving Directions 441S TO C-778, TR PROPERTY ON L 2ND LOT EAST
MARYNIE DeCOR 2ND LOT BACK FROM SCUBERTON ROAD

Number of Existing Dwellings on Property _____

Construction of in ground swimming pool Total Acreage 10.54 Lot Size _____

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height _____

Actual Distance of Structure from Property Lines - Front _____ Side _____ Side _____ Rear _____

Number of Stories _____ Heated Floor Area _____ Total Floor Area _____ Roof Pitch _____

Application is hereby made to obtain a permit to do 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 be performed to meet the standards of all laws regulating construction in this jurisdiction. **CODE:** Florida Building Code 2007 with 2009 Supplements and the 2008 National Electrical Code. Page 1 of 2 (Both Pages must be submitted together.) Revised 6-19-09

JW spoke w/ Stephanie Ref. A 12.13.10.

Columbia County Building Permit Application

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE: YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: 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.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. It may be to your advantage to check and see if your property is encumbered by any restrictions.

(Owners Must Sign All Applications Before Permit Issuance.)

X Barbara J. Sweeney

Owners Signature

****OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT. N/A**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

E Michael Holland

Contractor's Signature (Permitee)

Contractor's License Number CPC056809
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 1 day of December 2010.

Personally known ☒ or Produced Identification _____

Stephanie Baumgartner

State of Florida Notary Signature (For the Contractor)

SEAL:



STEPHANIE BAUMGARTNER
MY COMMISSION # DD 983166
EXPIRES: April 19, 2014
Bonded Thru Budget Notary Services

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER _____ CONTRACTOR E. Michael Holland PHONE 407-830-5327

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is **REQUIRED** that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name <u>David Pruett</u> License #: <u>EC 0002923</u>	Signature <u>[Signature]</u> Phone #: <u>904-272-7225</u>
MECHANICAL/ A/C	Print Name <u>[Signature]</u> License #: <u>[Signature]</u>	Signature _____ Phone #: _____
PLUMBING/ GAS	Print Name <u>E. Michael Holland</u> License #: <u>CR 056809</u>	Signature <u>E. Michael Holland</u> Phone #: <u>407-830-5327</u>
ROOFING	Print Name _____ License #: _____	Signature _____ Phone #: _____
SHEET METAL	Print Name _____ License #: _____	Signature _____ Phone #: _____
FIRE SYSTEM/ SPRINKLER	Print Name _____ License #: _____	Signature _____ Phone #: _____
SOLAR	Print Name _____ License #: _____	Signature _____ Phone #: _____

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.



COLUMBIA COUNTY BUILDING DEPARTMENT

135 NE Hernando Ave., Suite B-21

Lake City, FL 32055

Office: 386-758-1008 Fax: 386-758-2160

Application Number _____

NOTICE TO SWIMMING POOL OWNERS

I Barbara Sweeney have been informed and I understand that prior to the final inspection approval and use of my pool, I will need all the inspections approved and the required fencing installed in accordance with applicable regulations. The Florida Building Code Chapter 4 Section 24 requires private residential swimming pools, hot tubs, or non-portable spas containing water over 24 inches deep to meet the following pool barrier safety feature requirements:

- The pool access must be isolated by a barrier at least 4 feet high and installed around the perimeter of the pool. Unless the pool is equipped with a safety cover complying with the specifications of American Society for Testing and Materials standard F-1346-91.
- The barrier shall not have any gaps or openings which would allow a child to crawl under, squeeze through or climb over and must be placed no less than 20 inches from the water's edge.
- Gates located in the pool barrier must open outward away from the pool and be both self-closing and self-latching, with a release mechanism not less than 54" above the standing surface at the gate.
- The barrier must be separate from any other fence, wall, or other enclosure surrounding the yard unless the fence, wall or other enclosure or portion thereof is situated on the perimeter of the pool and meets the pool barrier requirements.
- Where a wall of a dwelling serves as part of the barrier **one** of the following shall apply:
 - 1) All doors and first floor windows with a sill height of less than 48 inches providing direct access from the home to the pool must be equipped with an alarm that has a minimum sound pressure rating of 85 decibels at 10 feet. The alarm shall sound immediately upon opening the window or door unless the temporary bypass mechanism is activated.
 - 2) **Or;** all doors providing direct access from the home to the pool must be equipped with a self-closing, self-latching device with a release mechanism located at least 54 inches above the floor.

According to Florida statutes, failure to comply with these requirements is a misdemeanor of the second degree, punishable by imprisonment for up to 60 days or a fine of up to \$500, except that no penalty shall be imposed if within 45 days after arrest or issuance of a summons or notice to appear, the pool is equipped with the aforementioned safety features and the responsible person attends a drowning prevention education program developed by the Florida Department of Health. I also understand that there are several inspections required in addition to a final inspection for my swimming pool.

Barbara Sweeney
Owner Signature / Date

Address: 918 SW County Rd 778, High Springs 32669

E. Michael Holland
Contractor Signature / Date

CPC 056809
License Number

Columbia County Property Appraiser

DB Last Updated: 11/4/2010

2010 Tax Year**Parcel:** 16-7S-17-10006-102

Tax Collector

Tax Estimator

Property Card

Parcel List Generator

<< Next Lower Parcel

Next Higher Parcel >>

Interactive GIS Map

Print

Owner & Property Info

<< Prev

Search Result: 3 of 3

Owner's Name	SWEENEY KENNETH C & BARBARA J		
Mailing Address	16975 HWY 278 WILLISTON, SC 29853		
Site Address	918 SW COUNTY ROAD 778		
Use Desc. (code)	VACANT (000000)		
Tax District	3 (County)	Neighborhood	16717
Land Area	10.540 ACRES	Market Area	02
Description	NOTE: This description is not to be used as the Legal Description for this parcel in any legal transaction.		
AKA LOT 2 SUMMER'S ACRES UNR: COMM NW COR, RUN S 80.15 FT TO S R/W CR-778, RUN E ALONG R/W 698.08 FT FOR POB, CONT E 587.02 FT, S 782.02 FT, W 587.02 FT, N 782.02 FT TO POB. ORB 983-2580 & WD 1197-2087			

**Property & Assessment Values**

2010 Certified Values		
Mkt Land Value	cnt: (0)	\$51,388.00
Ag Land Value	cnt: (1)	\$0.00
Building Value	cnt: (0)	\$0.00
XFOB Value	cnt: (0)	\$0.00
Total Appraised Value		\$51,388.00
Just Value		\$51,388.00
Class Value		\$0.00
Assessed Value		\$51,388.00
Exempt Value		\$0.00
Total Taxable Value	Cnty: \$51,388 Other: \$51,388 Schl: \$51,388	

2011 Working Values**NOTE:**

2011 Working Values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Show Working Values

Sales History

Show Similar Sales within 1/2 mile

Sale Date	OR Book/Page	OR Code	Vacant / Improved	Qualified Sale	Sale RCode	Sale Price
7/13/2010	1197/2087	WD	V	Q	01	\$130,000.00
5/21/2003	983/2580	WD	V	Q		\$48,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
NONE						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
NONE						

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000000	VAC RES (MKT)	10.54 AC	1.00/1.00/1.00/1.10	\$4,875.52	\$51,388.00

Columbia County Property Appraiser

DB Last Updated: 11/4/2010


<< Prev

3 of 3

DISCLAIMER

This information was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Although it is periodically updated, this information may not reflect the data

Job Number: 20101904

Elevation			Pool Specifications		
Set Pool Beam At: -7.75 IN	Set Tile At: -7.25 IN		Pool Area: 315 SF	Pool Length: 27 LF	Pool Width: 16 LF
Layout / Dig / Steel					
Dig & Haul	Benchmark: Finish Floor	Beam: 8 inch Bond	Pool Perimeter: 80 LF	Pool Depths: 3 - TO - 5	Volume: 10472 Gallons
Engineering					
Turn Down: 12 by 56 LF			Main Drain: 1 PR	Skimmer: 1 EA	Returns: 3 EA
Turn Down: 24 by 36 LF			Extra Step: 0 LF	Filter: CS 250	Filter Pump: Jandy Flor Pro 1.5hp 2 speed
Eng Angle Of Repose (Double Steel) Length:10			Inline Chlorinator: Jandy Aqua Pure 700	Pool Heater: Jandy Heat Pump	Pool Light: LED ColorLight #1
Decking and Tile					
Pavers Thin: 243 SF	Pavers Full: 1771 SF	Paver Color: Mahogany Ash	Vac Line: Pressure	Auto Cleaner: Polaris 360	Ozonator: UltraPure 700
Paver Pattern: Old town random	Footer Only: 92.00 LF	Coping Type: Bullnose Brick 155 LF	Pool Control System: PDA 6		
Step Tile Color: AZ606 Cobalt 20	Tile Color #1: AZ606 Cobalt	Deco Drains: 55 LF			
24 12 In Raised Beam	34 12 In Step Riser	Coping Color: Taupe			
Screen and Interior Finish			Spa Specifications		
Screen Style: Mansard Type	Screen Color: Bronze	Gutter: 56 LF	Accessories: 1 HP BLOWER Center Floor return	Spa Area: 35 SF	Spa Perimeter: 23 LF
Gutter Size: As Required	Interior Finish: Pebble Tec - Blue Lagoon	Safety Fence: 55 LF	Spa Jets: 6 EA	Spa Light: LED ColorLight 1 EA	Pre Plumb Spa
Screen Walls: 56 LF	Screen Roof: 631 SF	Screen Height: 10 FT	Dam Wall Thickness: 12 IN	Blower	Spa Heater: Jandy 250 Propane
Max Beam: 21 LF	Doors: 2	Lanai Insert: 36 LF	Spa Control System: PDA 6		
			Water Features and Options		
			Fla Falls: N/A	Water Features Pump: N/A	
Notes					
11/18/2010 12:31:35 PM - Pump#FHPM1.5hp(2 speed)..piping..Branch 3"..Trunk 3"..Return 2.5"					
11/18/2010 12:29:55 PM - Drop enough dirt to bring up grade for turn downs.					
11/18/2010 12:29:26 PM - 12 barrier footers(Pileasters) for rear due to drop dirt and build up.					
11/18/2010 12:27:13 PM - PLUMB NOTE::::Plumb external bypass on heaters					
11/18/2010 12:26:39 PM - PAVER NOTE:: Front patio gets paver...Thin South beach...pattern old town random..243sqft					
 <p>Holland Pools</p> <p>1090 Kensington Park Drive Altamonte Springs, FL 32714 Phone (407) 830-5327 Fax (407) 830-6404</p>					
Sales Rep: Derek Dixon					
Name: Barbara Sweeney		PBPG:		Lot #: 2	
Address: 918 SW county rd 778		Address: 918 SW county rd 778			
City: high springs	Zip: 32669	Municipality: Columbia		Subdivision: Summer acres	
Phones: 352-318-1530	Office:	Termite Bond Company: builder			
Cell:	Fax:				
Customer's Signature:				Date:	
NOT APPROVED					



Site plan for a pool and spa area. The plan includes the following features and dimensions:

- 12" Raised spa**: Located at the top left.
- 12" Riser**: Located below the spa.
- Planter**: Located below the riser.
- Brick coping**: Located around the pool area.
- 3'deep**: Depth of the pool area near the coping.
- 5'deep**: Depth of the pool area near the spa.
- paver deck**: Located around the pool and spa.
- covered lanai**: Located at the bottom right.
- Safety fence**: Located around the pool area.
- Deck drain**: Located near the paver deck.
- Equipment**: Located at the bottom right.
- Center floor return**: Located in the pool area.
- 4'x3'Door pad**: Located near the equipment area.

Dimensions provided:

- Overall width: 23' 11"
- Overall length: 34' 10"
- Spa width: 3'
- Riser width: 12'
- Planter width: 12'
- Brick coping width: 12'
- 3'deep width: 12'
- 5'deep width: 12'
- Paver deck width: 10' 4"
- Covered lanai width: 20' 11"
- Safety fence width: 11' 3"
- Deck drain width: 4' 9"
- Equipment width: 4' 6"
- Door pad width: 4' 6"

SW Sterling ter

Thin Pavers on front patio..243sqft South Beach Old town Random

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number 16-75-17-10006-102

County Clerk's Office Stamp or Seal

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description): Lot 2 Summer Acres
a) Street (job) Address: 918 SW County Rd 778
2. General description of improvements: In ground swimming pool
3. Owner Information
a) Name and address: Kenneth Sweeney 918 SW County Rd 778 High Springs FL 32669
b) Name and address of fee simple titleholder (if other than owner)
c) Interest in property: Owner
4. Contractor Information
a) Name and address: Holland Pools 10910 Kensington Park Dr., Altamonte Springs 32714
b) Telephone No.: Fax No. (Opt.)
5. Surety Information
a) Name and address:
b) Amount of Bond:
c) Telephone No.: Fax No. (Opt.)
6. Lender
a) Name and address:
b) Phone No.:
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
a) Name and address:
b) Telephone No.: Fax No. (Opt.)
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(i)(b), Florida Statutes:
a) Name and address:
b) Telephone No.: Fax No. (Opt.)
9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified):

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
COUNTY OF COLUMBIA

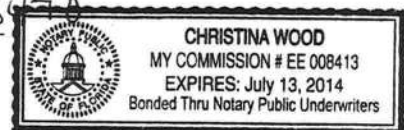
10. Kenneth C Sweeney
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager
KENNETH C SWEENEY
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 23rd day of November, 2010, by:

as _____ (type of authority, e.g. officer, trustee, attorney fact) for Kenneth Charles Sweeney (name of party on behalf of whom instrument was executed).

Personally Known _____ OR Produced Identification ☒ Type DL #SS00503533470

Notary Signature Christina Wood Notary Stamp or Seal:



---AND---

11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

Kenneth C Sweeney
Signature of Natural Person Signing (in line #10 above.)

COLUMBIA AVENUE
OF

COMPLETION

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 16-7S-17-10006-102

Building permit No. 000029066

Permit Holder E. MICHAEL HOLLAND

Owner of Building KENNETH & BARBARA SWEENEY

Location: 918 SW CR 778, HIGH SPRINGS, FL 32669

Date: 04/12/2011

Steve Lee

Building Inspector



POST IN A CONSPICUOUS PLACE
(Business Places Only)

THE N.W. CORNER OF
SECTION 16,
TOWNSHIP 7 SOUTH,
RANGE 17 EAST,
COLUMBIA COUNTY,
FLORIDA

P.O.B. EASEMENT
P.O.C.
PARCELS 1 & 13

COUNTY ROAD NO. 718
(80' RIGHT OF WAY)

N 89°55'25" E 587.02'

THE S. RIGHT OF WAY LINE
SET REBAR 30' E.

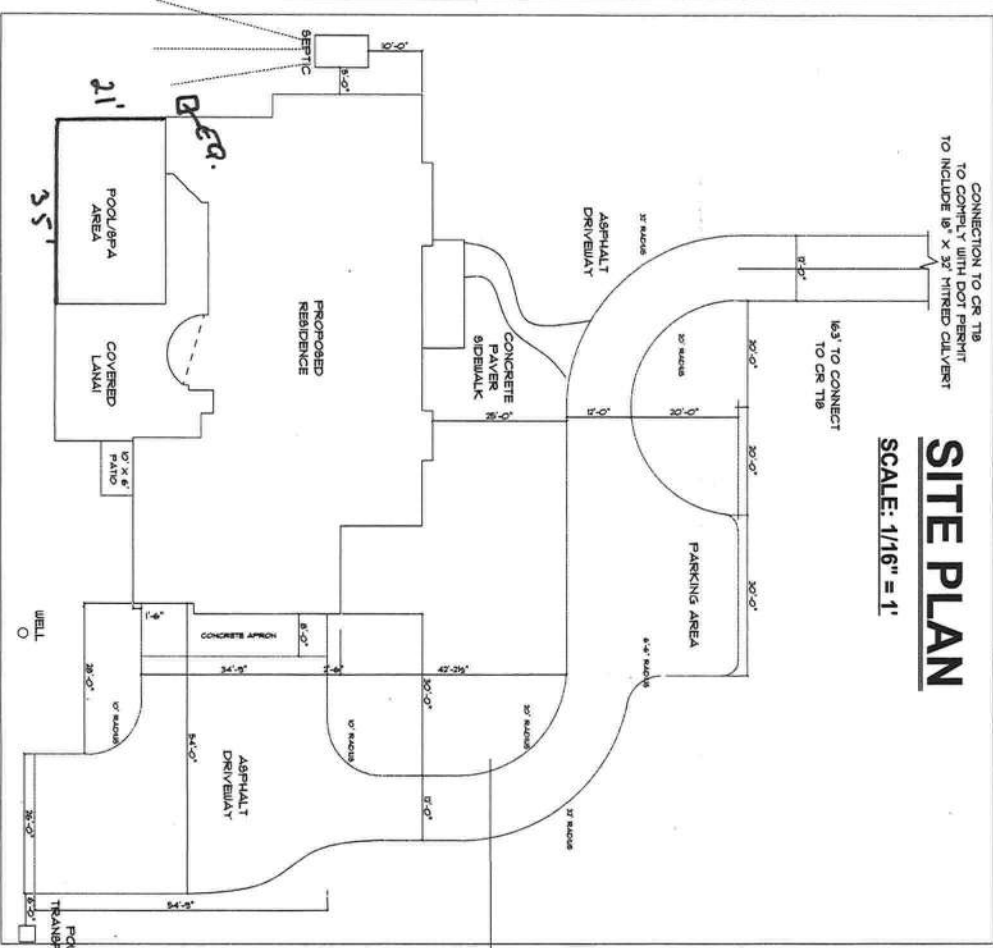
FENCE IS 0.8' S.

S 00°15'48" E 80.15'

N 89°55'25" E 698.08'

PARCEL 13

SITE PLAN
SCALE: 1/16" = 1'



60' INGRESS, EGRESS & PUBLIC UTILITIES EASEMENT
S.W. STERLING TERRACE
N 00°15'48" W 182.02'

PARCEL 12

PARCEL 2
10.54 AC. +/-

S 89°55'25" W 587.02'

SET REBAR 30' E.

PARCEL 1

S 00°15'48" E 182.02'

SITE PLAN
SCALE: 1" = 50'

PARCEL 3

CUSTOMER: KEN AND BARBARA SWEENEY
CONTRACTOR: SUTTON FAMILY HOMES & MANAGEMENT CONSULTING, INC.

SUBDIVISION: SUMMER'S ACRES
LOT: LOT 2

PLAN NAME: KEN & BARBARA'S DREAM HOUSE
GARAGE POSITION: GARAGE RIGHT
SCALE: 1/4" = 1'-0"
UNLESS OTHERWISE NOTED

AREA SUMMARY	
MAIN LIVING:	3244 SF
GARAGE/MECH:	948 SF
ENTRY:	160 SF
LANAI:	800 SF
TOTAL:	5152 SF

*ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL CODES
*THESE PLANS AND NOTES ARE THE PROPERTY AND SOLE RESPONSIBILITY OF SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. USE OF THESE PLANS WITHOUT THE WRITTEN CONSENT OF SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. IS PROHIBITED.
*THESE PLANS ARE SUBJECT TO MODIFICATION AS NECESSARY TO MEET CODE REQUIREMENTS OR TO FACILITATE MECHANICAL INSTALLATIONS OR TO INCORPORATE DESIGN IMPROVEMENTS. THE BUILDER RESERVES THE RIGHT TO MAKE ANY CHANGES FOR ANY REASON, AT ANY TIME, PROVIDING THEY COMPLY WITH THE CODE.
*THE SUB-CONTRACTOR SHALL COMPARE AND COORDINATE ALL DRAWINGS. WHEN A DISCREPANCY OR ERROR OR OMISSION EXISTS, THE SUB-CONTRACTOR SHALL COMPLY WITH THE CODE AND CONTACT THE BUILDER IN WRITING FOR PROPER ADJUSTMENT.

REVISION DATE:	
08/06/2010	
08/13/2010	
08/21/2010	
09/16/2010	
09/29/2010-FINAL	

DESIGNED BY:
SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC.
PO BOX 1108
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PH (352) 318-8884
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SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

PAGE CONTENT:
SITE PLAN

SHEET NO.
6

2016/904

ANSI/APSP-7 2006 Specifies three methods for determining the maximum system flow rate. The following simplified TDH calculation is one of the methods specified.

Simplified Total Dynamic Head (TDH) Calculation Worksheet

Determine Maximum System Flow Rate:

Minimum Flow Rate Required: 35 gpm Per Skimmer (Required: 1 skimmer per 800 sq ft of surf. area)

- Calculate Pool Volume: $\frac{350}{1} \times \frac{4}{1} \times 7.48 \text{ (gal./cubic foot)} = \frac{10472}{1}$
- Determine preferred Turnover Time in hours: $\frac{6}{1} \times 60 \text{ (min. / hr.)} = \frac{360}{1}$
- Determine Max Flow Rate: $\frac{10472}{360} = 30 + 30 = 60$
- Spa Jets: $\frac{6}{1} \times \frac{20}{1} \text{ gpm per jet} = \frac{120}{1} \text{ flow rate.}$

(For single pump pool/spa combo, use the higher of No. 3 or No. 4 in the following calculations for the pool & spa)

Determine Pipe Sizes:

Branch Piping to be	3	inch to keep velocity @ 6 fps max. at	120	gpm Maximum System Flow Rate.
Trunk, Skimmer & Suction Piping to be	3	inch to keep velocity @ 8 fps max. at	120	gpm Maximum System Flow Rate.
Return Piping to be	2.5	inch to keep velocity @ 10 fps max. at	120	gpm Maximum System Flow Rate.

Determine Simplified TDH:

- Distance from pool to pump in feet: 12
- Friction loss (in suction pipe) in 3 inch pipe per 1 ft. @ 120 gpm = .07 (from pipe flow/friction loss chart)
- Friction loss (in return pipe) in 2.5 inch pipe per 1 ft. @ 120 gpm = .13 (from pipe flow/friction loss chart)
- $\frac{22}{18} \times .07 = .154$
- $\frac{1}{18} \times .13 = .007$

TDH in Piping: 3.84

Filter loss in TDH (from filter data sheet): 6.2

Heater loss in TDH (from heater data sheet): 10.9

Total all other loss: 3.8

Total Dynamic Head (TDH): 24.78

Selected Pump and Main Drain Cover: FTHM/5-2 speed

Pump selection

Janoy P6-P15hp

using pump curve for TDH & System Flow Rate

Main Drain Cover

Hayward

(System Flow Rate must not exceed approved cover flow rates)

Notes: Minimum system flow based on min. flow per skimmer of 35 gpm.

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

Check all that apply.

- ☒ 3'-0" ☒ suction outlets @ 120 gpm max. flow (see note 2).
- ☐ ☒ suction outlets @ 3 gpm max. flow (see note 3).
- ☐ channel drain @ 1 gpm w/ ports (see note 4).

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.

Notes

- If a variable speed pump is used, use the max. pump flow in calculations.
- For side wall drains, use appropriate side wall drain flow as published by manufacturer.
- Insert manufacturer's name and approved maximum flow
- See installation instructions for number of ports to be used.
- In-Floor suction outlet cover/grate must conform to most recent edition of ASME/ANSI A112.19.8 and be embossed with that edition approval.
- Pump, Filter & Heater make and model cannot be changed, and equipment location cannot be moved closer to pool without submitting a revised plan and TDH calculation worksheet for approval.

Flow and Friction Loss Per Foot

Schedule 40 PVC Pipe

Pipe Size	6 fps	Velocity - Feet Per Second	8 fps	10 fps
1"	16 gpm	0.14'	21 gpm	0.23'
1.5"	37 gpm	0.06'	50 gpm	0.14'
2"	62 gpm	0.06'	82 gpm	0.10'
2.5"	88 gpm	0.05'	117 gpm	0.09'
3"	136 gpm	0.04'	181 gpm	0.07'
4"	234 gpm	0.03'	313 gpm	0.05'
6"	534 gpm	0.02'	712 gpm	0.03'

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
1	2.3	4.6	6.8	9.1	11.4	13.6	15.8	18.1	20.3
2	4.6	6.8	9.1	11.4	13.7	15.9	18.2	20.4	22.7
3	6.9	9.2	11.5	13.7	16.0	18.3	20.5	22.8	25.1
4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1	27.3
5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.6
6	13.8	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9
7	16.2	18.4	20.7	23.0	25.3	27.5	29.8	32.0	34.2
8	18.5	20.7	23.0	25.3	27.5	29.8	32.0	34.3	36.5
9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.8
10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.1
11	25.4	27.7	29.9	32.2	34.5	36.7	39.0	41.2	43.4
12	27.7	30.0	32.2	34.5	36.8	39.0	41.3	43.5	45.8
13	30.0	32.3	34.6	36.8	39.1	41.4	43.6	45.9	48.1
14	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.2	50.4
15	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.5	52.7
16	37.0	39.2	41.5	43.7	46.0	48.3	50.5	52.8	55.0
17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.3
18	41.6	43.8	46.1	48.4	50.6	52.9	55.1	57.4	59.6
19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	61.9
20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0	64.2
21	48.5	50.8	53.0	55.3	57.6	59.8	62.1	64.3	66.5
22	50.8	53.1	55.3	57.6	59.9	62.1	64.4	66.6	68.8
23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	68.9	71.2
24	55.4	57.7	60.0	62.2	64.5	66.7	69.0	71.3	73.5
25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.8
26	60.1	62.3	64.6	66.8	69.1	71.4	73.6	75.9	78.1
27	62.4	64.6	66.9	69.2	71.4	73.7	75.9	78.2	80.4
28	64.7	66.9	69.2	71.5	73.7	76.0	78.2	80.5	82.7
29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.0
30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.3
31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.6
32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	91.9
33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.2
34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4	96.6
35	80.8	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9

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

Drawn By: A R PATTON & Associates, Inc. Specializing in Residential and Commercial Pools, Fountains and Features

Holland Pools
Flowing and Excellence in Service

1090 Kensington Park Dr
Altamonte Springs FL 32714
(407) 830-5327
CPC0056809

RESIDENTIAL
SWIMMING POOL
MASTER SPECIFICATION
DRAWING
FOR

JUN 22 2009

Date

Date

This form is the property of Gordon H. Shepardon, PE and may only be used in conjunction with my Residential Swimming Pool Specification Drawings or by others with my written permission.

Contractors Signature
Michael H. Shepardon
Contractors Printed Name
CPC 056809
Contractors Cert. No.
407-830-5327
Contractors Telephone No.

GORDON H. SHEPARDSON, P.E.
FL PE # 19363
672 N. Seminole Blvd., Ste 203
Orlando, FL 32807
Office: (407) 275-1099
Fax: (407) 275-1015

Scale: None Rev 4 - 4/15/09



Qualification Test Plan

Title:
Chlorine Generator Cell
Qualification Test Plan

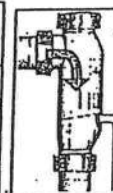
QTP #: 0113

Revision #: B
Date: 2/27/07

Page 23 of 28

3-Port AquaPure1400 (.040) – 90°Plumb

Flow Rate (GPM)	Pressure (PSI) @ Inlet	Pressure (PSI) @ outlet	Pressure Drop (Delta P)
30	43.7	43.6	0.1
50	40.0	39.7	0.3
70	34.4	33.7	0.7
80	30.8	29.9	0.9
100	21.1	19.5	1.6
120	12.8	10.7	2.1
132	4.2	1.4	2.8



Square Cell AquaPure700

Flow Rate (GPM)	Pressure (PSI) @ Inlet	Pressure (PSI) @ outlet	Pressure Drop (Delta P)
30	43.8	43.3	0.5
50	40.7	39.5	1.2
70	35.1	33.6	1.5
80	32.5	30.5	2.0
100	22.8	19.5	3.3
120	14.7	10.9	3.8
132	5.5	0.1	5.4



Square Cell AquaPure1400

Flow Rate (GPM)	Pressure (PSI) @ Inlet	Pressure (PSI) @ outlet	Pressure Drop (Delta P)
30	44.0	43.4	0.6
50	40.6	38.7	1.9
70	35.6	33.8	1.8
80	31.7	29.6	2.1
100	23.5	20.3	3.2
120	15	10.7	4.3
132	5.6	0.2	5.4



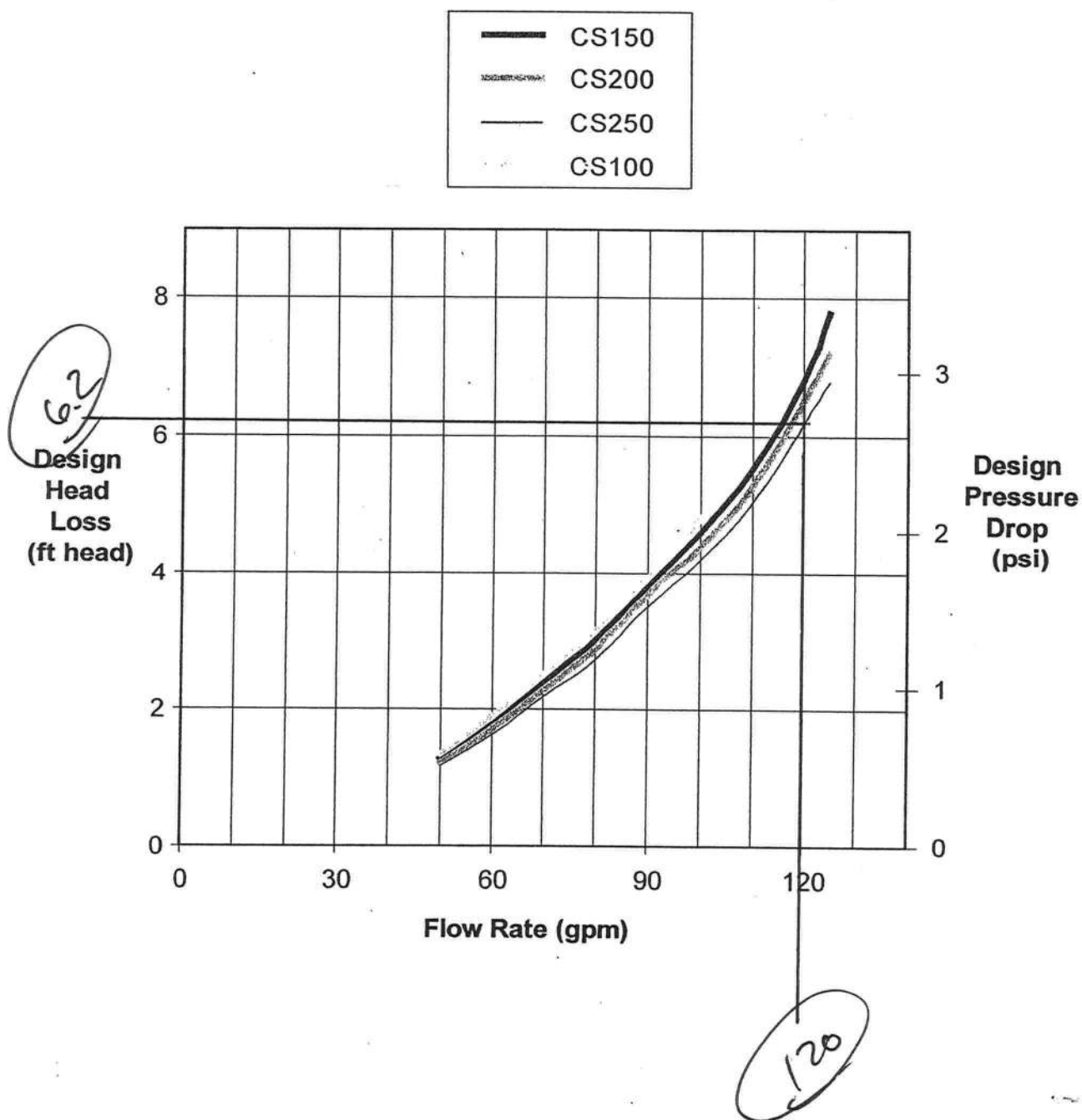
Originator

Richard Wu

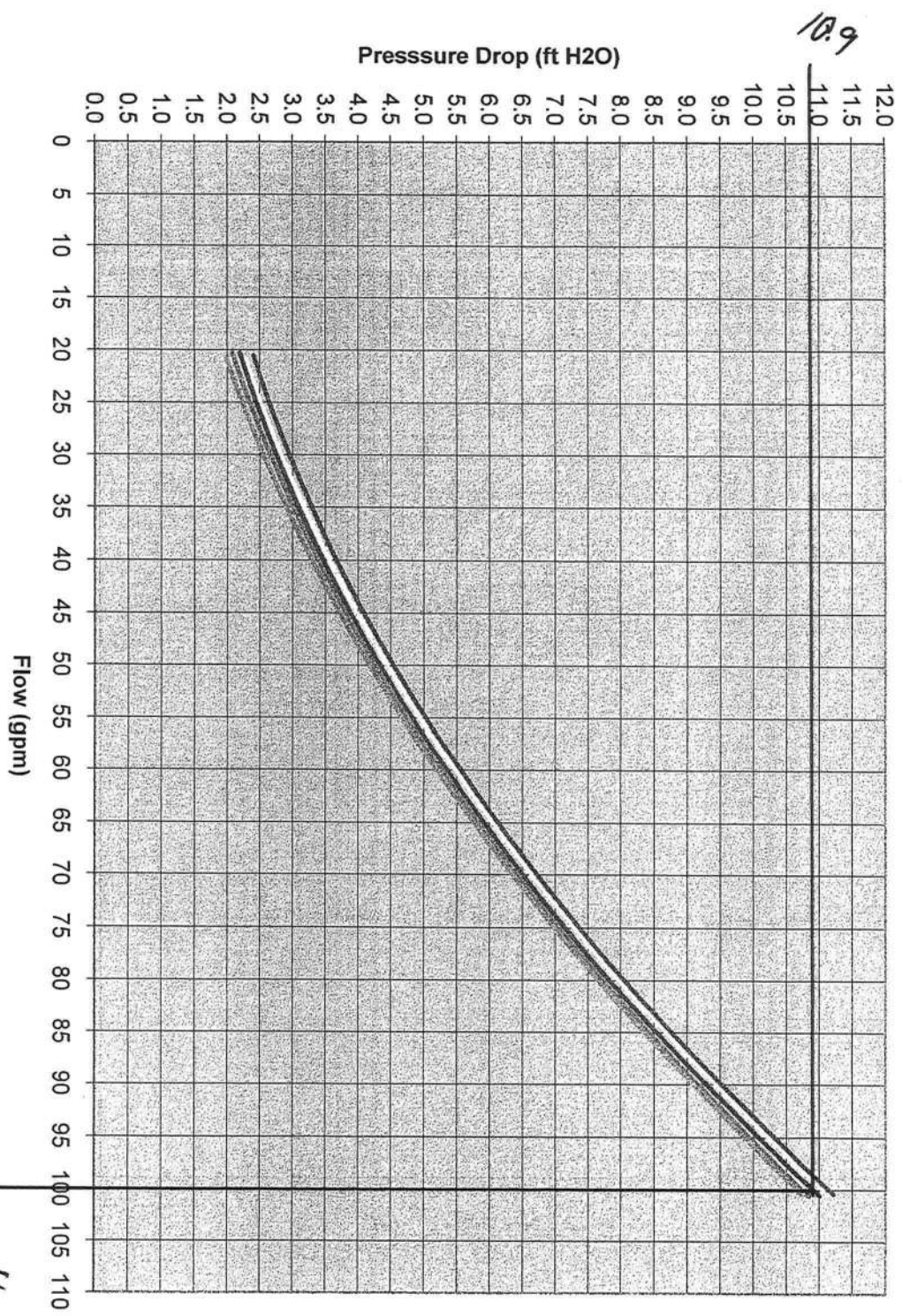
Approval

Section 10. Head Loss Curves

10.1 Jandy® Cartridge Filter, CS Series



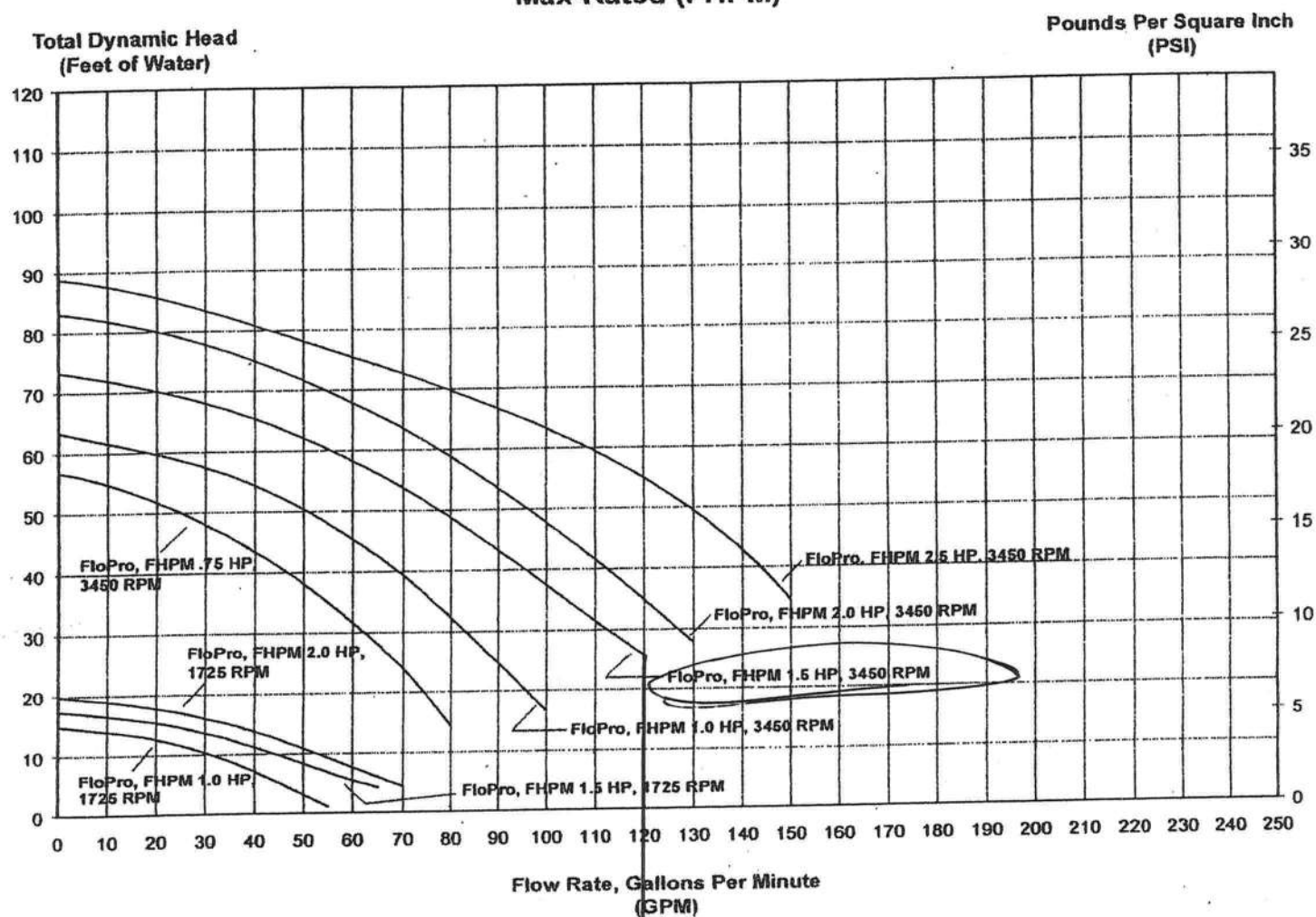
LRZ With a Polymer Header Heat Exchanger Pressure Drop vs. Flow



Poly. (LRZ 325)
Poly. (LRZ 400)
Poly. (LRZ 250)
Poly. (LRZ 175)
Poly. (LRZ 125)

7.3 Performance Curves

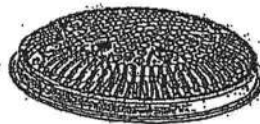
Jandy FloPro Series Pumps Max-Rated (FHPM)




120 MAX Flow





OWNER'S MANUAL
INSTALLATION, OPERATION, & PARTS
DUAL SUBMERGED SUCTION OUTLET SET
[Commonly called main drains]




Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

 This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

 **WARNING** warns about hazards that could cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

 **CAUTION** warns about hazards that will or can cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

The NOTICE label indicates special instructions that are important but not related to hazards.

 - **WARNING** - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

IMPORTANT SAFETY INSTRUCTIONS

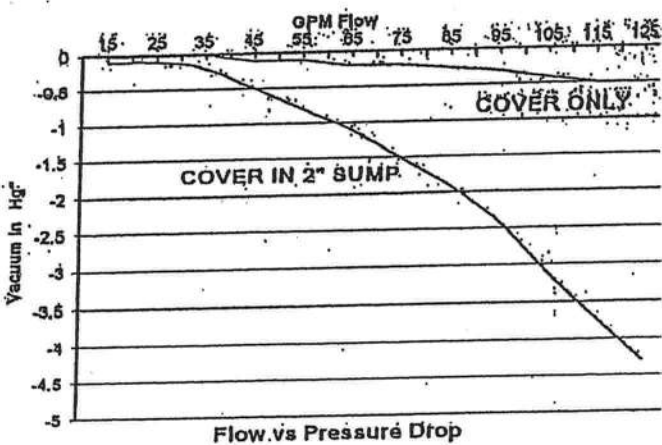
USE ONLY HAYWARD GENUINE REPLACEMENT PARTS

RECOMMENDED SYSTEM SPECIFICATIONS:

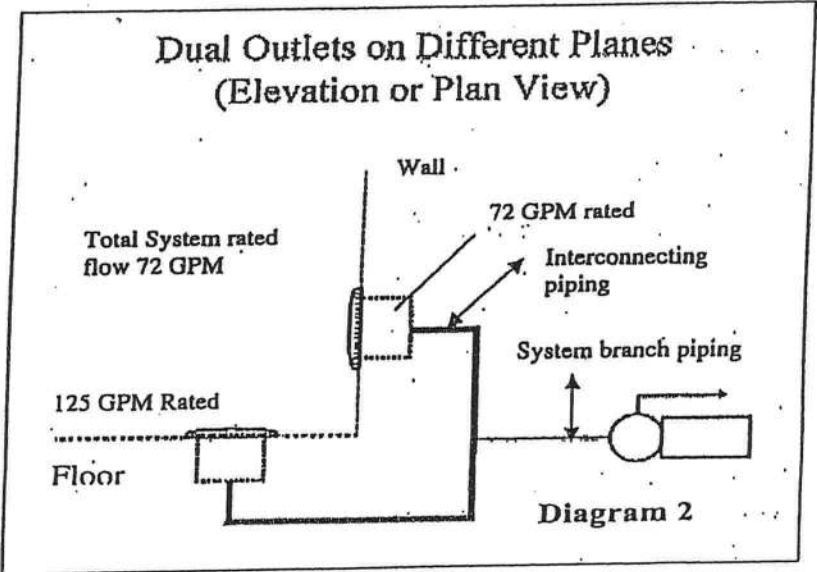
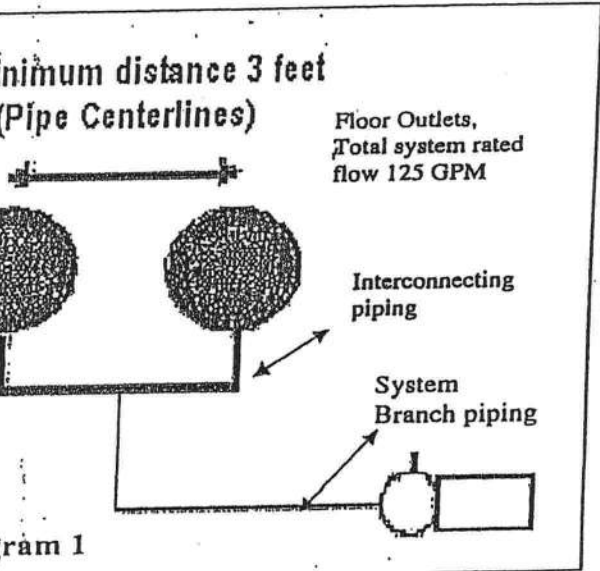
ACCEPTABLE PIPE SIZE FOR MAXIMUM RECOMMENDED SYSTEM FLOW RATE PER APSP-7 (6 FT/SEC IN THE BRANCH LINE)

Pipe Size [mm]	Flow rate GPM [Liter/Min]	Pipe Size [mm]	Flow rate GPM [Liter/Min]
1 1/2"	40	2 1/2"	90
[50]	[150]	[75]	[340]
2"	63	3"	138
[63]	[240]	[90]	[522]

Chart 1

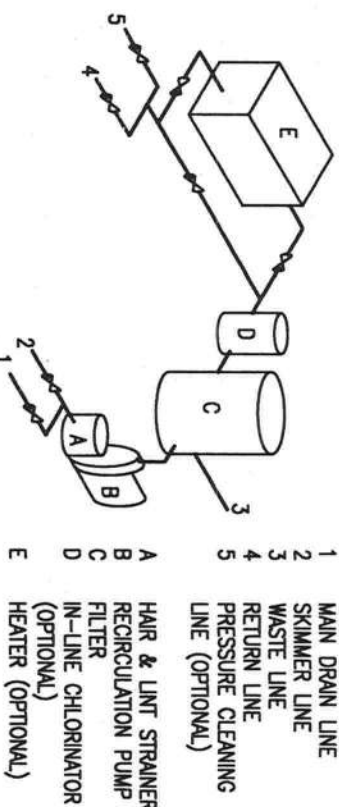


3X1048E Suction Outlet Covers are rated for Floor Only at 125 GPM
 3I1048EW Suction Outlet Covers are rated for Wall or Floor at 72 GPM
 In the event of one suction outlet being blocked, the remaining suction outlets serving that system shall have a rating capable of the full flow of the pump(s) for 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.

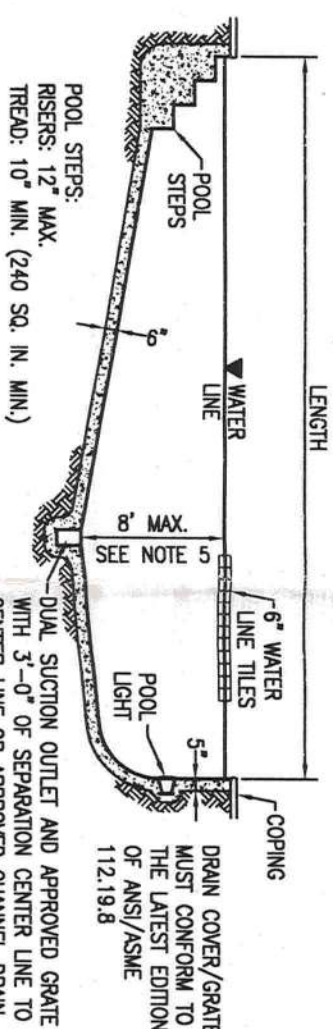


GENERAL NOTES

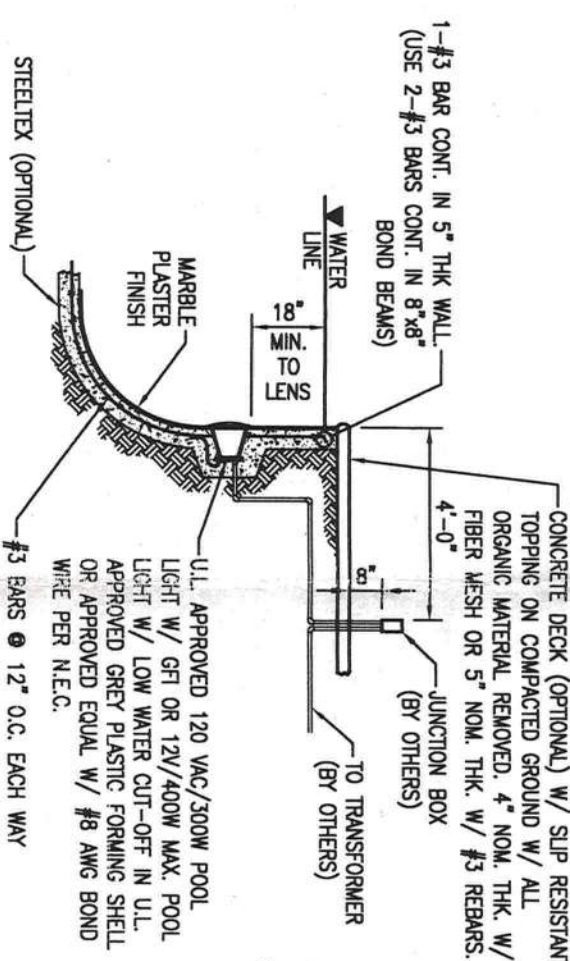
- For pool plan, size, deck, and special details, see Contractor's Pool Plan.
- Pool Walls shall be 5" thick and Floors shall be 6" thick and shall be pneumatically applied Concrete with a Compressive Strength of 3,000 psi in 28 days. Concrete Decks shall be 2,500 psi. Concrete construction will conform to ACI Standard 318.
- All Pool construction shall comply with Florida Building Code Building 2007 and Florida Building Code Residential 2007, together with 2009 Revisions, 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 and the Latest Adopted National Electric Code (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 (Steeltek) 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 form 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 Latest Adopted National Electrical Code (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.



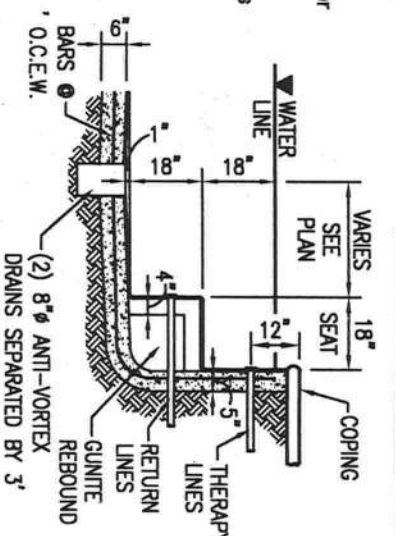
FILTER SYSTEM



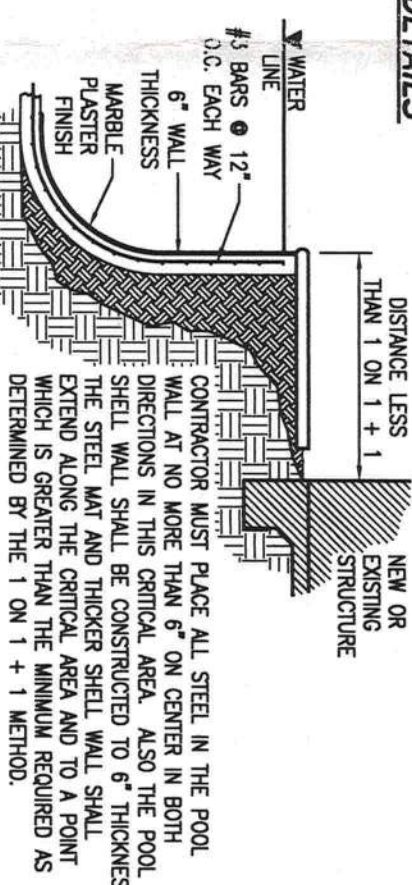
POOL SECTION (LONGITUDINAL)



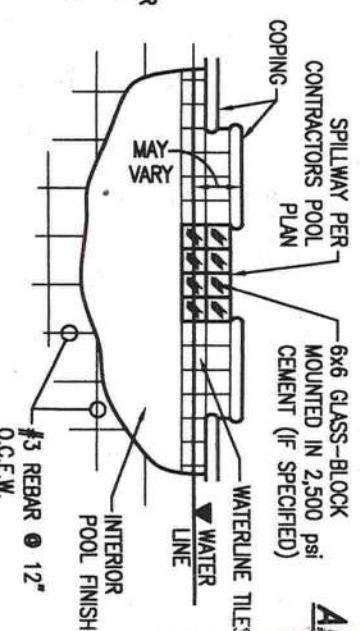
POOL STRUCTURAL DETAILS



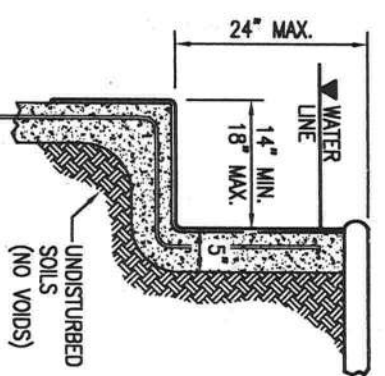
SPA STRUCTURAL DETAILS



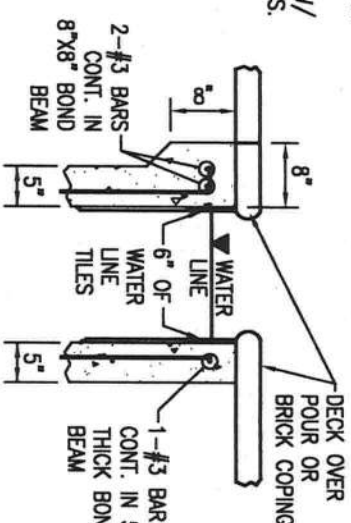
TYPICAL WALL AND FLOOR WITHIN ANGLE OF REPOSE



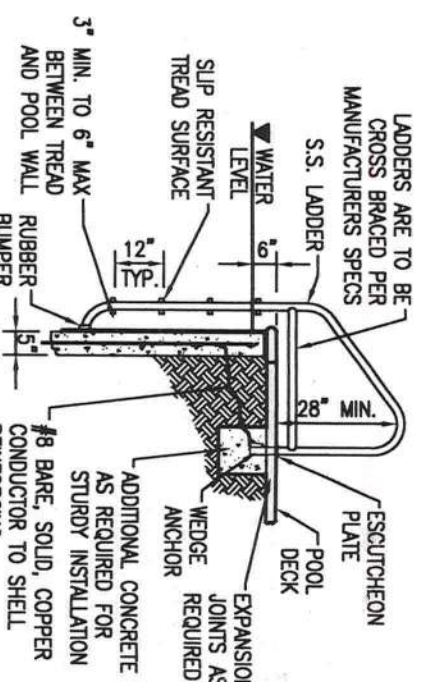
RAISED SPA DETAIL



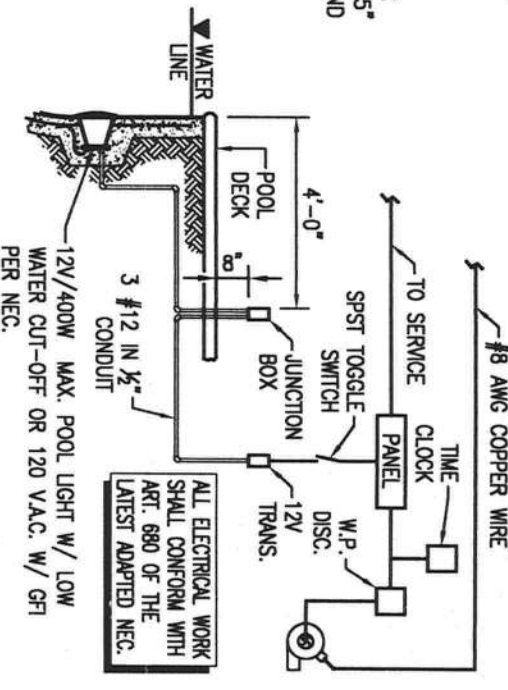
SWIM-OUT DETAIL



ALTERNATE BEAM FINISH DETAIL



TYPICAL LADDER DETAIL



ELECTRICAL DIAGRAM

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Altamonte Springs FL 32714
(407) 830-5327
CPC0056809

RESIDENTIAL SWIMMING POOL MASTER SPECIFICATION DRAWING FOR COLUMBIA COUNTY

DEC 02 2010
GORDON H. SHEPARDSON, P.E.
FL PE # 19333
672 N. Semoran Blvd., Ste 204
Orlando, FL 32807
Office: (407) 275-1099
Fax: (407) 275-1015

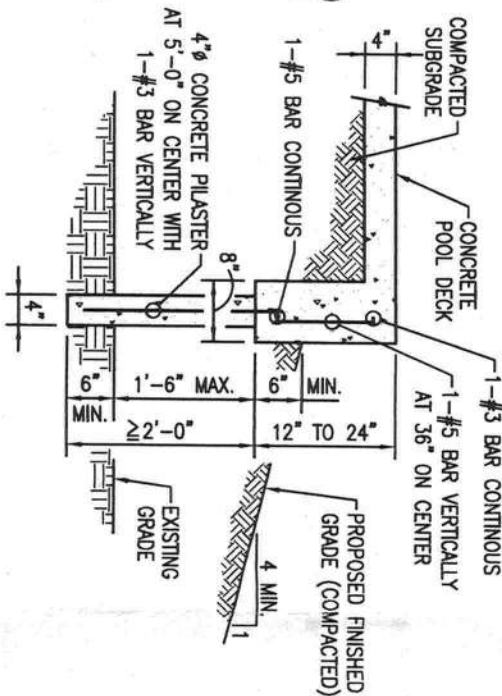
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TURNDOWN NOTES

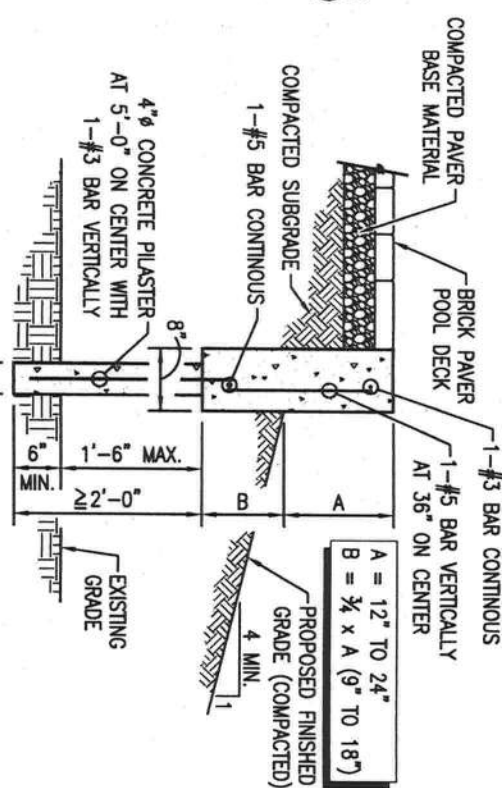
1. Detail is based on NO surcharge behind the Turndown and the Ground away from the Turndown is Level (>4' to 1'). Turndown may abut Ribbon Footer and be tied into Footer if Appropriate, with #3 Rebar.
2. Turndown shall bear on Rock, Clean Sand or Structurally Sound Soils (>1,500 PSF) that shall be compacted 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 2007, Florida Building Code Residential 2007, together with 2009 Revisions.
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" Plaster 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 Plaster 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 or 54" for a 24" 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 or 42.0" for a 24" 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.
10. If a Screen Enclosure is to be installed on top of the Turndown, the Swimming Pool Contractor must Coordinate attachment of the Screen Enclosure to the Turndown with the Screen Contractor.

FOOTER NOTES

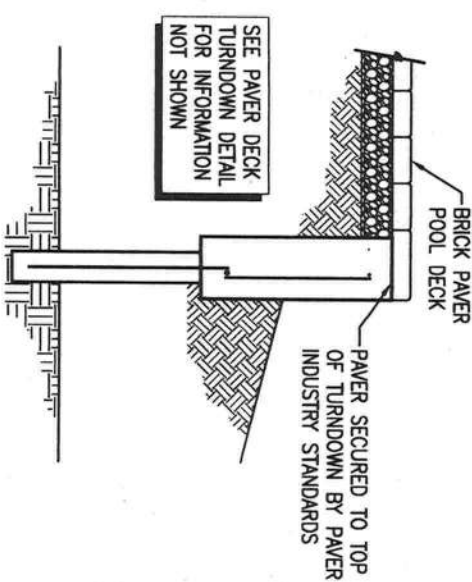
1. If a Screen Enclosure is to be installed, the Swimming Pool Contractor must Coordinate Construction of any required Footer with the Screen Contractor.
2. Footer shall bear on Rock, Sand or Structurally Sound Soils (>1,500 PSF) that shall be compacted to provide Optimum Bearing Capacity and prevent 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.



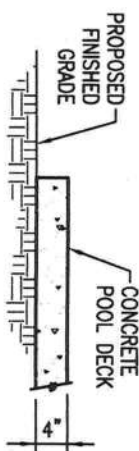
CONCRETE DECK TURNDOWN



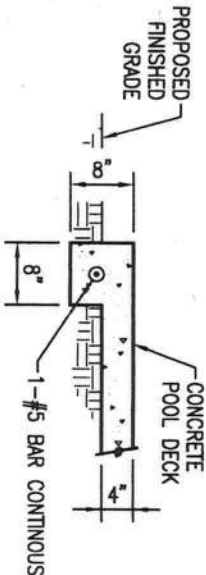
PAVER DECK TURNDOWN



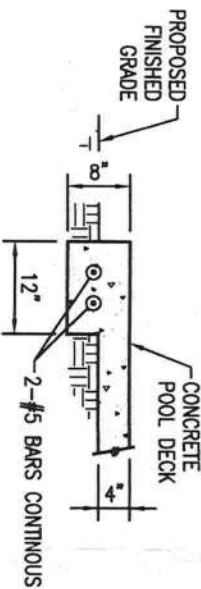
ALTERNATE PAVER ON TURNDOWN



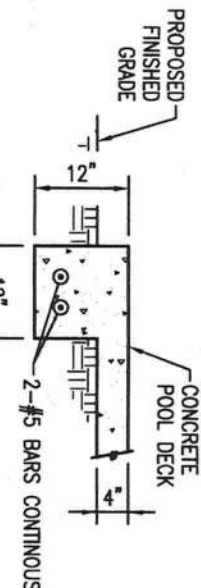
NO FOOTER



8" x 8" FOOTER

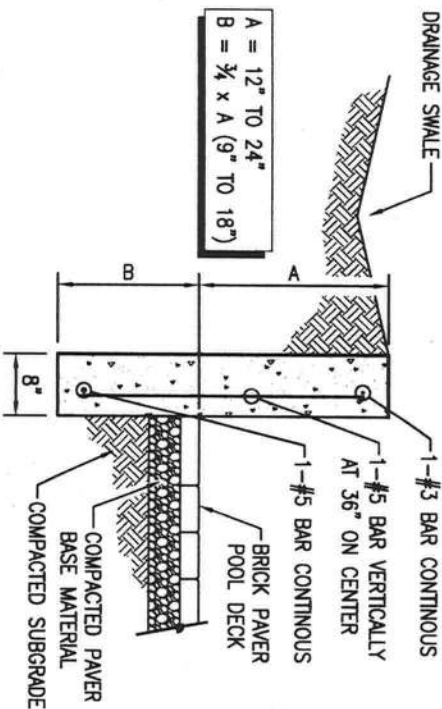


8" x 12" FOOTER



12" x 12" FOOTER

ALTERNATE PAVER LOCATION



Drawn By: A R PATTON & Associates, Inc. Specializing in Residential and Commercial Pools, Fountains and Features

(407) 977-1892

Holland Pools
History and Excellence in Service

1090 Kensington Park Dr (407) 830-5327
Altamonte Springs FL 32714 CPC0056809

RESIDENTIAL SWIMMING POOL MASTER SPECIFICATION DRAWING FOR COLUMBIA COUNTY

DEC 02 2010

Date

GORDON H. SHEPARDSON, P.E.
FL PE #19333
672 N. Semoran Blvd., Ste 204
Orlando, FL 32807
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Scale: None Rev 4 - 4/15/09

ANSI/APSP-7 2006 Specifies three methods for determining the maximum system flow rate. The following simplified TDH calculation is one of the methods specified.

Simplified Total Dynamic Head (TDH) Calculation Worksheet

Determine Maximum System Flow Rate:

Minimum Flow Rate Required: 35 gpm Per Skimmer (Required: 1 skimmer per 800 sf of surf. area)

- Calculate Pool Volume: $\frac{\text{Surf. Area}}{\text{Avg. Depth}} \times 7.48 \text{ (gal./cubic foot)} = \frac{\text{Vol. in gal.}}{\text{Turnover in Min.}}$
- Determine preferred Turnover Time in hours: $\frac{\text{Vol. in gal.}}{\text{Turnover in Min.}} \times 60 \text{ (min. / hr.)} = \text{Turnover in Min.}$
- Determine Max Flow Rate: $\frac{\text{Vol. in gal.}}{\text{Turnover in Min.}} = \text{Flow Rate}$
- Spa Jets: $\frac{\text{No. of Jets}}{\text{Jet Flow}} \times \text{gpm per jet} = \text{Flow Rate}$

(For single pump pool/spa combo, use the higher of No. 3 or No. 4 in the following calculations for the pool & spa)

Determine Pipe Sizes:

Branch Piping to be _____ inch to keep velocity @ 6 fps max. at _____ gpm Maximum System Flow Rate.
Trunk, Skimmer & Suction Piping to be _____ inch to keep velocity @ 8 fps max. at _____ gpm Maximum System Flow Rate.
Return Piping to be _____ inch to keep velocity @ 10 fps max. at _____ gpm Maximum System Flow Rate.

Determine Simplified TDH:

- Distance from pool to pump in feet: _____
- Friction loss (in suction pipe) in _____ inch pipe per 1 ft. @ _____ gpm = _____ (from pipe flow/friction loss chart)
- Friction loss (in return pipe) in _____ inch pipe per 1 ft. @ _____ gpm = _____ (from pipe flow/friction loss chart)
- $\frac{\text{Length of Suct. Pipe}}{\text{Length of Return Pipe}} \times \frac{\text{Friction Loss of Suct. Pipe}}{\text{Friction Loss of Return Pipe}} = \text{TDH Suct. Pipe}$
- $\frac{\text{Length of Return Pipe}}{\text{Length of Suct. Pipe}} \times \frac{\text{Friction Loss of Return Pipe}}{\text{Friction Loss of Suct. Pipe}} = \text{TDH Return Pipe}$

TDH in Piping: _____

Filter loss in TDH (from filter data sheet): _____

Heater loss in TDH (from heater data sheet): _____

Total all other loss: _____

Total Dynamic Head (TDH): _____

Selected Pump and Main Drain Cover:

Pump selection _____

using pump curve for TDH & System Flow Rate

(Make and Model)

Main Drain Cover _____

(System Flow Rate must not exceed approved cover flow rates)

(Make and Model)

Notes: Minimum system flow based on min. flow per skimmer of 35 gpm.

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

Check all that apply.

- ☐ 3'-0" ☐ suction outlets @ _____ gpm max. flow (see note 2).
☐ suction outlets @ _____ gpm max. flow (see note 3).
☐ channel drain @ _____ gpm w/ _____ ports (see note 4).

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.

Notes

- If a variable speed pump is used, use the max. pump flow in calculations.
- For side wall drains, use appropriate side wall drain flow as published by manufacturer.
- Insert manufacturer's name and approved maximum flow
- See installation instructions for number of ports to be used.
- In-Floor suction outlet cover/grate must conform to most recent edition of ASME/ANSI A112.19.8 and be embossed with that edition approval.
- Pump, Filter & Heater make and model cannot be changed, and equipment location cannot be moved closer to pool without submitting a revised plan and TDH calculation worksheet for approval.

Flow and Friction Loss Per Foot

Schedule 40 PVC Pipe

Pipe Size	6 fps	8 fps	10 fps
1"	16 gpm 0.14'	21 gpm 0.23'	26 gpm 0.35'
1.5"	37 gpm 0.08'	50 gpm 0.14'	62 gpm 0.21'
2"	62 gpm 0.06'	82 gpm 0.10'	103 gpm 0.16'
2.5"	88 gpm 0.05'	117 gpm 0.08'	146 gpm 0.13'
3"	136 gpm 0.04'	181 gpm 0.07'	227 gpm 0.10'
4"	234 gpm 0.03'	313 gpm 0.05'	392 gpm 0.07'
6"	534 gpm 0.02'	712 gpm 0.03'	

Total Head In Feet Conversion Chart

Inches Mercury (Vacuum Gauge)

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

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

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CPC0056809

RESIDENTIAL
SWIMMING POOL
MASTER SPECIFICATION
DRAWING
FOR
COLUMBIA COUNTY

Date _____
This worksheet was Created and provided By _____
Contractors Signature _____
Contractors Printed Name _____
Contractors Cert. No. _____
Contractors Telephone No. _____

Scale: None Rev 7 - 11/18/09