

POOLS



**TOWNSHIP OF DENVILLE
CONSTRUCTION DEPARTMENT**

973-625-8300 x251 or 253

POOLS

GETTING YOUR PERMIT

YOU WILL NEED TO SUPPLY THE FOLLOWING:

1. A Survey of your property showing location of pool (indicate location of septic tank if not on sewers) See attached sample.
2. Filter Specifications showing size of filter and amount of water it will process per hour.
3. Drawings and specifications of pool.

FILL OUT THE FOLLOWING FORMS:

(See samples)

1. Building
2. Electric
3. Plumbing

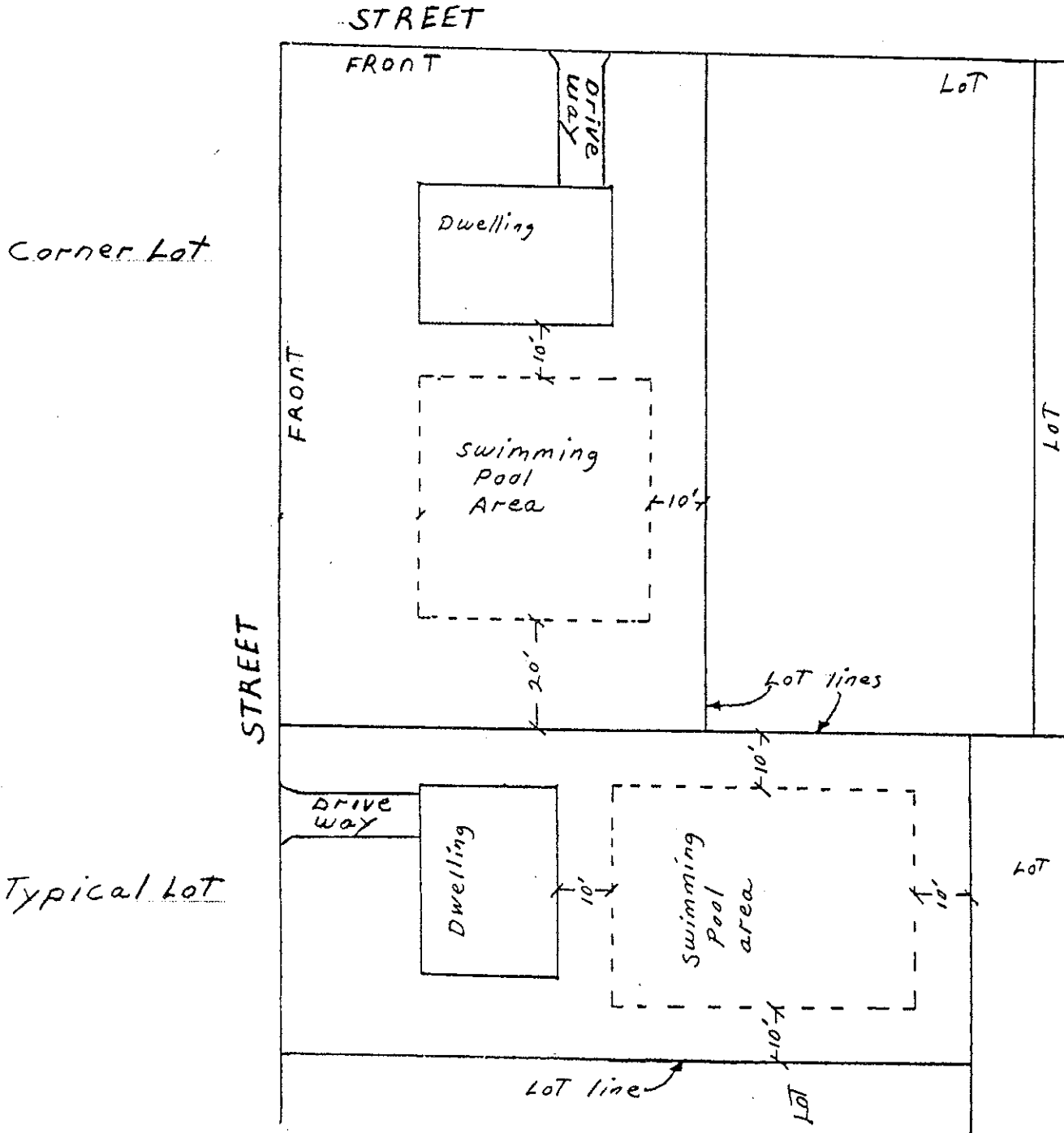
(If pool is heated or connecting to sewer or water)

Submit all of the above paperwork to zoning. They will notify you if a variance is necessary. If none is required your application will be forwarded to the Health Department and then to the Building Department. Once the Building Department has received a complete application it has 20 working days to review it.

DO NOT FILL YOUR POOL WITH WATER, UNTIL IT IS PROPERLY PROTECTED.

Swimming Pools

Zoning requirements



The above examples are for two typical lots, a rectangle and a corner lot. All pools must be at least 10 feet from their side lines and from other structures. Corner lots need at least 20 feet from the side property line.

Please note: The drawings are for example purposes only. Individual lots may vary and each survey must be reviewed separately for zoning compliance.

SPECIFICATIONS FOR POOLS

1. INGROUND POOLS

Electric permit is required for G.F.I., lights, and bonding
Building permit is required for installation of pool
Plumbing permit is required for gas piping and heater
Pool or yard must be enclosed by at least a 4' high fence with a
Self-latching gate (see barrier requirements)

2. ABOVE GROUND POOLS

Electric permits is required for G.F.I., lights and bonding
Building permit is required for installation of pool
Plumbing permit is required if pool is to be heated.
A 4 foot (or higher) pool only requires a barrier around the
stairs as long as the pool is not sunken into the ground. The
pool must measure at least 4 feet above grade (if not, see
alternative on next page.)

INSPECTIONS

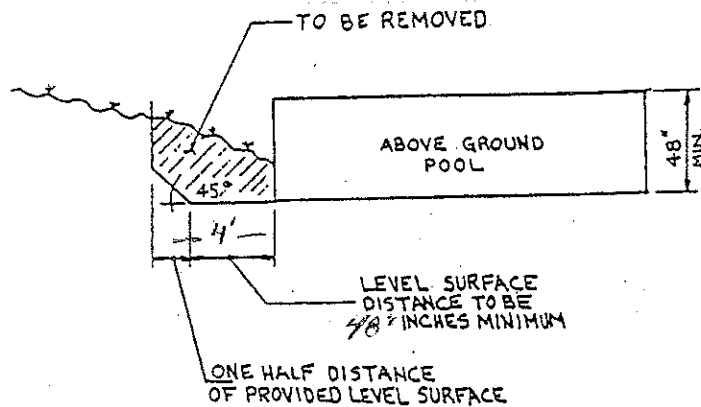
Building	1. Rough (before backfilling) 2. Final (when pool is complete)
Plumbing	1. Rough (underground piping) 2. Gas Line Test (a 15 lb. gauge with 5 lbs of pressure) 3. Final – Heater inspection
Electric	1. Bonding and G.F.I. 2. Trench 3. Final

ABOVE GROUND POOL-BARRIER ALTERNATIVE

Many times, above ground pools are installed on a sloped site so that the top of the pool wall, which acts as a barrier, is below the 48 inch minimum required by section, appendix G- IRC 2000. Usually when this occurs, an additional barrier is mounted on the top of the pool.

Where the above-ground pool is to be installed on a sloped site that will render a portion of the top of the pool structure to be less than 48 inches to grade, a minimum of a 4 foot level surface around the portion of the pool structure that is less than 48 inches to grade should be provided. The level surface should be measured away from the pool at a minimum 45 degree angle for a distance of one-half the provided level surface.

Please refer to the sketch below for clarification.



BARRIER REQUIREMENTS
(International Residential Code 2000)

ABOVE GROUND POOLS AND INGROUND POOLS

1. A 48 inch barrier is required and it must withstand a 200 pound weight. For above ground pools, the pool wall is considered the barrier if it is at least 48 inches high
2. Top of pool barriers
Openings in barriers shall not allow passage of a 4 inch diameter sphere
3. Solid Barriers
Such as a stone wall or masonry must be normal construction tolerances and tooled masonry joints
4. Chain Link Fence
1 ¼ inch squares
If fence is provided with slats and is attached at the top and bottom then 1 ¾ inch opening is adequate.
5. Lattice Fence
Diagonal members may have maximum openings of 1 ¾ inches.
6. Access Gates
Shall open away from pool area and have self-closing and self latching devices
7. Above Ground Pool Ladders
Ladder or steps shall be surrounded by a barrier of 48 inches with a self closing and self latching gate. Note: Retractable or removable ladders are not acceptable unless enclosed by the above barrier.

HOT TUBS AND SPAS

Must have a safety cover and comply with ASTM F 1346 – see Building Inspector

Any unique situations should be referred to your Building Official.

TOWNSHIP OF DENVILLE
Electrical Inspection Department
ABOVE GROUND POOLS

The following is a list of some rules that I have to enforce when making inspections on above ground swimming pools. These rules come right out of the National Electric Code (N.E.C.) book. For complete rules please look up article 680 in the latest edition of the N.E.C. The initials U.L. means that the equipment is listed and/or labeled by the Underwriters Laboratories.

- 1) Make sure before you start that you have all of your prior approvals. Such as for Zoning. (For example: Make sure you don't need a variance, or the distance from a side yard or rear yard setback.)
- 2) A receptacle for the pool motor can be between 5' and 10' from the pool, it shall be a 20 amp. twist lock receptacle with an "In Use" cover. (That is a cover where the receptacle can stay plugged in and the cover can be closed.) This receptacle shall be Ground Fault protected . The motor can also be hard wired using approved flexible liquidtight conduit.
- 3) The underground wiring from the house to the receptacle shall be in a approved electrical pipe (like PVC) and buried down at 18" below the grade. The wire in the pipe shall be # 12 gauge THHN wire of the proper colors. (black, white, green, etc.)
- 4) A bonding wire is required to be (#8 gauge) solid copper wire and shall be attached from the pool frame to the motor at the grounding lug provided on the motor. (All bonding lugs are to be copper and approved for direct burial.) Double insulated motors that are UL approved for storable pools need not be bonded.(Check the manufacture instructions that comes with the motor.)
- 5) The cord from the motor to the twist lock receptacle shall be a # 12 gauge cord approved for outside/wet usage. (The cord length shall not exceed 3 feet.)
- 6) There shall be a convenience receptacle between 10 feet and 20 feet from the side of the pool and it shall be a ground fault protected receptacle.
- 7) Inside the house regular house wiring is allowed. (for example: non metallic sheath cable, romex.)
- 8) Use the correct breaker for the correct panel and label it. (for example: a Square D breaker in a Square D panel.)

(OVER)

TOWNSHIP OF DENVILLE
Electrical Inspection Department
Inground Pools

The following is a list of some rules that I have to enforce when doing pool wiring inspections, due to the complexity of pool wiring it is advisable to get the help of a licensed electrical contractor. These rules are taken from the National Electric Code (N.E.C.) book. For a complete list of rules please look in article 680 of the latest edition of the N.E.C. The initials U.L. means that the equipment is listed and/or labeled by the Underwriters Laboratories.

- 1) A receptacle for the pool motor can be between 5' and 10' from the pool, it shall be a 20 amp. twist lock receptacle with an "In Use" cover. (That is a cover where the receptacle can stay plugged in and the cover can be closed.) This receptacle has to be Ground Fault protected. Motor can also be hardwired using approved flexible liquidtight conduit. (Sealtight)
- 2) The underground wiring from the house to the receptacle shall be in a approved electrical pipe (like PVC) and buried down at 18" below the grade. The wire in the pipe must be # 12 gauge THHN wire of the proper colors. (black, white, green, etc.)
- 3) A bonding inspection is required and the bonding wire is required to be (#8 gauge) solid copper wire shall be attached from the pool frame to the motor at the grounding lug provided on the motor. (All bonding lugs are to be copper and approved for direct burial.) All metal within 5 feet of the pool must be bonded. (for example: ladders, diveboards, fences, siding of house., etc.)
- 4) The cord from the motor to the twist lock receptacle shall be a # 12 gauge cord approved for outside/wet usage. (The cord length shall not exceed 3 feet.)
- 5) There shall be a convenience receptacle between 10 feet and 20 feet from the side of the pool and it shall be a ground fault protected receptacle.
- 6) Inside the house regular house wiring is allowed. (for example: non metallic sheath cable, romex.)
- 7) Use the correct breaker for the correct panel and label it. (for example: Square D breaker in a Square D panel.)
- 8) There shall be proper support for the box with the receptacle on it for the pool motor, or deck box. (for example: a 4 X 4 post, angle iron, etc.)



**BUILDING
SUBCODE
TECHNICAL SECTION**

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 12121 Lot 22

Work Site Location 2 ANYOLD STREET

DENVILLE, NJ 07834

Owner In Fee HARRY HOME MAKER

Address Same as above

Tele. () 625-555

Contractor Algae Pool Co.

Address 1 Puddle St.

Riverdale, NJ

Tele. () Fax ()

Lic. No. of Bidts. Reg. No. 22-22 22 22

Federal Emp. No. 22-22 22 22

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial	INSPECTIONS	Type:	Failure	Date (Month/Day)	Approval	Initial
<input type="checkbox"/> No Plans Required			<input type="checkbox"/> Footing					
<input type="checkbox"/> All			<input type="checkbox"/> Foundation					
<input type="checkbox"/> Footing			<input type="checkbox"/> Slab					
<input type="checkbox"/> Foundation			<input type="checkbox"/> Frame					
<input type="checkbox"/> Frame			<input type="checkbox"/> Barrier-Free					
<input type="checkbox"/> Other			<input type="checkbox"/> Insulation					
<input type="checkbox"/> Joint Plan Review Required:			<input type="checkbox"/> Finishes					
<input type="checkbox"/> Elec. <input type="checkbox"/> Plumb. <input type="checkbox"/> Fire <input type="checkbox"/> Elevator			<input type="checkbox"/> Energy					
SUBCODE APPROVAL			<input type="checkbox"/> Mechanical					
<input type="checkbox"/> CO <input type="checkbox"/> CCO <input type="checkbox"/> CA			<input type="checkbox"/> TCO					
Date:			<input type="checkbox"/> Other					
Approved by:			<input type="checkbox"/> Final					
			<input type="checkbox"/> Barrier-Free					

B. BUILDING CHARACTERISTICS

Use Group Present _____ Proposed _____

Constr. Class Present _____ Proposed _____

No. of Stories _____

Height of Structure _____ Ft.

Area — Largest Floor _____ Sq. Ft.

New Bldg. Area/All Floors _____ Sq. Ft.

Volume of New Structure _____ Cu. Ft.

Est. Cost of Bldg. Work:

1. New Bldg. \$ 15,000

2. Alteration \$ _____

3. Total (1+2) \$ _____



Date Received _____

Date Issued _____

Control # _____

Permit # _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Signature Harry Home maker

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

20' x 30' INGROUND POOL

TYPE OF WORK:

- New Building
- Addition
- Alteration
 - Roofing
 - Siding
 - Fence _____
 - Sign _____
 - Pool _____
 - Asbestos Abatement Subchapter 8
 - Lead Haz. Abatement NJAC 5:17
 - Other _____
- Demolition

Height (exceeds 6')
Sq. Ft.

FEE (Office Use Only)

Administrative Surcharge \$ _____

Minimum Fee \$ _____

DCA Training Fee \$ _____

TOTAL FEE \$ _____



**ELECTRICAL
SUBCODE
TECHNICAL SECTION**



Date Received
Date Issued
Control #
Permit #

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.
Block 12121 Lot 22

Work Site Location 2 ANYOLD STREET
Owner in Fee/Occupant DENVILLE, NJ 07834
HARRY HOMEMAKER
Address same as above

Tele. () 625-5555
Contractor Short Circuit Sal's Electric
Address 33 Shock St.
Serviceville, NJ

Fed. Emp. No. 1010 Fax ()
Lic. No. 1010

B. ELECTRICAL CHARACTERISTICS
Use Group Present Proposed
 Pole/Pad # Utility Co.
Building Occupied as Temporary
Est. Cost of Elec. Work \$ 400

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial	INSPECTIONS	Dates (Month/Day)
<input type="checkbox"/> No Plans Required			Type:	Failure
Joint Plan Review Required:			Rough	Failure
<input type="checkbox"/> Building <input type="checkbox"/> Plumbing			Temp. Serv.	Approval
<input type="checkbox"/> Fire <input type="checkbox"/> Elevator			Constr. Serv.	Initial
<input type="checkbox"/> Elec. Plans Approved			TCC	
Date:			Other	
Approved by:			Service	
			Final	
SUBCODE APPROVAL			Temp. Cut-In-Card Date Issued	
<input type="checkbox"/> CO	<input type="checkbox"/> CCO	<input type="checkbox"/> CA	Final Cut-In-Card Date Issued	
Date:				
Approved by:				

C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

SIGNED & SEALED BY CONTRACTOR
Applicant's Signature/Contractor's Seal and Signature

Licensed Electrical Contractor Exempt Applicant

D. TECHNICAL SITE DATA

QTY.	SIZE	ITEMS
1		Lighting Fixtures
1		Receptacles
		Switches
		Detectors
		Light Poles
		Motors--Fract. HP
		Emergency & Exit Lights
		Communications Points
		Alarm Devices/F.A.C. Panel

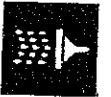
TOTAL NUMBERS

- Pool Permit/with UW Lights
- Storable Pool/Spa/Hot Tub
- KW Elec. Range/Receptacle
- KW Oven/Surface Unit
- KW Elec. Water Heater
- KW Elec. Dryer/Receptacle
- KW Dishwasher
- HP Garbage Disposal
- KW Central A/C Unit
- HP/KW Space Heater/Air Handler
- KW Baseboard Heat
- HP Motors 1/+ HP
- KW Transformer/Generator
- AMP Service
- AMP Subpanels
- AMP Motor Control Center
- KW Elec. Sign/Outline Light

Administrative Surcharge	\$	
Minimum Fee	\$	
DCA Training Fee	\$	
TOTAL FEE	\$	



**PLUMBING
SUBCODE
TECHNICAL SECTION**



Date Received _____
Date Issued _____
Control # _____
Permit # _____

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.
Block 12121 Lot 22
Work Site Location 2 ANYOLD STREET
DENVILLE, N.J. 07834
Owner In Fee HARRY HOME MAKER
Address Same as above
Tele. () 625-5555
Contractor PLUNGER PETE
Address 3 Flush way
GLOGSBURG, N.J.
Tele. () _____ Fax () _____
Lic. No. 2233 Federal Emp. No. _____

B. PLUMBING CHARACTERISTICS
Use Group Present Proposed _____
Building Sewer Size _____ Public Sewer _____
Water Service Size _____ Public Water _____
Est. Cost of Plumbing Work \$ 300 Private Sewer _____
Private GI _____

JOB SUMMARY (Office Use Only)
PLAN REVIEW
 No Plans Required
Joint Plan Review Required:
 Building Electric
 Fire Elevator
 Plumbing Plans Approved
Date: _____
Approved by: _____
INSPECTIONS
Type: _____ Failure _____
Slab _____
Rough _____
Water _____
Sewer _____
Fixtures _____
Gas Equipment _____
Gas Piping _____
Solar _____
TCO _____
Dates (Month/Day)
Approval Initial

D. TECHNICAL SITE DATA (List of all fixtures.)
NO. _____
FIXTURE/EQUIPMENT

Water Closet	
Urinal/Bidet	
Bath Tub	
Lavatory	
Shower	
Floor Drain	
Sink	
Dishwasher	
Drinking Fountain	
Washing Machine	
Hose Bibb	
Water Heater	
Fuel Oil Piping	
Gas Piping	
Steam Boiler	
Hot Water Boiler	
Sewer Pump	
Interceptor/Separator	
Backflow Preventer	
Greasetrap	
Sewer Connection	
Water Service Connection	
Stacks	
Other <u>gas heater</u>	
Other _____	
Other _____	

Administrative Surcharge	\$ _____
Minimum Fee	\$ _____
DCA Training Fee	\$ _____
TOTAL FEE	\$ _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

SIGNED & SEALED BY CONTRACTOR

Signature _____ Contractor's Seal _____

Licensed Plumbing Contractor Exempt Applicant