



At the Heart of Community

Locations

*The pool, spa or hot tub cannot be located over or under any utilities.

*Cannot be placed within any required front yard, corner yard or side yard.

*No part of the pool and/or deck shall be located within 23' of the rear lot line or in an easement.

*Call J.U.L.I.E. (800-892-0123) before digging.

Costs

\$64.00 Plan Review Fee
\$200.00 Engineering Fee
\$150.00 per engineering inspection

\$90.00 Permit Fee
\$90.00 Electrical Fee
\$500.00 Building Deposit
\$1200.00 Parkway Deposit

Deposit is refunded in accordance with Municipal Code Title 8, Chapters 2-6, Sections A-E. Allow 4-6 weeks for refund after final inspection has taken place.

If final inspection is not scheduled and approved prior to expiration date on permit, any deposit(s) will be forfeited to the Village.



Rules & Restrictions

*The pool may not be filled in excess of 1/3 its capacity with water until the required fencing is installed and approved. Use of the pool is not allowed until final approval.

*DO NOT discharge pool water to storm drains or wetlands when emptying pool. Discharge to your own yard away from adjacent property.

Fencing

*Every pool located on a lot used for residential purposes shall be completely enclosed by a fence 5 ft in height above grade of any walking surface such as decks, steps, ladders or platforms with suitable gates and self-closing, self-latching devices. Any access to the pool and point of entry to the pool must have a 5' barrier. See fence handout for more information.

*Fencing shall be installed prior to completely filling the pool with water.

*All doors with direct access to the pool and inside the enclosure area shall be equipped with an alarm.

*Spas/hot tubs with locking covers are not required to have fencing. Covers shall be installed at the time of final inspection.

Gas Pipe

*A protective coating shall be provided for all metallic piping fittings exposed to the atmosphere and the soil. Plastic pipe shall be UV protected.

*The min. burial depth shall be 12" below grade.

*A yellow insulated copper tracer wire shall be installed adjacent to underground non-metallic piping and terminate above ground at each end.

Pools

Spas & Hot Tubs

What to Submit

*Completed application.

*1 copy of a Certified Plat of Survey indicating the location of the pool/spa/hot tub, dimensions, height of the required fence, and the type and location of the electrical service line. Electrical plans shall be color coded. Indicate side and rear setbacks.

*Detailed drawings for the deck construction (if applicable. See Deck handout for info).

*1 copy of plans showing the house and the locations of all doors adjacent to the pool. Indicate the pool, pump, heater, deck, fence, and electric on the plans. Please include how the pool water will be maintained, including whether or not an auto-fill device will be installed.

*Specification sheets for all equipment. Detailed electrical information including grounding and bonding.

Inspections

*Inspections are scheduled for A.M. or P.M. Monday through Friday with 48 hours advance notice. Same day re-inspections are not available.

*Electrical inspection – before wire is buried.

*Pre-excavation and site layout.

*After the pool/spa site is located or excavated. Run string lines at the rear and side property lines.

*Bonding inspection - after the in-ground pool steel is in place and before pouring concrete.

*Pre-pour inspection – after post holes for the fence and/or deck are dug.

*After framework for the deck is completed.

*Underground gas pipe inspection – after trenches/ditches are excavated and bedded, piping installed, and before backfill is in place. Test will run 30 min. with no less than 20 psi. A 30 psi gauge with 1 psi increments will be used.



At the Heart of Community

Pools

Spas & Hot Tubs
Page 2

Note:

*If an inspector needs to return more than once for the same phase of any required inspection, a \$100.00 re-inspection fee will be required to be paid before the re-inspection takes place.



Swimming Pool Discharge Requirements

*The chlorine residual in the water shall be less than 0.1 mg/L.

*Wastewater must be pH neutralized between 6.5 and 8.5.

*The water is to be surface discharged within the owners' property lines and in no way create a public nuisance.

*The discharge of the water shall in no way damage, destroy, erode, or impair surrounding property.

*No permanent direct connection shall be made to the sanitary or storm sewer systems and no drainage shall be made into a storm ditch or swale or otherwise result in any of the contents flowing onto, or beyond the boundaries of the owner's property.

*Under no circumstances shall wastewater generated by the acid cleaning or chlorine washing of swimming pools, wading pools, spas, whirlpools, and therapeutic pools be discharged to the municipal storm sewer or storm ditch/swale.

*In the event a surface discharge is not available without creating a public nuisance, such wastewater must be neutralized and hauled from the owner(s) property by an enclosed tanker truck or similarly equipped vehicle, or disposed at a legal disposal site. The owner of the item(s) will be required to provide proof of disposal upon the Village's request.

*The discharge of the water shall in no way violate any regulation of Federal, State and Local Standards.



Electrical

*The electric shall comply with the swimming pool requirements of the 2017 National Electric Code, Section 680 and all other appropriate sections.

*The electrical wiring shall be installed underground in rigid metal conduit or an approved direct burial cable and must be equipped with a GFCI (Ground Fault Circuit Interrupter) device.

*Electric in pipe must be buried a minimum of 6" below grade. Direct burial cable must be buried a minimum of 24" below grade.

*All underground utilities must be a minimum of 5' horizontally from any wall of the pool. Overhead utilities shall not be located within 10' horizontally of any pool wall and the waters edge.

*All junction boxes and conduit shall be weather tight and approved for wet locations.

*Extension cords are not allowed for the operation of pool equipment.

I have read and reviewed these requirements.

Signature of Applicant

Date

Address



Community Development Department

505 Telser Road

Lake Zurich, IL 60047

P: (847) 540-1696 F: (847) 726-2182

www.LakeZurich.org

Permits@LakeZurich.org

Permit Application

Date of Application _____

Project Information

Property Address: _____

Type of Project: _____ Business Name: _____

Owner's Name/Address: _____
(If different from above)

(For commercial/industrial applications only)

Owner's Phone: _____

Value of proposed construction/improvements: \$ _____ Owner's Email: _____

Description of Work

Contractor Information

Contractors are required to be registered with the Village of Lake Zurich. Please refer to the Contractor Registration Application.

General Contractor: _____ Phone: _____

Address: _____ E-mail: _____

Other Contractor: _____ Type: _____ Phone: _____

Address: _____ E-mail: _____

Other Contractor: _____ Type: _____ Phone: _____

Address: _____ E-mail: _____

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the code official's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.

Printed Applicant Name: _____ Phone: _____

Applicant Signature: _____ Owner or Contractor

Property Owner Signature: _____ (Please Select One)

Application must be signed by the property owner. A signed letter of authorization/contract from the property owner must be submitted with the application in lieu of signature on application.

Director of Building and Zoning Signature: _____ Date: _____



At the Heart of Community

Electrical

Pool, Hot Tub, and Spa Installations

Rules & Restrictions

*All installations shall comply with Article 680 of the 2011 National Electric Code and Chapter 8 of Lake Zurich's 2012 Building Code.

*Proper grounding is required for the installation of all new electric services, panel replacement, all electric wiring and/or repairs. This may mean making changes to your existing grounding and bonding systems.

*If pool lighting is to be used, provide spec sheets and a detailed plan of how the lights will be installed.

What to Submit

*Completed application.

*Provide list of circuit breakers in main and sub-panels and load of existing circuits.

*Provide additional information and drawings showing locations, clearances, unusual installations, etc.

Service Entrance/Distance from Pool	<input type="checkbox"/> Overhead (10' min) _____ ft.
Service Entrance/Distance from Pool	<input type="checkbox"/> Underground (5' min) _____ ft.
Size of added circuits (amp)	<input type="checkbox"/> 15 <input type="checkbox"/> 20 <input type="checkbox"/> 30 <input type="checkbox"/> 40 <input type="checkbox"/> _____
Circuit Conduit Size	<input type="checkbox"/> 1/2" <input type="checkbox"/> 3/4" <input type="checkbox"/> 1" <input type="checkbox"/> _____"
Conduit Type	<input type="checkbox"/> EMT <input type="checkbox"/> IMC <input type="checkbox"/> RMC
Conduit Burial Depth	<input type="checkbox"/> 6" <input type="checkbox"/> 12" <input type="checkbox"/> 18" <input type="checkbox"/> 24"
Disconnect Method at Pool Filter	Switched GFI circuit Single twistlock outlet on GFI circuit
Horsepower of Filter Motor	<input type="checkbox"/> _____ HP
A GFI convenience outlet is required between 10-20 ft from pool.	<input type="checkbox"/> Already Installed <input type="checkbox"/> Will Install



At the Heart of Community

This checklist for permanently installed pools is **only a summary** of the code requirements based on the 2011 National Electric Code.

- ☐ Is there underground conductor within 5' horizontally from the inside wall at the pool? 680.10
- ☐ Is there overhead electrical conductors in the area extending 10 ft. horizontally from the inside wall of the pool and 22.5' up from water level? 680.8
- ☐ Is the pump motor third party listed to U.S. standards with a label for pool motor? UL181 is standard. 110.3(B)
- ☐ Is the cord on the pump motor #12 wiring and no longer than 3' with a twist lock cord cap? 680.7
- ☐ Is the receptacle 5' from the inside pool wall? 680.22(A)(1).
- ☐ Is the receptacle a twice-lock and protected by GFCI? 680.5. This must be a GFCI breaker or GFCI face-less type outlet or GFCI outlet, rated for the h.p. at the pump. (GFCI outlets can only do up to 1 ½ h.p. motors.)
- ☐ Is the cover for the receptacle an in-use cover? 406.8(B)(1)
- ☐ Is there a GFCI general purpose outlet on a general purpose circuit 6' from pool wall and not more than 20'? 680.22(A)(3).
- ☐ Is there a disconnecting switch located at least 5' from the inside wall of the pool? 680.12
- ☐ Is the raceway of the type of rigid heavy wall metal conduit, intermediate metal conduit or rigid nonmetallic conduit (PVC) and listed for electrical use? 680.21(A)(1) 110.3(b) Note: There shall be NO plumbers putty (pipe dope) or plumbers Teflon tape (white tape) on the ends of the metal conduit.
- ☐ Is the raceway buried to the correct depth? RMC, IMC=6" and PVC 18" from the top of the conduit to grade. 300.5 and Table 300.5
- ☐ There must be a minimum of a #12 green wire installed in the raceway. 680.21(A)(1) The wire must be green in color. 250.119
- ☐ The grounding conductor must pick up all junction boxes, light fixtures, pump motors, transformer enclosures, devices like switches, outlets, etc. 680.6
- ☐ Is there a grounding conductor between panel boards that are not part of the service equipment subpanels and that supply any electrical equipment associates with the pool? 680.25 The wire shall be sized in accordance with Table 250.122 and shall also be insulated.
- ☐ The bonding conductor must be a solid #8 copper wire. (Bare conductor is okay). This wire must pick up pool frame (upper and lower ring if metal) and pump motor, pool heater (if one) and RMC or IMC piping, and any metallic part within 5' of the pool. 680.26(B)(1)(2)(3)(4) and (5).
- ☐ Is the bonding conductor connection done with a clamp of the type of stainless steel, brass, or copper? No zinc parts. 680.26(C)
- ☐ Double insulated pump motors do not have to be bonded with the solid #8 but must have a #12 green wire to them.
- ☐ If RNC (PVC) is used with RNC PVC boxes, these items must be listed for electrical and sunlight resistant. Support and expansion fitting may be needed. Article 352 (No plumbing type pipes.)