

# PALMER TOWNSHIP, PENNSYLVANIA

## Pool & Fence Details

*Based on the 2009 International Residential Code*

(Designed and Printed January 2012)



### CONTENTS

General Information.....	2	Prohibited Barrier Locations.....	5
Barrier Requirements.....	2	Barrier Exceptions.....	5
Access Gates.....	4	Permit Application Submittals.....	5
Direct Access to Pool from House.....	4	Pool Deck Access Gate Details.....	7
Above-Ground Pool.....	4	Swimming Pool App. Checklist.....	8

**THE USE OF THIS PACKAGE IN LIEU OF SUBMITTED DRAWINGS APPLIES TO RESIDENTIAL POOLS AND FENCES. POOLS AND FENCES MUST BE CONSTRUCTED IN CONFORMANCE WITH THE 2009 INTERNATIONAL RESIDENTIAL CODE, WHICH SUPERCEDES ANY DISPREPANCY LOCATED HERE WITHIN.**



## GENERAL INFORMATION

1. Definition: Barrier – A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.
2. All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures intended for human occupancy shall be approved pressure-preservative treated wood suitable for ground contact use.
3. Fence installation may be situated on the property line unless an easement is stated (check with local zoning authority). Any fence constructed past the property line or in an easement will be required to amend the problem immediately.
4. During the construction of the pool, orange construction fence must be placed to prevent access to the pool. **All fences shall be at least 48” tall and provide enough strength to resist a 200 pound force per square foot.**
5. Pools may not be filled with water until all permanent barriers are installed.
6. The following inspection is required after installation of fence:
  - Final inspection shall be scheduled when all construction of the fence has been completed.
  - **NOTE: INSPECTIONS ARE MANDATORY BY LAW. FAILURE TO OBTAIN THE INSPECTIONS MAY CAUSE VIOLATIONS AND FINES.**
7. It shall be the duty of the permit holder or their agent to notify the building official that such work is ready for inspection. It shall be the duty of the person requesting any inspections required by this code to provide access and means for inspection of such work.
8. All inspections must be made at least 24 hours in advance. All construction documents shall be on the jobsite and provided to inspector upon request. You may schedule an appointment for inspection by calling Palmer Township’s Offices at (610) 253-7191 Monday thru Friday 8:30a.m. – 4:30p.m.

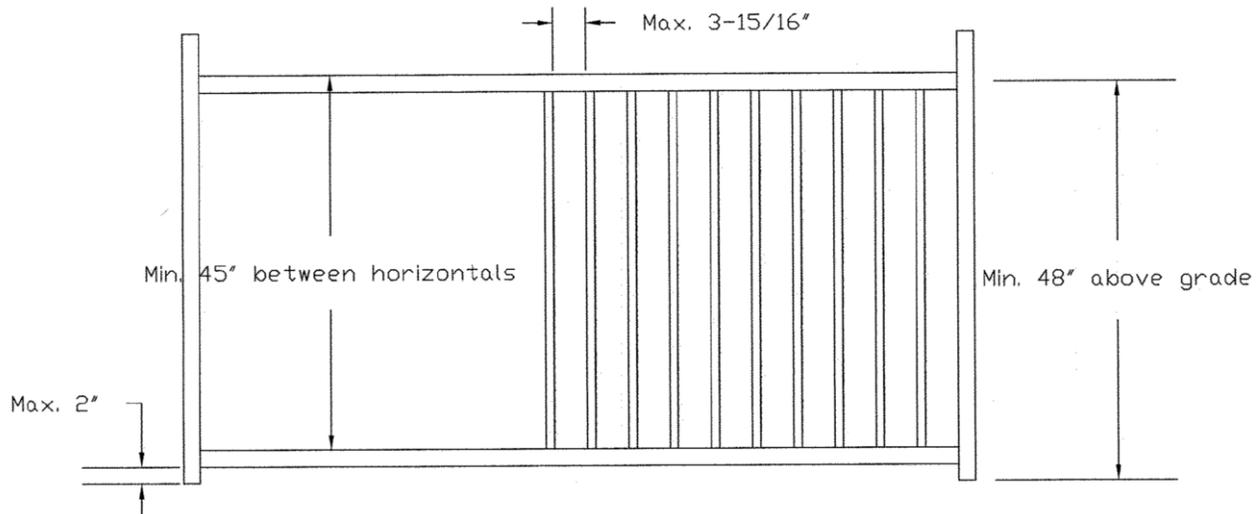
## Barrier Requirements

The provisions of this chapter (Appendix G of 2006 International Residential Code) shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

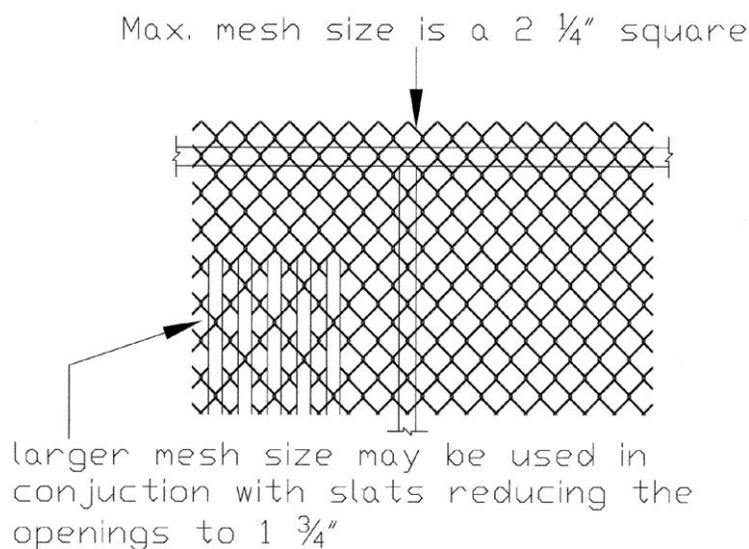
**Outdoor Swimming Pool:** An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches.
2. Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.

3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed  $1\frac{3}{4}$  inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed  $1\frac{3}{4}$  inches in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops and the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed  $1\frac{3}{4}$  inches in width.



6. Maximum mesh size for chain link fences shall be a  $2\frac{1}{4}$ -inch square unless the fence has slats fastened to the top or bottom which reduce the openings to not more than  $1\frac{3}{4}$  inches.

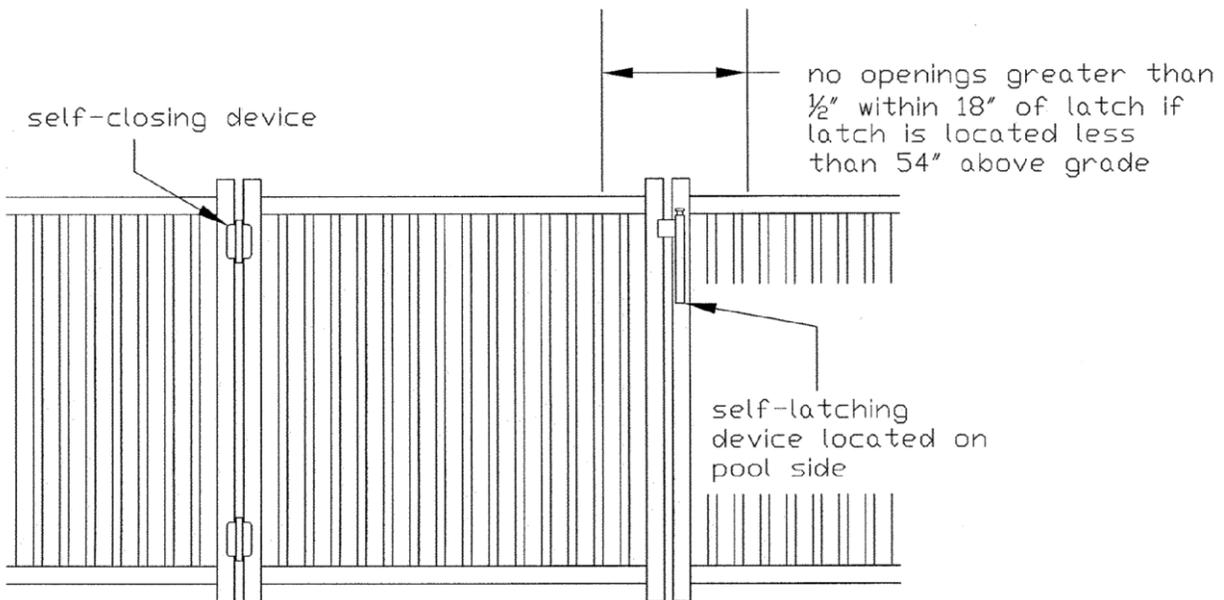


7. Where the barrier is composed of diagonal members, such as lattice fence, the maximum opening formed by the diagonal members shall not be more than  $1\frac{3}{4}$  inches.

## Access Gates

Access gates shall comply with the requirements above and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism and openings shall comply with the following:

1. The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate; and
2. The gate and barrier shall have no openings larger than  $\frac{1}{2}$  inch within 18 inches of the release mechanism.



## Direct Access to Pool from House

Where the wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:

1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible alarm warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. Deactivation switches shall be located at least 54 inches above the threshold of the door; or
3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be accepted so long as the degree of protection afforded is not less than the protection afforded above.

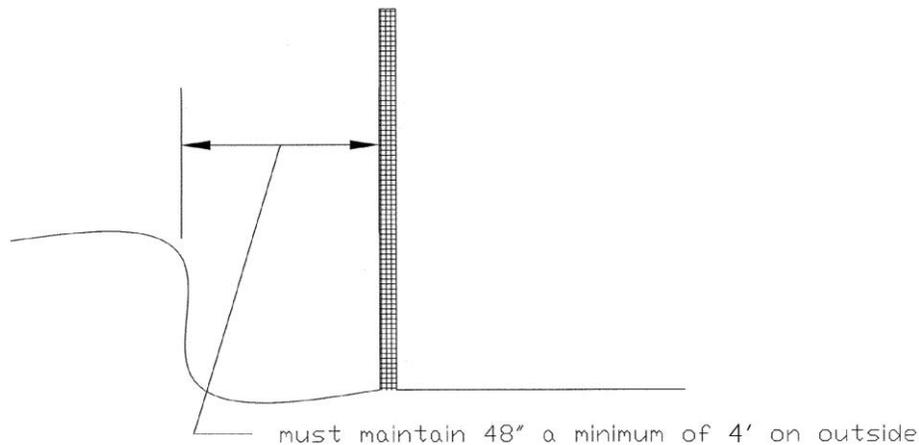
## Above-Ground Pool

Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
2. The ladder or steps shall be surrounded by a barrier which meets the requirements of the Barrier section above. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter sphere.

### **Prohibited Barrier Locations**

Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them. All barriers shall be a minimum of 4 feet from any grade or structure that does not maintain a height of at least 48 inches of protection.



### **Barrier Exceptions**

Only spas and hot tubs with a safety cover, which complies with ASTM F 1346, may be used without a barrier required from the sections above.

### **Permit Application Submittals**

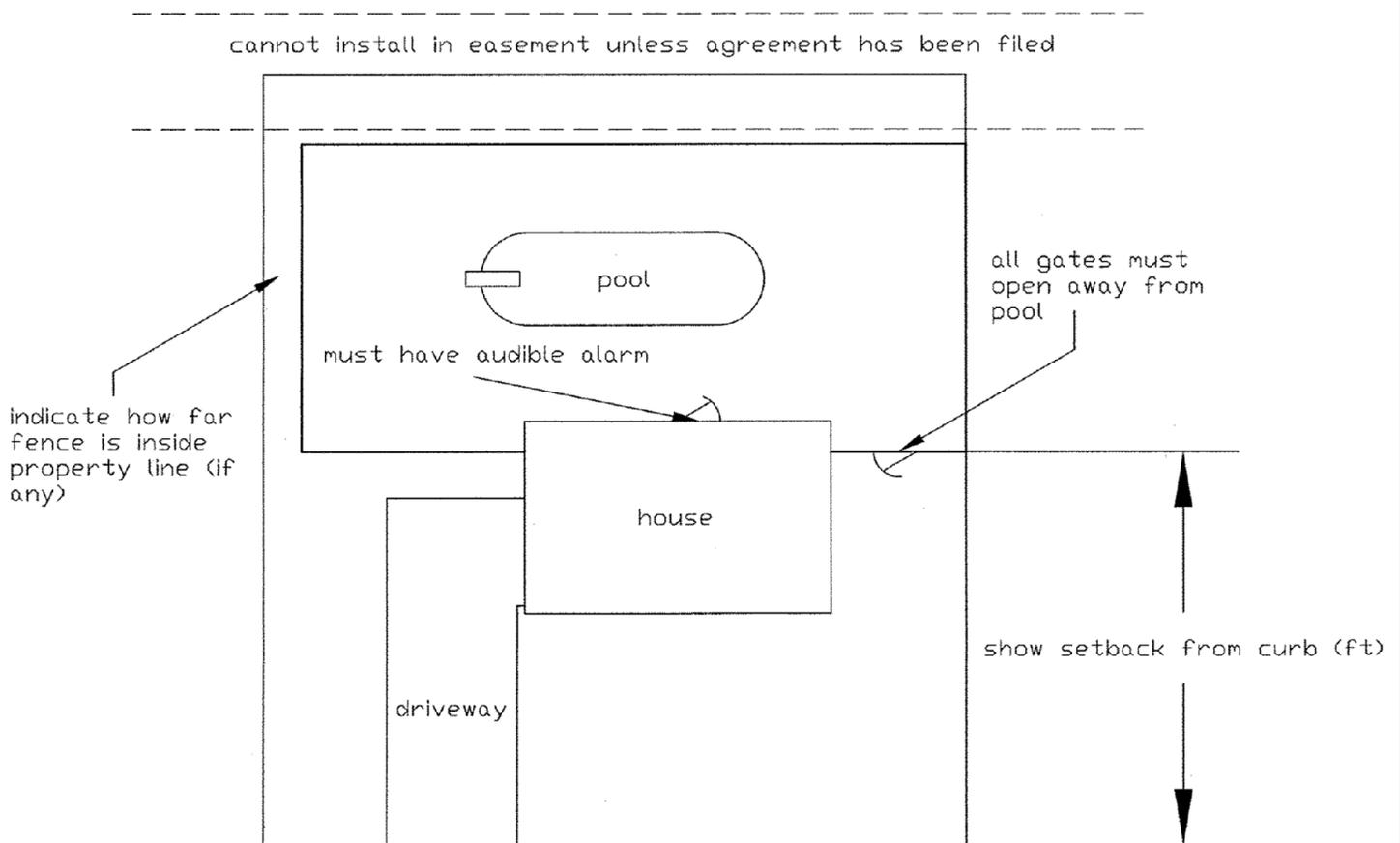
Site plan and fence details are required to be submitted when applying for a pool and fence permit. The site plan must include the fence and pool in reference to the house and property lines (see example on next page). This shall indicate the setbacks of the fence, if any, and pool from the property lines. Any misrepresentation will be handled by our Zoning and Building Department and may impose violations, fines and the removal of such installed structures.

Fence details including the size, measurements and materials of the fence or barrier shall be included when applying for a permit. If fence has not been purchased or selected at time of permit, processing may be delayed or rejected. **Note: Check with contractors that they are installing a fence approved for a pool barrier requirement in relation to the 2009 International Residential Code.** If a contractor is installing a fence, please supply contractor's name, address and phone number.

Pool manufacturer details, as well as, pump specifications shall be submitted when applying. See the last page in this packet for a helpful checklist.

Once one has applied and paid for the permit, it will undergo the approval process. The zoning and building departments shall have 15 days to review each application and contact the owner or agent

with any questions/concerns. When the permit is approved, it will be mailed to the applicant's house. Please post such permit in a window/door visible from the street during the construction project.



Example of Plot Plan

The following list includes applicable permits:

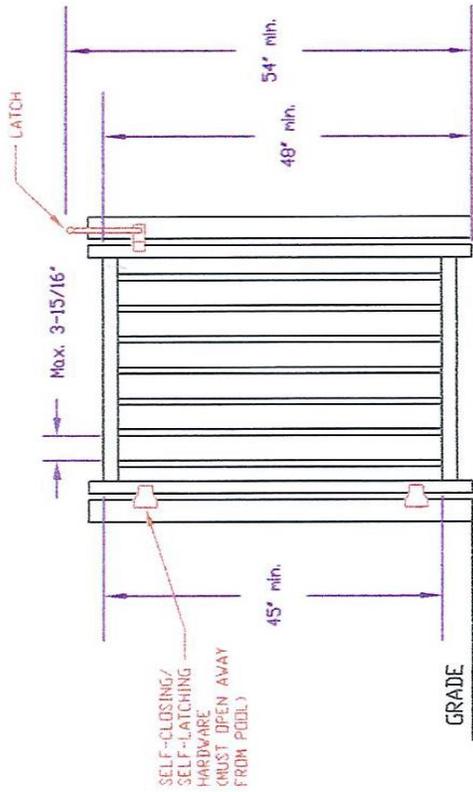
- Above-ground / in-ground pool permit
- Electrical permit
- Mechanical permit if installing gas heater
- State surcharge & occupancy fee
- Fence permit

Filtering systems must be installed at least 5' from any side or rear property line.

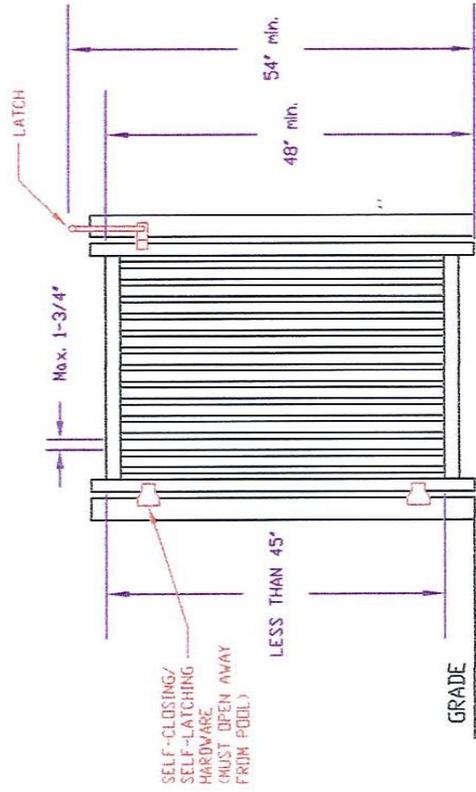
All water bearing sides of pool shall be a minimum of 10' from any side or rear property line and 5' from any structure. Any attached deck or platform shall be at least 5' from any property line. **NOTE: NO POOL MAY BE INSTALLED IN FRONT YARD.** If a property is located on a corner, front yard setbacks occur for any property line abutting a street.

All electrical installations shall be installed as per the current National Electrical Code standards with ground-fault circuitry, and shall be inspected by an approved inspection agency. The list will be provided with your application.

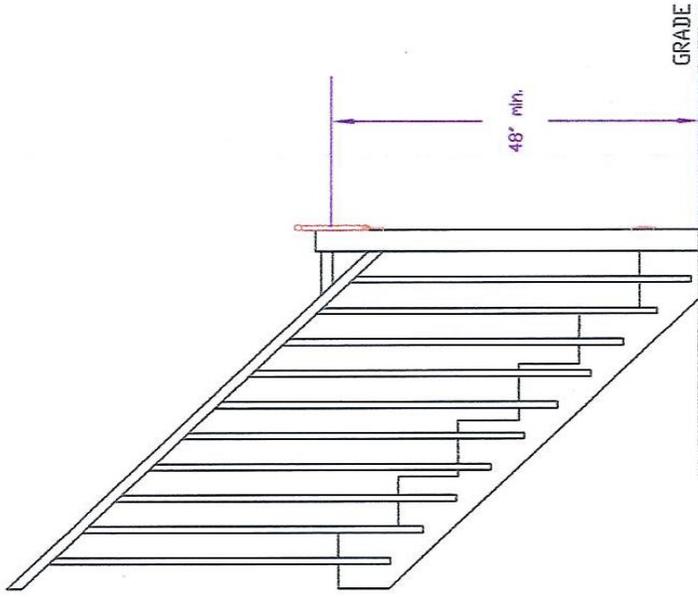
# POOL DECK ACCESS GATE CODE DETAILS



OPTION 1: WHEN THERE IS 45" BETWEEN TOPS OF HORIZONTALS



OPTION 2: WHEN THERE IS LESS THAN 45" BETWEEN TOPS OF HORIZONTALS



SIDE VIEW OF POOL STAIRS

2009 INTERNATIONAL RESIDENTIAL CODE - APPENDIX G:  
 \* WHERE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTALS IS LESS THAN 45 INCHES, THE HORIZONTAL MEMBERS SHALL BE LOCATED ON THE SWIMMING POOL SIDE OF THE FENCE AND SPACING SHALL NOT EXCEED 1-3/4 INCHES.  
 \* WHERE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTALS IS 45 INCHES OR MORE, SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 4 INCHES.  
 \* ACCESS GATES SHALL BE EQUIPPED TO ACCOMMODATE A LOCKING DEVICE. PEDESTRIAN ACCESS GATES SHALL OPEN OUTWARD AWAY FROM POOL AND SHALL BE SELF-CLOSING AND HAVE A SELF-LATCHING DEVICE. THE RELEASE MECHANISM SHALL BE LOCATED NOT LESS THAN 54 INCHES FROM THE BOTTOM OF THE GATE.

## SWIMMING POOL APPLICATION CHECKLIST

Municipality: Palmer Township

Date: \_\_\_\_\_

Site Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Applicant Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Type of pool:     Above-ground     In-ground     Temporary / Seasonal

Residential     Commercial

If above ground pool will be constructed into the slope of the property, manufacturer's specifications must be submitted to show that the pool can be partially buried.

Barrier:     Pool wall 48 inches or higher     Installing fence 48 inches or higher

Fence Gates:     Self closing & latching & locking     Swing in direction of egress

Include Fence and Gate details on plans

Pool is separated from house with fence full around. No access from house to pool area.

Ladders:     Secured, lockable or removable or surrounded by a code compliant barrier.

Door Alarms     If the house is used as part of the barrier all doors must be alarmed per code. (UL 2017)

Pool pump     All specifications included with permit. (UL listed pump)

Electrical service     Verify that there are no overhead electrical lines

Energy     Heated pools with vapor retardant pool cover; where water is heated to more than 90 degrees, pool cover shall be insulated to a minimum R-12

Entrapment     Provide entrapment protection details (in-ground pools only)

Plans     Provide 2 sets of complete plans with all of the above information

Note:    (Pool diagram showing size and type of pool, pool pump specifications, ladder type, fence style and self-closing and self-latching gates) All pool equipment specifications must be submitted.