

OUTDOOR IN GROUND POOL, SPA, & FOUNTAINS



Engineering and Development Services 14455 W. Van Buren Street, Bldg D, Goodyear, AZ 85338 (623) 932-3004, Opt. 2

REQUIREMENT / PROCEDURE		09-RP-004	
Effective Date:	Previously in effect	Revised Date:	12/24/18

PERMITS

Pool and spa permits may be obtained by completing an application and submitting (2) two sets of required plans to the Development Services Department located at 14455 W. Van Buren Street, D101. The fencing requirement will require original signatures of the Tenant/Resident to be submitted. The application shall be completed in full and shall be legible. Plans shall include all applicable information, as listed below, and shall be legible. **Incomplete and illegible applications and plans will not be accepted for review.**

PLAN SUBMITTAL REQUIREMENTS (Refer to attachment #1 for an example of an acceptable plan submittal. Copies of site plan with previous city approval stamps will not be accepted)

- The attached fencing requirement document shall be completed by the Tenant/Resident. This document with original signatures of the Tenant/Resident must be included with the permit application and plan submittal (**This document must remain as a double-sided form**)
- Specify the distance from water's edge of the pool to all nearest points of property lines.
 1. Minimum five feet (5) to all property lines.
- Provide the following information regarding the adjacent structure/structures:
 1. Single-story, two-story, basement (with single-story or two-story above).
 2. Specify if the patio slab is supporting roof and/or floor loads, if applicable.
 3. A minimum of 5' shall be maintained from the water's edge of the pool to the structure, or provide sealed engineered plans.
 4. A minimum 3' of exterior landing shall be maintained at all doors.
 5. A minimum of 5' from (or 60" above grade) the water's edge of the pool to any glazing, or glazing shall be safety glazed.
 6. Specify all surcharged areas of the pool, per engineered plans. Show "xxxxx" marks to clarify the locations.
- Specify type of pool equipment (gas or electric) and location from property lines and all structures.
- Clearly specify various pool depths on site plan.
- Provide a typical cross-section detail of the barrier fence/wall.
- Show the location of the utilization equipment disconnect. Also, at least one receptacle shall be located between 6'-20' of the inside wall of the pool.
- Specify if rock features are architectural (fake) or structural (real) and **specify maximum weight of boulders.**

1. Specify location of surcharging for rock waterfalls and rock features that impose a maximum square foot load on the ground of 250 psf, a maximum concentrated load of 400 lbs., and a maximum linear load of 250 plf.
2. Additional engineering may be required for rock waterfalls and rock features that exceed the maximum specifications listed in item #1.

Construction plans and calculations, sealed by an engineer registered in Arizona, shall be submitted for custom pools.

INSPECTIONS

An inspection may be requested by calling (623) 932-3004, **SELECT OPTION 1** by 11:59 PM the business day prior to inspection. Please be prepared to give the inspection code and permit number; for example, inspection code 50, permit number 98-1100. Inspections requested the previous business day must be ready for inspection the next business day by 7:00 A.M.

The city approved plot plan and permit, a copy of the city approved engineering standards, and a copy of city approved plans for any additional engineering specific to the project shall be available at the job site. Failure to have these plans available to the Inspector, failure to have the pool ready for the requested inspection, or failure to provide access to the property due to locked gates (access to the house will also be required for certain pool barrier requirements), or unrestrained dogs will result in a \$100 reinspection fee being assessed, unless our department is contacted at (623) 932-3004 x2 prior to the Inspector arriving at the jobsite.

The following is a list of items that are required to be completed prior to requesting a pre-gunite or pre-plaster inspection:

PRE-GUNITE

The following parts shall be bonded together with a minimum No. 8 solid copper conductor, insulated, covered, or bare. (NEC Section 680.26):

1. All pool steel and metallic items (ladders, handrails etc.).
2. All forming shells and mounting brackets of a no-niche fixture.
3. Metal parts of electrical equipment associated with the pool water circulating system, including pump motors.
4. All metallic material within five (5) feet of water's edge of the pool that may become energized (metal windows/door frames, gutters, metal siding, metal fences/gates, etc.).
5. All metallic piping and metallic material (metal window/door frames, gutters, fences, gates, etc.) within five (5) feet horizontally of the inside walls of the pool and within twelve (12) feet above the maximum water level of the pool.

The following grounding provisions shall be in compliance with NEC 680.25:

1. Pool lighting fixtures and related equipment.
2. Pool associated motors.
3. A panelboard that is not part of the service equipment.
4. Cord-connected equipment.
5. Other electrical equipment shall be grounded in accordance with Article 250.

A pressure type vacuum breaker shall be installed if the pool has an automatic filling capability.

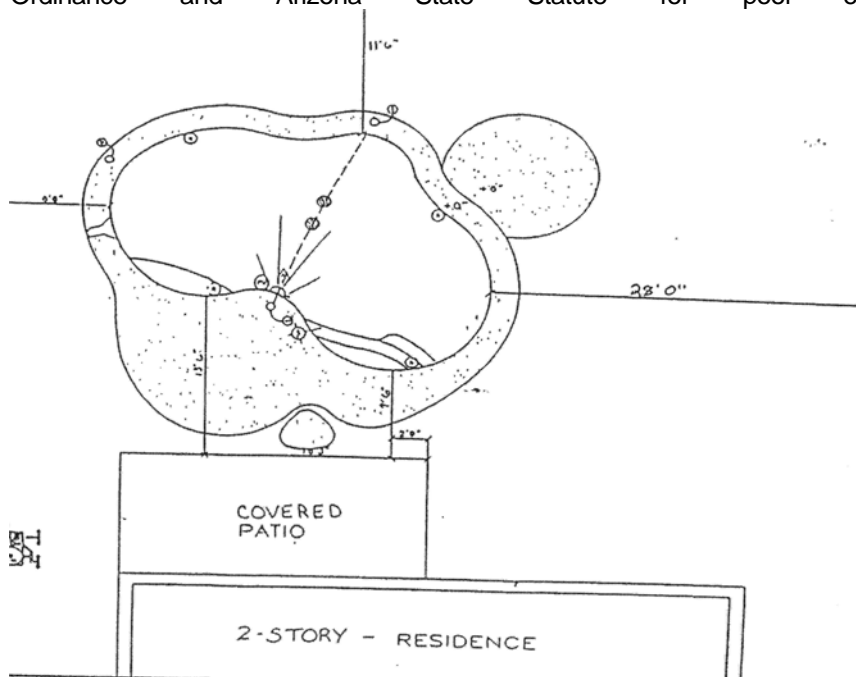
The bottom of the excavation for the pool shall be free of mud, debris, and other materials that may effect the integrity of the pool.

Reinforcing steel shall be adequately supported to maintain spacing and specified clearances.

- Confirm there are no switching devices within five (5) feet of the water's edge of the pool.
- Confirm there are no junction boxes located less than four (4) inches, measured from the inside of the bottom of the box, above the ground level or pool deck, or not less than eight (8) inches above the maximum pool water level, whichever provides the greatest elevation, and located not less than four (4) feet from the inside wall of the pool (or provide a solid, permanent barrier).
- Verify all receptacle outlets are a minimum of ten (6) feet from the water's edge of the pool.
- Verify a minimum of one (1) receptacle outlet with ground-fault circuit-interrupter protection shall be within ten (6) to twenty (20) feet from the water's edge of the pool.

PRE-PLASTER

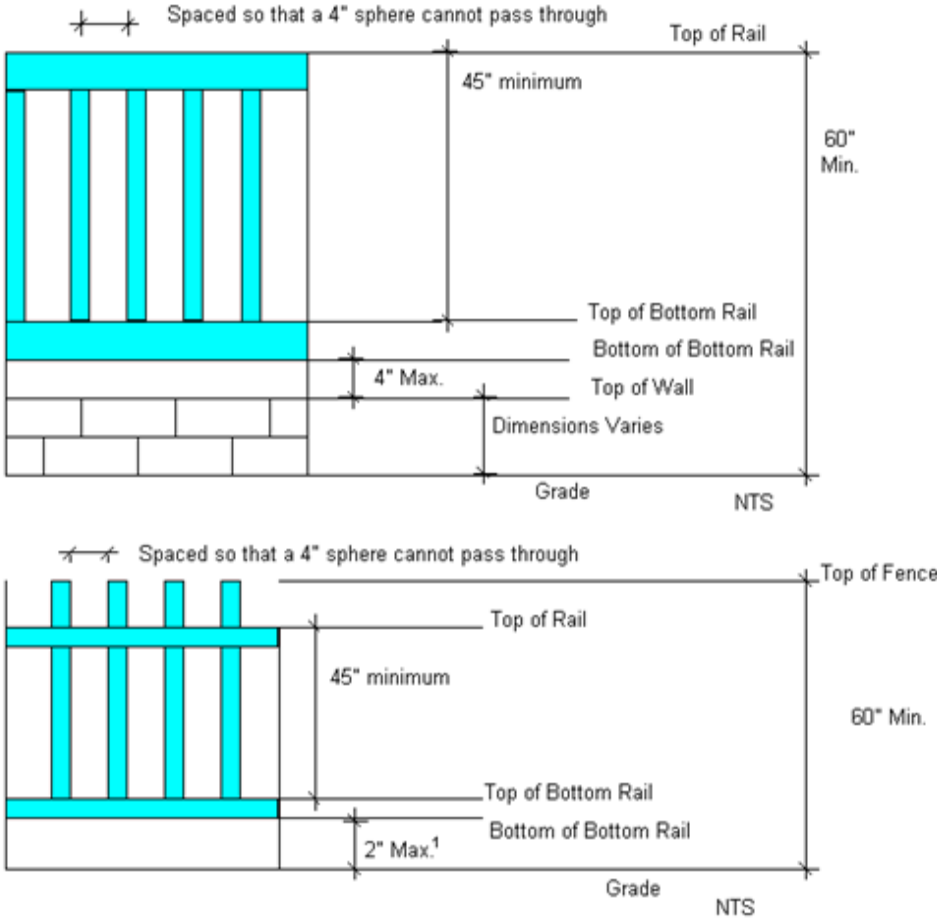
- Refer to the pre-gunite section of this document for bonding and grounding requirements, if applicable.
- Safety glazing shall be installed at windows or doors within five (5) feet (and less than sixty (60) inches above grade) of water's edge of the pool, if applicable. Window safety film is not an acceptable substitute.
- All pool equipment shall be placed on an approved slab for sufficient support.
- Gas heater vents, if applicable, shall terminate a minimum of:
 1. The vent termination point shall not be closer than (3) feet to an interior corner formed by two walls perpendicular to each other.
 2. A minimum of four (4) feet from and one (1) foot above any door, window, or gravity air inlet.
- The pool/spa circuit in the electrical service panel shall be:
 1. A circuit breaker approved for the panel and use.
 2. Bonded and grounded.
 3. Circuit shall be identified on panel index or dead front.
 4. All required fences and gates shall be installed (refer to the attached City of Goodyear Ordinance and Arizona State Statute for pool enclosure requirements)



GUIDELINES FOR DETERMINING POOL FENCES AND GATES TO BE NON-CLIMBABLE

The following are minimum and maximum dimensions and guidelines to be applied in determining if a fence and/or gate is non-climbable. These requirements apply to the side of the barrier that faces away from the pool or spa. Openings in the fence or gate shall be reduced to a maximum of one and three-quarter inches if horizontal components are placed on the pool side and are spaced less than forty-five inches apart (See the reverse side of this form for an example). Alternative methods may be submitted to the Building Safety Department for review.

1. Chain link fences are not considered to be non-climbable and are not approved as a pool barrier.
2. The following details provide minimum and maximum vertical and horizontal pool fence and gate dimensions:



1. 2" maximum from the grade to the bottom of the barrier may be increased to 4" maximum when grade is a solid surface such as concrete or brick paving.

CITY OF GOODYEAR
OUTDOOR POOL AND SPA FENCING REQUIREMENTS

This document outlines both the City of Goodyear Ordinance and Arizona State Statute pool enclosure requirements. Residences with residents younger than six years of age must comply with **both** the City of Goodyear Ordinance and Arizona State Statute requirements for pool enclosures. Please keep in mind that the most restrictive requirements of the two regulations will be enforced. After reviewing the following requirements, place a check mark in the appropriate box under Item "C", (if applicable); complete the information requested on the reverse side, and return this document with the permit application. Please contact our department if you have any questions at 623-932-3004.

Fences and gates shall meet the following City of Goodyear requirements for all residences:

1. Self-closing, self-latching devices shall be installed on all gates (refer to #2 for RV and double gate requirements).
2. RV and double gates, **which are not the sole means of ingress and egress**, shall have an unlocked padlock present at time of the inspection.
3. Gate latches shall be at least four and one-half feet above the ground or shall be made inaccessible from the outside.
4. Perimeter property fence or surrounding pool fence shall be a minimum of five (5) feet in height.
5. Have no openings within the fence and gates through which a spherical object four (4) inches in diameter can pass.
6. The fence and gates shall not be constructed in a manner as to provide hand or foot holes for climbing.
7. When acceptable and approved by the Chief Building Official, a readily portable hot tub or spa which is completely above ground, not more than eight (8) feet in width (not more than (8) feet in any dimension for residences with residents younger than six years of age) and has all sides fully exposed, may be permitted to have a hard, latching or locking cover in lieu of the five (5) foot fence barrier.

IN ADDITION TO THE ABOVE REQUIRED FENCE AND GATE REQUIREMENTS, refer to the following Arizona State Statute 36-1681 for pool fencing and gate requirements for **residences with residents younger than six years of age**.

ARTICLE 7
POOL SAFETY

36-1681. Pool enclosures; requirements; exceptions; enforcement.
Statute text

- A. A swimming pool, or other contained body of water that contains water eighteen inches or more in depth at any point and that is wider than eight feet at any point and is intended for swimming, shall be protected by an enclosure surrounding the pool area, as provided in this section.**
- B. A swimming pool or other contained body of water required to be enclosed by subsection A, whether a belowground or aboveground pool, shall meet all of the following requirements:**
 1. Be entirely enclosed by at least a five foot wall, fence or other barrier as measured on the exterior side of the wall, fence or barrier.
 2. Have no openings in the wall, fence or barrier through which a spherical object four inches in diameter can pass. The horizontal components of any wall, fence or barrier shall be spaced not less than forty-five inches apart measured vertically or shall be placed on the pool side of a wall, fence or barrier which shall not have any opening greater than one and three-quarter inches measured horizontally. Wire mesh or chain link fences shall have a maximum mesh size of one and three-quarter inches measured horizontally. (The City of Goodyear's ordinance requires the fence be non-climbable)
 3. Gates for the enclosure shall:
 - (a) Be self-closing and self-latching with the latch located at least fifty-four inches above the underlying ground or on the pool side of the gate with a release mechanism at least five inches below the top of the gate and no opening greater than one-half inch within twenty-four inches of the release mechanism or be secured by a padlock or similar device which requires a key, electric opener or integral combination which can have the latch at any height.
 - (b) Open outward from the pool.
 4. The wall, fence or barrier shall not contain openings, handholds or footholds accessible from the exterior side of the enclosure that can be used to climb the wall, fence or barrier.
 5. The wall, fence or barrier shall be at least twenty inches from the water's edge.

C. If a residence or living area constitutes part of the enclosure required by subsection B for a swimming pool or other contained body of water in lieu of the requirements of subsection B, please place a check mark in one of the following boxes to indicate how compliance will be achieved:

- Between the swimming pool or other contained body of water and the residence or living area, a minimum five foot wall, fence or barrier to the pool area which meets all of the requirements of subsection B, paragraphs 2 through 5.
- The pool shall be protected by a motorized safety pool cover which requires the operation of a key switch which meets the American Society of Testing and Materials Emergency Standards 13-89 and which does not require manual operation other than the use of the key switch.
- All ground-level doors or other doors with direct access to the swimming pool or other contained body of water shall be equipped with a self-latching device which meets the requirements of subsection B, paragraph 3, subdivision (a). Emergency escape or rescue windows from sleeping rooms with access to the swimming pool or other contained body of water shall be equipped with a latching device not less than fifty-four inches above the floor. All other openable dwelling unit or guest room windows with similar access shall be equipped with a screwed in place wire mesh screen, or a keyed lock that prevents opening the window more than four inches, or a latching device located not less than fifty-four inches above the floor. **Pet doors with direct access to the swimming pool are not allowed.**
- The swimming pool shall be an aboveground swimming pool, which has non-climbable exterior sides that are a minimum height of four feet. Any access ladder or steps shall be removable without tools and secured in an inaccessible position with a latching device not less than fifty-four inches above the ground when the pool is not in use.

D. This section does not apply to:

1. A system of sumps, irrigation canals, irrigation, flood control or drainage works constructed or operated for the purpose of storing, delivering, distributing or conveying water.
 2. Stock ponds, storage tanks, livestock operations, livestock watering troughs or other structures used in normal agricultural practices.
 3. Public or semi-public swimming pools.
 4. A swimming pool or contained body of water or barrier constructed prior to the effective date of this article.
 5. Political subdivisions which enact a swimming pool barrier ordinance before the effective date of this article.
 6. Political subdivisions which adopt ordinances after the effective date of this article provided that the ordinance is equal to or more stringent than the provisions of this article.
 7. A residence in which all residents are at least six years of age.
- E. A person on entering into an agreement to build a swimming pool or contained body of water or sell, rent or lease a dwelling with a swimming pool or contained body of water shall give the buyer, lessee or renter a notice explaining safety education and responsibilities of pool ownership as approved by the department of health services.
- F. A person who violates this section is guilty of a petty offense except that no fine may be imposed if a sufficient showing is made that the person has subsequently equipped the swimming pool or contained body of water with a barrier pursuant to the standards adopted in subsection B within forty-five days of citation and has attended an approved swimming pool safety course.

<u>THE TENANT/RESIDENT SHALL COMPLETE THE FOLLOWING INFORMATION:</u>			
DATE: _____			
NAME OF TENANT/RESIDENT (PLEASE PRINT): _____ _____			
ADDRESS: _____ _____			
ARE THERE CURRENTLY RESIDENTS YOUNGER THAN SIX (6) YEARS OF AGE RESIDING AT THE ABOVE ADDRESS?			
YES _____ NO _____			
I have read the above pool enclosure regulations and agree to have all requirements in place prior to requesting a pre-plaster inspection.			
_____	_____	_____	_____
SIGNATURE	DATE	SIGNATURE	DATE

FOUNTAIN PERMITS

A permit is required any time the following systems are added, altered, or breached: potable water system, electrical circuits, electrical wiring, or electrical equipment. The permit may be obtained by completing an application at the city Building Safety Division located at 14455 W. Van Buren St., D101, Goodyear, Arizona 85338, (623) 932-3004 option 2.

INSPECTION

All work must be inspected before being covered (this does not include any landscape piping on the load side of a vacuum breaker or wiring on the low voltage side of a landscape lighting transformer). When the work for which the permit was issued has been completed, a final inspection must be requested. Requests for inspection can be made by calling (623) 932-3004, **OPTION 1**, by 11:59 P.M. the business day prior to inspection.

Contractors performing work for which a permit is required must be licensed by the State of Arizona in the discipline of the work performed. Failure to bring into compliance any items noted during an inspection will result in a \$100 re-inspection fee assessment at the next requested inspection. Failure to request an inspection before the work is covered or completed will result in a notice to comply and additional fees.

Fountains 18 inches or deeper must comply with the City zoning requirements for a pool fencing.

The following items represent the most common requirements for the installation of fountain equipment. This list is not all inclusive, but it will help the installer obtain approval for compliance during inspection:

PLUMBING

- Refer to the City of Goodyear Landscape Vacuum Breaker handout for plumbing and vacuum breaker requirements.

ELECTRICAL

- Circuit breakers must be legibly marked to indicate it's purpose with durable ink or other durable means.
- Circuit breakers installed in panelboards must be the specific type listed on the panel cover.
- Grounding and neutral (grounded) conductors must not be terminated under or share the same lug or terminal. More than one grounding conductor may share the same termination where listed by the manufacturer, refer to the label on the inside panelboard cover.
- Outdoor receptacle outlets used to supply power to cord connected equipment must be GFCI protected and in a weatherproof enclosure, the integrity of which is not affected when the attachment plug cap is inserted.

- Underground conduit must be buried in accordance with 2002 NEC 300.5. Residential branch circuits rated 120 volts, maximum 20 amps, and GFCI protected may be buried 12 inches below grade.
- Electrical installations for fountains shall comply with 2002 NEC Article 680 Part V. Fountains that have water common to a pool shall comply with the pool requirements of 2002 NEC Article 680 Part I & II.
- Ground-Fault Circuit Interrupter (GFCI) protection shall be installed in the branch circuit supplying fountain equipment.
- All metal piping systems associated with the fountain shall be bonded to the fountain branch circuit equipment grounding conductor.

The following equipment shall be grounded:

- Fountain associated electrical equipment by an insulated copper grounding conductor.
- Electrical equipment within 5 feet of the inside walls of the fountain.
- Subservice panelboards supplying power to fountains shall be grounded in accordance with 2002 NEC 680.54