Community Development Department Building Division



www.cityofwestsacramento.org

1110 West Capitol Avenue West Sacramento, CA 95691 Ph: (916) 617-4683

Swimming Pools • Hot Tubs • Spas

Purpose

This handout summarizes the plan review submittals for proposed swimming pools, hot tubs and spas in private residential single-family homes (Group R-3 Occupancies). Barrier provisions also apply to the design and construction of swimming pools based on the 2016 California Building Code Section 3109. Approval must be obtained from Building, Planning, and Engineering before commencing any work.

Permits Required

A building permit is required for the following type of construction:

Indoor and outdoor swimming pools (any structure intended for swimming or recreational bathing that contains water to a depth at any point greater than 18-in), regardless of capacity. In-ground and above-ground spas or hot tubs.

Plan Submittal for Construction

Quantity

- Five (5) complete sets of plans.
- Two (2) sets of wet-stamped and signed calculation reports and steel schedules prepared by a professional engineer licensed in the State of California.
- Five (5) fully dimensioned <u>Site Plans</u> (11-in x 17-in minimum size), at least <u>two sets signed and wet-stamped by a California professional designer</u> (licensed architect or engineer).
- Two (2)Title 24 Energy forms 2016 (CF2R-PLB-03-E pgs 1-3, CF2R-PLB-03-E) pg 1 of 1
- A completed Building Permit Application form and plan check fee paid.
- Signed authorization letter from property owner where excavation will be deposited.

Obtain an Encroachment Permit by the Engineering Division.

Information

Site Plan

Lot dimension; location of all existing building structures; setback distances to property lines and pool; location of exterior windows facing the pool.

Note: glazing surfaces less than 60-in above the pool side <u>and</u> within 5-ft to edge of water shall be "tempered" glass.

Public utility easement location (sewer, water power, drainage, etc.).

Septic tank location and leach lines (if public sewer does not serve house).

Overhead electrical service drops, including clearance to pool.

Gas pipe location, material, size, routing and point of connection to existing gas service.

Pool equipment location (3-ft minimum to adjacent property lines), disconnects and breaker size; receptacle outlets within 20-ft of the pool; type of conduit (metal or plastic); existing service panel and amperage (underground or overhead); location and size for gas meter.

Enclosure information such as fences, gates, doors exiting to pool area - including garage doors - and exit alarm mechanism. Provide enclosure height, material (wood, chain link, wrought iron, etc.) including ornamental pattern of open-web or picket-type fence.

Note: All gates shall be self-closing and self-latching gates on which the latch is at least 54-in above ground level and on pool side of gate.

Setback distances from all property lines and building structures to the swimming pool; include any glazing surfaces (provide tempered glazing for windows and doors less than 60-in above the pool side and within five feet to water's edge of pool).

Location of hose bibs within 20-ft of the pool with backflow prevention devices.

Depth of pool.

Building

- This project shall comply with current adopted editions of the 2016 California Building Code, 2016 California Plumbing Code, 2016 California Mechanical Code, 2016 California Electrical Code, Article 680, and 2016 California Energy Standards.
- All electric and gas fired equipment shall be listed by a nationally recognized testing laboratory.
- All pool construction shall conform to expansive soil details unless a soil report indicates otherwise.
- All pool construction shall comply with the new safety feature regulations. Refer to the Safety Requirements handout for detailed information.

Definitions

Exit Alarms: devices that make audible, continuous alarm sounds when any door that permits access from the residence to the pool area that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.

The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dbA when measured indoors at 10-ft. The alarm shall automatically reset under all conditions; it shall be equipped with a manual means, such as a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall not last longer than 15 seconds. The deactivation switch shall be located at least 54-in above the threshold of the door.

Approved Safety Pool Cover: a manually or poweroperated safety cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with Standard F 1346-91.

OTHER DEPARTMENT REQUIREMENTS

Planning

Any pool, spa, pond, lake or open tank not located within a completely enclosed building and containing, or normally capable of containing, water to a depth at any point greater than 18-in in any residential (R) zone shall comply with the following requirements.

The pools shall be used solely for the enjoyment of the occupants of the premises on which they are located and their guests and not instruction

- or parties when fees are paid therefore unless a use permit is first obtained.
- The pools shall be located on the rear one-half of the lot or not less than 50-ft from the front property line.
- The pools shall maintain a setback of not less than 15-ft from a street property line, 5-ft from any other lot line, and 5-ft from any dwelling unit.

Attached patio covers are not considered part of the dwelling unit for the purposes of measuring swimming pool setbacks.

- ☐ Filter and Heating Systems (Equipment Pad) for swimming pools shall not be located:
 - a) Within any required setback adjacent to a public street, or
 - b) Within three feet of any other side or rear property line, or
 - c) Within ten feet from the living area of any dwelling unit on an adjacent parcel, unless enclosed in a sound proof enclosure.

Engineering

- An Encroachment Permit will be required to ensure repair of any existing curb, gutter and sidewalk or any other public improvements that may be damaged as a result of the pool installation. The site plan shall clearly delineate where access to the proposed site will occur. Access across City right-of-way onto the property shall be limited to the existing driveway approach unless expressly approved on the encroachment permit.
- Submit an Insurance Endorsement; naming the City of West Sacramento, its Officers, Officials, Employees and Volunteers as additionally insured.
- Provide a letter stating the location where the soils from the pool excavation will be dumped and written permission from the property owner of said site.

To comply with Cal Green storm water requirements applicant shall provide an Erosion Sediment Control Plan (ESCP). An ESCP worksheet is available on the City's website

Inspections

You may wish to follow the progress of your pool construction by monitoring various stages of approvals recorded on the inspection record card. It is important that this inspection card be conspicuously posted and made available at time of inspection. A brief explanation of each inspection step is described as follows.

Swimming Pools

Pre-Gunite

- ✓ Structural check involves location, excavation depth and steel placement are in accordance with the approved plans. Of special interest is the fact that the City of West Sacramento requires additional reinforcing steel to safeguard against the possible presence of expansive soils.
- ✓ Plumbing check involves return line, fill line and all other piping (minimum 35# psi test pressure); gas piping installation and test (minimum 10# psi test pressure); any sewer or water line reroute. Allow a soil embedment depth of 12-in when using plastic PVC in the circulating system, painted with latex paint to provide protection from sun. A direct connection between any storm drain, drainage system, dry well or subsoil irrigation line connected to a pool is not allowed. Any discharge from the swimming pool for the purpose of lowering the water level, must be from a hose connected to a hose bib on the filter or separation tank with drainage to an acceptable location.
- ✓ Electrical check involves service drop clearance requirements; bonding of pool or spa steel, underwater light fixture forming shells, diving boards, slide, fill line, equipment and metallic objects located within 5-ft of inside walls of pool or spa; electrical conduit; verify approved listings for underwater light fixtures forming shells these are installed with the top of the fixtures at least 18-in below normal water level, unless identified at a depth not less than 4-in.

Pre-Deck

✓ All plumbing and electrical installed, final bonding of diving board (if any), grab rails and slides, disabled access inserts and rope ties; deck steel bonding and bonding at pool equipment.

Pool Barrier & Pre-Plaster

- ✓ Inspection is always conducted at the same time to insure the pool enclosure complies with the barrier and safety features. Approval of the pre-plaster stage of construction authorizes plaster application to the pools gunite surface and the subsequent filling with water.
- ✓ Electrical check involves underwater light fixtures forming a shell, proper grounding, listed potting compound, encapsulating and covering requirements; required circuits GFCI protected; if fiber optics is used and equipment set.

NOTE: An adult (person over 18 years) must be present during the pre-plaster inspection!

Sign off for barrier and safety features is required <u>prior</u> to plastering of pool/spa.

Final Inspection

- ✓ Building check includes sidewalks; final grading; location of equipment in conjunction with property lines, structures and windows.
- ✓ Plumbing check inspection for all exposed piping to detect any leaks; approved gas valve; T & P relief valve on heater (if required) and termination of drain; equipment is secured to equipment pad; compliance with State energy laws and solar (if any); proper gas connector; prepare P G & E utility tag.
- ✓ Electrical check inspection for complete grounding and bonding; main panel indexed at breakers; proper operation of switches and receptacles; installation of time clocks; proper wire and breaker sizing; required pool/spa circuits GFCI protected; pool light has low water cutoff.

No excavation or structural portion of the pool to be located in any Public Utility Easements.

Sign off for the Encroachment Permit is required <u>prior</u> to Building's final inspection.

✓ Provide barrier and safety feature requirements to property owner.

Hot Tubs / Spas

Pool Barrier & Rough-Electrical

✓ Barrier and safety feature required at this inspection.

Final Inspection

Fees

Building fees are based on the total value of all construction work (including labor and materials). Consult with a permit technician for details.

Application Forms

Building permit application forms can be obtained in the following link or requested at the Building counter located on the second floor.

Address: 1110 West Capitol Avenue

Phone: (916) 617-4683

Hours: Monday through Thursday 8:00 a.m. - 1:00 p.m. (Sign in req. by 12:30 p.m.)

www.cityofwestsacramento.org/cityhall/departments/comdev/applications

Swimming Pool and Spa Safety Features

Please read the following important changes to state law which establishes new child safety standards for residential swimming pools and spas as amended provisions of the Health and Safety Code Sections 115920 – 115929 (AB 2977 - Chapter 478, Statutes of 2006: Swimming Pool and Spa Safety Act of 2006).

- A. Whenever a permit is **issued on or after January 1, 2007** for construction of a new swimming pool or spa at a private single-family home, or for remodeling of an existing pool or spa, the pool or spa shall be equipped with at least one of the following seven drowning prevention safety features:
 - 1) The pool shall be isolated from access to a home by an enclosure (refer to enclosure characteristics below).
 - 2) Incorporate approved removable mesh pool fencing (shall meet ASTM Specifications F 2286) in conjunction with a self-closing and self-latching gate that accommodates a key lockable device.
 - 3) An approved safety pool cover (shall meet ASTM Specifications F 1346).
 - 4) All doors providing direct access from the home to the swimming pool shall be equipped with exit alarms on those doors providing direct access to the pool.
 - 5) All doors providing direct access from the home to the swimming pool (including garage man-doors) shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54-in above the floor.
 - 6) Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water (shall meet and be independently certified to the ASTM Specification F 2208 "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser, and infrared type alarms).
 - 7) Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices listed above, and have been independently verified by an approved testing laboratory.
- B. Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the Building Inspector shall inspect the drowning safety prevention devices listed above. Final approval shall be given provided the safety devises are inspected and approved.
- C. Any person entering into an agreement to build a swimming pool or spa, or to engage in permitted work on a pool or spa, shall give the consumer notice of the requirements of this article⁽²⁾.
- D. As of January 1, 2007, the California Department of Health Services' web site provides information on pool and spa safety available for consumers. Educational brochures and safety guidelines may be downloaded at www.dhs.ca.gov/Drowning/Local/Drowing.htm.
- E. In addition, all of the following shall apply to the construction of new swimming pools or spas:
 - 1) (a) The suction outlet of the pool or spa shall be equipped to provide circulation throughout the pool or spa, and (b) At least two circulation drains per pump shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least 3-ft in any dimension between the drains.
 - 2) Suction outlets less than 12-in across shall be covered with anti-entrapment grates (ASME/ANSI Standard A 112.19.8) that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.
 - 3) Any backup safety system installed in addition to items 1 and 2 shall meet the standards as published in "Guidelines for Entrapment Hazards: Making Pools and Spas Safer" (Publication No. 363, March 2005, United States Consumer Product Safety Commission.
- F. The following procedures shall apply to all single family residences that are provided with an <u>existing</u> in ground swimming pools and spas:
 - 1) Whenever a building permit is issued for the remodel or modification of a single-family home with an <u>existing</u> swimming pool, toddler pool, or spa, the permit shall require that the suction outlet of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with an anti-entrapment cover meeting current standards of the American Society for Testing and Materials (ASTM) or the American Society of Mechanical Engineers (ASME).