



# RESIDENTIAL SWIMMING POOL & SPA REQUIREMENTS

**City of Lathrop  
Building Department**

390 Towne Centre Drive – Lathrop, CA 95330

Email: PermitOffice@ci.lathrop.ca.us

Phone #: (209) 941-7270

## PLEASE REFER TO THESE REQUIREMENTS BELOW FOR THE PERMITTING OF RESIDENTIAL SWIMMING POOLS, HOT TUBS, & SPAS

A Permit is required for any Residential Swimming Pool including In-Ground Pools, Above Ground Pools, Hot Tubs, and Spas. In general, a Swimming Pool / Spa means any structure intended for swimming or recreation bathing that contains water over 18 inches deep. Along with these Requirements, please also follow our General Permit Submittal Guidelines.

### SUBMITTAL REQUIREMENTS:

#### 1. A Complete and Signed Building Permit Application

- The Description of Work should include the type of pool (i.e. gunite, prefabricated, etc.) and square footage of the pool

#### 2. A Complete Set of Pool Plans including the following information:

- A True-To-Scale Site Plan showing all of the following:
  - Property address, parcel number, surrounding streets, and north facing arrow
  - Location of the pool/spa and all pool equipment (i.e. pumps, heaters, alarms, etc.)
    - Note that the installation of a solar water heater requires a separate permit
  - Actual setbacks from property lines, house, and other structures
    - Provide dimensions from heater to openings (windows/doors) into dwelling
  - Location of any overhead electrical conductors or communication cables, setback from the pool, and height above maximum water level
  - Location of a GFCI receptacle between 6 and 20 feet from the water's edge
  - Location and size of existing electrical panel and new subpanel (if applicable)
    - Note that any main panel upgrade requires a separate electrical permit
  - Location of electrical runs, burial depth, pipe diameter and material
  - Access route for pool construction equipment
  - Location of easements, finished floor elevation, grading and drainage
    - Lots with a grade differential greater than two feet must show contours
  - Location of concrete washout area and all other stormwater Best Management Practices (BMPs)
  - Location and height of any retaining walls, sound walls, stair or slope cuts

#### For Gunite Pools/Spas:

- Engineer stamped and signed Pool Structural Plans and Calculations
  - For all non-site specific pool structural plans (standard plans containing multiple options/details), all conditions, details and reinforcement schedules that are applicable to the submitted project shall be highlighted, circled, or otherwise identified

#### For Prefabricated Pools/Spas:

- Pool Design Plans and/or Manufacturer Specifications for the pool/spa with the stamp/signature of the person responsible for the plans.
  - If the prefabricated pool has been evaluated by ICC-ES or IAPMO UES:
    - Provide a copy of the Evaluation Report and Report Number
  - Spa information should include electrical and/or gas requirements
    - Manufactured Spas must be listed
- A Notation on the Plans stipulating the following:
  - **"Any damage to public property (such as driveway approaches, sidewalk, sound walls, etc.) must be repaired by the permit holder prior to Final Inspection."**



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### 3. **A Completed Erosion Sediment Control Plan (ESCP)**

- Please visit the City of Lathrop, [Public Works Storm Water Program](#) page for additional ESCP Information.

### 4. **Electrical Service Load Calculations** to verify capacity of electrical service equipment

### 5. **A Pool Equipment Schedule** including the manufacturer's specifications (cut sheets) for all equipment (i.e. pumps, heaters, control panels, lights, etc.)

### 6. **A CC&R /RD2062 Approval Letter** (if applicable), see below

#### For Property Addresses located in the River Islands District:

A [River Islands Architectural Review Application](#) must first be submitted and approved by the River Islands CC&R Compliance Team **before** submitting for application at the City. Their approval will include a CC&R Letter, which can be submitted as part of the initial submittal. If the backyard is located within 500' of a levee, the applicant may be subject to review by the Island Reclamation District 2062 (RD2062). If reviewed by RD2062, an approval letter from RD2062 will need to be provided as part of the submittal as well.

## SWIMMING POOL & SPA REGULATIONS:

### Setbacks:

- The pool/spa shall be located:
  - A minimum of 3 feet from the rear and side property lines, measured from the edge of water
  - Outside of any easement
  - 5 feet from the edge of water to any building.
    - Any building closer than 5 feet from the edge of water will require additional engineering
  - Pool equipment has no minimum setback from rear or side property line or any structure
  - No equipment or pool shall be within the Public Utility Easement (PUE) area or required front yard (**LMC 17.32.050**)

### Safety Glazing:

- New and existing glazing in walls used as a barrier for a pool/spa shall be safety glazed when the bottom edge of the glazing is less than 60 inches above the ground and the glazing is within 5 feet horizontally of the pool/spa's water edge (**CBC 2406.4, CRC R324.4.5**)
- Show all windows (openable and fixed) and doors on existing building site plan

### Heating/Energy:

- Pool/Spa heating must comply with the Mandatory Requirements as described in **CA Energy Code Section 110.4**
- Outdoor pools/spas with electric or gas heating equipment shall be installed with a pool cover

### California Swimming Pool Safety Act:

- At least 2 of the 7 drowning prevention safety features listed in **CBC 3109.2** must be used and identified on the plans
- Applicant shall provide proof of notification to consumers of these safety requirements (**CBC 3109.2 115924**)

### Deck:

- Deck shall maintain a 2 inch separation below the stucco weep screed to allow trapped water to drain from the exterior walls of the dwelling (**R703.2.1**)



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## Enclosure/Barrier:

- Fencing and enclosures for pools must comply with the requirements listed in **CBC 3109.2 115923**
- If a portion of the house is used as part of the enclosure, that portion must have alarms on all doors giving direct access through that wall to the pool area
  - Any barrier/fence shall be at least 60 inches above the ground and have a maximum distance of 2 inches from the ground to the bottom of the barrier
- Access gates and doors shall open away from the pool and have a self-closing and self-latching device located on poolside of the barrier and at least 3 inches below the top of gate
  - All garage man doors opening into the enclosure must be self-closing and latching
- The outside surface of the enclosure shall be free of protrusions, hand and footholds, and other characteristics that would aid in climbing

## Electrical:

- Equipotential bonding grid shall extend for 3 feet horizontally beyond the inside walls of the pool and shall include unpaved surfaces as well as concrete and other paving materials
  - Refer to the **CA Electrical Code Article 680.26** for additional bonding grid specifications
- All fixed metal parts located within 5 feet horizontally from the inside wall of the pool shall be bonded
- Provide at least one 125-volt GFCI receptacle located a minimum of 6 feet from, and no more than 20 feet from, the inside wall of the pool (**CA Electrical Code Article 680.22**)
  - The receptacle shall be located no more than 6'6" above the floor, platform, or grade level
- Disconnecting means for pool equipment shall be located at a minimum of 5 feet horizontally away from the inside wall of the pool/spa
  - Disconnecting means shall be accessible and within sight from the pool
- Contractor shall be responsible for sizing and adequacy of existing electrical and gas services
- Overhead conductor clearances shall meet the clearance requirements of **CA Electrical Code Article 680.9**
  - Pools shall not be placed under existing service-drop conductors or any other open overhead wiring
  - Show all overhead conductors, clearances, and locations in site plan

## Retaining Walls/Foundation Surcharges:

- Cutting into a levee slope is not permitted under any circumstance
- Retaining walls, over 4 feet in height, measured from the bottom of the footing, require engineering
- The vertical water line of any pool/spa shall be a minimum of 3 feet from any structure that will cause a surcharge load on the pool/spa walls
  - If located closer than 5 feet from a structure or affected by a surcharge because of pool depth, the plans must include an engineered surcharge schedule (See Figure Below)

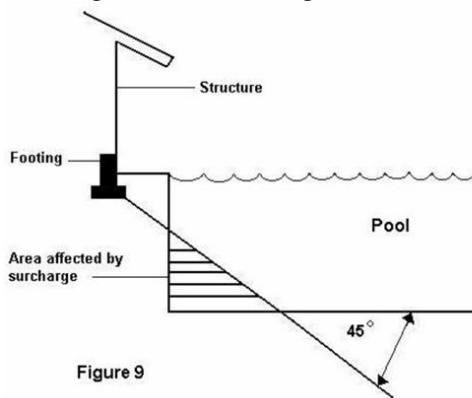


Figure 9



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## Pool Drain (Anti-Entrapment Cover):

- New pools/spas shall meet all of the following requirements:
  - Anti-Entrapment Certification Form must be completed and signed by the Property Owner prior to Final Inspection
  - At least two circulating drains per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least 3 feet in any dimension between the drains
  - Suction outlets that are less than 12 inches across shall be covered with anti-entrapment grates, as specified in the **ASME/ANSI Standard A112.19.8** that cannot be removed except with the use of tools
    - Slots or openings in the grates or similar protective devices shall be on a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers
- Existing pools/spas that are remodeled or modified shall require that the suction outlet of the pool/spa be upgraded to be equipped with an anti-entrapment cover meeting current standard of the American Society of Mechanical Engineers (ASME)

## INSPECTIONS CHECKLIST FOR SWIMMING POOLS & SPAS:

### A. Pre-Gunite

- Structural Check
  - Location, excavation and steel placement
  - Location of equipment pad
- Plumbing Check
  - Return line, fill line and all other piping (minimum 35lb pressure test)
  - Gas piping installation and test (minimum 15lb with approved gauge)
  - All plumbing is required to be under test, full assembly
- Electrical Check
  - Service drop clearance (22.5 feet above the pool if within 10 feet horizontal)
  - Bonding of pool/spa steel, underwater light fixture forming shells, diving board, slide, fill line, equipment and metallic objects located within 5 feet of the inside walls of a pool/spa
  - Bonding grid
  - Provide gate requirements to Property Owner
  - Specialty pools such as vinyl liners or fiberglass must have alarms or barriers installed at this time

### B. Pre-Deck

- Electrical Check
  - Final bonding of diving board, grab rails and slides, disabled access inserts and rope ties
  - Bonding grid
  - Bonding of pool/spa steel, underwater light fixture forming shells, diving board, slide, fill line, equipment and metallic objects located within 5 feet of the inside walls of a pool/spa

### C. Pre-Plaster

- Structural Check
  - Fences, gates or barrier alternates required to be installed at this time
  - Enclosure fences must be a minimum of 5 feet high and all gates must be self-closing and self-latching or padlocked and swing outward



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- “No-Climb Fencing” is not an acceptable barrier material
- Alarms meeting UL 2017 Standard are required at this time in conjunction with barrier requirements
- Electrical Check
  - For an underwater light fixture forming a shell, check for proper grounding listed potting compound, and encapsulating and covering requirements
  - The required GFCI's must be installed
  - Light Niche Cord shall be long enough to service outside of the pool

**ALL INSPECTIONS LISTED ABOVE MUST BE SIGNED OFF PRIOR TO PLASTERING OF THE POOL/SPA**

## **D. Final Inspection**

- Structural Check
  - Final grading
  - Location of equipment in conjunction with property lines, structures and windows
  - General appearance of the pool/spa and deck
  - Required barriers
- Plumbing Check
  - Inspection of all exposed piping for leaks
  - Approved gas valve
  - T&P relief valve on the heater (if required) and termination of the drain
  - Equipment secured to the equipment pad
  - Proper gas connector
  - Prepare the PG&E utility tag (if needed)
  - Paint all PVC plumbing lines exposed to sunlight
  - Obtain Anti-Entrapment Certification Form, signed by Property Owner and Contractor
- Electrical Check
  - Service drop clearance requirements
  - Grounding and bonding complete
  - Main panel indexed at breakers
  - Proper operation of switches and receptacles
  - Installation of time clocks
  - Proper wire and breaker sizing
  - Required circuits GFCI protected
  - Pool light has low water cutoff
  - Pool/spa light properly GFCI protected
  - Lighting fixtures, lighting outlets and ceiling fans located over the spa or within 5 feet from the inside walls of the spa shall be a minimum of 7'6" above the maximum water level and shall be GFCI protected
- Energy Check
  - Pool cover compliance with CA Energy Code and other CA Energy Laws
  - Obtain signed Form CEC-CF2R-PLB-03-E Pool and Spa Heating System
  - Verify CA appliance efficiency for dedicated-purpose pool pumps in accordance with Title20

**THE FINAL INSPECTION IS TO VERIFY ALL ITEMS ARE CONSTRUCTED AND INSTALLED COMPLETELY. THE PERMIT HOLDER OR AUTHORIZED AGENT MUST BE PRESENT AT THE FINAL INSPECTION WITH THE JOB CARD AVAILABLE FOR SIGNATURE.**