The following requirements shall be met prior to an application for a new residential pool permit being considered complete. Applications considered incomplete may be denied plan check review until all items have been provided. Please provide 2 sets of each:

|  |  |  |  |
| --- | --- | --- | --- |
| * **Site Plan**
 | * **Pool Plans**
 | * **Soils Report**
 | * **Drainage Plan**
 |

# GENERAL/SITE PLAN

The site plan should be drawn on 24” x 36” sheets with a scale of 1” = 40’ or larger. The plan shall be prepared by a person qualified to prepare plans for construction purposes and shall include all of the following items:

1. Site address, tract, and lot number.
2. The owner’s, contractors’, and engineer’s name, license, and phone number.
3. Identify on the cover sheet the following applicable “Project Building Data”: **Applicable Codes - 2022 CA Residential, Building, Plumbing, Mechanical, Electrical, and Energy Codes.**
4. Project site boundaries (property lines). Pool setback to the property line(s). Add the following note: **“Pool/spa less than 7’6” to the property line will require a licensed surveyor to determine the location of the property line. Provide documentation to the building inspector”.**
5. Existing structures
6. Depict all easements, restricted uses, and/or common areas. Show bearing and distances of easements, which may be affected by the construction of the pool.
7. Show the location and dimension of the pool and/or spa. Indicate the square footage of the pool and/or spa.
8. Pool setback (min. 5 ft. per Planning Dept.) to the main residence.
9. **All ascending and/or descending slopes contiguous to the site.** Locate and dimension the distance between the top/toe of slopes and the pool/spa.
	1. If no slopes are present then add the following note on the plan: **“No 3:1 or steeper slopes are within 20 ft. of proposed pool/spa.”**
10. Indicate or note which site improvements shall be under separate permit/plan check or future work.
11. Show the location of the street.
12. Show the location of the pool equipment
13. Show a “north arrow” **N** **⬆**
14. Provide site-specific **Cross-Section(s)** to verify the required **slope setback** distances from top and/or toe of slope. Elevation data (height of slope), gradient, and slope configuration shall be included. (CBC 1808.7.3]
	1. **Ascending Slope**: Required Setback = ht. of slope / 4 (H/4), (1.5 ft. min; 7.5 ft. max.)
	2. **Descending Slope**: Required Setback = ht. of slope / 6 (H/6), (2.5 ft. min; 20 ft. max)

If the setback measured from the pool wall to the top of the slope is **less than 7 ft.,** the pool wall shall be designed as **“free-standing**.”

# *HELPFUL INFO: If the result calculated from the equations above is not within the limits, then the required setback is either the minimum or maximum. Example: If the result is 1 ft. for ascending slope, then the setback must be at least 1.5 ft. If the result is 50 ft. for descending slope, then the setback must be at least 20 ft.*

1. Show the location of, or provide sufficient notes/details for a “Swimming Pool Barrier” that complies with the City of Agoura Hills Municipal Code Section 8200(h).
	1. Add the following note on the plans: **“Pool barrier shall be installed and approved prior to plastering**
	2. The top of the barrier shall be at least 60” above grade, on the outside of the barrier.
	3. The maximum vertical clearance between grade and the bottom of the barrier (horizontal member) shall be 2”.
		1. The maximum vertical clearance may be increased to 4” when the grade is a solid surface such as a concrete deck, or when the barrier is mounted on top of the aboveground pool structure.
	4. Any decorative design work on the outside of the barrier, which renders the barrier climbable, is prohibited.
	5. Openings in the barrier shall not allow passage of a 1-3/4” diameter sphere except:
		1. When the vertical spacing between such openings is 48” or more, the opening size may be increased such that the passage of a 4” diameter sphere is not allowed.
	6. For fencing composed of vertical and horizontal members,
		1. When the horizontal members are spaced less than 45” apart, then the members shall be placed on the poolside of the barrier.
		2. When the horizontal members are spaced 48” or more, then the spacing between the vertical members may be increased up to 4”.
	7. New chain link fences are not permitted to be used as a barrier.
		1. Existing chain link fences may be used as a barrier provided the fence shall not be less than 11 gauge and have slats of wood or UV-resistant plastic interwoven and complies with the Land Use and Development Code.
	8. Access gates shall be self-closing & latching and swing outward away from the pool. The latching device shall be located on the poolside.
		1. Structure walls that serve as a barrier may have either self-closing and latching doors or doors equipped with alarms complying with UL 2017.

# ENERGY

1. Note on plans: “**The CF2R-PLB-03-E Form (Certificate of Installation: Pool and Spa Heating) shall be submitted to the building inspector prior to final inspection of the pool**  **equipment installation.”**
2. The following energy requirements per Section 110.4 of the 2022 California Energy Code shall be **noted on the plans** for pool/spa heating equipment:

# Heater must have a thermal efficiency that meets the Appliance Efficiency Regulations.

* 1. Readily accessible “on/off” switch on the outside of the heater.
	2. Permanently mounted weatherproof plate with instructions for energy-efficient operation.
	3. At least 36” of pipe between the filter and the heater.
	4. Provide a cover for the outdoor pool/spa.
	5. Multi-directional inlets for recirculated water.
	6. Time clock for the circulation pump.
	7. Heater pilot lights are prohibited (CEnC 110.5).
1. The following energy requirements for the filtration system shall be **noted on the plans** for pool/spa heating equipment: [CEnC 150(p)]
	1. Pipe Sizing and Flow Rate:
2. All pumps and pump motors must be certified by the CEC and shall comply with the Appliance Efficiency Regulations.
3. Based on the volume (gallon) of the pool, the pump flow rate, pipe sizes, and filter size shall be determined by the Pool Sizing Table on the CF2R-OLB-03-E form.
4. Pump motors used for filtration with a capacity of 1 HP or more shall be multi-speed. The pumps must have the default setting at the lowest speed for filtration.
5. Each auxiliary pool load shall be served by either separate pumps or the system is served by a multi-speed pump.
	1. System Piping:
		1. The suction side pipe must be straight for at least 4 pipe diameters before installing into the pump.
		2. All elbows shall be sweep elbows OR elbow-type that has a pressure drop of less than the pressure drop of straight pipe with a length of 30 pipe diameters.
			1. Reduced friction sweep PVC 90 shall be used and shall be Schedule 80 pressure-rated fittings. No PVC drainage non-pressure-rated-type fitting shall be used.
	2. Valves:
		1. If a backwash valve is used, then the minimum diameter of the valve shall be 2” or the same size as the return pipe, whichever is greater.

# DRAINAGE

1. Show the proposed site drainage patterns with flow lines about the pool/spa taken to the street or other existing and approved drainage systems.
2. Do not direct lot drainage over a fill slope or onto the adjacent properties.
3. Show the locations of the new area drains and indicate the direction of flow on the sub-grade drainage system.
4. Provide a legend to identify all symbols used or indicate/note the following features: Catch basins, area drains, the direction of sub-grade drainage flow, flow lines, etc.
5. Identify the size and material type (PVC, ABS, PSM, or SDR) of the proposed sub-grade drainage pipe on the plan.
6. Clearly distinguish between the existing and proposed drainage systems by using different distinct symbols. Identify the symbols on the plan.
	1. Locate where the proposed drainage system shall be tied into the existing system or the curb drain on the plan.
	2. If a curb drain is proposed, indicate that the drain shall be constructed per City standards. Note on the plan: “**Separate permit is required for work in the Public Right of Way**.”
7. Lot/pool drainage system sub-grade piping must have a minimum of 1% slope and 4” ground cover. Show or note on plan.
8. Show or note on the plan a minimum surface drainage slope grade for landscape and asphalt concrete (AC) pavement of 1.0% and concrete pavement of 0.5% percent.
9. Place the following notes on the plan:

#  “Provisions shall be made for contributory drainage at all times.”

* 1. **“Secure permission from City Engineer for construction and/or discharge of drainage within the street right-of-way.”**
1. If a pool sub-drain is recommended in the soils report, then provide detail for the pool sub-drain.
2. Locate the discharge point, and detail a velocity reducer. Do not drain over a fill slope.

# STRUCTURAL/SOILS-GEOLOGY

1. Design professionals (landscape architect, engineer, etc.) to “wet-stamp” and sign all respective plans.
2. Geotechnical Engineer/Engineering Geologist shall indicate on the plans that the foundations meet the requirements of the project soils/geology report by placing a signature or stamp on the pool foundations plans.
3. Provide structural calculations for:
	1. “Fee-standing” pool wall design where the setback is less than 7 ft. measured from the pool wall to the top of the slope of a descending slope.
		1. Locate the “free-standing” walls on the pool plan view and cross-reference the applicable detail(s).
	2. Retaining walls and pool walls/conditions not covered by the “Standard Pool Plan”.
4. Submit a site-specific soil report not more than 2 years old; specifically, address (with recommendations) the proposed pool/spa construction.
	1. Reference on plans the project soils report by Company, project number (if any), and date.
	2. Indicate on the plan the allowable design “EFP” (equivalent fluid pressure) per the soil report. This may include the inward (retaining) pressure and the outward (freestanding) pressure.
	3. Detail or note the requirement of a hydrostatic relief valve and/or sub-drain as recommended in the report.
5. Unless the soil report indicates otherwise, the soils are assumed to be expansive and contain sulfates:
	1. All details are to represent the expansive soil alternative. Cross out all details not applicable to the project on the “Standard Pool Plan”.
6. Note on plans: **“Soils Engineer to observe and approve pool excavations prior to City of Agoura Hills foundation inspection.”**