

On-Lot Ponding Requirements

Per Unified Development Code Chapter 350-605

The anticipated size & location of the on lot pond must be shown on a site plan in relation to property boundaries and existing/proposed structures on the property. Details provided on the site plan should include but are not limited to:

- Top & Bottom dimensions of the pond
- Top & Bottom of Pond finished grade elevations
- Distance from adjacent property lines/structures
- Pond sizing calculations
- Side slope treatment (see Table 6.16 for requirements)
- Pond cross section showing all appropriate detail
- Existing and proposed grades
- Location of Leach lines/Septic Tank (if applicable)

Other design requirements to consider as described in the Unified Development Code include the following:

- The pond shall be sized to hold 125% of all runoff from impervious area on the property. The following formula can be used to estimate required ponding storage:

$$\text{Total Impervious Area (Sq. Ft.)} \times \left(\frac{\text{Runoff Coefficient}}{12} \right) \times 1.25 = \text{Total Required Storage (Cu. Ft.)}$$

**Runoff Coefficients: 2.0 for Mesa Areas (Land Slopes ≥ 1%)
2.8 for Valley Areas (Land Slopes ≤ 1%)

- Planning and design of pond dimensions/locations shall be such that flooding problems are not transferred beyond the property's boundaries.
- The pond shall be located in a low lying portion of the property dictated by on site topography
- The pond shall be located a minimum of five (5) feet from adjacent property lines and ten (10) feet from any structures
- The pond shall not be placed inside easements that are intended for uses other than drainage.
- The minimum depth of the pond shall be 18 inches
- Secure fencing shall be required if the depth of the pond exceeds three (3) feet
- The side slopes (rounded to the nearest whole number) shall be treated with the applications found in Table 6.16 below.

Table 6.16 Treatment Applications for Ponding Areas	
Side Slope	Typical Treatment Required or Other Acceptable Applications
Side slope 2:1	Grouted rock, concrete, or wire-tied rip-rap
2:1 < Side Slope < 3:1	Hand placed rip-rap
Side Slope < 3:1	Permanent best management practices, (i.e vegetation, landscape rock, etc.)

** Maintenance of the on-lot pond is the responsibility of the property owner(s)

**Hand drawn site plans as part of a building permit submittal are no longer accepted by this office. Site plan & all details must all be printed and hand delivered to the Flood Commission or sent digitally via email.

Examples of various ways to design your on lot pond:



