



ENGINEERING POLICY: 2023-05

Drywell BMP Guidelines

Date: January 20, 2023

This policy is to outline and clarify the requirements for use of a drywell as a Stormwater BMP. This policy does not enact new standards but rather gathers standards from multiple sources in one location. Refer to Chapter 8 of the Urban Runoff Management Plan for sizing criteria and more information on drywell use.

General Standards:

1. Site plan and details must be stamped by a registered professional engineer. Drywell installation is not permitted without a PE stamp.
2. Dry wells may be used to collect, detain, and percolate runoff for individual residences and for commercial development for which a standard bioretention pond is infeasible. Dry wells are considered a BMP of last resort. In areas where other BMPs are infeasible, dry wells may be considered. The applicant will need to provide evidence of such infeasibility to the City Engineer for review.
3. Foundation drains are not permitted to tie and drain to stormwater drywells. Foundation drains shall function independent of stormwater and surface runoff to ensure no negative impact to the building foundation from stormwater flows backing up into foundation drains. Refer to section 1805.4.2 and 1805.4.3 of the IBC. Stormwater drywells are not an *approved* drainage system per the COA Building Official.
4. Excavation extents shall be shown on the plan set to demonstrate that the installation is feasible. Plans shall show excavation does not extend into the ROW and that there are no negative impacts to nearby tree roots.
5. When sizing a drywell to capture WQCV, the volume must be calculated at 1.5 times the WQCV. If a drywell is to be utilized for full detention in addition to water quality, the total runoff volume of the design storm shall be captured. Refer to Chapter 8.5.4.2 of the URMP.
6. Drywells shall be a two-chamber specification. Refer to Chapter 8.5.4.2 of the URMP.

Separation Distances:

Clearance distance is measured from the exterior wall of the drywell.

1. Drywells shall be located 10 feet from neighboring property lines and 10 feet from property lines adjacent to the city right-of-way.
2. Drywells shall be located 10 feet from all building foundation walls.
3. Drywells shall be a minimum of 10 feet deep to allow infiltration below the frost depth.
4. A minimum 10 ft separation distance is required between a drywell and water service line.



If site constraints exist which prevent full compliance with all separation distances the following is required for any variance consideration. Follow Title 29 for variance requests. The following list is in order of preferable alternatives.

1. Drywell located within 10 feet of the building foundation.
 - a. Provide documentation from the project geotech and structural engineer verifying no negative affect to the building foundation from water infiltration.
2. Drywell located within 10 feet of the property line separating the property and City Right-of-Way.
 - a. Verify the proposed drywell has adequate clearance from any existing utilities or possible future utility corridors in the ROW that could be impacted by stormwater infiltration.
 - b. A variance will not be granted if there are any existing utilities or the possibility of future utilities in the drywell vicinity.
3. Drywell located within 10 ft from the property line abutting a neighboring property.
 - a. A drainage easement is required on the neighboring property for infiltration across the property line. An easement shall be recorded and include a survey exhibit which provides the full 10 feet infiltration zone around the proposed drywell.

This policy references the City of Aspen Urban Runoff Management Plan section 8.5.4.2 and Appendix A – Submittal Checklists.

Approved by: Trish Aragon, P.E., City Engineer

Tricia Aragon