Bioretention Areas & Bioswales

Bioretention Areas – A bioretention area consists of a grass buffer strip, sand bed, ponding area, mulch layer, planting soil and plants and non-invasive vegetation (preferably native) designed to collect and treat stormwater runoff. Stormwater runoff entering the bioretention area is filtered through the soil planting bed before either being conveyed downstream by an underdrain system or infiltrated into the existing subsoil below the soil bed. Vegetation in the soil planting bed provides uptake of pollutants and runoff and helps maintain the pores and associated infiltration rates of the soil in the bed.



These areas are graded to divert excess runoff away from the building.



Bioswales – A bioswale is typically a long, narrow channel planted with grasses and/or other native vegetation and may convey the stormwater to another LID such as a rain garden to bioretention area. The bioswale is designed to slow and capture stormwater runoff, filter pollutants and increase rainwater infiltration. Vegetation placed along the swale can benefit from the concentration of water in the area.

Both bioretention areas and bioswales can vary in size and can receive and treat runoff from a variety of drainage areas within a land development site. They can be installed in lawns, median strips, parking lot islands, unused lot areas, and certain easements. They are intended to receive and filter storm runoff from both impervious areas and lawns.



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