

**Bioretention Areas (Richmond, VA)  
Grove Avenue Baptist Church  
Completed in 1998**

There are two bioretention areas at this site. One of the bioretention areas is located on the western side of the parking lot, along Parham Road. It is 0.044 acres in size and treats a drainage area of 0.62 acres. Runoff from the parking lot and rooftop is diverted to the bioretention area and enters via a 15-inch pipe. Water is allowed to pond up to approximately 5 inches and then the excess volume will drain into a drop inlet connected to the stormwater conveyance system.

The other bioretention area, which is located on the southern end of the parking lot, is 0.06 acres in size and treats a runoff drainage area of 0.81 acres. Stormwater runoff that travels as sheet flow across the parking lot enters the bioretention through three different curb cuts. Water is also allowed to pool up to 5 inches in this area, but when excess water enters the cell it spills over a weir, travels down a short rip-rap channel and then drops down an inlet to the stormwater conveyance system.



*Above photo taken in fall 2001.*



**Construction** - Both bioretention areas consist of a 3-inch mulch layer over top a 4-foot planting soil layer composed of a sandy loam with no more than 10-25% clay content. Underneath the planting soil layer is a 1-foot sand layer on top of a 6-inch gravel layer. Running through the gravel layer are 4-inch perforated pipes, which transport the filtered water that does not infiltrate into the ground to the stormwater conveyance system. Bioretention was chosen for this site because there was not enough room for ponds and because it fulfilled some the landscaping requirements for the site. (AA 1998)

**ACCESSIBILITY:** The site is open to the public and available for viewing at any time.

**DIRECTIONS:** *From I-64, Take the PARHAM ROAD SOUTH exit (Number 181A). Turn left onto RIDGE ROAD. The church is located on the right, at 8701 Ridge Road. The bioretention areas are located on the western side of the parking lot, along Parham Rd., and at the southern end of the parking lot.*



The information in this write-up was prepared by Krista Thompson Sharp at Friends of the Rappahannock in March 2002 through a grant funded project from the Chesapeake Bay Restoration Fund.