

**Green Roof (Arlington, VA)
Arlington County Government Center in
Courthouse Plaza - Completed in 2003**

Arlington County local government officials are encouraging developers to make projects more environmentally friendly, by practicing what they preach through the installation of a 3,285 square foot green roof that is viewable from the county's third floor conference room at Courthouse Plaza. The new roof garden improves looks, energy-efficiency, and reduces stormwater runoff.

The Barrett Green Roof Roofscapes system was installed on the building in September 2003. The project team consisted of the building owner, Charles E. Smith Company; the architect, Page Southerland Page; and Arlington County's Department of Environmental Services and Office of Support Services. Barrett Roofs, Commercial Roofing, and Chapel Valley Landscaping were instrumental in completing the roof. Total installation costs for the green roof that has a life expectancy of approximately 40 years, was under \$65,000.



The newly planted green roof is on a former tar-and-gravel roof. Photo taken just after planting was completed in October 2003.

Construction – Prior to beginning construction the project team coordinated installation of an operable window on the third floor to provide easy access to the roof, reviewed fire prevention and resistance issues, and planned for recycling of the ballast rock from the original roof. The insulation panels and some ballast rock for the edges were saved from the original roof and reused. A fluid applied waterproof membrane underlies the Roofscapes green roof system. This membrane is covered with a root barrier, insulation, and a unique drainage/water retention/aeration system, covered by a geotextile fabric that acts as a filter to prevent soil migration into the drainage channels of the water retention layer. A soil layer was placed on top of this system and planted with selected sedums.

Monitoring – Arlington's Energy Manager installed a temperature gauge on the existing roof, in August 2003 to measure temperature fluctuations on the roof for one week. Temperatures will be collected on the roof again in summer 2004 for comparison purposes.

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ACCESSIBILITY: Schedule visits in advance. The roof is viewable from the county's 3rd floor conference room.

DIRECTIONS: The building is located at the Court House Metro stop on the Orange Line. To drive, take I-95 to I-395 N. Take exit 8A onto Washington Blvd/VA-27. Take right exit onto Arlington Blvd/US-50E toward Washington (0.8 miles). Take the left exit ramp toward Court House Road. Merge left onto N. Courthouse Rd. Turn left onto 14 Street N. Turn right into parking lot. 2100 Clarendon Blvd is the building directly west of the parking lot.



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