

Mark J. Ayles, PE

Civil Engineer

With 13 years of experience in civil engineering and three years of experience in surveying, Mark brings a variety of engineering expertise in both the private and public sectors. Prior to joining Hughes Associates Architects, Mark worked for the Virginia Department of Transportation Salem Residency and the Salem District, Location and Design section. While in the Salem Residency as the Assistant Resident Engineer, Mark was responsible for all engineering related activities including review and VDOT approval of public and private land development activities in Botetourt, Craig, and Roanoke Counties. He is knowledgeable in all aspects of roadway geometrics and land development, including stormwater management, erosion and sediment control, pavement design, drainage design, utility design, traffic analysis, and flood studies.

While working in the private sector, Mark was a project engineer/manager for a variety of civil engineering projects, including subdivisions, roadways, and site designs for businesses and governmental agencies throughout the United States and Haiti.

As a surveyor's party chief, Mark conducted numerous topographical, boundary, and waterway surveys for commercial, municipal, and residential developments.

Education

1995 Bachelor of Science in Civil Engineering, VPISU

Engineering Registrations

Virginia Registration # 034160

North Carolina # 036096

West Virginia # 017214

Professional and Civic Activities

American Society of Civil Engineers

Experience

2007 Hughes Associates Architects; Civil Engineer

2001-2007 Virginia Department of Transportation; Transportation Engineer/ Staff Engineer

1995-2001 Hayes, Seay, Mattern & Mattern, Inc.; Project Engineer/ Project Manager

1994-1995 Schnabel Engineering; Engineering Intern

Related Project Experience

Religious Assembly

Fort Lewis Baptist Church, Roanoke, Virginia – We worked with the owner and VDOT to determine appropriate compensation for the land take required by the Virginia Department of Transportation for the widening of Route 11/460. We developed construction documents for a new and expanded parking lot that required a retaining wall around the perimeter of the site to accommodate the future proposed roadway grades for the VDOT roadway project. The project was designed to

meet the current and future needs of the church and to allow for the substantial amount of earthwork needed to construct the Route 11/460 roadway project. The utilities and stormwater drainage systems were designed to function today and to be easily adapted to the future roadway utilities and drainage systems. Substantial completion is Spring 2009

Bonsack Baptist Church, Roanoke County, Virginia – Site development for a new 60 space parking area and stormwater management.

Fairmont Baptist Church, Boones Mill, Virginia – Site development for 80 new parking areas and stormwater management.

Commercial, Industrial, Retail, Office

Lanford Brothers Contractors, Roanoke, Virginia – Site development for office building addition and renovation - LEED Certified

Bank of Monroe, Lewisburg, West Virginia- Site development for addition and renovation of branch office. Also added additional parking area and completed stormwater management.

First & Main, Blacksburg Virginia- Designed 250,000 cf underground stormwater management basin for a new 24 acre retail development/shopping mall.

First & Main, Blacksburg Virginia- Designed 91,000 cf underground stormwater management basin for a new 17 acre retail development/shopping mall.

Municipal/Government

North Roanoke County Fire Station #1, Roanoke Virginia – Site development for a new 3-bay fire and rescue facility for career firefighters.

Wright Patterson Air Force Base, Dayton, Ohio* - Site design for USAF National Museum.

Residential/Housing

Friendship Retirement Community, Roanoke County, Virginia – HAA developed construction plans to widen the roadway to add a raised pedestrian island the center of the roadway. We also designed a pedestrian crosswalk with pedestrian activated flashing crosswalk signs. The roadway is considered a primary artery with 20,000 vehicles per day using this section of the roadway. Plan approval June 2009

Orchards of Ashley- Section II, Ashley Plantation, Botetourt County

Hotels/Lodging

Comfort Suites, Salem, Virginia- Site development of a new 72 room, three-story hotel with an indoor swimming pool.

Plantation Hotel, Roanoke County, Virginia – Site development for a four-story, 84 room hotel with indoor swimming pool and retail/restaurant out parcel.

Miscellaneous

Virginia Department of Transportation – Salem District, Salem, Virginia* - Site development for District stormwater management, basin reconfiguration and upgrade.

Virginia Department of Transportation, Girard Lane, Roanoke County, Virginia* – Precast concrete double box culvert replacement and channel improvements. (Engineer-in-Charge. Roanoke County Revenue Sharing Project)

Route 634, Hardy Road, Franklin County, Virginia* - 4-mile roadway realignment and widening project. (Transportation Engineer – Drainage)

Route 650, Irisburg Road, Henry County, Virginia* - 4-mile roadway realignment and widening project. (Transportation Engineer - Drainage)

Cougar Road, Roanoke County, Virginia* - 2-mile roadway realignment and widening project. (Transportation Engineer – Drainage)

Route 11/460, West Main Street, Roanoke County, Virginia* - 4-mile roadway realignment and widening project. (Transportation Engineer – Drainage)

Route 1662/1663, McVitty Road/Old Cave Spring Road, Roanoke County, Virginia* - 4-mile roadway realignment and widening project. (Transportation Engineer – Drainage)

Route 41, Franklin Turnpike, Pittsylvania County, Virginia* - 3-mile roadway realignment and widening project. (Civil Engineer-Drainage)

Route 29/130, Madison Heights Bypass, Amherst & Campbell County Virginia* - 17-mile bypass roadway and connector project. (Civil Engineer-Drainage)

Route 19, Birch River Interchange, Nicholas County, West Virginia* - 2-mile roadway realignment and widening project. (Civil Engineer-Roadway/Drainage)

Route 15, John Cocke Memorial Bridge, Bremo Bluff, Virginia* - 1.2-mile bridge and roadway realignment and widening project. (Civil Engineer-Roadway/Drainage)

Route 1, Petersburg, Virginia* - 4 mile roadway and sidewalk widening throughout Historic Petersburg that included ADA accessibilities.

**Represents Tenure Experience*