



Automated People Mover System Washington Dulles International Airport

Location: Washington Dulles International Airport, Dulles, Virginia

Date: 2003 – 2010

Structure: Automated People Mover (APM) System

Length: Approximately 21,000 feet (6,400 meters)

Cross-Section: 23 feet (7 meters) in diameter

Geology: Fill, Residual Soils, and Balls Bluff Formation (Including Siltstones, Mudstones and Sandstones)

Cost: Approximately \$2.3 Billion

Client: Parsons Management Consultants

Owner: Washington Dulles International Airport (IAD)



Figure 1. TBM walk-through at the 3E Station cut-and-cover box.

Automated People Mover Construction, Inspection, and Management Services:

The Automated People Mover (APM) System is part of the Dulles Development (D2) Program. The APM is set up to connect the airport terminals. The D2 scheme included a total of approximately 4 miles (6.4 kilometers) of APM tunnels and four new stations at terminal nodes along with tug and utility tunnels, a pedestrian tunnel and at-grade vehicle maintenance facility.

Gall Zeidler Consultants (GZ) provided initial peer review and subsequent construction management services for the IAD APM System. These services included design review and construction inspection related to the underground aspects of the work, New Austrian Tunneling Method / Tunnel Boring Machine (NATM / TBM) tunnel excavation and support, instrumentation and monitoring, waterproofing, support of excavation for cut-and-cover construction for station and line tunnels and the installation of electrical and mechanical systems for the facilities.



Figure 2. NATM tunneling at west utility building tunnel and installation of initial tunnel support.