

Purple Line – Plymouth Tunnel MD Department of Transportation / MD Transit Administration

Location: Baltimore, MD
Date: 2014
Structure: SEM Light Rail Tunnel
Length: 1,020 ft (311 m)
Cross-Section: Approx. 29 ft height x 35.6 ft width (8.8 m x 10.85 m)
Geology: Topsoil, fill with debris, colluvium, saprolite, Laurel Formation (Gneiss)
Cost: -
Client: Parsons / Kiewit Infrastructure
Owner: Maryland Department of Transportation Maryland Transit Administration (MDOT MTA)

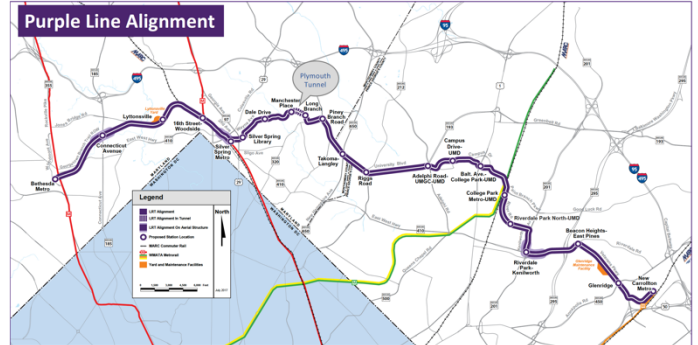


Figure 1. Project alignment (Courtesy of MDOT MTA).

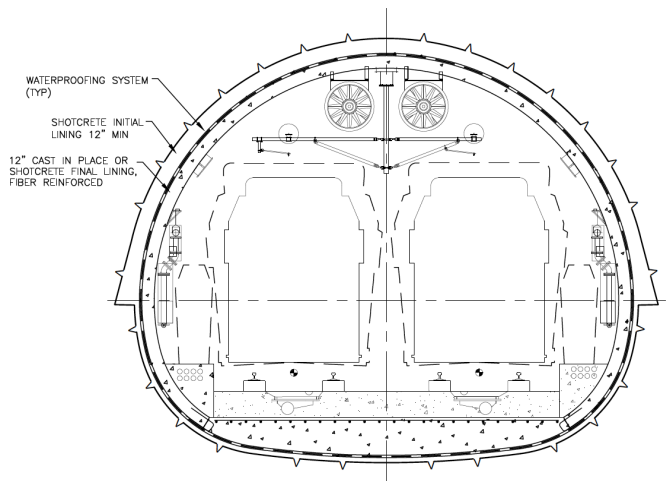


Figure 2. Preliminary Engineering Typical Cross Section with space proofing.

Bid Tender Design Services:

The Purple Line is a new light rail line running approximately 16 miles (57 km) between Bethesda, MD and New Carrollton, MD. The line will provide direct connections to the Metrorail Red, Green, and Orange Lines, in addition to connections to MARC, Amtrak, and local bus services. The majority of the project will be at-grade except for the approximately 1,000 ft (311 m) long Plymouth Tunnel between Plymouth Street and Arliss Street in Silver Spring, MD.

Gall Zeidler Consultants (GZ) developed the bid level design of the primary and final linings for the Plymouth Tunnel, which included evaluation of the geology, development of excavation and support classes for tunnel construction, and preliminary structural models.