Excavation for Phase 2 Stations, Substations To Remove Thousands of Cubic Yards of Dirt and Rock

The Silver Line Phase 2 design-build contractor is about to begin construction of the future Dulles Airport Station, one of six stations along Phase 2 of the Silver Line and located just south of Daily Garage 1 along Saarinen Circle.

The process will begin with mass excavation, a term used to describe the process of quickly removing large amounts of material from a job site.

During a mass excavation process, large bulldozers, excavators, loaders and tandem dump trucks are used to dig out, load and take away dirt and rock at a rapid and efficient pace. At peak operation, as many as 15 dump trucks per hour may be moving into and out of the Dulles Airport Station job site.

Approximately 28,000 cubic yards of rock and 12,000 cubic yards of dirt will be removed from the Dulles Airport Station site during the excavation. Trucking routes will be carefully defined to minimize the impact on airport traffic.

The five Phase 2 at-grade stations will require an average of 13,000 cubic yards of mass excavation. Additional mass excavation operations will occur at some of the wayside facilities that support the rail system.

Some of the materials removed will be used as fill at other Phase 2 construction locations at Dulles International Airport.

Design Changes Enhancing Safety and Reliability, Cause Phase 2 Delays

More than 150 modifications to the design for Phase 2 as well as weather and construction delays have added about 13 months to the estimated construction period for Phase 2 of the Silver Line.

Many of those changes reflect design changes that were made in the final months of construction of Phase 1 and are now being integrated in the Phase 2 design. These changes will enhance safety and reliability.

“Over 100 design changes require additional design, engineering, construction, management and oversight work,” said Charles Stark, executive director of the Silver Line project. “The added costs remain within the Phase 2 contingency budget of $550 million and will have no effect on the toll rates on the Dulles Toll Road,” Stark said in late April.

Tower Crane Goes Up For Innovation Station

With temperatures near 90 degrees, Dulles Corridor Metrorail Project crews spent a July weekend assembling a tower crane in the median of the Dulles International Airport Access Highway, on the site of the Silver Line’s future Innovation Center Station.

The crane tower (mast) rises approximately 187 feet and is outfitted with a 252-foot horizontal working arm (jib) able to lift 22,000 pounds of steel, concrete, large tools, generators and a wide variety of other building materials that will be used during the construction of the station. The crane’s motors and counter weights are located in the shorter horizontal counter jib.

A second tower crane will be placed at the Herndon Station site in late 2015. Once the first crane has completed its work at Innovation Center Station it will be disassembled and moved onto the Reston Town Center Station site. Both cranes will be moved to the median of the Dulles Greenway to assist in the construction of the Loudoun Gateway and Ashburn Stations.
In Search of the Long-Eared Bat

Contractors building the rail yard, located on Dulles Airport property off Route 606 in Loudoun County, for Phase 2 are at the forefront of national efforts to save the Northern Long-Eared Bat, a recent addition to the U.S. Fish and Wildlife Service’s (FWS) list of endangered species.

In mid-July the project undertook a week-long survey over seven nights from dusk to late night using nets to catch the bats which were identified for species and set free.

The creature is distinguished by its small size, large ears, and dark brown color and feasts on insects. These bats, whose population dropped 99 percent since 2006, are threatened by white-nose syndrome, a fungus that infects the environments where the bats hibernate.

The disease has killed more than 5.7 million bats in eastern North America, according to the FWS.

Silver Line Hailed at First Birthday Party

The Silver Line opened a year ago and business leaders, politicians and residents gathered in late July to celebrate as a long list of project proponents praised what many called the dramatic changes that continue to come to Tysons Corner and the entire Dulles Corridor because of the Silver Line.

Currently there are 20 plans for new mixed-use developments in Tysons. Experts said Tysons now contributes more than $300 million to the Fairfax County tax base, a number that is expected to eventually hit $1 billion.

Wells + Associates reported on statistics that shows significant decreases in vehicular traffic in the Tysons area since the Silver Line opened:

- 15 percent fewer cars at Scotts Crossing/Colshire Drive.
- 11 percent fewer cars at Anderson Road/Dulles Access Highway off-ramp.
- 7 percent fewer cars at Route 123 at Old Meadow Road/Capital One Drive.

Wiehle-Reston East Station, the temporary terminus of the Silver Line, continues to be the busiest station.

Want to know more or set up a briefing? Please visit www.dullesmetro.com, follow us on twitter @DullesMetrorail or call (703) 572-0506. To set up a briefing for your HOA, civic group or business email outreach@dullesmetro.com. To report construction concerns, please call our hotline: 1-844-385-7245