Phase 2 Construction Reaches 30 Percent Completion

Construction of Phase 2 of the Silver Line has hit the 30 percent mark and design is virtually complete, according to information supplied by the Dulles Rail Project team to the Federal Transit Administration in mid-July.

Work continues at station sites and at 10 of the wayside support facilities -- such as traction power substations and train control rooms -- as well as ongoing mass excavation at the Loudoun Gateway Station site.

What the next 6-8 weeks of construction will bring:

- Track wall, storm pipe and 34.5kV duct bank (which will feed power directly to the trains) work is ongoing.
- Work at six of the nine pavilion sites will include drilled shafts, footings, duct bank, utilities and clearing.
- Lane shifts, paving and striping will continue along the Dulles Toll Road/Airport Access Highway and the Dulles Greenway.
- Concrete foundation pours and concrete barrier wall construction is ongoing at the Reston Town Center Station.
- Ongoing steel erection at the Innovation Center Station.
- Assembly of the Innovation Center Station pedestrian bridges begins.
- Pre-cast erection at the Herndon Station is ongoing.
- Final pier shafts for the aerial guideway at Dulles Airport to be drilled in early August.
- 34.5kV duct bank work continues along Rudder Road and moves to Autopilot Drive and the cargo area at Dulles Airport.
- Work on the four straddle bents over the Dulles Greenway will begin.
- Storm pipe and 34.5kV duct bank work continues in the median of the Dulles Greenway.

At Dulles Airport:

- Station column construction continues.
- Cross girder installation will be ongoing.
- Pre-cast erection will begin.
- Fiber support steel will be installed.
- Removal of the pedestrian tunnel roof will start.
- Girder installation and deck construction is scheduled to return to Autopilot Drive at Dulles Airport and continue south through the cargo area.
- 34.5kV duct bank work continues along Rudder Road and moves to Autopilot Drive and the cargo area.

Want to know more or set up a briefing? Visit www.dullesmetro.com, 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, call our hotline: 1-844-385-7245
Green Light For Dulles Greenway Construction

By: Stacey DaBaldo

During recent months, four giant straddle bents have been constructed to support the aerial guideway for the future Silver Line trains leading into Dulles Airport from Innovation Station.

As the remaining forms are being stripped and final inspections take place, crews are preparing to embark on the final four straddle bents; but this time, it’s over the Dulles Greenway.

What are straddle bents? Think of a massive concrete span that straddles either side of a wide roadway giving support to the load on top. Because putting a pier in the middle of a highway is out of the question, straddle bents work as the unsung hero supporting unusually heavy loads when a traditional support is not possible.

"The eight large straddle bents are a critical component of the Silver Line’s aerial guideway," said Brad Williamson, Capital Rail Constructors’ structures project manager. "With an average of 410 cubic yards of concrete and 27 tons of rebar in each one and a very technical post-tensioning process, a single straddle bent takes approximately eight weeks to build from start to finish."

Inside the ‘belly’ of the straddle bent, multiple tension cords allow for ever so subtle pressure and weight fluctuations due to weather and travel, such as that of a rail car.

John Kearney, construction manager of the Dulles Corridor Metrorail Project, says that in order for the Silver Line to reach Loudoun Gateway Station, crossing the Dulles Greenway is a necessity not only because of topography and right of way, but also so that the guideway can ‘spiral’ to ensure rider safety and provide an optimal ride quality for passengers onboard.

Since each straddle bent is unique, it must be poured in place rather than being pre-cast. Lane and road closures will be necessary to ensure drivers safety and traffic will be temporarily diverted when construction over the Greenway begins.

"Our crew is working in close coordination with the Dulles Airport and Dulles Greenway staff to build these labor-intensive elements with as little disruption as possible," Williamson said.

Specific dates have not yet been set, however, any major closures will be done during the night and should not impact rush hour commutes.

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**Highlights**

A station column at the Dulles Airport Station. Photo by: Haigh Thornton, Capital Rail Constructors

View of the aerial guideway taken from the window of an aircraft. Photo by: Meghan Murphy, Capital Rail Constructors

Station Manager's kiosk at the Innovation Center Station being lifted into place. Photo by: Capital Rail Constructors

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