



# TUSCARORA TUNNEL PROJECT UPDATE

## MARCH 2021

Work is continuing in the eastbound tunnel with weekly closures. These weekly closures begin each Sunday night at 9 p.m. and end each Friday by noon. During the eastbound tunnel closures, a single lane of eastbound traffic is diverted into the westbound tunnel. The westbound tunnel operates with bi-directional traffic during these weekly closures.

Over the past few months, the contractor excavated and constructed the new inlets along the right side of the eastbound tunnel. This was followed by work on the waterproofing system, drainage work, and placement of concrete for the roadway barrier. The contractor is also installing temporary electric wiring and lighting that will be used while the waterproofing and shotcrete liner are installed through the eastbound tunnel.

At each end of the tunnel the contractor is installing the mechanical ventilation system that will more efficiently direct air through the tunnels. A number of the existing fans have also been disassembled and removed from the site. New fans are being designed and fabricated to increase the ventilation capacities within the tunnels.

At the portal buildings located at each end of the tunnel, the contractor continues with upgrades of the electrical and mechanical systems throughout the buildings. Work also continues in the westbound tunnel where new conduit and junction boxes are being installed for the new lighting, fire and life safety systems. The contractor is finalizing shop drawings for new Tunnel Control System (TCS) including closed circuit television (CCTVs). When the TCS is eventually installed, it will provide a state-of-the-art upgrade of the communications and life safety systems in the tunnels.

In next several months, the contractor will begin a critical and time-consuming phase of the construction. During the eastbound tunnel weekly closures, the contractor will install the waterproofing system on the existing walls and arch of the tunnel followed by lattice girders, reinforcing mesh and an 8-inch-thick shotcrete liner. Grout hoses will be installed allowing grout to be pumped in behind the shotcrete liner to prevent any water from leaking to the surface.

The work will proceed by completing several 30-foot-long panel sections each week. At the end of each week, a temporary lighting system will be restored to provide the required lighting levels. After several of the 30-foot panels are reconstructed, the new electrical and life safety systems will be installed on the surface of the new tunnel liner. This entire process will continue for the next 12 months in the eastbound tunnel.

By summer of 2022, the work in the eastbound tunnel is expected to be completed and then work will begin in the westbound tunnel. Since the westbound tunnel is newer and in better condition, waterproofing and a shotcrete liner will not be needed. There will be repairs performed to the tile walls and to the surface of the roadway barriers. A completely new communications and life safety system will also be installed.