By early 2014, the machine digging the State Route 99 tunnel will pass beneath the Alaskan Way Viaduct near Yesler Way, in Seattle’s Pioneer Square neighborhood. The Washington State Department of Transportation will close the viaduct for one to two weeks while the machine digs beneath the structure’s foundation.

The viaduct was designed and built to withstand some settlement, and WSDOT has reinforced the structure and strengthened the ground beneath its foundations to protect it during tunneling. Temporarily removing traffic from the viaduct while we tunnel beneath it will enable crews to monitor the structure more closely and act quickly to mitigate any settlement that may occur during this section of the tunnel drive. The short-term inconvenience of closing the viaduct will help us preserve it until we shift SR 99 traffic to the tunnel.

Protecting the viaduct
WSDOT has implemented a comprehensive program to monitor and mitigate settlement as the machine digs under the viaduct, including:

1. Outfitting the viaduct and the ground below it with instruments designed to detect the slightest ground movement.
2. Wrapping reinforcing fiber around this section of the viaduct to provide additional strength.
3. Installing underground support walls to hold the soil in place beneath this section of the viaduct’s foundation.

Tunneling beneath the State Route 99 Alaskan Way Viaduct

- **1. Settlement monitors**: Monitors are installed in the ground and on the viaduct, extending down to the top of the tunneling machine.
- **2. Fiber wrap**: Fiber wrap provides additional strength to the viaduct.
- **3. Underground walls**: Made up of a series of steel tubes drilled into the ground, these angled walls hold the soil in place by creating a barrier between the machine and the viaduct's foundation.

Visit the website at: www.AlaskanWayViaduct.org | Call the hotline at: 1-888-AWV-LINE (298-5463) | Follow @BerthaDigsSR99