

## VandenBerghe, Alissa (Consultant)

---

**From:** Santic, Heather (Consultant)  
**Sent:** Monday, March 16, 2009 5:08 PM  
**To:** Williamson, Alec  
**Subject:** RE: Bored tunnel comment  
**Follow Up Flag:** Follow up  
**Flag Status:** Red

Thanks, Alec!

---

**From:** Williamson, Alec  
**Sent:** Monday, March 16, 2009 4:29 PM  
**To:** Santic, Heather (Consultant)  
**Subject:** RE: Bored tunnel comment

Geotechnical Studies have not yet been conducted for the bored tunnel but are planned for the near future. Tunnel boring machines accomplish two jobs simultaneously: first, the machine grinds through the soil and rocks and pushes forward a few feet; then, the machine places a ring of concrete segments behind the machine that forms the tunnel lining. This process is repeated over and over until the tunnel is completed. This method of construction allows the workers to do their job in an unpressurized environment.

---

**From:** Santic, Heather (Consultant)  
**Sent:** Thursday, March 12, 2009 10:25 AM  
**To:** Williamson, Alec  
**Subject:** Bored tunnel comment

Hi Alec,

We recently received a comment regarding pressure during bored tunnel construction. Please let me know if you could suggest a few sentences to address his concerns.

Comment:  
Comments:

Has a geotech survey been performed to estimate how much pressure will be required to keep the water out of the tunnel during construction? The state's current rules for exposure to workers is limited to 50psi (3.4 bar). Thank you.

Thank you!

**Heather Santic**  
Alaskan Way Viaduct and Seawall Replacement Program  
Phone: 206.267.3789  
[santich@wsdot.wa.gov](mailto:santich@wsdot.wa.gov)

For more information on the project, visit [www.alaskanwayviaduct.org](http://www.alaskanwayviaduct.org)