# BULLETIN

*News from SubTerra, Inc.®*

## *Good Samaritan Hospital Utilidor Tunnel Project*
## *Puyallup, Washington*

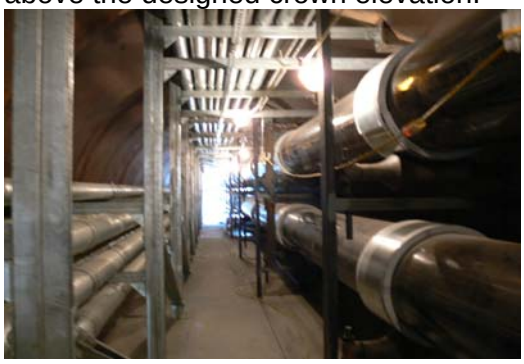
*The Good Samaritan Hospital in Puyallup, WA began a massive expansion project in 2008. New facilities will occupy three corners at the intersection of 14th Ave and 3rd Street including a new ER, Patient Care Tower, Parking Structure, Heli-Stop, Central Utility Plant and Utilidor Tunnel. Clark/Kjos and Giffin, Bolte Jurgens Architects make up The Good Sam Design Collaborative.*

The Good Sam Design Collaborative awarded the Design-Bid-Build contract to SubTerra, Inc. as the Utilidor (utility corridor) Tunnel Designer and Northwest Boring as the tunneling subcontractor to Skanska. The Design-Bid-Build process allowed ***SubTerra*** to fast track the project from concept to completed product within a single calendar year.

***SubTerra*** provided Tunnel and Shaft Engineering Services and associated technical support during and after construction.

The Utilidor Tunnel is a 12-foot diameter, 115-foot long tunnel connecting the new Central Utility Plant on the northwest corner of the intersection to the new Patient Care Tower on the southeast corner.

The tunnel was mined through very dense glacial till by the pipe jacking method. Potential utility conflicts buried beneath the roadway included multiple underground electric lines, water mains, storm drains, a sanitary sewer, fiber optic communications, and two natural gas lines just three feet above the designed crown elevation.



At the completion of mining the tunnel, the annular space produced by a small over-cut from the tunnel shield was grouted to prevent future subsidence and to ensure the development of ring thrust that the primary steel liner relies upon for stiffness.

The project was completed on schedule, accident free and with no measurable ground subsidence or heave.



*PO Box 520, 218 East North Bend Way, North Bend, WA 98045*
*Phone (425) 888-5425 info@subterra.us Fax (425) 888-2725*