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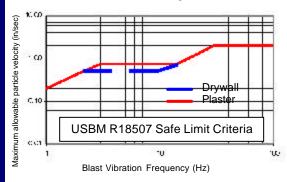
News from SubTerra, Inc.®

Blast Monitoring for the Lake Louise Sewer Interceptor Bellingham, Washington

Controlled blasting was the planned excavation method for a Wet Well Pump Facility for the Lake Louise Sewer Interceptor Project in Bellingham, Washington. Additional trench blasting would also be performed in areas of elevated rock along the the alignment, and within one hundred feet of nearby residences. The project engineering company, Wilson Engineering, contacted SubTerra, Inc., to provide expert blasting technical review for the project.

SubTerra, Inc., began with door-to-door informational visits to area residents, to help dispell potential concerns over blasting. Next, a review of all blast design submittals was performed, followed by visual inspections of structures close to the alignment, and monitoring of all nearby blast vibrations. Recorded vibration levels were used in planning the layout of each subsequent blast.

The recorded blast vibration levels at the nearest structures were interpreted to be below the recognized "Safe





Limit" Criteria recognized by the Office of Surface Mining Reclamation and Enforcement, the US Bureau of Mines and Washington State.

Proper rock fragmentation was verified in the Wet Well and Sewer Trench using an on-site excavator.



Blast monitoring programs, in conjunction with pre- and post-blast inspections, can be very useful in evaluating blasting-related damage claims.