



ParklandGEO has performed vibration and noise monitoring for construction projects dating back to 2002. Vibration and noise testing is performed to control health impacts and limit possible damage to sensitive buildings, civil infrastructure, pipelines and other underground services/ utilities due to excess vibration and noise. ParklandGEO have 7 eight-channel seismographs with microphones which allow concurrent monitoring at up to 14 different locations for vibration and 7 different locations for noise. The seismographs are capable of continuous monitoring and real time display of results to facilitate control of vibration activities. The following is a selected list of ParklandGEO vibration monitoring project experience.

Suncor Firebag Dilbit Pipeline Capacity Project (2012) - Performed full-time vibration monitoring for ten driven steel piles installed in close proximity to oil pipelines at this Suncor facility. The monitoring was done on exposed pipeline sections using criteria developed in consultation with Suncor engineers.

Red Deer Regional Hospital (2002 & 2014) - In 2002 a vibration monitoring program was undertaken around the new MRI lab during the foundation installations for the adjacent Emergency Wing and Heli-pad. In 2014, vibration and noise monitoring was undertaken during a test pile program for the proposed parkade to determine the possible impacts of installing driven steel piles at a at the site. Monitoring locations included six critical sites at the hospital (ie. the MRI lab, the laser clinic and the radiation vaults at the Cancer Centre).

ATCO Eastern Alberta Transmission Line (2013) - Performed full-time vibration monitoring during driven steel pile installations at two test pile sites; and at twelve transmission tower sites that were located in close proximity to gas/oil pipelines, buried services or sensitive structures.

R.M. of Wood Buffalo Waterways Lift Station (2014 & 2015) - Performed vibration monitoring during trench backfill, road construction, driven steel pile and steel sheet pile installations for the lift station to review the impacts on nearby buried services and older residential structures close to the site.

Nova Chemicals Gas Phase R3 Project (2013) - Performed vibration monitoring during driven steel pile installations at a test pile site to determine possible impacts on existing plant equipment.