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### NOTICE OF CONSTRUCTION ACTIVITIES

September 9, 2022	
Project:	Cassellholme Redevelopment, North Bay, ON
General Contractor:	Percon Construction Inc. Michael Cicerani, M.Arch., OAA, LEED AP, <i>Director, Design/Build</i> Contact No.: (416) 744-9967 ext. 236
Owner Representative:	Dave Smits, P.Eng, Director Facilities and Capital Projects Contact No.: (705) 474-4250 ext. 177

Dear Residents, Families, Visitors, Staff, or Resident/Owner,

Please be advised that construction activities, including pile driving operations will commence on the above noticed project the week of September 12, 2022, and will continue until the completion of the site preparation for the development of the above noted project. The pile driving operation itself for Phase 1 is expected to take approximately six (6) weeks. We will keep you informed similarly as Phase 2 approaches.

In accordance with the local noise By-Law No. 2014-53 for a Quiet Zone, Construction will occur between the hours of 7 am and 5 pm, Monday to Friday, and potentially on Saturdays.

Rest assured that seismic monitoring equipment will be installed at locations on either side of the construction site(s) to measure the vibrations and maintain the vibration levels within industry guidelines.

The following are frequently asked questions regarding construction sites and the noises surrounding them:

### Is my home safe from construction related vibration and noise?

If construction is occurring near your home, you can expect to feel some vibration and hear some noise, however, vibration levels are normally lower and no more dangerous than those caused by the slamming of a door or by children running and jumping around the house. Vibrations accompanied by sound effects (noises, rattles, etc.) seem far stronger than those that make no noise. Experience has shown that a seismograph set up inside a home will usually record higher vibration levels from activity in that home than from construction operations in the vicinity. Many, many tests have proven that these types of activities in the home have more potential for damage than the construction which will take place in your area. In fact, unseen environmental forces, such as temperature and humidity changes, which make no noise, are potentially worse as these may have silently already caused damage to your property. Understandably, however you may well be concerned about the construction for a number of reasons:

- 1) You may be startled by the vibration and noise;
- 2) Because the human body feels very low levels of motion, you may feel vibration in the floor if you are standing or in a chair if you are seated;
- 3) On occasion, the construction activities may rattle windows and doors. The important point is that people are more sensitive to vibrations than their homes are.

Though we do not deny that you may hear or feel construction vibrations, its suddenness coupled with your sensitivity to vibrating floors, walls and windows, will make the vibrations seem worse than they really are.

### Does louder mean stronger?

There is no direct relationship between the noises you hear around your house and the potential for damage. Contrary to the low frequencies of earthquakes, ground vibrations from construction have relatively higher

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frequencies and can be heard very easily. They are also easier to feel than the slow motions of mild earthquakes. The levels you can hear and feel are far below those needed to cause damage. These pulses also seem worse because they come rather suddenly.

### Who's to say what levels of ground vibration are safe for my home and the rest of my property?

Much research has been devoted to providing answers to this question, since numerous factors concerned with construction methods and possible effects from vibrations must be considered. There are provincial and municipal agencies that impose restrictions and laws pertaining to ground vibrations and noise levels from construction operations. These limits are based on extensive research conducted by many agencies and specialists throughout the world. One of the leading agencies, and one of the most restrictive, is in the United States Bureau of Mines. The USBM has contributed a major part of the technical data on vibration levels and their effects, however, other agencies, institutions, corporations, and individual investigators, both foreign and domestic, have contributed to the accumulated knowledge in this area. Current legal and recommended vibration limits result from this research. By adhering to these limits and by following safe construction procedures, contractor can minimize or eliminate risk to the surrounding area.

### How are vibration and sound measured?

Portable seismographs will be used to measure and record the ground vibrations and noise levels. These are typically situated between the construction operations and select buildings in the area to ensure levels are at or below industry standards, which also ensures that levels beyond the monitoring station would be even less.

Before a seismograph is approved for field work, it is thoroughly tested, and its accuracy is verified by the supplier. The emphasis on instrumental accuracy is important to the user. It makes little sense for a contractor to go to the expense of recording vibrations in order to satisfy governmental regulations, his insurance or engineered recommendations if the validity and accuracy of the seismic readings could be questioned.

### Is there anything I can do to reduce any effects the construction may have on my house or family?

The start of construction activities in a new area often generates much concern by the public, primarily due to a lack of awareness about the extensive precautions normally taken both to protect property and to reduce inconvenience. Concerns can be minimized by informing yourself about what is going on. Since vibration or noise levels may rattle dishes and disturb pictures, results similar to those from a sonic boom or nearby thunderclap, make sure that pictures are securely hung, that dishes are stored flat and that glassware is well away from shelf edges, etc.

### What is the City's involvement?

The contractor conducting the work must conform to procedures outlined through a contract document and/or a design approval process (site plan, subdivision approval and/or rezoning) which requires construction methods be designed to suit existing conditions and surrounding built environment. They will be required to conform to those strict limitations, outlined in the contract or the development approvals process.

If you have any questions regarding this project, please contact the general contractor noted above.

Yours very truly,

Englobe Corp

Jake Berghamer, P. Eng., Director of Operations, Geotechnical and Materials (NE/NW Ontario)