

VIBRATION MONITORING - Item No.

Special Provision

Amendment to OPSS 903, November 2009

903.01 SCOPE

Section 903.01 of OPSS 903 is amended by the addition of the following:

This specification also covers the requirements for vibration monitoring.

903.07 CONSTRUCTION

903.07.02.01 Pile Driving Requirements and Restrictions

Clause 903.07.02.01 of OPSS 930 is amended by the addition of the following clause:

903.07.02.01.01 Vibration

The amount of vibration on the existing structure during pile driving for the new structure shall be monitored. The vibration monitoring equipment shall be placed on the existing structure such that it will not be disturbed. The location shall be as close as possible to the piling works.

The vibrations at the existing structure shall not exceed 100 mm/s (peak particle velocity).

Readings shall be taken on the first pile in each pile group (i.e. at each corner of the abutment), starting with the pile furthest away from the existing structure. As a minimum, the readings shall be taken and recorded during the first 3 m of driving and during seating of the pile onto the bedrock.

The results shall be certified by the Quality Verification Engineer as being accurate and meeting the requirements of the specification. The results shall be submitted to the Contract Administrator prior to continuing with the remaining piles. As a minimum, the pile number, location set criteria and driving log shall be submitted with vibration monitoring results.

If the results are acceptable, the installation of the remaining piles shall continue with readings taken during driving of each pile. Subsequent vibration readings shall be taken for each pile during bedrock seating. The results of the subsequent piles shall be certified by the Quality Verification Engineer as being accurate and meeting the requirements of the specifications. The results shall be submitted to the Contract Administrator at the end of each day.

If the readings are not within the limits stated above, the driving procedures shall be altered until the vibrations on the existing structure are within acceptable levels. The above process shall be repeated for each pile.

903.10 Basis of Payment

Section 903.10 of OPSS 903 is amended by the addition of the following subsection:

903.10.04 Vibration Monitoring – Item

Payment at the Contract price for the above tender item shall include full compensation for all labour, Equipment, and Materials to do the work.

WARRANT: Always with this tender item.

SAMPLE