14 August 2017

Tunnelling in your area – Arncliffe

Work is underway on WestConnex which involves widening and extending the M4 and M5 and joining them to create a free-flowing motorway network.

As part of the project, the New M5 will duplicate the existing M5 East corridor, doubling vehicle capacity and easing congestion between St Peters and Beverly Hills. It will include twin tunnels, an upgrade of King Georges Road Interchange and a new interchange at St Peters. For more information, visit westconnex.com.au/NewM5.

In the next one to two weeks, tunnelling for the New M5 will start in your area approximately 60 metres underground and will be carried out 24 hours a day, seven days a week.

What to expect

In your area the roadheaders will be 60 metres underground and depending on the ground conditions, building type and existing background noise, it is possible that you will not notice the work underneath your property.

You will not be able to hear the excavation equipment, but ground borne noise generated by tunnelling activities may be experienced inside your property at shallower depths. Ground borne noise is created when vibration from tunnel excavation travels through the ground and causes the walls and floors of the building to faintly vibrate, creating audible noise.

You may notice a low frequency rumble up to about 45dBA when the roadheader is working beneath your property. By comparison, a normal conversation is about 60dBA and a refrigerator is about 50dBA. This could occur for a period of about one week, depending on the size of your property, geological conditions and how far away you are from the tunnel.

What is involved

The New M5 tunnels will be excavated to around 12.5 metres wide with a height of around 7.5 metres. Tunnel excavation is carried out using road headers.

A roadheader is an excavation machine that has a rotating, rock-cutting head, mounted to a boom. When the excavated material is cut, it falls at the front of the machine, where a loading device transfers the rock onto the roadheader's conveyor system which loads the spoil onto underground off road haulage trucks. The roadheader machine travels on tracks and weighs around 135 tonnes.

Tunnelling will take place from four main construction sites located at Kingsgrove, Bexley, Arncliffe and St Peters. In your area, the tunnelling site is located on Marsh Street in Arncliffe.

There will be 2 roadheaders passing underneath your property around the same time. The anticipated tunnel advance rate is around 25 to 30 metres each week. Tunnelling will occur under individual properties for around a week for each tunnel. In order to see the New M5 tunnel alignment in comparison to the location of your property please go to https://gis.aecomonline.net/westconnex/newm5/.

Cross Passages

Cross passage tunnels which connect the eastbound and westbound tunnels are designed to house mechanical and electrical equipment for the tunnel operation and to permit the motoring public to cross to the other carriageway in the event of an emergency.

Cross passages are located throughout the tunnel around 120 metres apart and will typically be excavated around two to three weeks after the main tunnels in that area are complete. The time taken to construct a cross passage will depend on ground conditions and the type and length of the cross passage being constructed. A typical cross passage will take around one week to construct.

Example of a typical road header

If you have a question about this work, please call toll-free **1800 660 248 (24 hours)** and ask to speak to a member of the New M5 community engagement team or email info@newm5.com.au.

Interpreter

We speak your language

To learn more simply visit westconnex.com.au/yourlanguage.
Need an interpreter? Call the Translating and Interpreting Service on **131 450**

Notification No: 252