

Barbican Crossrail Forum meeting 9 October 2014

Overall the work is on target. The latest information is that one tunnel will come under the Barbican in later January 2015 and the second in late February 2015.

About 300 residents visited the Moorgate shaft on its open day.

Crossrail and the BA are planning another public meeting for all Barbican residents in the week of 19 January 2015.

The defects surveys are underway: 950 letters of 1250 had gone out and 200 inspections had been done. The surveyors plan to finish their work by mid-December.

If you haven't replied to a letter requesting you to make an appointment for a survey, the BA is recommending that you should make the appointment: in the event of any damage caused by Crossrail it will be in your interests to have had the baseline survey done.

David Shepherd, Crossrail's Supervising engineer for the running tracks outlined the measures taken to prevent settlement: the tunnel boring machine itself exerts a forward pressure while tunnelling, and the earth under the Barbican is sympathetic to tunnelling. The TBMs had gone under the DLR with virtually no settlement. Structures around the tunnels are monitored continuously and the data kept under constant review by engineers. He didn't expect any problems under the Barbican.

The tunnels excavate about 14 metres in each 12 hour shift.

He explained that the tunnels were about 40 m under ground level but rose slightly on the approach to a station and fell again on leaving a station, to take advantage of the inclines for breaking and accelerating.

When the railway is operating

Colin Cobbing, Crossrail's Acoustic Manager, talked about noise and vibration when the is operating, something of great interest to the house group representatives who were there from Brandon and Lambert Jones Mews, who hear some noise from the underground lines.

He said that Crossrail had given commitments to Parliament to install permanent track that met specified criteria for noise and vibration. These included a maximum of 40 dB under dwellings and of 25 dB under concert halls – with an obligation to go lower than that when reasonable to do so. The London local authorities all wanted the noise to be less than 35 dB throughout. He said that, it depended on the background noise in the space concerned, but that 35 dB should probably be inaudible unless the background was very quiet, and even if heard it would be very faint.

Under questioning he said that Crossrail had given the City of London an undertaking to put a floating slab track (which would further attenuate noise) under the Barbican concert hall and that this floating slab track would also be laid in the vicinity of the concert hall. Again under questioning he thought that the "vicinity" included the entire Barbican estate, but we have asked for a map to show the extent of the floating slab.

The floating slab track, would, he said ensure that the sound over it would be no more than 35 dB and probably less. The whole track was being designed to high standards, it was at considerable depth (close to 40 m under ground level), and though London clay (which is good for attenuating sound); it was a similar system to that used for the below-London sections of High Speed 1 (where there had been no noted problems); and he was confident there would be no issues.

Moorgate and the escalators

Work on excavating the Moorgate shaft is nearly complete: the concrete for the base slab will be poured in November.

Work on preparing for the new escalators at Moorgate would begin in the next 3 months and they would start to be constructed in the next 6 months. They were expected to be ready in the third quarter of 2015. Crossrail has committed not to close the existing escalators till the new ones are in place.