## Freya Turtle

From: Freya Turtle

**Sent:** 22 March 2017 16:59

**To:** Freya Turtle

**Subject:** FW: FW: Crossrail Safeguarding responses (Giles Circus) mitigation of

groundborne noise & vibration

From: Geoff Rankin [mailto:GeoffRankin@crossrail.co.uk]

Sent: 07 March 2017 16:17

To: Clive Fussell

**Cc:** Rupert Thornely-Taylor (<a href="mailto:rmtt@ruperttaylor.com">rmtt@ruperttaylor.com</a>); Will Orlik

Subject: FW: FW: Crossrail Safeguarding responses (Giles Circus) mitigation of groundborne noise & vibration

Hi Clive,

The objective of the CRL Safeguarding directive is to mitigate risk of unacceptable levels of groundborne N&V transmission from emissions from Crossrail rather than other underground railways. (e.g. Northern Line)

Section 3.3.1 will now read

Ground borne noise level predicted from measured Northern Line vibration level – 22.9 dBA Ground borne noise level predicted from predicted Northern Line vibration level – 39.4 dBA Ground borne noise level predicted from Crossrail Line vibration level – 28.8 dBA

We are now happy to accept that the analysis conclusions meet the requirements of Crossrail's Safeguarding condition and it is acceptable to us.

Mitigation of development impact from the Northern Line is beyond CRL Safeguarding's remit so not of concern to us but it may be of interest to LU. However our acoustic advisor has observed that the difference between the Northern Line prediction based on measurements and based on pure prediction is now very large, which perhaps deserves explanation. Buro Happold are making the recommendation that isolation bearings be deleted and to support that recommendation there perhaps needs to be an explanation as to why the prediction model should be disregarded.

Kind Regards,

Geoff Rankin

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