



ACOUSTICAL INVESTIGATION &  
RESEARCH ORGANISATION LTD

**Duxons Turn  
Maylands Avenue  
Hemel Hempstead  
Hertfordshire  
HP2 4SB**

Registered in England No. 00603110 Secretary R C Harding BSc

**Consultants in Acoustics, Noise Control  
and specialist Electro-Acoustic Systems,  
Laboratory and On-Site Testing Services**

**Director**  
A J Jones BSc PhD CPhys MInstP HonFIOA  
**Principal Consultants**  
W R Stevens MIOA  
D L Watts BEng CEng FIOA  
**Laboratory Manager**  
M Sawyer MIOA

**Telephone: +44(0)1442 247146**  
**E-mail: airo@airo.co.uk**  
**Web: <https://www.airo.co.uk/>**

---

DLW/KH/7167/L1

Mr J Fullagar  
c/o Farris Associates Ltd  
4 Claridge Court  
Lower Kings Road  
Berkhamsted  
Hertfordshire  
HP4 2AF

2 July 2019

Dear Mr Fullagar,

### **57 SOUTH PARK GARDENS**

We refer to AIRO report DLW/7167 dated 25 July 2018 and the reported feedback from the recent planning committee meeting regarding an acoustic barrier to protect the site against rail traffic noise.

There is a British Standard that classifies the sound insulation performance of noise barriers and is often used by specifiers (for example Highways England) to ensure that the barrier is of an appropriate constructional design to act as a noise barrier. The standard relates to road noise and is based on the frequency spectrum of road traffic noise but this is generally suitable for electric or mixed rail traffic of the type using the line next to the application site.

The Standard is BS EN 1793-2:2012 and categorizes noise barriers according to objective acoustical measurements in categories of B0, B1, B2, B3 and B4 where B4 is the highest category of barrier.

In relation to the application site, AIRO would suggest that a Category B3 or better noise barrier according to BS EN 1793-2:2012 is specified and this could be incorporated within the terms of a condition to secure this for the planning authority.

The details of the height, length and precise position of the barrier can then be subject to agreement in the same or a separate condition.

Based on indicative calculations, AIRO is satisfied that a Category B3 barrier of height at least 2.5 to 3.0 metres of appropriate length and position within the application site can provide noticeable localized reductions in rail traffic noise levels to external areas.

Continued/....

The proposals described in the report to protect dwellings and deliver current design standards for noise levels internally do not rely on any external barrier. Consequently, where the external barrier reduces incident noise levels at dwelling façades, internal sound levels that are better than current design standards may be achieved with the proposed dwelling mitigation packages.

We trust this is of assistance but please contact us if anything further is required at this stage.

Yours sincerely

*DL Watts*

David Watts