

**Presentation updated 14 March 2017 -
EWRP1 16-02507-CND and 16-02509-CND for
Planning Review Committee
Wednesday 15 March 2017**

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3. East West Rail Phase 1 - 2 applications

3 - 30

This updated version of the presentation contains a new slide and cross references the slide contents to the page numbers in officer report.

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Welcome to the Planning Review Committee

- This planning committee meeting is held in public but it is not a public meeting.
- Members of the public can speak to the committee for or against applications on the agenda for up to five minutes.
- If you wish to speak, you must register before the meeting starts. You can ask the clerk to add your name to the speakers' list if you did not register beforehand.
- Information on meeting protocol and conduct at the committee is set out in the Code of Practice in the agenda. Copies are available.

Background

see pages 14-16 WAPC report 21st Feb

- EWRP1 was granted deemed planning permission in October 2012
- Since then, the Council has been discharging the planning conditions imposed by the Secretary of State

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- Condition 19 was imposed by the Secretary of State to *ensure that operational noise and vibration are adequately mitigated at residential and other noise sensitive premises*
- The Council's decisions about noise and vibration are guided by the Noise and Vibration Mitigation Policy (NVMP) which also approved by the Secretary of State



Applications before the Committee

- The applications concern condition 19 - the Noise Schemes of Assessment (NSoAs) for route sections H and I-1 which predict operational noise and propose mitigation to deal with significant noise impacts.
- These NSoAs were approved by WAPC in June 2015
 - February 2016 subject to :
 - (i) a condition requiring the installation of rail damping if reasonably practicable

On the advice of officers removal of that condition refused by the WAPC in September 2016 because it hadn't been demonstrated that rail damping was not reasonably practicable. NR intends to appeal – the current applications allow reappraisal of the NSoAs
 - (ii) a condition restricting the pattern of train services



Purpose of these applications

see page 4 of the PRC report

NR intends to appeal against

- the Council's refusal to remove the rail damping condition; and
- the imposition of the condition restricting the pattern of rail services

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In advance of these appeals the approved NSoAs have been resubmitted with additional information responding to the background to the Council's reasons for refusal so that the issues around rail damping and rail services can be reconsidered.

This accords with best practice – to bottom out material planning issues prior to an appeal



Decisions before this Committee

- Whether rail damping is reasonably practicable in the current circumstances where noise barriers and noise insulation are already installed

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- Whether it is reasonable to retain a planning condition which restricts the pattern of rail services

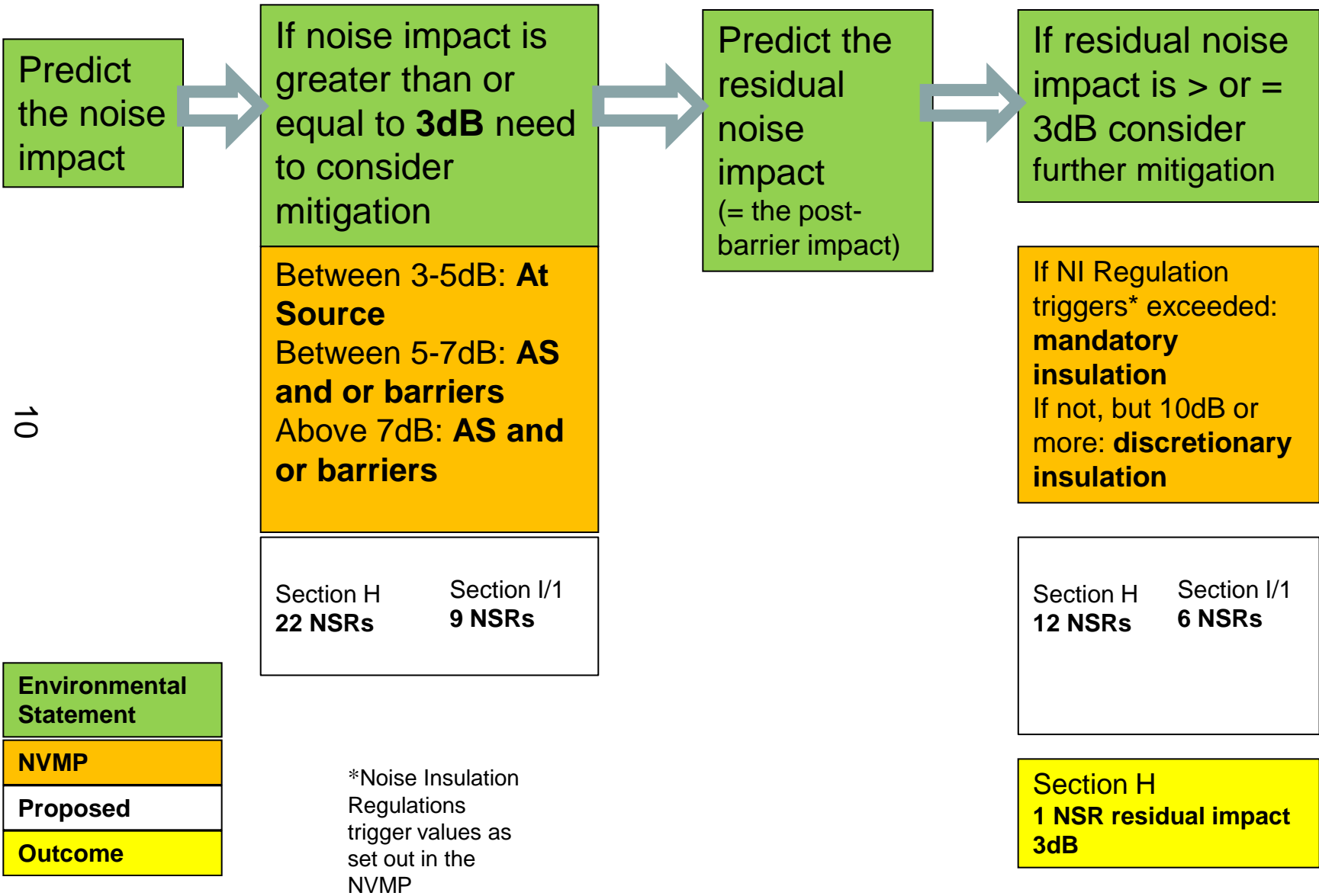


Rail Damping Technical Matters

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Approach to noise mitigation in the ES and NVMP



NVMP standards

- **Mitigation provided on a fair basis**
- **Best Practicable Means to avoid significant impacts**
- **Consultation with those affected**
- **Thresholds and Triggers:**
 - Absolute Threshold Levels (day and night time)
 - Relative impact thresholds
 - Trigger levels for insulation (day and night time)
- **Monitoring of mitigation performance**
- **Other mitigation (station announcements, stabling & train horns)**



- Mitigation provided on a fair basis
- NVMP and “Reasonably Practicable”

- From NVMP *Principles* section
(page 62 report to WAPC 21st Feb)

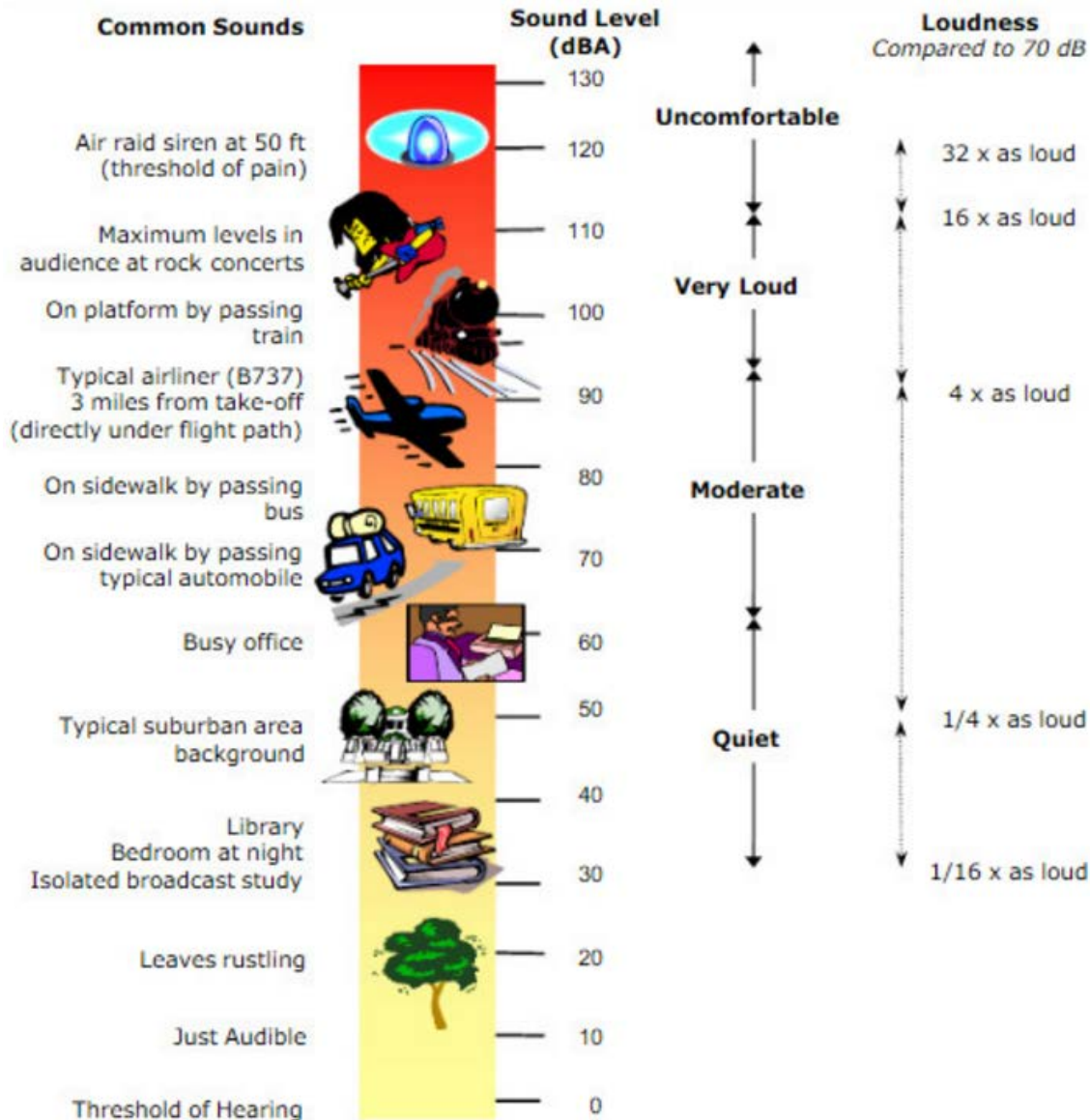
2.2. The Promoter is committed to using the Best Practicable Means ⁽¹⁾ to design the railway so as to avoid significant noise and vibration impacts at existing sensitive receptors (e.g. residential properties, educational buildings and places of worship). The first preference will be to apply necessary noise control measures at source where this is reasonably practicable. These may include rail damping or other infrastructure measures to reduce noise at source. Where this is not reasonably practicable or sufficient to mitigate significant noise impacts, the Promoter will:

- where they are effective and reasonably practicable to install, provide noise barriers to mitigate noise between the track and sensitive receptors; and
- after considering all practicable mitigation measures that can be taken at source (i.e. within the railway corridor), including noise barriers, offer noise insulation to properties where residual noise impacts on sensitive receptors remain high.

(1) Best Practicable Means are defined in Section 72 of the Control of Pollution Act 1974 as those measures which are “reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge, financial considerations and compatibility with safety and safe working conditions”



Typical sounds and decibel levels



Source: Handbook of Environmental Acoustics, James P. Cowan, 1994

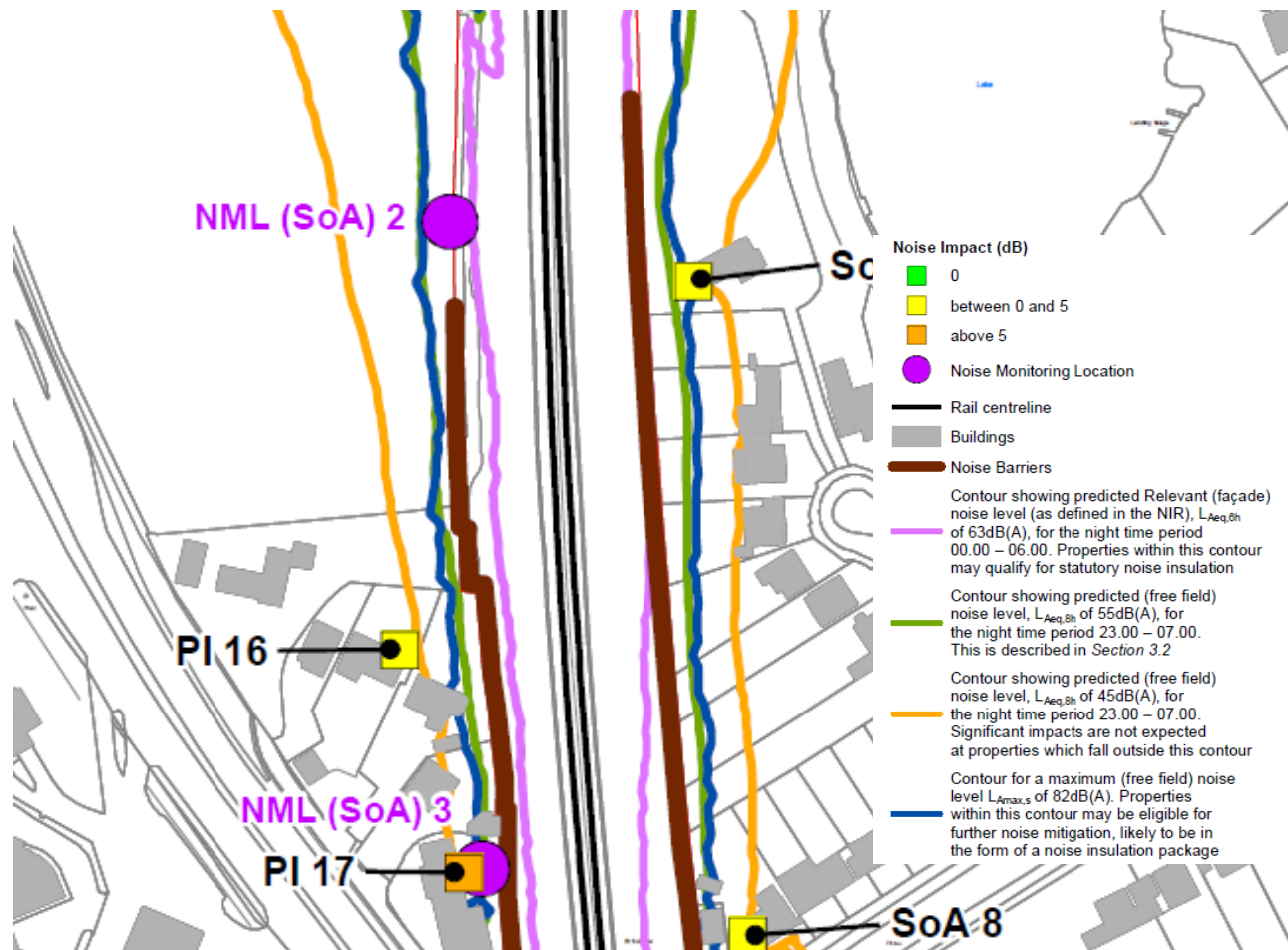
Figure A-2. Typical A-Weighted Sound Levels of Common Sounds

Perceiving loudness

SPL Change	Subjective impression	Power	Pressure
0 dB		x 1	x 1
+ 1 dB	Not noticeable	x 1.25	x 1.12
+ 3 dB	Just noticeable	x 2	x 1.41
¹⁴ + 6 dB	Easy to hear	x 4	x 2
+ 10 dB	Twice as loud	x 10	x 3.15
+ 20 dB	Four times louder	x 100	x 10



Excerpt from noise Scheme of Assessment for Section H showing NSR PI16, 398 Woodstock Rd



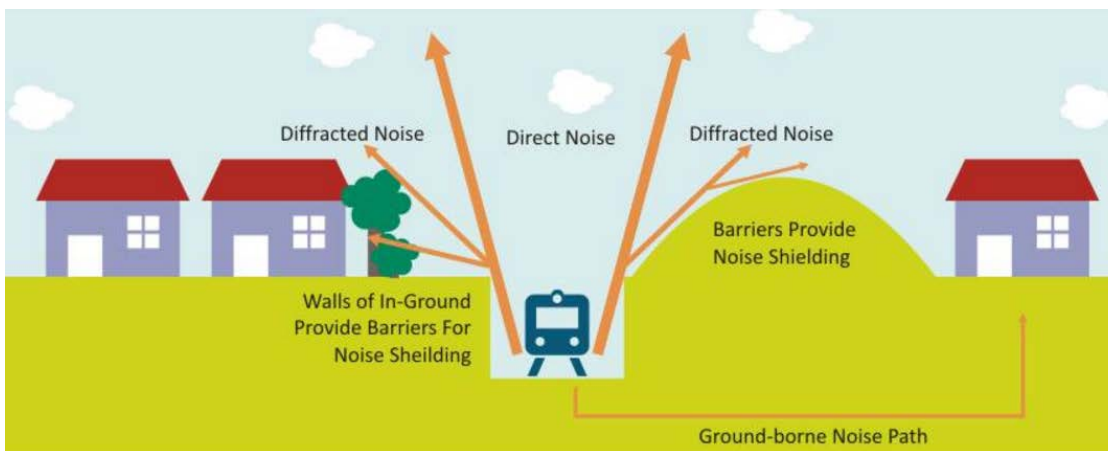
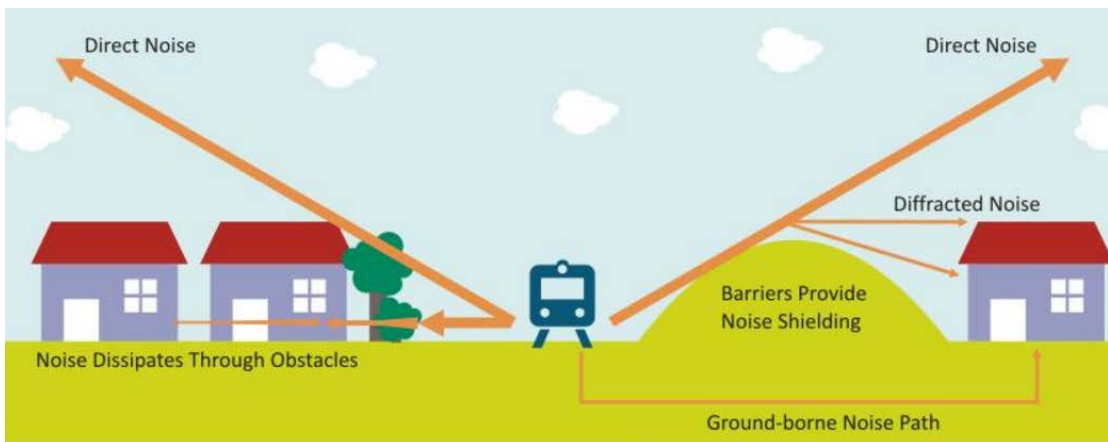
Photograph from Wolvercot Bridge looking north



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Sound propagation from a track



TATA SilentTrack

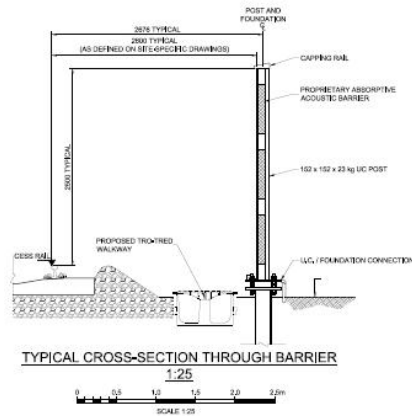
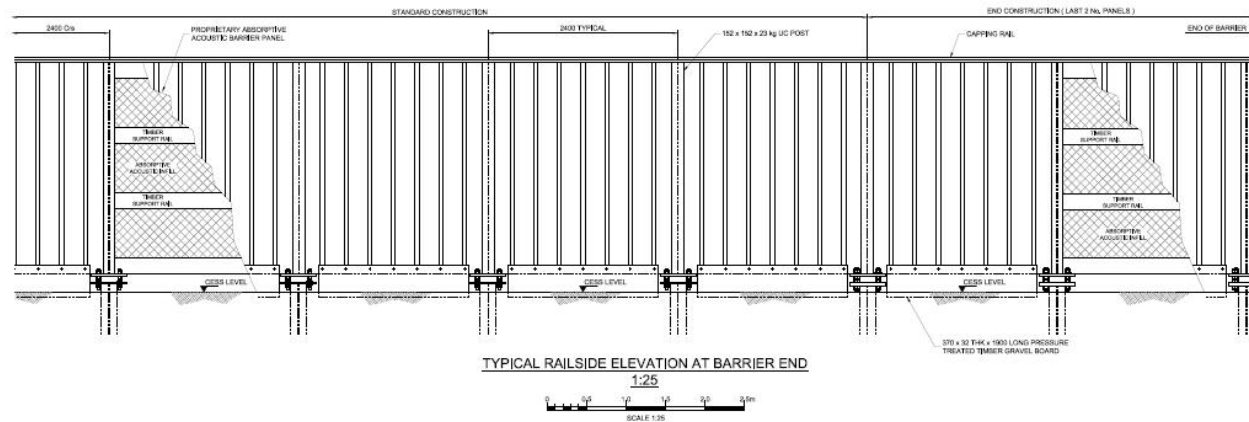


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Barrier details



Rail Damping Assessment



Key points of NR's case on rail damping

see pages 18-19 WAPC report 21st Feb

- The predicted noise impact is so great that rail damping alone cannot achieve the noise standards of the NVMP - barriers and noise insulation are needed instead of rail damping – there is no role for rail damping
- the benefits of RD would be only marginal (up to 2.5dB to 3dB), not likely to be noticeable, and would involve significant cost;
- RD does not represent value for money given that the costs are grossly disproportionate to the benefits



Arup's advice

see pages 19-20 WAPC report 21st Feb

- Arup was asked to comment on specific technical matters in NR's Supplementary Statement
 - Arup's technical advice has clarified matters for officers and was taken into account by QC
- 22 Arup has also advised on all of Prof Buckley's submissions and has acknowledged that his latest submission claiming a 4.4dB reduction

“should be taken into account as a potential outcome for the performance of rail dampers on EWR, albeit for a different damping product to SilentTrack and for a single type of rolling stock”.



Key Aspect of Queen's Counsel's

see page 88 WAPC report 21st Feb

- The key aspect of his advice is:

The NVMP does not require 'at source' mitigation if the other measures already provided will achieve the objectives of the NVMP (para 77)

- 23
- It is primarily this aspect of QC's advice that has changed the officer recommendation between September 2016 and today

- In the current situation with barriers and insulation in place, on the advice of QC, rail damping can only be seen as an additional mitigation measure if reasonably practicable



Key public comments

see pages 5-8 PRC report 15th March

- Performance of rail damping
- Obligation to provide rail damping
- NR reneged on promise to provide rail damping
- Noise and vibration modelling flawed
- Possible appeal costs should not trump consideration of local amenity
- 24 • NR's cost assessments inadequate
- Train speed restrictions needed
- Impacts of de-vegetation
- Noise and vibration monitoring needed – it is noisier than we were told
- Impacts of air pollution
- **HS2 has received Royal Assent - Condition 19 trumps the NVMP**



Key Aspects of Officer Assessment

see page 10 of PRC report 15th March

- The existing barriers and insulation meet the requirements of the NVMP (in both route sections H and I-1) apart from at one Noise Sensitive Receptor (NSR) in section H where the residual (post barrier) noise impact is 3dB.
- Given that at that one NSR the benefit of rail damping would be a 'just-noticeable' noise reduction, the likely costs of providing rail damping make it not reasonably practicable



Officer recommendation on rail damping

see pages 9-10 PRC report 15th March

- The recommendation is therefore that the NSoAs relating respectively to route sections H and I-1 be approved subject only to a condition specifying the documents that form part of the permission, excluding the previously imposed condition regarding rail damping.





Restrictions on the pattern of train services

Restrictions on train services

see page 11 PRC report 15th March

- Queen's Counsel has advised that the NVMP does not require any assessments to address any future increases in service and that these potential changes do not need to be modelled (paragraph 84 of his Advice).
- 28 NR can increase services without being in breach of condition 19 of the deemed planning permission, and do not need to seek further consent (paragraph 85).
- In the view of officers therefore, since there is no legal basis for the imposition of this condition, it is not recommended.



Recommendations



Recommendation

- the respective NSoAs are considered to be robust and to have demonstrated that the required standards of noise mitigation set out in the Noise and Vibration Mitigation Policy will be achieved subject to the installation of the specified mitigation measures.
- 30 • The applications are recommended for approval subject to a condition that the development shall take place in accordance with the submitted details.
- The previous conditions relating to rail damping and limitations on the patterns of train services are not recommended.

