

## WEST AREA PLANNING COMMITTEE

9<sup>th</sup> June 2015

**Application Number:** 15/00956/CND

**Decision Due by:** 19/05/2015

**Proposals:** Details submitted in compliance with condition 19 (Operational Noise: section H) of TWA ref: TWA/10/APP/01 (The Chiltern Railways (Bicester to Oxford Improvements) Order - deemed planning permission granted under section 90(2A) of the Town and Country Planning Act 1990).

**Site Address:** Chiltern Railway From Oxford To Bicester **Appendix 1**

**Ward:** Wolvercote Ward

**Agent:** Andrew Deacon (ERM)

**Applicant:** Network Rail

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### Recommendation:

CONDITION 19 BE PARTIALLY DISCHARGED IN RELATION TO THE NOISE SCHEME OF ASSESSMENT FOR SECTION H.

For the following reasons:

- 1 The Noise Scheme of Assessment is considered to be robust and has demonstrated that the required standards of noise mitigation set out in the Policy will be achieved subject to the installation of the specified mitigation measures.
- 2 The Council considers that the proposal accords with the policies of the development plan as summarised below. It has taken into consideration all other material matters, including matters raised in response to consultation and publicity. Any material harm that the development would otherwise give rise to can be offset by the conditions imposed.

subject to the following conditions, which have been imposed for the reasons stated:-

1. The development is to be carried out strictly in accordance with the documents titled "Noise Scheme of Assessment for Route Section H" (ref 0221083/11/H06) dated 6 March 2015; the ERM further technical note submitted to the Council on 5 May 2015 titled "Technical Note to Provide Information on the Effect of Relocating the Woodstock Road Crossover (ref 0221083/H07) and drawing numbers 0221083\_SecH\_Sheet24\_Ver1, 0221083\_SecH\_Sheet25\_Ver1, 0221083\_SecH\_Sheet26\_Ver1 and 0221083\_SecH\_Sheet27\_Ver1 all dated May 2015. In the event of conflict between these drawings and other documents the four May 2015 drawings shall prevail and as between the other documents the later produced

document shall prevail

**Reason** – the Noise Scheme of Assessment has been prepared upon the basis of these details and deviation from them would not necessarily result in the standards of vibration mitigation required by the Noise and Vibration Mitigation Policy (January 2011) being achieved

- 2 Within three months of this partial approval under condition 19 of the deemed planning permission, proposals shall be submitted for the written approval of the local planning authority showing how at-source noise attenuation by rail dampening to at least the standard achievable by the use of Tata Silentrail can be incorporated into the scheme. The development to which this approval relates shall not be brought into operation EITHER without that written approval having been obtained and other than in accordance with such approved details OR without the Council having given written confirmation that it is satisfied that the provision of such rail dampening is not reasonably practicable.

Reason: The local planning authority is not satisfied that rail dampening as an at source mitigation measure has been shown to not be reasonably practicable in the absence of any attempt on the part of the applicant to secure approval for the use of such a measure.

#### **Main Local Plan Policies:**

##### **Oxford Local Plan 2001-2016**

**CP6** - Efficient Use of Land & Density

**CP10** - Siting Development to Meet Functional Needs

##### **Core Strategy**

**CS6** - Northern Gateway

**CS13** - Supporting access to new development

**CS27** - Sustainable economy

#### **Other Main Material Considerations:**

- National Planning Policy Framework
- National Planning Policy Guidance
- Emerging Northern Gateway AAP (currently awaiting Inspector's Report)
- Environmental Information
- Other comments representations and submissions made in connection with the applications
- The deemed planning permission of 23 October 2012 and documents related to it including the Noise and Vibration Mitigation Policy (January 2011)

#### **Purpose of the Report**

1. The Committee is being asked to consider and determine the acceptability of the Noise Scheme of Assessment which has been submitted in order to

discharge the noise elements of Condition 19 (**Appendix 2**) to the deemed planning permission for East West Rail Phase 1.

### **Description of East West Rail Phase 1**

2. East West Rail Phase 1 uses the exiting route of the Bicester/Oxford rail line, **Appendix 1**. This crosses from the north into the City administrative area just north of the Lakeside development, passes under the Wolvercote roundabout and continues south through Wolvercote village, over the Oxford Canal, past the west side of the Waterways developments (including Stone Meadow), the Waterside developments (including Plater Drive, Rutherford Way and William Lucy Way) and the Rewley Road developments, and then into Oxford Station.
3. East West Rail Phase 1 has been amended since the original permission and now involves:
  - i. replacing the existing Bicester/Oxford track for its length within the city up to a point opposite Stone Meadow where it deviates west of the existing line and joins the main line near the existing Aristotle Lane crossing; and,
  - ii. constructing a new line to the west of the existing line which joins the main line opposite Stone Meadow.
4. Some proposals which were in the original permission are not now being implemented, namely:
  - a new track from opposite Stone Meadow into the Oxford Station close to the eastern side of the exiting extent of railway land;
  - a new short spur from that track into the station (together with a new platform) which commenced just north of the Rewley Road Swing Bridge; and,
  - a shorter link which was to have joined the new line (ii above) to the main line in the vicinity of Stone Meadow.
5. The details relevant to these applications are shown on the document titled “Noise Scheme of Assessment for Route Section H” (ref 0221083/11/H06) dated 6 March 2015; the ERM further technical note submitted to the Council on 5 May 2015 titled “Technical Note to Provide Information on the Effect of Relocating the Woodstock Road Crossover (ref 0221083/H07) and drawing numbers 0221083\_SecH\_Sheet24\_Ver1, 0221083\_SecH\_Sheet25\_Ver1, 0221083\_SecH\_Sheet26\_Ver1 and 0221083\_SecH\_Sheet27\_Ver1 all dated May 2015 the applications being in respect of Section H.

### **Background and Relevant Planning History**

6. The Transport and Works Act application for the project, which was known at the time as ‘Chiltern Evergreen 3’, was submitted by Chiltern Railways to the Department for Transport on 6<sup>th</sup> January 2010.

7. A Public Inquiry into the scheme was held between 2<sup>nd</sup> November 2010 and 28<sup>th</sup> January 2011. The outcome was that the Secretary of State was minded not to make the Order (by letter dated 15<sup>th</sup> November 2011) because the likely lack of a licence for works affecting the habitat of bats (in the Wolvercote Tunnel) would be an impediment to the implementation of the scheme.
8. Progress was made on this issue and the Secretary of State informed the respective parties (by letter dated 24<sup>th</sup> January 2012) that she was now minded to approve the scheme. Responses to that letter however were such that the Inquiry was re-opened between 29<sup>th</sup> May and 15<sup>th</sup> June 2012 to cover the proposed mitigation measures for bats, the planning conditions relating to operational noise and vibration, and the air quality impacts of the scheme.
9. By letter dated 17<sup>th</sup> October 2012 the Secretary of State approved the scheme and granted deemed planning permission subject to conditions. The deemed planning permission was issued in a letter dated 23 October 2012.
10. *Sustainability*: in granting deemed planning permission for the scheme, the Secretary of State concluded that there is a compelling case to increase rail capacity between Oxford and London, and that the scheme would bring substantial transport benefits in terms of reduced travel times, better public transport connectivity, and better rail network capability. In the decision, the Secretary of State weighed these sustainability benefits against the potential adverse impacts that the scheme might cause. Those considerations gave rise to several of the planning conditions dealing with the natural environment and to residential amenity, including Condition 19 (**Appendix 2**) which focusses on mitigating adverse impacts of noise and vibration on residential amenity. The assessment and mitigation of the predicted vibration impacts of East West Rail in accordance with Condition 19 are the subject of this report.
11. The City Council's jurisdiction in this matter relates only to the works within its administrative boundary. Cherwell DC has jurisdiction for the scheme within its area.
12. The relevant applications subsequent to the grant of deemed planning permission which have been received and determined to date are as follows:

**13/00907/CND** - condition 19 - appointment of Independent Experts - PARTIALLY DISCHARGED 2nd May 2013.

**13/00917/CND** - condition 18 - Code of Construction Practice - DISCHARGED 17th September 2013.

**13/00918/CND** - condition 3: Development Sections - DISCHARGED 7th May 2013.

**13/01276/CND** - condition 9: Archaeology - PARTIALLY DISCHARGED 6th June 2013.

**13/01342/CND** - condition 11: Contaminated Land - PARTIALLY DISCHARGED 20th August 2013.

**13/01965/CND** - condition 6: implementation and maintenance of railway fencing between chainages 124995 (beginning of section H) and 127980 (approximately halfway through section I) - PARTIALLY DISCHARGED 28th January 2013.

**13/03202/CND** – condition 19: vibration - plain line, section H; PENDING CONSIDERATION – see previous report

**13/03209/CND** – 11: Contaminated Land - PARTIALLY DISCHARGED 19th June 2014.

**14/00007/CND** - condition 31: Measures for the protection of the Oxford Meadows Special Area of Conservation and condition 32: Hook Meadow and Trap Ground Site of Specific Scientific Interest - PARTIALLY DISCHARGED 16<sup>th</sup> June 2014.

**14/00232/CND** – condition 19: vibration - switches + crossings, section H; PENDING CONSIDERATION – see previous report

**14/02962/CND** - condition 19: appointment of replacement Independent Expert for Noise - PARTIALLY DISCHARGED 6<sup>th</sup> November 2014.

**14/03453/CND** - condition 11: Contaminated Land - Scheme of Investigation - PARTIALLY DISCHARGED 16th March 2015.

**15/00429/PDC** - PERMITTED DEVELOPMENT CHECK - Proposed temporary compounds. PERMISSION NOT REQUIRED 20<sup>th</sup> February 2015.

**15/00442/CND** - condition 16: Method Statement: SSSIs - PARTIALLY DISCHARGED 7th April 2015.

### **The Requirements of Condition 19 - noise and vibration**

13. Condition 19 is entitled “Operational noise and vibration monitoring and mitigation” and is a relatively complex condition with a number of components. Its core requirements are that:

- operational noise and vibration monitoring and mitigation are to be carried out in accordance with the Noise and Vibration Mitigation Policy, **Appendix 3**, which was approved by the Secretary of State; and
- Development within each section of the scheme is not to commence until noise and vibration schemes of assessment have been approved by the Council.

14. Schemes of Assessment are to be submitted to show how the standards set out in the Noise and Vibration Mitigation Policy (the Policy) will be achieved. The Schemes of Assessment are to be accompanied by a report prepared by

an Independent Expert (who has been approved in advance by the Council) commenting on their robustness. The appointment of the Independent Experts: one for noise (Brian Hemsworth) and one for vibration (Dr. Chris Jones), were agreed by Oxford City Council on 2<sup>nd</sup> May 2013 under planning application reference 13/00907/CND.

### **Noise and vibration being considered separately**

15. Condition 19 requirements apply both to operational noise and vibration aspects of the scheme. There are similarities and links between these two aspects, since both are generated by the same rolling stock; and a person's perception of railway noise might be affected by structure-borne vibration and vice versa<sup>1</sup>.
16. However, the way in which sound and ground-borne vibration are generated, transmitted and perceived are different, as are the resulting methodologies for their measurement and prediction. These differences are reflected in the way that noise and vibration has been treated in the environmental impact assessment, application, public inquiry and resulting deemed permission. In effect condition 19 requires noise and vibration to be treated separately, though in the same context and using similar processes. For that reason this report deals with noise and the previous report deals with vibration.

### **The Noise and Vibration Mitigation Policy – in relation to noise**

17. The purpose of the Noise and Vibration Mitigation Policy (set out in part (v) of the summary on page 1) is to ensure that:

*“(i) Noise will be reduced at source where it is reasonably practicable to do so.*

*“(ii) Where this is not reasonably practicable, noise barriers or noise insulation to properties will be provided, where necessary, in accordance with relevant standards.*

*“(iii) Where predicted noise levels exceed relevant levels set out in the Noise Insulation (Railways and Other Guided Systems) Regulations, noise insulation will be offered to the occupiers of eligible buildings to the standards required by those Regulations and provided at their request.*

*“(iv) At other locations, where statutory noise levels are not exceeded but where significant noise impacts are predicted, noise will be mitigated wherever reasonably practicable. Significant noise impacts include a significant increase in noise in an already noisy area, or the significant exceedence of stringent thresholds in an area where the ambient noise is currently low. Chiltern Railways*

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<sup>1</sup> British Standard BS6472-1:2008 “guide to evaluation of human exposure to vibration in buildings” includes advice on this interaction.

*has chosen to offer this high standard of mitigation. It is not a statutory requirement”.*

18. The Noise and Vibration Mitigation Policy uses both absolute and relative change noise thresholds to determine acceptability or whether mitigation is needed. It also acknowledges the legal responsibilities for noise insulation of residential property under the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1998.
19. Absolute ‘Noise Impact Threshold’ levels of 55dB LAeq,Day (0700-2300 hours) and 45 dB LAeq, Night (2300-0700 hours) are adopted as levels below which noise impacts are not considered significant. The Statutory requirements apply where noise impact from the Order Scheme is predicted to be above the ‘Noise Insulation Trigger’ levels of (Day > LAeq, (0600-0000 hours) 66 dB; and Night > LAeq, (0000-0600 hours) 61 dB). Where the scheme is predicted to cause either an exceedance or an increase but lies between these two sets of threshold/trigger levels the Policy applies non statutory mitigation measures.
20. The way that these thresholds are to be applied, in combination if relevant, is as follows:
  - exceedances of 3 dB or greater and increases of 3 dB or greater—mitigation at source through rail infrastructure solutions will be implemented where reasonably practicable;
  - exceedances of greater than 5 and up to 7 dB and increases of greater than 5 dB and up to 7 dB -- at source and/or in the form of noise barriers if reasonably practicable and have no other negative effects;
  - exceedances of greater than 7dB and increases of greater than 7dB – at source through rail infrastructure solutions and where these cannot be reasonably practicably achieved, noise barriers will be provided, where reasonably practicable.
21. The Noise and Vibration Mitigation Policy acknowledges that infrastructure and/or noise barrier mitigation might not prevent exceedance of the thresholds at all properties. Additional mitigation commitments are made, where “residual noise levels” (ie those after mitigation and/or statutory insulation has been applied) are 10dB above the existing levels. Finally, a further absolute threshold is adopted for the instantaneous peak noise from a train pass-by at night (82 dB LAmax). The Noise and Vibration Mitigation Policy sets out the assumptions that are to be used in the Schemes of Assessment for the numbers and timing of train movements which are as follows (set out in full for ease of reference):

*“1.8 The assessment of noise and vibration has been based on two operational patterns of new train services:*

  - *After the implementation of the works in Phases 1 and 2A, operational services will consist of up to two Chiltern Railways passenger trains per hour each way. The passenger trains will replace the existing passenger service operated by First Great Western between Bicester Town and Oxford stations.*

- *After the implementation of the East West Rail (EWR) link including works in Phase 2B, there are likely to be an additional two passenger trains per hour each way.*

*Neither Chiltern Railways or EWR will be running passenger trains throughout the night, and services in late evening and early morning will be at a reduced frequency. A small number of passenger trains may arrive in Oxford after midnight or depart from Oxford before 0600.*

*1.9. In the operation of Phase 1 and 2A, there are likely to be no more freight trains than operate at present, as there will be no new freight destinations that can be served. When the East-West Rail (EWR) link is in operation, there may be more freight trains. For this reason, additional freight services were included in the noise assessment in the Environmental Statement, so that this reflects a reasonable planning scenario. The actual number of freight services will reflect national freight demand, but will be limited to the maximum number of available freight 'paths' (1 per hour in each direction). Experience shows that about half of the available freight train paths are likely to be used on a given day, which would suggest a reasonable planning scenario of 8 freight train movements between 11pm and 7am. Freight trains will not use the 'new' railway line between Oxford North Junction (where the Bicester to Oxford Line meets the Oxford-Banbury main line) and Oxford, but instead will use the existing main line, as at present.*

*1.10 The noise and vibration mitigation will be designed based on the assumptions in paragraph 1.8 and 1.9 regarding the numbers and timing of train movements.* [Underlining added]"

### **What is a Noise Scheme of Assessment and how is it judged?**

22. The purpose of a Noise Scheme of Assessment is to predict the impact of noise on properties and, if pre-agreed thresholds are exceeded, set out mitigation measures and monitoring arrangements. A Scheme of Assessment would therefore be expected to comprise measurements, methodology, modelled predictions and resulting proposals (which might include mitigation and monitoring).
23. Considering this and the requirements of condition 19, the key tests for the submitted Noise Scheme of Assessment therefore are as follows:
- Is the Noise Scheme of Assessment sufficient – being a detailed scheme of assessment of vibration effects, with details of proposed monitoring and mitigation measures?
  - Does the Noise Scheme of Assessment contain measurements, methodology, modelled predictions and resulting proposals (which include mitigation and monitoring if applicable)?
  - Does the Noise Scheme of Assessment show how the standards of vibration mitigation set out in the Noise and Vibration Mitigation Policy will be achieved?

- Does the Noise Scheme of Assessment contain supporting calculations or empirical data, or a combination of the two?
24. In each of these tests there is an implication that as well as the Noise Scheme of Assessment containing the relevant elements, these have been treated correctly. This leads to the overall test:
- Are the noise-related elements of the Noise Scheme of Assessment considered to be sufficiently robust?
25. If any of these tests were not met, the Noise Scheme of Assessment would need to be rejected. It is the role of the Independent Expert to comment on the robustness of the Scheme of Assessment.
26. However, it is the Local Planning Authority and not the Independent Expert which must decide upon the adequacy of the Noise Scheme of Assessment. Provided that the submitted Noise Scheme of Assessment is considered to be robust then its predictions may be relied upon, as may the mitigation and monitoring measures contained within it.

## **Monitoring**

27. The Noise and Vibration Mitigation Policy does not require the monitoring of operational noise and vibration as a continuous exercise: it requires only the monitoring of any mitigation measures that are installed as a result of the findings of the Noise and Vibration Scheme of Assessment (see paragraph 2.11 of the Policy, **Appendix 3**).

## **The Submitted Schemes of Assessment in this case**

28. On 24<sup>th</sup> March 2015 the Council received the noise Scheme of Assessment (dated 11<sup>th</sup> February 2015) and the related report of the Independent Expert (dated 11<sup>th</sup> March 2015, **Appendix 4**)(15/00956/CND). This meets the 'content' tests set out in paragraph 22 above.
29. The Scheme predicts that noise thresholds will be exceeded at a number of locations and goes on to propose mitigation measures.
30. The Noise Scheme of Assessment discusses possibilities for mitigation at source but dismisses these on grounds that they are not reasonably practicable. Noise barriers and, in some cases, property-based noise insulation measures, are proposed.
31. In December 2014, prior to submission of the Noise Scheme of Assessment, Network Rail circulated a draft document and carried out a consultation exercise with those likely to be affected by rail noise from the permitted to their agents, ERM. ERM replied to all correspondents and copied these to Council officers for their consideration. The Independent Expert for noise, Brian Hemsworth, was provided with the representations and responses as well as the draft document. He raised a number of questions which ERM responded to.

32. The finalised Noise Scheme of Assessment was submitted on 24<sup>th</sup> March 2015. The overall position of Network Rail set out in this document is that: noise thresholds would be exceeded at a number of locations; that at-source mitigation measures are not reasonably practicable; and that noise barriers, together with additional property-specific insulation will enable the noise from the scheme to be mitigated in accordance with the principles of the Noise and Vibration Mitigation Policy.

### **Public consultation on noise**

33. There is no requirement for public consultation in relation to the discharge of planning conditions. Extensive public consultation has however occurred in relation to this submission:

- at the request of Members following a Member briefing in March 2014 two public meetings were arranged in Wolvercote Village Hall in April 2014 (the first convened by officers, the second by convened by Cllr Fooks) to inform local people about the process and progress towards discharge of the conditions, particularly focused on Condition 19, and to invite comments. Some 50 people attended each meeting;
- Consultants ERM on behalf of Network Rail organised a public meeting at The Oxford Hotel in December 2014 specifically on their draft Noise Scheme of Assessment and then allowed for public comment until 12<sup>th</sup> January 2015. In total 56 responses were received. ERM replied to all the responses on 11 February 2015 and copied Council officers in to those replies.
- Nicola Blackwood MP organized a further very well attended public meeting on 5<sup>th</sup> March 2015 covering noise and vibration at which the Rail Minister Claire Perry MP was present along with representatives from Network Rail, Chiltern Railways, consultants ERM, and city officers;
- A Webpage on the City Council's website has been set up to help disseminate information between the Council and local people; and,
- Throughout, officers have maintained an 'open door' for the receipt of comments and the circulation of responses.

### **Public comments and the independent advice received**

34. The City Council invited public comment on the submitted noise Scheme of Assessment for 4 weeks between 26<sup>th</sup> March and 23<sup>rd</sup> April 2015. During this period some twenty two households commented individually, a further nine households commented as a group (three also submitting their comments individually), and Nicola Blackwood MP, who is also a 'near-track' local resident, also commented. In summary, the comments of individual householders submitted during this period are below:

- Welcome the scheme, understand the need for the scheme and the benefits it will bring but it needs proper mitigation;
- Network Rail wants to get away with minimum;
- Residents not been given proper consideration in the planning of this project;
- Agree with the detailed analysis submitted by Buckley and Dancey;
- No confidence levels in the calculations, should use normal confidence levels of +/-3 Standard Deviations;
- Need a greater degree of certainty than 'robust but not over-cautious';
- Submission not detailed enough, need to delay consideration;
- Particular construction of property not accounted for in the submission;
- Confusion over boundaries;
- Confusion over proposer of the scheme;
- Topography has not been properly considered;
- Need speed limit;
- Need noise barriers;
- Use silent track;
- Need re-planting;
- Move the switches and crossings;
- Proposed noise barriers ineffective – should be higher and curved inwards;
- Don't want to be hemmed in by noise barriers which will be like prison walls but do need noise mitigation;
- No mention of sound barrier in vicinity of Five Mile Drive;
- At-source mitigation should be used such a silent track;
- Increased noise recently;
- Current noise levels are the cause of stress;
- Currently noise is unbearable at night;
- Can't leave doors open because too much noise;
- Noise levels predicted will disrupt sleep;
- Impact on school from noise from idling trains by school;
- De-vegetation has increased the noise effects of current operations;
- Need to stop de-vegetation;
- Section I should have the same analysis as section H;
- Don't approve section H without considering section I.

35. In addition, individual householders commented on associated matters which were not related to the noise submission as follows:

- Vibration felt badly, feels like an earthquake;
- Inadequate consideration/mitigation of vibration;
- Appearance of the bridge is not known, the character of the village is being lost, views damaged because of loss of trees;
- Increased pollution from idling trains (section I);
- Impact of pollution on school;
- Need barriers to prevent disaster if trains are derailed.

36. In summary, the detailed group analysis (reproduced at **Appendix 5**) was:

- the scheme has the potential to create major blight for large numbers of properties;
- predictions of noise levels may be under-predictions because there has been no allowance for uncertainty;
- there has been no 'at-source' mitigation;
- there has been no minimisation of amplification from the switches and crossings;
- there are no proposals for monitoring when EWR complete;
- shouldn't rely on the Independent Expert's view – there is no robust compliance with Condition 19;
- solutions: reduce speed, use rail dampers, remove switches and crossings away from homes, extend monitoring programme.

37. Council officers have brought these representations to the attention of the Independent Expert for noise, Brian Hemsworth, for two reasons. Firstly, in case any matter raised by residents might cause him to challenge the Noise Scheme of Assessment further and/or change the opinion he expressed in his report of 11<sup>th</sup> March 2015. Secondly, to assist Council officers in taking account of local concerns. His responses on the issues raised by local people, both following the Network Rail consultation and the subsequent planning consultation are attached in **Appendices 6 and 7** respectively.

#### **Issues:**

- The reasonable planning scenario and the Environmental Impact Assessment
- Post-scheme monitoring
- Topography
- Trees
- Noise impact in gardens
- Mitigation at source
- Barrier performance
- Post implementation monitoring
- Northern Gateway
- Restricting the speed of trains
- Standards of proof, certainty

#### **Officers Assessment:**

*The reasonable planning scenario: pattern and types of train movements*

38. The Noise and Vibration Mitigation Policy, approved by the Secretary of State, lays down the 'reasonable planning scenario' that is to be used in the assessment of noise and vibration (paragraph 21 above). On the operational pattern of train services it sets out the following (for ease of reference, summarized from para 21 above):

*Passenger services*

- Phase 1 - up to two passenger trains per hour each way;
- with Phase 2 from Bicester to Bletchley, an additional two passenger trains per hour each way;
- no passenger trains throughout the night; and,
- services in late evening and early morning at a reduced frequency.

*Freight services (underlining added)*

- Phase 1 - there are likely to be no more freight trains than operate at present, as there will be no new freight destinations that can be served
- with Phase 2 - there may be more freight trains. For this reason, additional freight services were included in the noise assessment in the Environmental Statement, so that this reflects a reasonable planning scenario.
- The actual number of freight services will reflect national freight demand, but will be limited to the maximum number of available freight 'paths' (1 per hour in each direction). Experience shows that about half of the available freight train paths are likely to be used on a given day, which would suggest a reasonable planning scenario of 8 freight train movements between 11pm and 7am.

39. In considering the predicted noise and vibration impacts of the 'reasonable planning scenario,' the 'reasonable worst case scenario' has been used: the worst case that is reasonably likely to occur has been tested. The robustness of the approach is specifically provided for by the requirement that a report as to robustness be provided.

40. Local representations have pointed to the possibility that freight services on this line will be more intensive (more frequent/numerous; heavier, longer faster freight trains) because of the role of East West Rail in the strategic freight network (following implementation of Phase 2 from Bicester to Bletchley) and the intention that it will be used to service the construction and operation of HS2. Thus, residents assert that the reasonable worst case has not been described or tested through this current application process. As a result, in the view of local residents, the Noise and Vibration Mitigation Policy thresholds will be exceeded in the future, and the Vibration Schemes of Assessment should be reviewed to take these future freight scenarios into account. For that reason also, residents consider that the Environmental Impact Assessment is out of date and a new EIA is called for.

41. In response to these concerns, on 14<sup>th</sup> May ERM on behalf of Network Rail wrote (**Appendix 8**):

“In response to the assertions that Network Rail intend to increase capacity beyond that assessed in the ES, we reiterate that the service levels specified in the NVMP take into account future growth in passenger and freight use of the line once EWR Phase 2 has opened and are the same as those assumed at the TWA Inquiry and in the ES, except for the Cross Country service already discussed above. The NVMP states, in paragraph 1.9, that *‘when the East-West Rail (EWR) link is in operation, there may be more freight trains. For this reason, additional freight services were included in the noise assessment in the Environmental Statement, so that this reflects a reasonable planning scenario’*.

These future service levels were discussed and accepted by the Inspector at the TWA Inquiry (and confirmed by the Secretary of State’s decision to grant the Order) to be *‘reasonable assumptions of likely future service frequencies following the opening of East West Rail Phase 2 between Bicester and Bletchley’*.

These reflect the anticipated train movements after the opening of East West Rail Phase 2 and it remains Network Rail’s position that this forms the appropriate basis for determining mitigation in both the Noise and Vibration Schemes of Assessments in line with the Secretary of State’s decision.”

42. In response to ERM’s comments, on 21<sup>st</sup> May, Dr Robertson wrote (**Appendix 9**):

“For Oxford City Council to decide if sufficient environmental information has been provided to discharge planning Condition 19, it must be fully satisfied that the proposed mitigation is based on **meaningful** levels of train services over the next 15 years. At the moment, predictions of future train services are based on **obsolete** assumptions as the scope of the scheme has **expanded** beyond that covered by Chiltern Railways’ Environmental Statement”.

43. Also in response to ERM’s comments, Prof. Buckley wrote, on 22<sup>nd</sup> May (**Appendix 10**):

“ERM asserts ... that the *‘the [train] service levels specified in the NVMP take into account future growth in passenger and freight use of the line once EWR Phase 2 has opened..’*. This is no longer plausible in the light of information now available. The NVMP claims that only 50% of all available freight paths will be used, even on the busiest day or night in the future (to a 15 year horizon ...). But, as was made clear by Arup in their report for Oxford City Council, there is no limit to the fraction of available freight paths that will be used in future. The figure of 50% now seems reckless, since plans for HS2 are much further advanced than was the case at the time of the public inquiries. It is now known that HS2 will be serviced with delivery of supplies and removal of spoil by EWR, via the Infrastructure

Maintenance Depot (IMD) at Calvert. It is true that the hybrid HS2 bill is still under parliamentary scrutiny ....., but it is unreasonable to imply that HS2 may not go ahead, and it is irrelevant to point out that HS2 Ltd is a separate company from Network Rail ....., HS2 has already been approved in principle, when the bill passed its second reading by a very large majority in April 2014. Current debate is only about matters of detail. Royal assent is currently expected in December 2016. There is widespread agreement that the most likely outcome, by far, is that HS2 will go ahead. Trains servicing HS2 will be competing with all the other anticipated freight demands on EWR. The likely effect will be to exert pressure on the number of available EWR freight paths. In the light of this, a much more sensible, cautious, assumption for EWR noise and vibration predictions is that *all* freight paths will be used – i.e. the number of assumed freight trains should be doubled. This would more fairly represent the intention of Condition 19.

Network Rail's revised train operating assumptions envisage *no* loaded stone trains at night (11pm-7am), and only two such trains per day (7am-11pm) in the down direction only. Also, their speed in future is envisaged to be no more than 20mph through Wolvercote. These assumptions are hopelessly unrealistic. *Currently*, residents routinely experience noise and vibration from heavy stone trains travelling towards Water Eaton after 11pm at night. *Currently*, heavy stone trains pass through Wolvercote towards Water Eaton at speeds of more than 20mph. For example, the VSoA records vibration measurements from only two loaded stone trains on the OXD (Oxford –Bicester) line: one was travelling at 35mph, the other at 28mph. One of the main supplies to the HS2 IMD will be ballast for the new tracks – i.e. there will in future be many stone trains supplying HS2. These will not be stopping at Water Eaton, so will be travelling at the full speed envisaged in the VSoA (60mph). Pressure on availability of freight paths will mean they are most likely to be at night. In the light of all this evidence, ERM's claim ... that 'normal' stone trains in future will run only between 6am and 7pm (weekdays) or 6am and 1pm (Saturdays) is wholly implausible".

44. The advice of officers however, as a point of law, is that the Council is required (in the discharge of Condition 19) to consider whether the submitted schemes of assessment show how the standards of the Noise and Vibration Mitigation Policy will be met. The Noise and Vibration Mitigation Policy itself (at paragraph 1.10) provides that the noise and vibration mitigation will be based upon the assumptions set out in the Policy itself. To apply different assumptions would involve the consideration of matters beyond the scope of the Noise and Vibration Mitigation Policy, Condition 19 and the determinations currently before the Council.
45. On the receipt of applications for approval in circumstances such as these the Council is required to consider whether it has sufficient environmental information as to the likely significant effects of the development. This has been done and officers are content that the Council does have sufficient information. The Council cannot use the requirement to obtain approval under a planning condition to reconsider issues that were determined by the

Secretary of State in the context of deeming the planning permission to be granted.

46. While residents' analysis of future service possibilities is thorough and their concerns are real, the situation is that East West Rail Phase 2 (which would give access to the strategic freight network) has not been approved under the Transport and Works Act nor does it have the benefit of planning permission; and HS2 is not approved. The impacts of those schemes on residential areas in Oxford cannot yet be discerned and have not been the subject of scrutiny through the Transport and Works Act and associated public examination procedures. Their impacts including cumulative impacts will be assessed within those processes.
47. In the view of officers therefore, the Noise Scheme of Assessment and the Environmental Impact Assessment (together with further environmental information subsequently submitted), are acceptable insofar as they are based on the approved reasonable planning scenario.
48. To respond to residents' concerns however, it is suggested that the City Council, and indeed residents, should they choose, should participate in those processes making representations at the appropriate time to the relevant bodies when they consider future schemes which may put additional pressure on this line, as to the impact of noise and vibration on local residents which must be carefully considered.

#### *Mitigation at source*

49. The Noise and Vibration Mitigation Policy states that "*Noise will be reduced at source where it is reasonably practicable to do so*". It goes on to commit to mitigation at source through rail infrastructure solutions, where reasonably practicable. The term "reasonably practicable" is not defined in the policy nor in condition 19 but was raised at Public Inquiry. The Inspector advised that:

*"the term is one that in the current context may be taken to have its everyday meaning and so no special definition is necessary. Independent review of circumstances said to be not reasonably practicable would be by the local planning authority through paragraph 12 of Condition 19".*

50. In the submitted Noise Scheme of Assessment a number of potential rail infrastructure measures for noise mitigation are discussed including the use of track and wheel-based measures. These are as follows:
  - an acoustic plenum under the track and a low upstand, not considered appropriate for a high-speed or heavy haul railway;
  - wheel dampers, which are discounted as not being a practicable mitigation measure;
  - low noise designs for switches and crossings, stated to be not available for use on heavy rail schemes; and,

- rail dampers, which it considers are not a practicable mitigation measure, primarily because type approval for use on the relatively high speed track is not currently available.

51. Council officers have taken advice from the Independent Expert and have noted correspondence from residents concerning the use of at source mitigation measures on other railways. They have also raised these matters with Network Rail's project team. Officers consider that the arguments put forward are sound apart from that for rail dampers. Whilst it has to be accepted that type approval would be required for the use of this measure, it is understood that a noise reduction of 3 dB may be expected from its use, a significant, if hardly noticeable change.

52. In the letter dated 2<sup>nd</sup> April (**Appendix 11**) Network Rail's project manager referred to progress towards a trial certificate for use of "Silent Track" at Wolvercote cutting. Officers are of the opinion that it is reasonable for Network Rail to pursue this option and that a condition to secure this is included in the recommendations to this report.

#### *Post-Scheme monitoring*

53. Some correspondents have expressed concern that since rail traffic predictions in the Noise and Vibration Mitigation Policy are unlikely to be reached for some time, operational noise levels are unlikely to be at their maxima by the 6 months and 18 months monitoring periods proposed in the Policy.

54. As stated in the Noise Scheme of Assessment, ERM propose to overcome this difference through a modelling exercise. The Independent Expert has considered this intention and the correspondence on the matter. In the view of the Independent Expert the monitoring proposals in the Noise Scheme of Assessment are acceptable and officers see no reason to disagree.

#### *Topography*

55. It has been claimed in some representations that noise barriers will be ineffective at some locations and that topography has not adequately been taken into account.

56. The Independent Expert has commented that, as required by the "Calculation of Rail Noise" standard methodology, the model used is three dimensional and has taken account of topographical features. He further notes that the Noise Scheme of Assessment defines correction terms used when these are necessary. Officers are satisfied that sufficient account has been taken of topography in the Noise Scheme of Assessment.

#### *Trees*

57. Several residents have claimed that tree removal has increased perceived noise levels or would be likely to increase noise levels. This is not a factor

explicitly referred to in the Noise and Vibration Mitigation Policy. Nevertheless the Independent Expert has been asked to comment on the relevance of trees to sound propagation.

58. He has advised that a band of trees several hundred feet deep is required to achieve a significant attenuation. He has also pointed out that the propagation calculations used by ERM for the Noise Scheme of Assessment were appropriate. Taking these comments into account officers are of the opinion that loss of trees and other vegetation is not material to the determination of the noise impacts in the terms of Condition 19.

#### *Noise impact in gardens*

59. Several residents have referred to the likely increase in noise levels within gardens and other open spaces and express concern that the Noise Scheme of Assessment does not make reference to this impact.
60. The standards contained in the Noise and Vibration Mitigation Policy are focused on “noise sensitive receptors” and the noise thresholds which determine whether mitigation is required are specific to internal noise levels (paragraph 2.6 of the Noise and Vibration Mitigation Policy):

*“the noise levels predicted at the most exposed windows to noise sensitive rooms in noise sensitive buildings”*

61. There is, therefore, no means by which condition 19 may be used specifically to control noise levels in gardens, since this is not a matter which is covered by the Policy. Although this is the case, the use of at-source mitigation and in some cases noise barriers will result in some reduced noise in gardens and open spaces.

#### *Barrier performance*

62. A number of correspondents have expressed concern that insufficient noise barrier details are contained in the Noise Scheme of Assessment to demonstrate that the policy requirements have been met. Additionally residents have expressed concern at those details which are included in the Noise Scheme of Assessment, including proposed height and location and constraints
63. The Independent Expert has advised on this matter. He has referred to the process envisaged in condition 19(13) which states that: *“Where noise barriers are promoted in an approved scheme of assessment, they shall be installed only once the local planning authority has given written approval of their size, appearance and location. Noise barriers shall be maintained in their approved form and may be removed only with the written approval of the local planning authority.* The Independent Expert considers that the principles and proposed locations shown in the Noise Scheme of Assessment are adequate and that he would expect the detailed design specification of the proposed barriers to be part of the submission to tendering process which, in line with Condition 19(13) would follow NSoA approval.

64. Officers agree with this interpretation and advice.

#### *Restricting the speed of trains*

65. As it has been demonstrated that the required standards set out in the Noise and Vibration Mitigation Policy will be achieved, the possibility that train speed might be reduced to mitigate vibration impact does not arise. Had that not been the case, the issue might have arisen in the context of substitute mitigation.

66. ERM on behalf of Network Rail commented upon the practicality of such mitigation in their letter of 29 April 2015 (**Appendix 12**). Furthermore, the Inspector at the reconvened Public Inquiry in January 2011 stated as follows:

*“Representations were made that, in order to reduce the noise and/or vibration they might otherwise cause, the speed of trains using the Scheme should in places be limited (by planning condition) to, variously, 30 mph, 40 mph or 50 mph [6.9.1, 6.12.2, 6.11.8]. I do not adopt such a course, for the following reasons:*

*a) No expert evidence was brought to support the views that any of the suggested speed limits would have the desired effect in the context of the Scheme, or that any one of them was necessary.*

*b) Such evidence as was brought about the relationship of train speed and resulting vibration was that the ground vibration spectra produced by passing railway trains depend strongly on factors other than train speed [6.19.10].*

*c) The planning conditions I propose would provide the surety I have described in respect of noise and in respect of vibration, without recourse to speed limits.*

*d) The suggested condition would therefore not be necessary.”*

67. Officers note this position and advise that speed restrictions cannot be required as part of this application.

#### *Northern Gateway*

68. On 13<sup>th</sup> May the Northern Gateway Consortium lodged a holding objection to the site for the relocation of the switches and crossings at Lakeside. In their view the proposals had the potential, in terms of noise and vibration, to materially impact on the strategic site at Northern Gateway for which detailed Masterplan proposals were currently being prepared.

69. ERM on behalf of Network Rail:

- confirmed that other locations had been considered for the relocated switches and crossings but that none was suitable against detailed locational criteria;
- that they had been aware of the Northern Gateway proposals when they chose the Lakeside location; and

- they supplied detailed noise and vibration assessments which demonstrated that:
  - would be needed to meet the Noise and Vibration Mitigation Policy thresholds for vibration; and
  - that the increased noise over the previously proposed plain line in this location would be less than 3dB (which is generally accepted as the smallest change that is noticeable in ordinary conditions).

70. In those circumstances the view of officers is that the impact of East West Rail on the Northern Gateway strategic site in terms of the noise and vibration associated with the location of switches and crossings at Lakeside should not be a reason to doubt that the Vibration Schemes of Assessment are acceptable.

### *Robustness*

71. Condition 19 deals with highly technical issues around predicting and mitigating operational noise. Such issues are within not within the normal scope of the Planning Committee's work. Indeed highly technical matters such as this are more usually fully resolved at public inquiries following detailed exchanges between technical experts, with cross-examination of the evidence presented, and with the Inquiry Inspector and/or the Secretary of State ultimately adjudicating.

72. In this case, based on the evidence presented at the Inquiry, the Secretary of State was satisfied that these issues did not justify the refusal of planning permission. The scheme was given planning permission, the Noise and Vibration Mitigation Policy was approved and set the noise limits to be achieved (subject to the concession where limits are not achievable and there is no reasonably practicable mitigation), and Condition 19 was formulated.

73. The "limited technical expertise" available 'in-house' to the Council in these disciplines was however acknowledged by the Secretary of State, and this resulted in the requirement that Independent Experts should be appointed to comment on the robustness of the Schemes of Assessment. Under the terms of his appointment approved by the Council in 2<sup>nd</sup> May 2013 under planning application reference 13/00907/CND the Independent Expert for noise has also been involved in an advisory capacity, assisting Council officers with technical matters raised by the applications and public correspondence.

74. Officers have also explored with the Department for Transport the experience of other local authorities in this regard to see if lessons can be learned from the way in which the discharge of such applications has been handled elsewhere. There are however, so far as officers are aware, no similar circumstances in the UK where railway noise and vibration mitigation has been dealt with by such a condition, and therefore no comparable experience upon which to draw.

75. It is evident from the foregoing that officers have not been indifferent to the considerable weight of local anecdotal evidence about how operational rail noise and vibration is experienced locally, nor to the considerable body of well-researched and well-articulated technical objection. Throughout this process officers have ensured that the stream of public comment has been subjected to scrutiny by the Independent Expert and, for vibration, by ARUP. After several iterations of report and comment, as described above and in the vibration report, those experts now largely agree that the Schemes of Assessment are robust, and that nothing remains in the concerns of residents that would cause them to alter those views.

76. In those circumstances, having worked closely with those experts and having considered their written advice, officers are aware of no basis upon which it can be properly concluded that the Noise Scheme of Assessment is anything other than robust.

### **Conclusion on Noise:**

77. The Noise Scheme of Assessment has been shown to meet the tests set out in paragraphs 23 and 24 of this report, including the overall test of whether it is sufficiently robust. The Noise Scheme of Assessment has demonstrated that the required standards in the Noise and Vibration Mitigation Policy will be achieved. On that basis it is recommended that approval be given, subject to the conditions set out above.

### **Human Rights Act 1998**

Officers have considered the Human Rights Act 1998 in reaching a recommendation to grant planning permission, subject to conditions. Officers have considered the potential interference with the rights of the owners/occupiers of surrounding properties under Article 8 and/or Article 1 of the First Protocol of the Act and consider that it is proportionate.

Officers have also considered the interference with the human rights of the applicant under Article 8 and/or Article 1 of the First Protocol caused by imposing conditions. Officers consider that the conditions are necessary to protect the rights and freedoms of others and to control the use of property in accordance with the general interest. The interference is therefore justifiable and proportionate.

### **Section 17 of the Crime and Disorder Act 1998**

Officers have considered, with due regard, the likely effect of the proposal on the need to reduce crime and disorder as part of the determination of this application, in accordance with section 17 of the Crime and Disorder Act 1998. In reaching a recommendation that the condition be partially discharged, officers consider that the proposal will not undermine crime prevention or the promotion of community safety.

**Background Papers:** 13/03202/CND, 14/00232/CND and 15/00956/CND

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**Date:** 28<sup>th</sup> May 2015

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