# Agenda Item 5

WEST AREA PLANNING COMMITTEE 9th February 2016

**Application Numbers:** 15/03587/CND

**Decision Due by:** 08/02/2016

**Proposals:** Details submitted in compliance with condition 19(2)

(Vibration - Section I1) 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: Summertown Ward and St Margaret's Ward

Agent: Sarah Goodall (ERM) Applicant: Network Rail

#### **Recommendation:**

CONDITION 19 BE PARTIALLY DISCHARGED IN RELATION TO THE VIBRATION SCHEME OF ASSESSMENT FOR SECTION I1.

# For the following reasons:

- The Vibration Scheme of Assessment for route section I1 is considered to be robust and has demonstrated that the required standards set out in the Noise and Vibration Mitigation Policy will be achieved. It is confirmed that prior to and in connection with the granting of this consent, the Council has taken the Environmental Statement and other relevant environmental information into account.
- 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:
  - a. Plain Line Vibration Assessment and Mitigation Report (ref 5114534-ATK-VIB-RPT-80001 rev P07);
  - Vibration from Switches & Crossings Assessment and Mitigation Report (ref 5114534-ATK-VIB-RPT- 80003 rev A01);
  - c. Cover letter dated 28<sup>th</sup> November 2013 that sets out the monitoring scheme;

- d. Report by Chris Jones (Independent Expert, Vibration) on Schemes of Assessment for Plain Line and Switches and Crossings, Report-on-the-vibration-schems-of-assessment-CJCJ-15-05-2014-final.doc; and,
- e. Atkins Technical Note: Predicted Vibration Levels at Section I, Estimated Vibration Levels at Section I Rev 05 (issue) (3).docx.

Reason: the vibration scheme of assessment has been prepared upon the basis of these details and the potential for deviation from them would not result in the achievement of the standards of vibration mitigation required by the Noise and Vibration Mitigation Policy (January 2011).

2 Passenger train movements on Section I1 between 0700 hours and 2300 hours shall not be in excess of 8 movements per hour. Freight train movements between 2300 hours 0700 hours on the following day shall not exceed 8.

Reason - to ensure compliance with condition 19 of the planning permission deemed to have been granted (ref TWA/10/APP/01)

Section I1shall not be made available for use by trains until provision for continuous monitoring of vibration has been effected for vibration sensitive properties throughout section I1 in accordance with a scheme previously approved in writing by the Council. The results of such monitoring shall be provided to the Council on each of six months, eighteen months, thirty months, forty-two months, fifty-four months, sixty-six months and seventy-eight months from the date on which Section I1 is first made available for use for trains. In the event that the monitoring results provided to the Council exceed the vibration thresholds in the Noise and Vibration Mitigation Policy then additional mitigation measures shall be effected within six months in order to ensure that those levels are not again exceeded.

Reason: to ensure compliance with condition 19 of the planning permission deemed to have been granted (ref TWA/10/APP/01)

Officers are aware that Network Rail (NR) intends to make application to vary condition 3 above, as it is written in respect of route section H, to make alternative proposals for monitoring of this scheme. The relevant variation application has not yet been submitted and so NR's alternative proposals have not been the subject of public consultation or formal Committee debate: discussion around these issues is not therefore included in this report. NR has not said that it intends to challenge condition 2 above, as it is written for route section H, since it is not a precommencement condition and is not impeding the construction programme.

Conditions 2 and 3 above, as they were applied to route section H, are therefore repeated as recommendations for route section I1 unchanged except for the route section references.

#### Main Local Plan Policies:

#### Oxford Local Plan 2001-2016

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

CP10 - Siting Development to Meet Functional Needs

# **Core Strategy**

**CS13** - Supporting access to new development

**CS27** - Sustainable economy

#### Other Main Material Considerations:

- National Planning Policy Framework
- National Planning Policy Guidance
- 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 Vibration Scheme of Assessment for route section I1 which has been submitted in order to discharge the vibration elements of Condition 19 (**Appendix 3**) 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 2. 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. Route section I1 is shown on the plan at Appendix 1.
- 3. East West Rail Phase 1 has been amended since the original permission and now involves:
  - 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 in the submitted documents:
  - Plain Line Vibration Assessment and Mitigation Report (ref 5114534-ATK-VIB-RPT-80001 rev P07);
  - Vibration from Switches & Crossings Assessment and Mitigation Report (ref 5114534-ATK-VIB-RPT- 80003 rev A01);
  - Cover letter dated 28<sup>th</sup> November 2013 that sets out the monitoring scheme:
  - Report by Chris Jones (Independent Expert, Vibration) on Schemes of Assessment for Plain Line and Switches and Crossings, Report-on-the-vibration-schems-of-assessment-CJCJ-15-05-2014-final.doc; and.
  - Atkins Technical Note: Predicted Vibration Levels at Section I, Estimated Vibration Levels at Section I Rev 05 (issue) (3).docx.

# **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 (reproduced in full in Appendix 3) 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 full list of applications subsequent to the grant of deemed planning permission which have been received and determined to date are set out in **Appendix 4**. The applications dealing with operational noise and vibration in route section H and which therefore have a bearing on the Committee's consideration of these applications for route section I1 are as follows:

**13/03202/CND** – condition 19: operational vibration - plain line, route section H: PARTIALLY DISCHARGED 30<sup>th</sup> June 2015.

**14/00232/CND** – condition 19: operational vibration - switches and crossings, route section H; PARTIALLY DISCHARGED 30<sup>th</sup> June 2015.

**15/00956/CND** - condition 19: operational noise, route section H PARTIALLY DISCHARGED 30<sup>th</sup> June 2015.

**15/02673/CND** - condition 2: rail dampening - route section H, WITHDRAWN 12<sup>th</sup> November 2015.

**15/03110/CND** - Condition 19, Part 13: Noise barriers - route section H, PARTIALLY DISCHARGED 24<sup>th</sup> December 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 5**, 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 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.

# Operational 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 the previous report dealt with noise and this report deals with vibration.

# The Noise and Vibration Mitigation Policy – in relation to vibration

17. The Noise and Vibration Mitigation Policy was approved by the Secretary of State in granting deemed planning permission: its sets out the parameters for the analysis contained in the Vibration Schemes of Assessment. Its purpose is to ensure that:

"Vibration from trains will not cause damage to structures, and even without mitigation, will be likely only to give rise to 'adverse comments from occupiers being possible' at a few properties that are located very close to the railway. At these locations, appropriate mitigation measures will be provided".

18. The Noise and Vibration Mitigation Policy uses principles contained in British

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

Standard BS647-1:2008 "guide to evaluation of human exposure to vibration in buildings". This sets numerical ranges, expressed as Vibration Dose Values to predict the "likelihood of adverse comment" as a result of "feelable" vibration. The Noise and Vibration Mitigation Policy sets down thresholds for Vibration Dose Values which this scheme must not exceed: these thresholds are located between the lower and middle of three Vibration Dose Values ranges, below which the British Standard predicts a "low probability of adverse comment".

- 19. Thus the threshold Vibration Dose Values which must not be exceeded in this scheme are:
  - Day (0700 2300 hours): 0.4 m/s1.75
  - Night (2300 0700 hours): 0.2 m/s1.75
- 20. The Noise and Vibration Mitigation Policy requires that trackforms be designed and installed adjacent to occupied vibration sensitive buildings using best practicable means to keep within the thresholds. Where mitigation measures that the Noise and Vibration Mitigation Policy would otherwise require are "not reasonably practicable" the condition allows for an equally effective substitute (previously approved in writing by the Council) unless the Council has agreed in writing that the mitigation measure is not reasonably practicable and that there is no suitable substitute. In the event that the thresholds could not be met, the condition would allow for alternative mitigation or potentially insufficient mitigation to meet those thresholds.
- 21. 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 Vibration Scheme of Assessment and how is it judged?

- 22. The purpose of a Vibration Scheme of Assessment is to predict the impact of vibration 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 Vibration Scheme of Assessment therefore are as follows:
  - Is the Vibration Scheme of Assessment sufficient being a detailed scheme of assessment of vibration effects, with details of proposed monitoring and mitigation measures?
  - Does the Vibration Scheme of Assessment contain measurements, methodology, modelled predictions and resulting proposals (which include mitigation and monitoring if applicable)?
  - Does the Vibration Scheme of Assessment show how the standards of vibration mitigation set out in the Noise and Vibration Mitigation Policy will be achieved?
  - Does the Vibration 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 Vibration Scheme of Assessment containing the relevant elements, these have been treated correctly. This leads to the overall test:
  - Are the vibration-related elements of the Vibration Scheme of Assessment considered to be sufficiently robust?
- 25. If any of these tests were not met, the Vibration 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 acceptability of the Vibration Scheme of Assessment. Provided that the submitted Vibration 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 5**).

#### The Submitted Vibration Scheme of Assessment for route section I1

- 28. The discharge of condition 19 in respect of vibration is being addressed by NR through Schemes of Assessment which deal with the entire track length from Bicester to Oxford.
- 29. Two Vibration Schemes of Assessment were submitted in 2014 one for <u>plain line</u> dated 16<sup>th</sup> January 2014 (13/03202/CND) and the other for <u>switches and crossings</u> dated 21<sup>st</sup> January 2014 (14/00232/CND). These met the 'content' tests set out in paragraph 23 above. The associated report of the Independent Expert is dated 15<sup>th</sup> May 2014.
- 30. These submissions, including the related report of the Independent Expert, a series of subsequent documents from ERM and Atkins, a report from an additional independent advisor, ARUP, and related correspondence from and to local residents and other third parties, were considered and approved by the West Area Planning Committee at its meeting on 16<sup>th</sup> June 2015 *but only in respect of route section H*. This was because it had been asserted by the applicant that no work under the approved Transport and Works Act Order (TWAO) was to take place within route section I1 and therefore that condition 19 did not need to be discharged within route section I1. It was subsequently agreed that TWAO work is to be undertaken in route section I1 and therefore that condition 19 needs to be discharged in route section I1.
- 31. Operational vibration in route section I1 is therefore being addressed through re-submission of the relevant parts of the approved Vibration Schemes of Assessment and associated reports and documents; together with a Technical Note by Atkins dated 1<sup>st</sup> October 2015, which uses the methodology already approved for route section H and deals with the properties within Section I1 that are less than 15 metres from the tracks but which were not considered in the original Vibration Schemes of Assessment. The Technical Note confirms that those additional properties would not be exposed to vibration exceeding the VDV levels set out in the Noise and Vibration Mitigation Policy.

#### Public consultation on vibration

- 32. There is no requirement for public consultation in relation to the discharge of planning conditions. Extensive public consultation has however occurred in relation to submissions for East West Rail Phase I, namely:
  - 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;
  - Network Rail organised a 'technical' meeting to discuss the vibration submissions with the public on 10<sup>th</sup> June 2014 at The Oxford Hotel;
  - 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;
  - Specifically in relation to route section I1 Consultants ERM on behalf of Network Rail organised public information exhibitions on 26<sup>th</sup> August, 2<sup>nd</sup> September and 9<sup>th</sup> September 2015, at the Waterways Community Room in Clearwater Place, where information on vibration in route section I1 was available. Public comment was invited until 16<sup>th</sup> September 2015. In total 78 responses were received. ERM replied to all the responses on 13<sup>th</sup> October 2015 and copied those replies to Council officers for review by the Independent Expert
  - 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**

- 33. The City Council invited public comment on the formally submitted Vibration Scheme of Assessment between 4<sup>th</sup> December 2015 and 7<sup>th</sup> January 2016. Some 40 'near-track' local residents submitted comments as summarised below:
  - Council should insist on independent vibration assessment of current services and then from that data assess proposed services
  - Impact of vibration from current railway line as not been accounted for
  - Restrict the numbers of trains at night and review this with residents
  - Impose and enforce a speed limit on freight trains passing through residential areas

- Ensure continuous and impartial vibration monitoring throughout route section I adjacent to properties – not at locations well-away from people's homes and self-report leading potentially to misleading figures – tie the phases of rail development to this
- No admission in submission that vibration is an issue for residents because derived from theoretical modelling applied to whole line with no detailed testing in specific areas or individual properties – not an accurate picture of reality - Council should demand in-situ, real-life monitoring now and in the future and consider vibration mitigation in the light of such monitoring – need to assess the 'waterways area specifically not theoretically
- Need to assess the impact of increased vibration on the school not through a theoretical model but by real measurement and monitoring – current levels of vibration acceptable but concerned about increased vibration which will impact on the children's learning environment and could cause damage to the school building
- No assessment of current vibration inside properties has been made or the resulting property damage – current vibration levels will increase with the increase in speed and frequency of trains proposed, particularly freight trains
- No assessment of vibration impact in 3-storey properties which most are in this location – upper floors will be significantly affected – this should be assessed together with likely building damage
- Low frequency vibration presents particular problems for walls, building facades and roofing; also living conditions: nausea, lack of faith in construction – not acknowledged in the submission
- Models are no substitute for real-life experience residents do not have the relevant financial or intellectual resources to challenge technical arguments
- Noise and vibration will inevitably affect local wildlife in Burgess Field and Trap Ground – ecology will benefit from mitigation
- Need to take account of health impacts on local residents of rail noise and vibration – particular reference to children's' health
- 34. The County Council as education authority has commented that it would wish to be assured that an accurate assessment of the potential impact of the rail upgrade, upon the school, has been undertaken and that appropriate mitigation measures are to be put in place in respect of noise, vibration and pollution, in order that neither has a quantifiable negative impact upon the quality of education that the school can provide. It therefore endorses the recommendation that there be ongoing independent monitoring of noise levels during the daytime both in the school building and on the school playing field and that if acceptable levels are exceeded, further noise mitigation should be provided. Likewise the Council would support the implementation of independent monitoring of air quality, with a requirement for mitigation if it can be shown that air quality has been adversely affected by the operation of the railway.

#### Issues:

- Assessment methodology and data
- Low frequency vibration
- Restricting the speed of trains
- Limiting the number of trains
- Monitoring to replicate that at Wolvercote
- Impact on school
- Health impact
- Vegetation and trees

#### **Officers Assessment:**

# Assessment methodology and data

- 35. Residents are concerned that the Vibration Scheme of Assessment relies on theoretical models to predict impacts, and does not contain measured data of the operational rail vibration currently experienced in the area including at the school. One comment suggested that the input data was incorrect in that Waterways had not been considered.
- 36. The methodology used for this Vibration Scheme of Assessment replicates that approved for route section H. Measured data is used but at sample points only so as to establish a baseline against which to compare and upon which to model the future impacts. The latter process does take account of a full operational timetable, including passenger and freight train movements which may only take place if East West Rail Phase II is permitted. These movements represent a "reasonable worst case" and modelled predictions using them are unlikely to underestimate actual future noise levels.

# Low frequency vibration

- 37.A resident has asserted that low frequency vibration has not been taken account of sufficiently regarding structural impacts and the effects on living conditions and health.
- 38. These matters were considered extensively for Section H and included consultation with the vibration Independent Expert, a second, Council-appointed vibration expert (Arup) and reference to industry practice and British Standards on human response to vibration (see footnote 1, para 15 above). Officers consider that there are no new issues within Section I1 which would a re-examination of these matters beyond those covered for section H.

# Restricting the speed of trains

39. 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.

- 40.ERM on behalf of Network Rail commented upon the practicality of such mitigation in their letter of 29 April 2015 in respect of route section H (**Appendix 6**). 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."
- 41. Officers note this position and advise that speed restrictions cannot be required as part of this application.

# Limiting the number of trains

- 42. Residents have requested that limits be put on the numbers of trains using this line.
- 43. Recommended condition 2 above which was imposed on route section H (as condition 3) gives effect to this.

#### Monitoring to replicate that at Wolvercote

- 44. Correspondents have requested separate in-situ vibration monitoring as is required by condition for route section H in Wolvercote; and that the Council should ensure that the second period of monitoring occurs when both tracks are operational and in the context of the final speed limit.
- 45. Recommended condition 3 above as imposed on route section H gives effect to this.

# Vibration impact on school

46. Concerns have been raised that the vibration impacts on the school have not been properly assessed or future impacts mitigated.

47. The methodology for vibration assessment has however already been approved and there are no grounds to doubt its applicability to the school environment or buildings.

#### Health impact

- 48. Correspondents refer to the need to take account of the health impacts of operational rail vibration, and diesel pollution. With respect to vibration impacts they refer to sleep deprivation, structural damage and consequent loss of confidence in building structure. In relation to the school, impacts on the school buildings and learning environment are emphasised. Air quality and diesel pollution is also referred to.
- 49. The health impacts of operational noise and vibration are taken into account by the Noise and Vibration Mitigation Policy, which sets the basis for vibration mitigation assessment, requirements and eligibility. The Noise and Vibration Mitigation Policy utilizes vibration dose levels based on a British Standard specifically devised for this purpose (see footnote 1, para 15 above). There is no mechanism under condition 19 to consider diesel pollution and this matter lies outside the scope of this application.

# Impact on ecology

- 50. Several residents have commented that rail vibration may impact adversely on local ecology.
- 51. This is not a factor explicitly referred to in the Noise and Vibration Mitigation Policy nor is it an impact of the development which is controlled under condition 19. The Committee is unable to base its determination of this application on such ecological considerations.

# **Conclusion on Vibration:**

52. The Vibration Schemes of Assessment previously approved for the purposes of route section H together with the Technical Note relating specifically to route section I1, have been shown to meet the tests set out in paragraphs 23 and 24 of this report, including the overall test of whether they are sufficiently robust. It has been demonstrated that the required standards set out in the Noise and Vibration Mitigation Policy will be achieved in route section I1. On that basis it is recommended that approval be given to this application in respect of route section I1, 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; 15/03587/CND

Contact Officer: Fiona Bartholomew

Extension: 2774

Date: 1st February 2016

