

Western Rail Link to Heathrow Scheme

*Summary of comments from Spelthorne Borough Council
(June 2018)*

Introduction

This document sets out a summary of Spelthorne Borough Council's (SBC) comments and observations on the Western Rail Link to Heathrow consultation exercise to inform the preparation and completion of the Preliminary Environmental Information Report as part of the Development Consent Order (DCO) process.

Summary of SBC's Comments and Observations

Non-technical Summary

Paragraph 1.10.49 states that the scheme would generate a large volume of surplus excavated material from the bored tunnels and other excavation activities, but those impacts are to be reduced by use of conveyors and removal by rail. This summary does not refer to the >30% of total surplus materials being removed by road from the Shaft 3 and 4 construction sites.

Scheme Description (Chapter 3)

A couple of discrepancies between the text and tables of the report are noted:

- Specification of Working Hours - Paragraph 3.3.22 (p3-27/28) states that the hours of work are a normal 5 day week, 8am to 6pm but with mobilisation and construction vehicle deliveries between the hours of 7am to 7pm Monday to Friday. Within Table 3.4 working hours include 08.00 – 13.00 Saturdays (07.00 – 14.00 including mobilisation & deliveries). The site construction hours and times used in the traffic assessment (Volume 2, paragraph 20.5.6, p20-17) also assume a 5 day week, but with a 10 hr day and further restricted to an 8 hour day for earthworks movements.
- Construction schedule - Paragraph 3.1.2 (p3-27) states that the spray concrete lined tunnel (SCL) would take approximately 25 months to construct, whereas in Table 3.1 (p3-15) the gant chart schedules this work for a maximum of 15 months from Q1 of 2023 to Q2 of 2024.

Air Quality (Chapter 9) and Traffic & Transport (Chapter 20)

Whilst the whole of the new rail line and tunnelling will be outside of Spelthorne, the construction compound at Bedford Court is only about 200-250m from the Borough boundary. Properties within the north of Stanwell Moor are within the 350m study area of the construction compound for construction phase dust impacts. Access to the construction compound at Bedford Court is via the A3044, so all construction vehicles will arrive via the Stanwell Moor Road roundabout of the A3044 on the borough boundary of Spelthorne to get to the entrance on the northbound carriageway, having travelled either from the A4 and A3044 south, or from M25 J14 and A3113 Airport Way to the west, again across the top of Spelthorne. Access to the construction compound for Shaft 3 at Poyle will also be via J14 then westwards on Horton Road and around the Poyle Industrial Estate or again via the A3044.

Paragraph 3.68 of the PINS (June 2015, p29) Scoping Opinion states that the Secretary of State considers that adverse changes to air quality should be assessed in relation to compliance with European Air Quality limit values and Air Quality Management Areas (AQMAs). Figure 9.2 (PEIR, Volume 1) shows the local Air Quality Management Areas and local air quality monitoring locations. This includes the Spelthorne Whole Borough AQMA. There is no reference to this within Chapter 9 or its appendices and no consideration has been given to possible impacts of the scheme on the Spelthorne AQMA.

Spelthorne air quality monitoring data and reports should be included in paragraph 9.4.7, Tables 9.4 (PEIR Volume 1, page 9-12), 9.6 (Annual mean nitrogen dioxide concentrations, p9-18), and 9.7 (Annual mean PM₁₀ concentrations) together with Figure 9.2 to provide further baseline information in relation to construction routes to the south of the scheme near Bedfont Court.

Paragraph 9.1.7 (Volume 1, p9-2) outlines that human health impacts from air quality will be for nitrogen dioxide and particulate matter as PM₁₀. There is no reference to PM_{2.5} in Chapter 9, nor within the April 2015 Jacobs Environmental Impact Assessment Scoping Report, or the PINS Scoping Opinion Report of June 2015. Given the focus on reduction to exposure to PM_{2.5} within the 2018 Clean Air Strategy, the PEIR should consider this source and provide justification for scoping this pollutant out.

Chapter 9 on air quality outlines that air quality will be assessed by Highway England's DMRB criteria for gaseous pollutants and the Institute of Air Quality Management (IAQM) (2016) guidance for construction dust. Table 9.3 (Air Quality Guidance) refers to the IAQM (2017) Planning for Air Quality guidance and states that it will be used for the Environmental Impact Assessment. Given that the Highways England criteria are being used to define when an air quality assessment will be triggered it is not clear about how the IAQM 2017 guidance will actually be followed. Paragraph 9.4.12 outlines that air quality modelling of the construction phase will be undertaken for the final Environment Statement using the ADMS-Roads dispersion model for nitrogen dioxide and particulate matter (PM₁₀) where DMRB criteria are met.

The report states that Highways England DMRB (2007)¹ screening criteria will be used to determine whether road links will be affected, as follows:

- Road alignment will change by 5 m or more
- Daily traffic flows will change by 1,000 Annual Average Daily Traffic (AADT) or more
- Heavy Duty Vehicles flows will change by 200 AADT or more

The Highway England's guidance is intended for use on schemes improving the Strategic Road Network, which would typically move traffic away from populated areas. It was not intended for land development with the potential to increase flows on local roads in urban areas. The DMRB air quality guidance was developed over 10 years ago, at a time when less was known about the health effects of nitrogen dioxide, and when vehicle emission reductions were expected to occur much more rapidly than has transpired. AQMAs continue to be declared, specifically in congested areas where emission rates have historically underestimated actual exhaust conditions. Arguably, then, a smaller increment could now result in a significant effect, particularly within AQMAs in town centres.

A precautionary approach to identification of affected road network, particularly in light of the poor air quality in some local urban areas, is appropriate. The IAQM² (2017) land-use planning guidance includes more stringent screening criteria, set specifically with land development in mind, including that within urban areas. It includes the following traffic flow thresholds:

- Changes in Light Duty Vehicles flows by (i) more than 100 AADT within or adjacent to an AQMA; or (ii) more than 500 AADT elsewhere;
- Changes in Heavy Duty Vehicles flows by (i) more than 25 AADT within or adjacent to an AQMA; or (ii) more than 100 AADT elsewhere.

The IAQM guidance includes provision for whole borough AQMAs so that local baseline monitoring can still be taken into account - "*where whole authority AQMAs are present and it is known that the affected roads have concentrations below 90% of the objective, the less stringent criteria are likely to be more appropriate.*"

¹ Highways Agency, Design Manual for Roads and Bridges. Volume 11. Section 3. Environmental Assessment Techniques. Part 1. HA207/07. Air Quality, 2007

² EPUK & IAQM Land Use Planning & Development Control: Planning for Air Quality. January 2017.

The IAQM 2017 guidance on land use planning and development control should also be used to assess significance. Use of DMRB guidance, may result in changes that are significant for local authorities to be missed.

None of the access roads in the vicinity of Spelthorne (i.e. Horton Road, A3113 Airport Way and A3044) have been flagged as roads potentially affected by construction phase traffic - where there is an increase in Annual Average Daily Traffic flows (AADT) of >1,000 movements or >200 Heavy Duty Vehicles. The volume of spoil excavated from the works at Bedfont Court will be significant (>233,000 cu. m.), and at that location the construction will be entirely facilitated by road. The peak traffic generation for the Poyle and Bedfont Court construction sites (paragraphs 20.4.24 to 20.4.26, Volume 2, p20-11) has been estimated at 3,524 Heavy Goods Vehicle movements per move, equivalent to an additional 114 Heavy Goods Vehicle two way movements per day (based on a seven-day week). This would exceed the IAQM 2017 air quality assessment criteria discussed above.

It is noted that traffic data associated with Heathrow Expansion was not available to Network Rail (paragraph 9.11.6, Volume 1, p9-37) and therefore not included in the PEIR in traffic assessments. Cumulative movements from the Heathrow Expansion with the WRLtH scheme are considered to be very likely to result in significant construction phase traffic & transport impacts, and in-turn air quality impacts, particularly in relation to construction at Shaft 3 Poyle and Bedfont Court/ Shaft 4. It is our view that when the combined effects are considered therefore that there could be potentially significant implications for residents within Spelthorne in Stanwell Moor and for our AQMA at that location.

Paragraph 9.6.16 (Volume 1, p9-21) states that a three month project specific dust monitoring survey was undertaken within the dust study area to inform the baseline study, and that results will be reported in the final Environment Statement. Best practice guidance is often for such surveys to ideally be over a full year, and certainly spanning both some of the winter and summer months. Surveys of short duration are unlikely to provide sufficiently representative data. No indication has been provided as to what technique(s) have been used for both the survey. There are a number of methods for dust monitoring and all have advantages and disadvantages, and the key differences between them have implications for recommending compliance values, designing dust management and monitoring schemes and evaluating data. No details have been provided about how the baseline dust deposition data would be assessed – would this be via custom and yardstick measures for deposited dust (e.g. 200 mg/m²/day averaged over a 4 week period) or would the methodology seek best practice through a bespoke site-specific value, which would definitely require at least 12 months of local baseline monitoring data to be available.

Table 20.9 (Construction shafts 3 & 4 two way AADT₂₄ flow, Volume 2, pp20-27) outlines that Stanwell Moor Road (A3044) would experience a -2% total change in vehicle movements at 2022 with the proposed scheme in comparison with the 2022 baseline. No explanation is given for why the scheme would result in a decrease in total traffic flows, especially given that there will be a 12% increase in Heavy Goods Vehicle movements.

Paragraph 20.8.5 (Volume 2, p20-28) concludes that from the PEIR assessment there are no major adverse or beneficial traffic impacts due to the construction traffic generated by Shafts 3 & 4 except for the adverse effect of an increase in Heavy Goods Vehicle flows on Horton Road, near Horton. Table 20.9 predicts a 348% increase in heavy duty vehicles, equivalent to about 150 additional two way movements per day for Horton Road. Paragraph 20.8.5 states that “no construction traffic from either Langley area or Shafts 3 or 4 would travel down Horton Road, and this is likely due to diversion of existing traffic due to the closure of Hollow Hill Lane”. It would appear though that this major adverse effect (>60% change in Heavy Goods Vehicle movements) is due to earthworks movements from the proposed scheme. Table 3.3 (Volume 1, p318/19) details that over 255,000 cu m of surplus materials will be removed from Shaft 3 Poyle and Bedfont Court by road to Kingsmead Quarry in Horton using the scheme access routing as shown in Figure 3.1. Paragraph 20.8.6 appears to dismiss this major adverse effect (stating that if necessary measures to prevent existing Heavy

Goods Vehicle traffic using Horton Road west of Welley Road will be discussed with the local highway authorities during preparation of the Environment Statement), as it is then omitted from Table 20.11 (Summary of potential effects during construction without additional mitigation due to traffic and transport, Volume 2, p20-32/33).

The draft Code of Construction Practice (CoCP) outlines that an air quality management plan will be prepared for each worksite prior to commencement. This is to be consulted on with the relevant planning authorities (paragraph 9.2.4, Appendix 3.1, p35). It would be appropriate that this is subject to consultation with relevant stakeholders and approval from the local planning authority.

There is no reference in the draft CoCP to the IAQM (2016) guidance, Guidance on the assessment of dust from demolition and construction, including within section 9.6 on dust control or within the references. Chapter 9 of the PEIR on air quality outlines that the environmental impact assessment will be based on the IAQM (2016) guidance for construction dust. Appendix 9.1 employs the IAQM (2016) methodology of a construction phase dust risk assessment, which is also summarised in section 9.8 and Table 9.12 (Summary of fugitive dust risk) of Chapter 9. Paragraph 1.8.11 states that the construction dust mitigation measures detailed in the draft CoCP are based on the IAQM (2016) guidance. Discussions about risk levels for construction sites in the draft CoCP should match the findings of the dust risk assessment in Appendix 9.1 (and as refined as the scheme develops).

Paragraph 19.3.9 of the draft CoCP (Appendix 3.1) outlines that the main contractors shall use lorries that meet the current best environmental standards, including Euro 6 emission standards, "where appropriate". Further all hauliers shall adhere to the standard as set by the London Low Emission Zone. Meanwhile, paragraph 9.4.1 states that all construction vehicles and plant shall conform to the Ultra-Low Emission Zone measures or the Supplementary Planning Guidance. The London Low Emission, Ultra-Low Emission and Congesting Charging Zones all have differing standards. The standards required should be consistent and clear. Commitments should be made to best practice environmental performance of Heavy Goods Vehicles and Light Duty Vehicles during construction, setting a requirement for Euro VI/6 emission standards or better for all road going construction vehicles.

Section 9.4 of the draft CoCP discusses vehicle and plant emissions. There is no explicit reference to Non-Road Mobile Machinery (NRMM) best practice guidelines. There should be a commitment to vehicle standards for NRMM, following GLA guidance and Supplementary Planning Guidelines.

Ecology (Chapter 11)

The Ecological Study area for the scheme extends to a 2km radius from the new lines, covering all of Stanwell Moor, north west Stanwell and the Wraysbury Reservoir, King George VI Reservoir and Staines Reservoirs. Staines Moor has been identified as a Biodiversity Opportunity Area (Figure 11.3).

Paragraph 11.10.1 (Volume 1, p11-94) outlines that no significant effects have been identified for ecology and nature conservation and that no additional off-site mitigation (biodiversity compensation) is likely to be required. However, Spelthorne takes this opportunity to comment that whilst the land could be better managed in order to safeguard the site in perpetuity, it is not considered suitable for enhancement and is best left undisturbed.

Noise and Vibration (Chapter 13)

The geographical study area has been set at 600m from the construction boundary, which does cross into the Spelthorne area at Stanwell Moor. It is noted that this will be kept under review during the EIA to give consideration of the likelihood of significant noise effects on receptors outside the 600m study area. Due to the distance between the construction site and sensitive receptors in

Spelthorne, the PIER has not identified any notable impacts of noise and vibration arising from the construction or operation of the proposed development.

Land Contamination (Chapter 16)

The land marked on Ordnance Survey maps as a sand and quarry works between the Spout Arch and Horton Road landfills appears to have been worked. This is not identified in Figure 10.4 (Locations of Existing Landfill Sites). This site is in the London Borough of Hillingdon. The site was originally a commercial plant nursery and then operated as a waste transfer station under Fowles haulage up to circa 2008. There was a court case between the land owners Heathrow Airport Ltd (HAL) and Fowles about use of the land (<http://high-court-justice.vlex.co.uk/vid/hc06c03497-52635615>). The 2008 aerial photograph clearly shows the Fowles operations at Spout Lane North. Using the Google Street View for August 2008, the signage for Fowles on the site on Spout Lane North is evident, together with a large customer notice saying the site is closing. By the 2013 aerial photograph, the Fowles business has vacated and the site is being restored. The aerial photograph of 2015 shows the site restored to agricultural. The profile of the land following restoration appears to indicate some landfilling or raising has taken place. Reference to aerial photography for the land immediately north of the western half of the site (i.e. at the Bedfont Court construction site, east of Horton Road Landfill) would suggest that it too has been worked and filled.

Prior to a boundary change in 1994, the land at Bedfont Court, including the Horton Road Landfill and Spout Arch and Spout Lane Tip Landfills, was previously located within the Borough of Spelthorne. Spelthorne still holds the files of the Public Health Inspectors of its predecessor authority, Staines Urban District Council, for these landfill sites, which hold correspondence, plans and tipping consents from the 1960s through to the mid-1970s. Relevant environmental information about land condition is therefore available to Network Rail from Spelthorne on request.

Cumulative Effects (Chapter 21)

The scheme is given to have impacts on flood risks and that Network Rail intends to mitigate this increase in flood risk elsewhere through inclusion of floodplain compensation near the Grand Union Canal and close to Bedfont Court (e.g. paragraphs 1.10.33 & 34). The Heathrow Expansion Project will see competition for land use in the vicinity of Bedfont Court, where new taxiways and terminal capacity are being proposed. It may therefore not be possible for Network Rail to provide the mitigation near Bedfont Court and alternative locations should be considered.

The Heathrow Expansion project will also cause severance of the A3044 such that the proposed construction traffic routing to Shaft 3 and Shaft 4 at Bedfont Court may not be possible at some point during the construction period between 2022 and 2026. The proposed permanent vehicular access configuration for Bedfont Court (e.g. Figure 7 of the Consultation Overview Report) links to the A3044 which will no longer exist at that location by 2028 under Heathrow Expansion plans.