Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Written Statement of Oral Case ISH3 [Appendix A - Air Quality Construction Traffic Update Note]

Document reference: 18.7.1

Revision: 1

14 November 2023

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

Hinckley National Rail Freight Interchange

TECHNICAL NOTE

Project	Hinckley National Rail Freight Interchange		
Document Number	HNRFI-BWB-VUT-ZZ-RP-G-0002_TN	**BWB Ref**	NTT2814
Author	A. Van de Sande MSc BSc (Hons) MIAQM MIEnvSc M. Wilby PIEMA, MSc, BSc (Hons)	**Status**	Issue
Checked	C. Meddings MSc BSc (Hons) CSci MIAQM MIEnvSc I. Rassool MCIWEM C.WEM CEng	**Revision**	V1.0
Approved	C. Meddings MSc BSc (Hons) CSci MIAQM MIEnvSc I. Rassool MCIWEM C.WEM CEng	**Date**	13/11/2023

Construction Traffic – Greenhouse Gases

The approach to determining the effects of greenhouse gases (GHGs) arising as a result of construction vehicles and large plant is set-out in paragraphs 18.52, 18.65-18.78 and 18.82 of Chapter 18: Energy and Climate Change (document reference: APP-127) of the Environmental Statement. The assessment is conducted in accordance with relevant environmental regulations and guidelines.

GHG (Greenhouse Gas) modelling of emissions associated with construction traffic requires AADT (Annual Average Daily Traffic) data because it serves as a critical input for estimating and understanding the emissions associated with road traffic. The AADT provides information on the average daily traffic volume on a specific road and/or the entire traffic model. Emissions are calculated by multiplying the activity data (e.g., fuel consumption) by the appropriate emission factors. These factors are typically provided by environmental agencies or established databases and help in quantifying emissions based on the data collected. The sum of these calculations provides an estimate of GHG emissions during the construction phase. In this instance, daily vehicle movements during peak construction were provided by the appointed transport consultants, extrapolated from the transport assessment modelling; given the construction of HNRFI will be phased over a ten-year period, a peak annual number of heavy goods vehicles (HGVs) and light duty vehicles (LDVs) was determined (50,735). This annual figure was divided by 365 to determine average daily figures (139) to allow modelling to be completed using the 'Emissions Factors Toolkit' (v11). The Emissions Factors Toolkit (EFT) is published by Defra and the Devolved Administrations to assist local authorities and consultants in carrying out assessments of local air quality and greenhouse gas emissions. The EFT is updated periodically due to updates to underlying data including vehicle fleet composition

and emissions factors determined by Government agencies and the Institution of Civil Engineers (ICE) and considered an appropriate tool for the purposes of high-level effects. It is therefore likely the results of this assessment are considered conservative / worst-case as it is unlikely that construction traffic will remain at peak levels throughout the construction period and for construction to be undertaken over 365 days of the year – this approach is considered appropriate under the circumstances of the 'Rochdale Envelope' (Advice Note Nine), where a number of conservative assumptions are required due to the outline nature of the scheme. Appendix 18.3 – 'Assumptions for Emissions from Vehicles and Rail during Construction Stage and Operational Phase' presents the assumptions for this assessment."

Construction Traffic – Air Quality

The approach to determining the impacts of the construction phase of the HRNRFI on air quality is set-out in Chapter 9: Air Quality (APP-118) of the Environmental Statement. The assessment is conducted in accordance with relevant environmental regulations and guidelines.

The air quality assessment assessed the peak year of construction, which is considered to be 2026, as provided by the transport consultants. Assessing the peak year of construction is predicted to provide a robust assessment of construction impacts as 2026 is the year which is expected to experience the highest volumes of construction traffic on the local road network. Other construction years are predicted to experience a smaller traffic generation. Key construction traffic routes were provided by the project Transport Consultants, BWB Consulting and are provided in Figure 9.2 (document reference: APP-241). These roads were predicted to experience the greatest increase in road traffic during the peak construction operations, due to the required routing of delivery vehicles and available access point to the Main HNRFI Site at this stage of the construction. All impacts at modelled receptor locations were predicted to be negligible and not significant.