

Tritax Symmetry (Hinckley) Limited

# **HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE**

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## **The Hinckley National Rail Freight Interchange Development Consent Order**

Project reference TR050007

### **Environmental Statement Volume 1: Main Statement**

## **Appendix 12.2: Biodiversity Impact Assessment Calculations**

Document reference: 6.2.12.2

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Planning Act 2008

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

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017  
Regulation 14

**This document forms a part of the Environmental Statement for the Hinckley National Rail Freight Interchange project.**

Tritax Symmetry (Hinckley) Limited (TSH) has applied to the Secretary of State for Transport for a Development Consent Order (DCO) for the Hinckley National Rail Freight Interchange (HNRFI).

To help inform the determination of the DCO application, TSH has undertaken an environmental impact assessment (EIA) of its proposals. EIA is a process that aims to improve the environmental design of a development proposal, and to provide the decision maker with sufficient information about the environmental effects of the project to make a decision.

The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects.

**Further details about the proposed Hinckley National Rail Freight Interchange are available on the project website:**

<http://www.hinckleynrfi.co.uk/>

**The DCO application and documents relating to the examination of the proposed development can be viewed on the Planning Inspectorate's National Infrastructure Planning website:**

<https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/hinckley-national-rail-freight-interchange/>

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## Appendix 12.2 ◆ Biodiversity Impact Assessment Calculations

### INTRODUCTION

- 1.1. This report presents the Biodiversity Impact Assessment (BIA) Calculations (Annex 1) of the Proposed Development at Hinckley National Rail Freight Interchange (HNRFI).
- 1.2. The BIA has been undertaken using the Department for Environment, Food and Rural Affairs (DEFRA) Biodiversity metric 3.1 (Version date: 21 April 2022)<sup>1</sup>, by an ecologist with experience of using such calculators.
- 1.3. The BIA has been produced to objectively assess the net effects of the Proposed Development on biodiversity in line with local and national planning policy.
- 1.4. The assessment was undertaken based on the existing habitat information derived from the Extended Phase 1 survey carried out by EDP in July 2021 as shown on Figure 12.3: Extended Phase 1 Survey (document reference 6.3.12.3), a Modular River Physical (MoRPh) field assessment undertaken in January 2023 and proposed habitats detailed on Figure 11.20: Illustrative Landscape Strategy (document reference 6.3.11.20). Plans for post-development habitats are shown in Annex 2 to this report.
- 1.5. Geographic Information System (GIS) software has been used to accurately calculate areas of habitat to be retained, enhanced and recreated. The Biodiversity Metric 3.1 condition assessment calculator reference sheets have been used to inform the conditions used for existing habitats alongside professional judgement.

### ASSUMPTIONS AND LIMITATIONS

- 1.6. It is worth noting that these calculations are based on the Illustrative Landscape Strategy (ES Figure 11.20, document reference 6.3.11.20) (i.e. the 'calculation area') to demonstrate the outline development proposals impact upon biodiversity. This may be subject to variation at the detailed design stage.
- 1.7. Various assumptions have been made for the purposes of the calculations as detailed below. Where appropriate, these have been added to the impact calculation table in the notes column.
- 1.8. Recommendations for ecological enhancements to habitat management and additional planting have been made as part of the River Condition Assessment. It may be possible to enhance the condition further by incorporating physical alterations to the channel bed and banks. Any structural changes must be advised by a hydrologist and additional flood

<sup>1</sup> <http://publications.naturalengland.org.uk/publication/6049804846366720>

risk assessments must be considered should the function of the watercourse be altered in any way.

### Strategic Significance

- 1.9. Lowland mixed deciduous woodland along the south-eastern boundary and two small strips along the western boundary, which are associated with Burbage Wood and Aston Firs Site of Special Scientific Interest (SSSI), have been entered as 'Within area of formally identified in local strategy' as mentioned in the Leicester, Leicestershire and Rutland Biodiversity Action Plan 2016–2026.

### Existing Habitats

- 1.10. Improved grassland has been entered as 'modified grassland' of 'fairly poor' condition owing to the lack of species diversity, uniformed sward height and intensive grazing from cattle and/or sheep. The majority of this habitat will be lost, however, a small area within will be enhanced with wildflower grassland mix and/or shade tolerant meadow grassland mix. This has been entered into the calculator as 'other neutral grassland' of 'moderate' condition.
- 1.11. Poor semi-improved grassland has been entered as 'modified grassland' of 'moderate' condition owing to limited species diversity. Small areas to the north and south of will be enhanced with wildflower grassland mix and have been entered into the calculator as 'other neutral grassland' of 'moderate' condition.
- 1.12. The marsh/marshy grassland in the northeast of the calculation area has been entered as 'other neutral grassland' of 'moderate condition' as it does not qualify under the UK habitats classification as one of the marshy grassland communities but would be undervalued to include as modified grassland. It has been inputted as 'moderate' condition owing to its species composition and absence of management.
- 1.13. Broadleaved semi-natural woodland has been entered as 'lowland mixed deciduous woodland' of 'moderate' condition, owing to the limited ground floor and lack of management. This habitat is to be retained in its entirety.
- 1.14. There are several ponds within the calculation area, which have collectively been entered as 'poor' condition as they are mostly shaded and overgrown with poor water quality.
- 1.15. Defunct species-poor hedgerows and intact species-poor hedgerows are entered as 'native hedgerow' of 'poor' and 'moderate' condition respectively. Defunct and intact species-poor hedgerows with trees are entered as 'native hedgerow with trees' of 'poor' and 'moderate' condition respectively. Defunct and Intact species-rich hedgerows are entered as 'native species-rich hedgerow' of 'poor' and 'moderate' condition respectively and intact species-rich hedgerows with trees is entered as 'native species-rich hedgerow with trees' of 'moderate' condition. Hedgerows throughout the calculation area are of varying quality, with the majority intensively managed.
- 1.16. A large proportion of linear hedgerow habitat is to be lost due to the Proposed

Development; however, areas of intact hedgerows are to be retained, and the retained defunct hedgerows will be enhanced to 'native species-rich hedgerows with trees' of 'moderate' condition through management and gap planting to increase structural and species diversity, including the establishment of trees; and gap planting with native tree and hedgerow species.

- 1.17. The existing stream corridor has been entered as 'Other Rivers and Streams' of 'Moderate' and 'Fairly Good' condition. A large proportion of the stream will be re-routed to facilitate the Proposed Development and areas of the stream will be culverted at certain points to pass beneath new road. There are also several wet and dry ditches, which have been input as 'Ditches' of 'Poor' condition throughout the Site, of which approximately half will be lost. Those ditches that are being retained will be enhanced.
- 1.18. An area of approximately 11ha to the north of the calculation area has been identified for possible offsite mitigation of the biodiversity loss. This area is under negotiation and has not been formally adopted and therefore is presented within the BIA calculator to demonstrate the possible provision within the local area in close proximity to the Site. This area consists mainly of arable land (entered as 'Cereal Crops'), dense continuous scrub (entered as 'Mixed Scrub' of 'Moderate' condition) and tall ruderal (entered as 'Ruderal/Ephemeral' of 'Good' condition).
- 1.19. The offsite mitigation area is bordered by a stream. Given the stream itself does not fall within the offsite mitigation area, it will not be directly enhanced as part of the proposals. However, the associated riparian and river corridor habitats which do fall within the offsite mitigation area will be subject to improvement, thereby contributing to enhancement of stream habitat.

### Habitat Created

- 1.20. Although the majority of the arable land, entered as 'cereal crops', will be lost, with the exception of the retained habitats to the east of the northern road, large areas of wildflower meadow ('other neutral grassland' of 'fairly good' condition), shade tolerant meadow ('other neutral grassland' of 'fairly good' condition), scrub planting ('mixed scrub' of 'fairly moderate' condition) wet woodland planting ('wet woodland' of 'moderate' condition and woodland planting ('other woodland; broadleaved' of 'moderate' condition), will be created within the proposed on-site open space and ecology mitigation areas.
- 1.21. The wet attenuation features will be designed for wildlife and to hold permanent water, in addition to serving drainage needs. These have been assumed to contain 50% of permanent water ('ponds (non-priority)') and 50% wetland wildflower grassland planting ('other neutral' with "fairly good" condition targeted), with areas of marginal/aquatic planting being entered as 'reedbeds' of 'moderate' condition.
- 1.22. The calculation assumes the addition of a total of 500 urban trees of 250 small and 250 medium sizes are planted across the Proposed Development. The condition of the tree stock is likely to vary according to location, therefore 'moderate' condition has been entered as a precautionary approach.

- 1.23. 5.22km of 'native species-rich hedgerow' of 'good' condition will be planted in areas adjacent to buildings and 6.59km of 'native species-rich hedgerows with trees' of 'good' condition will be planted throughout the calculation area.
- 1.24. The re-routing of the stream will account for 3.23km (including 0.98km of culvert under new roads) being reinstated along the south of the Proposed Development, allowing for a naturalistic profile and the establishment of vegetation which is currently absent.
- 1.25. The condition of the proposed rerouted stream has been entered as 'Moderate' condition, given that it ties in with the existing upstream watercourse, and therefore a number of physical attributes relating to the channel bed/margin could be assumed to naturalise and achieve a similar condition as the existing section to be lost. Culverts have been entered as 'Poor' condition.
- 1.26. Assumptions have been made precautionarily at this stage and will be reviewed later when additional hydrological information is available in a more detailed application. It may be possible to enhance the condition further by incorporating physical alterations to the channel bed and banks, however this must be advised by a hydrologist.
- 1.27. A mosaic of different habitats will be created within the proposed offsite mitigation area. This area would have reduced public access to the area, along with suitable management, to allow habitats created in this area to achieve 'Good' condition. These habitats will include a large area of wildflower meadow ('other neutral grassland'), wet grassland ('other neutral grassland'), woodland ('other woodland; broadleaved'), wet woodland ('wet woodland'), scrub ('mixed scrub') and wildlife ponds ('ponds (non-priority habitat)'). Those areas being created/enhanced, that are within 10m of the stream running along the boundary of the offsite mitigation area, have contributed to the river assessment calculations.
- 1.28. If the possible area of offsite mitigation land identified was secured, the designated footpaths would be planted with double hedgerows, and thorn scrub, which will serve as a deterrent for public access into the offsite fields and will encourage 'Good' condition habitats to be achieved in these areas. Current boundary hedgerows within the offsite land have not been included in the calculations as they will not be impacted by the enhancement works undertaken in the area.
- 1.29. The BIA calculations do not account for other protected species enhancement measures, for example, the provision of bird and bat boxes and reptile hibernacula, see Figure 12.24 (document reference 6.3.12.24).

## RESULTS

- 1.30. Based on the BIA calculations, as provided in Annex 1 of this report, the illustrative proposals for onsite habitat achieves a net loss of habitat and river biodiversity units, and a net gain in hedgerow biodiversity units:
- Habitat Biodiversity Impact Score = - 25.09 biodiversity units (4.82% net biodiversity)

loss);

- Hedgerow Biodiversity Impact Score = + 9.20 linear units (7.12% net linear gain); and
- River Biodiversity Impact Score = - 3.49 river units (11.85% net river loss).

1.31. With the potential area of offsite compensation, the Proposed Development's biodiversity impact habitat area score has been calculated to achieve an overall net gain of habitat biodiversity units:

- Habitat Biodiversity Impact Score = + 28.62 biodiversity units (5.50% net biodiversity gain);
- Hedgerow Biodiversity Impact Score = + 15.11 linear units (11.70% net linear gain); and
- River Biodiversity Impact Score = - 2.58 river units (8.75% net river loss).

1.32. Although this does not meet current planning policy requirements and the Environment Act (November 2021) requirements for developments to deliver a 10% net gain in biodiversity, the additional 25.79 habitat units and 6.71 river units will be achieved through an offsetting scheme, such as the Environment Bank, in order to achieve 10% net gain. Discussions with the Environment Bank have been undertaken and will be progressed.

1.33. If the offsite land cannot be secured or an alternative area of suitable offsite mitigation cannot be found then it is envisaged that the Proposed Development would commit to the 10% biodiversity net gain, with any short fall picked up through an offsetting scheme, such as the Environment Bank.

1.34. While the Environment Act has now been passed, biodiversity net gain has not yet come into force and there will be a period of transition until it does.

1.35. The final biodiversity position will be subject to the detailed design stage and opportunities can potentially be identified to increase the level of biodiversity gain.

## Annex 1 ◆ Biodiversity Impact Assessment Calculations



Annex 2 ◆ Post-development BIA Plan  
(edp3267\_d178 10 November 2022 DJo/MMc)