

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Environmental Statement Volume 2: Appendices

Appendix 9.12: Air Quality Construction Phase Road Traffic Emissions - Ecological Results

Document reference: 6.2.9.12

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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/>

APPENDIX 6.2.9.12: AIR QUALITY CONSTRUCTION PHASE ROAD TRAFFIC EMISSIONS ASSESSMENT – ECOLOGICAL RECEPTOR FULL RESULTS

The results of the Critical Level and Nitrogen Critical Load assessments are provided for each local authority for the transects modelled in ADMS-Roads.

Critical Level Assessment

Background pollutant concentrations were obtained from the latest Defra background concentration maps¹, which are provided for the UK as 1km x 1km grid network. The latest maps are based on 2018 monitoring and meteorological data. Background concentrations of NO_x were obtained for the grid squares covering the ecological receptor locations for 2026 and 2036. 2030 data was used for the 2036 scenarios as this is the latest year for which background mapped concentrations were derived by Defra at the time of assessment.

Exceedances of the NO_x critical level of 30 $\mu\text{g}\cdot\text{m}^{-3}$ are shown in bold.

Table 12.1: Blaby District Council critical level assessment – 2026 Peak Construction.

Ecological Receptor	Defra NO _x Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Burbage LNR_T1_15m	11.6	11.4	11.6	+0.2
Burbage LNR_T1_25m	11.6	11.4	11.6	+0.1
Burbage LNR_T1_35m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_45m	11.6	11.4	11.5	+0.1

¹ Defra (2020) background pollutant concentration maps [<https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2018>]

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Ecological Receptor	Defra NOx Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Burbage LNR_T1_55m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_65m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_75m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_85m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_95m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_105m	11.6	11.4	11.5	+0.1
Burbage LNR_T1_115m	11.6	11.4	11.5	0.0
Burbage LNR_T1_125m	11.6	11.4	11.5	0.0
Burbage LNR_T1_135m	11.6	11.4	11.5	0.0
Burbage LNR_T1_145m	11.6	11.4	11.5	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m⁻³)	Scenario 2: 2026 Without Peak Construction Traffic (µg.m⁻³)	Scenario 3: 2026 With Peak Construction Traffic (µg.m⁻³)	Concentration Change* (µg.m⁻³)
Burbage LNR_T1_155m	11.6	11.4	11.5	0.0
Burbage LNR_T1_165m	11.6	11.4	11.4	0.0
Burbage LNR_T1_175m	11.6	11.4	11.4	0.0
Burbage LNR_T1_195m	11.6	11.4	11.4	0.0
Burbage LNR_T1_185m	11.7	11.5	11.6	0.0
Burbage LNR_T2_42m	11.2	11.0	11.2	+0.2
Burbage LNR_T2_52m	11.2	11.0	11.2	+0.1
Burbage LNR_T2_62m	11.2	11.0	11.1	+0.1
Burbage LNR_T2_72m	11.2	11.0	11.1	+0.1
Burbage LNR_T2_82m	11.2	11.0	11.1	+0.1

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Ecological Receptor	Defra NOx Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Burbage LNR_T2_92m	11.2	11.0	11.1	+0.1
Burbage LNR_T2_102m	11.2	11.0	11.1	+0.1
Burbage LNR_T2_112m	11.2	11.0	11.1	+0.1
Burbage LNR_T2_122m	11.2	11.0	11.1	0.0
Burbage LNR_T2_132m	11.2	11.0	11.1	0.0
Burbage LNR_T2_142m	11.2	11.0	11.1	0.0
Burbage LNR_T2_152m	11.2	11.0	11.1	0.0
Burbage LNR_T2_162m	11.2	11.0	11.1	0.0
Burbage LNR_T2_172m	11.2	11.0	11.1	0.0
Burbage LNR_T2_182m	11.2	11.0	11.1	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m⁻³)	Scenario 2: 2026 Without Peak Construction Traffic (µg.m⁻³)	Scenario 3: 2026 With Peak Construction Traffic (µg.m⁻³)	Concentration Change* (µg.m⁻³)
Burbage LNR_T2_192m	11.2	11.0	11.1	0.0
Burbage LNR_T2_202m	11.2	11.0	11.1	0.0
Freeholt Wood AW_T1_55m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_65m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_75m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_85m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_95m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_105m	14.2	14.0	14.1	+0.1
Freeholt Wood AW_T1_165m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_115m	14.2	14.0	14.1	0.0

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Ecological Receptor	Defra NOx Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Freeholt Wood AW_T1_125m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_135m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_145m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_155m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_195m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_175m	14.2	14.0	14.1	0.0
Freeholt Wood AW_T1_185m	14.2	14.0	14.1	0.0
Aston Firs SSSI_T1_7m	12.0	14.2	14.2	+0.1
Aston Firs SSSI_T1_17m	12.0	13.4	13.4	0.0
Aston Firs SSSI_T1_27m	12.0	13.0	13.0	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m⁻³)	Scenario 2: 2026 Without Peak Construction Traffic (µg.m⁻³)	Scenario 3: 2026 With Peak Construction Traffic (µg.m⁻³)	Concentration Change* (µg.m⁻³)
Aston Firs SSSI_T1_37m	12.0	12.8	12.8	0.0
Aston Firs SSSI_T1_47m	12.0	12.6	12.6	0.0
Aston Firs SSSI_T1_57m	12.0	12.5	12.5	0.0
Aston Firs SSSI_T1_67m	12.0	12.4	12.4	0.0
Aston Firs SSSI_T1_77m	12.0	12.3	12.4	0.0
Aston Firs SSSI_T1_87m	12.0	12.3	12.3	0.0
Aston Firs SSSI_T1_97m	12.0	12.3	12.3	0.0
Aston Firs SSSI_T2_107m	12.0	12.2	12.2	0.0
Aston Firs SSSI_T1_117m	12.0	12.2	12.2	0.0
Aston Firs SSSI_T1_127m	12.0	12.2	12.2	0.0

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Ecological Receptor	Defra NOx Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Aston Firs SSSI_T1_137m	12.0	12.1	12.2	0.0
Aston Firs SSSI_T1_147m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T1_157m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T1_167m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T1_177m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T1_187m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T1_197m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_0m	12.0	13.2	13.2	0.0
Aston Firs SSSI_T2_10m	12.0	12.8	12.8	0.0
Aston Firs SSSI_T2_20m	12.0	12.6	12.6	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m⁻³)	Scenario 2: 2026 Without Peak Construction Traffic (µg.m⁻³)	Scenario 3: 2026 With Peak Construction Traffic (µg.m⁻³)	Concentration Change* (µg.m⁻³)
Aston Firs SSSI_T2_30m	12.0	12.5	12.5	0.0
Aston Firs SSSI_T2_40m	12.0	12.4	12.4	0.0
Aston Firs SSSI_T2_50m	12.0	12.4	12.4	0.0
Aston Firs SSSI_T2_60m	12.0	12.3	12.3	0.0
Aston Firs SSSI_T2_70m	12.0	12.3	12.3	0.0
Aston Firs SSSI_T2_80m	12.0	12.3	12.3	0.0
Aston Firs SSSI_T2_90m	12.0	12.2	12.2	0.0
Aston Firs SSSI_T2_100m	12.0	12.2	12.2	0.0
Aston Firs SSSI_T2_110m	12.0	12.2	12.2	0.0
Aston Firs SSSI_T2_120m	12.0	12.2	12.2	0.0

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Ecological Receptor	Defra NOx Background Concentration 2026 ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 2: 2026 Without Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Scenario 3: 2026 With Peak Construction Traffic ($\mu\text{g}\cdot\text{m}^{-3}$)	Concentration Change* ($\mu\text{g}\cdot\text{m}^{-3}$)
Aston Firs SSSI_T1_130m	12.0	12.1	12.2	0.0
Aston Firs SSSI_T2_140m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_150m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_160m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_170m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_180m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_190m	12.0	12.1	12.1	0.0
Aston Firs SSSI_T2_200m	12.0	12.1	12.1	0.0

**Discrepancies in changes due to rounding effects.*

Critical Load Assessment

The level of nitrogen deposition calculated across the transect points within the designated ecological sites were compared to the lower critical load value to determine whether changes in nitrogen deposition were greater than 1% of the critical load.

Table 12.2: Blaby District Council critical load assessment – 2026 Peak Construction Year.

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Burbage LNR_T1_15m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_25m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_35m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_45m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_55m	10 – 15	8.9	23.4	25.9	25.9	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Burbage LNR_T1_65m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_75m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_85m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_95m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_105m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_115m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_125m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_135m	10 – 15	8.9	23.4	25.9	25.9	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Burbage LNR_T1_145m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_155m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_165m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_175m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_185m	10 – 15	8.9	23.4	25.9	25.9	0.0	0
Burbage LNR_T1_195m	10 – 15	9.0	23.4	25.9	25.9	0.0	0
Burbage LNR_T2_42m	10 – 15	8.6	23.4	25.8	25.9	0.0	0.3
Burbage LNR_T2_52m	10 – 15	8.6	23.4	25.8	25.9	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Burbage LNR_T2_62m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_72m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_82m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_92m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_102m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_112m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_122m	10 – 15	8.6	23.4	25.8	25.9	0.0	0
Burbage LNR_T2_132m	10 – 15	8.6	23.4	25.8	25.9	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Burbage LNR_T2_142m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_152m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_162m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_172m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_182m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_192m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Burbage LNR_T2_202m	10 – 15	8.6	23.4	25.8	25.8	0.0	0
Freeholt Wood AW_T1_55m	10 – 20	10.7	46.3	49.4	49.4	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Freeholt Wood AW_T1_65m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_75m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_85m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_95m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_105m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_165m	10 – 20	10.7	46.3	49.4	49.4	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Freeholt Wood AW_T1_115m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_125m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_135m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_145m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_155m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_195m	10 – 20	10.7	46.3	49.4	49.4	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Freeholt Wood AW_T1_175m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Freeholt Wood AW_T1_185m	10 – 20	10.7	46.3	49.4	49.4	0.0	0
Aston Firs SSSI_T1_7m	15 - 20	9.2	45.7	48.7	48.7	0.0	0
Aston Firs SSSI_T1_17m	15 - 20	9.2	45.7	48.6	48.6	0.0	0
Aston Firs SSSI_T1_27m	15 - 20	9.2	45.7	48.5	48.5	0.0	0
Aston Firs SSSI_T1_37m	15 - 20	9.2	45.7	48.5	48.5	0.0	0
Aston Firs SSSI_T1_47m	15 - 20	9.2	45.7	48.4	48.5	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T1_57m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_67m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_77m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_87m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_97m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_107m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_117m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T1_127m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_137m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_147m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_157m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_167m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_177m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T1_187m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T1_197m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_0m	15 - 20	9.2	45.7	48.5	48.5	0.0	0
Aston Firs SSSI_T2_10m	15 - 20	9.2	45.7	48.5	48.5	0.0	0
Aston Firs SSSI_T2_20m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_30m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_40m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_50m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T2_60m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_70m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_80m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_90m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_100m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_110m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_120m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T2_130m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_140m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_150m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_160m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_170m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_180m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

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Ecological Receptor	Critical Load Range (kg N ha ⁻¹ kg ⁻¹)	NO ₂ Defra Background 2026 (µg.m ⁻³)	Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Scenario 2: 2026 Without Peak Construction (µg.m ⁻³)	Scenario 3: 2026 With Peak Construction (µg.m ⁻³)	Change* in Nitrogen Deposition (kg N ha ⁻¹ year ⁻¹)	Percentage Change* of Lower Critical Load
Aston Firs SSSI_T2_190m	15 - 20	9.2	45.7	48.4	48.4	0.0	0
Aston Firs SSSI_T2_200m	15 - 20	9.2	45.7	48.4	48.4	0.0	0

**Discrepancies in changes due to rounding effects.*