

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 9.10: Local Authority Air Quality Monitoring Data within the Study Area

Document reference: 6.2.9.10

Revision: 02

November 2022

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 6.2.9.10: LOCAL AUTHORITY AIR QUALITY MONITORING DATA WITHIN THE STUDY AREA**Nitrogen Dioxide (NO₂)**

NO₂ monitoring is undertaken across the study area by the relevant councils by using a network of automatic monitoring locations and diffusion tubes. Bias adjusted NO₂ monitoring results for the locations within the study area are detailed in Table 10.1. Exceedances of the annual mean NO₂ air quality objectives are shown in bold. Data are provided to the level of accuracy presented within each Annual Status Report.

2020 and 2021 monitoring data was available for some local authorities at the time of assessment; however due to the influence of COVID-19 pandemic lockdowns restrictions on traffic levels, monitoring undertaken in 2020 and 2021 would not be considered representative of 'typical' conditions. The IAQM released a position statement in July 2021 which stated that, until the influence of COVID-19 lockdowns on traffic conditions is further understood, 2019 monitoring should be used as the last 'normal' year of monitoring data for use in assessments.

Table 10.1: NO₂ monitoring data 2015 – 2019 by Local Authority

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
Blaby District Council											
CM1, Blaby 1	454482	298573	Roadside	9km, north east	38.1	23.0	28.8	27.0	30.9	16	24.3

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
(Packhorse Drive)												
CM3, Blaby 3 (Hinckley Road, LFE)	453185	303310	Roadside	11km, north east	26.8	44.0	25.4	27.6	24.8	-	-	
CM4, Blaby 4 (Hinckley Road, LFE)	453492	303315	Roadside	11km, north east	47.9	24.9	37.1	47.3	38.4	23.3	26.9	
DT11, NOx Box A	454482	298573	Other	9km, north east	19.0	25.2	20.0	21.7	17.3	-	-	
DT12, NOx Box B	454482	298573	Other	9km, north east	20.0	24.7	20.2	20.9	17	-	-	
DT13, NOx Box C	454482	298573	Other	9km, north east	19.0	24.0	20.4	20.5	17.1	-	-	

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
DT16, The Cottage, Ratby Lane	453220	304273	Roadside	12km, north east	29.0	38.4	38.7	34.4	27.9	22.2	21.8
DT17, St Andrews Church, Hinckley Road	453137	303321	Roadside	11km, north east	20.0	26.0	24.5	25.0	19.6	-	-
DT18, 64 Packer Avenue	453488	303637	Other	11km, north east	28.0	34.3	34.7	30.1	24.9	20.6	19.1
DT22, 8 Coventry Road	448004	291660	Roadside	4km, north east	20.0	25.2	21.3	22.2	17.1	-	-
DT39, Sapcote	448847	293462	Roadside	3km, north east	15.0	16.5	-	-	15.8	11.1	11.5

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
Working Mens Club												
DT48, 98 Leicester Rd, Enderby	454519	298148	Roadside	9km, north east	-	-	35.5	34.0	25.0	18.2	18.3	
DT53, 2 Webb Close, LFE	453648	302974	Roadside	11km, north east	-	-	19.8	22.5	16.6	-	-	
DT54, 71 Hinckley Rd, LFE	453592	303415	Roadside	11km, north east	-	-	20.4	32.5	26.6	22.1	20.7	
DT56, Avalon, 9 Hinckley Rd, LFE	454079	303535	Roadside	11km, north east	-	-	26.3	24.8	21	15.9	15.8	

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
DT57, 6 Ratby Lane, LFE	454096	303599	Roadside	12km, north east	-	-	25.3	39	29.7	22.1	23.7
DT61, 92 Leicester Rd, Narborough	454434	297987	Roadside	9km, north east	-	-	19.2	28.9	20.9	-	-
DT69, Station Road, Elmesthorpe	447032	295877	Roadside	3m, north	-	-	-	-	16.7	12.9	14.5
DT73, New Road, Stoney Stanton	449036	294720	Roadside	3km, east	-	-	-	-	29.0	25.1	24.0
DT74, Broughton	449105	294705	Roadside	3km, east	-	-	-	-	25.5	20.4	21.1

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
Road, Stoney Stanton												
DT75, Long Street, Stoney Stanton	449080	294785	Roadside	3km, east	-	-	-	-	21.1	17.4	18.0	
DT78, Aston Firs, Blaby	446218	293831	Roadside	17m south of Site Boundary	-	-	-	-	31.5 ⁺	19.3	19.6	
Hinckley & Bosworth District Council												
1, Trinity Lane	442417	293808	Urban Centre	4km, west	25.9	25.0	21.6	20.3	19.6	15.6	-	
2, 1 Rufford Close	442903	291349	Suburban	5km, west	-	28.3	32.2	27.4	27.3	23.4	-	

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
3, 562 Coventry Road	440106	293080	Suburban	6km, west	-	24.7	25.2	23.8	23.1	18.7	-
5, Wheldon A5	440166	292984	Suburban	6km, west	23.4	22.6	23.0	19.9	21.7	-	-
6, 207 Rugby Road	442592	292938	Suburban	4km, west	-	22.6	21.6	20.4	19.8	15.6	-
7, 66 London Road	443624	293829	Suburban	3km, west	-	24.4	23.6	21.3	21.1	16.9	-
8, Earl Shilton Bypass	446696	296771	Suburban	2km, west	17.4	17.9	17.7	16.2	19.1	15.6	-

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
13, 36 Groby Road Ratby	451560	306273	Suburban	12km, west	-	-	-	-	28.6	15.3	-
15, 93 Rugby Road, Hinckley	442291	293579	Urban Centre	4km, west	-	35.9	35.1	31.1	29.0	24.9	-
16, 171 Rugby Road, Hinckley	442328	293264	Suburban	4km, west	-	26.3	27.6	25.0	24.0	18.9	-
Charnwood District Council											
DT17, Cow Hill Lodge (Shepshed)	448876	318307	Roadside	22km, north east	21.3	27.1	25.4	23.3	26.6	17.8	18.5

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
DT27, Ashby Rd Central (Shepshed)	448121	318257	Roadside	22km, north east	31.5	39.0	34.9	33.9	22.2	21.2	23.8	
DT46, 74 Hathern Rd (Shepshed)	448311	320511	Roadside	24km, north east	18.9	22.2	21.5	20.4	19.8	13.9	15.8	
Erewash Borough Council												
EBC2, Cairnsmore Close	447296	334193	Other	39km, north	39.5	37.2	35.0	23.3	24.3	-	-	
EBC4, Copeside Close	447333	333588	Other	39km, north	40.5	39.7	34.8	22.1	24.1	-	-	

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
EBC5, Brendon Way	447211	334543	Other	39km, north	40.9	38.9	32.0	22.7	21.8	-	-
EBC6, Guinea Close	447356	333422	Other	38km, north	31.7	30.6	27.8	18.8	19.5	-	-
EBC7, Heath Gardens	447016	333792	Urban Background	39km, north	20.8	22.6	18.8	14.6	14.7	-	-
EBC8, Bracken Road	447544	334195	Kerbside	39km, north	34.4	34.4	32.5	22.4	22.5	-	-
EBC11, Bronte Close	447280	333161	Other	38km, north	34.6	35.3	30.8	20.9	21.7	-	-

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
EBC18, Richmond Avenue	447314	333161	Other	38km, north	32.2	32.1	30.8	21.8	27.7	-	-
EBC22, Borrowdale Drive	447192	332847	Suburban	38km, north	34.4	34.2	32.3	20.2	22.8	-	-
EBC 23, Langdale Drive (Automatic)	447186	332832	Suburban	38km, north	-	-	-	20.0	22.8	-	-
EBC 23, Langdale Drive (Diffusion Tube)	447186	332832	Suburban	38km, north	-	-	-	19.9	20.4	-	-
Rugby Borough Council											

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
S55, Main St Stretton	445004	281330	Roadside	12km, south	-	25.3	20.6	20.8	21.4	13.5	-	
Coventry City Council												
Grange3, 161/163 Grange Road	435791	284285	Roadside	14km, south west	-	-	35.4	33.1	36.4	23.4	-	
North West Leicestershire District Council												
08N, End Cottage Copt Oak	448138	313012	Rural	17km, north	23.7	25.9	24.8	23.4	22.4	16.9	18.8	
26N, Molehill House	447457	326420	Roadside	31km, north	29.4	29.5	31.7	-	-	-	-	

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
32N, M1 Bridge Copt Oak	448082	313100	Other	17km, north	56.5	55.0	58.1	59.5	53.9	39.3	39.9
39N, LW new M1	446950	323750	Other	28km, north	26.0	27.3	19.8	-	20.9	16.3	16.4
45N, outside corner farm Copt Oak	448119	312920	Roadside	17km, north	29.7	33.5	31.3	30.7	26.7	23.0	21.2
Tamworth Borough Council											
Q2, 50 Lakeland Drive	423430	301280	Roadside	22km, north west	23.7	25	24.2	23.8	22.7	17.3	-
Daventry District Council (now part of West Northamptonshire Council)											

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
N12	456572	276826	Roadside	19km, south east	57.7	47.2	38.3	62.6	50.6	-	-	
N13	456461	276872	Roadside	19km, south east	26.3	26.2	22.3	26.5	20.9	-	-	
N14	457573	273884	Roadside	19km, south east	32.8	31.6	31.1	27.8	26.6	-	-	
N15	455422	275971	Roadside	21km, south east	29.9	28.6	27.0	23.2	21.9	-	-	
N16	457673	273884	Roadside	21km, south east	25.0	24.7	24.2	20.8	21.2	-	-	
Harborough District Council												
32n, Alma House, Watling	448065	287719	Roadside	6km, south east	25.3	29.9	29.2	25.1	23.9	-	-	

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)							
					2015	2016	2017	2018	2019	2020	2021	
Street Claybrooke Parva												
33n, Signpost outside White House Farm Watling Street	448948	286554	Roadside	7km south east	26.5	18.1	18.8	24.4	21.9	-	-	
North Warwickshire Borough Council												
2, Penmire Close, Grendon	427374	299431	Roadside	19km, north west	28.3	25.9	18.8	22.6	17.3	13.8	14.6	
3, Spon Lane, Grendon	427835	299652	Roadside	19km, north west	-	-	-	-	18.0	13.6	14.0	

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Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
8, A5 Watling Street, Dordon	426026	300135	Roadside	21km, north west	-	-	-	-	46.8	35	42.7
27, Coleshill Road, Atherstone	430940	297759	Roadside	15km, north west	-	-	-	-	26.0	19.0	20.5
29, Long Street, Atherstone	430912	297773	Kerbside	15km, north west	29.5	31.3	31.3	31.6	30.7	22.6	25.3
Nuneaton & Bedworth Council											
NB06, Tudor Ct Bowling Green Ln	434313	285292	Roadside	13km, south west	34.6	34.9	25.7	32.0	31.4	-	-

Location and Reference	Grid Reference		Site Type	Distance from and direction to HNRFI	Monitored Annual Mean NO ₂ Concentration (µg.m ⁻³)						
					2015	2016	2017	2018	2019	2020	2021
NB31, 376 Longford Road	435146	284563	Roadside	13km, south west	33.4	34.3	32.1	30.2	29.4	-	-
NB35, 60 Watling St	439268	293457	Roadside	13km, south west	24.8	24.8	23.2	22.9	23.2	-	-

+ data capture less than 75%, - data not available

Particulate Matter (PM₁₀ and PM_{2.5})

Concentrations of PM₁₀ are monitored at the CM1 automatic monitoring location, which is located within Blaby District Council on Packhorse Drive approximately 9km north east of the Site. Monitored concentrations of PM₁₀ and PM_{2.5} at the CM1 automatic analyser are detailed in Table 10.2.

Table 10.2: BDC PM₁₀ and PM_{2.5} monitoring data in 2015 – 2019 at the CM1 automatic analyser.

Pollutant	Grid Reference		Site Monitoring Type	Monitored Annual Average Concentration (µg.m ⁻³)						
				2015	2016	2017	2018	2019	2020	2021
PM ₁₀	454482	298573	Roadside	15.8	12.0	14.8	11.0	11.8	11.5	10.8
PM _{2.5}				11.1	8.4	10.4	7.7	8.3	8.1	7.6

No other local authorities undertake particulate matter (PM₁₀ or PM_{2.5}) monitoring within the study area.