

Air Quality and Dust Monitoring Monthly Report – November 2023

North Warwickshire Borough Council



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2021, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in North Warwickshire Borough Council (NWBC) during November 2023.
- 1.1.2 Figures 1 and Figure 2 in Appendix A present the current worksites together with the dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current worksites, as presented in Figure 1 and Figure 2, include:

Sublot 6BS

Gilson Embankment

- Formwork, Reinforcement & Concrete (FRC) works inside cofferdams at M42 CHN.

Gilson Drive

- Welding desk segments ready for M42/M6 link viaduct bridge launch.
- Installation of rotary bored piles.
- FRC works inside Cofferdam.
- Excavation of cofferdams.

Attleboro Lane Overbridge

- Pier construction and installation of temporary works for precast beam installation.
- Water Orton Cutting: excavation of single box and boubel box, and base slab construction.

Birmingham Road

- 4th arm work - Breaking down tarmac for Extension of Haul road and tie-in work to new Bailey bridge work.
- Platform P13: Breaking down concrete slab, tarmac and construction of piling platform work.
- Construction of new ditch diversion work.
- Pile arising stabilization work and moving stockpile work

Sublot 7

Faraday Avenue Embankment and Underbridge and Marston Box

- Stockpiling stone.
- Trimming batters on the Embankment.
- Stoning embankment.
- Haul road maintenance.

Sublot 6NC

- No works undertaken.

Sublot 5N

Chattle Hill Box Structure

- FRC works in Cofferdam 2.
- Installation of sheet pile Cofferdam 1.
- FRC works inside Cofferdams at Watton House.

1.1.5 Seven (7) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.

1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor presented in Figure 3. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.

1.1.7 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (October 2018)*' has been applied.

1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (November 2023).

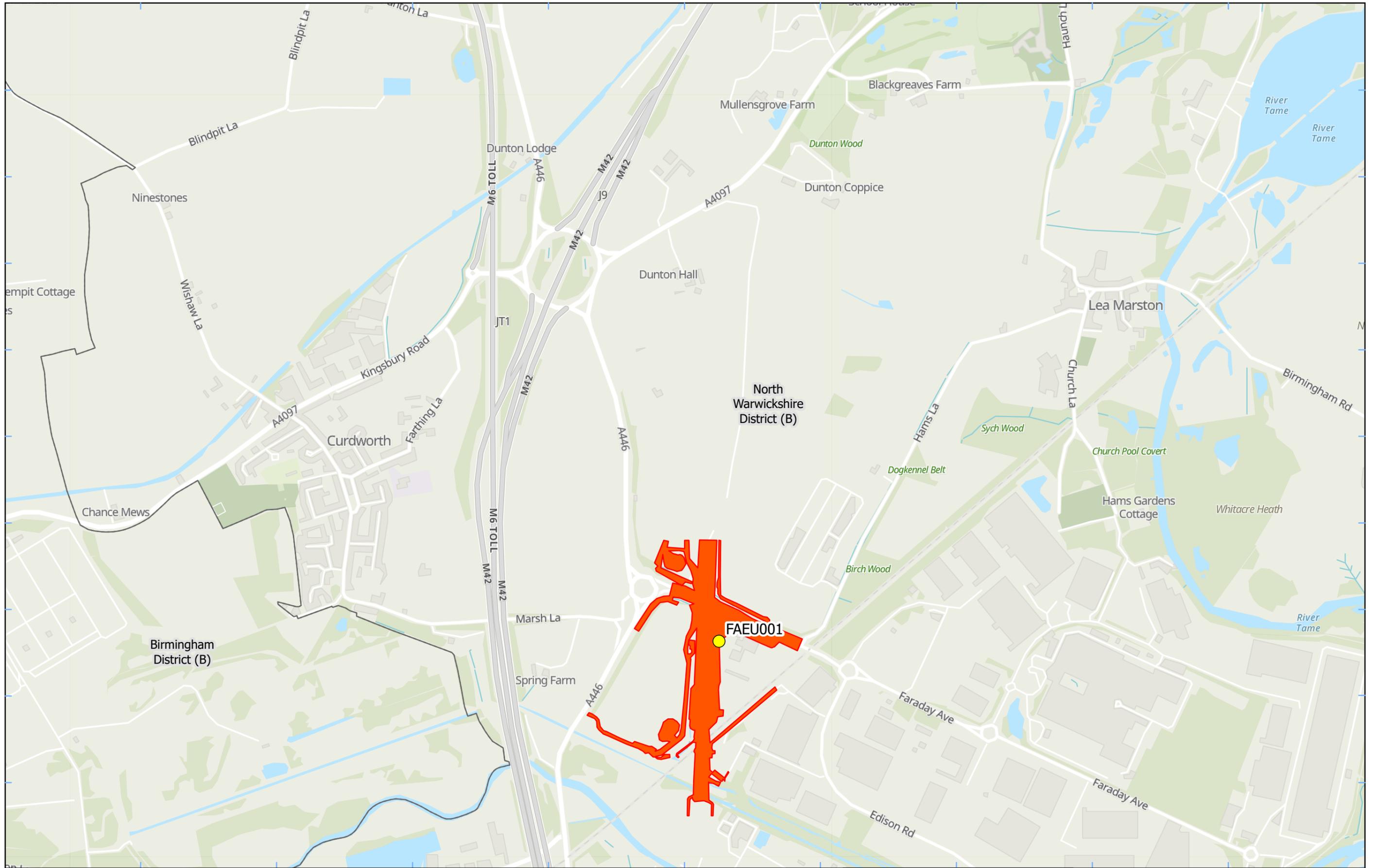
1.1.9 Data capture was below 90% for multiple monitors due to a full maintenance work up and battery refresh was carried out on monitor BRD001 on 9th November 2023. A battery refresh was done on monitor AFE001 on 16th November 2023.

1.1.10 Monitor CHBS001 was installed and commissioned on 21st November 2023.

1.1.11 There were no (0) complaints received during this reporting period (November 2023).

Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within NWBC



Legend

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

Map Number

Map Name
**Worksite and Monitoring Locations
In NWBC (Sheet 1)**

North Warwickshire Borough

Map Name
**Worksite and Monitoring Locations
In NWBC (Sheet 1)**

North Warwickshire Borough

hs2

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

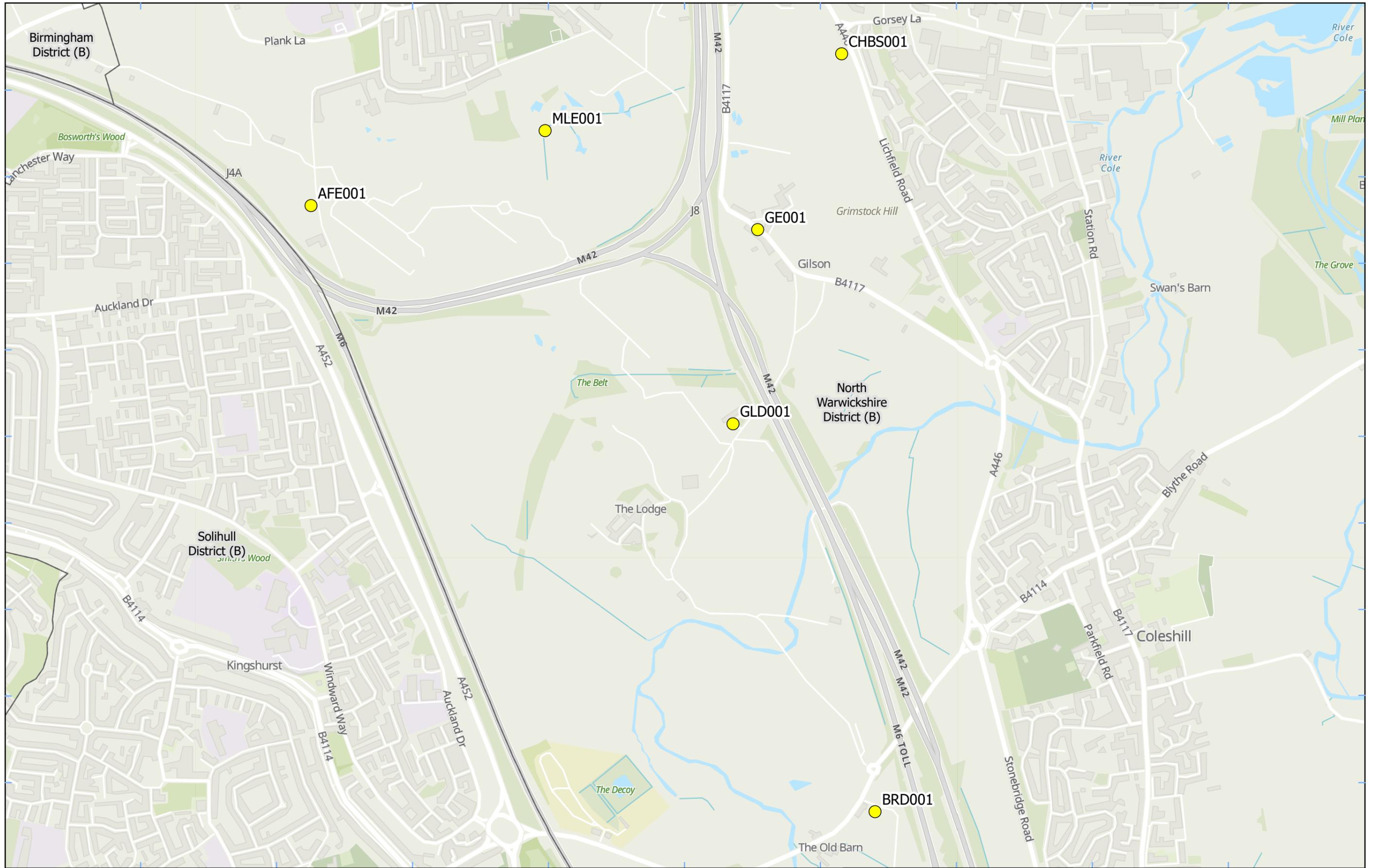
Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2023.
Ordnance Survey Licence Number 100049190.

Doc Number:

Date: 22/12/23

Scale at A3: 1:11,000



Legend

- Dust Monitor
- District Borough Unitary Boundaries

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

Map Number

Map Name
**Monitoring Locations
In NWBC (Sheet 2)**

North Warwickshire Borough

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2023.
Ordnance Survey Licence Number 100049190.

Doc Number:

Scale at A3: 1:11,000

Metres

Date: 22/12/23

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1- hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
BRD001	419262, 288328	New Cottage, Birmingham Road, Coleshill	M	Y	N	7.2	0.2	37.5	0	99.4
FAEU001	419164, 292273	Faraday Avenue Embankment and Underbridge, at Orchard Cottage	M	Y	N	8.0	0.8	36.7	0	96.7
GLD001	418807, 289570	Gilson Drive	M	Y	N	7.1	0.8	38.9	0	100.0
MLE001	418205, 290509	Vicarage Lane	M	Y	N	9.8	0.4	114.8	0	100.0
AFE001	417455, 290269	Attleboro Farm, Attleboro Lane	M	Y	N	7.6	0.1	58.6	0	73.2
GE001	418886, 290192	Lovegrove Cottage, Gilson Road	M	Y	N	8.7	0.1	88.0	0	99.9
CHBS001	419155, 290755	6 Gorsey Way, Lichfield Road	L	Y	Y	11.4	1.6	38.8	0	31.8

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



