

Air Quality and Dust Monitoring Monthly Report – June 2023

Solihull Metropolitan 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.

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

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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 Solihull Metropolitan Borough during June 2023.
- 1.1.2 Figures 1 and Figure 2 in Appendix A indicate the current worksites together with the dust monitoring locations for June 2023.
- 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 phase of works commenced in September 2020 and is expected to be completed by 2026. The current worksites, as presented in Appendix A, Figures 1 and Figure 2, include:

Sublot 2B3

Balsall Common Viaduct:

- Haul Road Traffic;
- Truggist Lane Traffic; and
- Roller on platform.

Park Lane:

- Traffic moving past monitor/delivers;
- Gravel stockpile material being moved;
- Stockpile of material collins/Moving Traffic/Murphy's Wagons;
- Excavator/ADT;
- Haul Road traffic moving past; and
- Trial Holes being dug – Vac Ex/Stockpile of material – Collins Earthworks/Moving Traffic/Murphy's Wagons.

A452 Compound:

- ADTs using Haul Road.

Sublot 5S

Coleshill Hill Heath Road Underbridge:

- Transport, stabilise, compact;
- Pile cropping;
- Piling; and

- Rigid inclusion installation.

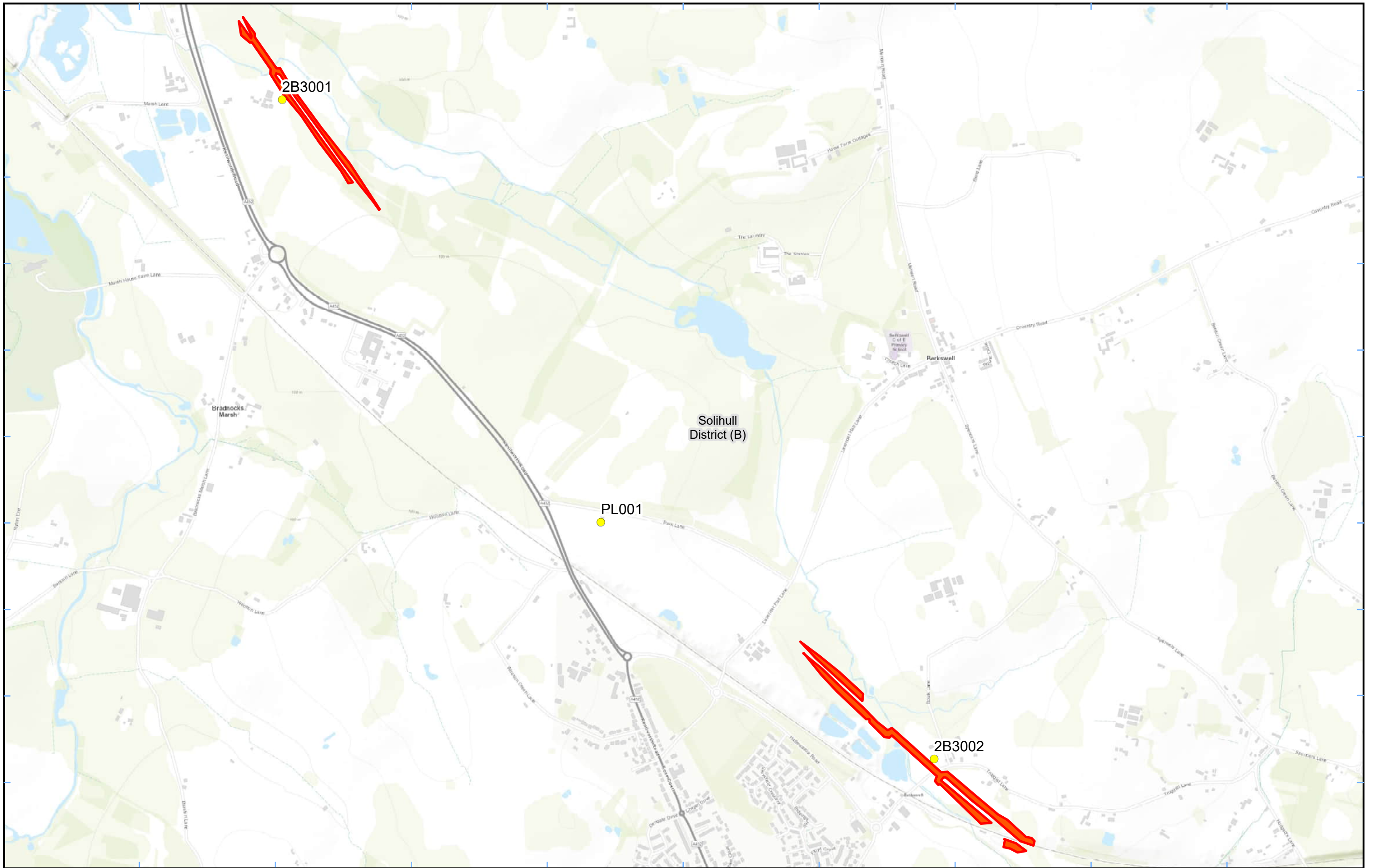
Coleshill Heath Road:




- Excavation/ducting/backfill; and
- Topsoil stripping.

- 1.1.5 Four (4) dust monitors are installed at the worksites, where works are underway. These sites returned a 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 the dust monitors 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 Dust trigger alerts were recorded during the monitoring period (June 2023) and are reported in Appendix B, Table 2.
- 1.1.9 There were no (0) complaints received during this reporting period (June 2023).

Appendix A – Worksites and Monitoring Locations



Figure 1 and Figure 2: Worksites and Monitoring Locations within SMBC



Legend
 Dust Monitor  District Borough Unitary Boundaries
 Worksite


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Map Number
 Map Name
**Worksite and Monitoring Locations
 In SMBC (Sheet 1)**
 Solihull Metropolitan Borough

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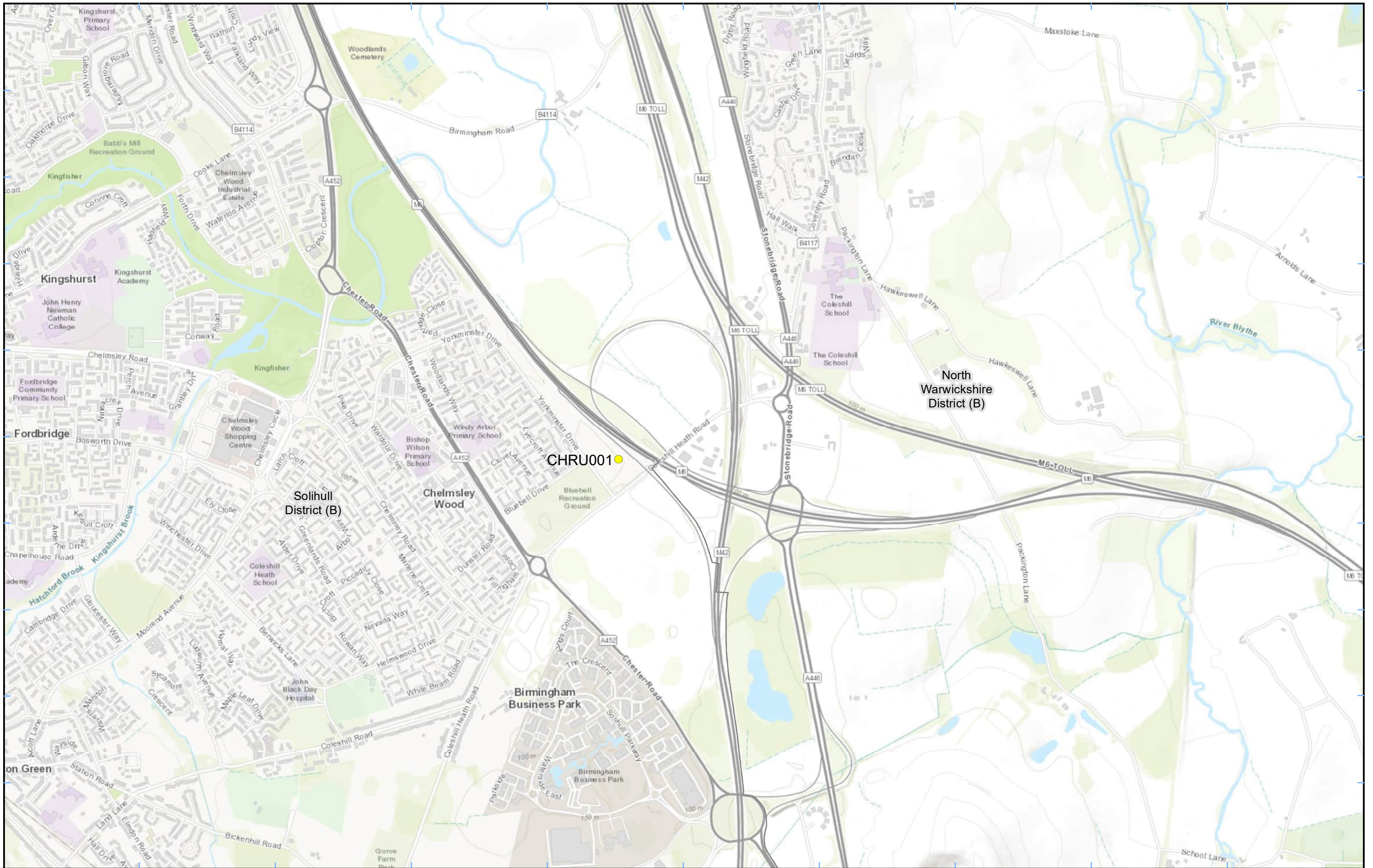
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Legend
 ● Dust
 □ District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In SMBC (Sheet 2)**
 Solihull Metropolitan Borough

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Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and June 2023 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 Month (%)
2B3001	422322, 280034	Sublot 2B3, at Marsh Farm	M	Yes	N	10.5	1.9	54.0	0	100.0
2B3002	424601, 277729	Sublot 2B3, at Cherry Tree Cottage	M	Yes	N	13.7	0.0	574.6	7	92.2
CHRU001	419300, 286793	Bluebell Drive, Coleshill Heath Road Underbridge	M	No	N	9.7	0.4	47.5	0	100.0
PL001	423436, 278557	Park Lane	M	No	N	13.4	1.3	206.4	1	98.3

Table 2: Summary of exceedances of trigger level in June 2023.

Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
2B3002	01/06/2023 15:01 – 16:00; 262.87 µg/m ³ 02/06/2023 11:01 – 12:00; 250.68 µg/m ³ 12:01 – 13:00; 267.13 µg/m ³ 04/06/2023 02:01 – 03:00; 200.65 µg/m ³ 07/06/2023 22:01 – 23:00; 280.65 µg/m ³ 23:01 – 00:00; 574.62 µg/m ³ 08/06/2023 00:01 – 01:00; 548.99 µg/m ³	The exceedances on 01/06/2023 and 02/06/2023 were caused by a farmer burning rubbish and the resultant smoke drifted over to where the monitor was located. The exceedances that were recorded on 04/06/2023, 07/06/2023 and 08/06/2023 occurred outside of BBV working hours, so were not caused by HS2 construction works.	n/a
PL001	12/06/2023 15:01 – 16:00; 206.41 µg/m ³	The exceedance was caused by a combination of dry weather and heavy plant machinery passing close by the monitor.	The site foreman was asked to be more vigilant with site speed limits and the covering of fine materials in sensitive areas. The amount of damping down of this particular area was also increased

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

