

HS2

May 2023

Air Quality and Dust Monitoring Monthly Report – May 2023

Lichfield District Council



Department for Transport

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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.

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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 Lichfield District (LDC) during May 2023.
- 1.1.2 Figure 1 in Appendix A indicate the current worksites together with the dust monitoring locations for May 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 worksites, as presented in Appendix A, Figure 1, include:

Shaw Lane Embankment and Underbridge (Sublot 8.2)

Spinney Nurseries:

- 'Raw Water Diversion Security Guard Only
- Grass cutting
- CLD Gate installation for Compound Entrance
- Gate installation for compound
- Survey Station Installation
- PMI 1460 - Site Security Works
- WCML Surveys
- NFP Drainage Arisings
- Site Maintenance
- Engineering Support
- HC190-CT404 (John Gorse / Crossing SSW)
- Conducting survey
- Shaw Lane Access - GS6 Installation
- Swan Lake - GS6 Installation
- Ducting connection by the electrical team

- Backfilling for all street light and container ducting

Shaw Lane car park:

- Handrail and car stopper installation for the car park

Streethay Cutting Retaining Structure (Sublot 8.3)

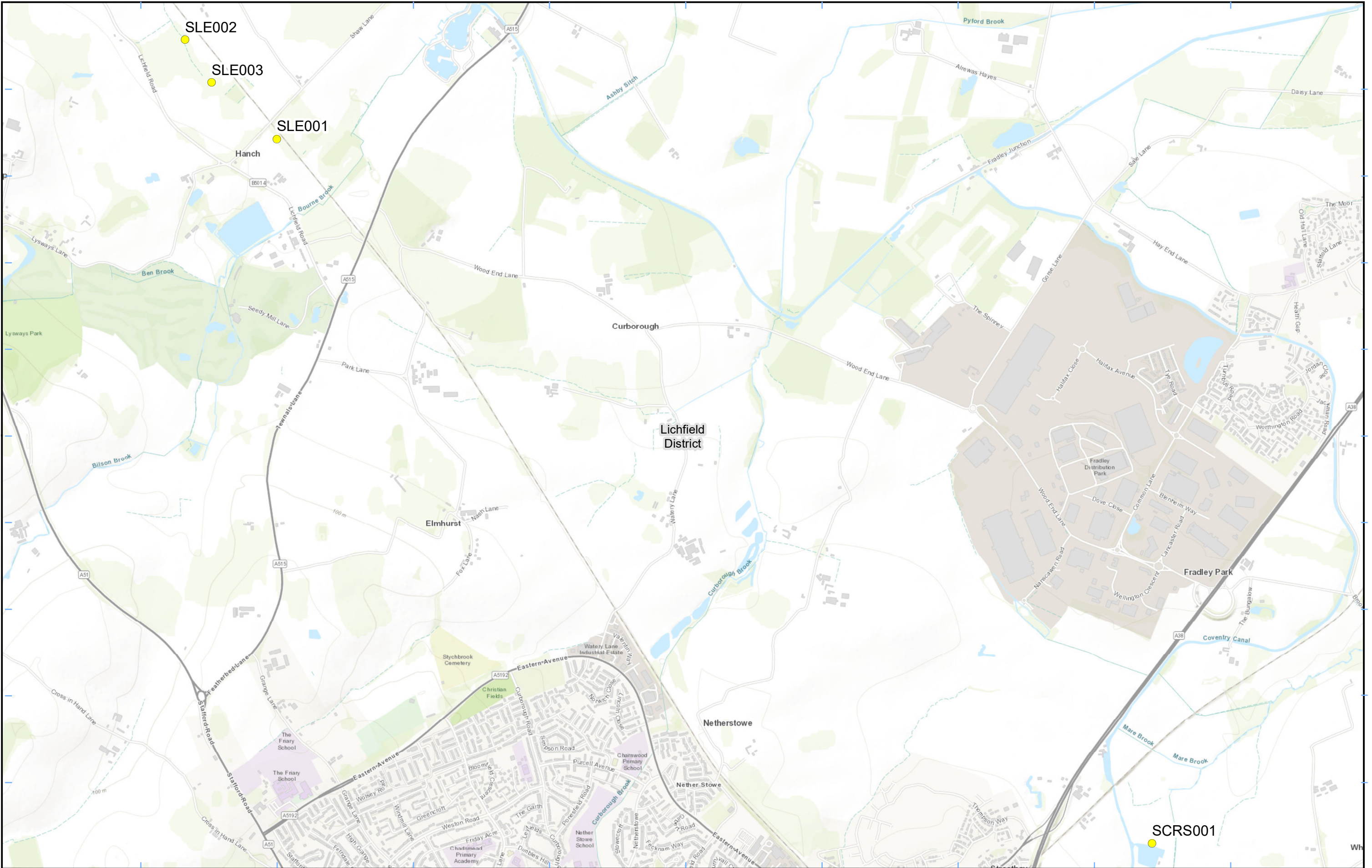
- Secant piling works

- 1.1.5 Four (4) dust monitors are installed at the worksites, where works are underway. These sites returned a low 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 2. 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 mitigations.
- 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 There were no (0) dust trigger alerts recorded during the monitoring period (May 2023).
- 1.1.9 Data capture was below 90% for SLE002 due to power being lost following the installation of a replacement monitor. The issues were investigated but could not be resolved remotely or through field maintenance. A repair swap out was conducted on monitors SLE002 and SLE003 on 25th May 2023, and no further issues have been reported.
- 1.1.10 There were no (0) complaints received during this reporting period (May 2023).

Appendix A – Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within LDC





Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In LDC (Sheet 1)**
 Lichfield District

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Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and May 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 for Month (%) |
|--------------------|-------------------|--|---------------------------|--------------------------------------|---|---|--|--|--|----------------------------|
| SLE001 | 410383, 314185 | Spinney Nurseries, Shaw Lane Embankment | L | Yes | No | 8.7 | 1.1 | 51.7 | 0 | 100.0 |
| SLE002 | 409903, 314705 | New Farm Produce 1, Shaw Lane Embankment | L | Yes | No | 2.7 | 0.1 | 17.0 | 0 | 64.0 |
| SLE003 | 410041, 314481 | New Lane Produce 2, Shaw Lane Embankment | L | Yes | No | 5.1 | 0.1 | 36.7 | 0 | 95.3 |
| SCRS001 | 414913, 310498 | Streethay Cutting Retaining Structure, King's Orchard Marina | L | Yes | No | 5.7 | 0.1 | 68.5 | 0 | 94.9 |

Figure 2: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

