

Air Quality and Dust Monitoring Monthly Report – May 2022 Birmingham City Council



Department for Transport

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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 dust monitoring undertaken within Birmingham City Council (BCC) during May 2022.
- 1.1.2 Figure 1 to 3 in Appendix A indicates the BCC worksite together with dust monitoring locations for May 2022.
- 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 first phase of works commenced within BCC during November 2018 and it is completed in 2020. The current worksites, as presented in Appendix A, Figure 1 to 3, include:

Curzon Street Station

- Ground remediation; and
- Utility diversion works.

Washwood Heath

- Setup of the compound area and haulage routes; and
- Demolition and crushing of existing concrete foundations.

Bromford East Tunnel Portal (BETP)

- On-site slurry treatment.

- 1.1.5 Seven (7) dust monitors are installed around the worksites, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results for May 2022 are presented in Appendix B, Table 2 together with line charts for each dust monitor presented in Figure 4. 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

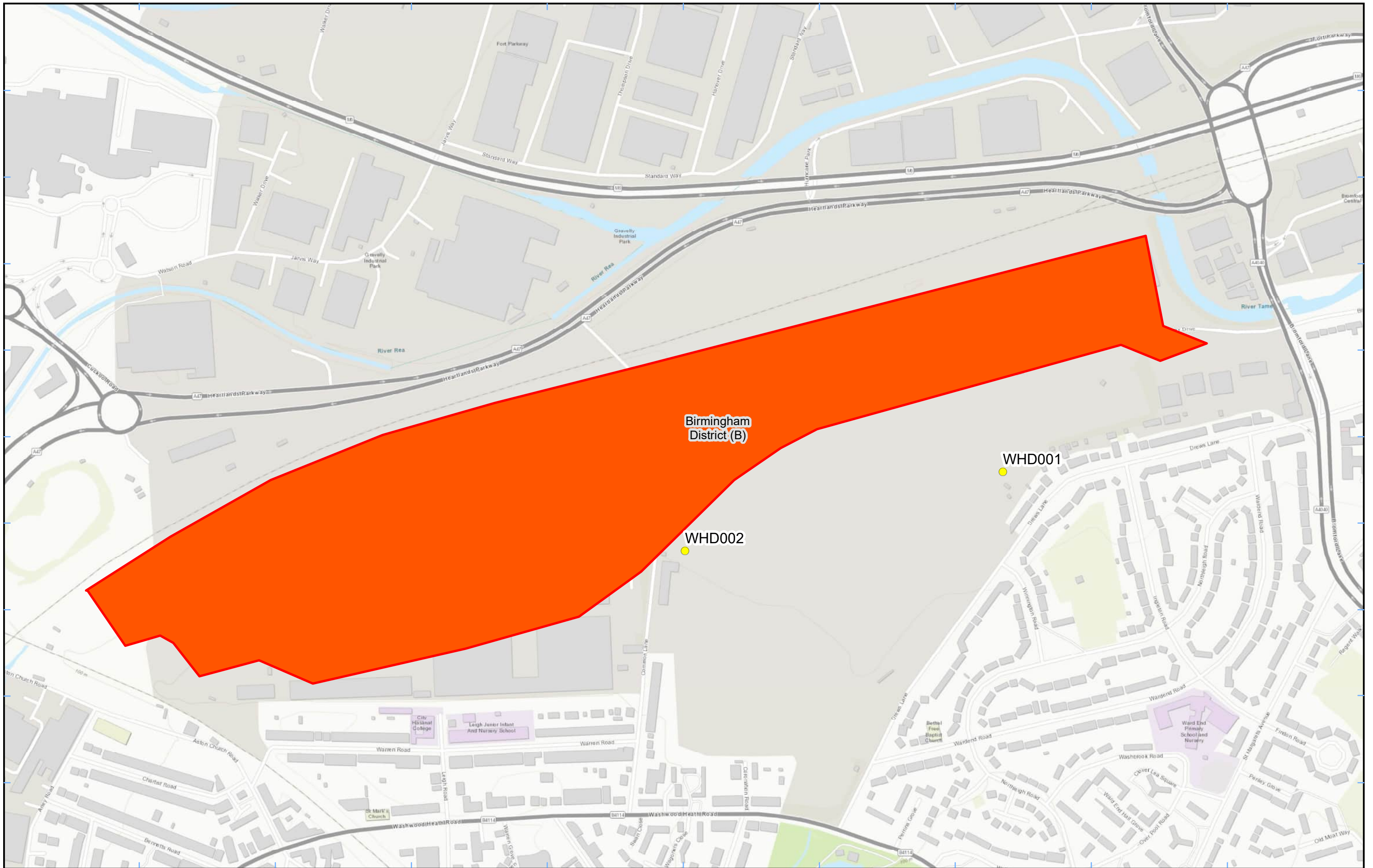
human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.

- 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 – (November 2018)*' has been applied.
- 1.1.8 There were no (0) dust trigger alerts recorded during the monitoring period (May 2022).
- 1.1.9 No (0) complaints were recorded during the reporting period.

Appendix A –Worksite and Dust Monitoring Locations

Figure 1 to 3: Worksites and monitoring locations within the BCC





Legend
 Dust Monitor
 Worksite
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet1)**
 Birmingham City Council



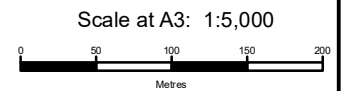
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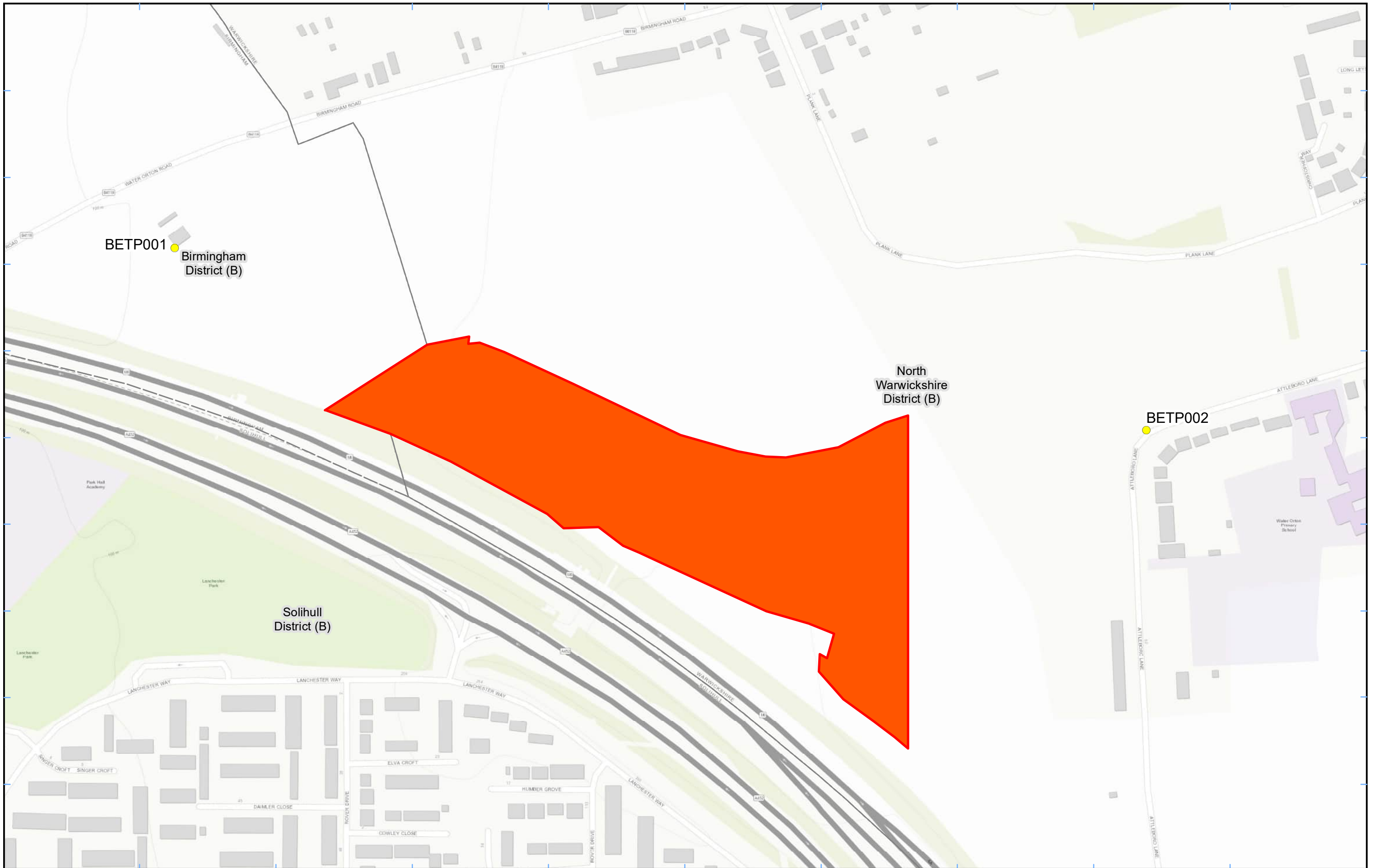
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Legend
 Dust Monitor  District Borough Unitary Boundaries
 Worksite

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Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet2)**
 Birmingham City Council



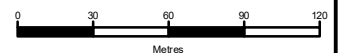
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Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
 In BCC (Sheet 3)**

Birmingham City County

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Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and May 2022 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 rate (%) |
|----------------------|-------------------|---|---------------------------|--------------------------------------|---|---|--|--|---|-----------------------|
| Dust #530 (old #555) | 407702, 287079 | Curzon Street Station HS2 Site | H | N/A | N/A | 5.0 | 0.1 | 37.6 | 0 | 95.4 |
| Dust #753 | 407619, 287006 | Curzon Street Station HS2 Site | H | N/A | N/A | 4.5 | 0.1 | 35.3 | 0 | 91.4 |
| Dust #552 | 407765, 287073 | Curzon Street Station HS2 Site | H | N/A | N/A | 6.8 | 1.1 | 50.1 | 0 | 100.0 |
| WHD001 | 411221, 289245 | Washwood Heath Depot, near receptors on Drews Lane | M | Yes | No | 11.9 | 0.9 | 168.2 | 0 | 100.0 |
| WHD002 | 410758, 289130 | Washwood Heath Depot, near receptors on Common Lane | M | Yes | No | 1.7 | 0.1 | 83.7 | 0 | 95.3 |
| BETP001 | 416620, 290808 | Bromford East Tunnel Portal, Twisted Oak Stables | M | Yes | No | 6.5 | 0.7 | 34.7 | 0 | 100.0 |
| BETP002 | 417467, 290649 | Bromford East Tunnel Portal, Attleboro Lane | M | Yes | No | 6.9 | 1.0 | 94.5 | 0 | 100.0 |

Figure 4: Construction dust hourly mean indicative PM₁₀ concentration for all monitors

