

Air Quality and Dust Monitoring Monthly Report – August 2024

Birmingham City 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.

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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 August 2024.
- 1.1.2 Figure 1 to Figure 3 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 Appendix A, Figure 1 to Figure 3, include:

Sublot 4

Washwood Heath

- Traffic on main site haul road, including haul road maintenance with excavator, Articulated Dump Trucks (ADTs), dozer and roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading/unloading plant/material deliveries.
- Cranes and piling rigs working in permanent brook area to remove sheet piles and break corbel.
- Stockpile management area including tipping and loading of ADTs and wagons, excavators and dozers.
- Tarmac batching plant operations, including delivery of aggregates, operating plant and concrete wagons.

Curzon Street

- Reinforced concrete piers construction.
- Concrete pours.
- Traffic on main site haul road (Tarmac batching plant operations, delivery wagons, aggregate delivery, operating plant, concrete wagons).
- Site welding tripods.
- Deck formwork, falsework erection.
- Deck steel fixing.
- Deck finishing works.
- Drainage works.
- Hydrodemolition works.

Bromford East Tunnel Portal (Sublot 1B)

- Continue drilling for anchoring for north side brackets.
- Installing dywidags for north brackets.
- Sump excavation A3.
- Dismantling traveller formwork.
- Concrete to sump and MSV north.
- Breaking concrete for sump stage 2.
- Lateral restrains for Escalib stairs.
- Capping beam protection.
- Dismantle traveller formwork and scabbling of infills northside.
- Small modifications in shutters and traveller formwork.
- Installation of MSV overbridge.

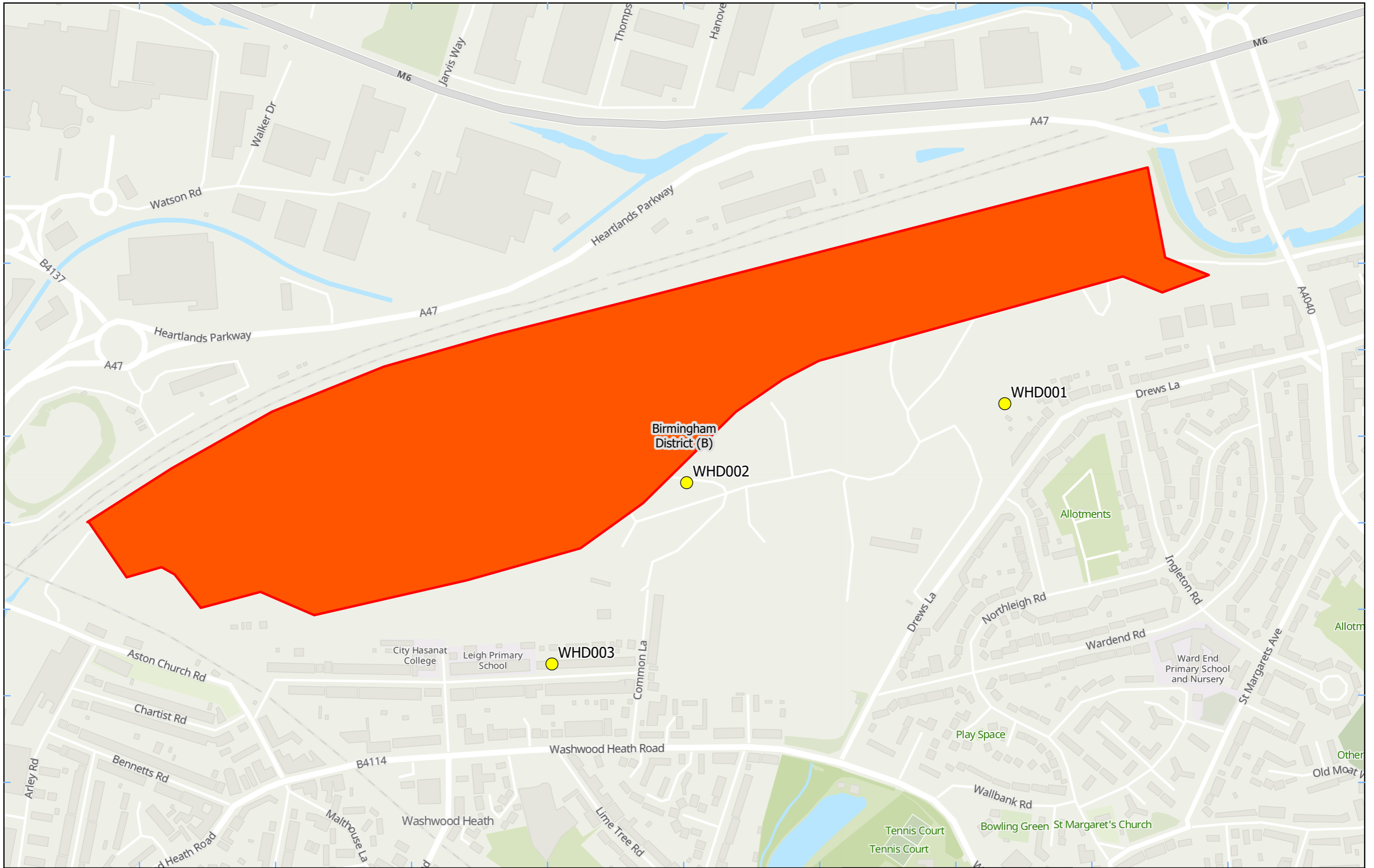
Curzon Street Station – Pre-main works

- Stripping of weathering layer
- Pile matt construction
- Installation of temporary haul road

- 1.1.5 Eight (8) 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 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 (October 2018)*' has been applied.
- 1.1.8 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 There were no (0) complaints received during the reporting period (August 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1 - 3: Worksites and Monitoring Locations within BCC



Legend
 [Red outline] District Borough Unitary Boundaries [Red fill] Worksite
 [Yellow dot] Dust Monitor

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Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 1)**
 Birmingham City Council

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Legend

- District Borough Unitary Boundaries
- Worksite
- Dust Monitor

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Map Number

Map Name
**Worksite and Monitoring Locations
In BCC (Sheet 2)**

Birmingham City Council

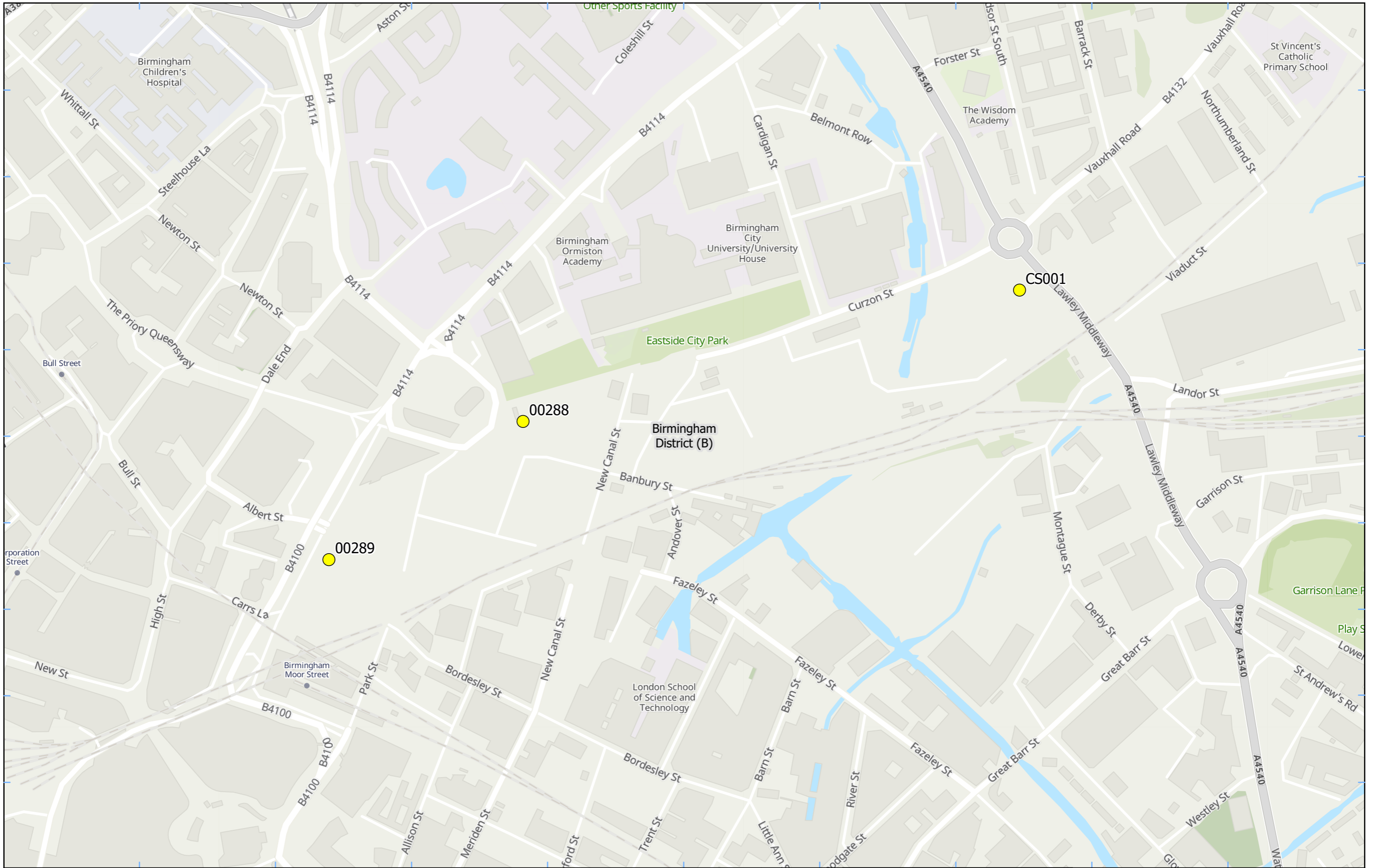
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Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In BCC (Sheet 3)**
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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 PM10 concentration (µg/m3)	Minimum 1-hour PM10 concentration (µg/m3)	Maximum 1-hour PM10 concentration (µg/m3)	Number of 1-hour periods exceeding trigger level of 190 µg/m3	Data capture (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	12.2	0.1	66.4	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	10.1	0.3	43.4	0	99.6
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	8.3	0.5	40.5	0	100.0
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	L	Yes	No	18.0	0.5	98.7	0	99.9
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	9.1	0.4	46.4	0	100.0
CS001	408254, 287210	University Locks, Curzon Street	M	Yes	No	2.1	0.1	28.2	0	98.8
00288	407676, 287057	Curzon St – East Side City Park	M	Yes	No	18.4	0.1	385.7	3	94.9
00289	407450, 286896	Curzon St – Moor St Queensway	M	Yes	No	15.1	1.2	190.2	1	99.7

Table 2: Summary of exceedances during period (August 2024)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
00288	13/08/2024 12:01 – 13:00; 298 µg/m ³ 14:01 – 15:00; 386 µg/m ³ 29/08/2024 13:01 – 14:00; 227 µg/m ³	Dry weather on site at the time of trigger, dust controls in place to manage dust as much as practicable.	Controls already in place to manage dust on site during warm / dry weather.
00289	13/08/2024 15:01 – 16:00; 190 µg/m ³	Dry weather on site at the time of trigger, dust controls in place to manage dust as much as practicable.	Controls already in place to manage dust on site during warm / dry weather.

Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

