

## Air Quality and Dust Monitoring Monthly Report – January 2022

London Borough of Hammersmith and  
Fulham



## 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 air quality and dust monitoring undertaken in the London Borough of Hammersmith and Fulham (LBHF) during December 2021 and January 2022 respectively.
- 1.1.2 Figure 1 and Figure 2 in Appendix A indicate the current worksite together with air quality and dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from [www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2](https://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 August 2020 and is expected to be completed by 2025. The current worksites, as presented in Appendix A, Figure 1 to Figure 2, include:
- Old Oak Common Depot and mobilisation and new site set up for the station works;
  - Permanent Accommodation Building fit out;
  - Vegetation Strimming;
  - Hex Depot building - Demolition works / Slab breakout and material processing;
  - Construction of temporary haul roads;
  - Drainage installation;
  - Piling and D-Wall activities – East / Central Box;
  - Breaking down of D-Wall / Capping Beam Construction – West Box;
  - Old Oak Common Lane boundary wall stabilisation Works;
  - Conveyor steel erection;
  - Asphalt and tarmac laying for Haul road; and
  - Hording electrical installation – Wormwood Scrubs.
- 1.1.5 Four (4) dust monitors are installed around worksites, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, **Error! Reference source not found.**, together with line charts of monthly data from each dust monitor 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.

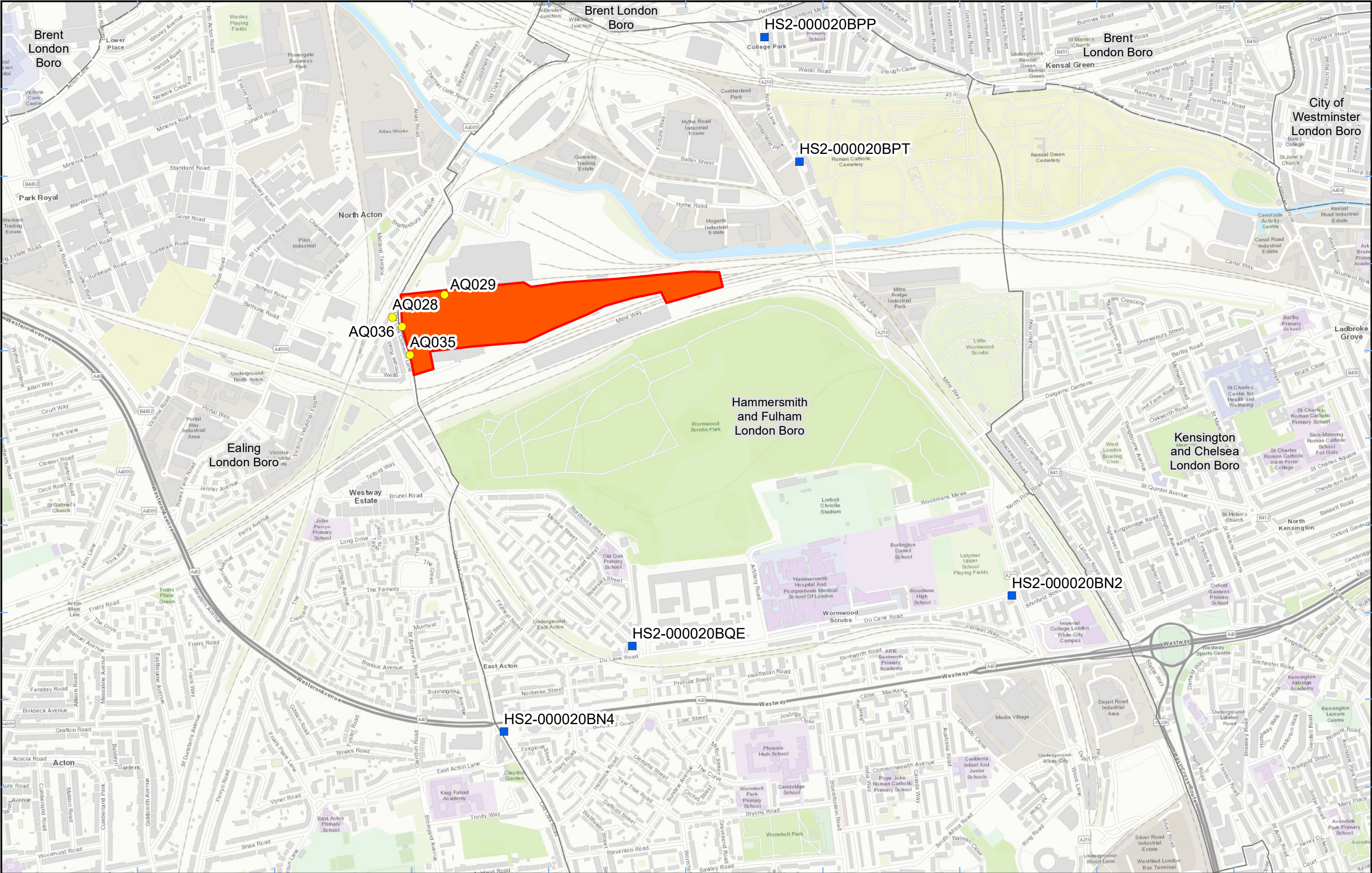
- 1.1.7 The trigger level for PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (October 2018)*' has been applied.
- 1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (January 2022).
- 1.1.9 Data capture was below 90% for monitor AQ029 in January 2022 due to power supply issues.
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO<sub>2</sub>) is undertaken at seven (7) locations around highways within the LBHF as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.11 Diffusion tube monitoring results are as provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.
- 1.1.12 NO<sub>2</sub> monitoring locations and results are presented in Appendix C, Table , together with the 2021 running mean.
- 1.1.13 There were no (0) complaints received during this reporting period.

# Appendix A – Worksites and Monitoring Locations

Figure 1 and 2: Worksites and monitoring locations within the LBHF







**Legend**

- Diffusion Tube
- Dust Monitor
- Worksite
- District Borough Unitary Boundaries

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Map Number

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

**London Borough of Hammersmith  
and Fulham**

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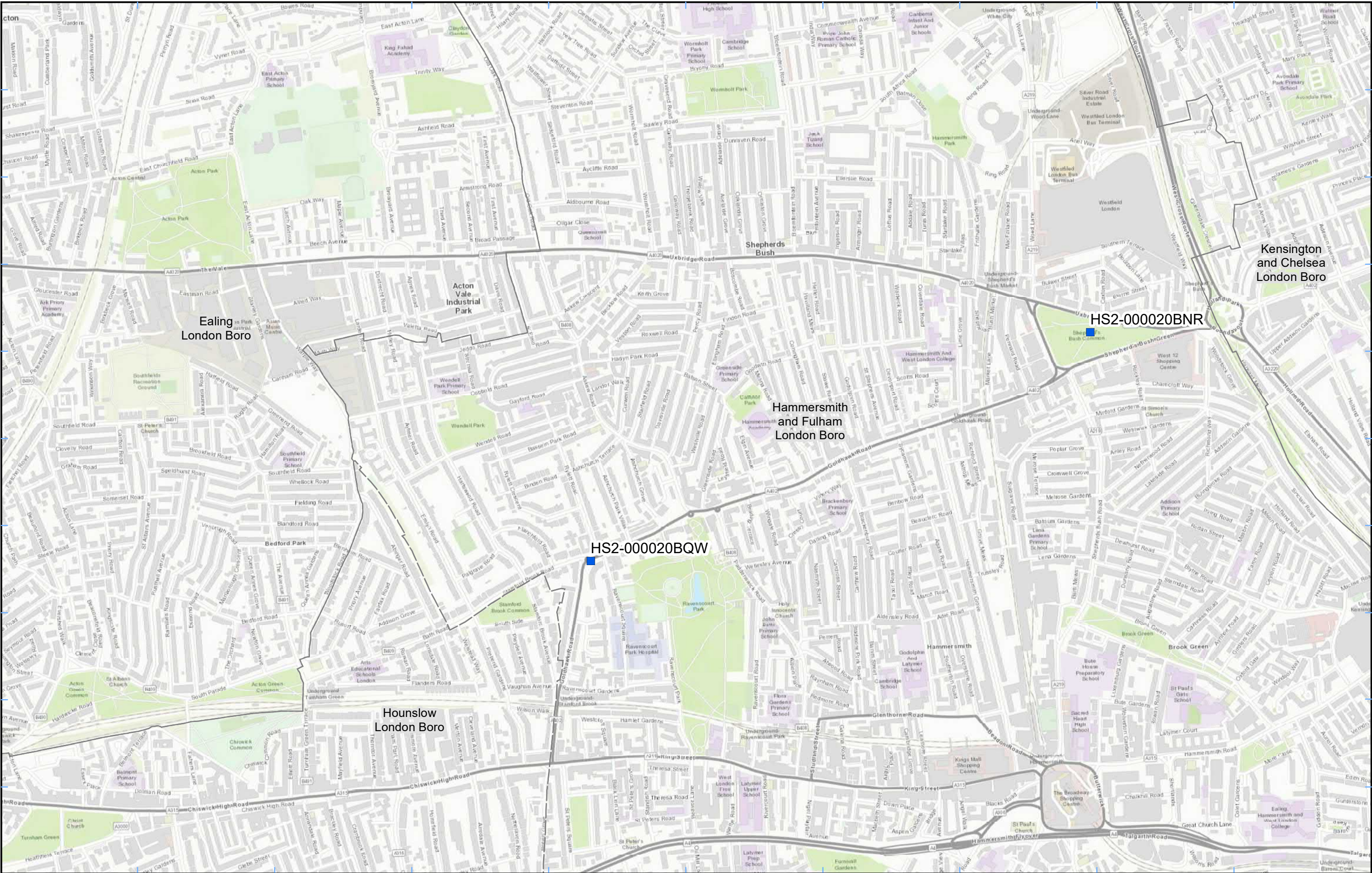
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**Legend**

- Diffusion Tube
- District Borough Unitary Boundaries

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Map Number

Map Name

**Monitoring Locations In LBHF  
(Sheet 2)**

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# Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring locations and January 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 <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1-hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture (%)
AQ028	521302, 182067	Wells House Road	M	Yes	N	14.6	1.1	130.6	0	100.0
AQ029	521453, 182132	Old Oak Common	H	Yes	Y	18.1	1.6	78.3	0	17.3
AQ035	521353, 181959	Old Oak Common	H	Yes	N	15.2	1.2	48.0	0	100.0
AQ036	521330, 182041	Old Oak Common	H	Yes	N	10.9	0.7	47.4	0	100.0



Figure 3: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for dust monitors



# Appendix C – Air Quality Monitoring Results

Table 2: NO<sub>2</sub> monitoring locations around highways, NO<sub>2</sub> concentrations and monthly monitoring results with running mean for 2021 (µg/m<sup>3</sup>)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
HS2-000020BN2	Lamp post on Du Cane Road	523092, 181264	52	49	46	42	45	Tube Missing	35	34	49	48	38	48	44
HS2-000020BN4	End of cycle lane sign on Old Oak Road	521625, 180871	55	49	47	54	48	43	34	33	47	42	Tube Missing	39	45
HS2-000020BNR	Lamp posts in Shepherd's Bush Common	523481, 179871	42	39	34	33	34	25	26	25	43	36	36	37	34
HS2-000020BPP	Sign post on A219 Scrubs Lane, South of Harrow Road	522378, 182877	48	52	40	40	39	37	42	35	51	48	48	46	44
HS2-000020BPT	Controlled Zone/Zone Ends road sign on A219 Scrubs Lane, north of Hythe Road	522478, 182517	52	52	44	45	42	36	34	33	42	51	32	34	41
HS2-000020BQE	Lamp post next to No 11 Wulfstan Street	521996, 181118	38	33	33	29	27	19	21	19	32	30	31	33	29
HS2-000020BQW	Lamp post on A402 Goldhawk Road	522037, 179209	44	44	39	36	35	34	26	27	40	40	27	42	36

<sup>1</sup> Note: to aid interpretation and conform with best practice, the monthly measurements in this table are reported rounded to the nearest whole number. The annual mean presented here is calculated based on laboratory data to 4 significant figures, rounded to a whole number, and therefore may differ slightly to a mean derived from averaging the rounded monthly measurements in the table.