

Air Quality and Dust Monitoring Monthly Report – May 2019

London Borough of Brent



SKANSKA



Department for Transport

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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 Brent (LBB) during April and May 2019 respectively.
- 1.1.2 Figure 1 in Appendix A indicates the current work sites 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, 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 within the LBB during September 2018 and are expected to be completed by July 2019. The current worksite, as presented in Appendix A, Figure 1, includes:
- Canterbury Road Vent Shaft, securing of site, pre-demolition surveys and soft strip. Worksite ref: S001-WS06.
- 1.1.5 One (1) dust monitor is installed on the worksite, where pre-demolition works are underway. This site returned a high 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 in Figure 2.
- 1.1.7 The trigger level of $190 \mu\text{g}/\text{m}^3$, 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) exceedances of the dust trigger level during the month of May 2019. All results were in line with expected ranges.
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO_2) was undertaken at four (4) locations in April 2019, around highways within the LBB as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.10 Diffusion tube monitoring results are provided from the laboratory analysis, and therefore still require various analysis and adjustments to be undertaken. Final

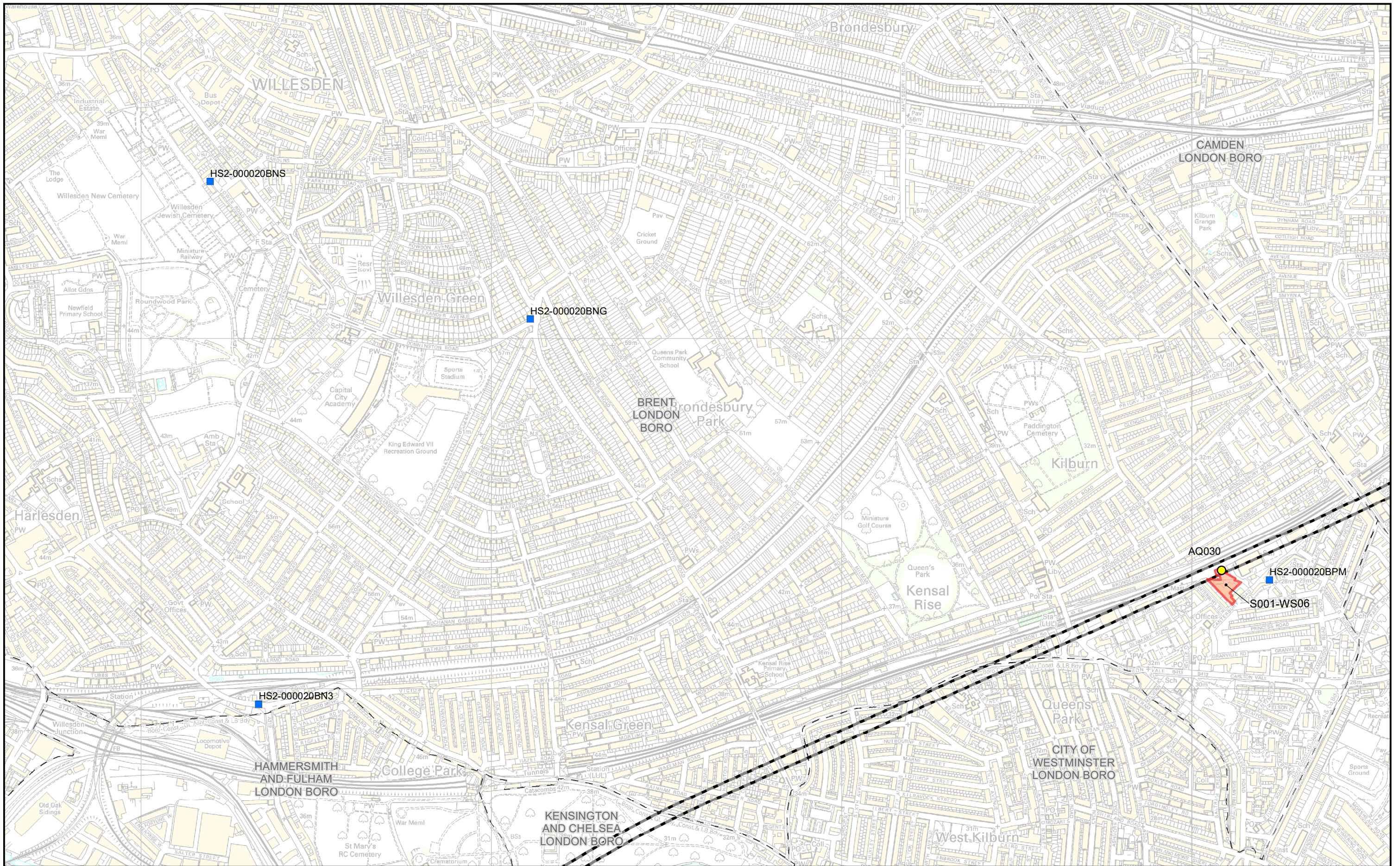
corrected results will be presented and described in the annual report. However, based on the results to date, no unexpected values were recorded during the monitoring period.

- 1.1.11 NO₂ monitoring locations and results are presented in Appendix C, Table 2, together with the 2019 running mean.
- 1.1.12 There were no complaints received, relating to air quality, during this monitoring period.

Appendix A – Worksites and Monitoring Locations

Figure 1: Current worksites and monitoring locations within the LBB





- Legend**
- Route in tunnel
 - Route on surface
 - Diffusion tube monitoring location
 - Canterbury Road Vent Shaft
 - Dust monitoring location

Figure Number	
Figure Name	Monitoring locations in LBB
	London Borough of Brent

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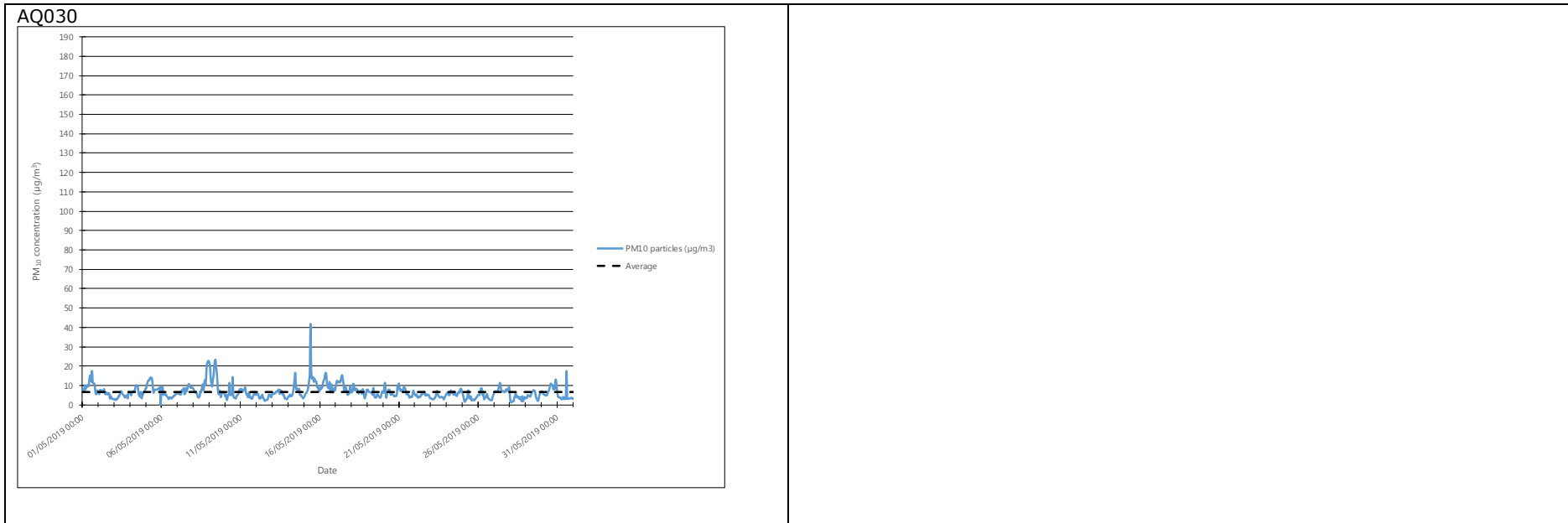
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Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and May 2019 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	1-hour data capture (%)
AQ030	525079, 183341	Canterbury Road Site	H	Yes	N	6.7	1.3	41.8	0	99.9

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



Appendix C - Air Quality Monitoring Results

Table 2: NO₂ monitoring locations around highways, NO₂ concentrations and monthly monitoring results with running mean for 2019 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2-000020BN3	Sign post on High Street Harlesden	522335, 182955	54	75	57	57									61
HS2-000020BNG	Lamp post on Donnington Road	523110, 184055	56	53	42	36									47
HS2-000020BNS	Lamp post on Tower Road by Willesden Jewish Cemetery	522196, 184448	40	36	29	31									34
HS2-000020BPM	Lamp post along Gorefield Place near block of flats	525222, 183309	45	45	34	28									38

¹ 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.