

Air Quality and Dust Monitoring Monthly Report – March 2019

London Borough of Brent



SKANSKA



Department for Transport

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Monthly Summary

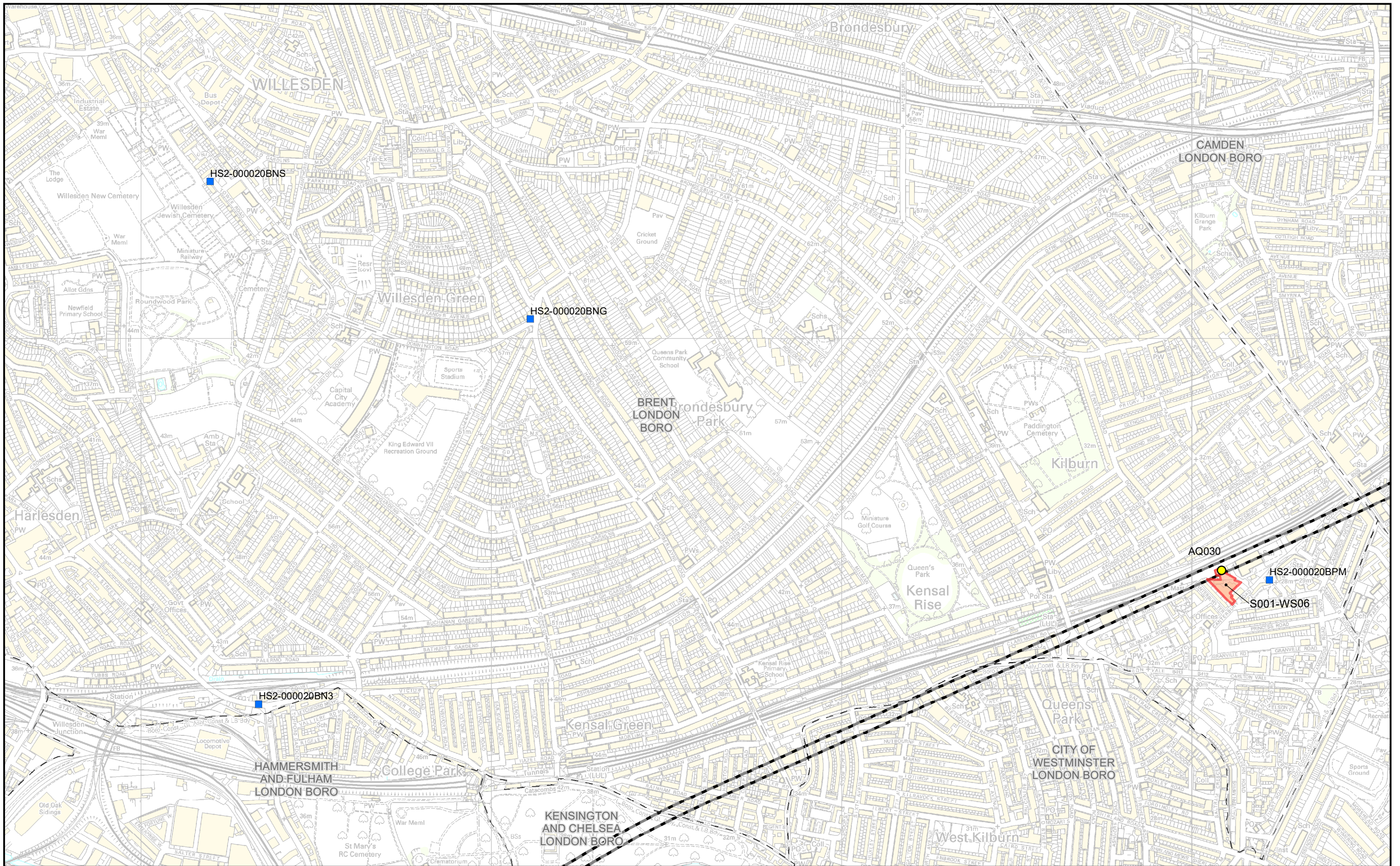
- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in the London Borough of Brent (LBB) during February and March 2019 respectively.
- 1.1.2 Figure 1 in Appendix A indicates 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, 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 and pre-demolition surveys, 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 There were no (0) exceedances of the dust trigger level during the month of March 2019.
- 1.1.8 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at four (4) locations in February 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.
- 1.1.9 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.
- 1.1.10 NO₂ monitoring locations and results are presented in Appendix C, Table 2, together with the 2019 running mean.

1.1.11 There were no complaints received, relating to air quality, during this monitoring period.

Appendix A – Worksites and Monitoring Locations

Figure 1: Current 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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Scale at A3: 10,000

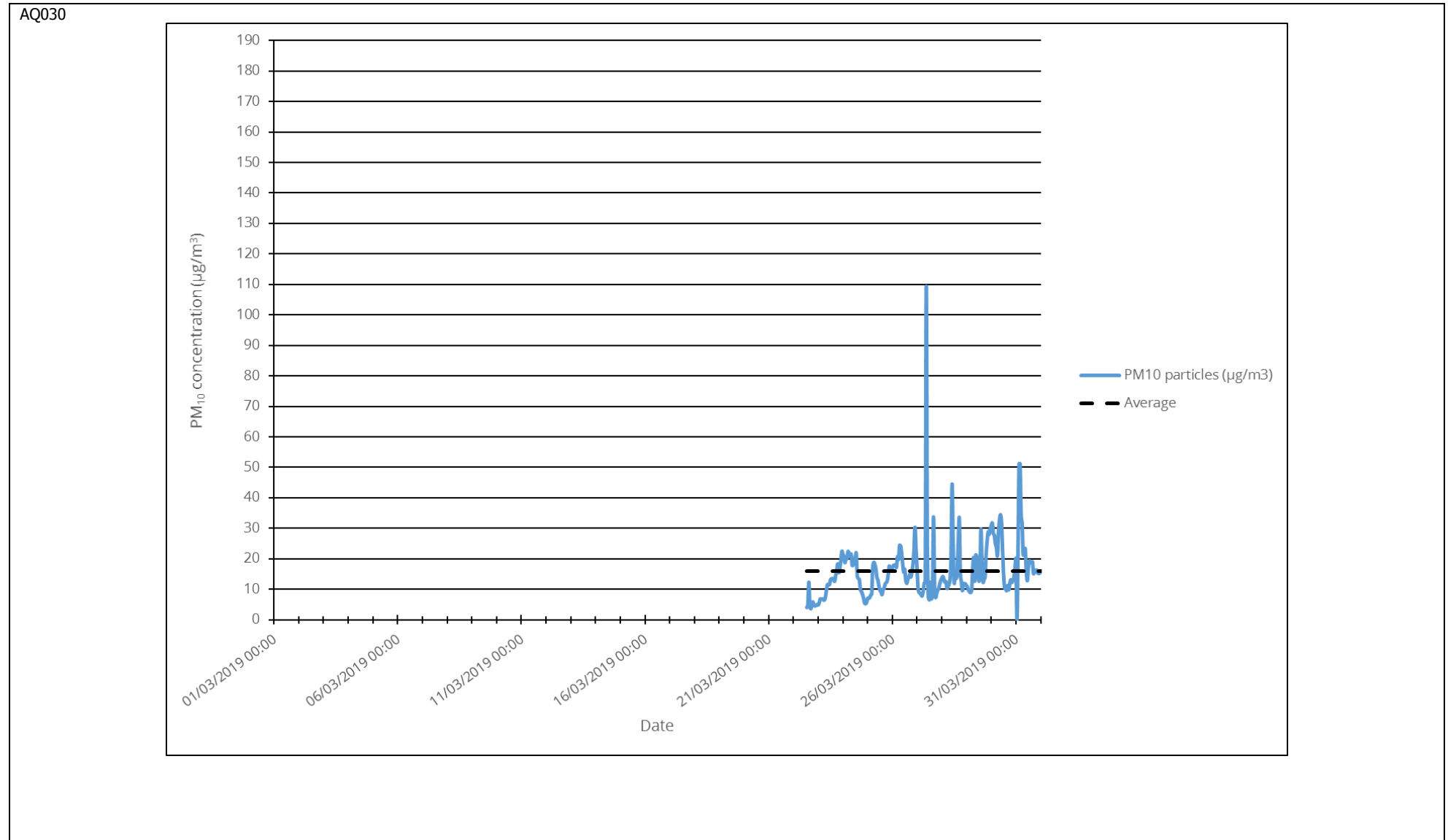
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Map Number: 1EW02-CSJ-EV-REP-S000-000017_appAFig1.pdf **Date: 09/04/19**

Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and March 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 | 16.0 | 3.6 | 109.3 | 0 | 30.5 |

Figure 2: 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 | | | | | | | | | | | 65 |
| HS2-000020BNG | Lamp post on Donnington Road | 523110, 184055 | 56 | 53 | | | | | | | | | | | 54 |
| HS2-000020BNS | Lamp post on Tower Road by Willesden Jewish Cemetery | 522196, 184448 | 40 | 36 | | | | | | | | | | | 38 |
| HS2-000020BPM | Lamp post along Gorefield Place near block of flats | 525222, 183309 | 45 | 45 | | | | | | | | | | | 45 |

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.