

Air Quality and Dust Monitoring Monthly Report – November 2018

**London Borough of Hammersmith and
Fulham**



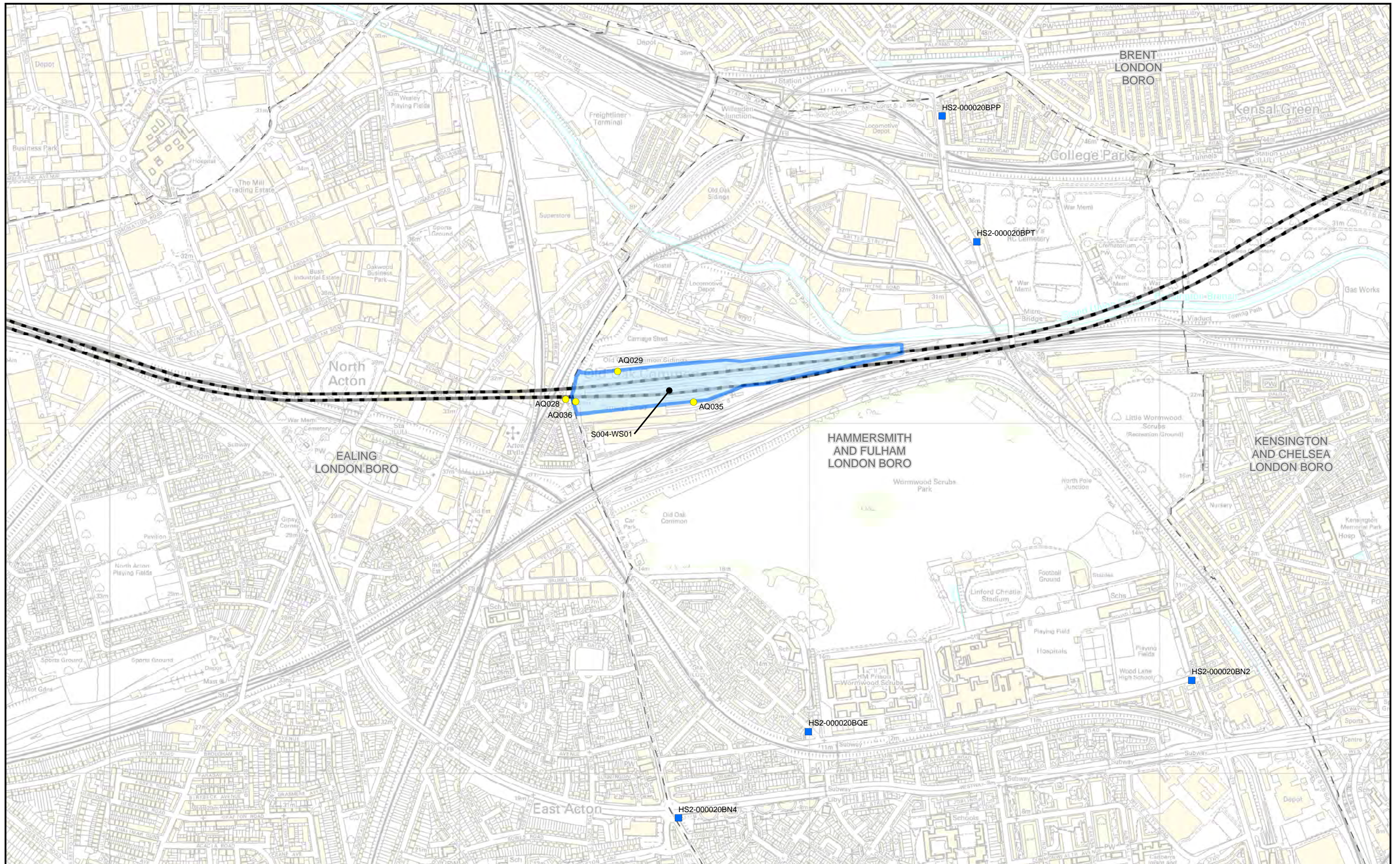
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Monthly Summary

- 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 October and November 2018 respectively.
- 1.1.2 Figure 1 and Figure 2 in Appendix A indicate 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 LBHF during May 2018, and are expected to be completed by October 2019. The current worksite, as presented in Appendix A, Figure 1, includes:
- Demolition and groundworks at Old Oak Common Depot, worksite ref. S004-WS01.
- 1.1.5 Four (4) dust monitors were installed around the worksite, where pre-demolition works are underway. This site returned a high dust risk rating, in accordance with the methodology described in the Overview Monitoring Report, available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, in line with the IAQM Guidance (2014) on the assessment of dust from demolition and construction activities.
- 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.
- 1.1.7 Seven (7) exceedances of the dust trigger level were recorded during the month of November 2018. Exceedances are presented in Appendix B, Table 2. All other results were in line with the expected ranges.
- 1.1.8 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at seven (7) locations in October 2018, around highways within the LBHF as part of the management of air quality where significant effects may occur as a result the scheme.
- 1.1.9 Diffusion tube monitoring results were 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 3, together with the 2018 running mean.
- 1.1.11 There were no complaints received, relating to dust or air quality, during this monitoring period.


Appendix A – Worksites and Monitoring Locations



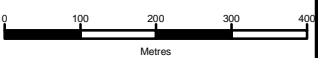
Legend	
	Route in tunnel
	Route on surface
	Dust monitoring location
	Diffusion tube monitoring location
	Old Oak Common worksite

Figure Number	
Figure Name	Worksites and Monitoring locations in LBHF (sheet 1)
London Borough of Hammersmith and Fulham	

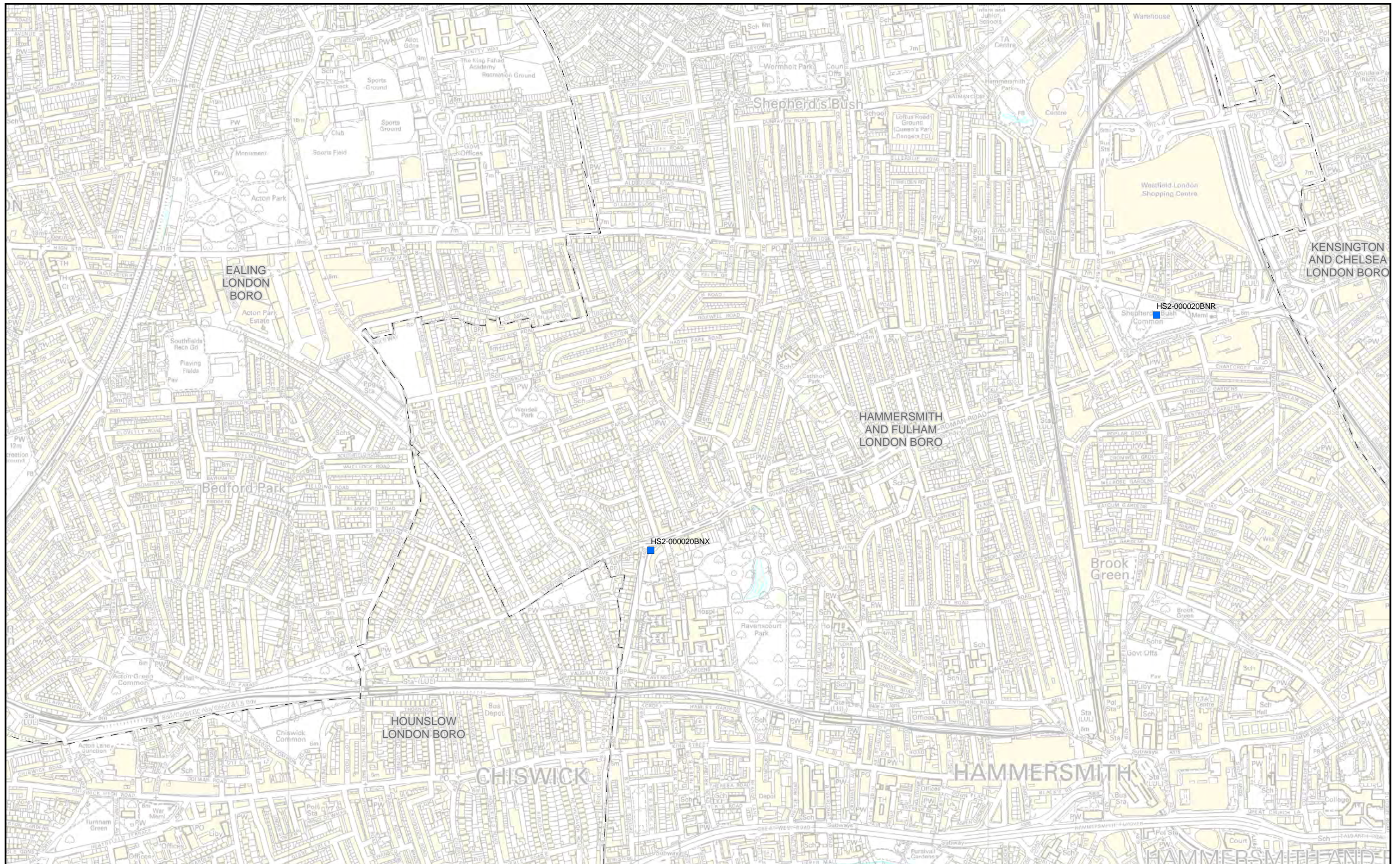

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- Legend**
-  Route in tunnel
 -  Route on surface
 -  Diffusion tube monitoring location

Figure Number

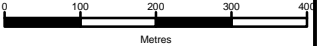
Figure Name
Worksites and Monitoring locations in LBHF (sheet 2)

London Borough of Hammersmith and Fulham

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 Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf Date: 13/07/18

Appendix B – Dust Monitoring Results

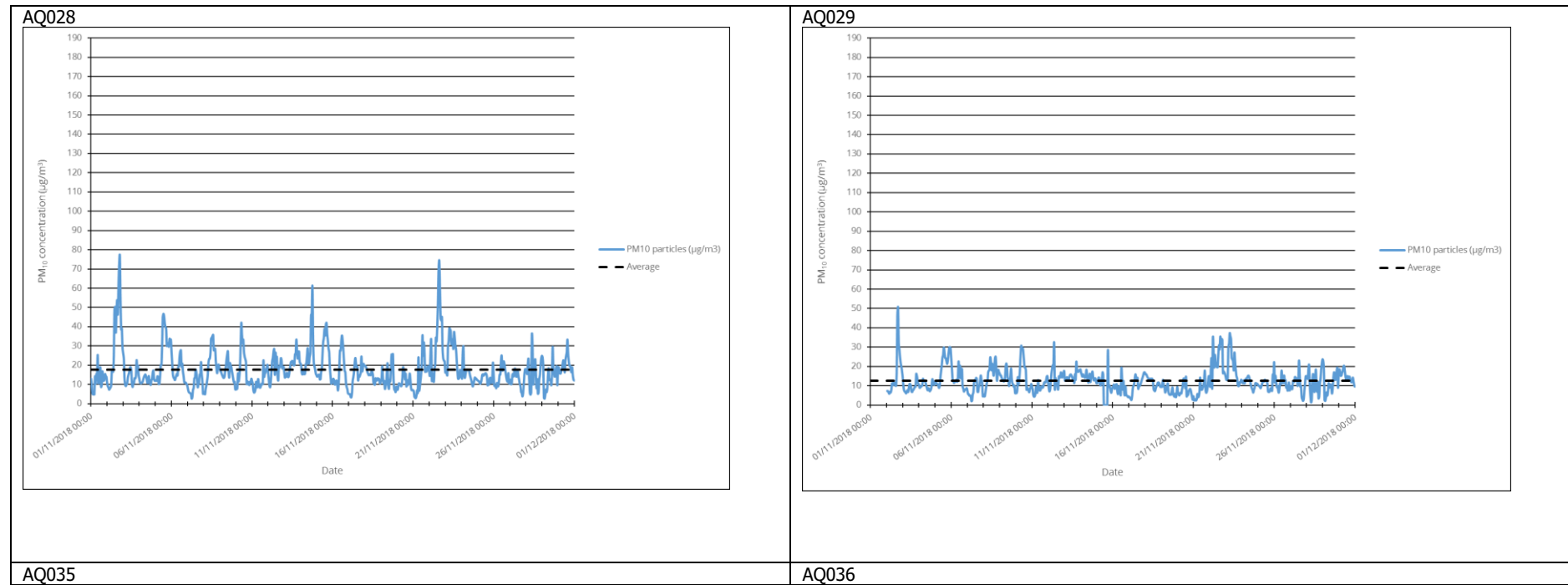
Table 1: Dust monitoring locations and November 2018 Results

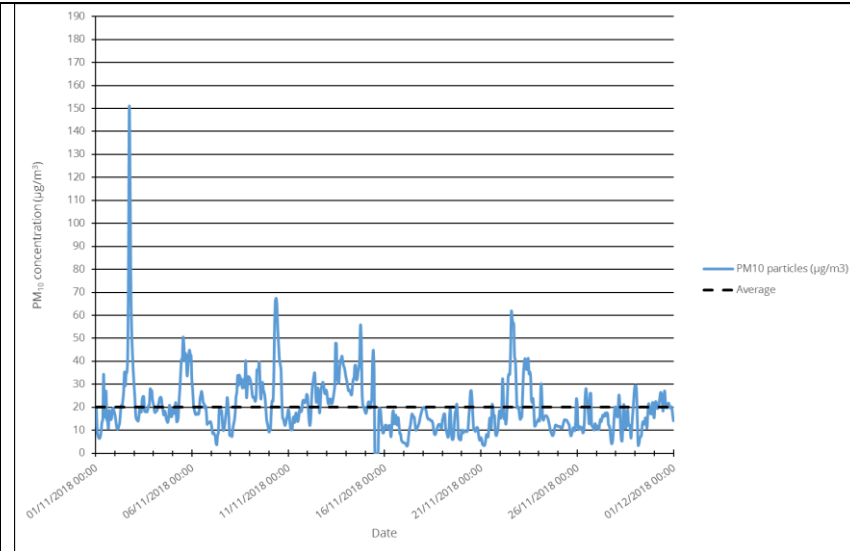
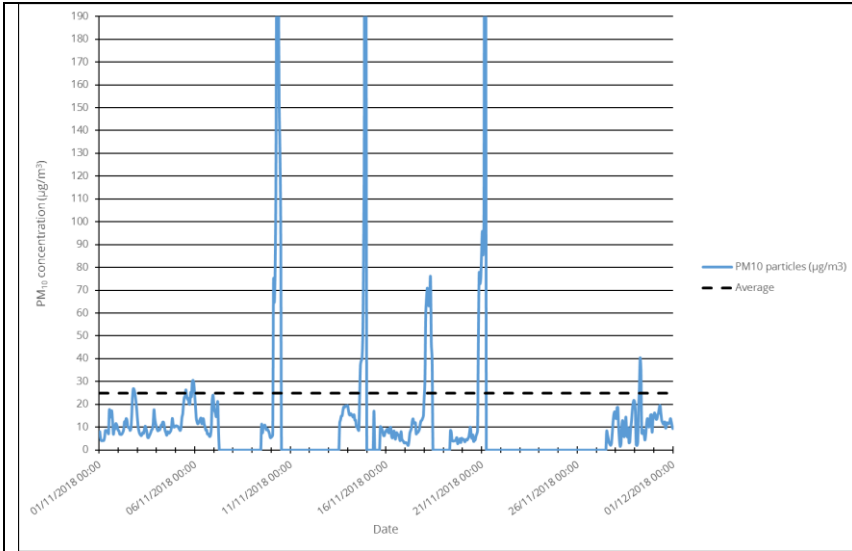
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	1-hour data capture (%)
AQ028	521302, 182067	Wells House Road	H	Yes	N	17.5	2.5	77.0	0	100.0
AQ029	521451, 182148	Old Oak Common	H	Yes	N	12.7	1.4	50.6	0	96.0
AQ035	521668, 182060	Old Oak Common	H	Yes	N	24.8	1.6	1,889.0	7	56.3
AQ036	521331, 182061	Old Oak Common	H	Yes	N	20.1	3.1	150.1	0	99.3

Table 2: Summary of exceedances of trigger level in November 2018

Period exceeding trigger level	Worksite reference	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
10/11/2018 06:00 – 10/11/2018 09:00 (3 x triggers)	S004-WS01	AQ035	n/a	No works were being undertaken near the monitor at the time of the exceedances.	Service and maintenance of monitor and checking of power supply
14/11/2018 21:00 - 14/11/2018 23:00 (2 x triggers)	S004-WS01	AQ035	n/a	Monitor was subject to intermittent power supply failures and triggers are considered associated with either debris within the inlet	
21/11/2018 03:00 - 21/11/2018 05:00 (2 x triggers)	S004-WS01	AQ035	n/a	tube being dislodged upon failure of the power supply.	

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors





Appendix C – Air Quality Monitoring Results

Table 3: NO₂ monitoring locations around highways NO₂ concentrations and monthly monitoring results with running mean for 2018 (µg/m³)

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean ¹
HS2-000020BN2	Lamp post on Du Cane Road	523092, 181264	61	Tube missing	67	60	59	47	63	54	57	53			58
HS2-000020BN4	End of cycle lane sign on Old Oak Road	521625, 180871	56	59	67	49	68	58	55	46	43	55			56
HS2-000020BNR	Lamp posts in Shepherd's Bush Common	523481, 179871	54	51	49	41	49	40	37	Tube missing	41	39			44
HS2-000020BNX	Signpost on A402 Goldhawk Road	522035, 179199	54	46	53	43	48	42	46	39	36	40			45
HS2-000020BPP	Sign post on A219 Scrubs Lane, South of Harrow Road	522378, 182877	50	54	57	52	50	38	49	43	42	49			48
HS2-000020BPT	Controlled Zone/Zone Ends road sign on A219 Scrubs Lane, north of Hythe Road	522478, 182517	56	50	51	50	Tube missing	43	51	46	40	53			49
HS2-000020BQE	Lamp post next to No 11 Wulfstan Street	521996, 181118	41	38	40	39	37	31	36	33	33	39			37

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.