

Air Quality and Dust Monitoring Monthly Report – January 2019

**London Borough of Hammersmith and
Fulham**



SKANSKA



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 Costain Skanska on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2019, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



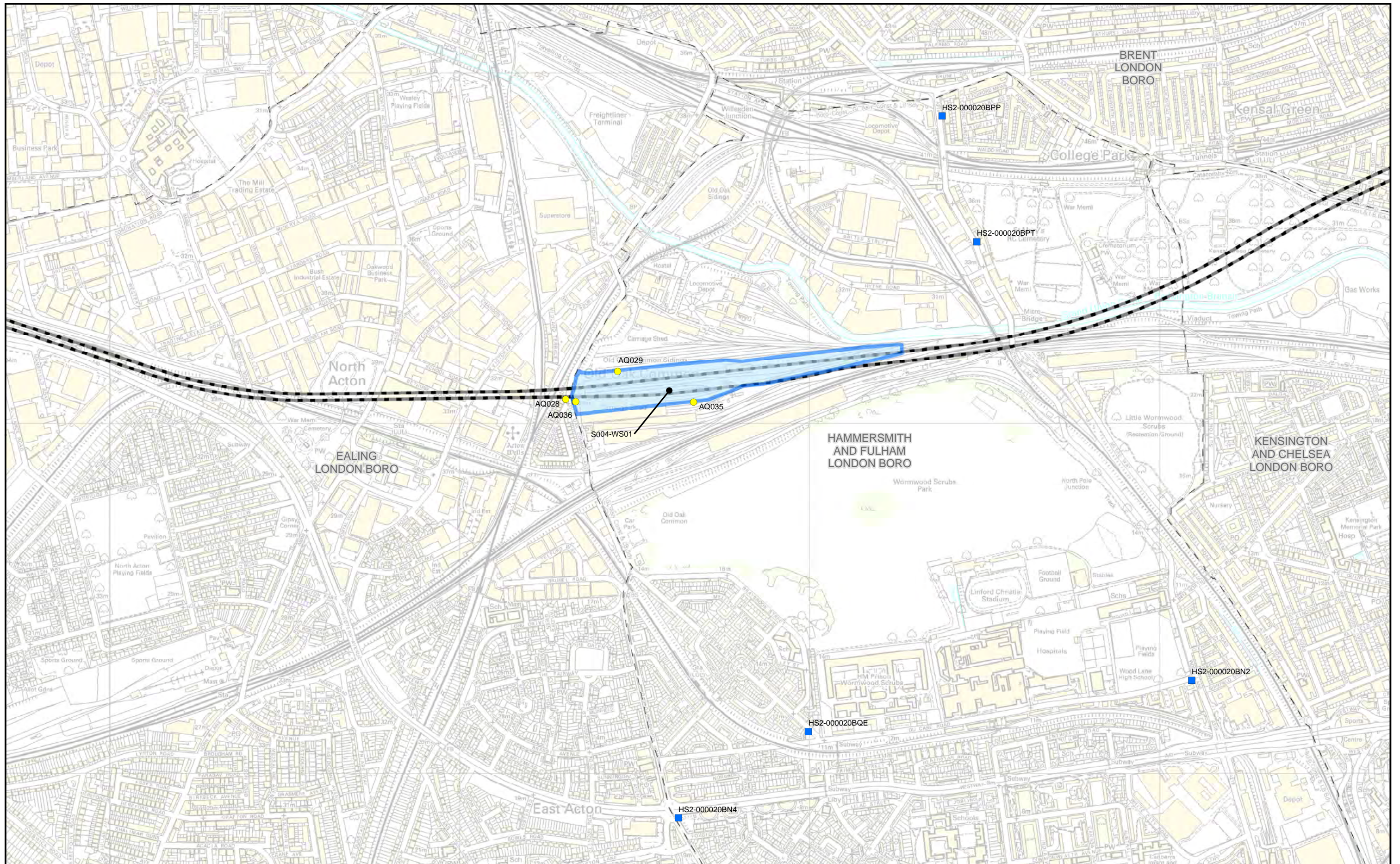
Printed in Great Britain on paper containing at least 75% recycled fibre.

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 2018 and January 2019 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 July 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.
- 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 3.
- 1.1.7 Six (6) exceedances of the dust trigger level were recorded during the month of January 2019. Exceedances are presented in Appendix B, Table 2. All 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 December 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

Figures 1 and 2: Worksites and monitoring locations within the LBHF.



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

Figure Number: 1

Figure Name
Worksites and Monitoring locations in LBHF (sheet 1)

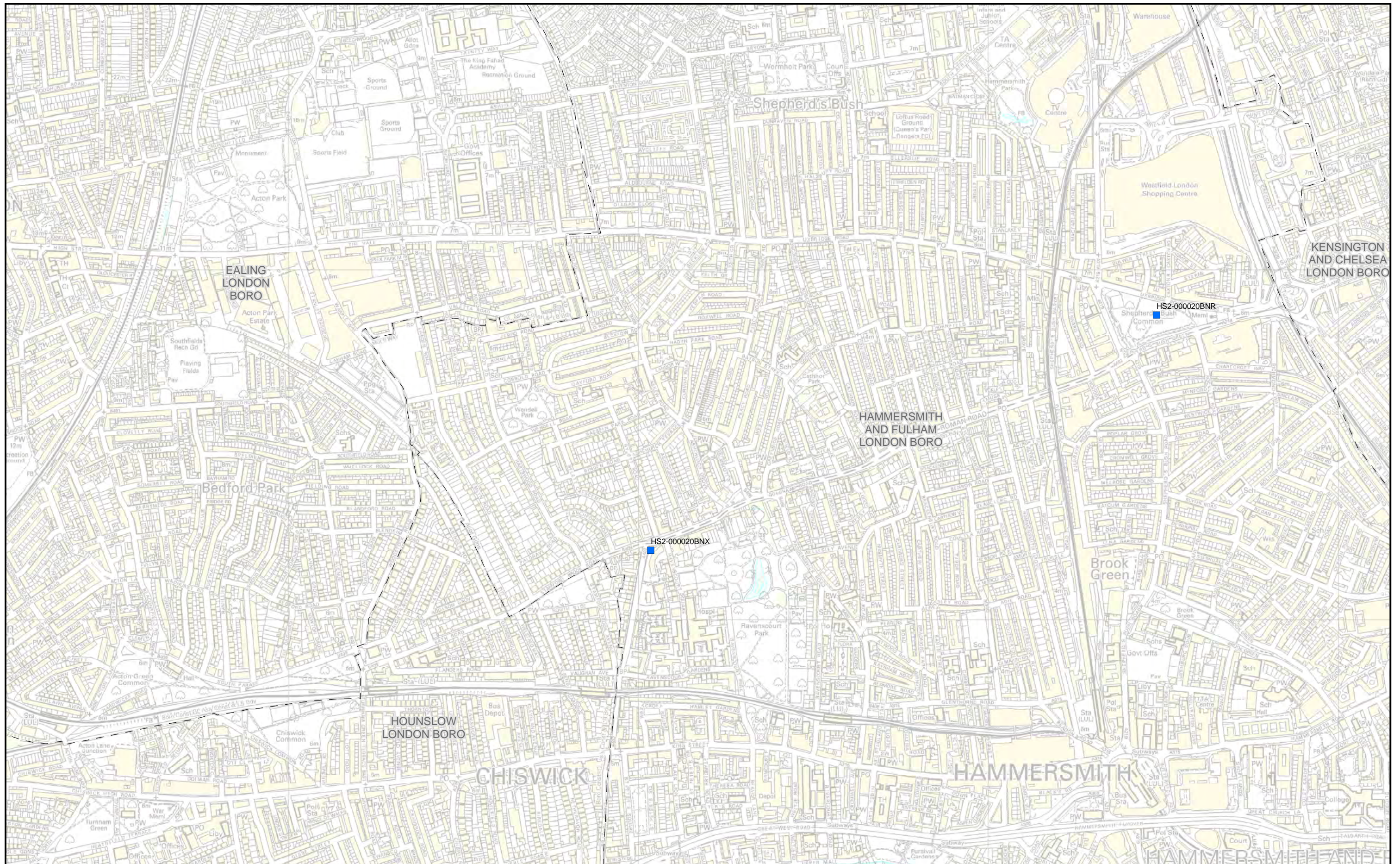
London Borough of Hammersmith and Fulham

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Scale at A3: 10,000

© Crown copyright and database rights 2016. Ordnance Survey Licence Number 100049190.

Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf Date: 05/09/18








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

Figure Number: 2


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

London Borough of Hammersmith and Fulham

 HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.



Scale at A3: 10,000



© Crown copyright and database rights 2016. Ordnance Survey Licence Number 100049190.
 Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf Date: 13/07/18

Appendix B – Dust Monitoring Results

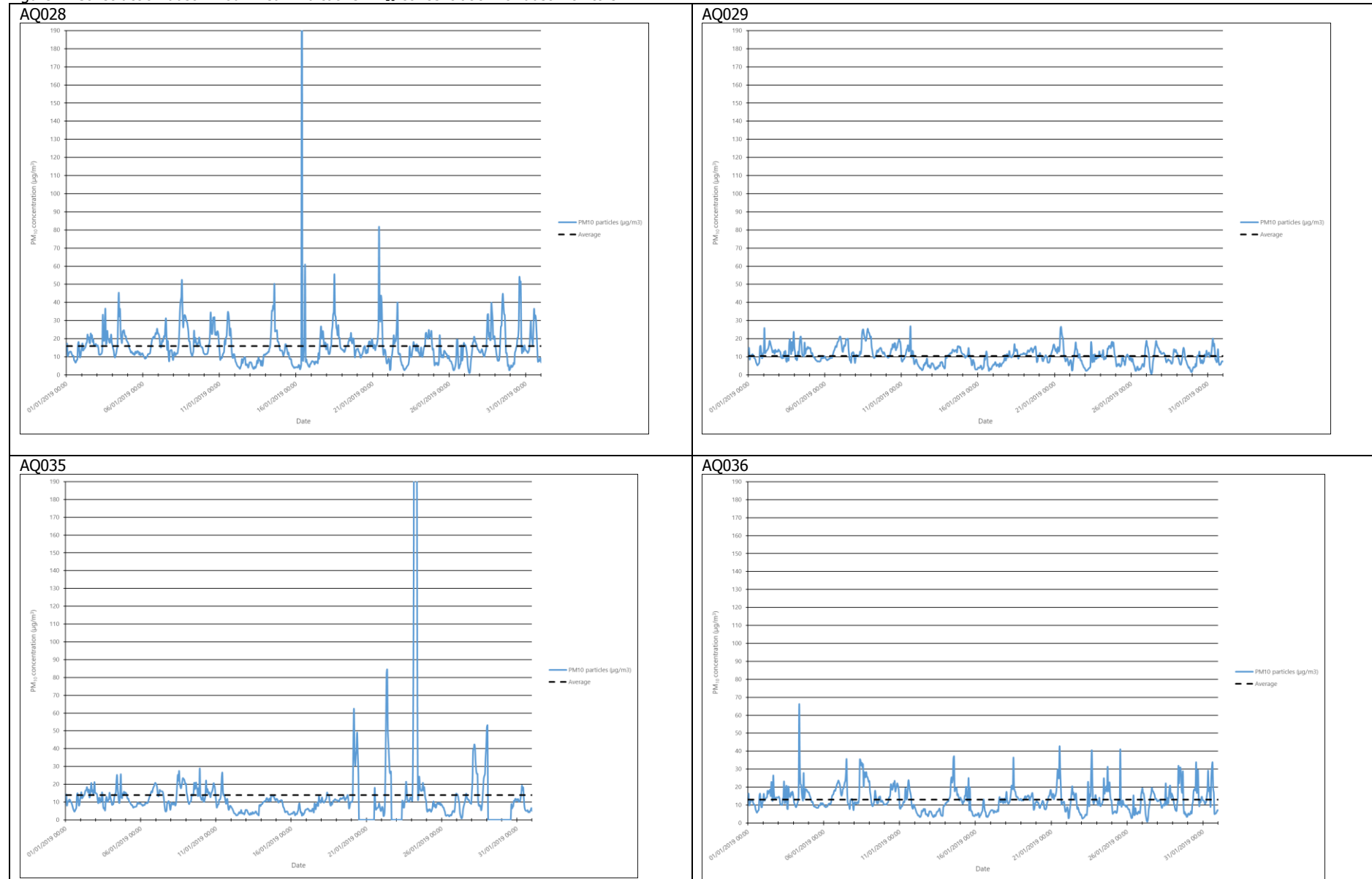
Table 1: Dust monitoring locations and January 2019 Results

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 (%)
AQ028	521302, 182067	Wells House Road	H	Yes	N	15.8	1.0	269.2	1	100.0
AQ029	521451, 182148	Old Oak Common	H	Yes	N	10.5	0.6	26.8	0	100.0
AQ035	521668, 182060	Old Oak Common	H	Yes	N	13.8	0.8	274.2	5	89.4
AQ036	521331, 182061	Old Oak Common	H	Yes	N	12.9	0.7	66.0	0	100.0

Table 2: Summary of exceedances of trigger level in January 2019

Period exceeding trigger level	Worksite reference	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
16/01/2019 08:01 – 09:00	S004-WS01	AQ028	n/a	Trigger was investigated and it was concluded that it was not associated with HS2 works but potentially from a nearby 3rd party site not associated with HS2 works.	n/a
24/01/2019 03:01 – 08:00 (5 x triggers)	S004-WS01	AQ035	n/a	Triggers received during the early hours of the morning prior to works commencing. Nearby stockpiles of ballast were not likely sources of dust given damp/cold weather conditions. Triggers considered to be 'false' and potentially associated with high moisture. Monitor has been serviced to ensure the heating inlet is correctly functioning.	n/a

Figure 1: 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	60	55	58
HS2-000020BN4	End of cycle lane sign on Old Oak Road	521625, 180871	56	59	67	49	68	58	55	46	43	55	55	42	54
HS2-000020BNR	Lamp posts in Shepherd's Bush Common	523481, 179871	54	51	49	41	49	40	37	Tube missing	41	39	47	38	44
HS2-000020BNX	Signpost on A402 Goldhawk Road	522035, 179199	54	46	53	43	48	42	46	39	36	40	41	38	44
HS2-000020BPP	Sign post on A219 Scrubs Lane, South of Harrow Road	522378, 182877	50	54	57	52	50	38	49	43	42	49	54	45	49
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	59	Tube missing	50
HS2-000020BQE	Lamp post next to No 11 Wulfstan Street	521996, 181118	41	38	40	39	37	31	36	33	33	39	40	37	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.