

Air Quality and Dust Monitoring Monthly Report – January 2020

**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, 2020, 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  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

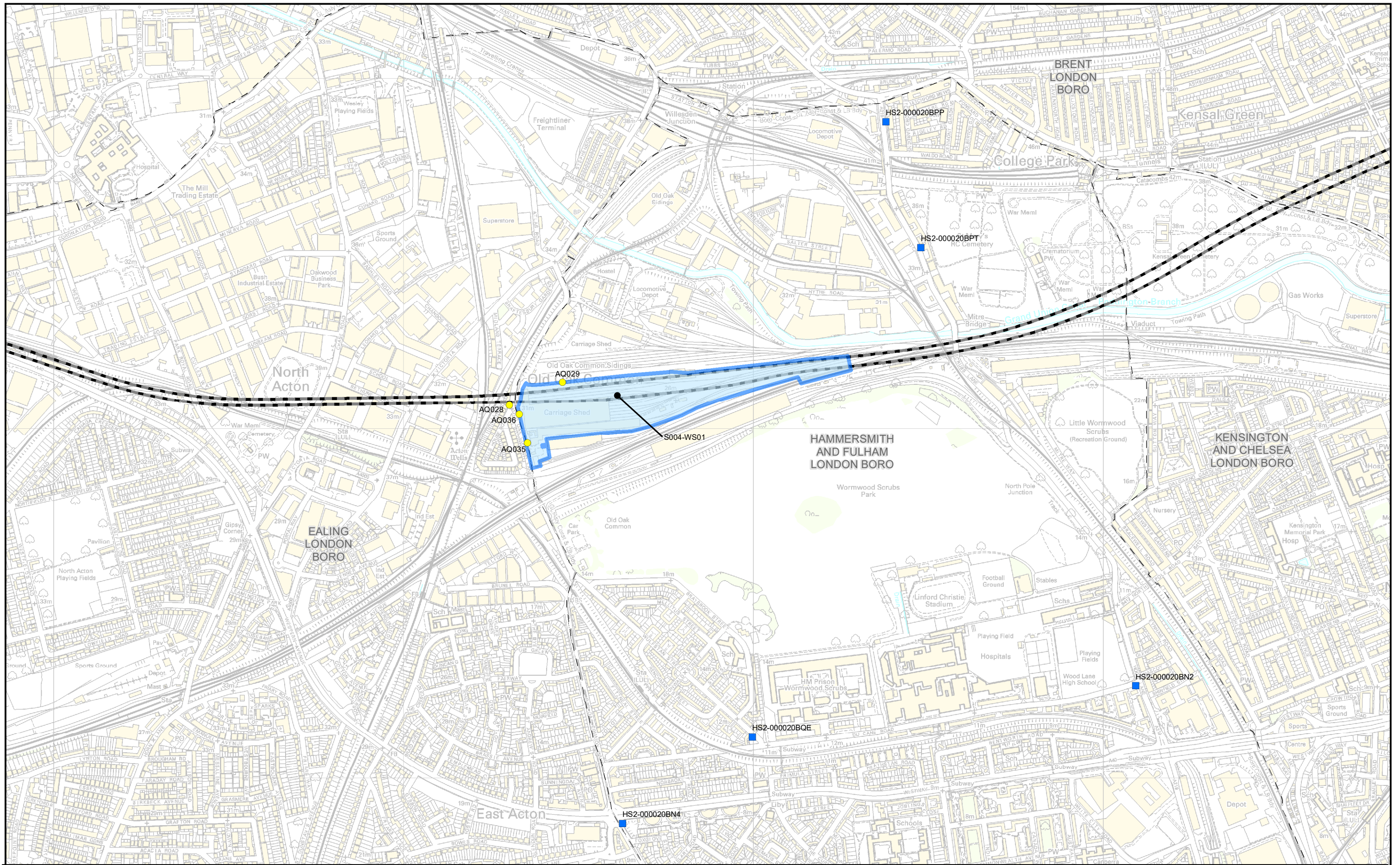
- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in the London Borough of Hammersmith and Fulham (LBHF) during December 2019 and January 2020 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, 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 June 2020. 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 are installed around the worksite, where 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. 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 of 190 µg/m³, 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) dust trigger alerts recorded during this monitoring period (January 2020). All results were in line with expected ranges.
- 1.1.9 Diffusion tube monitoring of Nitrogen Dioxide (NO₂) was undertaken at seven (7) locations in December 2019, around highways within the LBHF as part of the management of air quality where significant effects may occur as a result of the scheme.
- 1.1.10 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 (0) complaints received, relating to dust or air quality, during this monitoring period (January 2020).


Appendix A – Worksites and Monitoring Locations


Figure 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	
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.

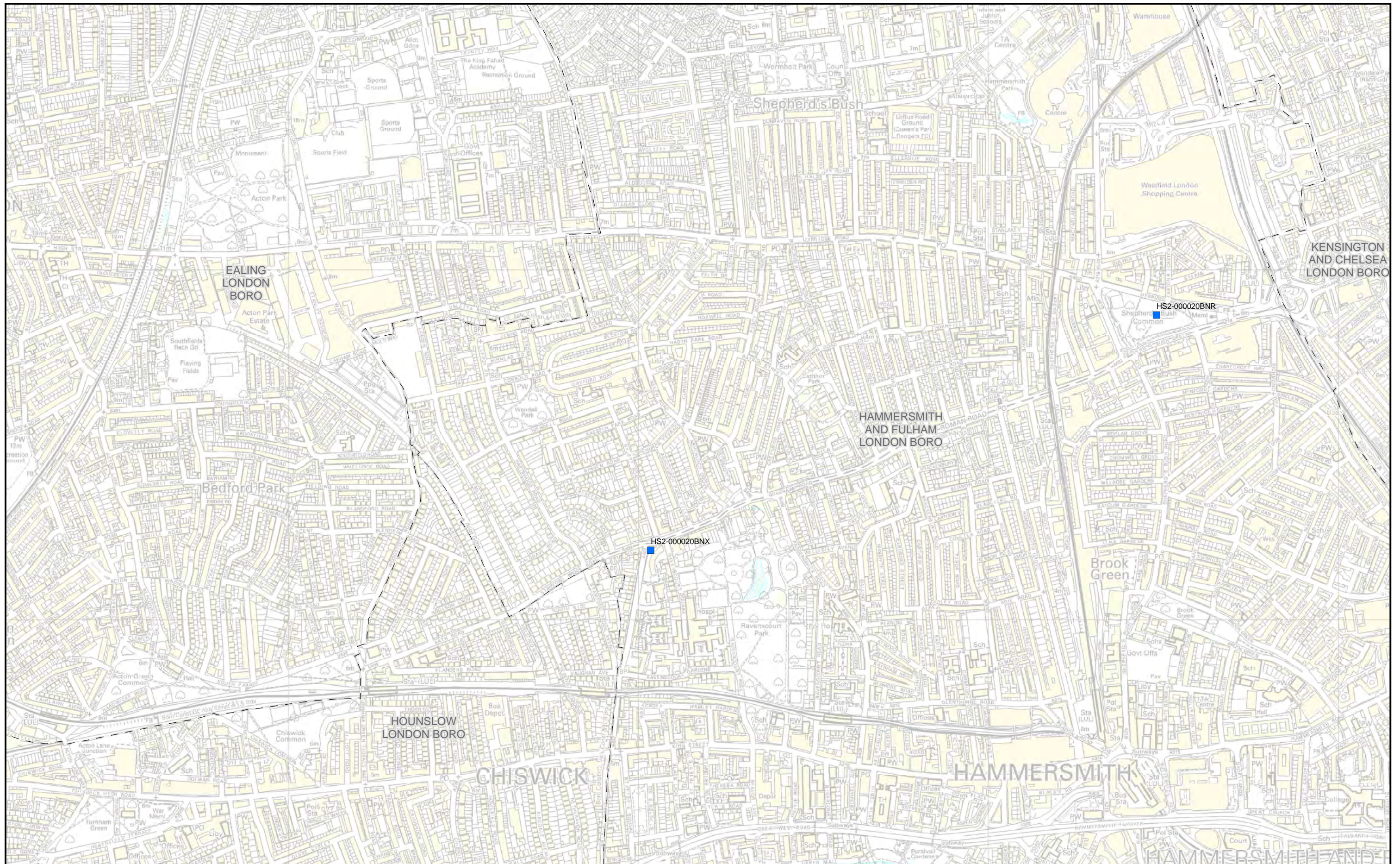


Scale at A3: 10,000



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

Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf Date: 12/07/19








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

Figure Number

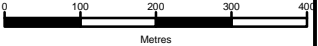
Figure Name
Worksites and Monitoring locations in LBHF (sheet 2)

London Borough of Hammersmith and Fulham

 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



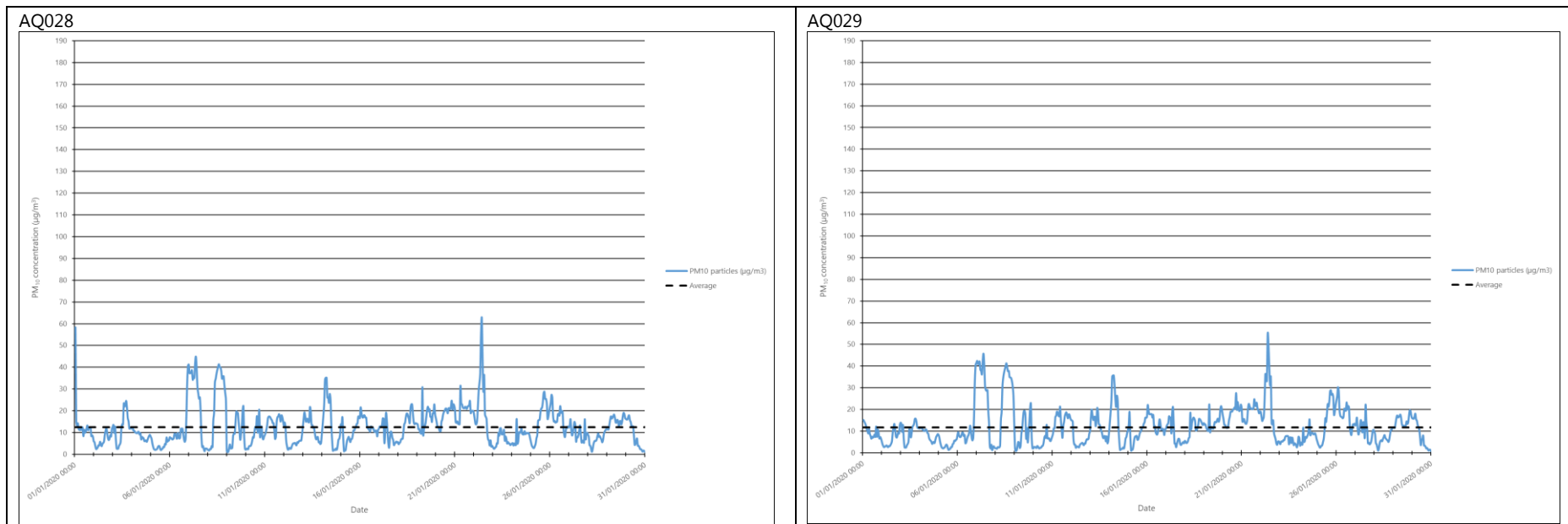
© Crown copyright and database rights 2016. Ordnance Survey Licence Number 100049190.
 Map Number: 1EW02-CSJ-EV-REP-S000-000017_appA_fig1.pdf Date: 13/07/18

Appendix B – Dust Monitoring Results

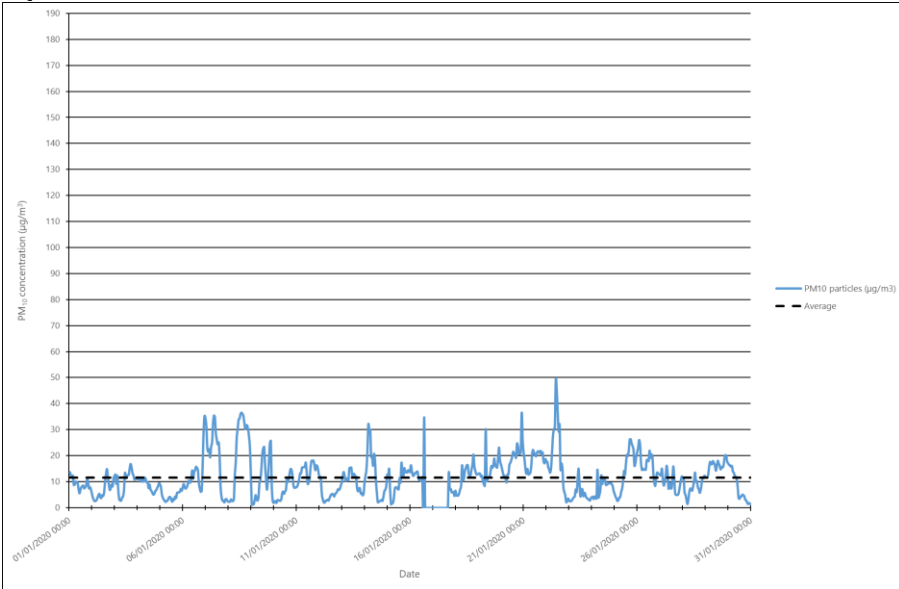
Table 1: Dust monitoring locations and January 2020 Results

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	Data capture (%)
AQ028	521302, 182067	Wells House Road	H	Yes	N	12.4	0.9	62.7	0	100.0
AQ029	521453, 182132	Old Oak Common	H	Yes	N	11.8	0.8	54.8	0	100.0
AQ035	521353, 181959	Old Oak Common	H	Yes	N	11.6	1.2	49.2	0	96.5
AQ036	521330, 182041	Old Oak Common	H	Yes	N	11.5	0.8	51.3	0	100.0

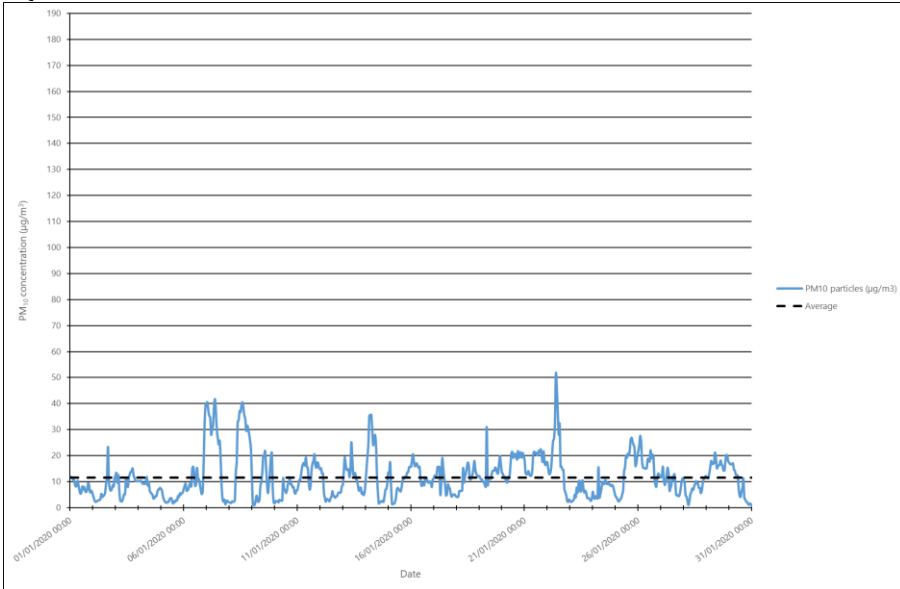
Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors



AQ035



AQ036



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
HS2-000020BN2	Lamp post on Du Cane Road	523092, 181264	53	61	52	41	39	47	40	48	48	48	52	38	47
HS2-000020BN4	End of cycle lane sign on Old Oak Road	521625, 180871	52	56	47	58	43	43	40	39	46	45	49	39	46
HS2-000020BNR	Lamp posts in Shepherd's Bush Common	523481, 179871	52	50	42	43	33	35	31	37	38	38	47	35	40
HS2-000020BNX	Signpost on A402 Goldhawk Road	522035, 179199	48	45	36	42	31	39	Tube missing	36	47	53	39	44	42
HS2-000020BPP	Sign post on A219 Scrubs Lane, South of Harrow Road	522378, 182877	60	64	46	44	41	43	45	49	54	48	42	51	49
HS2-000020BPT	Controlled Zone/Zone Ends road sign on A219 Scrubs Lane, north of Hythe Road	522478, 182517	49	65	53	55	42	44	44	44	47	51	57	43	50
HS2-000020BQE	Lamp post next to No 11 Wulfstan Street	521996, 181118	No data	43	32	35	28	29	28	31	32	38	39	34	33

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.