

October 2022

# Air Quality and Dust Monitoring Monthly Report – October 2022 London Borough of Camden

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A report prepared by EWCs and MWCCs on behalf of HS<sub>2</sub> Ltd.

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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 Camden (LBC) during September and October 2022 respectively.
- 1.1.2 Figure 1 to Figure 5 in Appendix A indicate the current worksites 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 <u>www.gov.uk/government/collections/monitoring-the-environmental-</u><u>effects-of-hs2</u>, 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 construction works commenced in November 2019 and is expected to be completed by 2025. The current and planned worksites, as presented in Appendix A, Figures 1-5, include:

# Skanska Costain Strabag Joint Venture (SCSjv)

Adelaide Road Vent Shaft

- Piling operations; and
- Groundworks.

#### Euston Scissor Cut

- Groundworks;
- Piling operations; and
- Materials management.

#### Euston Throat Retained Cut

- Groundworks;
- Piling operations; and
- Materials management

#### Hampstead Road Bridge

• Utilities diversion works.

#### Euston Cavern

- Piling operations;
- Groundworks; and
- Materials management.

# Mace Dragados Joint Venture (MDjv)

#### <u>Utilities</u>

- Barhale continuing with installing TW and excavating for crossing
- Barhale installing TW and excavating for MH10 works
- Barhale deliveries and installation of compound
- BRM Utilities working at Doric way for Vodafone
- Modus carrying out works for UKPN at Cobourg/Drummond Street

### <u>Zone 5</u>

• Guidewall completed

#### Main site

- CemSkan continue test piling
- Skanska complete all test piling in NTH and waiting for test cages to arrive.

#### <u>TSS</u>

- Completion of all liner walls, internal walls and columns B4 to B2
- Completion of pile box tunnel eye
- Commencing B2 slab soffit decking and rebar installation
- JGL demob from site

#### <u>ITR</u>

- Attenuation tank excavation/install/testing/backfill
- SWMH2 excavate/build/pipework to attenuation tank/backfill
- Extend up feeder pilar to new datum level
- Excavate feeder pillar cable pit for UKPN works
- Exchange faulty generator for new equipment also clear route for collection
- Delivery of 35t machine

#### Two Towers

- New access ramp construction (SW corner)
- Concrete barrier removal for ramp construction
- Precast L block installation/backfill
- Lighting installed on hoarding
- Delivery of 6F5 for new haul road
- Install canopy lighting

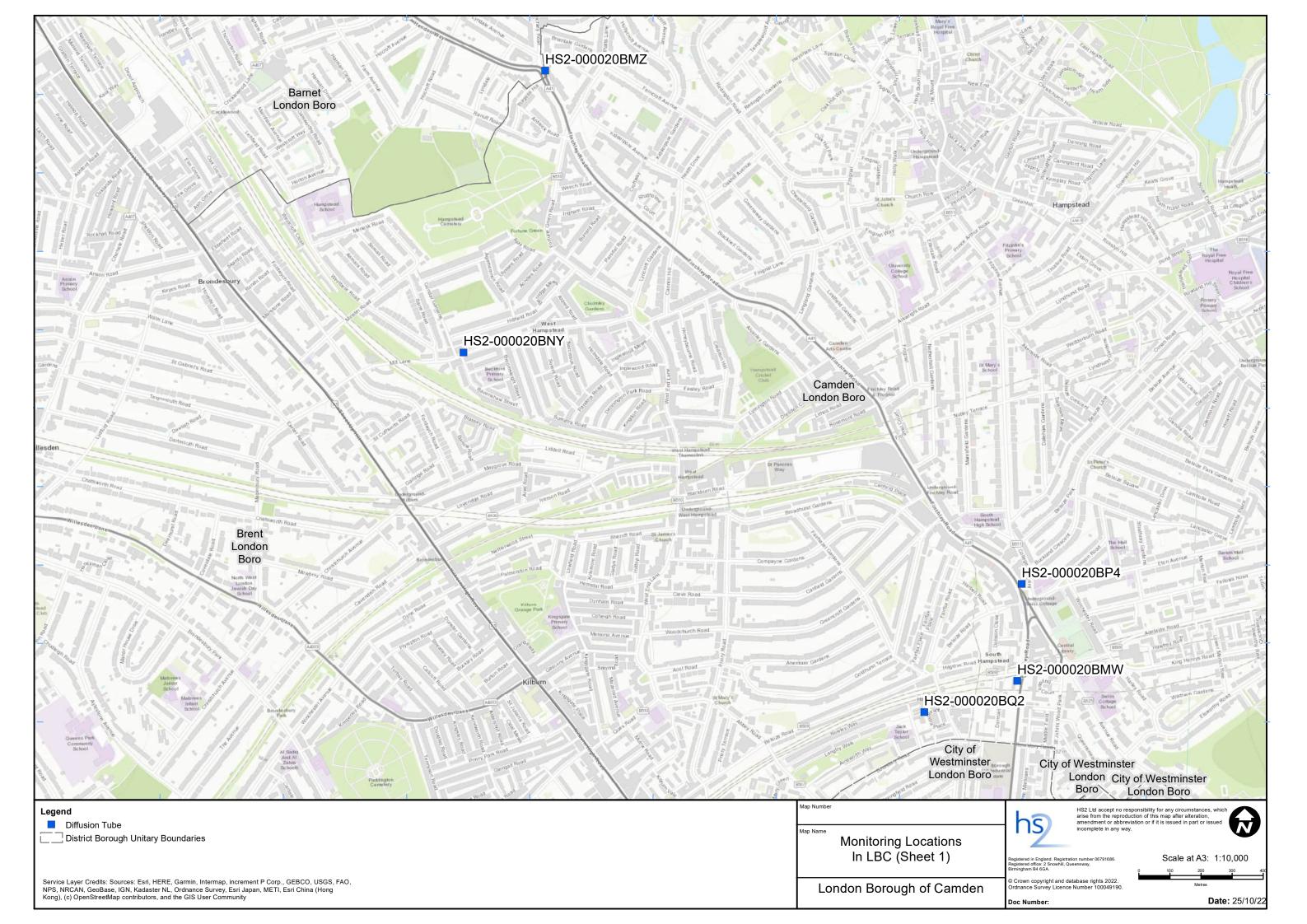
#### <u>Maria Fidelis</u>

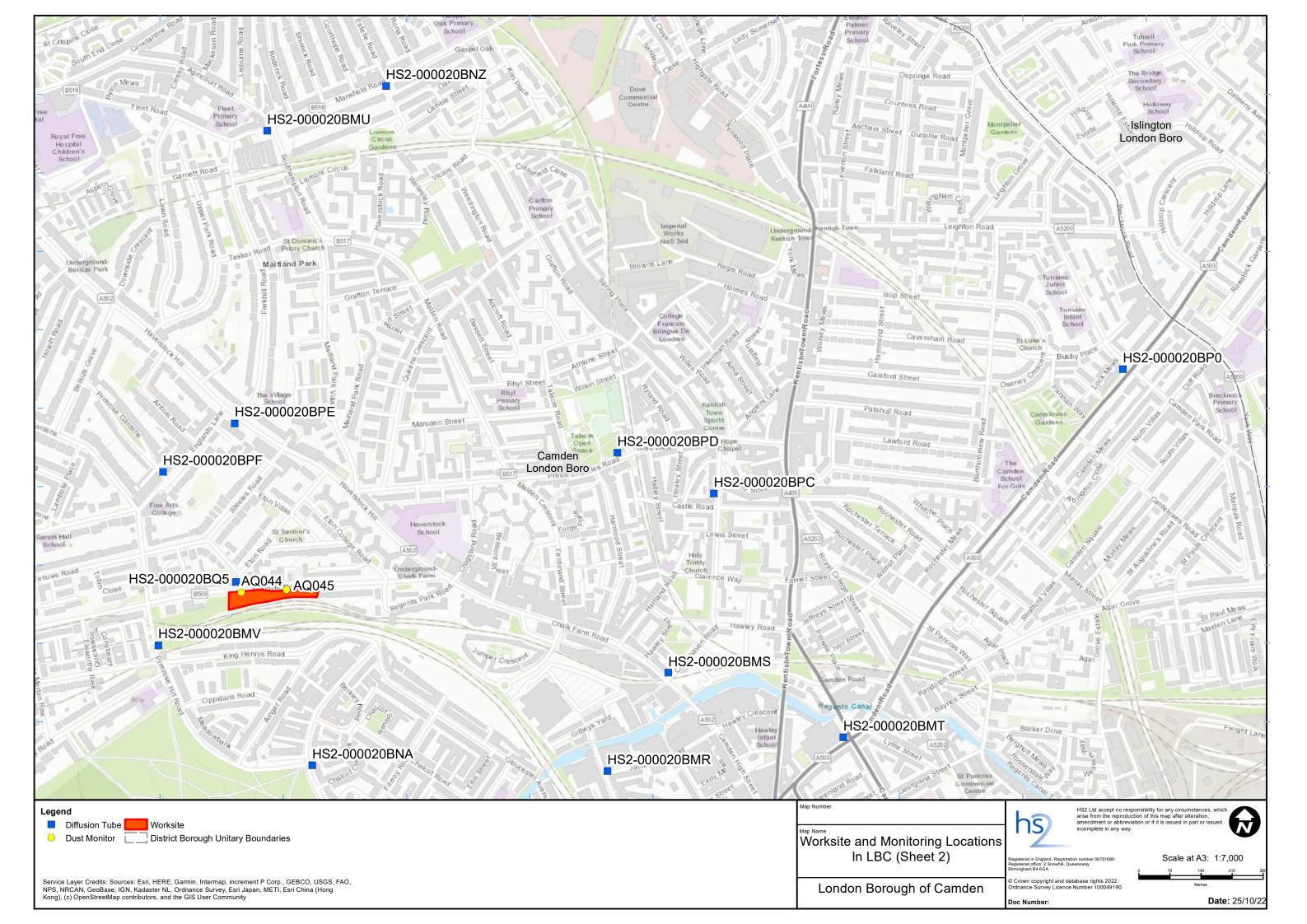
- Premier installing cabins.
- Recommenced lifting on 6th Oct
- 82 x cabins installed.
- 7.5 days lost due to being winded off
- Pyramid blockwork
- Excavation works to the Margaret centre

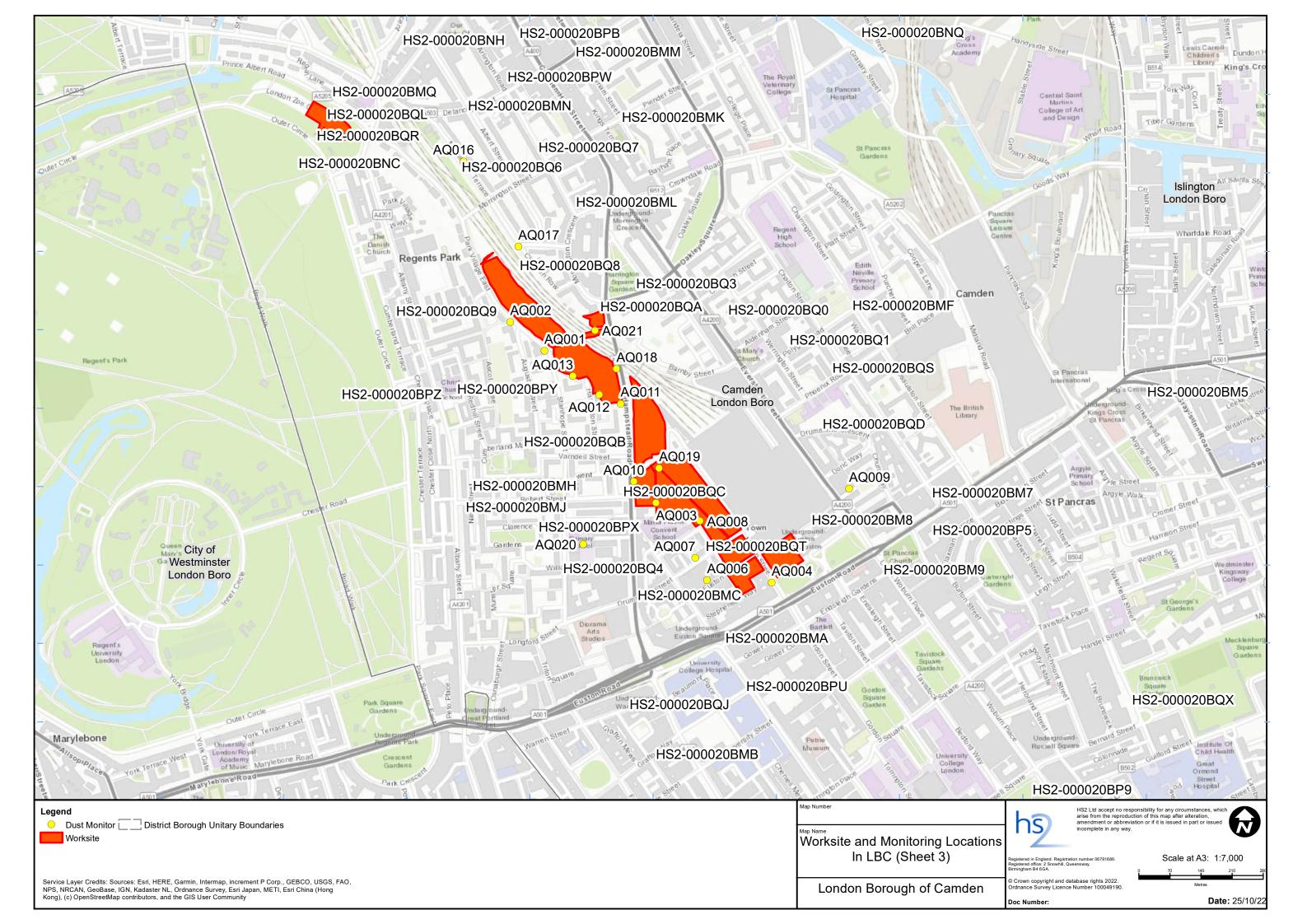
- Wingate started installing temporary electrics within CSC
- 1.1.5 Twenty (20) dust monitors are installed around worksites, where works are underway. These sites returned a medium or high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor in Figure 6. 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 for PM<sub>10</sub> concentrations of 190 μg/m<sup>3</sup>, 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 two (2) dust triggers alert recorded during the monitoring period (October 2022). The exceedance is presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for multiple monitors due to communications issues, technical faults, and power loss.
- 1.1.10 Diffusion tube monitoring of Nitrogen Dioxide (NO<sub>2</sub>) is undertaken at sixty-four (64) locations around highways within the LBC as part of the management of air quality where significant effects August occur as a result of the scheme.
- 1.1.11 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.
- 1.1.12 NO<sub>2</sub> monitoring locations and results are presented in Appendix C, Table 3, together with the 2022 running mean.
- 1.1.13 There were no (0) complaints received during this reporting period.

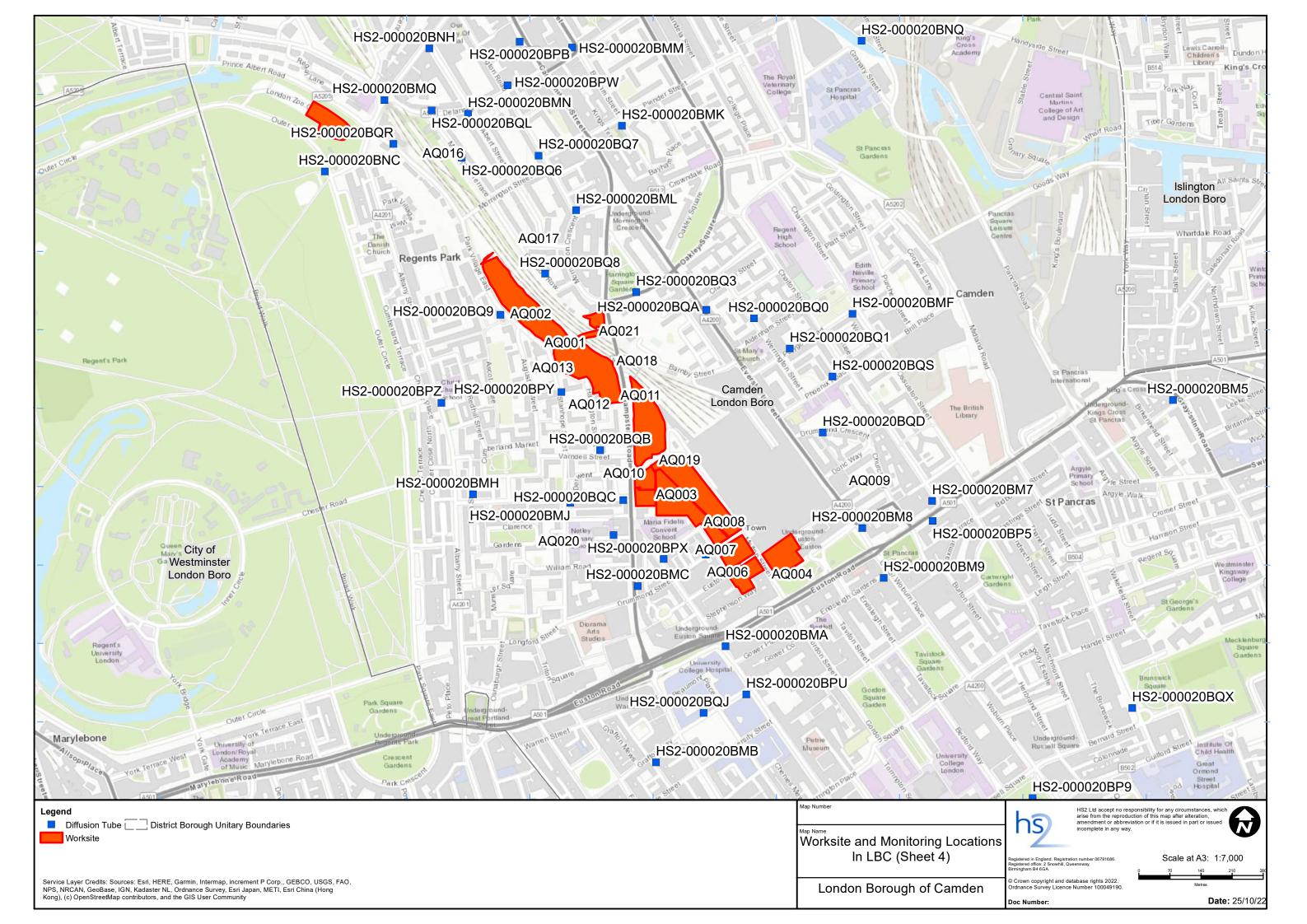
# **Appendix A – Worksites and Monitoring Locations**

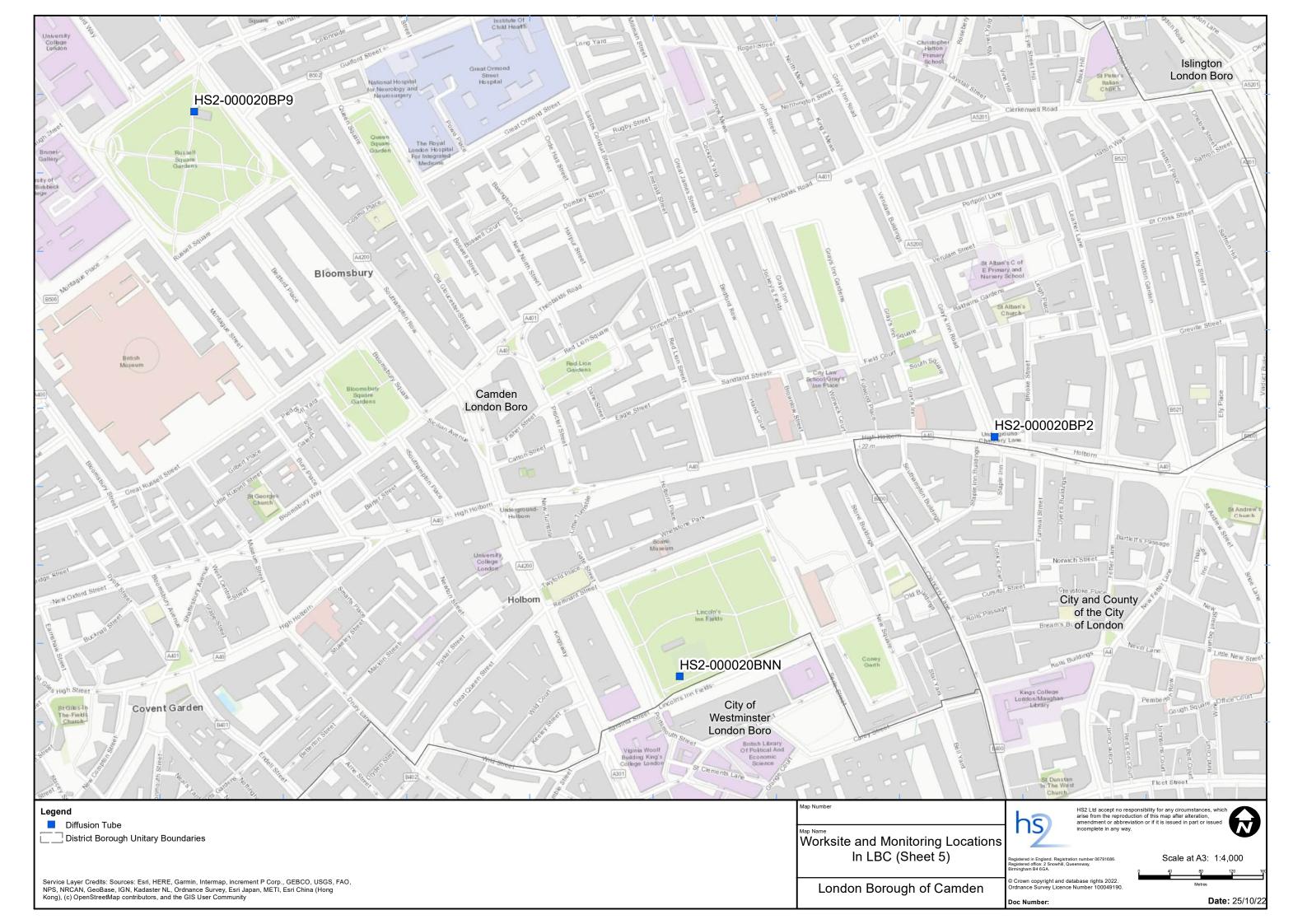
Figure 1 to Figure 5: Worksites and monitoring locations within the LBC











# **Appendix B – Dust Monitoring Results**

Table 1: Dust monitoring locations and October 2022 Results

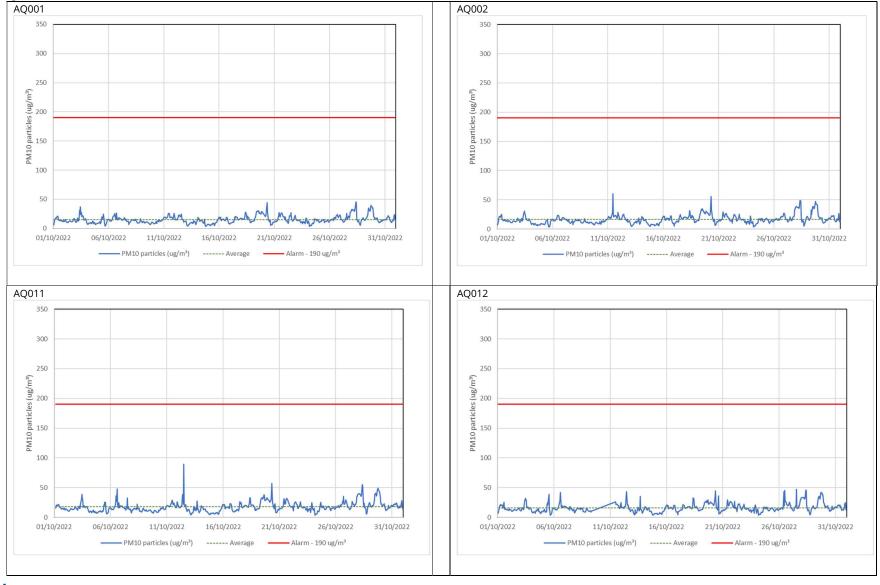
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM <sub>10</sub> concentration (µg/m³)	Minimum 1- hour PM <sub>10</sub> concentration (µg/m³)	Maximum 1- hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1- hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture (%)
AQ001	529016, 183049	Junction of Park Village East, Stanhope Street and Granby Terrace	М	Yes	N	15.1	3.2	45.6	0	100.0
AQ002	528924, 183130	Park Village East	М	Yes	N	16.5	3.4	60.3	0	100.0
AQ003	529273, 182698	St James' Gardens	М	Yes	N/A	9.0	1.8	29.4	0	100.0
AQ004	529533, 182519	Melton Street	н	Yes	N/A	15.2	2.9	41.8	0	68.8
AQ006	529388, 182524	Euston Street	н	No	N/A	-	-	-	-	-
AQ007	529361, 182574	Drummond Street	н	Yes	N/A	16.6	3.5	48.5	0	100.0
AQ008	529372, 182657	Cobourg Street	н	Yes	N/A	17.6	2.7	61.3	0	100.0
AQ009	529707, 182730	Eversholt Street	н	Yes	N/A	8.8	1.6	26.3	0	100.0
AQ010	529223, 182746	Hampstead Road South	м	Yes	N/A	18.5	3.2	51.8	0	100.0
AQ011	529176, 182922	Hampstead Road	М	Yes	N	17.5	3.7	89.1	0	100.0
AQ012	529144, 182941	Rear of Coniston House	М	Yes	Ν	16.0	3.4	46.9	0	93.4

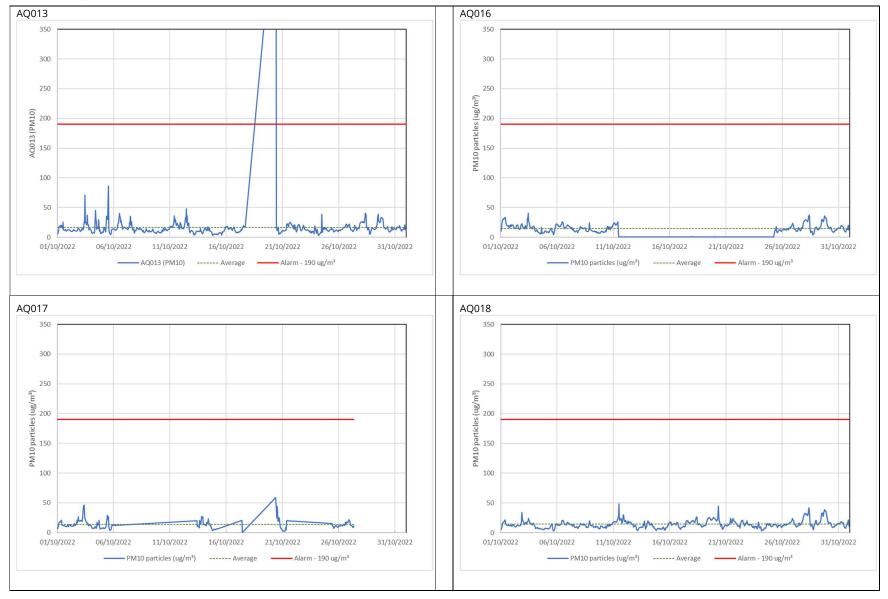
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM <sub>10</sub> concentration (µg/m³)	Minimum 1- hour PM <sub>10</sub> concentration (µg/m³)	Maximum 1- hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1- hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture (%)
AQ013	529066, 182990	Regents Park Estate	м	Yes	N	16.2	3.0	565.9	2	91.9
AQ016	528820, 183498	Mornington Terrace North	М	Yes	N	14.6	0.2	40.5	0	59.4
AQ017	528962, 183274	Mornington Terrace South	м	Yes	N	13.6	1.9	58.8	0	31.9
AQ018	529192, 183071	Hampstead Road North	м	Yes	N	14.2	2.7	48.5	0	100.0
AQ019	528689 , 183500	Park Village East (North)	м	Yes	N	15.0	0.3	39.2	0	61.1
AQ020	529109, 182605	Netley School	n/a	Yes	N/A	10.8	1.2	34.3	0	100.0
AQ021	529136, 183086	Site compound at the Junction of Hampstead Road & Granby Terrace Bridge	М	Yes	Ν	16.0	2.6	47.6	0	100.0
AQ044	527725, 184369	Adelaide Road	м	Yes	N	11.4	2.1	64.8	0	100.0
AQ045	527826, 184375	Adelaide Road 2	м	Yes	N	19.0	2.8	50.9	0	48.5

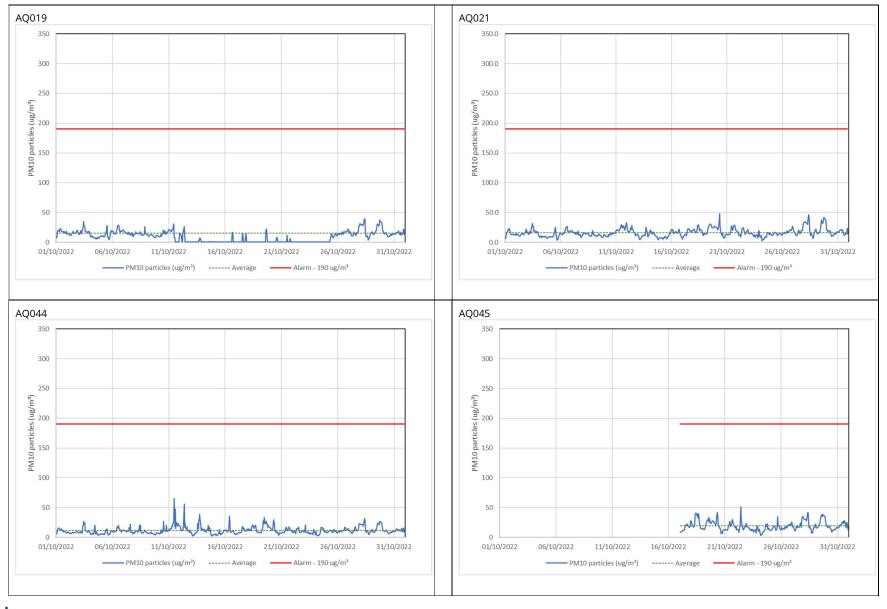
#### Table 2: Summary of exceedances of trigger level in October 2022

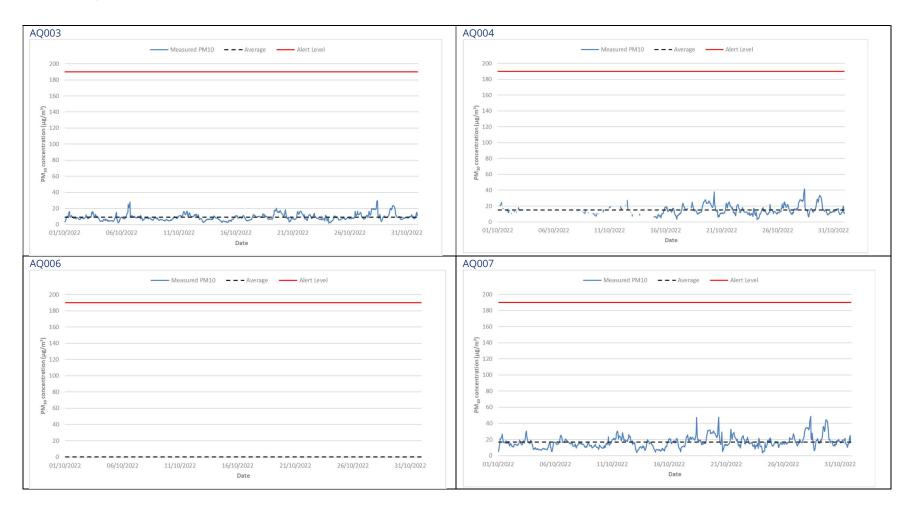
Period exceeding trigger level	Worksite	Monitoring site ID	Complaint reference number (if applicable)	Reason	Resolution
20/10/2022 09:00 - 09:59; 565.9 μg/m³ 10:00 – 10:59; 565.9 μg/m³	Euston Throat Retained Cut	AQ013	n/a	At the time of the two isolated trigger alerts from dust monitor (AQ013), which is located on the south-western boundary of the Euston Throat Retained Cut (ETRC) no dusty works were taking place. The trigger was due to power being restored to the monitor after an outage for the preceding few days. Weather conditions were very wet.	n/a

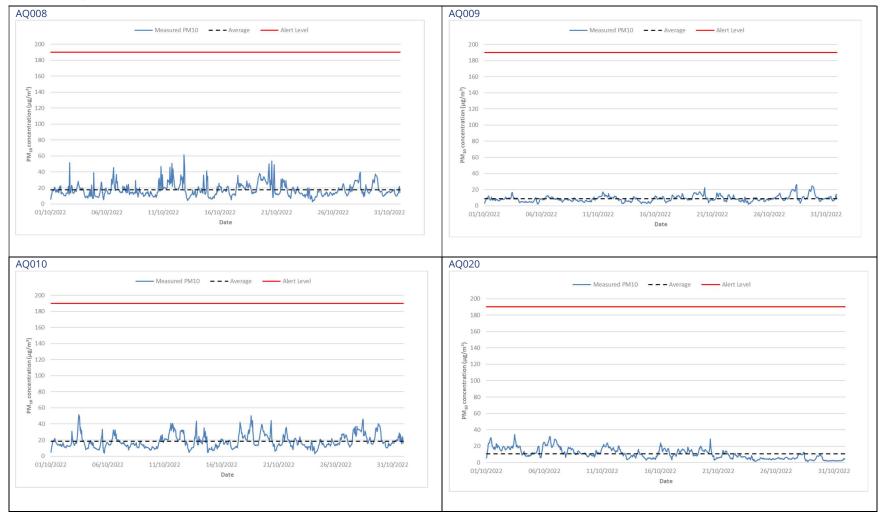












# **Appendix C – Air Quality Monitoring Results**

Table 3: NO<sub>2</sub> monitoring locations around highways, NO<sub>2</sub> concentrations and monthly monitoring results with running mean for 2022 (µg/m<sup>3</sup>)

Monitoring Site	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
HS2- 000020BM5	Junction of St Chad's Street and Grays Inn Road	530436, 182929	55	40	48	42	34	34	39	41	45				42
HS2- 000020BM7	Chalton Street	529894, 182702	Tube Missing	Tube Missing	62	46	41	38	Tube Missing	40	41				45
HS2- 000020BM8	Junction of Euston Square and Grafton Place	529737, 182641	Tube Missing	51	59	49	51	45	49	47	49				50
HS2- 000020BM9	Junction of Endsleigh Gardens and Upper Woburn Place	529785, 182529	61	44	58	47	38	38	42	49	51				48
HS2- 000020BMA	Junction of Euston Road and Gower Street	529429, 182375	Tube Missing	44	57	43	41	31	41	41	42				43
HS2- 000020BMB	Whitfield Street	529273, 182114	51	37	50	35	28	26	28	30	32				35
HS2- 000020BMC	Hampstead Road	529232, 182511	70	52	71	55	52	54	60	58	63				60
HS2-000020BMF	Junction of Polygon Road and Ossulston Street	529715, 183123	42	27	55	28	25	21	23	27	29				31
HS2- 000020BMH	Nash Street	528861, 182717	46	31	45	28	26	26	27	29	28				32
HS2-000020BMJ	Junction on Robert Street and Stanhope Street	529080, 182698	41	31	47	33	28	25	27	31	31				33

<sup>&</sup>lt;sup>1</sup> 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.

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
HS2- 000020BMK	Junction of Plender Street and Bayham Street	529196, 183546	56	Tube Missing	54	37	36	37	38	41	40				42
HS2-000020BML	Junction of Arlington Road and Mornington Crescent	529093, 183356	48	30	44	28	23	20	22	24	27				30
HS2- 000020BMM	Junction of Bayham Street and Pratt Street	529084, 183722	Tube Missing	49	52	37	44	Tube Missing	40	33	43				43
HS2- 000020BMN	Junction of Delancey Street and Albert Street	528850, 183573	53	34	43	32	30	26	26	26	29				33
HS2- 000020BMQ	Junction of Parkway and Delancey Street	528662, 183604	51	30	60	40	33	33	37	39	38				40
HS2- 000020BMR	Junction of Oval Road and Jamestown Road	528548, 183967	49	31	43	29	24	18	22	26	28				30
HS2- 000020BMS	Junction of Chalk Farm Road and Castlehaven Road	528685, 184188	50	41	50	38	36	31	34	40	44				40
HS2- 000020BMT	Junction of Camden Road and Camden Street	529079, 184043	60	Tube Missing	53	44	35	31	33	43	45				43
HS2- 000020BMU	Junction of Southampton Road and Fleet Road	527783, 185407	53	37	53	37	32	29	32	34	39				39
HS2- 000020BMV	Primrose Hill Road	527538, 184250	57	Tube Missing	42	28	25	18	23	25	27				31
HS2- 000020BMW	Junction of Finchley Road and Hilgrove Road	526619, 184081	66	52	64	48	41	37	44	Tube Missing	50				50
HS2- 000020BMZ	Junction of Finchley Road and Hendon Way	525102, 186042	88	62	83	59	50	52	60	64	66				65

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
HS2-000020BNA	Junction of Regent's Park Road and Rothwell Street	527884, 183980	48	33	38	Tube Missing	21	22	Tube Missing	22	24				30
HS2-000020BNC	Junction of Outer Circle and Gloucester Gate	528528, 183443	38	19	39	25	18	14	20	24	23				24
HS2- 000020BNH	Junction of Parkway and Albert Street	528763, 183720	50	Tube Missing	Tube Missing	Tube Missing	24	24	28	28	28				30
HS2- 000020BNN	Lincoln's Inn Fields	530744, 181308	47	34	39	26	25	24	26	23	27				30
HS2- 000020BNQ	Camley Street	529735, 183737	62	Tube Missing	42	32	30	22	22	27	28				33
HS2-000020BNY	Junction of Mill Lane and Hillfield Road	524839, 185136	60	39	43	34	27	25	32	29	36				36
HS2-000020BNZ	Mansfield Road	528050, 185508	50	36	37	26	27	26	27	26	30				31
HS2-000020BP0	Junction of Camden Road and Torriano Avenue	529708, 184871	63	Tube Missing	56	42	38	40	Tube Missing	41	45				46
HS2-000020BP2	Junction of Grays Inn Road and Holborn	531149, 181616	59	40	48	33	33	29	31	30	35				37
HS2-000020BPB	Camden High Street	528966, 183735	78	Tube Missing	65	50	49	50	52	54	61				57
HS2-000020BPC	Castlehaven Road	528788, 184591	52	Tube Missing	39	27	24	18	22	22	27				29
HS2-000020BPD	Prince of Wales Road	528571, 184683	46	32	37	25	19	17	18	20	24				26
HS2-000020BPE	Haverstock Hill	527710, 184749	55	41	39	28	32	22	29	27	32				34
HS2-000020BPF	Junction of Primrose Gardens and England's Lane	527549, 184640	54	38	49	31	26	24	29	31	33				35

Monitoring Site	Location	Coordinates	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
ID	description	(X, Y)	Jan	reb	IVIAI	Арі	way	Jun	Jui	Aug	Seb	000	NOV	Dec	Weatt
HS2-000020BPU	Junction of Gower Street and Grafton Way	529476, 182267	Tube Missing	37	49	38	35	33	39	37	41				39
HS2- 000020BPW	Junction of Delancey Street and Arlington Road	528939, 183637	53	34	49	36	29	27	30	31	33				36
HS2-000020BPX	Netley Street	529177, 182625	48	30	50	34	26	18	27	33	33				33
HS2-000020BPY	Stanhope Street	529060, 182947	47	Tube Missing	46	31	25	21	23	22	23				30
HS2-000020BPZ	Albany Street	528790, 182923	31	29	45	31	26	24	26	28	30				30
HS2-000020BQ0	Werrington Street	529493, 183113	44	28	40	26	19	18	20	22	25				27
HS2-000020BQ1	Polygon Road	529574, 183045	44	31	42	28	Tube Missing	19	21	23	25				29
HS2-000020BQ2	Alexandra Place	526320, 183980	45	30	42	26	22	17	22	21	24				28
HS2-000020BQ3	Harrington Square	529228, 183172	55	Tube Missing	60	41	36	29	35	34	37				41
HS2-000020BQ4	Junction of North Gower Street and Starcross Street	529290, 182572	52	25	52	33	26	21	26	28	28				32
HS2-000020BQ5	Adelaide Road	527713, 184392	53	41	48	30	31	24	28	23	31				34
HS2-000020BQ6	Mornington Terrace	528836, 183474	47	30	42	25	22	19	21	23	25				28
HS2-000020BQ7	Arlington Road	529009, 183479	46	28	38	25	22	18	20	22	26				27
HS2-000020BQ8	Clarkson Row	529024, 183213	48	33	44	27	25	23	24	25	26				30
HS2-000020BQ9	Park Village East	528923, 183121	Tube Missing	28	44	31	23	22	24	28	27				28
HS2-000020BQA	Eversholt Street	529386, 183132	50	52	60	39	40	39	37	38	42				44

Monitoring Site	Location	Coordinates	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
ID HS2-000020BQB	description Junction of Harrington Street and Varndell Street	(X, Y) 529147, 182816	45	27	42	32	22	20	21	25	26				29
HS2-000020BQC	Junction of Robert Street and Hampstead Road	529199, 182704	51	30	53	37	27	26	28	33	35				36
HS2- 000020BQD	Drummond Crescent	529648, 182856	52	35	51	34	32	27	26	25	31				35
HS2-000020BQJ	Grafton Way	529380, 182225	Tube Missing	47	50	43	44	41	40	40	Tube Missing				44
HS2-000020BQL	Delancey Street	528768, 183581	60	37	57	43	33	26	35	36	39				41
HS2-000020BQR	Lamp post on Park Village East	528682, 183505	47	29	47	27	23	20	24	25	27				30
HS2-000020BQS	Opposite Maria fidelis school on Phoenix Road	529670, 182982	39	28	45	27	24	19	20	23	27				28
HS2-000020BQT	Drummond Street	529385, 182581	50	32	52	33	29	19	24	28	31				33
HS2-000020BQX	Lamp post on Brunswick Square	530344, 182236	56	37	45	30	31	27	29	27	30				35
HS2-000020BP4	Triplicate site on Finchley Road next to Swiss Cottage kerbside automatic monitoring station	526633, 184392	74	50	76	49	41	41	49	48	55				54
HS2-000020BP5	Triplicate site next to the Euston Road roadside automatic monitoring stations	529895, 182657	Tube Missing	Tube Missing	67	Tube Missing	Tube Missing	Tube Missing	Tube Missing	Tube Missing	65				66

Monitoring Site ID	Location description	Coordinates (X, Y)	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean <sup>1</sup>
HS2-000020BP9	Triplicate site in Russell Square next to Bloomsbury urban background automatic monitoring station	530120, 182034	54	36	42	34	27	21	24	25	29				32