

Holloway Park, London

Construction Monitoring Report

Client: London Square
Ref: CM81-22405-R0
Date: 24 May 2024
Note by: Anthony Coraci, MSc DipIOA MIOA, Senior Acoustics Consultant

1. INTRODUCTION

1.1 This Technical Note sets out results of the construction monitoring being carried out at the above site between Monday 29th April & Saturday 11th May 2024. The monitoring is being carried out in general agreement with the methodology in the current Section 61 Consent between the London Borough of Islington and OHOB.

2. WEEKLY ACTIVITIES

2.1 The following activities have been carried during the period covered by this report, in addition to the usual use of the Haul Road with site vehicles:

OHOB

- Tarmac works
- Working on drainage at Gate 2 and near welfare and further into the site
- Drainage installed near site cabins

Pure Logistic

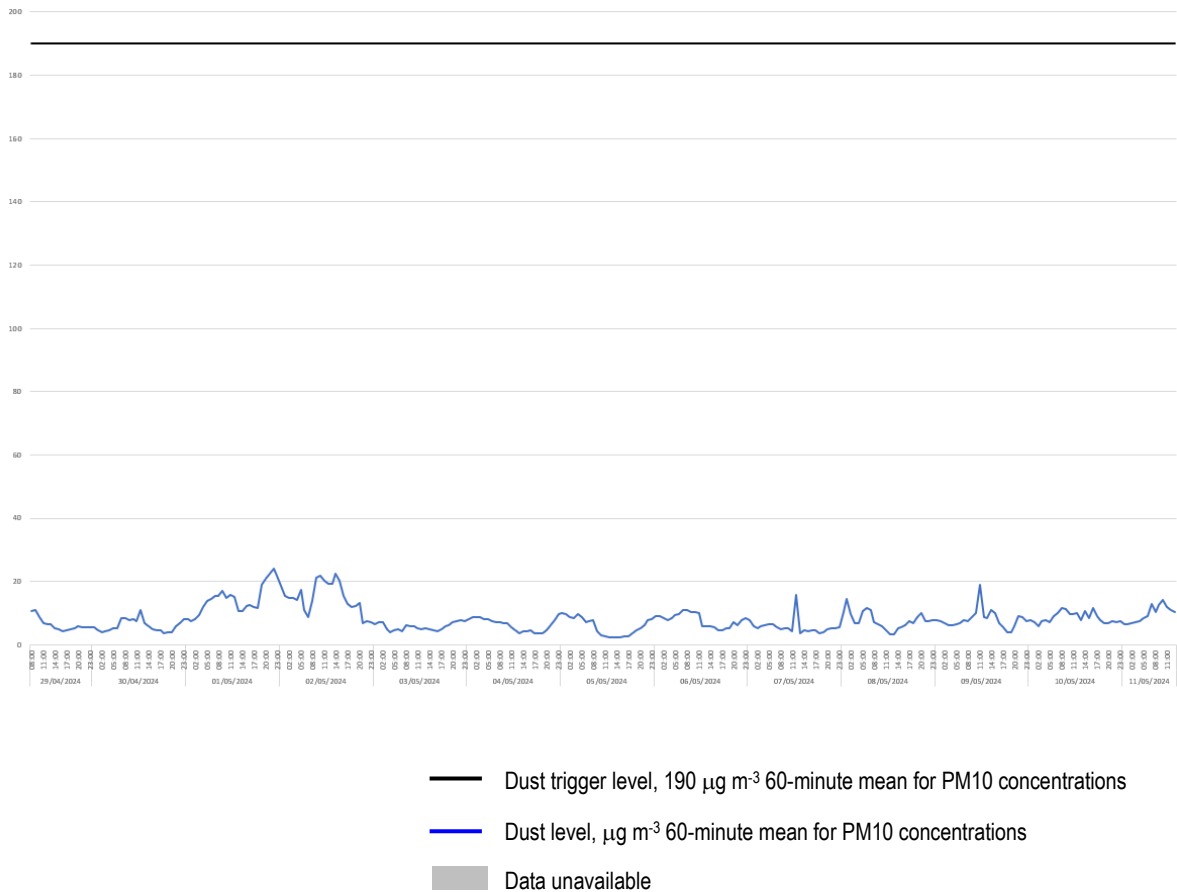
- General site works

3. MONITORING DATA

3.1 This section sets out a summary of the monitoring data that has been recorded onsite and provides a discussion of any exceedances and best practicable means incorporated by the site team if exceedances were believed to be construction related.

Dust Monitoring Results

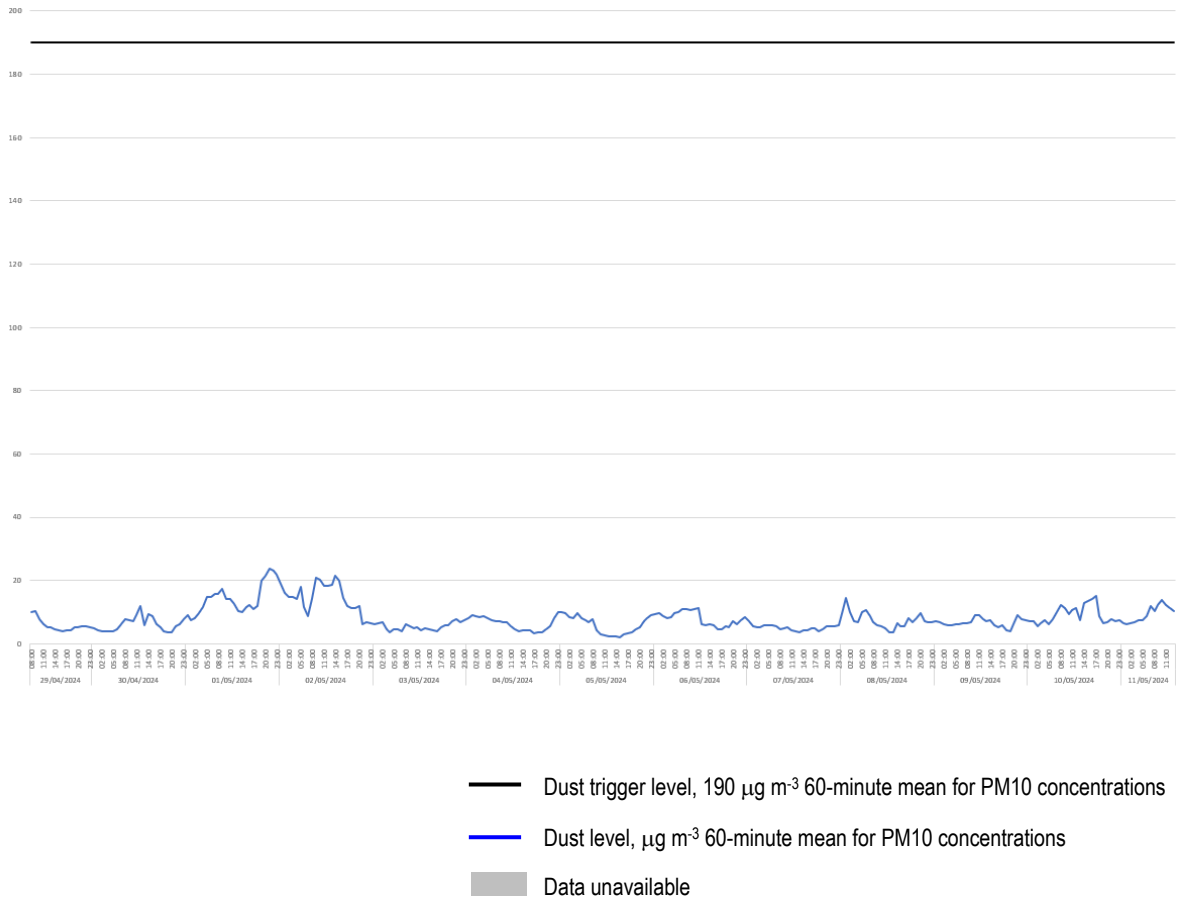
Location 1



3.2 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report.

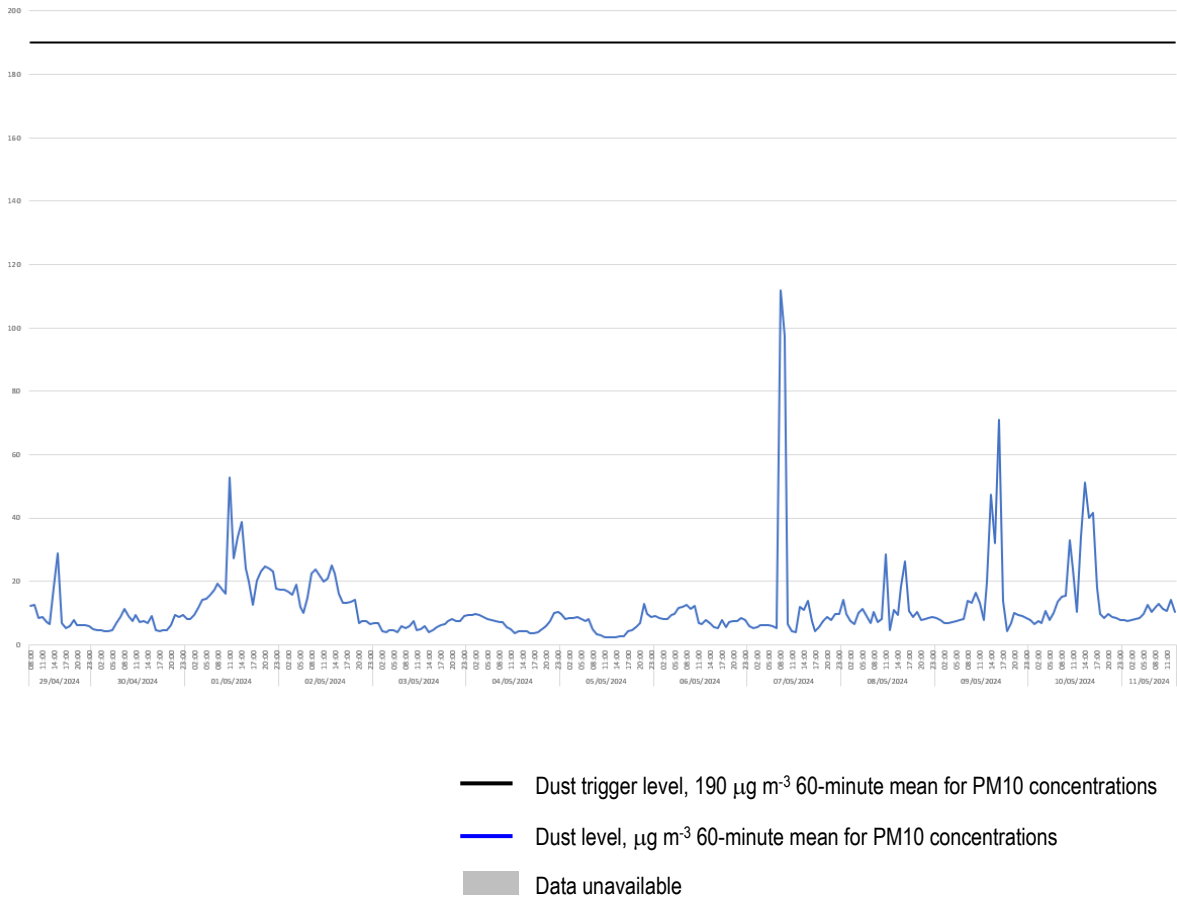
3.3 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Location 2



- 3.4 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.
- 3.5 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Location 3



3.6 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report.

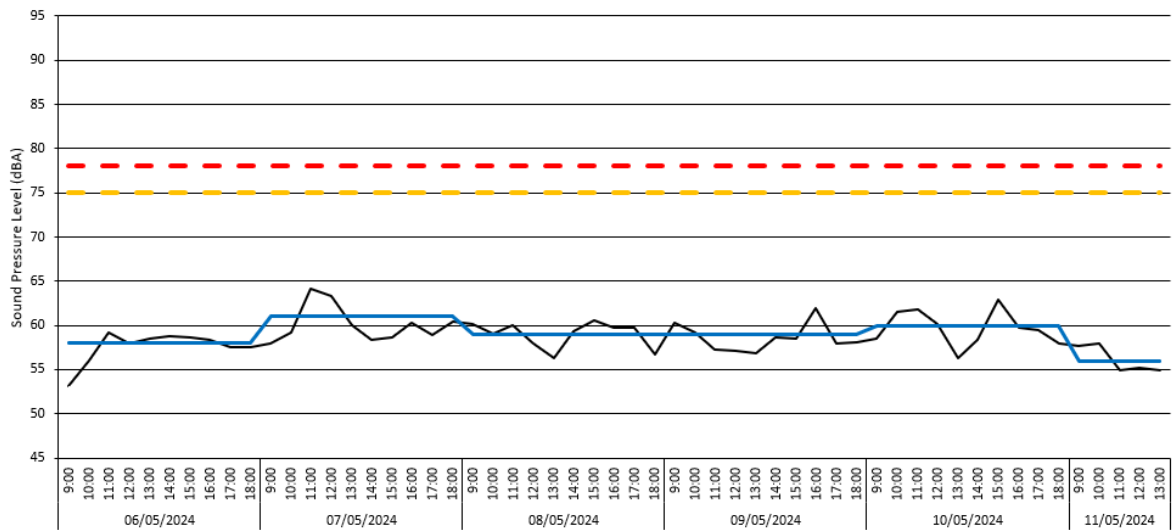
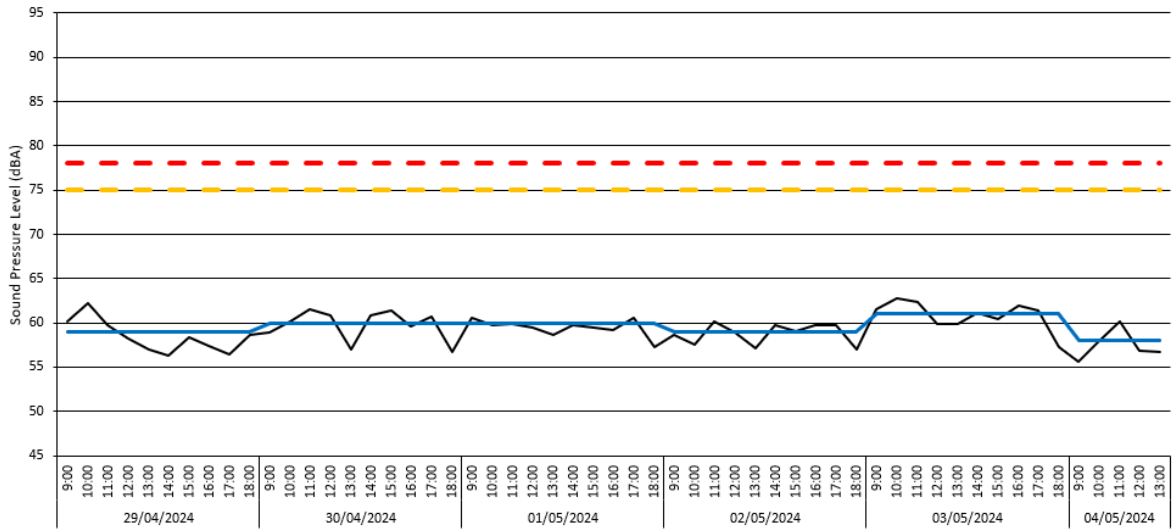
3.7 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Noise Monitoring Results

Location 1 – Raw Data

# Broadband Results	Date	Time	LAeq(60min)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]
	2024-04-29	09:00:00	60.1
	2024-04-29	10:00:00	62.2
	2024-04-29	11:00:00	59.7
	2024-04-29	12:00:00	58.2
	2024-04-29	13:00:00	57.0
	2024-04-29	14:00:00	56.3
	2024-04-29	15:00:00	58.4
	2024-04-29	16:00:00	57.4
	2024-04-29	17:00:00	56.5
	2024-04-29	18:00:00	58.7
	2024-04-30	09:00:00	58.9
	2024-04-30	10:00:00	60.1
	2024-04-30	11:00:00	61.6
	2024-04-30	12:00:00	60.9
	2024-04-30	13:00:00	57.0
	2024-04-30	14:00:00	60.9
	2024-04-30	15:00:00	61.4
	2024-04-30	16:00:00	59.6
	2024-04-30	17:00:00	60.7
	2024-04-30	18:00:00	56.7
	2024-05-01	09:00:00	60.5
	2024-05-01	10:00:00	59.8
	2024-05-01	11:00:00	59.9
	2024-05-01	12:00:00	59.5
	2024-05-01	13:00:00	58.7
	2024-05-01	14:00:00	59.8
	2024-05-01	15:00:00	59.4
	2024-05-01	16:00:00	59.2
	2024-05-01	17:00:00	60.6
	2024-05-01	18:00:00	57.2
	2024-05-02	09:00:00	58.7
	2024-05-02	10:00:00	57.5
	2024-05-02	11:00:00	60.2
	2024-05-02	12:00:00	58.9
	2024-05-02	13:00:00	57.1
	2024-05-02	14:00:00	59.8
	2024-05-02	15:00:00	59.1
	2024-05-02	16:00:00	59.7
	2024-05-02	17:00:00	59.8
	2024-05-02	18:00:00	57.0
	2024-05-03	09:00:00	61.6
	2024-05-03	10:00:00	62.8
	2024-05-03	11:00:00	62.4
	2024-05-03	12:00:00	59.9
	2024-05-03	13:00:00	59.9
	2024-05-03	14:00:00	61.1
	2024-05-03	15:00:00	60.4
	2024-05-03	16:00:00	61.9
	2024-05-03	17:00:00	61.4
	2024-05-03	18:00:00	57.3
	2024-05-04	09:00:00	55.6
	2024-05-04	10:00:00	57.9
	2024-05-04	11:00:00	60.2
	2024-05-04	12:00:00	56.8
	2024-05-04	13:00:00	56.7
	2024-05-05	18:00:00	-
	2024-05-06	09:00:00	53.2
	2024-05-06	10:00:00	56.0
	2024-05-06	11:00:00	59.2
	2024-05-06	12:00:00	57.9
	2024-05-06	13:00:00	58.5
	2024-05-06	14:00:00	58.8
	2024-05-06	15:00:00	58.6
	2024-05-06	16:00:00	58.3
	2024-05-06	17:00:00	57.5
	2024-05-06	18:00:00	57.5
	2024-05-07	09:00:00	58.0
	2024-05-07	10:00:00	59.2
	2024-05-07	11:00:00	64.1
	2024-05-07	12:00:00	63.3
	2024-05-07	13:00:00	60.0
	2024-05-07	14:00:00	58.4
	2024-05-07	15:00:00	58.6
	2024-05-07	16:00:00	60.3
	2024-05-07	17:00:00	58.9
	2024-05-07	18:00:00	60.4
	2024-05-08	09:00:00	60.1
	2024-05-08	10:00:00	59.0
	2024-05-08	11:00:00	60.0
	2024-05-08	12:00:00	57.9
	2024-05-08	13:00:00	56.3
	2024-05-08	14:00:00	59.3
	2024-05-08	15:00:00	60.6
	2024-05-08	16:00:00	59.8
	2024-05-08	17:00:00	59.8
	2024-05-08	18:00:00	56.7
	2024-05-09	09:00:00	60.3
	2024-05-09	10:00:00	59.2
	2024-05-09	11:00:00	57.2
	2024-05-09	12:00:00	57.1
	2024-05-09	13:00:00	56.9
	2024-05-09	14:00:00	58.7
	2024-05-09	15:00:00	58.5
	2024-05-09	16:00:00	62.0
	2024-05-09	17:00:00	58.0
	2024-05-09	18:00:00	58.1
	2024-05-10	09:00:00	58.5
	2024-05-10	10:00:00	61.5
	2024-05-10	11:00:00	61.8
	2024-05-10	12:00:00	60.2
	2024-05-10	13:00:00	56.3
	2024-05-10	14:00:00	58.4
	2024-05-10	15:00:00	62.9
	2024-05-10	16:00:00	59.7
	2024-05-10	17:00:00	59.5
	2024-05-10	18:00:00	58.0
	2024-05-11	09:00:00	57.7
	2024-05-11	10:00:00	58.0
	2024-05-11	11:00:00	54.9
	2024-05-11	12:00:00	55.2
	2024-05-11	13:00:00	54.9

Location 1 – Time History Data



- Daily noise trigger level (75 dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1 hour
- Daily noise level (dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- Data unavailable

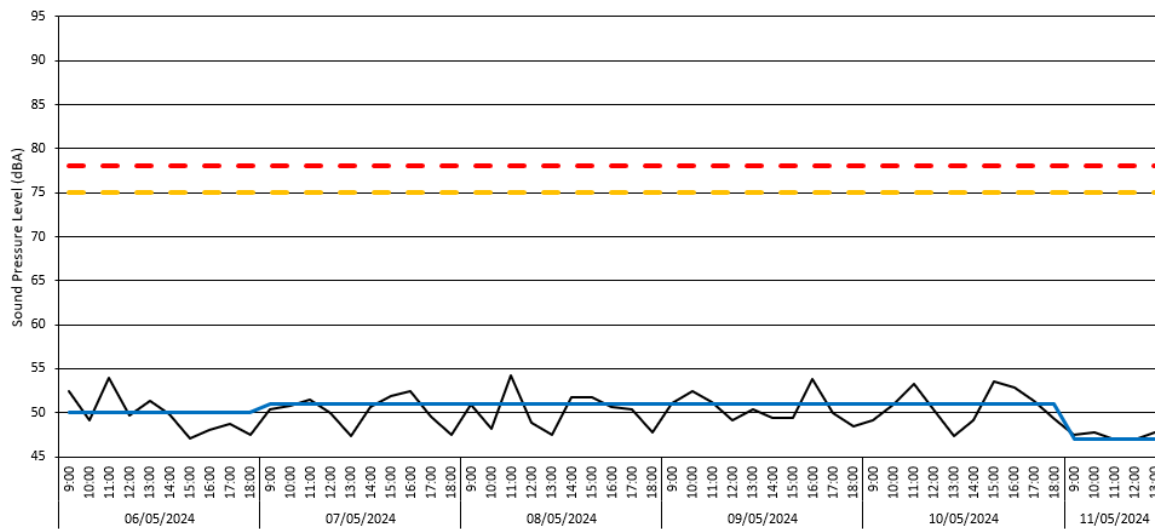
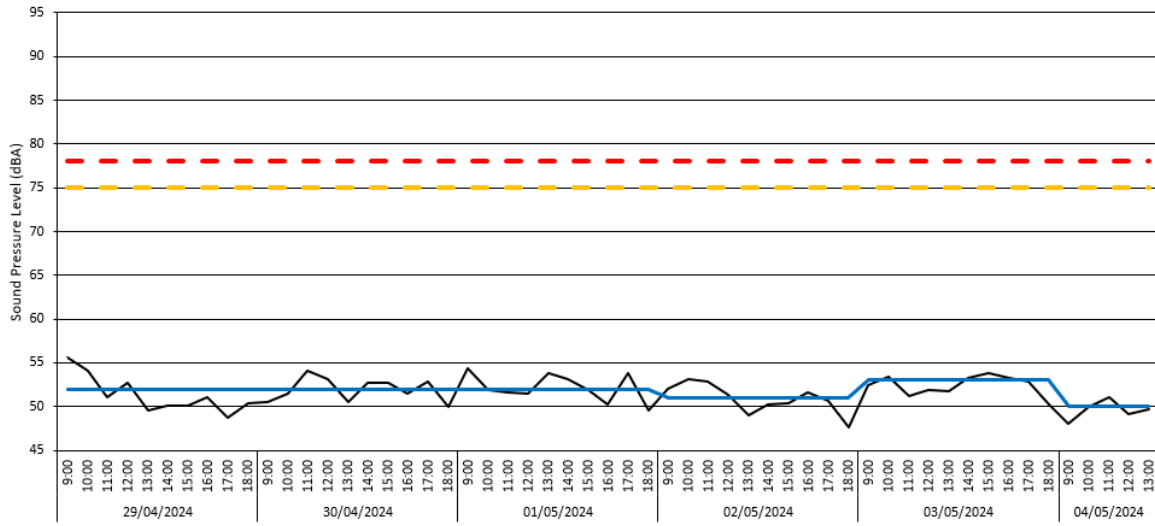
3.8 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. The monitor was offline between:

3.9 No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 2 – Raw Data

# Broadband Results	Date	Time	LAeq(60min)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]
	2024-04-29	09:00:00	55.6
	2024-04-29	10:00:00	54.1
	2024-04-29	11:00:00	51.1
	2024-04-29	12:00:00	52.7
	2024-04-29	13:00:00	49.5
	2024-04-29	14:00:00	50.1
	2024-04-29	15:00:00	50.1
	2024-04-29	16:00:00	51.1
	2024-04-29	17:00:00	48.7
	2024-04-29	18:00:00	50.4
	2024-04-30	09:00:00	50.5
	2024-04-30	10:00:00	51.5
	2024-04-30	11:00:00	54.1
	2024-04-30	12:00:00	53.1
	2024-04-30	13:00:00	50.5
	2024-04-30	14:00:00	52.7
	2024-04-30	15:00:00	52.7
	2024-04-30	16:00:00	51.5
	2024-04-30	17:00:00	52.8
	2024-04-30	18:00:00	49.9
	2024-05-01	09:00:00	54.4
	2024-05-01	10:00:00	51.9
	2024-05-01	11:00:00	51.6
	2024-05-01	12:00:00	51.5
	2024-05-01	13:00:00	53.8
	2024-05-01	14:00:00	53.1
	2024-05-01	15:00:00	51.9
	2024-05-01	16:00:00	50.2
	2024-05-01	17:00:00	53.8
	2024-05-01	18:00:00	49.5
	2024-05-02	09:00:00	52.0
	2024-05-02	10:00:00	53.2
	2024-05-02	11:00:00	52.8
	2024-05-02	12:00:00	51.4
	2024-05-02	13:00:00	49.0
	2024-05-02	14:00:00	50.2
	2024-05-02	15:00:00	50.4
	2024-05-02	16:00:00	51.6
	2024-05-02	17:00:00	50.7
	2024-05-02	18:00:00	47.6
	2024-05-03	09:00:00	52.4
	2024-05-03	10:00:00	53.4
	2024-05-03	11:00:00	51.2
	2024-05-03	12:00:00	51.9
	2024-05-03	13:00:00	51.8
	2024-05-03	14:00:00	53.3
	2024-05-03	15:00:00	53.8
	2024-05-03	16:00:00	53.3
	2024-05-03	17:00:00	52.9
	2024-05-03	18:00:00	50.3
	2024-05-04	09:00:00	48.0
	2024-05-04	10:00:00	50.0
	2024-05-04	11:00:00	51.1
	2024-05-04	12:00:00	49.1
	2024-05-04	13:00:00	49.7
	2024-05-05	18:00:00	-
	2024-05-06	09:00:00	52.5
	2024-05-06	10:00:00	49.2
	2024-05-06	11:00:00	53.9
	2024-05-06	12:00:00	49.7
	2024-05-06	13:00:00	51.4
	2024-05-06	14:00:00	49.8
	2024-05-06	15:00:00	47.1
	2024-05-06	16:00:00	48.0
	2024-05-06	17:00:00	48.7
	2024-05-06	18:00:00	47.5
	2024-05-07	09:00:00	50.4
	2024-05-07	10:00:00	50.8
	2024-05-07	11:00:00	51.5
	2024-05-07	12:00:00	49.9
	2024-05-07	13:00:00	47.3
	2024-05-07	14:00:00	50.7
	2024-05-07	15:00:00	51.9
	2024-05-07	16:00:00	52.5
	2024-05-07	17:00:00	49.6
	2024-05-07	18:00:00	47.5
	2024-05-08	09:00:00	50.9
	2024-05-08	10:00:00	48.2
	2024-05-08	11:00:00	54.3
	2024-05-08	12:00:00	48.9
	2024-05-08	13:00:00	47.5
	2024-05-08	14:00:00	51.8
	2024-05-08	15:00:00	51.8
	2024-05-08	16:00:00	50.6
	2024-05-08	17:00:00	50.4
	2024-05-08	18:00:00	47.8
	2024-05-09	09:00:00	51.0
	2024-05-09	10:00:00	52.4
	2024-05-09	11:00:00	51.2
	2024-05-09	12:00:00	49.1
	2024-05-09	13:00:00	50.4
	2024-05-09	14:00:00	49.4
	2024-05-09	15:00:00	49.4
	2024-05-09	16:00:00	53.8
	2024-05-09	17:00:00	50.0
	2024-05-09	18:00:00	48.4
	2024-05-10	09:00:00	49.2
	2024-05-10	10:00:00	50.9
	2024-05-10	11:00:00	53.3
	2024-05-10	12:00:00	50.4
	2024-05-10	13:00:00	47.3
	2024-05-10	14:00:00	49.1
	2024-05-10	15:00:00	53.6
	2024-05-10	16:00:00	52.8
	2024-05-10	17:00:00	51.3
	2024-05-10	18:00:00	49.3
	2024-05-11	09:00:00	47.5
	2024-05-11	10:00:00	47.8
	2024-05-11	11:00:00	47.0
	2024-05-11	12:00:00	46.9
	2024-05-11	13:00:00	47.8

Location 2 – Time History Data



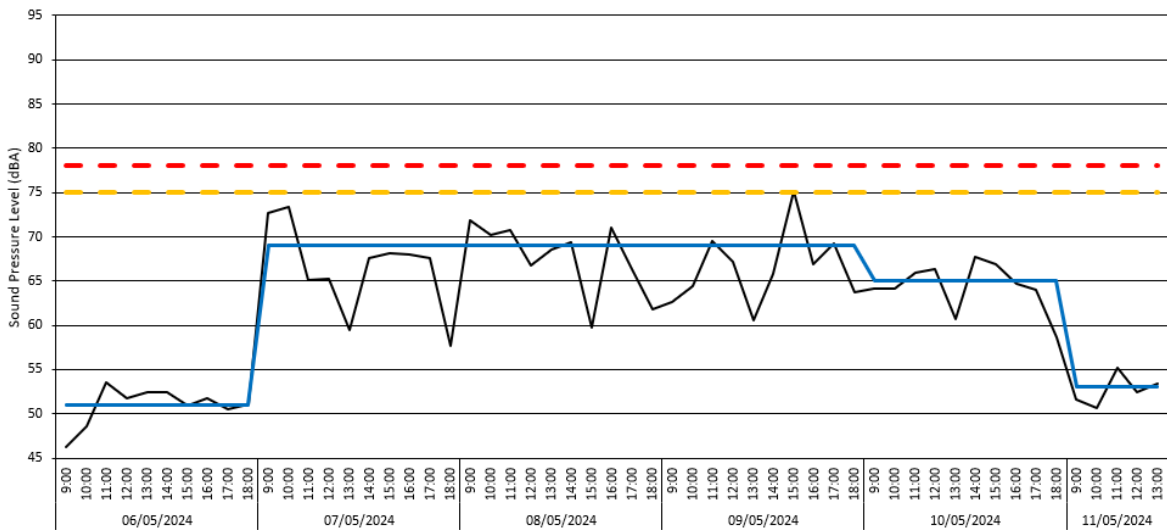
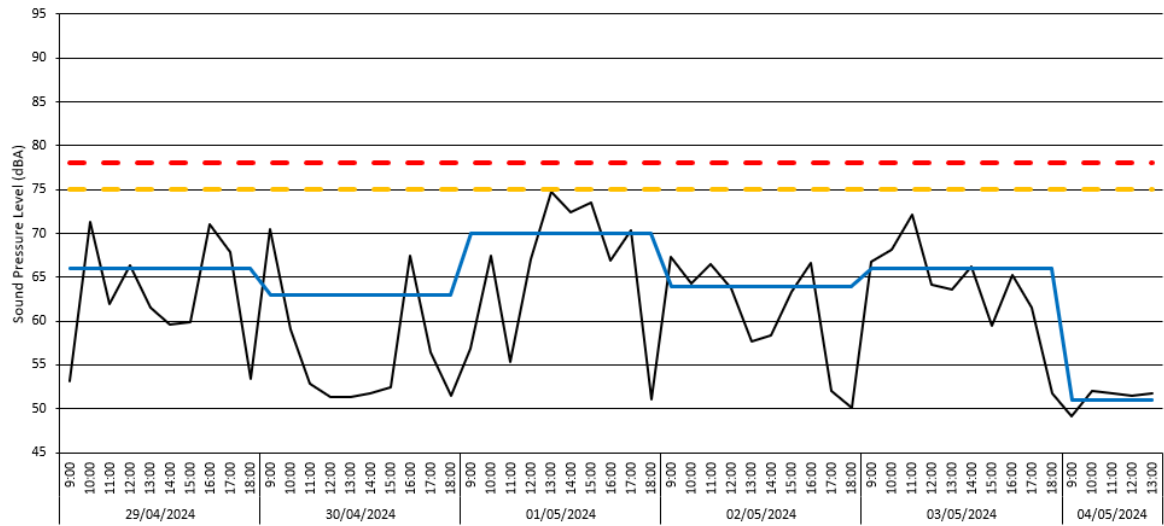
- Daily noise trigger level (75 dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- - - Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1 hour
- Daily noise level (dB LAeq, 0800-1800 hours, LAeq, 0800-1300 hours)
- Data unavailable

- 3.10 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.
- 3.11 No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Location 3 – Raw Data

# Broadband Results	Date	Time	L _{eq} (50min)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]
	2024-04-29	09:00:00	53.1
	2024-04-29	10:00:00	71.3
	2024-04-29	11:00:00	62.0
	2024-04-29	12:00:00	66.4
	2024-04-29	13:00:00	61.6
	2024-04-29	14:00:00	59.6
	2024-04-29	15:00:00	59.9
	2024-04-29	16:00:00	71.0
	2024-04-29	17:00:00	67.8
	2024-04-29	18:00:00	53.4
	2024-04-30	09:00:00	70.5
	2024-04-30	10:00:00	59.0
	2024-04-30	11:00:00	52.8
	2024-04-30	12:00:00	51.4
	2024-04-30	13:00:00	51.4
	2024-04-30	14:00:00	51.7
	2024-04-30	15:00:00	52.5
	2024-04-30	16:00:00	67.4
	2024-04-30	17:00:00	56.4
	2024-04-30	18:00:00	51.5
	2024-05-01	09:00:00	56.9
	2024-05-01	10:00:00	67.4
	2024-05-01	11:00:00	55.3
	2024-05-01	12:00:00	67.1
	2024-05-01	13:00:00	74.7
	2024-05-01	14:00:00	72.4
	2024-05-01	15:00:00	73.5
	2024-05-01	16:00:00	66.9
	2024-05-01	17:00:00	70.3
	2024-05-01	18:00:00	51.0
	2024-05-02	09:00:00	67.3
	2024-05-02	10:00:00	64.3
	2024-05-02	11:00:00	66.5
	2024-05-02	12:00:00	63.8
	2024-05-02	13:00:00	57.7
	2024-05-02	14:00:00	58.4
	2024-05-02	15:00:00	63.3
	2024-05-02	16:00:00	66.6
	2024-05-02	17:00:00	52.1
	2024-05-02	18:00:00	50.1
	2024-05-03	09:00:00	66.7
	2024-05-03	10:00:00	68.2
	2024-05-03	11:00:00	72.2
	2024-05-03	12:00:00	64.2
	2024-05-03	13:00:00	63.6
	2024-05-03	14:00:00	66.2
	2024-05-03	15:00:00	59.5
	2024-05-03	16:00:00	65.3
	2024-05-03	17:00:00	61.5
	2024-05-03	18:00:00	51.7
	2024-05-04	09:00:00	49.1
	2024-05-04	10:00:00	52.1
	2024-05-04	11:00:00	51.8
	2024-05-04	12:00:00	51.5
	2024-05-04	13:00:00	51.7
	2024-05-05	18:00:00	-,-
	2024-05-06	09:00:00	46.2
	2024-05-06	10:00:00	48.6
	2024-05-06	11:00:00	53.5
	2024-05-06	12:00:00	51.7
	2024-05-06	13:00:00	52.5
	2024-05-06	14:00:00	52.4
	2024-05-06	15:00:00	50.9
	2024-05-06	16:00:00	51.8
	2024-05-06	17:00:00	50.5
	2024-05-06	18:00:00	51.1
	2024-05-07	09:00:00	72.7
	2024-05-07	10:00:00	73.4
	2024-05-07	11:00:00	65.1
	2024-05-07	12:00:00	65.2
	2024-05-07	13:00:00	59.5
	2024-05-07	14:00:00	67.6
	2024-05-07	15:00:00	68.1
	2024-05-07	16:00:00	68.0
	2024-05-07	17:00:00	67.6
	2024-05-07	18:00:00	57.7
	2024-05-08	09:00:00	71.9
	2024-05-08	10:00:00	70.2
	2024-05-08	11:00:00	70.8
	2024-05-08	12:00:00	66.8
	2024-05-08	13:00:00	68.5
	2024-05-08	14:00:00	69.4
	2024-05-08	15:00:00	59.8
	2024-05-08	16:00:00	71.1
	2024-05-08	17:00:00	66.4
	2024-05-08	18:00:00	61.8
	2024-05-09	09:00:00	62.6
	2024-05-09	10:00:00	64.4
	2024-05-09	11:00:00	69.5
	2024-05-09	12:00:00	67.2
	2024-05-09	13:00:00	60.6
	2024-05-09	14:00:00	65.8
	2024-05-09	15:00:00	75.2
	2024-05-09	16:00:00	66.9
	2024-05-09	17:00:00	69.2
	2024-05-09	18:00:00	63.7
	2024-05-10	09:00:00	64.2
	2024-05-10	10:00:00	64.2
	2024-05-10	11:00:00	65.9
	2024-05-10	12:00:00	66.4
	2024-05-10	13:00:00	60.7
	2024-05-10	14:00:00	67.7
	2024-05-10	15:00:00	66.9
	2024-05-10	16:00:00	64.7
	2024-05-10	17:00:00	64.0
	2024-05-10	18:00:00	58.6
	2024-05-11	09:00:00	51.6
	2024-05-11	10:00:00	50.6
	2024-05-11	11:00:00	55.2
	2024-05-11	12:00:00	52.4
	2024-05-11	13:00:00	53.4

Location 3 – Time-history graph



- Daily noise trigger level (75 dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Hourly noise action level (78 dB LAeq, 1 hour)
- Noise level, LAeq, 1hour
- Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Data unavailable

3.13 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report.

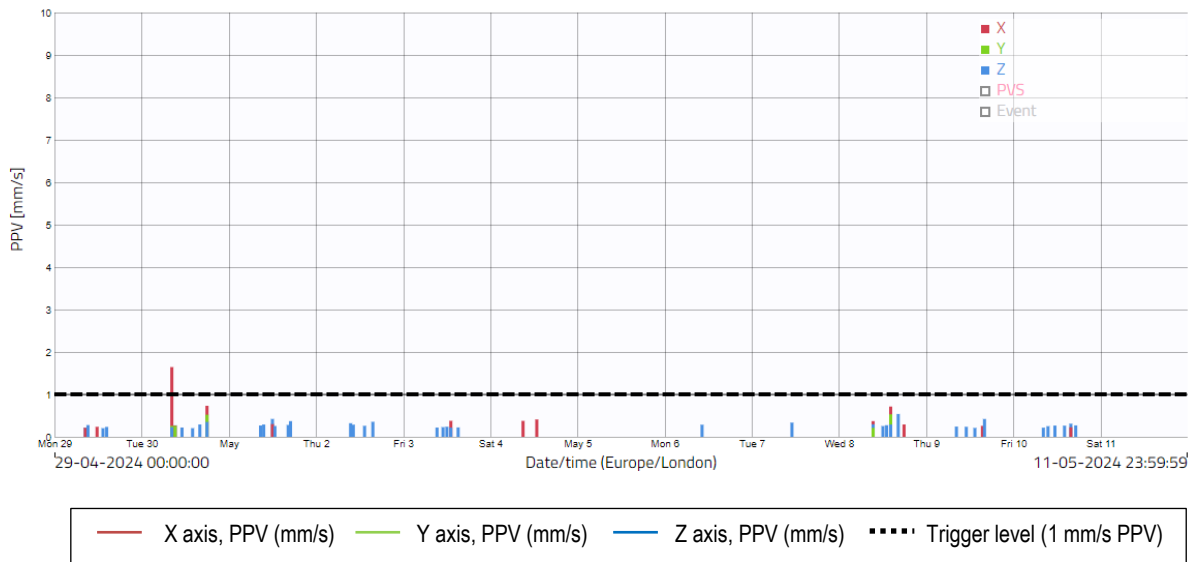
3.14 No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Vibration Monitoring Results

Location 1 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L1	29/04/2024 to 11/05/2024	1	1.67	30/04/2024	08:19
		2	0.82	30/04/2024	18:00
Criteria mm/s PVS	Exceedances	3	0.74	08/05/2024	14:14
1.0	1	4	0.68	30/04/2024	17:37
		5	0.54	08/05/2024	16:19
		6	0.47	01/05/2024	12:01
		7	0.42	09/05/2024	16:04
		8	0.42	04/05/2024	12:48
		9	0.39	08/05/2024	09:24
		10	0.38	03/05/2024	13:08

Location 1 – Time-history graph



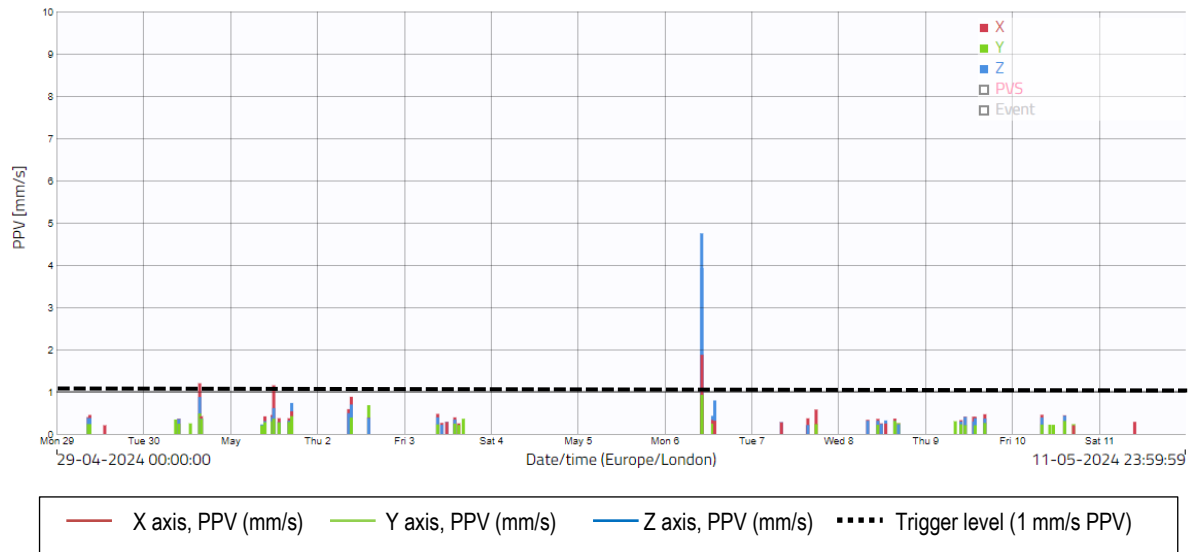
3.15 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. There was one exceedance of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Tuesday 30th April at 08:19, with a recorded level of 1.7 mm/s PPV. It is worth noting from the raw data above that the exceedance was caused by an individual, short-lived event, rather than continuous activity at this location. This will continue to be monitored.

3.16 In this location, it is likely that the residents opening and closing the main door to the residential building will cause occasional vibration spikes, given that the monitor is located on the same facade as the doors.

Location 2 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L2	29/04/2024 to 11/05/2024	1	4.82	06/05/2024	10:16
		2	3.95	06/05/2024	10:20
Criteria mm/s PVS	Exceedances	3	2.84	06/05/2024	10:22
1.0	13	4	2.23	06/05/2024	10:30
		5	2.21	06/05/2024	10:23
		6	1.29	06/05/2024	10:33
		7	1.29	30/04/2024	15:35
		8	1.17	01/05/2024	12:02
		9	1.12	06/05/2024	10:32
		10	1.05	06/05/2024	10:26

Location 2 – Time-history graph



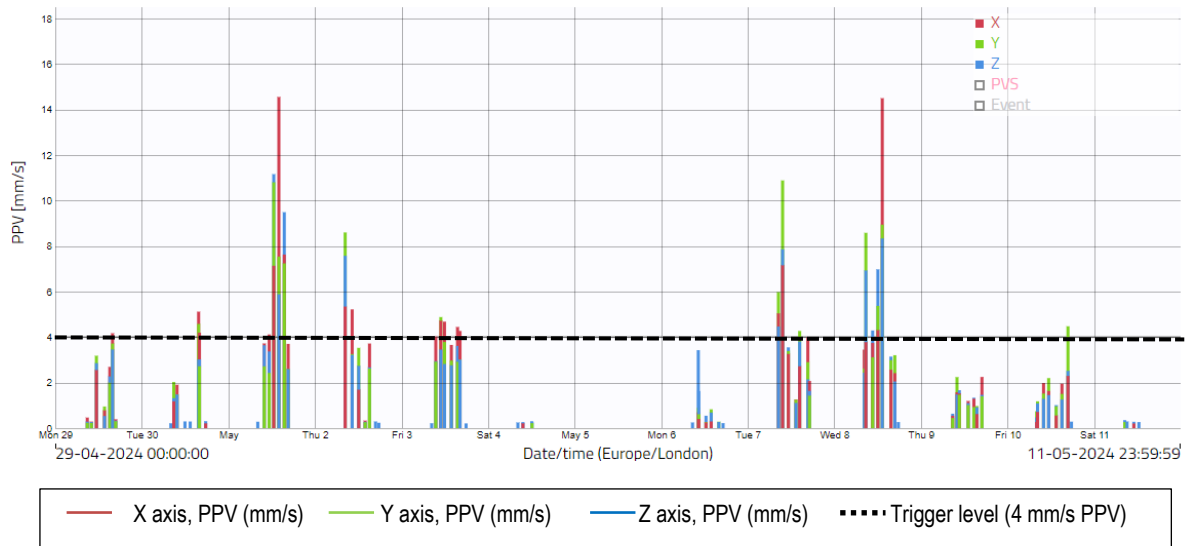
3.17 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report. There were 13 exceedances of the project vibration trigger level of 1.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Monday 6th May at 10:16, with a recorded level of 4.8 mm/s PPV. It is possible that the sensor may have accidentally been knocked. This is supported by the fact that no other similar vibration levels were recorded, and this was a one-off reading.

3.18 Additionally, one of the residents behind the monitoring location has some form of workshop with power tools at the rear of their garden. Any operation of these tools could also generate vibration alerts.

Location 3 – Raw data

Measuring point:	Period:	Order	Value	Date	Time	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L3	29/04/2024 to 11/05/2024	1	17.56	08/05/2024	13:17	31	6.21	03/05/2024	10:54	61	5.02	01/05/2024	12:29
		2	16.27	01/05/2024	14:00	32	6.14	07/05/2024	09:31	62	5.01	07/05/2024	11:15
Criteria mm/s PVS	Exceedances	3	14.88	01/05/2024	12:35	33	6.08	08/05/2024	13:16	63	4.97	02/05/2024	10:06
4.0	102	4	13.88	01/05/2024	15:30	34	5.89	03/05/2024	15:32	64	4.96	08/05/2024	13:13
		5	12.57	07/05/2024	09:39	35	5.89	01/05/2024	12:11	65	4.94	02/05/2024	08:22
		6	11.52	02/05/2024	08:23	36	5.88	01/05/2024	14:48	66	4.93	10/05/2024	16:46
		7	10.56	08/05/2024	13:20	37	5.87	02/05/2024	08:21	67	4.91	07/05/2024	14:23
		8	9.77	08/05/2024	08:44	38	5.76	30/04/2024	15:45	68	4.82	07/05/2024	15:01
		9	9.70	08/05/2024	09:53	39	5.75	01/05/2024	12:21	69	4.77	01/05/2024	11:19
		10	9.61	01/05/2024	14:39	40	5.66	08/05/2024	12:02	70	4.76	07/05/2024	09:28
		11	9.09	08/05/2024	12:04	41	5.63	30/04/2024	15:38	71	4.73	07/05/2024	08:25
		12	8.87	08/05/2024	13:18	42	5.59	01/05/2024	14:34	72	4.71	01/05/2024	12:07
		13	8.50	01/05/2024	15:52	43	5.57	01/05/2024	12:25	73	4.70	03/05/2024	12:16
		14	8.48	01/05/2024	13:55	44	5.56	01/05/2024	16:05	74	4.67	08/05/2024	15:41
		15	8.30	01/05/2024	12:19	45	5.54	03/05/2024	10:50	75	4.66	08/05/2024	10:18
		16	8.06	01/05/2024	12:28	46	5.53	29/04/2024	15:53	76	4.62	03/05/2024	13:49
		17	8.00	01/05/2024	12:27	47	5.52	01/05/2024	14:06	77	4.61	08/05/2024	10:39
		18	7.71	01/05/2024	15:41	48	5.49	01/05/2024	12:02	78	4.58	03/05/2024	10:39
		19	7.71	01/05/2024	12:31	49	5.39	08/05/2024	13:14	79	4.57	01/05/2024	09:53
		20	7.49	07/05/2024	08:30	50	5.36	08/05/2024	12:03	80	4.52	07/05/2024	16:39
		21	7.36	07/05/2024	08:29	51	5.36	02/05/2024	10:19	81	4.51	03/05/2024	09:30
		22	7.09	01/05/2024	12:30	52	5.35	29/04/2024	16:13	82	4.51	02/05/2024	10:05
		23	7.09	01/05/2024	12:18	53	5.30	08/05/2024	10:37	83	4.49	01/05/2024	15:50
		24	6.70	01/05/2024	12:33	54	5.30	01/05/2024	13:34	84	4.47	03/05/2024	15:46
		25	6.65	01/05/2024	16:26	55	5.27	01/05/2024	09:57	85	4.42	01/05/2024	12:17
		26	6.60	01/05/2024	12:26	56	5.27	30/04/2024	15:59	86	4.40	01/05/2024	13:50
		27	6.48	01/05/2024	12:23	57	5.27	03/05/2024	16:13	87	4.38	08/05/2024	10:38
		28	6.30	01/05/2024	12:24	58	5.24	01/05/2024	12:39	88	4.36	07/05/2024	08:24
		29	6.30	01/05/2024	12:34	59	5.17	03/05/2024	11:55	89	4.33	30/04/2024	16:00
		30	6.29	07/05/2024	09:38	60	5.16	01/05/2024	12:20	90	4.28	07/05/2024	09:40

Location 3 – Time-history graph



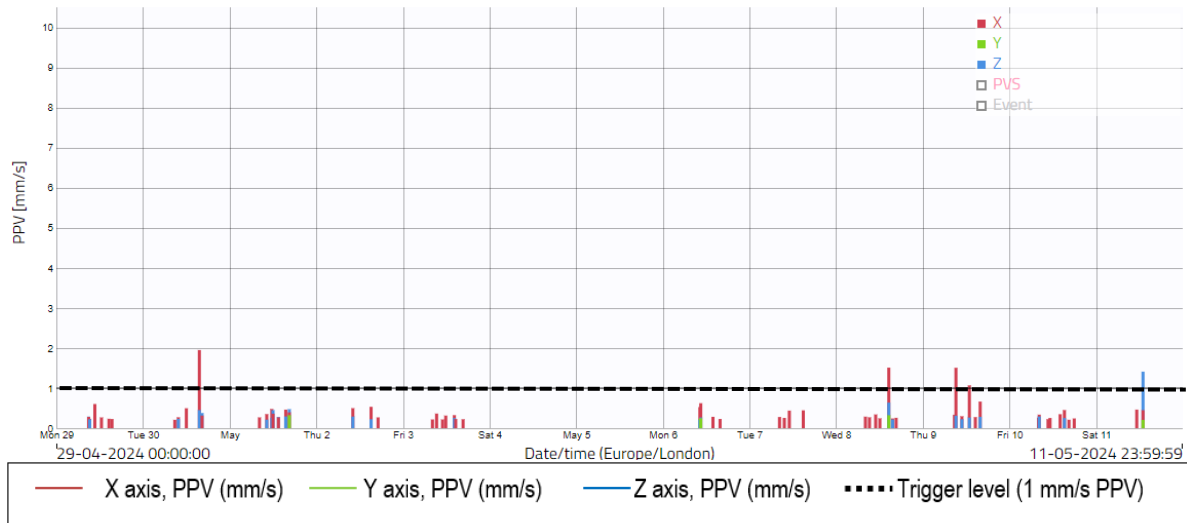
3.19 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report. There were 102 exceedances of the project vibration trigger level of 4.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Wednesday 8th May at 13:17, with a recorded level of 17.6 mm/s PPV. The site team confirmed that, due to the drainage works at Gate 2, heavy machinery (including 20 Tonne vehicles) drove within very close proximity of the monitor. Due to the close proximity in these cases, the high recorded levels are likely to have been localised and, therefore, likely to have been significantly lower at the nearest sensitive receptor. Additionally, a breaker was used at the location on Wednesday 1st May, to remove existing concrete hardstandings.

- 3.20 The activity taking place at this location will continue to be monitored; however, it is our understanding that no vibration complaints were received due to the work described above.
- 3.21 As above, it is understood that the majority of exceedances were likely to have been caused onsite vehicles moving material within the vicinity of the monitor – this has been confirmed by the site team. It is possible that the higher vibration levels recorded over this period were also caused by vehicle movements (i.e. when a lorry drives over an uneven part of ground near the monitor, a high vibration level can be recorded).
- 3.22 In addition, it is our understanding that one of the residents behind the monitoring location has some form of workshop with power tools at the rear of their garden. Any operation of these tools could also generate vibration alerts.
- 3.23 However, due to the proximity between the vibration sensor and the nearest sensitive receptor, it follows that the vibration levels at this position would have been lower than shown at the sensor location.
- 3.24 Cass Allen will continue to review noise and vibration emissions and advise on any further practicable measures to minimise vibration.

Location 4 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L4	29/04/2024 to 11/05/2024	1	2.00	30/04/2024	15:37
		2	1.55	08/05/2024	14:35
Criteria mm/s PVS	Exceedances	3	1.54	09/05/2024	09:11
1.0	6	4	1.41	11/05/2024	13:00
		5	1.12	08/05/2024	13:29
		6	1.10	09/05/2024	12:54
		7	0.68	09/05/2024	15:54
		8	0.66	06/05/2024	10:30
		9	0.64	06/05/2024	10:21
		10	0.61	29/04/2024	10:40

Location 4 – Time-history graph



3.25 There was 100% data coverage at Location 4 during construction hours for the monitoring period covered by this report. There were two exceedances of the project vibration trigger level of 1.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Tuesday 30th April at 15:37, with a recorded level of 2 mm/s PPV. Although this recorded level is a relatively small exceedance of the vibration trigger level, this will continue to be monitored. It is also worth noting that the vibration sensor is fixed to the garden wall of a private residential dwelling and the monitor is located next to a child’s play area. It is, therefore, possible that exceedances at this location may have been caused by non-construction related activity.