

Holloway Park, London

Construction Monitoring Report

Client: London Square
Ref: CM85-22405-R1
Date: 29 July 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 24th June & Saturday 7th July 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

- Working on drainage at Gates 2 and near welfare and further into the site
- Installation of drainage adjacent to Block D
- Excavation of pilecaps in Block C
- Commencement of the excavation of the crane base between Blocks E1 & E2
- Installation of drainage under temp haul road, adjacent to site welfare accommodation.
- Muck away works (i.e. the process of removing waste material, debris, and soil)
- Mobile plant used around the site where required

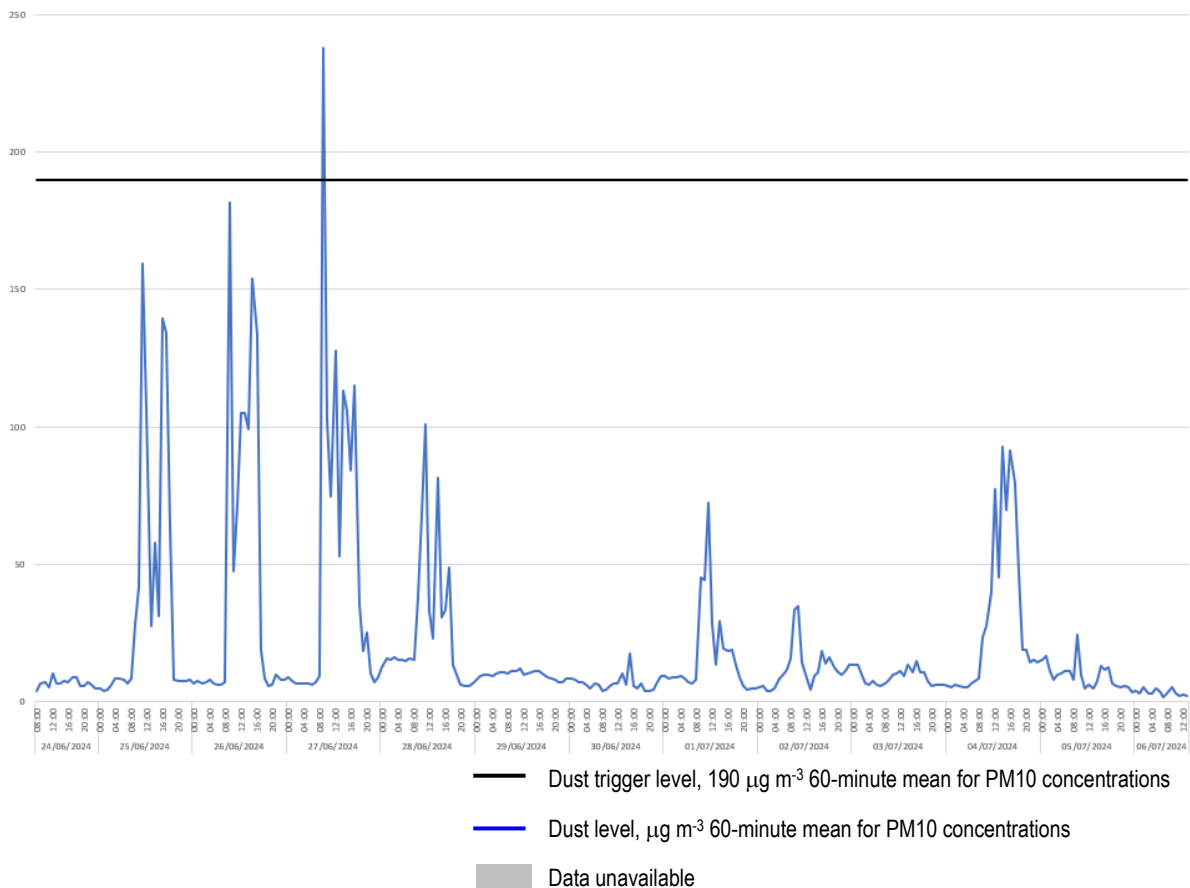
- Excavation and preparing pile caps at Block D
- Temporary surface installation at the haulage road

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

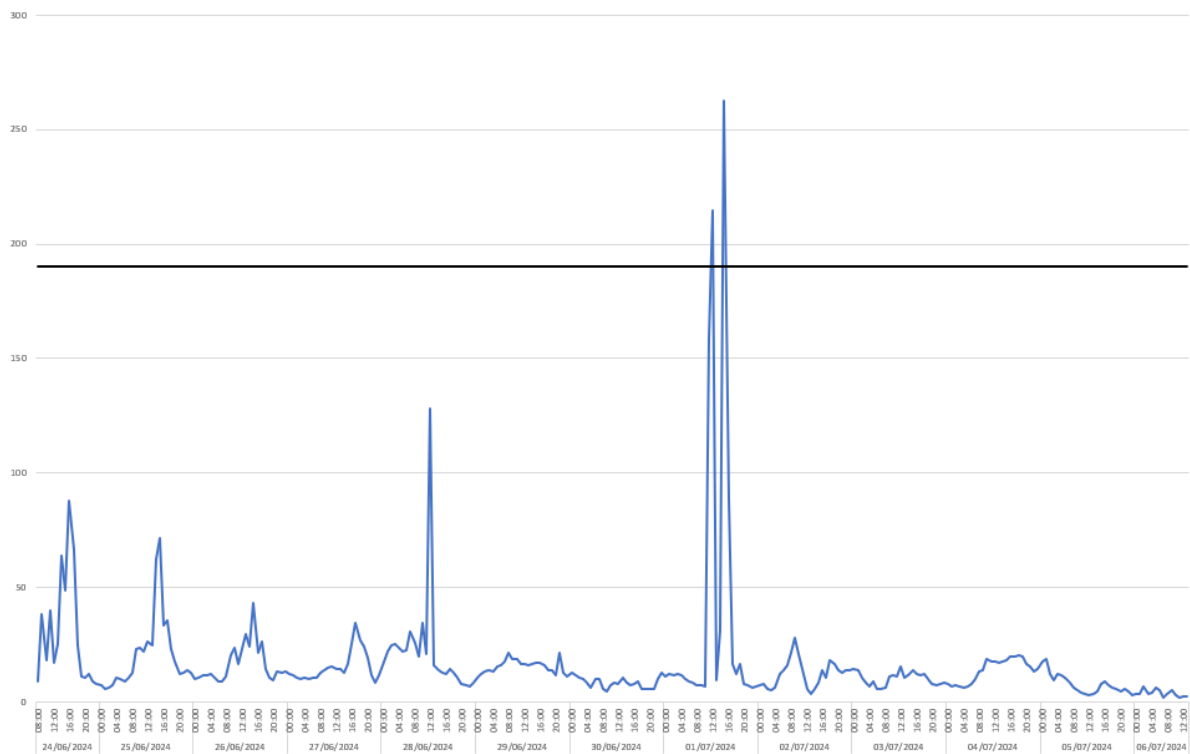


3.2 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. One exceedance of the project dust criteria of 190 micrograms per cubic meter was recorded during the monitoring period covered by this report. This occurred on Thursday 27th June at 09:00 with a recorded level of 238 $\mu\text{g m}^{-3}$.

3.3 Email correspondence with site management confirmed that the exceedances were likely to have been caused by deep drainage being installed next within the vicinity of the monitor at Location 1. It was confirmed that heavy machinery was required for this work, including a 20t excavator and a 9t dumper.

3.4 It has been confirmed that this work has since moved further down the site boundary at this location and, as a result, no further exceedances of the dust trigger level have been recorded at this location. Data at this location will continue to be monitored and Cass Allen will continue regular communication with site management to ensure that noise emissions are minimised as far as practicable.

Location 2



- Dust trigger level, 190 $\mu\text{g m}^{-3}$ 60-minute mean for PM10 concentrations
- Dust level, $\mu\text{g m}^{-3}$ 60-minute mean for PM10 concentrations
- Data unavailable

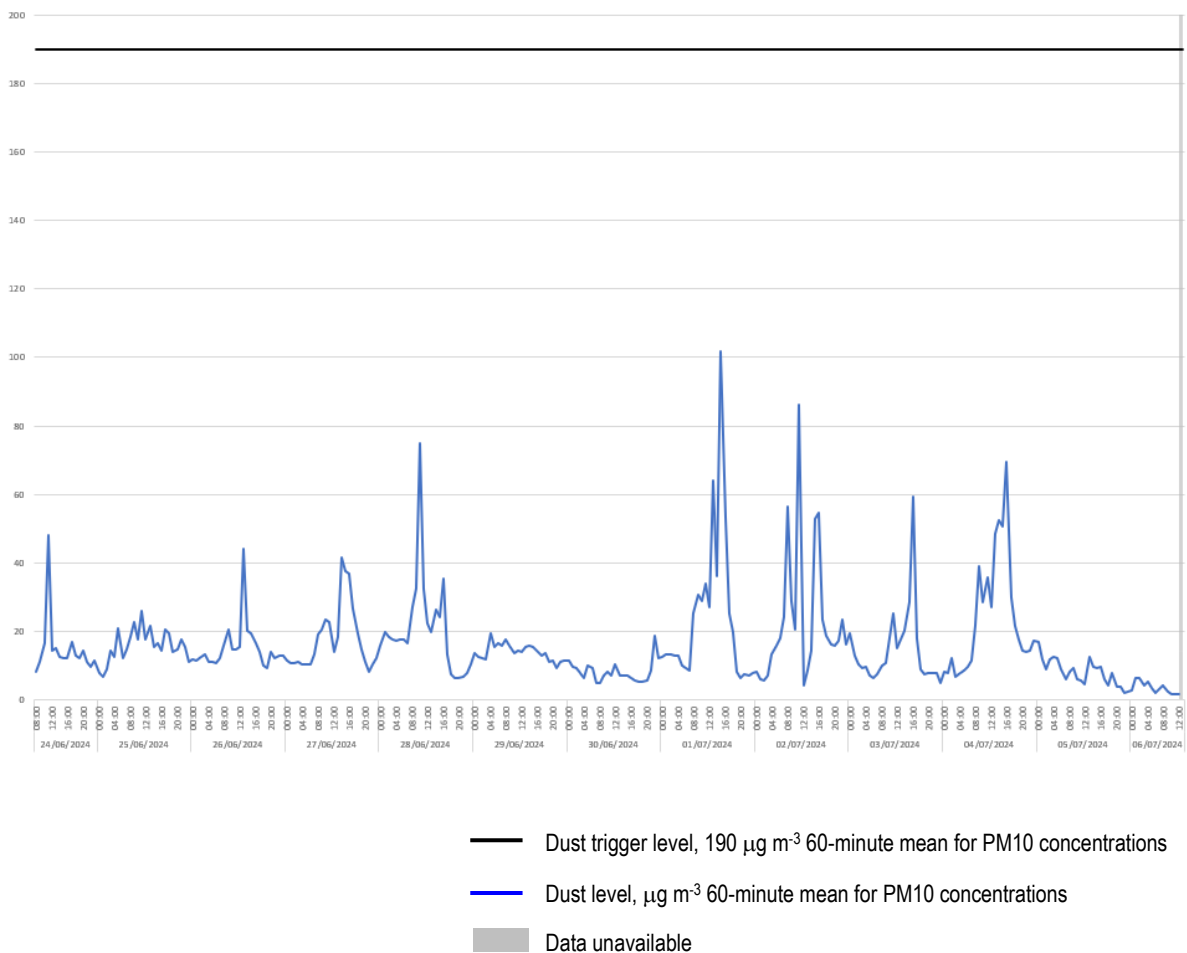
3.5 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.

3.6 Two exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report. These occurred on:

- Monday 1st July at 12:00 with a recorded level of 215 $\mu\text{g m}^{-3}$
- Monday 1st July at 15:00 with a recorded level of 263 $\mu\text{g m}^{-3}$

3.7 It is possible that the excavation of the crane base between Blocks E1 & E2 may have caused these exceedances. Furthermore, the movement of site vehicles within the vicinity of this location may have also contributed to dust levels within the area. Correspondence with site management during this monitoring period confirmed that site management are continuing to review and apply appropriate measures to minimise the spread of dust as far as practicable. This includes the use of a water spreader across the site, as well as limiting relevant vehicles to a speed of 5 km/h.

Location 3



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

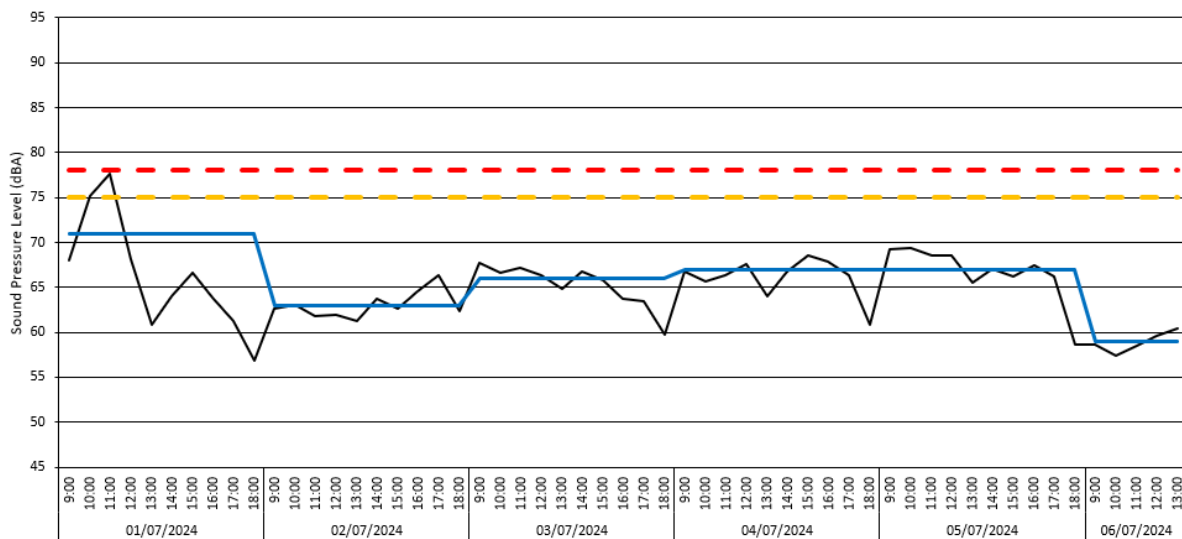
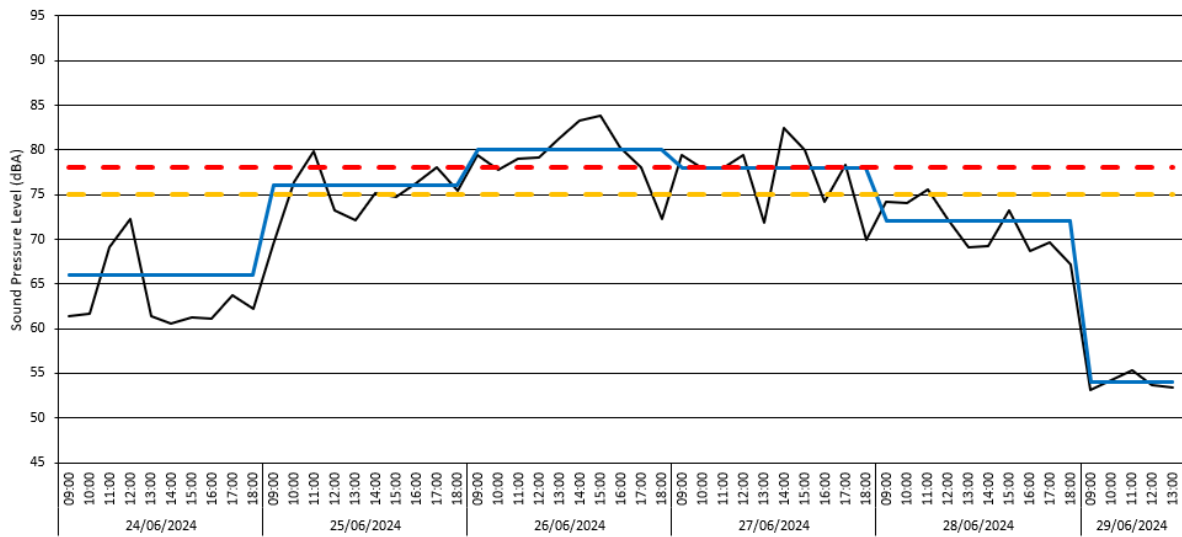
3.9 No exceedances of the project dust criteria of 190 micrograms per cubic meter were recorded during the monitoring period covered by this report.

Noise Monitoring Results

Location 1 – Raw Data

#	Broadband Results	Time	LAeq(60min)	LAeq(7hr)	LAeq(10hr)	LAeq(5hr)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]	[dB]
1	2024-06-24	09:00:00	61.4	--	--	--
2	2024-06-24	10:00:00	61.7	--	--	--
3	2024-06-24	11:00:00	69.3	--	--	--
4	2024-06-24	12:00:00	72.3	--	--	--
5	2024-06-24	13:00:00	61.4	--	--	--
6	2024-06-24	14:00:00	60.5	--	--	--
7	2024-06-24	15:00:00	61.3	--	--	--
8	2024-06-24	16:00:00	61.1	--	--	--
9	2024-06-24	17:00:00	63.8	--	--	--
10	2024-06-24	18:00:00	62.2	--	65.7	--
11	2024-06-25	09:00:00	69.4	--	--	--
12	2024-06-25	10:00:00	76.4	--	--	--
13	2024-06-25	11:00:00	79.8	--	--	--
14	2024-06-25	12:00:00	73.2	--	--	--
15	2024-06-25	13:00:00	72.1	--	--	--
16	2024-06-25	14:00:00	75.2	--	--	--
17	2024-06-25	15:00:00	74.7	--	--	--
18	2024-06-25	16:00:00	76.2	--	--	--
19	2024-06-25	17:00:00	78.0	--	--	--
20	2024-06-25	18:00:00	75.4	--	75.9	--
21	2024-06-26	09:00:00	79.5	--	--	--
22	2024-06-26	10:00:00	77.8	--	--	--
23	2024-06-26	11:00:00	79.0	--	--	--
24	2024-06-26	12:00:00	79.1	--	--	--
25	2024-06-26	13:00:00	81.4	--	--	--
26	2024-06-26	14:00:00	83.3	--	--	--
27	2024-06-26	15:00:00	83.9	--	--	--
28	2024-06-26	16:00:00	80.2	--	--	--
29	2024-06-26	17:00:00	78.0	--	--	--
30	2024-06-26	18:00:00	72.3	--	80.4	--
31	2024-06-27	09:00:00	79.5	--	--	--
32	2024-06-27	10:00:00	77.9	--	--	--
33	2024-06-27	11:00:00	77.9	--	--	--
34	2024-06-27	12:00:00	79.4	--	--	--
35	2024-06-27	13:00:00	71.9	--	--	--
36	2024-06-27	14:00:00	82.5	--	--	--
37	2024-06-27	15:00:00	80.0	--	--	--
38	2024-06-27	16:00:00	74.2	--	--	--
39	2024-06-27	17:00:00	78.4	--	--	--
40	2024-06-27	18:00:00	70.0	--	78.4	--
41	2024-06-28	09:00:00	74.2	--	--	--
42	2024-06-28	10:00:00	74.1	--	--	--
43	2024-06-28	11:00:00	75.6	--	--	--
44	2024-06-28	12:00:00	72.3	--	--	--
45	2024-06-28	13:00:00	69.1	--	--	--
46	2024-06-28	14:00:00	69.3	--	--	--
47	2024-06-28	15:00:00	73.3	--	--	--
48	2024-06-28	16:00:00	68.7	--	--	--
49	2024-06-28	17:00:00	69.7	--	--	--
50	2024-06-28	18:00:00	67.2	--	72.2	--
51	2024-06-29	09:00:00	53.2	--	--	--
52	2024-06-29	10:00:00	54.2	--	--	--
53	2024-06-29	11:00:00	55.4	--	--	--
54	2024-06-29	12:00:00	53.7	--	--	--
55	2024-06-29	13:00:00	53.4	--	--	54.1
56	2024-06-30	18:00:00	--	--	54.1	--
57	2024-07-01	09:00:00	68.0	--	--	--
58	2024-07-01	10:00:00	75.1	--	--	--
59	2024-07-01	11:00:00	77.7	--	--	--
60	2024-07-01	12:00:00	68.1	--	--	--
61	2024-07-01	13:00:00	60.8	--	--	--
62	2024-07-01	14:00:00	64.0	--	--	--
63	2024-07-01	15:00:00	66.6	--	--	--
64	2024-07-01	16:00:00	63.9	--	--	--
65	2024-07-01	17:00:00	61.2	--	--	--
66	2024-07-01	18:00:00	56.9	--	70.7	--
67	2024-07-02	09:00:00	62.6	--	--	--
68	2024-07-02	10:00:00	63.1	--	--	--
69	2024-07-02	11:00:00	61.8	--	--	--
70	2024-07-02	12:00:00	62.0	--	--	--
71	2024-07-02	13:00:00	61.2	--	--	--
72	2024-07-02	14:00:00	63.8	--	--	--
73	2024-07-02	15:00:00	62.7	--	--	--
74	2024-07-02	16:00:00	64.5	--	--	--
75	2024-07-02	17:00:00	66.4	--	--	--
76	2024-07-02	18:00:00	62.4	--	63.3	--
77	2024-07-03	09:00:00	67.7	--	--	--
78	2024-07-03	10:00:00	66.6	--	--	--
79	2024-07-03	11:00:00	67.2	--	--	--
80	2024-07-03	12:00:00	66.4	--	--	--
81	2024-07-03	13:00:00	64.9	--	--	--
82	2024-07-03	14:00:00	66.7	--	--	--
83	2024-07-03	15:00:00	65.8	--	--	--
84	2024-07-03	16:00:00	63.8	--	--	--
85	2024-07-03	17:00:00	63.5	--	--	--
86	2024-07-03	18:00:00	59.7	--	65.7	--
87	2024-07-04	09:00:00	66.7	--	--	--
88	2024-07-04	10:00:00	65.6	--	--	--
89	2024-07-04	11:00:00	66.3	--	--	--
90	2024-07-04	12:00:00	67.6	--	--	--
91	2024-07-04	13:00:00	64.0	--	--	--
92	2024-07-04	14:00:00	66.7	--	--	--
93	2024-07-04	15:00:00	68.6	--	--	--
94	2024-07-04	16:00:00	67.9	--	--	--
95	2024-07-04	17:00:00	66.4	--	--	--
96	2024-07-04	18:00:00	60.9	--	66.5	--
97	2024-07-05	09:00:00	69.3	--	--	--
98	2024-07-05	10:00:00	69.4	--	--	--
99	2024-07-05	11:00:00	68.6	--	--	--
100	2024-07-05	12:00:00	68.6	--	--	--
101	2024-07-05	13:00:00	65.5	--	--	--
102	2024-07-05	14:00:00	67.1	--	--	--
103	2024-07-05	15:00:00	66.2	--	--	--
104	2024-07-05	16:00:00	67.5	--	--	--
105	2024-07-05	17:00:00	66.2	--	--	--
106	2024-07-05	18:00:00	58.6	--	67.4	--
107	2024-07-06	09:00:00	58.6	--	--	--
108	2024-07-06	10:00:00	57.4	--	--	--
109	2024-07-06	11:00:00	58.5	--	--	--
110	2024-07-06	12:00:00	59.6	--	--	--
111	2024-07-06	13:00:00	60.4	--	--	59.0

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, 1hour
- Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)
- Data unavailable

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

3.11 15 exceedances of the project hourly noise criteria of 78 dB LAeq were recorded at the following times:

- 11:00 on Tuesday 25th June, with a measured noise level of 80 dB LAeq,1hr

- Between 09:00 & 18:00 on Wednesday 26th June, with measured hourly noise levels ranging between 78 & 84 dB LAeq,1hr.
- 09:00 on Thursday 27th June, with a measured noise level of 80 dB LAeq,1hr
- 12:00 on Thursday 27th June, with a measured noise level of 79 dB LAeq,1hr
- 14:00 on Thursday 27th June, with a measured noise level of 83 dB LAeq,1hr
- 15:00 on Thursday 27th June, with a measured noise level of 80 dB LAeq,1hr
- 18:00 on Thursday 27th June, with a measured noise level of 81 dB LAeq,1hr.

3.12 There were 3 exceedances of the daily project noise limit of 75 dB LAeq (0800-1800 hours) recorded at Location 1 during the monitoring period covered by this report. These occurred on:

- Tuesday 26th June, with a measured noise level of 76 dB LAeq,10hrs
- Wednesday 27th June, with a measured noise level of 80 dB LAeq,10hrs
- Thursday 28th June, with a measured noise level of 80 dB LAeq,10hrs

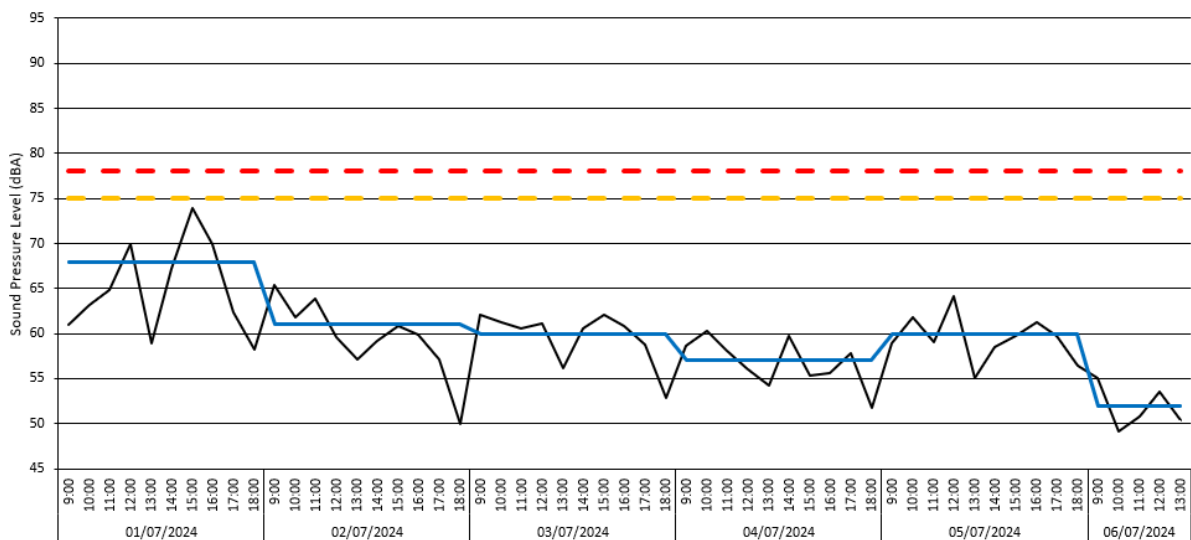
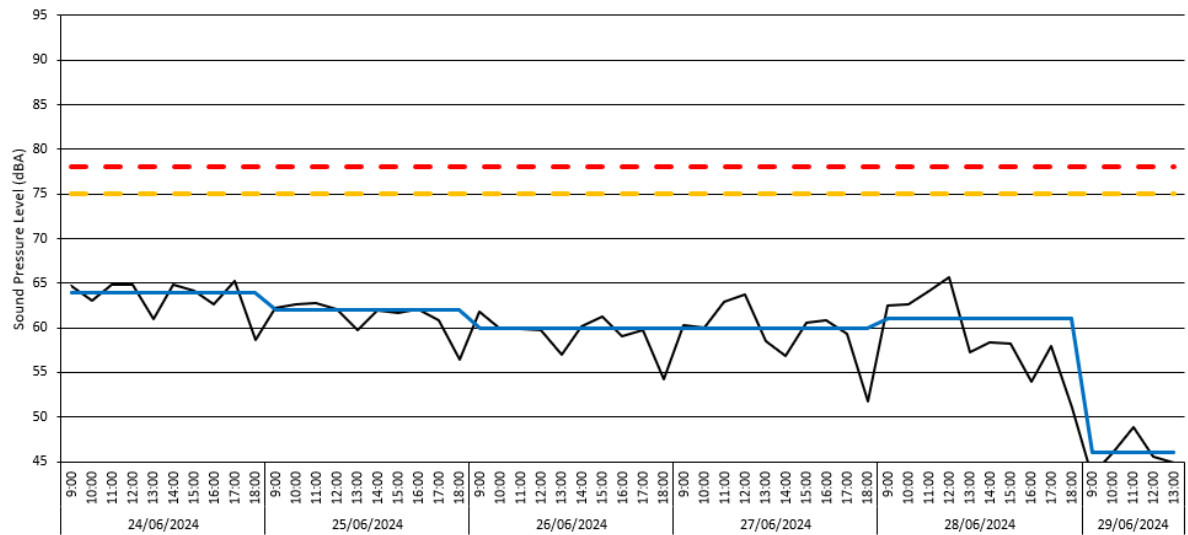
3.13 Email correspondence with site management confirmed that the exceedances were likely to have been caused by deep drainage being installed next within the vicinity of the monitor at Location 1. It was confirmed that heavy machinery was required for this work, including a 20t excavator and a 9t dumper.

3.14 It has been confirmed that this work has since moved further down the site boundary at this location and, as a result, no further exceedances of the daily noise limit have been recorded at this location. This suggests that a significant contributing factor for these exceedances was the close proximity between the deep drainage installation and the monitor location. As a result, it follows that the actual noise levels at the nearest noise-sensitive receptors would have been lower than shown in the above graphs. Data at this location will continue to be monitored and Cass Allen will continue regular communication with site management to ensure that noise emissions are minimised as far as practicable.

Location 2 – Raw Data

# Broadband Results	Date	Time	LAeq(60min)	LAeq(10hr)	LAeq(5hr)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]
	2024-06-24	09:00:00	64.7	--	--
	2024-06-24	10:00:00	63.0	--	--
	2024-06-24	11:00:00	64.8	--	--
	2024-06-24	12:00:00	64.8	--	--
	2024-06-24	13:00:00	61.0	--	--
	2024-06-24	14:00:00	64.9	--	--
	2024-06-24	15:00:00	64.2	--	--
	2024-06-24	16:00:00	62.6	--	--
	2024-06-24	17:00:00	65.2	--	--
	2024-06-24	18:00:00	58.6	63.8	--
	2024-06-25	09:00:00	62.2	--	--
	2024-06-25	10:00:00	62.6	--	--
	2024-06-25	11:00:00	62.8	--	--
	2024-06-25	12:00:00	62.1	--	--
	2024-06-25	13:00:00	59.8	--	--
	2024-06-25	14:00:00	61.9	--	--
	2024-06-25	15:00:00	61.7	--	--
	2024-06-25	16:00:00	62.1	--	--
	2024-06-25	17:00:00	60.9	--	--
	2024-06-25	18:00:00	56.5	61.5	--
	2024-06-26	09:00:00	61.8	--	--
	2024-06-26	10:00:00	59.9	--	--
	2024-06-26	11:00:00	59.9	--	--
	2024-06-26	12:00:00	59.7	--	--
	2024-06-26	13:00:00	57.0	--	--
	2024-06-26	14:00:00	60.2	--	--
	2024-06-26	15:00:00	61.2	--	--
	2024-06-26	16:00:00	59.1	--	--
	2024-06-26	17:00:00	59.8	--	--
	2024-06-26	18:00:00	54.3	59.7	--
	2024-06-27	09:00:00	60.3	--	--
	2024-06-27	10:00:00	60.0	--	--
	2024-06-27	11:00:00	62.9	--	--
	2024-06-27	12:00:00	63.8	--	--
	2024-06-27	13:00:00	58.5	--	--
	2024-06-27	14:00:00	56.9	--	--
	2024-06-27	15:00:00	60.6	--	--
	2024-06-27	16:00:00	60.9	--	--
	2024-06-27	17:00:00	59.3	--	--
	2024-06-27	18:00:00	51.8	60.4	--
	2024-06-28	09:00:00	62.5	--	--
	2024-06-28	10:00:00	62.6	--	--
	2024-06-28	11:00:00	64.2	--	--
	2024-06-28	12:00:00	65.7	--	--
	2024-06-28	13:00:00	57.2	--	--
	2024-06-28	14:00:00	58.3	--	--
	2024-06-28	15:00:00	58.2	--	--
	2024-06-28	16:00:00	54.0	--	--
	2024-06-28	17:00:00	58.0	--	--
	2024-06-28	18:00:00	51.0	61.1	--
	2024-06-29	09:00:00	43.5	--	--
	2024-06-29	10:00:00	46.0	--	--
	2024-06-29	11:00:00	48.8	--	--
	2024-06-29	12:00:00	45.5	--	--
	2024-06-29	13:00:00	44.9	--	46.1
	2024-06-30	18:00:00	--	45.9	--
	2024-07-01	09:00:00	61.0	--	--
	2024-07-01	10:00:00	63.2	--	--
	2024-07-01	11:00:00	64.9	--	--
	2024-07-01	12:00:00	69.9	--	--
	2024-07-01	13:00:00	58.9	--	--
	2024-07-01	14:00:00	67.2	--	--
	2024-07-01	15:00:00	73.9	--	--
	2024-07-01	16:00:00	69.9	--	--
	2024-07-01	17:00:00	62.3	--	--
	2024-07-01	18:00:00	58.2	67.7	--
	2024-07-02	09:00:00	65.4	--	--
	2024-07-02	10:00:00	61.8	--	--
	2024-07-02	11:00:00	63.9	--	--
	2024-07-02	12:00:00	59.6	--	--
	2024-07-02	13:00:00	57.1	--	--
	2024-07-02	14:00:00	59.2	--	--
	2024-07-02	15:00:00	60.8	--	--
	2024-07-02	16:00:00	59.9	--	--
	2024-07-02	17:00:00	57.1	--	--
	2024-07-02	18:00:00	50.0	61.0	--
	2024-07-03	09:00:00	62.1	--	--
	2024-07-03	10:00:00	61.3	--	--
	2024-07-03	11:00:00	60.6	--	--
	2024-07-03	12:00:00	61.1	--	--
	2024-07-03	13:00:00	56.1	--	--
	2024-07-03	14:00:00	60.6	--	--
	2024-07-03	15:00:00	62.1	--	--
	2024-07-03	16:00:00	60.8	--	--
	2024-07-03	17:00:00	58.8	--	--
	2024-07-03	18:00:00	52.8	60.3	--
	2024-07-04	09:00:00	58.6	--	--
	2024-07-04	10:00:00	60.3	--	--
	2024-07-04	11:00:00	58.1	--	--
	2024-07-04	12:00:00	56.0	--	--
	2024-07-04	13:00:00	54.2	--	--
	2024-07-04	14:00:00	59.7	--	--
	2024-07-04	15:00:00	55.4	--	--
	2024-07-04	16:00:00	55.6	--	--
	2024-07-04	17:00:00	57.8	--	--
	2024-07-04	18:00:00	51.7	57.4	--
	2024-07-05	09:00:00	58.9	--	--
	2024-07-05	10:00:00	61.8	--	--
	2024-07-05	11:00:00	59.0	--	--
	2024-07-05	12:00:00	64.1	--	--
	2024-07-05	13:00:00	55.1	--	--
	2024-07-05	14:00:00	58.5	--	--
	2024-07-05	15:00:00	59.8	--	--
	2024-07-05	16:00:00	61.2	--	--
	2024-07-05	17:00:00	59.7	--	--
	2024-07-05	18:00:00	56.4	60.1	--
	2024-07-06	09:00:00	55.0	--	--
	2024-07-06	10:00:00	49.2	--	--
	2024-07-06	11:00:00	50.8	--	--
	2024-07-06	12:00:00	53.5	--	--
	2024-07-06	13:00:00	50.4	--	52.3

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

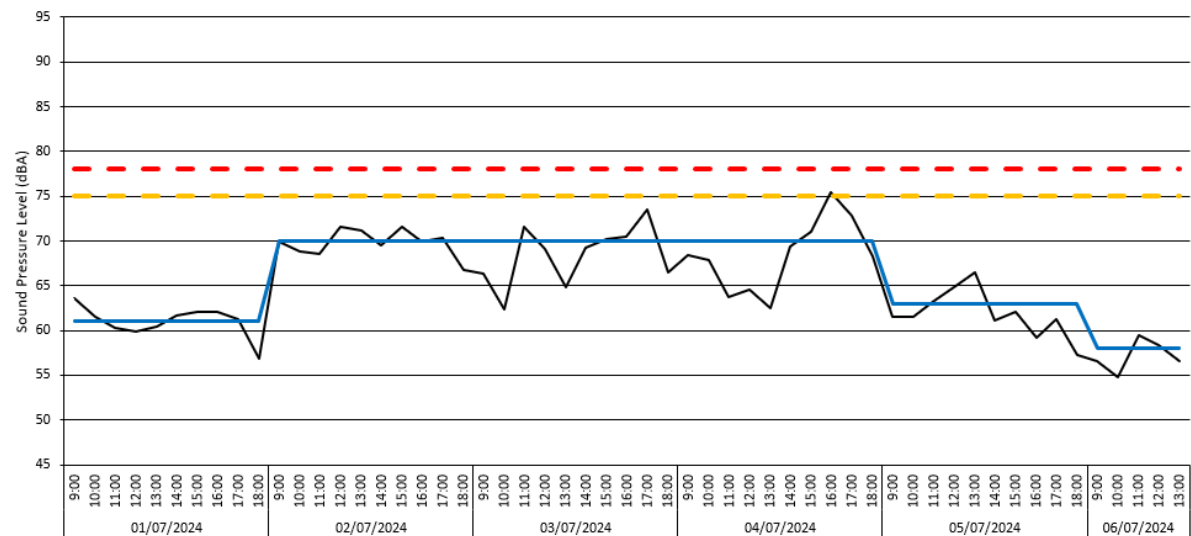
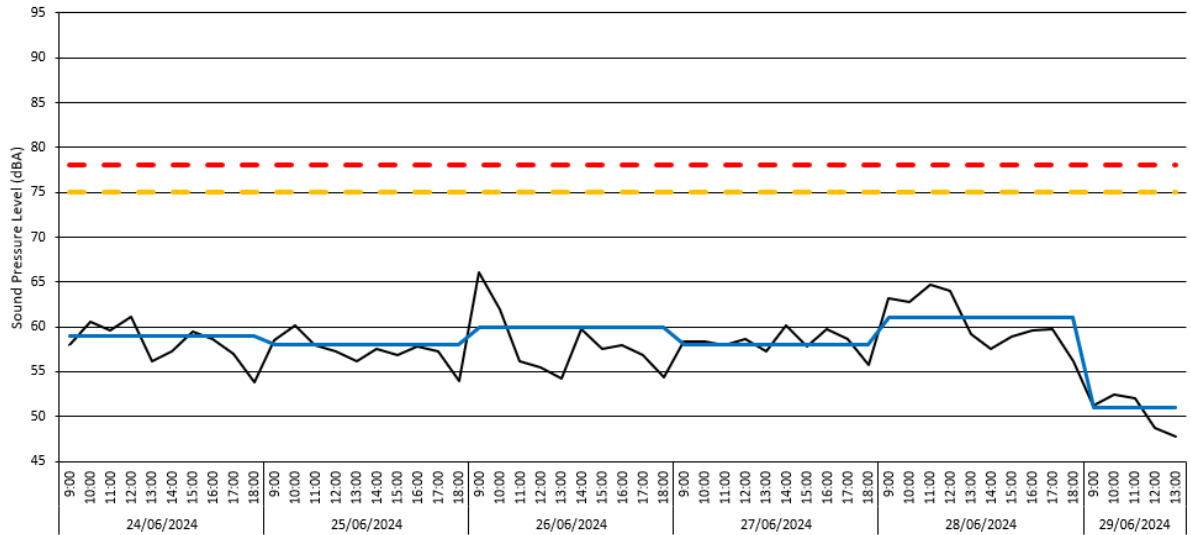
3.15 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report.

3.16 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	LAeq(60min)	LAeq(10hr)	LAeq(5hr)
	[YYYY-MM-DD]	[hh:mm:ss]	[dB]	[dB]	[dB]
	2024-06-24	09:00:00	57.9	--	--
	2024-06-24	10:00:00	60.6	--	--
	2024-06-24	11:00:00	59.6	--	--
	2024-06-24	12:00:00	61.1	--	--
	2024-06-24	13:00:00	56.1	--	--
	2024-06-24	14:00:00	57.2	--	--
	2024-06-24	15:00:00	59.5	--	--
	2024-06-24	16:00:00	58.7	--	--
	2024-06-24	17:00:00	57.0	--	--
	2024-06-24	18:00:00	53.8	58.6	--
	2024-06-25	09:00:00	58.5	--	--
	2024-06-25	10:00:00	60.2	--	--
	2024-06-25	11:00:00	58.0	--	--
	2024-06-25	12:00:00	57.2	--	--
	2024-06-25	13:00:00	56.2	--	--
	2024-06-25	14:00:00	57.5	--	--
	2024-06-25	15:00:00	56.8	--	--
	2024-06-25	16:00:00	57.8	--	--
	2024-06-25	17:00:00	57.3	--	--
	2024-06-25	18:00:00	53.9	57.6	--
	2024-06-26	09:00:00	66.1	--	--
	2024-06-26	10:00:00	61.9	--	--
	2024-06-26	11:00:00	56.2	--	--
	2024-06-26	12:00:00	55.5	--	--
	2024-06-26	13:00:00	54.3	--	--
	2024-06-26	14:00:00	59.7	--	--
	2024-06-26	15:00:00	57.5	--	--
	2024-06-26	16:00:00	58.0	--	--
	2024-06-26	17:00:00	56.9	--	--
	2024-06-26	18:00:00	54.4	59.8	--
	2024-06-27	09:00:00	58.4	--	--
	2024-06-27	10:00:00	58.4	--	--
	2024-06-27	11:00:00	57.9	--	--
	2024-06-27	12:00:00	58.7	--	--
	2024-06-27	13:00:00	57.2	--	--
	2024-06-27	14:00:00	60.1	--	--
	2024-06-27	15:00:00	57.8	--	--
	2024-06-27	16:00:00	59.7	--	--
	2024-06-27	17:00:00	58.7	--	--
	2024-06-27	18:00:00	55.8	58.4	--
	2024-06-28	09:00:00	63.2	--	--
	2024-06-28	10:00:00	62.8	--	--
	2024-06-28	11:00:00	64.7	--	--
	2024-06-28	12:00:00	64.0	--	--
	2024-06-28	13:00:00	59.2	--	--
	2024-06-28	14:00:00	57.6	--	--
	2024-06-28	15:00:00	58.9	--	--
	2024-06-28	16:00:00	59.6	--	--
	2024-06-28	17:00:00	59.8	--	--
	2024-06-28	18:00:00	56.1	61.4	--
	2024-06-29	09:00:00	51.2	--	--
	2024-06-29	10:00:00	52.4	--	--
	2024-06-29	11:00:00	52.1	--	--
	2024-06-29	12:00:00	48.7	--	--
	2024-06-29	13:00:00	47.8	--	50.8
	2024-06-30	18:00:00	--	51.5	--
	2024-07-01	09:00:00	63.6	--	--
	2024-07-01	10:00:00	61.5	--	--
	2024-07-01	11:00:00	60.3	--	--
	2024-07-01	12:00:00	59.9	--	--
	2024-07-01	13:00:00	60.4	--	--
	2024-07-01	14:00:00	61.7	--	--
	2024-07-01	15:00:00	62.1	--	--
	2024-07-01	16:00:00	62.1	--	--
	2024-07-01	17:00:00	61.3	--	--
	2024-07-01	18:00:00	56.8	61.3	--
	2024-07-02	09:00:00	69.9	--	--
	2024-07-02	10:00:00	68.8	--	--
	2024-07-02	11:00:00	68.5	--	--
	2024-07-02	12:00:00	71.6	--	--
	2024-07-02	13:00:00	71.2	--	--
	2024-07-02	14:00:00	69.5	--	--
	2024-07-02	15:00:00	71.6	--	--
	2024-07-02	16:00:00	70.0	--	--
	2024-07-02	17:00:00	70.3	--	--
	2024-07-02	18:00:00	66.8	70.0	--
	2024-07-03	09:00:00	66.4	--	--
	2024-07-03	10:00:00	62.3	--	--
	2024-07-03	11:00:00	71.6	--	--
	2024-07-03	12:00:00	69.1	--	--
	2024-07-03	13:00:00	64.9	--	--
	2024-07-03	14:00:00	69.2	--	--
	2024-07-03	15:00:00	70.2	--	--
	2024-07-03	16:00:00	70.5	--	--
	2024-07-03	17:00:00	73.5	--	--
	2024-07-03	18:00:00	66.5	69.5	--
	2024-07-04	09:00:00	68.4	--	--
	2024-07-04	10:00:00	67.9	--	--
	2024-07-04	11:00:00	63.8	--	--
	2024-07-04	12:00:00	64.5	--	--
	2024-07-04	13:00:00	62.5	--	--
	2024-07-04	14:00:00	69.4	--	--
	2024-07-04	15:00:00	71.1	--	--
	2024-07-04	16:00:00	75.4	--	--
	2024-07-04	17:00:00	72.8	--	--
	2024-07-04	18:00:00	68.3	70.1	--
	2024-07-05	09:00:00	61.5	--	--
	2024-07-05	10:00:00	61.6	--	--
	2024-07-05	11:00:00	63.3	--	--
	2024-07-05	12:00:00	64.8	--	--
	2024-07-05	13:00:00	66.5	--	--
	2024-07-05	14:00:00	61.1	--	--
	2024-07-05	15:00:00	62.1	--	--
	2024-07-05	16:00:00	59.2	--	--
	2024-07-05	17:00:00	61.3	--	--
	2024-07-05	18:00:00	57.2	62.6	--
	2024-07-06	09:00:00	56.6	--	--
	2024-07-06	10:00:00	54.8	--	--
	2024-07-06	11:00:00	59.5	--	--
	2024-07-06	12:00:00	58.3	--	--
	2024-07-06	13:00:00	56.6	--	57.5

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

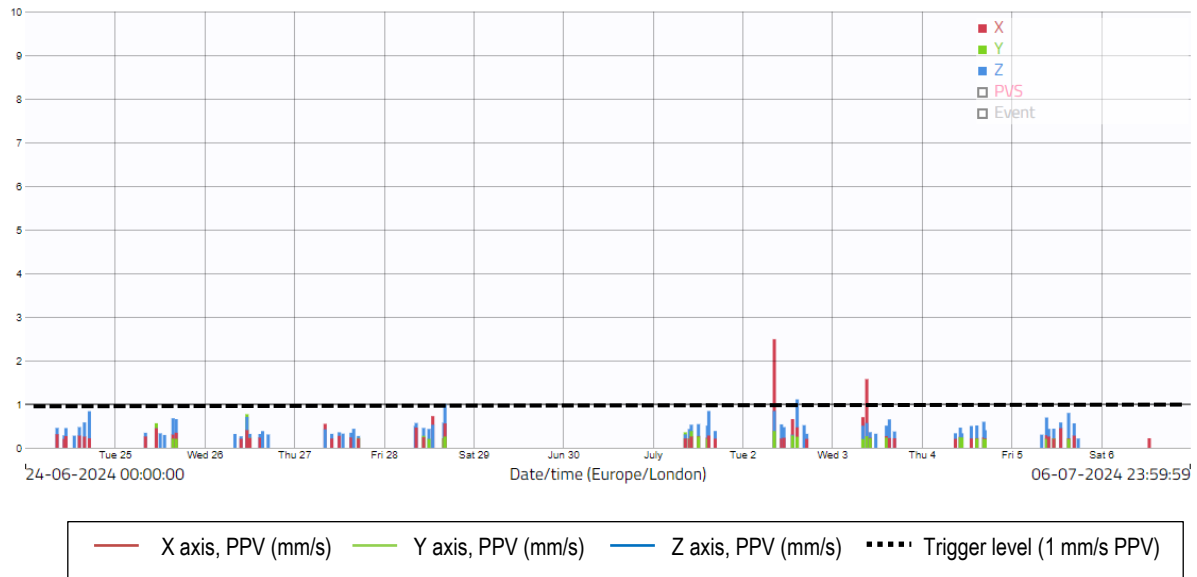
- 3.17 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report.
- 3.18 No exceedances of the project hourly noise criteria of 78 dB LAeq nor the daily project noise limit of 75 dB LAeq (0800-1800 hours) were recorded during the monitoring period covered by this report.

Vibration Monitoring Results

Location 1 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L1	24/06/2024 to 06/07/2024	1	2.49	02/07/2024	08:40
		2	1.57	03/07/2024	09:18
Criteria mm/s PVS	Exceedances	3	1.11	02/07/2024	14:40
1.0	4	4	1.00	28/06/2024	16:24
		5	0.84	01/07/2024	15:01
		6	0.84	02/07/2024	08:12
		7	0.84	25/06/2024	08:12
		8	0.80	05/07/2024	15:24
		9	0.77	26/06/2024	11:24
		10	0.73	28/06/2024	13:08

Location 1 – Time-history graph



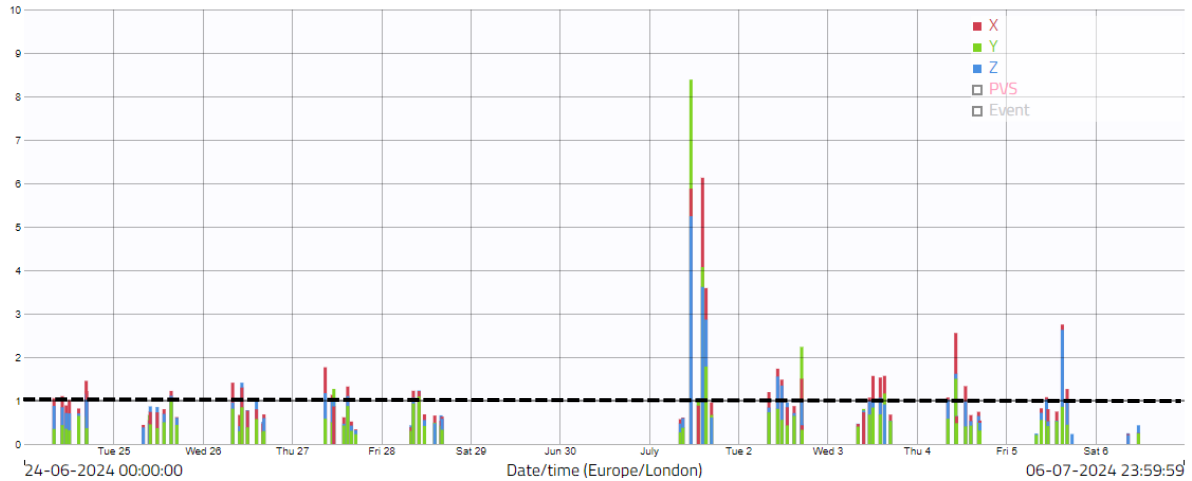
3.19 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. There were four exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Tuesday 2nd July at 08:40, with a recorded level of 2.5 mm/s PPV. It is worth noting from the raw data above that the exceedances were caused by individual, short-lived events, rather than continuous activity at this location. This will continue to be monitored.

3.20 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	Order	Value	Date	Time	Order	Value	Date	Time
Holloway - L2	24/06/2024 to 06/07/2024	1	8.39	01/07/2024	11:18	31	2.76	01/07/2024	15:11	61	1.90	01/07/2024	15:06
		2	6.13	01/07/2024	14:25	32	2.75	05/07/2024	15:09	62	1.90	01/07/2024	15:27
Criteria mm/s PVS	Exceedances	3	5.94	01/07/2024	14:29	33	2.73	01/07/2024	14:34	63	1.86	01/07/2024	14:43
1.0	156	4	5.88	01/07/2024	11:19	34	2.70	01/07/2024	15:28	64	1.86	01/07/2024	15:02
		5	5.24	01/07/2024	11:20	35	2.63	05/07/2024	15:10	65	1.83	01/07/2024	15:09
		6	5.19	01/07/2024	14:37	36	2.63	05/07/2024	14:59	66	1.82	05/07/2024	15:12
		7	4.73	01/07/2024	14:23	37	2.62	01/07/2024	11:17	67	1.80	01/07/2024	14:02
		8	4.46	01/07/2024	14:24	38	2.55	04/07/2024	10:30	68	1.77	01/07/2024	15:15
		9	4.07	01/07/2024	14:12	39	2.43	01/07/2024	15:24	69	1.77	27/06/2024	08:58
		10	3.98	01/07/2024	14:26	40	2.34	01/07/2024	14:45	70	1.76	01/07/2024	11:03
		11	3.90	01/07/2024	14:38	41	2.34	01/07/2024	14:57	71	1.75	01/07/2024	14:07
		12	3.78	01/07/2024	14:22	42	2.32	01/07/2024	14:11	72	1.73	02/07/2024	10:37
		13	3.69	01/07/2024	14:13	43	2.28	01/07/2024	14:35	73	1.71	01/07/2024	15:10
		14	3.61	01/07/2024	14:30	44	2.25	01/07/2024	15:18	74	1.70	01/07/2024	15:26
		15	3.59	01/07/2024	15:00	45	2.24	01/07/2024	14:18	75	1.66	01/07/2024	14:19
		16	3.54	01/07/2024	14:39	46	2.23	01/07/2024	14:08	76	1.63	01/07/2024	14:44
		17	3.41	01/07/2024	14:32	47	2.23	02/07/2024	17:04	77	1.62	04/07/2024	09:41
		18	3.40	01/07/2024	15:21	48	2.23	01/07/2024	14:33	78	1.61	01/07/2024	15:22
		19	3.35	01/07/2024	13:50	49	2.22	01/07/2024	14:42	79	1.57	03/07/2024	15:21
		20	3.28	01/07/2024	11:16	50	2.21	01/07/2024	15:16	80	1.57	03/07/2024	12:15
		21	3.21	01/07/2024	14:01	51	2.19	01/07/2024	14:40	81	1.53	03/07/2024	14:12
		22	3.11	01/07/2024	14:27	52	2.14	01/07/2024	15:08	82	1.50	01/07/2024	15:25
		23	2.99	01/07/2024	14:10	53	2.09	01/07/2024	15:01	83	1.48	02/07/2024	11:43
		24	2.98	01/07/2024	15:20	54	2.08	01/07/2024	10:59	84	1.45	24/06/2024	16:42
		25	2.91	01/07/2024	14:15	55	2.04	01/07/2024	15:03	85	1.45	01/07/2024	15:05
		26	2.89	01/07/2024	13:51	56	1.97	01/07/2024	14:55	86	1.43	04/07/2024	09:34
		27	2.83	01/07/2024	13:49	57	1.97	01/07/2024	14:58	87	1.43	03/07/2024	15:20
		28	2.81	01/07/2024	14:05	58	1.95	01/07/2024	15:23	88	1.42	03/07/2024	15:11
		29	2.80	01/07/2024	14:16	59	1.95	01/07/2024	11:15	89	1.41	26/06/2024	10:34
		30	2.78	01/07/2024	14:04	60	1.95	01/07/2024	14:03	90	1.41	26/06/2024	08:05

Location 2 – Time-history graph



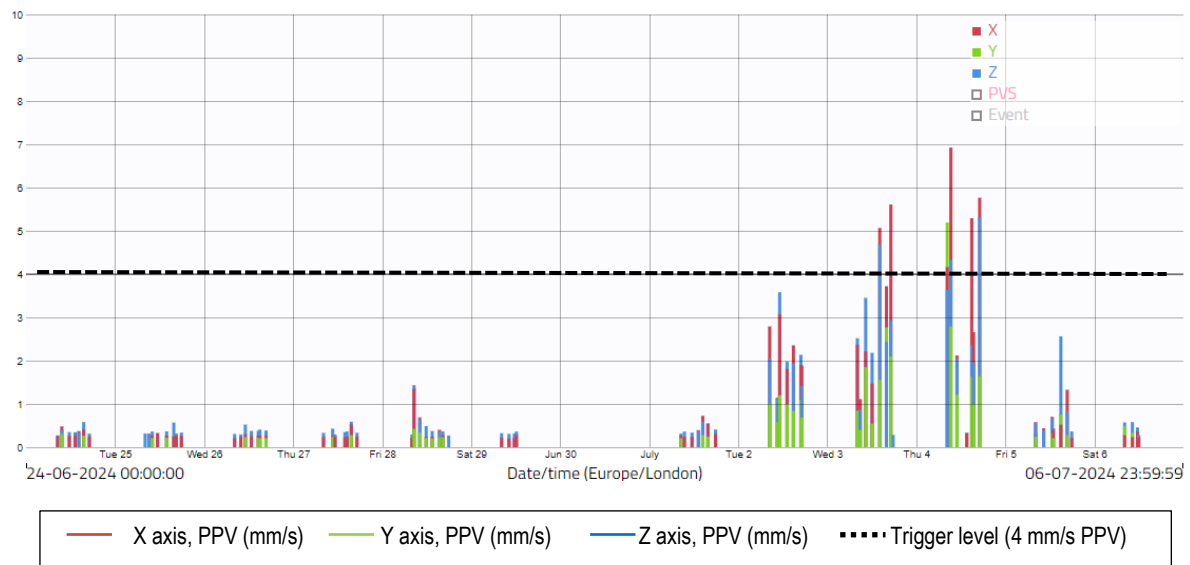
— X axis, PPV (mm/s)
 — Y axis, PPV (mm/s)
 — Z axis, PPV (mm/s)
 - - - - - Trigger level (1 mm/s PPV)

- 3.21 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report. There were 156 exceedances 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 Monday 1st July at 11:18, with a recorded level of 8.4 mm/s PPV. It is understood that no complaints have been received in relation to vibration at this location – this will continue to be monitored.
- 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.

Location 3 – Raw data

Measuring point:	Period:	Order	Value	Date	Time
Holloway - L3	24/06/2024 to 06/07/2024	1	6.92	04/07/2024	09:20
		2	5.76	04/07/2024	17:06
Criteria mm/s PVS 4.0	Exceedances 10	3	5.61	03/07/2024	17:09
		4	5.29	04/07/2024	14:58
		5	5.26	04/07/2024	14:54
		6	5.19	04/07/2024	08:22
		7	5.07	03/07/2024	14:10
		8	4.34	03/07/2024	17:03
		9	4.34	04/07/2024	17:05
		10	4.16	04/07/2024	08:54

Location 3 – Time-history graph

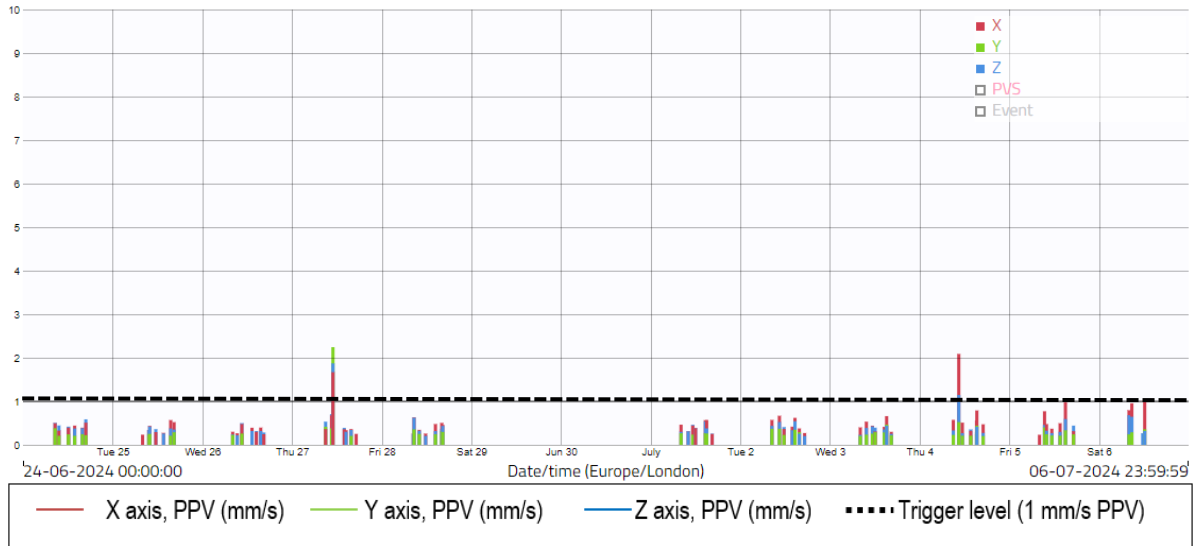


- 3.23 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report. There were 10 exceedances of the project vibration trigger level of 4.0 mm/s PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Thursday 4th July at 09:20, with a recorded level of 6.9 mm/s PPV.
- 3.24 It is understood several of the recorded exceedances were likely to have been caused onsite vehicles moving material within the vicinity of the monitor. It is possible that any of 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).
- 3.25 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.
- 3.26 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	24/06/2024 to 06/07/2024	1	2.24	27/06/2024	10:59
		2	2.15	27/06/2024	11:01
Criteria mm/s PVS	Exceedances	3	2.09	04/07/2024	10:30
1.0	9	4	1.89	27/06/2024	10:58
		5	1.79	27/06/2024	10:56
		6	1.30	27/06/2024	11:17
		7	1.29	27/06/2024	11:00
		8	1.05	04/07/2024	09:34
		9	1.02	00/01/1900	00:00
		10	0.98	05/07/2024	15:03

Location 4 – Time-history graph



3.27 There was 100% data coverage at Location 4 during construction hours for the monitoring period covered by this report. There were nine 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 Thursday 27th June at 10:59, with a recorded level of 2.6 mm/s PPV. It is worth noting that the recorded exceedances at this location were relatively low (i.e. below 3.0 mm/s). This will continue to be monitored.