

Architectural & Environmental Acousticians
Noise & Vibration Engineers

# Holloway Park, London

# **Construction Monitoring Report**

Client: London Square

Ref: CM83-22405-R0

Date: 14 June 2024

Note by: Anthony Coraci, MSc DiplOA 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 27<sup>th</sup> May & Saturday 8<sup>th</sup> June 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:

#### ОНОВ

- Working on drainage at Gate 2 and near welfare and further into the site
- Installation of drainage under adjcant to Block D
- Excavation of pilecaps in Block C
- 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)
- Concrete tower crane base for TC1



# 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.

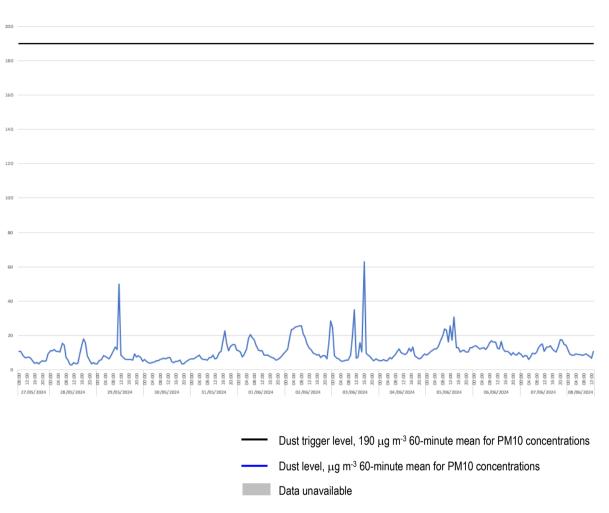
# **Dust Monitoring Results**

ocation 1
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Dust trigger level, 190 μg m <sup>-3</sup> 60-minute mean for PM10 concentrations
—— Dust level, μg m <sup>-3</sup> 60-minute mean for PM10 concentrations
Data unavailable

- 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.



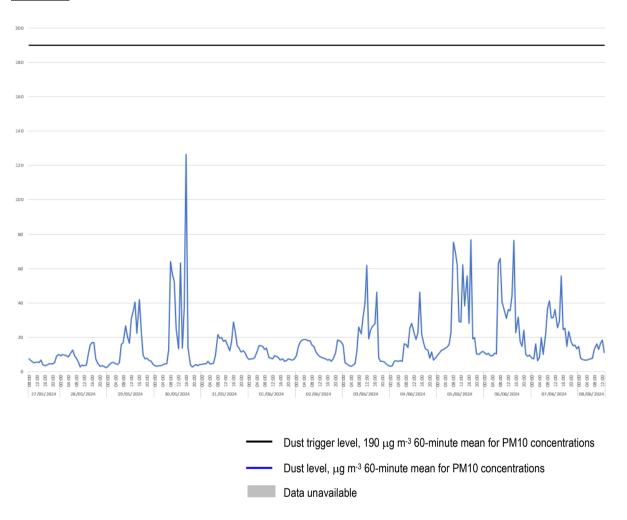
# Location 2



- 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.



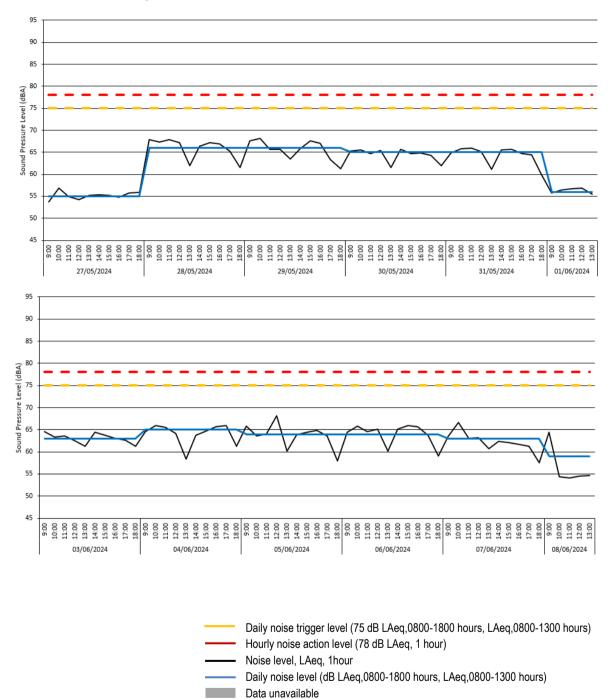
# **Noise Monitoring Results**

# Location 1 - Raw Data

# Broadband Results Date	Time	Linn(Chrin)	Ling(Thr)	Liter(10hr)	Liter(Shr)
	[hh:mm:ss] 09:00:00	[dB]	[dB]	[d8]	[dB]
2024-05-27 2024-05-27	09:00:00 10:00:00	LAeq(60min) [d8] 53.7 56.8 54.9		2.2	
2024-05-27 2024-05-27	11:00:00 12:00:00	54.9		55.2	
2024-05-27	13:00:00	55.2	-:-	-:-	
2024-05-27 2024-05-27	14:00:00 15:00:00	55.4 55.2	-:-		
2024-05-27	16:00:00	54.8			
2024-05-27 2024-05-27	17:00:00 18:00:00	55.7	-:-	55.2	-:-
2024-05-28 2024-05-28	09:00:00 10:00:00	67.8	-:-		
2024-05-28	11:00:00	67.8		66.4	
2024-05-28 2024-05-28	12:00:00 13:00:00	67.2 62.0	-:-	-:-	-:-
2024-05-28 2024-05-28	14:00:00 15:00:00	66.3			
2024-05-28	16:00:00	66.9	-:-	-:-	-:-
2024-05-28 2024-05-28	17:00:00 18:00:00	65.2 61.5		66.4	-:-
2024-05-29 2024-05-29	09:00:00	67.6			
2024-05-29	10:00:00 11:00:00	65.6		-:-	
2024-05-29 2024-05-29	12:00:00 13:00:00	65.7 63.4	-:-		
2024-05-29	14:00:00	65.8			
2024-05-29 2024-05-29	15:00:00 16:00:00	67.0		-:-	
2024-05-29 2024-05-29	17:00:00 18:00:00	63.3	2.2	66.0	
2024-05-30	09:00:00	65.3			
2024-05-30 2024-05-30	10:00:00 11:00:00	65.5		-:-	
2024-05-30 2024-05-30	12:00:00 13:00:00	65.4			
2024-05-30	14:00:00	65.6		-:-	
2024-05-30 2024-05-30	15:00:00 16:00:00	64.7 64.9			-:-
2024-05-30 2024-05-30	17:00:00 18:00:00	64.3		7.7	
2024-05-31	09:00:00	64.9			
2024-05-31 2024-05-31	10:00:00 11:00:00	65.8 66.0	2.2		
2024-05-31	12:00:00	65.1			
2024-05-31 2024-05-31	13:00:00 14:00:00	65.5		-:-	-:-
2024-05-31 2024-05-31	15:00:00 16:00:00	65.7			
2024-05-31	17:00:00	64.4		7	
2024-05-31 2024-06-01	18:00:00 09:00:00	59.8 55.7	2.2	64.7	
2024-06-01 2024-06-01	10:00:00 11:00:00	56.4			
2024-06-01	12:00:00	56.9		-:-	
2024-06-01 2024-06-02	13:00:00 13:00:00 18:00:00	55.5		54.6	56.3
2024-06-03	09:00:00	64.5			
2024-06-03 2024-06-03	10:00:00 11:00:00	63.6			
2024-06-03 2024-06-03	12:00:00 13:00:00	62.5 61.2			
2024-06-03 2024-06-03	14:00:00	64.4			
2024-06-03	15:00:00 16:00:00	63.0		-:-	
2024-06-03 2024-06-03	17:00:00 18:00:00	62.7		63.2	
2024-06-04	09:00:00	64.6			
2024-06-04 2024-06-04	10:00:00 11:00:00	65.5			
2024-06-04 2024-06-04	12:00:00 13:00:00	64.2 58.3			-:-
2024-06-04	14:00:00	63.8			
2024-06-04 2024-06-04	15:00:00 16:00:00	65.6	-:-		-:-
2024-06-04 2024-06-04	17:00:00 18:00:00	65.9	-:-	64.5	
2024-06-05	09:00:00	65.8	-,-		
2024-06-05 2024-06-05	10:00:00 11:00:00	64.0	-:-	2.2	-:-
2024-06-05 2024-06-05	11:00:00 12:00:00 13:00:00	56.7 56.9 55.5 64.5 63.6 62.5 64.4 63.8 62.7 64.4 63.8 62.7 64.6 65.0 65.1 64.2 58.3 64.7 65.6 65.5 64.2 58.3 64.7 65.6 65.8 64.2 65.8 64.2 66.0			-:-
2024-06-05	14:00:00	63.9	-,-		
2024-06-05 2024-06-05	15:00:00 16:00:00	64.4 64.8	-:-	2.2	
2024-06-05 2024-06-05	17:00:00	63.6		64.4	
2024-06-06	18:00:00 09:00:00	64.4		-:-	
2024-06-06 2024-06-06	10:00:00 11:00:00				-:-
2024-06-06 2024-06-06	12:00:00 12:00:00 13:00:00	65.1 60.1			
2024-06-06	14:00:00	65.1		-:-	
2024-06-06 2024-06-06	15:00:00 16:00:00	65.9 65.6			-:-
2024-06-06	17:00:00 18:00:00	65.6 63.8 59.0		64.4	
2024-06-07	00.00.00	63.4			-:-
2024-06-07 2024-06-07	10:00:00 11:00:00	63.1			-:-
2024-06-07	12:00:00	63.2		-:-	
2024-06-07 2024-06-07	13:00:00 14:00:00	60.7 62.4	-:-		-:-
2024-06-07 2024-06-07	16:00:00	62.1 61.7		-:-	-:-
2024-06-07	17:00:00	61.3			
2024-06-07 2024-06-08	18:00:00 09:00:00	57.5 64.4		62.7	-:-
2024-06-08 2024-06-08	10:00:00 11:00:00	54.4 54.1	-:-	2.2	
2024-06-08	12:00:00	54.5 54.7			
2024-06-08	13:00:00	34.7			58.9



# Location 1 - Time History Data



- 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.

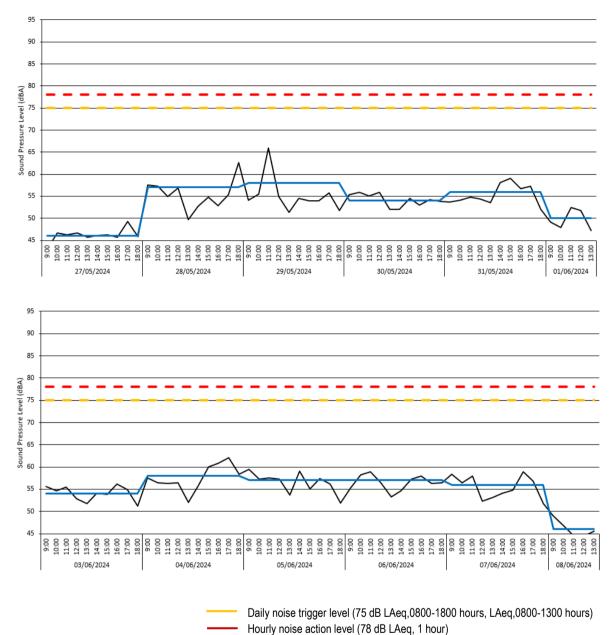


# Location 2 - Raw Data

# Broadband Results				
Date	Time (bh:mm:ss)	LAQ(60min) [ds], 46.7 46.7 46.7 46.7 46.7 55.9 55.9 55.7 55.1 55.9 55.7 55.1 55.1 55.1 55.1 55.1 55.1 55.1	LAeq(10hr)	LAeg(Shr)
2024-05-27	[hh:mm:ss] 09:00:00	43.0		
2024-05-27 2024-05-27	10:00:00	46.7		
2024-05-27	12:00:00	46.7		
2024-05-27 2024-05-27	13:00:00	45.7		
2024-05-27	09:00:00 10:00:00 11:00:00 12:00:00 13:00:00 14:00:00 15:00:00 17:00:00	46.2	-:-	-:-
2024-05-27	16:00:00 17:00:00 18:00:00	45.7		
2024-05-27	18:00:00	49.3	46.4	
2024-05-28	18:00:00 09:00:00 10:00:00 11:00:00	57.5		
2024-05-28 2024-05-28	11:00:00	54.9		
2024-05-28	12:00:00	56.9		
2024-05-28 2024-05-28	14:00:00	49.7 52.7		
2024-05-28	15:00:00	54.8		
2024-05-28 2024-05-28	09:00:00 10:00:00 11:00:00 12:00:00 13:00:00 14:00:00 14:00:00 15:00:00 16:00:00 18:00:00 10:00:00 10:00:00 11:00:00 11:00:00 11:00:00	55.4		
2024-05-28 2024-05-29	18:00:00	62.7	56.9	
2024-05-29	10:00:00	55.5		-:-
2024-05-29 2024-05-29	11:00:00	66.0		
2024-05-29	13:00:00	51.4		
2024-05-29 2024-05-29	14:00:00	54.5		
2024-05-29	16:00:00	54.0		
2024-05-29 2024-05-29	12:00:00 13:00:00 14:00:00 15:00:00 16:00:00 17:00:00 18:00:00	55.7 51.7	58.0	
	17:00:00 18:00:00 09:00:00 10:00:00	55.4		
2024-05-30 2024-05-30	10:00:00	55.9		
2024-05-30	12:00:00	55.9		
2024-05-30 2024-05-30	14:00:00	52.0	-:-	
2024-05-30 2024-05-30	15:00:00	54.5		
2024-05-30	17:00:00	54.2		-:-
2024-05-30 2024-05-31	18:00:00	53.8	54.4	
2024-05-31	10:00:00	54.1		
2024-05-31 2024-05-31	11:00:00	54.8 54.4		
2024-05-31	13:00:00	53.6		
2024-05-31 2024-05-31	14:00:00 15:00:00	58.1 59.0		
2024-05-31	16:00:00	56.7		
2024-05-31 2024-05-31	18:00:00	52.0	55.9	-:-
2024-06-01 2024-06-01	09:00:00	49.1		
2024-06-01	11:00:00	52.4		
2024-06-01 2024-06-01	10:00:00 11:00:00 11:00:00 13:00:00 13:00:00 14:00:00 15:00:00 16:00:00 17:00:00 19:00:00 10:00:00 11:00:00	51.8 47.2		50.2
2024-06-02	18:00:00 09:00:00 10:00:00 11:00:00 12:00:00 13:00:00 14:00:00		47.1	
2024-06-03 2024-06-03	09:00:00	55.6 54.6		2.2
2024-06-03	11:00:00	55.5		
2024-06-03 2024-06-03	13:00:00	51.8		
2024-06-03	14:00:00	54.1		
2024-06-03 2024-06-03	15:00:00 16:00:00	56.2	-:-	
2024-06-03	16:00:00 17:00:00 18:00:00 09:00:00 10:00:00 11:00:00	54.9	54.2	
2024-06-04	09:00:00	57.5		
2024-06-04 2024-06-04	10:00:00	56.5 56.3		7.7
2024-06-04	09:00:00 10:00:00 11:00:00 12:00:00 13:00:00 14:00:00 15:00:00 16:00:00 17:00:00 18:00:00 10:00:00	56.4		
2024-06-04	13:00:00 14:00:00	52.0 55.8		
2024-06-04	15:00:00	60.0		
2024-06-04 2024-06-04	17:00:00	62.1		
2024-06-04	18:00:00	58.3	58.4	
2024-06-05 2024-06-05	10:00:00 11:00:00	57.3		-:-
2024-06-05	11:00:00 12:00:00	57.6		
2024-06-05	13:00:00	53.7		
2024-06-05 2024-06-05	14:00:00	59.1 55.0	-:-	-:-
2024-06-05	16:00:00	57.4		
2024-06-05	17:00:00 18:00:00	56.1 51.9	57.0	-:-
2024-06-06		55.2		
2024-06-06	10:00:00 11:00:00	58.9	2.2	-:-
2024-06-06	12:00:00	56.4		
2024-06-06	13:00:00 14:00:00	54.6	-:-	-:-
2024-06-06	15:00:00 16:00:00	57.2 57.9	-:-	-:-
2024-06-06	17:00:00	56. 2		
2024-06-06 2024-06-07	18:00:00	58.4	56.7	
2024-06-07	09:00:00 10:00:00			
2024-06-07 2024-06-07	11:00:00 12:00:00	52.3	2.2	-:-
2024-06-07 2024-06-07	13:00:00 14:00:00	53.2	-:-	
2024-06-07	15:00:00	54.8		-:-
2024-06-07 2024-06-07	16:00:00	58.9		
2024-06-07	17:00:00 18:00:00	56.8 51.7	56.1	
2024-06-08 2024-06-08	09:00:00 10:00:00	49.0 46.8	2.2	-:-
2024-06-08 2024-06-08	11:00:00 12:00:00	44.4		
2024-06-08	13:00:00		-:-	46.4



# Location 2 - Time History Data



3.10 There was 100% data coverage at Location 2 during construction hours for the monitoring period

Data unavailable

Noise level, LAeg, 1hour

Daily noise level (dB LAeq,0800-1800 hours, LAeq,0800-1300 hours)

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.

covered by this report.

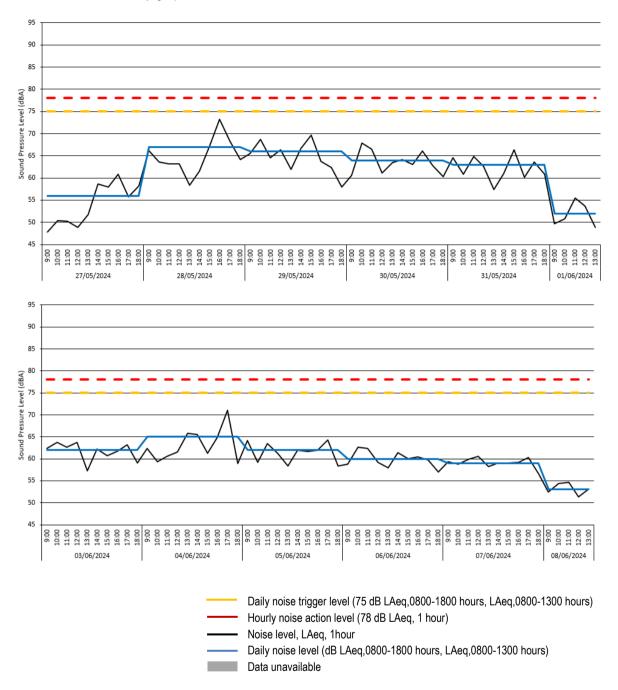


# Location 3 - Raw Data

# Broadband Results		Lichard (60min) (10min) (10min		
Date [YYYY-MM-DD] 2024-05-27	Time [hh:mm:ss]	LAeq(60min) [d8]	LAeq(10hr) [dB]	LAeq(5hr) [dB]
2024-05-27 2024-05-27	09:00:00	47.7		
2024-05-27	11:00:00	50.3		-:-
2024-05-27 2024-05-27	12:00:00 13:00:00	48.9 51.7		
2024-05-27 2024-05-27 2024-05-27 2024-05-27	14:00:00	58.7		
2024-05-27	[hh:mm:ss] 09:00:00 10:00:00 11:00:00 11:00:00 12:00:00 13:00:00 14:00:00 15:00:00 16:00:00 17:00:00 18:00:00 19:00:00	60.8		-:-
2024-05-27 2024-05-27	17:00:00 18:00:00	55.7 58.2	56.1	
2024-05-28 2024-05-28	09:00:00	66.2		
2024-05-28 2024-05-28 2024-05-38	11:00:00	63.2	-:-	-:-
2024-05-28 2024-05-28	12:00:00 13:00:00	63.2 58.4		
2024-05-28	14:00:00	61.5		
2024-05-28 2024-05-28	16:00:00	73.3	-:-	-:-
2024-05-28 2024-05-28	17:00:00 18:00:00	68.3 64.2	66.9	
2024-05-28 2024-05-29 2024-05-39	09:00:00	65.5		
2024-05-29 2024-05-29 2024-05-29 2024-05-29	11:00:00	64.6		
2024-05-29 2024-05-29	12:00:00 13:00:00	66.3 62.0	-:-	-:-
2024-05-29	14:00:00	66.6		
2024-05-29 2024-05-29 2024-05-29 2024-05-29 2024-05-30	16:00:00	63.8	-:-	
2024-05-29	17:00:00 18:00:00	62.3 58.0	65.8	-:-
2024-05-30 2024-05-30	09:00:00	60.6		
2024-05-30	11:00:00	66.5		
2024-05-30 2024-05-30	13:00:00	63.4	-:-	-:-
2024-05-30 2024-05-30 2024-05-30	14:00:00 15:00:00	64.1 63.0		
2024-05-30	16:00:00	66.1		
2024-05-30 2024-05-30 2024-05-30	18:00:00	60.3	64.3	-:-
2024-05-31 2024-05-31	09:00:00 10:00:00	64.5 60.9		
2024-05-31 2024-05-31 2024-05-31	11:00:00	64.8		
2024-05-31	13:00:00	57.4		
2024-05-31 2024-05-31 2024-05-31 2024-05-31 2024-05-31	15:00:00	66.3	-:-	-:-
2024-05-31 2024-05-31	16:00:00 17:00:00	60.1 63.6		
2024-05-31 2024-05-31 2024-06-01	18:00:00	60.9	62.9	
2024-06-01 2024-06-01 2024-06-01	10:00:00	50.8		
2024-06-01 2024-06-01	18:00:00 10:00:00 10:00:00 11:00:00	53.7	-:-	-:-
2024-06-01 2024-06-02	13:00:00 18:00:00	48.9	53.0	52.4
2024-06-03 2024-06-03	09:00:00	62.4		
2024-06-03 2024-06-03	11:00:00	62.6	-:-	
2024-06-03	13:00:00	57.3		
2024-06-03 2024-06-03	15:00:00	60.7	-:-	
2024-06-03 2024-06-03	16:00:00 17:00:00	61.7 63.2		
2024-06-03 2024-06-04	18:00:00	59.0	62.0	
2024-06-04 2024-06-04	10:00:00	59.3		
2024-06-04	12:00:00	61.5	-:-	-:-
2024-06-04 2024-06-04	13:00:00 14:00:00	65.8 65.5		
2024-06-04 2024-06-04	15:00:00	61.2		
2024-06-04	17:00:00	71.0	11.	
2024-06-04 2024-06-05 2024-06-05	09:00:00	64.1		-:-
2024-06-05	10:00:00 11:00:00	63.5	-:-	
2024-06-05 2024-06-05	12:00:00	61.2 58.4	-:-	-:-
2024-06-05 2024-06-05	14:00:00 15:00:00	61.9		
2024-06-05	16:00:00 17:00:00	61.7 62.0		111
2024-06-05 2024-06-05	18:00:00	64.3 58.4	62.0	-:-
2024-06-06 2024-06-06	09:00:00	58.8 62.7	-:-	-:-
2024-06-06 2024-06-06	10:00:00 11:00:00 12:00:00	62.4 59.2		
2024-06-06	13:00:00	58.0		-:-
2024-06-06 2024-06-06	14:00:00 15:00:00	61.4 60.0	-:-	-:-
2024-06-06	16:00:00 17:00:00	59.7	2.2	-:-
2024-06-06 2024-06-07	18:00:00 09:00:00	57.0 59.3	60.3	
2024-06-07	10:00:00	58.8		-:-
2024-06-07 2024-06-07	11:00:00 12:00:00	60.5	-:-	-:-
2024-06-07 2024-06-07	12:00:00 13:00:00 14:00:00	58.2		1.1
2024-06-07 2024-06-07	15:00:00 16:00:00	59.1		
2024-06-07 2024-06-07 2024-06-07	17:00:00 18:00:00	60.3		
2024-06-08		56.6 52.5	59.2	111
2024-06-08 2024-06-08	10:00:00 11:00:00	54.4 54.7	-:-	-:-
2024-06-08 2024-06-08	12:00:00 13:00:00	51.4 53.2		53.4
		_		-



# Location 3 - Time-history graph



- 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.



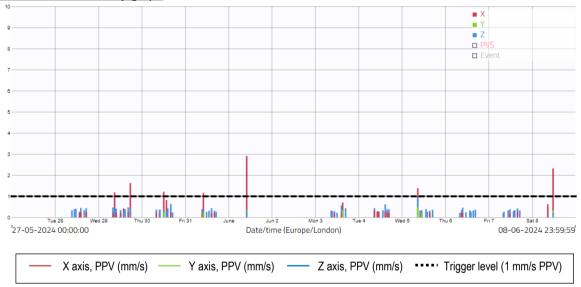
#### **Vibration Monitoring Results**

#### Location 1 - Raw data

Measurin	g point:	Period:		Order	Value	Date	Time
Holloway	- L1	27/05/202	4 to 08/06/2024	1	2.93	01/06/2024	10:04
				2	2.34	08/06/2024	11:39
Criteria m	m/s PVS	Exceedan	ces	3	1.63	29/05/2024	17:40
1.0		7		4	1.41	05/06/2024	08:46
				5	1.24	30/05/2024	12:10
				6	1.19	29/05/2024	08:56
				7	1.18	31/05/2024	10:05
				8	0.94	05/06/2024	09:13
				9	0.83	30/05/2024	13:39
				10	0.70	03/06/2024	15:12

#### Location 1 - Time-history graph

PPV [mm/s]



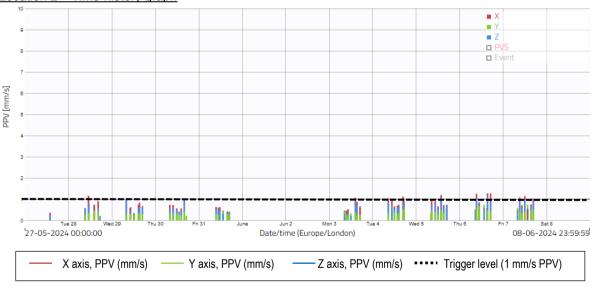
- 3.15 There was 100% data coverage at Location 1 during construction hours for the monitoring period covered by this report. There were seven exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Saturday 1<sup>st</sup> June at 10:04, with a recorded level of 2.9 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.
- 3.16 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	27/05/2024 to 08/06/2024	1	1.45	06/06/2024	09:24
		2	1.44	06/06/2024	17:11
Criteria mm/s PV	S Exceedances	3	1.43	07/06/2024	12:04
1.0	28	4	1.42	05/06/2024	13:52
		5	1.41	06/06/2024	15:29
		6	1.36	04/06/2024	16:51
		7	1.33	07/06/2024	16:47
		8	1.31	04/06/2024	08:42
		9	1.30	07/06/2024	09:14
		10	1.25	03/06/2024	14:33
		11	1.21	28/05/2024	11:11
		12	1.21	29/05/2024	08:03
		13		30/05/2024	16:04
		14	1.15	06/06/2024	09:22
		15	1.14	07/06/2024	12:13
		16	1.13	06/06/2024	17:10
		17	1.13	05/06/2024	10:36
		18	1.12	04/06/2024	10:42
		19	1.12	04/06/2024	17:18
		20	1.11	06/06/2024	09:23
		21	1.10	06/06/2024	15:48
		22	1.09	05/06/2024	08:38
		23	1.09	06/06/2024	17:12
		24	1.06	07/06/2024	08:50
		25	1.04	04/06/2024	16:56
		26	1.04	06/06/2024	10:50
		27	1.03	07/06/2024	12:05
		28	1.02	06/06/2024	11:48
		29	1.00	05/06/2024	16:58
		30	0.99	06/06/2024	17:09

# Location 2 - Time-history graph



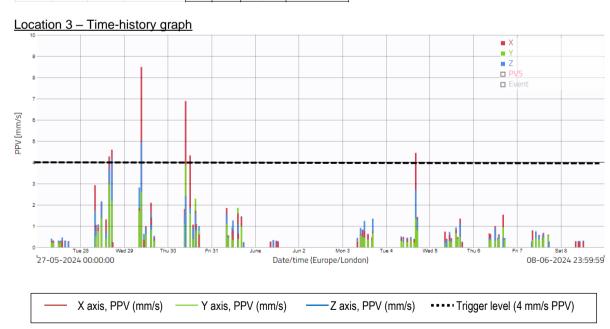
3.17 There was 100% data coverage at Location 2 during construction hours for the monitoring period covered by this report. There were 28 exceedances of the project vibration trigger level of 1 mm/s PPV as shown in the raw data and graph above. The highest recorded vibration level occurred on Thursday 6th June at 09:24, with a recorded level of 1.5 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.



3.18 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

Measurin	g point:	Period:		Order	Value	Date	Time
Holloway	- L3	27/05/202	4 to 08/06/2024	1	9.44	29/05/2024	09:30
				2	7.52	30/05/2024	09:50
Criteria m	ım/s PVS	Exceedan	ces	3	6.26	30/05/2024	09:49
4.0		12		4	5.69	28/05/2024	15:49
				5	5.61	30/05/2024	10:10
				6	5.33	28/05/2024	17:18
				7	5.06	30/05/2024	10:15
				8	4.88	28/05/2024	15:31
				9	4.70	28/05/2024	15:50
				10	4.52	28/05/2024	15:27
				11	4.46	04/06/2024	16:19
				12	4.46	30/05/2024	12:19
				13	3.98	28/05/2024	15:23
				14	3.97	28/05/2024	15:48
				15	3.94	28/05/2024	15:28
				16	3.80	04/06/2024	16:22
				17	3.78	30/05/2024	09:42
				18	3.67	30/05/2024	10:03
				19	3.63	29/05/2024	09:32
				20	3.59	04/06/2024	16:33
				21	3.57	30/05/2024	09:47
				22	3.54	28/05/2024	15:34
				23	3.52	28/05/2024	08:02
				24	3.49	04/06/2024	16:24
				25	3.49	30/05/2024	09:43
				26	3.33	28/05/2024	15:35
				27	3.13	30/05/2024	10:12
				28	3.13	29/05/2024	08:51
				29	3.06	30/05/2024	10:11
				30	3.05	29/05/2024	08:22



3.19 There was 100% data coverage at Location 3 during construction hours for the monitoring period covered by this report. There were 12 exceedances of the project vibration trigger level of 4.0 mm/s

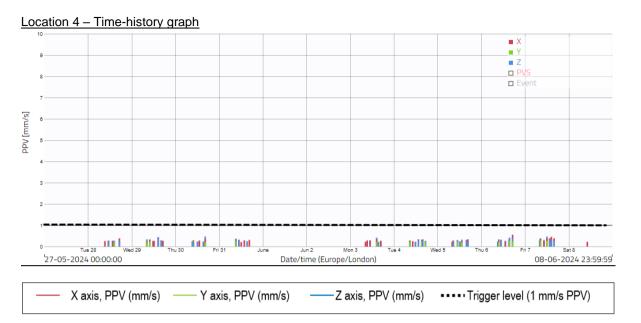


- PPV, which are shown in the raw data and graph above. The highest recorded vibration level occurred on Wednesday 29<sup>th</sup> May at 09:30, with a recorded level of 9.4 mm/s PPV.
- 3.20 The activity taking place at this location will continue to be monitored; however, it is our understanding that 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. 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 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.
- 3.23 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 poin	t: Period:	Order	Value	Date	Time
Holloway - L4	27/05/2024 to 08/06/2024	1	0.69	06/06/2024	17:11
		2	0.61	29/05/2024	14:32
Criteria mm/s P	VS Exceedances	3	0.60	30/05/2024	16:22
1.0	0	4	0.57	03/06/2024	14:33
		5	0.57	07/06/2024	12:04
		6	0.55	07/06/2024	12:13
		7	0.55	06/06/2024	15:29
		8	0.54	06/06/2024	17:12
		9	0.50	06/06/2024	17:10
		10	0.48	31/05/2024	09:14





3.24 There was 100% data coverage at Location 4 during construction hours for the monitoring period covered by this report. There were no 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 6<sup>th</sup> June at 17:11, with a recorded level of 0.7 mm/s PPV.