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RESULTS OF A 24-HOUR NOISE LEVEL SURVEY CARRIED OUT ON THE ROOF
OF THE OFFICE BUILDING LOCATED AT 3 BROMLEY PLACE, LONDON W1
AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED
TO MITIGATE THE IMPACT OF THE PROPOSED NEW EXTERNAL PLANT

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Authorised for
Release by : I J Marchant

Client: Watts Group Limited.
Project: 3 Bromley Place, London W1
Emtec Ref: QF9468/PF6258/RP1
Date: 18th July 2018



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1.0. INTRODUCTION

This report details the results of a 24-hour noise survey carried out on the roof of the office building located at 3 Bromley Place, London W1.

The objectives of this survey were as follows:

- To assess the proposal to install new external plant on the roof of the building .
- To establish the existing background noise level outside the nearest noise sensitive properties.
- To recommend noise limits and any necessary measures to ensure that the operation of the new plant does not disturb the occupants of the nearest affected properties.

This report has been divided into the following sections for ease of analysis:

- 1.0. INTRODUCTION
- 2.0. SITE DESCRIPTION
- 3.0. TEST INSTRUMENTATION
- 4.0. TEST PROCEDURE
- 5.0. RESULTS AND EVALUATION OF NOISE CRITERIA
- 6.0. DISCUSSION OF RESULTS

2.0. SITE DESCRIPTION

The property at 3 Bromley Place is located in the corner of the rear of a number of buildings which front onto Conway Street, Grafton Way and Cleveland Street. Bromley Place is a small mews off of Conway Street and has two office buildings that front onto the mews. The attached Photo A shows an aerial view of the site and the Photos B and C show the front views of the two offices at the end of the mews. Bromley Place is the office building on the right hand side at the end of the mews.

There are a number of existing air cooled condensers on the roof of the building, which are not operating, and these condensers will be replaced by the proposed new condensers. The existing condensers are shown on the attached Photos D and E.

3.0. TEST INSTRUMENTATION

All measurement equipment used during the survey complied with the requirements of BS4142:2014 "Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas". Details of the equipment are as follows:

Integrating Sound Level Meter:	Rion type NL-52 class 1 Sound Level Meter fitted with a Rion type UC-59 ½ inch condenser microphone. Serial No. 01121378
Statistical Analysis Modules:	Built in module capable of computing the percentile levels L1, L10, L50, L90 and L99 and also the Leq level.
Acoustic Calibrator:	Bruel & Kjaer type 4231 electronic calibrator. Serial No.: 1934160

Calibration was performed before and after the surveys and found to be, in all cases, +/- 0.1 dB from the reference source.

3.1. Existing Noise Climate

An extract fan, associated with a property in Cleveland Street, was running at the beginning and end of the survey. This fan was unsilenced and was clearly audible.

Road traffic travelling on nearby roads could not be heard due to the noise of the adjacent extract fan drowning out any contributions from road vehicles. However during the overnight period, when the extract fan will not be running, noise from road vehicles could possibly affect the noise levels overnight.

Commercial jet aircraft were observed at medium and high altitude during the manned periods at the start and the end of the survey, so it is possible that the noise levels measured could include contributions from medium altitude jet aircraft.

There are no overland railways nearby, so the noise levels measured will not include contributions from rail noise.

We judged that noise from the adjacent extract fan will be the dominant noise source throughout the daytime period.

4.0. TEST PROCEDURE

The survey was conducted during a continuous 24-hour period from 12.03pm on Monday the 9th of July 2018 to 12.03pm on Tuesday the 10th of July 2018.

Data was continuously acquired throughout the measurement period with the individual averaging time for statistical noise data set to 15 minutes. The following 'A' weighted statistical measurements were recorded concurrently: -

- LA₁ - The Sound Pressure Level exceeded for 1% of the measurement period.
- LA₁₀ - The Sound Pressure Level exceeded for 10% of the measurement period.
- LA₅₀ - The Sound Pressure Level exceeded for 50% of the measurement period.
- LA₉₀ - The Sound Pressure Level exceeded for 90% of the measurement period. LA90 is considered to represent the "background noise level" during the measurement period and is used for the assessment of noise to determine the likelihood of complaints (See BS 4142:2014).
- LA₉₉ - The Sound Pressure Level exceeded for 99% of the measurement period.
- LA_{eq} - The continuous steady state Sound Pressure Level that has the same acoustic energy as the real fluctuating level.

4.1. Measurement Position

Noise levels were measured at a position on the second floor roof terrace at the right hand end of the building adjacent to the existing redundant condensers. The microphone was attached to a boom which was strapped to the metal railing around the edge of the terrace.

The microphone can be seen on the attached Photos D,E and F.

The rest of the measurement equipment was located in a weatherproof enclosure with a low impedance cable running from the microphone to the instrumentation.

4.2. Weather Conditions

The weather conditions prevailing during the measurement period were generally in line with those recommended in BS 4142:2014: -

Weather daytime: -	Bright and Sunny	Weather night time: -	Clear
Wind daytime: -	Calm	Wind night time: -	Calm

The microphone was protected throughout the tests by an acoustically transparent wind balloon.

5.0. RESULTS AND EVALUATION OF NOISE CRITERIA

The raw test data, gathered during the noise survey, is given in Appendix 'A' of this report.

The 'A' Weighted Leq levels measured over each 15 minute interval throughout the 24-hour period (denoted by LA_{eq}, (15 mins)) are displayed as a bar graph on the attached Sketch No QF/9468/T1 at the back of this report.

The 'A' Weighted percentile levels measured over each 15 minute interval denoted by LA₁₀ (15 mins), LA₅₀ (15 mins) and LA₉₀ (15 mins) are displayed as line graphs on the attached Sketch No QF/9468/T2 at the back of this report.

5.1. Summary of Results

The table QF/9468/D1 below summarises the noise levels taken over the 24-hour period in terms of the maximum and minimum Sound Pressure Levels recorded.

Table QF/9468/D1 – Summary of Maximum and Minimum Noise Levels

	LA _{eq}	LA ₁	LA ₁₀	LA ₅₀	LA ₉₀	LA ₉₉
Minimum	43.2dBA	44.7dBA	43.8dBA	43.0dBA	42.5dBA	42.3dBA
Maximum	65.2dBA	76.3dBA	68.9dBA	59.3dBA	55.8dBA	55.5dBA

Table QF/9468/D2 – Minimum LA90 Noise Level – Daytime (07.00 to 23.00)

	LA ₉₀
Minimum daytime	44.6dBA

Table QF/9468/D3 – Minimum LA90 Noise Level – Nighttime (23.00 to 07.00)

	LA ₉₀
Minimum night time	42.5dBA

5.2. Summary of the Local Authority's planning requirements regarding noise for noise sensitive properties

The local planning authority is the London Borough of Camden.

The Camden Local Plan sets out the Council's planning policies and replaces the Core Strategy and Development Policy planning documents (adopted in 2010). It ensures that Camden continues to have robust, effective and up-to-date planning policies that respond to changing circumstances and the borough's unique characteristics and contribute to delivering the Camden Plan and other local priorities.

The Local Plan will cover the period from 2016-2031. Policy A4 of The Local Plan is entitled Noise and Vibration and states:

The Council will seek to ensure that noise and vibration is controlled and managed. Development should have regard to Camden's Noise and Vibration thresholds (Appendix 3). We will not grant planning permission for a) a development likely to generate unacceptable noise and vibration impacts or b) a development sensitive to noise in locations which experience high levels of noise, unless appropriate attenuation measures can be provided and will not harm the continued operation of existing uses. We will only grant permission for noise generating development, including any plant and machinery, if it can be operated without causing harm to amenity. We will also seek to minimise the impact on local amenity from deliveries and from the demolition and construction phases of development.

The parts of Appendix 3 that we have identified as relevant to this application are as follows:

Appendix 3: Noise thresholds

The significance of noise impact varies dependent on the different noise sources, receptors and times of operation presented for consideration within a planning application. Therefore, Camden's thresholds for noise and vibration evaluate noise impact in terms of various 'effect levels' described in the National Planning Policy Framework and Planning Practice Guidance:

- *NOEL – No Observed Effect Level*
- *LOAEL – Lowest Observed Adverse Effect Level*
- *SOAEL – Significant Observed Adverse Effect Level*

Three basic design criteria have been set for proposed developments, these being aimed at guiding applicants as to the degree of detailed consideration needed to be given to noise in any planning application. The design criteria outlined below are defined in the corresponding noise tables. The values will vary depending on the context, type of noise and sensitivity of the receptor:

- *Green – where noise is considered to be at an acceptable level.*
- *Amber – where noise is observed to have an adverse effect level, but which may be considered acceptable when assessed in the context of other merits of the development.*
- *Red – where noise is observed to have a significant adverse effect.*

Table C: Noise levels applicable to proposed industrial and commercial developments (including plant and machinery)

Existing Noise sensitive receptor	Assessment Location	Design Period	LOAEL (Green)	LOAEL to SOAEL (Amber)	SOAL (Red)
Dwellings**	Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)	Day	'Rating level' 10dB* below background	'Rating level' between 9dB below and 5dB above background	'Rating level' greater than 5dB above background
Dwellings**	Outside bedroom window (façade)	Night	'Rating level' 10dB* below background and no events exceeding 57dBL _{Amax}	'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dB L _{Amax}	'Rating level' greater than 5dB above background and/or events exceeding 88dBL _{Amax}

*10dB should be increased to 15dB if the noise contains audible tonal elements (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.

**levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.

The periods in Table C correspond to 0700 hours to 2300 hours for the day and 2300 hours to 0700 hours for the night. The Council will take into account the likely times of occupation for types of development and will be amended according to the times of operation of the establishment under consideration.

There are certain smaller pieces of equipment on commercial premises, such as extract ventilation, air conditioning units and condensers, where achievement of the rating levels (ordinarily determined by a BS:4142 assessment) may not afford the necessary protection. In these cases, the Council will generally also require an NR curve specification of NR35 or below, dependant on the room (based upon measured or predicted Leq (5mins) noise levels in octave bands, 1 metre from the façade of affected premises, where the noise sensitive premise is located in a quiet background area.

5.3. Determination of noise sensitive property design criteria

We believe that the new plant, which will consist of a number of heat pump condensing units, will not emit noise that has a distinguishable discrete continuous note, or emit noise that that has distinct impulses. The condensers will be inverter controlled and will slowly ramp up to their operating condition. To comply with a green rating from the table above the new units should have a combined Sound Pressure Level 10dB below the lowest LA90 background noise level at 1 metre from the nearest noise sensitive window.

The lowest background noise level measured during the survey was 42.5dBA, which occurred during four consecutive time periods starting at 2.48am and ending at 3.48am. The lowest daytime LA90 noise level was 44.6dBA. Applying a rating level that is 10dB below the daytime/nighttime noise levels would give limiting daytime/nighttime rating levels of 34.6 and 32.5dBA.

We therefore propose that the following rating levels be applied to this project:

Table QF/9468/D4 – Proposed Design Rating Levels

<i>Existing Noise sensitive receptor</i>	<i>Assessment Location</i>	<i>Design Period</i>	<i>Lowest measured background level</i>	<i>Proposed rating level</i>	<i>Proposed Local Authority criteria</i>
<i>Dwellings</i>	<i>Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)</i>	<i>Day</i>	<i>44.6dBA</i>	34.6dBA	<i>Green</i>
<i>Dwellings</i>	<i>Outside bedroom window (façade)</i>	<i>Night</i>	<i>42.5dBA</i>	32.5dBA	<i>Green</i>

5.4. Determination of commercial design criteria

The uses of the commercial premises adjacent to the office building in Broley Place consist of offices. It is therefore proposed that the recommendations given in BS8233:2014 and that Table 2 be considered.

	Good 45dBA	Reasonable 50dBA
Open Plan offices: $L_{Aeq,T}$		

We propose that the lower of these rating levels is adopted, i.e. 45dBA.

Assuming a 10dB noise reduction due to a partially open window the rating level at 1 metre external to the nearest affected office windows would be 45dBA + 10dB = 55dBA.

5.5 Summary of external noise criteria

Based upon the results of the survey and the above design criteria we summarise the actual design rating levels to be adopted for this project in table QF/9468/D5: -

Table QF/9468/D5 – recommended design rating levels $L_{Ar,T}$

Type of premises	$L_{Ar,T}$ (Daytime 7am – 11pm)	$L_{Ar,T}$ (Nighttime 11pm – 7am)
Noise sensitive	34.6dBA	32.5dBA
Commercial	55 dBA	-

6.0. DISCUSSION OF RESULTS

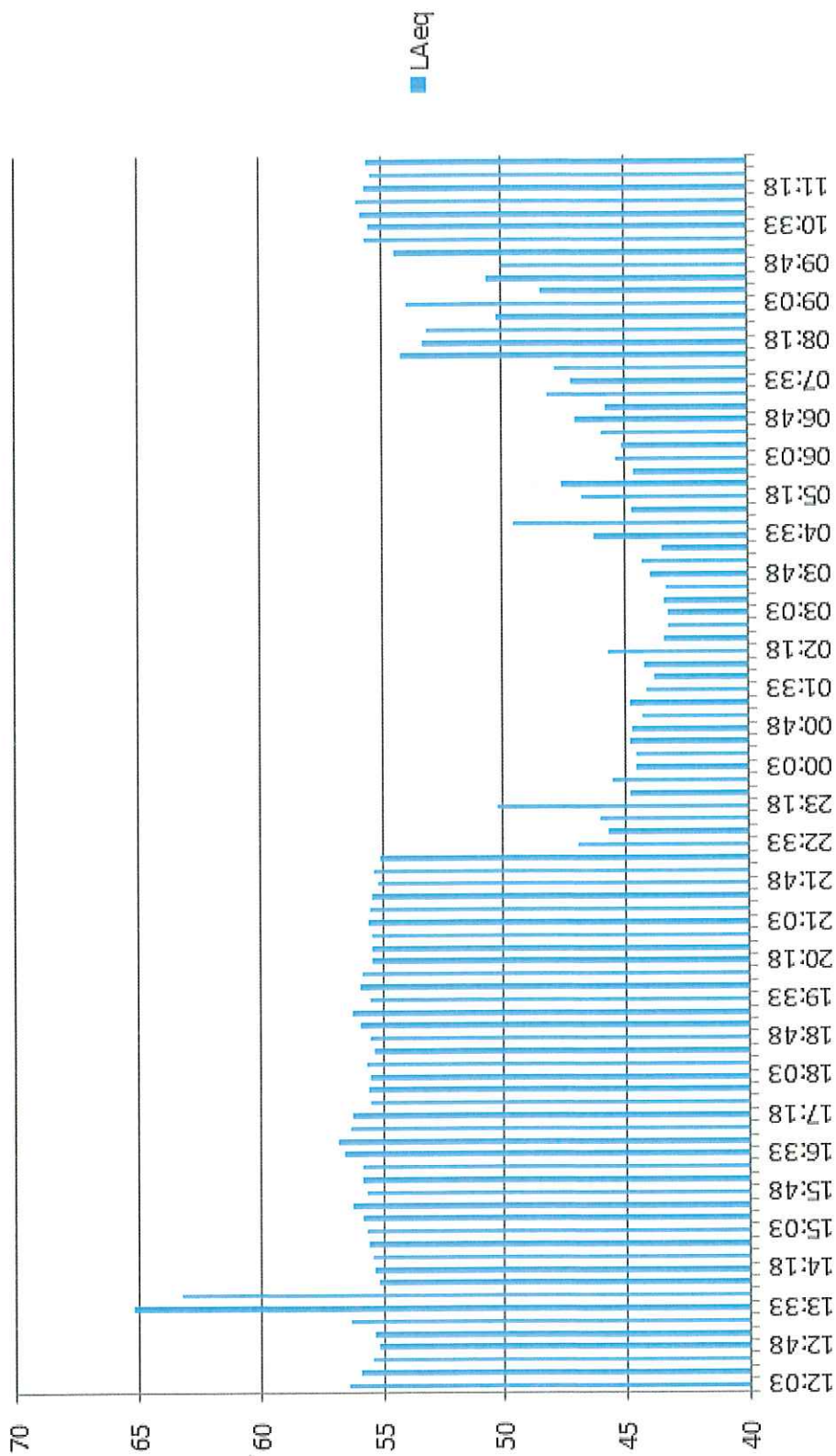
It is proposed to install a number of air cooled condensers adjacent to the second floor terrace to replace the existing condensers. The units will be mounted externally and will probably require some form of acoustic screening to achieve the limiting LAeq noise levels listed in table QF/ 9468/D5

On receipt of details of the condensers, and any other mechanical plant items, that are to be installed onto the building we can analyse the noise output of this plant and suggest any remedial measures that might be necessary to mitigate the potential noise so that the limiting noise levels are achieved at 1 metre from the nearest affected windows.

In order to ensure that the operation of the Condensing Units do not transfer structural noise into the fabric of the building the equipment should be placed onto Emtec/VMC RD2 type neoprene-in-shear, anti-vibration mounts having a minimum static deflection of 6mm.

If mitigation measures are installed to the new mechanical plant and the limiting noise levels, laid down in table QF/9468/D5 above, are not exceeded then the new plant and should be acceptable to the Camden planning authority.

EMTEC PRODUCTS LTD
18th July 2018



TITLE:
LAeq Levels

ISSUE DATE:
10/07/2018

DRAWN BY:
MGR

A B C D E F G H

CLIENT: Watts Group Ltd

PF No: 6258

APPROVED BY:
MGR

REVISION

PROJECT:
3 Bromley Place, London

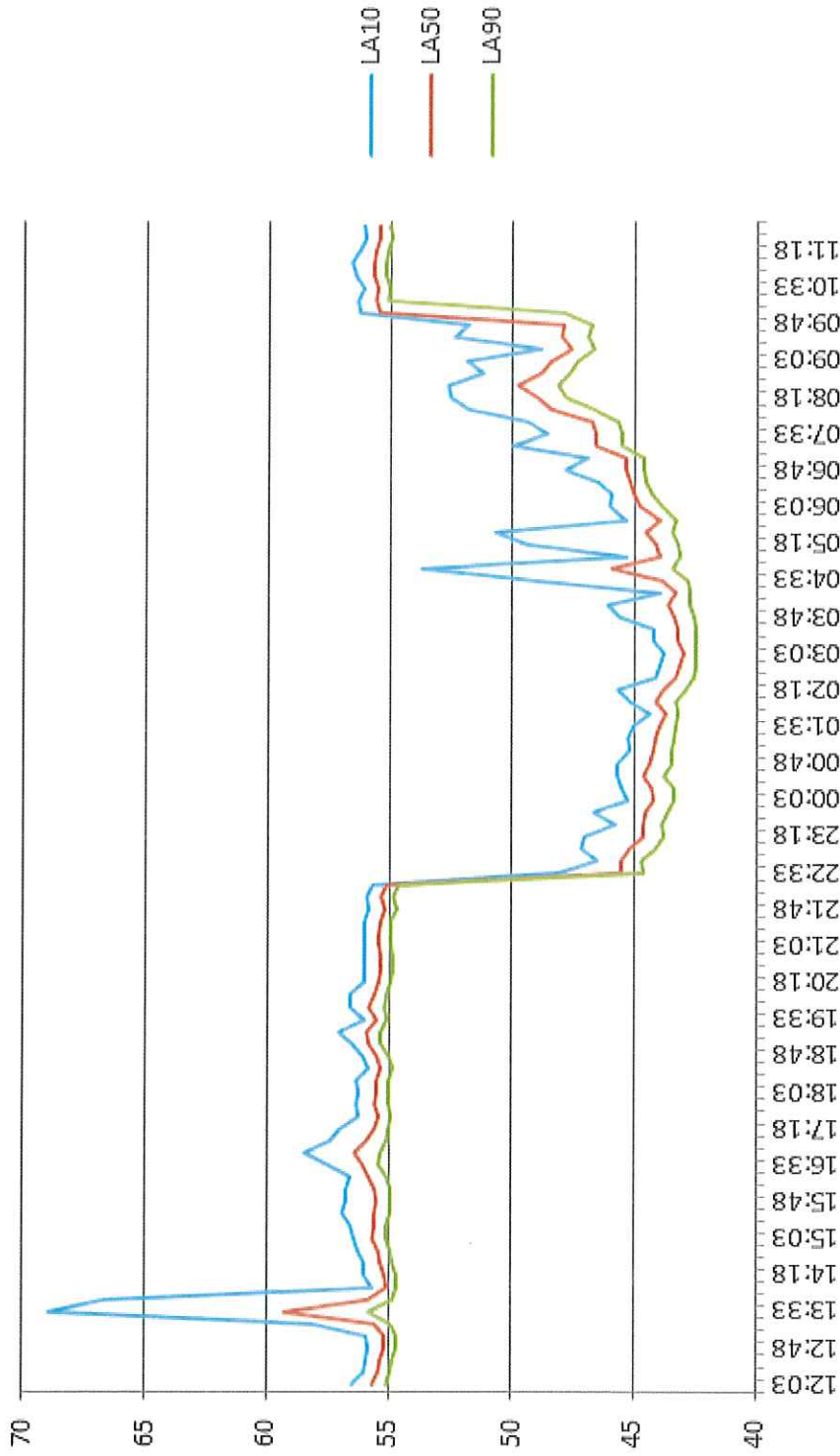
Q A M I

DESIGN AUTH:
MGR

SKETCH No. QF/9468/T1



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TITLE:
LA10; LA50 & LA90 Levels

ISSUE DATE:
10/07/2018

DRAWN BY:
MGR

A B C D E F G H

CLIENT: London Land Ltd

PROJECT:
3 Bromley Place, London

PF No: 6258

APPROVED BY:
MGR

REVISION

SKETCH No. QF/9468/T2



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APPENDIX 'A'

Raw Data – Noise Survey

9th to 10th July 2018

RAW NOISE DATA - 3 Bromley Place, London

Ref: QF9468/PF6258/RP1
 Client: Watts Group Ltd
 Date: 9th to 10th of July 2018

Address	Start Time	LAeq	LE	Lmax	Lmin	LA1	LA10	LA50	LA90	LA99
1	12:03	56.4	86	81.7	54.1	59.2	56.5	55.7	55.1	55
2	12:18	55.9	85.5	78.1	53.8	59.2	56	55.4	54.9	54.8
3	12:33	55.4	85	62.6	53.9	58.3	55.9	55.3	54.8	54.7
4	12:48	55.2	84.8	59.1	53.7	57	55.8	55.2	54.7	54.6
5	13:03	55.3	84.9	62	53.8	57.7	55.9	55.2	54.7	54.6
6	13:18	56.3	85.9	62.7	53.8	60.5	58.1	55.6	54.9	54.8
7	13:33	65.2	94.8	81.4	54.5	76.3	68.9	59.3	55.8	55.5
8	13:48	63.2	92.8	77.8	53.9	74.2	66.6	55.8	54.8	54.7
9	14:03	55.2	84.8	62.6	53.7	56.3	55.7	55.1	54.7	54.5
10	14:18	55.3	84.9	59	53.8	56.8	56	55.2	54.7	54.6
11	14:33	55.4	85	65.6	53.9	57.1	56	55.3	54.8	54.7
12	14:48	55.6	85.2	64.8	54	59.8	56.2	55.4	54.9	54.7
13	15:03	55.7	85.3	59.9	53.8	57.2	56.4	55.7	55.1	54.9
14	15:18	55.8	85.4	60.7	54.1	58	56.6	55.6	55.1	54.9
15	15:33	56.2	85.8	68.7	53.9	62.6	56.9	55.6	54.9	54.8
16	15:48	55.7	85.3	62	53.8	58.4	56.7	55.5	54.9	54.8
17	16:03	55.8	85.4	62.8	53.9	58.6	56.7	55.6	54.9	54.8
18	16:18	55.8	85.4	59.8	53.9	57.9	56.6	55.8	55.1	54.9
19	16:33	56.6	86.2	68.6	54	62.2	57.5	56.1	55.4	55.2
20	16:48	56.8	86.4	63.8	53.9	60.7	58.5	56.4	55.3	55.1
21	17:03	56.3	85.9	65.6	54	60.7	57.4	55.9	55.1	55
22	17:18	56.2	85.8	68.3	54	61.8	57	55.6	55	54.8
23	17:33	55.5	85.1	61.9	53.7	57.1	56.2	55.4	54.9	54.8
24	17:48	55.6	85.2	60.5	54	57.6	56.3	55.6	55	54.8
25	18:03	55.5	85.1	60	54	57	56.2	55.5	55	54.8
26	18:18	55.7	85.3	65.8	54	58.3	56.3	55.5	55	54.9
27	18:33	55.3	84.9	61.4	53.8	56.7	55.8	55.3	54.8	54.7
28	18:48	55.5	85.1	64	53.8	56.9	56.1	55.5	55	54.8
29	19:03	55.9	85.5	65.8	54.2	57.6	56.5	55.8	55.3	55.1
30	19:18	56.2	85.8	68.7	54.1	59.5	57.1	55.9	55.3	55.2
31	19:33	55.5	85.1	61.3	54.2	56.6	56	55.5	55.1	54.9
32	19:48	55.9	85.5	61	54.3	58.4	56.6	55.8	55.2	55.1
33	20:03	55.8	85.4	62.9	54	58.4	56.6	55.6	55.1	54.9
34	20:18	55.4	85	60.6	53.8	56.7	56	55.4	54.9	54.8
35	20:33	55.4	85	60.8	53.8	56.7	56	55.3	54.8	54.7
36	20:48	55.4	85	62.9	53.8	59.1	56	55.3	54.8	54.6
37	21:03	55.6	85.2	68.9	53.8	58	56	55.4	54.9	54.7
38	21:18	55.5	85.1	64.6	53.9	58.2	56	55.4	54.9	54.7
39	21:33	55.4	85	69.3	53.8	57.2	56	55.3	54.9	54.7
40	21:48	55.2	84.8	59.9	53.6	56.4	55.8	55.2	54.7	54.6
41	22:03	55.3	84.9	58.3	53.8	56.5	55.9	55.3	54.8	54.7
42	22:18	55.1	84.7	60.5	53.6	56.4	55.7	55.1	54.6	54.5
43	22:33	46.9	76.5	58.5	43.5	55.3	48.1	45.5	44.6	44.5
44	22:48	45.7	75.3	59.6	43.3	48.2	46.5	45.5	44.7	44.5
45	23:03	46	75.6	61.5	42.7	52.7	47.2	45.2	44.1	43.9
46	23:18	50.2	79.8	82.4	42.7	54.7	47	44.6	43.8	43.7
47	23:33	44.8	74.4	53.4	42.7	47.5	45.8	44.6	43.9	43.7
48	23:48	45.5	75.1	64.9	42.1	52.4	46.7	44.5	43.6	43.4
49	00:03	44.5	74.1	57.4	42.1	47.8	45.3	44.2	43.4	43.2
50	00:18	44.5	74.1	52.8	42.3	47	45.5	44.3	43.4	43.3
51	00:33	44.8	74.4	60.4	42.5	48.3	45.7	44.6	43.8	43.6

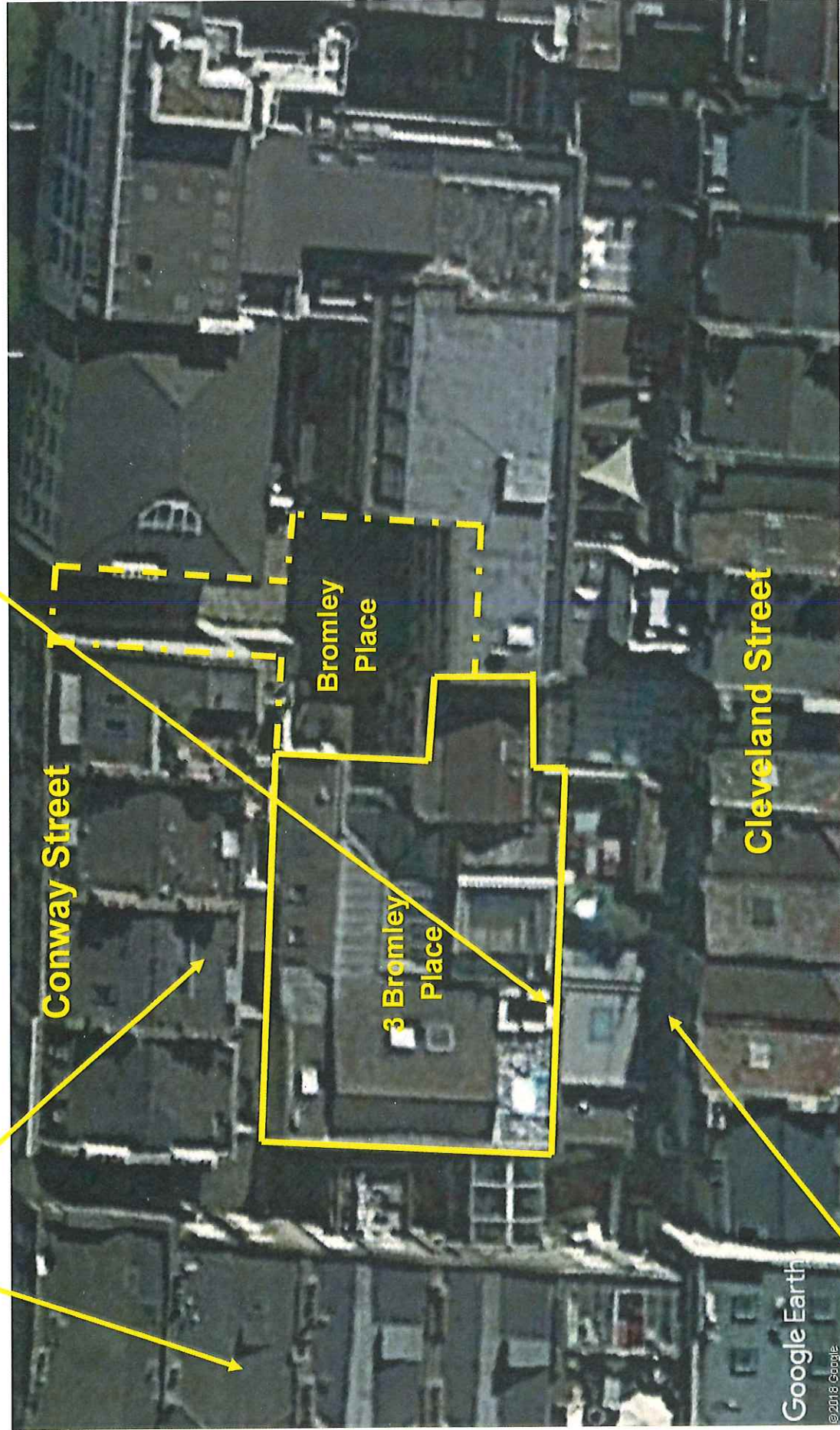
52	00:48	44.7	74.3	58.1	42.4	48.7	45.7	44.4	43.5	43.4
53	01:03	44.3	73.9	49.9	42.3	46.8	45.2	44.2	43.5	43.3
54	01:18	44.8	74.4	70.2	42.1	48.3	45.3	44.1	43.4	43.2
55	01:33	44.1	73.7	49.4	42.1	46.1	45	44	43.3	43.1
56	01:48	43.8	73.4	47.9	42.1	45.2	44.4	43.7	43.2	43
57	02:03	44.2	73.8	56.2	42.2	46.9	45.2	44.1	43.3	43.1
58	02:18	45.7	75.3	61.7	41.4	55.6	45.7	43.8	42.9	42.7
59	02:33	43.4	73	48.2	41.5	46	44.1	43.3	42.6	42.5
60	02:48	43.2	72.8	48.9	41.4	44.7	44	43.1	42.5	42.4
61	03:03	43.2	72.8	56.1	41.3	45.4	43.8	43	42.5	42.3
62	03:18	43.4	73	50.3	41.4	46.4	44.2	43.2	42.5	42.4
63	03:33	43.3	72.9	52.7	41.6	45.9	44.2	43.2	42.5	42.4
64	03:48	44	73.6	50.4	41.4	48.2	45.6	43.4	42.6	42.5
65	04:03	44.3	73.9	55.1	41.4	48.6	46.1	43.6	42.7	42.5
66	04:18	43.5	73.1	60.5	41.5	45.8	44	43.3	42.7	42.6
67	04:33	46.3	75.9	58.4	41.6	54.9	49.1	43.9	42.8	42.6
68	04:48	49.6	79.2	61	42.1	57.5	53.7	45.9	43.5	43.3
69	05:03	44.7	74.3	58.3	41.9	51.9	45.4	44	43.1	42.9
70	05:18	46.8	76.4	61.4	42	56.3	49.4	44.1	43.2	43
71	05:33	47.6	77.2	61.4	42.1	57	50.7	44.5	43.5	43.3
72	05:48	44.6	74.2	56.2	42.1	50.2	45.4	44	43.3	43.1
73	06:03	45.4	75	60.3	42.2	51.5	46	44.8	43.9	43.6
74	06:18	45.1	74.7	54.2	43.1	47.4	45.9	45	44.3	44.1
75	06:33	45.9	75.5	60.8	43.4	52.6	46.5	45.2	44.5	44.3
76	06:48	47	76.6	63.3	43.4	55.7	47.8	45.4	44.6	44.4
77	07:03	45.8	75.4	57.1	43.4	50.1	46.9	45.4	44.6	44.4
78	07:18	48.2	77.8	63.7	44	56.4	50	46.6	45.5	45.2
79	07:33	47.2	76.8	56.9	44.1	53	48.6	46.6	45.5	45.3
80	07:48	47.8	77.4	59.5	44	54.9	49.4	46.8	45.7	45.4
81	08:03	54.2	83.8	77.7	44.9	68.1	51.8	48.4	46.7	46.3
82	08:18	53.3	82.9	79.4	46.2	62.6	52.5	49	47.8	47.5
83	08:33	53.1	82.7	80	46.6	61.5	52.6	49.8	48.2	47.9
84	08:48	50.2	79.8	66.4	46.4	59.3	51.2	48.8	47.7	47.4
85	09:03	53.9	83.5	80.3	45.8	61.5	51.9	48.4	47.3	47.1
86	09:18	48.4	78	70.4	45.2	53.1	48.8	47.6	46.7	46.5
87	09:33	50.6	80.2	67.7	45.5	60.9	52.4	48	46.9	46.7
88	09:48	50	79.6	63.6	45.5	59.3	51.8	47.9	46.8	46.5
89	10:03	54.4	84	64.6	46.5	58.2	56.2	55.4	47.9	47.6
90	10:18	55.7	85.3	61.6	54.1	58.2	56.3	55.6	55.1	55
91	10:33	55.5	85.1	59.3	54.1	56.6	56.1	55.5	55	54.9
92	10:48	55.8	85.4	62.5	54.2	57.8	56.4	55.7	55.2	55
93	11:03	56	85.6	63.4	54.1	59.6	56.6	55.7	55.2	55.1
94	11:18	55.7	85.3	63.8	54.1	59.1	56.2	55.6	55.1	55
95	11:33	55.4	85	62.5	54	56.7	56	55.4	54.9	54.8
96	11:48	55.6	85.2	65.4	54	59.2	56.1	55.4	55	54.8

APPENDIX 'B'

Photos

Residential Properties All Round Site

Microphone Location



Conway Street

Bromley Place

3 Bromley Place

Cleveland Street

Google Earth
©2018 Google

Photo A – Aerial View of site with Microphone Location & Surrounding Properties

Extract Fan



Photo B – Front of 3 Bromley Place on Right Hand Side of the End of Mews



Photo C – Adjacent Office Building at the end of Bromley Place (Left Hand Side)



Photo D – Existing Condensers on Roof Area of No.3 Bromley Place (Units not Operating)

Extract Fan

Microphone

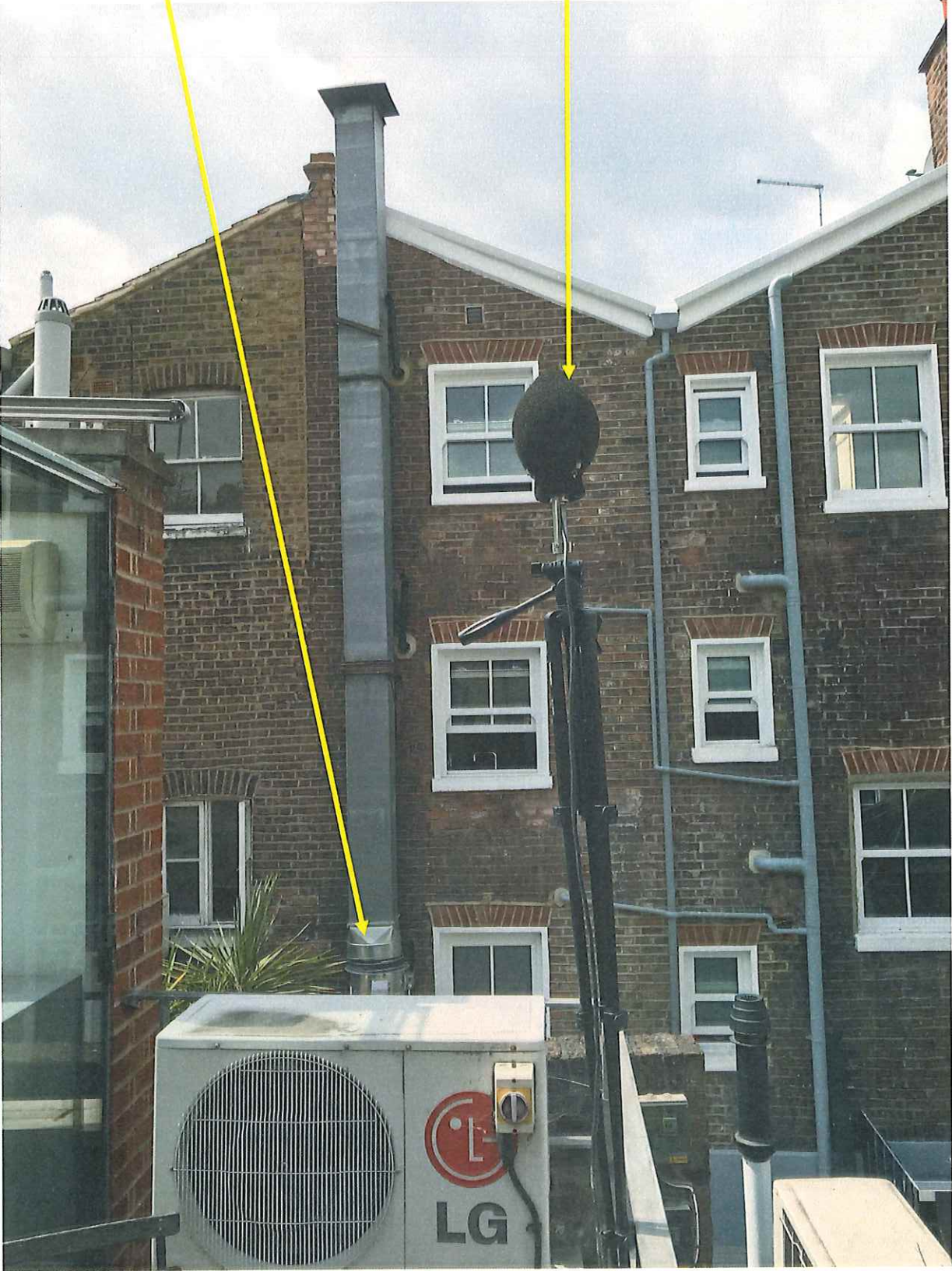


Photo E – Microphone Location with Extract Fan Behind

Microphone



Photo F – Location of Microphone with Residential Properties on Cleveland Street & Grafton Way

Entrance to
Bromley Place



Photo G – Residential Properties on Conway Street