Store Property Investments Ltd

Atelier House,

30 Greville Street,

London

Plant Noise Assessment

August 2019

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Document Control

Project:	Atelier House, 30 Greville Street, London
Client:	Store Property Investments Ltd
Job Number:	A113196
File Origin:	O:\Acoustics Air Quality and Noise\Active Projects\A113196

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Issue	Date	Status
1	16th May 2019	Draft Issue
2	17th July 2019	First Issue
3	30th August 2019	Second Issue – Updated Barrier Height
4		

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Appendix Contents

1.0 Introduction

1.1 Purpose of this Report

This report presents the findings of a noise assessment undertaken for the proposed installation of 3 air conditioning units, on the roof of Atelier House, 30 Greville Street, London.

A description of the existing noise environment in and around the site is provided. The noise levels from the proposed development have been predicted at local representative receptors using CADNA noise modelling software which incorporates ISO 9613 methodologies and calculations. Report Conditions are presented in Appendix C.

1.2 Legislative Context

This report is intended to provide information relevant to the local planning authority and their consultees in support of a planning application for the above proposed development. Policy guidance with respect to noise is found in the NPPF, published on 19th February 2019. With regard to noise and planning, the NPPF contains the following statement at paragraph 170:

"170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans"

A further 2 short statements are presented at paragraph 180, which state:

"180. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

a) "mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."

Furthermore, paragraphs 182 and 183 state:

> *"182. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.*
>
> *183. The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."*

Planning Practice Guidance (PPG): Noise provides further guidance with regard to the assessment of noise within the context of Planning Policy. The overall aim of this guidance, tying in with the principles of the NPPF and the Explanatory Note of the Noise Policy Statement for England (NPSE), is to, *'identify whether the overall effect of noise exposure is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation.'*

A summary of the effects of noise exposure associated with both noise generating developments and noise sensitive developments is presented within the PPG and repeated as follows:

Table 1.1 NPPG Noise Exposure Hierarchy

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No Effect	No Observed Effect	No Specific Measures Required
Noticeable and not intrusive	Noise can be heard but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No Specific Measures Required
Lowest Observed Adverse Effect Level			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life	Observed Adverse Effect	Mitigate and reduce to a minimum
Significant Observed Adverse Effect Level			
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Observed Adverse Effect	Prevent

The NPPF, NPSE and NPPG do not, however, present absolute noise level criteria which define SOAEL, LOAEL and NOEL which is applicable to all sources of noise in all situations. Therefore, within the context of the Proposed Development, national planning policy and appropriate guidance documents including 'BS 4142: 2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound'. Section 2.0 presents the noise level criteria used as a basis of this assessment.

The PPG: Noise also states that *neither the NPSE nor the NPPF (which reflects the Noise Policy Statement) expects noise to be considered in isolation, separately from the economic, social and other environmental dimensions of the proposed development.*

2.0 Assessment Criteria

2.1 Local Guidance (Camden London Borough Council) – Assessment Criteria

The effects of the new plant noise have been assessed in accordance with the noise thresholds set out in Appendix 3 of the Camden Local Plan which states:

> *"A relevant standard or guidance document should be referenced when determining values for LOAEL and SOAEL for non-anonymous noise. Where appropriate and within the scope of the document it is expected that British Standard 4142:2014 'Methods for rating and assessing industrial and commercial sound' (BS 4142) will be used. For such cases a 'Rating Level' of 10 dB below background (15dB if tonal components are present) should be considered as the design criterion)."*

Table 2.1 presents equivalent noise levels presented within Appendix 3 of the Camden Local Plan.

Table 2.1 Noise Levels Applicable to Proposed Industrial and Commercial Developments (Including Plant and Machinery) – Camden Local Plan

Existing Noise Sensitive Receptor	Assessment Location	Design Period	LOAEL (Green)	LOAEL to SOAEL (Amber)	SOAEL (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' 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 event exceeding 57 dB L_{Amax}	'Rating level' 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 88dB L_{Amax}

Therefore, the effects of operational noise associated with the project have been assessed in accordance with BS 4142:2014+A1:2019. This standard sets down the following guidelines for assessing the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes, based upon difference between the measured background noise level and the rating level of the source under consideration. In particular, the standard states:

"a) Typically, the greater the difference, the greater the magnitude of the impact.

b) A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.

c) A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.

d) The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."

In addition to noise levels the significance of the impact depends on the individuals affected and to the acoustic features present which may be assessed subjectively or objectively as appropriate. Section 9 of BS 4142:2014 recommends that correction factors be applied to the specific noise level if the noise contains certain acoustic features such as:

- tonality
- impulsivity
- other sound characteristics which are readily distinctive
- intermittency

It should be noted that the significance of an industrial sound source depends upon both the margin by which the rating level exceeds the background sound level and the overall context in which the sound occurs.

3.0 Assessment Methodology

3.1 Noise Modelling Methodology

Three-dimensional noise modelling has been undertaken based on the monitoring data to predict noise levels at a number of locations. The model is based on ISO 9613 noise propagation methodology and allows for detailed prediction of noise levels to be undertaken for several receptor points and different noise emission scenarios both horizontally and vertically.

The modelling software calculates noise levels based on the emission parameters and spatial settings that are entered. Input data, assumptions and model settings as given in Table 3.1 below have been used.

Table 3.1 Modelling Parameters Sources and Input Data

Parameter	Source	Details
Horizontal distances – around site	Ordnance Survey	Ordnance Survey
Ground levels – around site	Ordnance Survey	Ordnance Survey
Building heights – around site	WYG Observations	3m per storey
Barriers	WYG	All existing barriers inputted from site visit data. Proposed 2.5m Roof Mounted Acoustic Screen
Proposed Plans	PJR Building Services Design Engineers	Drawing Number: S43/01/401-2 Rev C Dated: June 2019

It is acknowledged that a number of these parameters will affect the overall noise levels presented in this report. However, it should be noted that certain assumptions made, as identified above, are considered to be representative of a reasonable worst-case.

3.2 Model Input Data

The proposals include the introduction of 2 x Mitsubishi PURY-P450YSNW-A and 1 x Mitsubishi PURY-P500TYNW-A air conditioning units situated on the roof. Noise level data from the manufacturer are presented in Table 3.2 below; the sound pressure levels have been used within the model.

Table 3.2 Manufacturer's Noise Level Data

Description	Sound Pressure Level at 1m Distance (per unit, dB L_{Aeq})
2 x Mitsubishi PURY-P450YSNW-A	64.5 dB(A)
1 x Mitsubishi PURY-P500YSNW-A	63.5 dB(A)

3.3 Sensitive Receptors

The table below summarises receptor locations that have been selected to represent worst-case residential receptors with respect to direct noise from the new plant. The locations of the receptors are shown on SK02 in Appendix B.

Table 3.3 Receptor Locations

Ref.	Description	Height (m) Above Local Ground Level
R01	Arundel House, 36 – 43 Kirby Street	12.0
R02	Marriner House, 32-33 Greville Street	12.0
R03	Atelier Apartments, 30 Greville Street	12.0
R04	Atelier Apartments, 30 Greville Street	12.0
R05	Atelier Apartments, 30 Greville Street	12.0
R06	Atelier Apartments, 30 Greville Street	9.0
R07	17 Greville Street	12.0
R09	29 – 35 Farringdon Point	12.0
R09	City View Apartments, Saffron Hill	12.0

4.0 Noise Survey

4.1 Noise Survey Methodology

A monitoring survey was undertaken to characterise baseline ambient noise levels currently experienced on the site and to establish the relative local background and traffic noise levels. Equipment used during the survey included:

Norsonic 140	Building Acoustics Analyser	s/n	1402989
Rion NL-52	Environmental Noise Analyser	s/n	01021257
Rion NL-52	Environmental Noise Analyser	s/n	732146
Rion NC-74	Sound Calibrator	s/n	35046823
Norsonic 1251	Calibrator	s/n	31043

The measurement equipment was checked against the appropriate calibrator at the beginning and end of the measurements, in accordance with recommended practice, a drift of 0.1 dB was observed for LT1 and no drift for LT2 and the short-term measurements. The accuracy of the calibrators can be traced to National Physical Laboratory Standards, calibration certificates for which are available on request.

A baseline monitoring survey was undertaken at two locations (as specified in the following table and shown in SK01 of Appendix B) from Thursday 4th April 2019 to Tuesday 9th April 2019. Attended short term measurements were undertaken at five locations during day, evening and night-time periods with two additional locations being measured unattended over a 117-hour period. The raw data collected from the long-term monitoring is available upon request.

Measurements were taken in general accordance with BS 7445-1:2003 *The Description and Measurement of Environmental Noise: Guide to quantities and procedures*. Weather conditions during the survey period were observed as being dry. Anemometer readings confirmed that wind speeds were less than 5 ms^{-1} at all times during the survey, with a predominant southernly wind direction, during the survey.

Table 4.1 Noise Monitoring Locations

Ref	Description
LT1	North west corner of rooftop of Atelier House, facing west (towards Kirby Street).
LT2	South east corner of rooftop of Atelier House, facing south (towards Greville Street).
ST1	Opposite Saffron House, Kirby Street.
ST2	Outside 14 Greville Street.
ST3	Opposite Hearts of London, 29 Greville Street.
ST4	At junction of Greville Street and Saffron Hill.
ST5	Adjacent to 29-31 Saffron Hill.

4.2 Noise Survey Results

The dominant noise sources found in the area include: road traffic noise from the A201, Greville Street and Kirby Street, including motorbikes parking on Kirby Street, and HGVs reversing and loading at surrounding commercial premises; pedestrian traffic and pedestrian crossing alarm were also audible during the survey.

Ambient and background noise levels are usually described using the L_{Aeq} index (a form of energy average) and the L_{A90} index (i.e. the level exceeded for 90% of the measurement period) respectively. Road traffic noise is generally described using the L_{A10} index (i.e. the level exceeded for 10% of the measurement period).

Table 4.2 Meteorological Conditions during the Survey

Survey Location	Date & Time	Temperature (°C)	Wind Speed (m/s)	Wind Direction	Cloud Cover (Oktas)	Dominant Noise Source
Daytime ST1	08/04/2019 16:11	10	0-2	S	8	Road traffic noise (Kirby Street).
Daytime ST2	08/04/2019 15:52	10	0-2	S	8	Pedestrian traffic, public conversations, construction (A201 Greville Street junction), road traffic noise (A201, Greville Street).
Daytime ST3	08/04/2019 15:16	10	0-3	S	8	Pedestrian traffic, pedestrian crossing, road traffic noise (Greville Street).
Daytime ST4	08/04/2019 14:58	10	2-4	SE	8	Pedestrian traffic, road traffic noise (skip lorry, LGVs).
Daytime ST5	08/04/2019 15:33	10	1-3	S	8	Road traffic noise (Greville Street, A201).
Evening ST1	08/04/2019 21:58	7	0-2	SW	7	Pedestrian traffic and road traffic noise (Greville Street).
Evening ST2	08/04/2019 21:41	7	0-2	WSW	8	Road traffic noise (A201, Greville Street).
Evening ST3	08/04/2019 21:24	7	0-2	SW	8	Road traffic noise (A201), pedestrian traffic and crossing alarm.
Evening ST4	08/04/2019 20:49	7	0-1	S	7	Road traffic noise (A201), pedestrian crossing alarm (frequent), some pedestrian activity.
Evening ST5	08/04/2019 21:06	7	0-2	SW	8	Restaurant extractor unit audible (One Tun Pub), road traffic noise (A201), pedestrian crossing.
Night-time ST1	08/04/2019 23:10	6	0-2	S	8	Pedestrian traffic and distant road traffic noise.
Night-time ST2	08/04/2019 23:26	6	0-2	S	8	Some road traffic noise (A201), vehicle loading on Hatton Garden, light pedestrian traffic.
Night-time ST3	08/04/2019 23:43	6	0-3	SE	8	Road traffic noise (Greville Street, A201).
Night-time ST4	09/04/2019 00:00	6	0-2	S	8	Road traffic noise (A201), pedestrian crossing alarm.
Night-time ST5	09/04/2019 00:16	6	0-2	S	7	Road traffic noise (A201), Saffron Hill: engine noise, doors and bags loaded.

The results of the statistical measurements and frequency measurements conducted during the survey are summarised in the following table. All values are sound pressure levels in dB (re: 2 x 10^{-5} Pa). For the long-term (LT) locations, the presented $L_{Aeq,T}$ and $L_{A10,T}$ are average noise levels whilst the L_{A90} is the modal noise level of each 5 minute measurement over the stated survey period.

Table 4.3 Results of Baseline Noise Monitoring Survey (Average Levels)

Period	Duration (T)	Monitoring Date and Times	Location	$L_{Aeq,T}$ (dB)	$L_{Amax,T}$ (dB)	$L_{Amin,T}$ (dB)	$L_{A10,T}$ (dB)	$L_{A90,T}$ (dB)
Weekday Daytime 07:00 - 23:00	45 hours	04/04/2019 - 09/04/2019 07:00 - 23:00	LT1	59.1	89.8	45.9	59.9	56.0
Weekday Night-time 23:00 – 07:00	24 hours	04/04/2019 - 09/04/2019 23:00 - 07:00		52.6	86.3	44.0	52.8	49.0
Weekend Daytime 07:00 - 23:00	32 Hours	04/04/2019 - 09/04/2019 07:00 - 23:00		54.9	90.8	44.8	55.0	48.0
Weekend Night-time 23:00 – 07:00	16 hours	04/04/2019 - 09/04/2019 23:00 - 07:00		50.9	92.3	44.6	51.0	47.0
Weekday Daytime 07:00 - 23:00	45 hours	04/04/2019 - 09/04/2019 07:00 - 23:00	LT2	60.9	86.2	46.4	61.5	56.0
Weekday Night-time 23:00 – 07:00	24 hours	04/04/2019 - 09/04/2019 23:00 - 07:00		53.6	84.1	44.4	54.8	50.0
Weekend Daytime 07:00 - 23:00	32 Hours	04/04/2019 - 09/04/2019 07:00 - 23:00		55.2	87.6	45.2	56.2	50.0
Weekend Night-time 23:00 – 07:00	16 hours	04/04/2019 - 09/04/2019 23:00 - 07:00		52.2	87.6	44.5	53.4	48.0
Daytime 07:00 - 19:00	15 Mins	08/04/2019 16:11	ST1	66.0	92.2	52.2	62.0	53.0
	15 Mins	08/04/2019 15:52	ST2	66.3	92.6	52.1	65.0	55.6
	15 Mins	08/04/2019 15:16	ST3	63.1	82.1	46.5	64.3	55.5
	15 Mins	08/04/2019 14:58	ST4	69.9	91.8	57.2	71.1	63.2
	15 Mins	08/04/2019 15:33	ST5	62.0	84.3	53.2	62.2	55.1
Evening 19:00 - 23:00	15 Mins	08/04/2019 21:41	ST1	54.8	77.8	44.2	54.4	46.1
	15 Mins	08/04/2019 21:58	ST2	54.5	69.0	52.0	55.6	52.7
	15 Mins	08/04/2019 21:24	ST3	59.3	81.1	48.6	62.8	51.0
	15 Mins	08/04/2019 20:49	ST4	59.7	78.4	51.4	62.1	53.6
	15 Mins	08/04/2019 21:06	ST5	53.6	70.6	51.2	54.5	52.3
Night-time 23:00 - 07:00	15 Mins	08/04/2019 23:10	ST1	54.6	66.1	53.1	55.5	53.5
	15 Mins	08/04/2019 23:26	ST2	53.8	77.1	42.3	56.1	44.4
	15 Mins	08/04/2019 23:43	ST3	51.7	64.7	46.5	54.3	48.2
	15 Mins	09/04/2019 00:00	ST4	62.3	87.0	47.4	63.3	51.2
	15 Mins	09/04/2019 00:16	ST5	75.0	102.5	48.9	69.4	50.4

All values are sound pressure levels in dB re: 2x 10^{-5} Pa

5.0 Noise Assessment

5.1 BS 4142 Assessment of Background Noise Comparison Assessment

The assessment compares the predicted average noise levels from proposed plant with the measured pre-installation daytime (07:00 – 23:00) and night-time (23:00 – 07:00) background noise L_{A90} at the nearest noise sensitive properties; all plant is considered to be operating simultaneously and at full capacity; a 2.5m high acoustic screen is included as part of the intrinsic design of the installation, the location of which is shown on SK02 of appendix B.

The proposed plant is not expected to produce any identifiable tonal noise at nearby sensitive receptor locations and will operate continuously; considering that the plant noise levels shown in Table 5.1 below are predicted to be at least 10 dB below existing background L_{A90} noise levels, any distinguishable noise characteristics are not expected to be identifiable and therefore therefore no correction is considered necessary as per the guidance within BS4142:2014+A1:2019.

Table 5.1 BS4142:2014 Assessment of Proposed Plant Noise

Ref	Measured Representative Background Noise Level L_{A90}		Noise Rating Level $L_{Aeq,1hr}$		BS 4142 Score	
	Daytime	Night-time	Daytime	Night-time	Daytime	Night-time
R01	48	47	32	32	-16	-15
R02	48	47	38	38	-11	-10
R03	48	47	38	38	-11	-10
R04	48	47	36	36	-12	-11
R05	48	47	37	37	-11	-10
R06	48	47	36	36	-12	-11
R07	48	47	35	35	-13	-12
R08	48	47	34	34	-14	-13
R09	48	47	32	32	-17	-16
R10	48	47	32	32	-16	-15

All values are sound pressure levels in dB re: 2×10^{-5} Pa

The assessment shows that worst-case noise levels from the new building services plant are predicted to be at least 10 dB below the measured background L_{A90} noise levels during the daytime and night-time period. In accordance with the guidance presented within BS 4142:2014+A1:2019, this is the indication of a low impact. Noise levels from the proposed plant units are also below the requirements of the London Borough of Camden Local Plan and fall below the '*Lowest Observed Adverse Effect Level*' (LOAEL).

6.0 Conclusions

A noise assessment has been undertaken for the proposed instalment of 3 air conditioning units, on the roof of Atelier House, 30 Greville Street, London. The assessment has been carried out in accordance with BS 4142:2014+A1:2019 and the noise thresholds detailed in Appendix 3 of the Camden Local Plan.

Noise rating levels from the new building services plant are predicted to be at least 10 dB below the existing background L_{A90} noise levels during the daytime period and in accordance with the guidance presented within BS4142:2014, this is an indication of a low impact. Furthermore, noise from the BSP would be below the LOAEL presented within appendix 3 of the Camden Local Plan.

Appendices

Appendix A – Acoustic Terminology and Abbreviations

Acoustic Terminology

dB Sound levels from any source can be measured in frequency bands in order to provide detailed information about the spectral content of the noise, i.e. whether it is high-pitched, low-pitched, or with no distinct tonal character. These measurements are usually undertaken in octave or third octave frequency bands. If these values are summed logarithmically, a single dB figure is obtained. This is usually not very helpful as it simply describes the total amount of acoustic energy measured and does not take any account of the ear's ability to hear certain frequencies more readily than others.

dB(A) Instead, the dBA figure is used, as this is found to relate better to the loudness of the sound heard. The dBA figure is obtained by subtracting an appropriate correction, which represents the variation in the ear's ability to hear different frequencies, from the individual octave or third octave band values, before summing them logarithmically. As a result the single dBA value provides a good representation of how loud a sound is.

L_{Aeq} Since almost all sounds vary or fluctuate with time it is helpful, instead of having an instantaneous value to describe the noise event, to have an average of the total acoustic energy experienced over its duration. The $L_{Aeq,\ 07:00 - 23:00}$ for example, describes the equivalent continuous noise level over the 12 hour period between 7 am and 11 pm. During this time period the L_{pA} at any particular time is likely to have been either greater or lower that the $L_{Aeq,\ 07:00 - 23:00}$.

L_{Amin} The L_{Amin} is the quietest instantaneous noise level. This is usually the quietest 125 milliseconds measured during any given period of time.

L_{Amax} The L_{Amax} is the loudest instantaneous noise level. This is usually the loudest 125 milliseconds measured during any given period of time.

L_n Another method of describing, with a single value, a noise level which varies over a given time period is, instead of considering the average amount of acoustic energy, to consider the length of time for which a particular noise level is exceeded. If a level of x dBA is exceeded for say 6 minutes within one hour, then that level can be described as being exceeded for 10% of the total measurement period. This is denoted as the $L_{A10,\ 1\ hr}$ = x dB.

The L_{A10} index is often used in the description of road traffic noise, whilst the L_{A90}, the noise level exceeded for 90% of the measurement period, is the usual descriptor for underlying background noise. L_{A1} and L_{Amax} are common descriptors of construction noise.

R_w The *weighted sound reduction index* determined using the above *measurement* procedure, but weighted in accordance with the procedures set down in BS EN ISO 717-1. Partitioning and building board manufacturers commonly use this index to describe the inherent sound insulation performance of their products.

Abbreviations

CADNA – Computer Aided Noise Abatement

DMRB – Design Manual for Roads and Bridges

HGV – Heavy Goods Vehicle

NPPF – National Planning Policy Framework

PPG – Planning Practice Guidance

UDP – Unitary Development Plan

UKAS – United Kingdom Accreditation Service

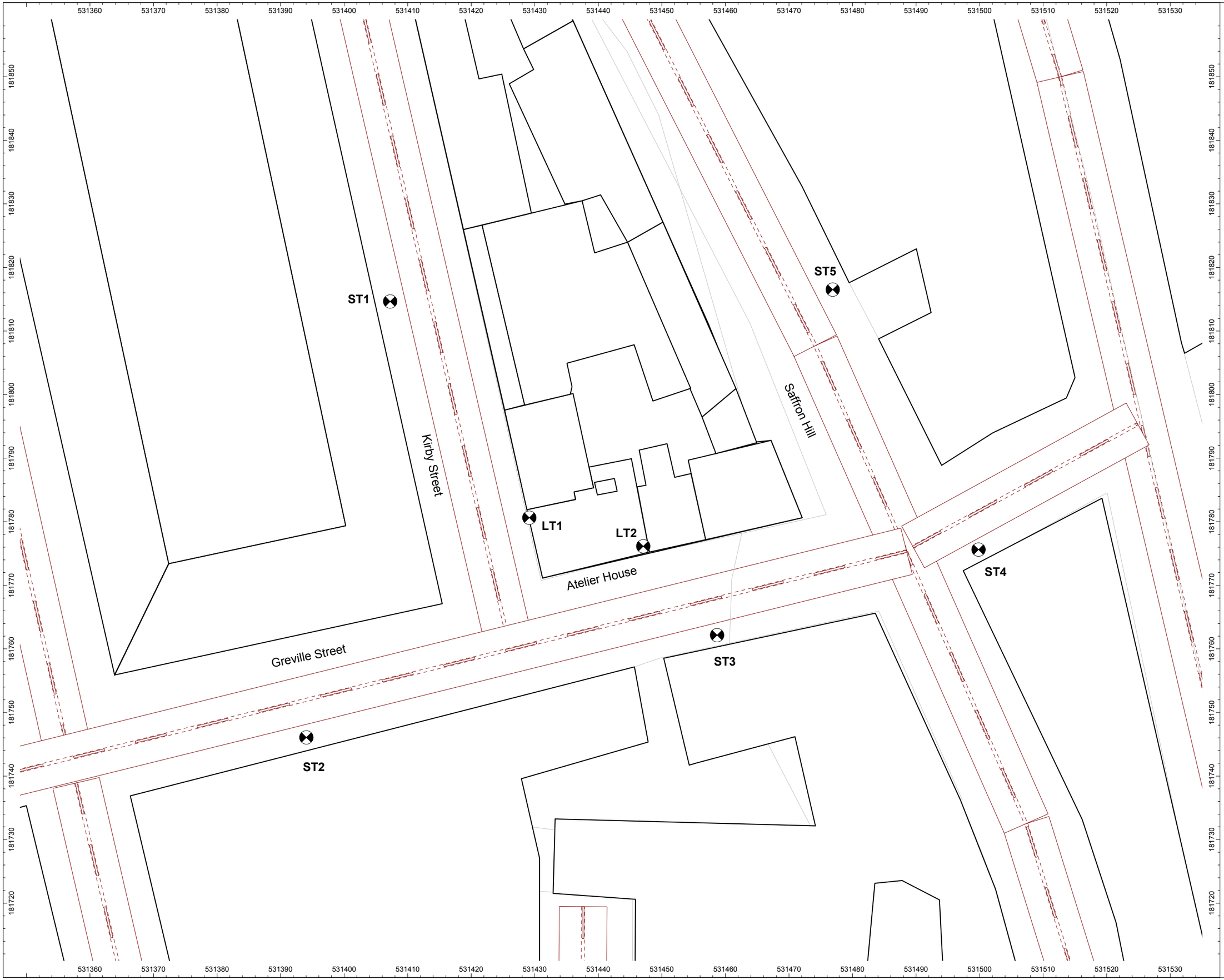
WYGE – WYG Environment

Appendix B – Sketches

SK01 Noise Monitoring Locations

SK02 Sensitive Receptor Locations & Site Layout

SK03 Worst-case Daytime L_{Aeq} Contribution from New Building Services Plant



Client:
Store Property Investments Ltd

Project:
Atelier House

Project Number:
A113196

Drawing Title / Scenario:
Noise Monitoring Locations

Drawing Number:
SK01

Scale : Not to scale

WYGE Leicester 17.07.19

Executive Park
Avalon Way
Anstey
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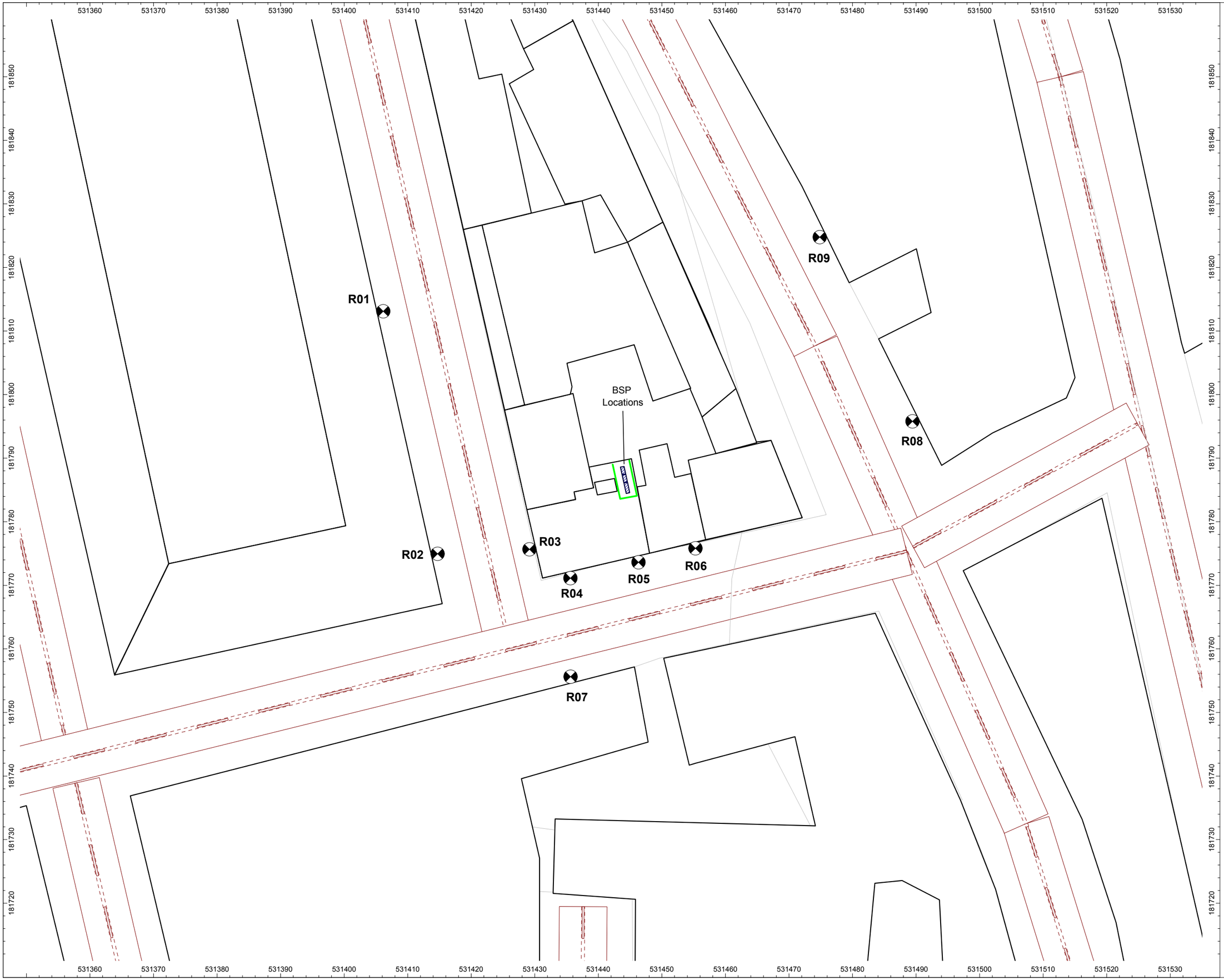
LE7 7GR
Tel 0116 234 8000



Client:
Store Property Investments Ltd

Project:
Atelier House

Project Number:
A113196

Drawing Title / Scenario:
Sensitive Receptor Locations

Drawing Number:
SK02

Key:

2.5m Acoustic Screen:

Scale : Not to scale

WYGE Leicester 30.08.19

Executive Park
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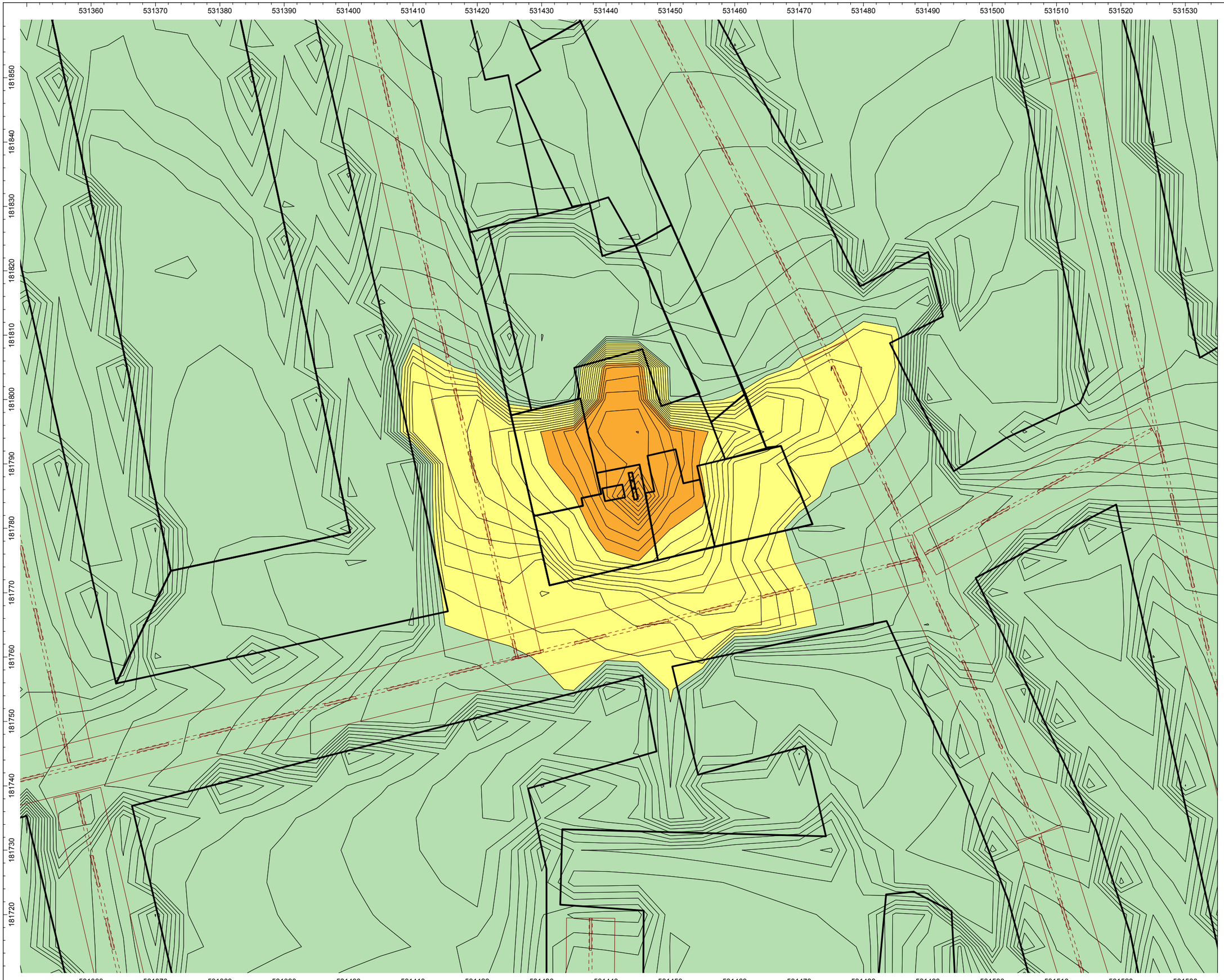
LE7 7GR
Tel 0116 234 8000



Client:
Store Property Investments Ltd

Project:
Atelier House

Project Number:
A113196

Drawing Title / Scenario:
Worst-case Daytime LAeq Contribution from New Building Services Plant

Drawing Number:
SK03

Key:

- 0.0 - 35.0 dB
- 35.0 - 45.0 dB
- 45.0 - 55.0 dB
- >55.0 dB

Grid Height = 12m

Scale : Not to scale

Please note: Noise contour plots are for illustrative purposes only

WYGE Leicester 30.08.19

Licence Number AL 553611

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Appendix C – Report Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of Store Property Investments Ltd. ("the Client") for the proposed uses stated in the report by [WYG Environment Planning Transport Limited] ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.