

TECHNICAL NOTE IN RESPECT OF THE PROPOSAL TO VARY THE PLANNING CONDITION (REF 213106) AT HEADLEY ROAD EAST, WOODLEY

Introduction

ACCON UK Ltd (ACCON) have been commissioned by HE2 Reading 1 GP Limited to investigate the potential noise impacts on the nearest noise sensitive receptors (NSRs) to the site of extending the consented operational delivery hours for Units 9 and 10 at Headley Road East, Woodley, RG5 4SN.

The client seeks to remove Condition 32 through Section 73 of the Town and Country Planning Act, 1990. The proposal is to extend the permitted hours of deliveries such that deliveries can be accepted or dispatched from Units 9 and 10 throughout the night-time period (2300 hrs to 0700 hrs).

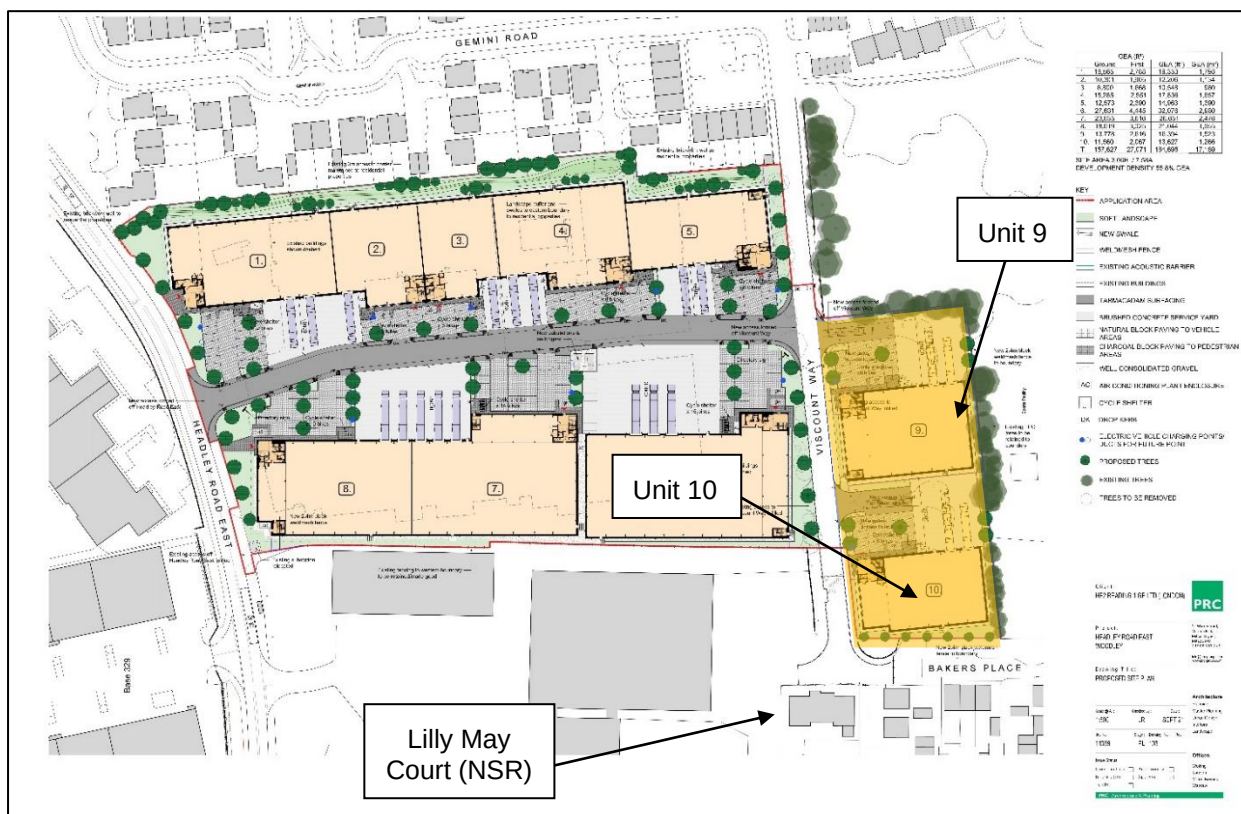
The Planning Condition (Condition 32)

Condition 32 (Planning Reference: 213106, Appeal Reference: APP/XO360/W/22/3306963) relates to the permitted hours for deliveries and is provided below:

"No deliveries shall be accepted or dispatched from Units 9 and 10 between 2300hrs and 0700hrs the following day".

The consented plan including Units 9 and 10 (highlighted in orange) is identified in **Figure 1**. The nearest Noise Sensitive Receptor (NSR), located at Lilly May Court, is also identified.

Figure 1: Proposed Site Plan



Planning Policy & Guidance

National Planning Policy Framework

The revised National Planning Policy Framework (NPPF as amended in December 2023) supersedes the 2012, 2018, 2019 and 2021 versions of the NPPF. The purpose of the planning system is to contribute to the achievement of sustainable development. There are three dimensions to sustainable development: economic, social and environmental. The environmental role is to contribute to protecting and enhancing our natural, built and historic environment; and as part of this, make effective use of land, help to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate to adapt to climate change including moving to a low carbon economy.

One of the core planning principles is to contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser value, where consistent with other policies in the Framework. The planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.

Paragraph 191 of the NPPF states:

“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 (see Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food and Rural Affairs, 2010));*
- 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.”*

Additionally, Paragraph 193 states:

“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.”

Noise Policy Statement for England

The Noise Policy Statement for England (NPSE) aims to “*through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*

- *Avoid significant adverse impacts on health and quality of life;*
- *Mitigate and minimise adverse impacts on health and quality of life; and*
- *Where possible, contribute to the improvement of health and quality of life”.*

Based on concepts from toxicology, it introduces three ‘Effect Levels’ relevant to the assessment of noise. These are:

- **NOEL:** No Observed Effect Level: This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise;
- **LOAEL:** Lowest Observed Adverse Effect Level: This is the level above which adverse effects on health and quality of life can be detected; and
- **SOAEL:** Significant Observed Adverse Effect Level: This is the level above which significant adverse effects on health and quality of life occur.

Planning Practice Guidance

The Planning Practice Guidance for Noise (PPG-N) was published in March 2014 and most recently updated in July 2019. The PPG-N suggests that the most appropriate and cost-effective solutions to potential noise issues are best identified when good acoustic design is considered early in the planning process.

The PPG-N provides the following advice on how to determine the noise impact on development:

“Plan-making and decision making need to take account of the acoustic environment and in doing so consider:

- *Whether or not a significant adverse effect is occurring or likely to occur;*
- *Whether or not an adverse effect is occurring or likely to occur; and*
- *Whether or not a good standard of amenity can be achieved.*

In line with the Explanatory Note of the Noise Policy Statement for England, this would include identifying whether the overall effect of the noise exposure (including the impact during the construction phase wherever applicable) is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation. As noise is a complex technical issue, it may be appropriate to seek experienced specialist assistance when applying this policy.” (Paragraph 003 Reference ID 30-003-20190722)

The document goes on to acknowledge the levels of noise exposure at which an effect may occur as provided in the NPSE and introduces a fourth effect level:

- **UAE:** Unacceptable Adverse Effect: Extensive and regular changes in behaviour and/or an inability to mitigate the effect of noise lead to psychological stress or physical effects.

Where residential development is proposed in the vicinity of existing businesses, community facilities or other activities that produce noise, the PPG-N advises that the applicant (or ‘agent of change’)

need to clearly identify the effects of the existing businesses that may cause a nuisance (including noise) and clearly define the mitigation measures being proposed to address any potential significant adverse effects that are identified. The agent of change needs to not only consider the current activities of the business, but the permitted activities too, even if they are not occurring at the time of the application being made. The PPG-N acknowledges that *“It can be helpful for developers to provide information to prospective purchasers or occupants about mitigation measures that have been put in place, to raise awareness and reduce the risk of post-purchase/occupancy complaints.”* (Paragraph 009 Reference ID 30-009-20190722).

It is important to understand that as the PPG-N does not specifically provide any advice with respect to noise levels/limits for different sources of noise, it is appropriate to consider other sources of advice and guidance documents when considering whether new developments would be sensitive to the prevailing acoustic environment and the PPG-N signposts a number of appropriate guidance documents.

Synopsis of Previous Noise Study & Predicted Noise Levels

ACCON has previously conducted both attended and unattended noise monitoring at the Headley Road East, Woodley site. The noise monitoring locations are identified in **Table 1**. The noise measurement results from ACCON's previous Noise Impact Assessment (Reference A4199/N/0003) that was carried out between 1115 hrs on Wednesday 17th March 2021 and 1200hrs Thursday 18th March 2021 are detailed in **Tables 1, 2 and 3**.

Table 1: Noise Survey Locations (17.03.2021 – 18.03.2021)

Location Reference	Location Description	Measurement Duration	Observed Noise Sources
MP1	In the south of the site, approximately 35 m south of Viscount Way.	24 Hours.	Departing HGVs from the site and road traffic along Viscount Way.
MP2	In the north east of the site, approximately 16 m to the south of Headley Road East.	24 Hours.	Headley Road East is the dominant road traffic noise source.
ST1	In the west of the site, approximately 40 m to the south of the access road entrance.	2 x 1 Hour Periods.	Plant sources along the west façade of the existing building are the dominant noise source. Regular movement of HGVs along the access road.
ST2	In the south east of the site, approximately 5 m north of Viscount Way and approximately 40 m to the west of the service yard.	2 x 1 Hour Periods.	Unloading of the HGVs can be heard with road traffic noise along Viscount Way.

Table 2: Unattended Noise Measurement Survey (17.03.2021 – 18.03.2021)

Position	Period	L _{Aeq,T} (dB)	L _{AFmax} (dB)	L _{A10,T} (dB)	Mean L _{A90,T} (dB)	Modal L _{A90,T} (dB)	Typical L _{A90,T}
MP1	0700 hrs to 2300 hrs	54	72 (72)	53	45	43	40
	0700 hrs to 2300 hrs	49	66 (67)	49	39	35	35
MP2	0700 hrs to 2300 hrs	61	77 (77)	64	50	51	51
	0700 hrs to 2300 hrs	54	74 (72)	51	42	40	40

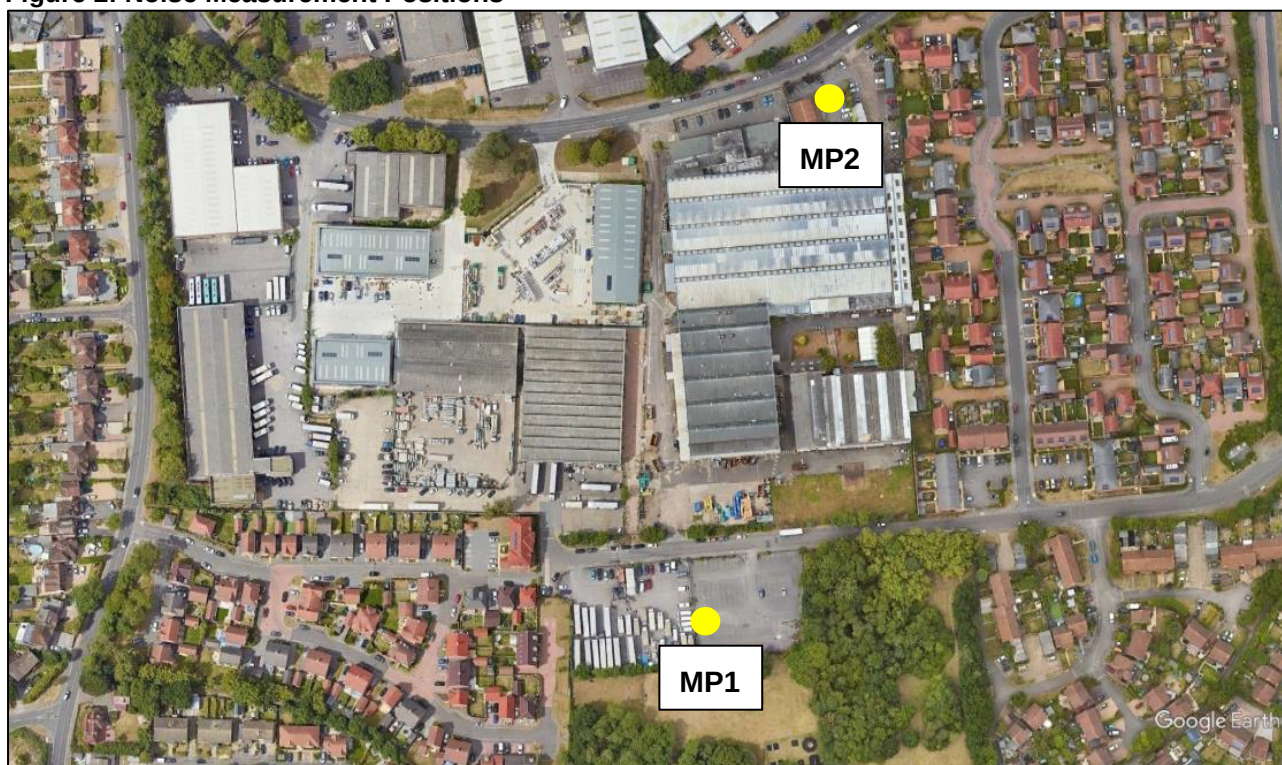
Table 3: Attended Noise Measurement Survey (17.03.2021 – 18.03.2021)

Position	Period	L _{Aeq,T} (dB)	L _{AFmax} (dB)	Mean L _{A10,T} (dB)	Mean L _{A90,T} (dB)
ST1	1210 hrs to 1310 hrs	64	71	64	63
	0950 hrs to 1050 hrs	63	68	64	62
ST2	1310 hrs to 1410 hrs	54	71	53	41
	1050 hrs to 1150 hrs	55	73	53	42

The levels stated are logarithmic averages for L_{Aeq,T} and arithmetic averages for L_{A10,T} and mean L_{A90,T}. The L_{AFmax} is the average of the highest hourly maximum sound levels measured during the measurement period, measured with a fast time-weighting. The L_{AFmax} levels in brackets are the tenth highest L_{AFmax} noise levels measured during the measurement period. The typical background sound level has been determined from assessment of the lowest regularly occurring L_{A90,T}.

Figure 2 identifies the noise measurement positions.

Figure 2: Noise Measurement Positions



A Technical Note (dated 15/02/2022) was issued which updated the predicted noise levels for Lilly May Court and Concorde Way arising from deliveries. The predicted daytime and night-time period noise levels from that report are identified in **Table 4**.

Table 4: Delivery Noise Levels Predicted at NSRs: $L_{Aeq,T}$

NSR	Specific Delivery Noise Level ($L_{Aeq,T}$ dB)	
	Daytime	Night-time
Lilly May Court: Ground Floor	33	32
Lilly May Court: First Floor	34	34
Lilly May Court: Second Floor	34	34
22 – 34 Concorde Way: Ground Floor	37	28
22 – 34 Concorde Way: First Floor	40	29

Recent Noise Measurement Survey

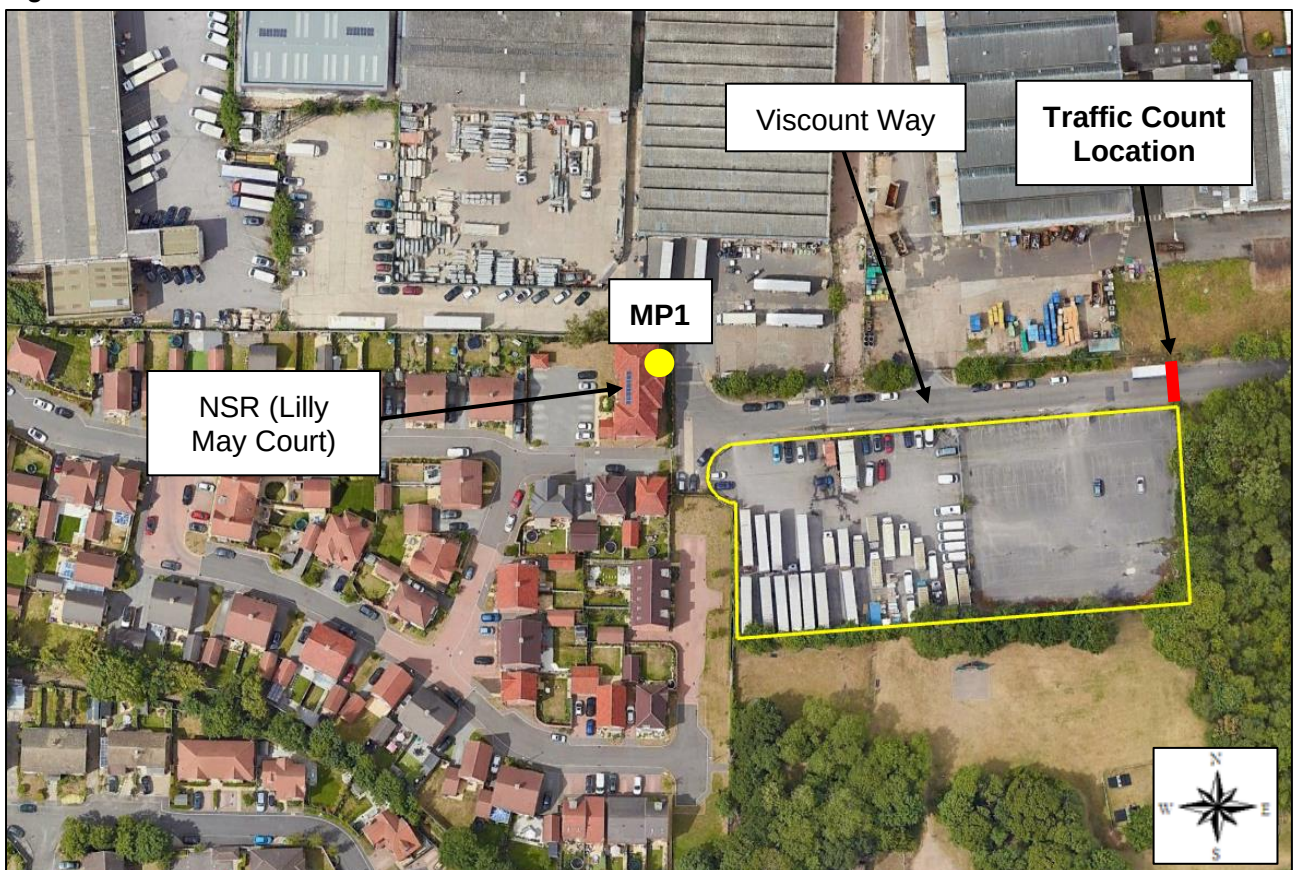
In order to quantify existing noise levels at Lilly May Court, a 24 hour noise measurement study was carried out in May 2024. At the same time as the noise measurement study was carried out, automatic traffic counts were carried out at Viscount Way between the 26th April 2024 and the 14th May 2024 at the location identified on **Figure 2**.

Unattended noise measurements were carried out between 1125 hrs on the 7th May 2024 and 1145 hrs on the 8th May 2024 to determine the existing ambient and background noise levels during the proposed extended operational hours.

The noise measurements utilised one Class 1 Sound Level Meter: a Svantek 971 sound level meter, which holds a current certificate of calibration that is available upon request. The equipment was calibrated before and after the noise measurement period to ensure that it had remained within calibration limits (± 0.5 dB).

The microphone was located at Lilly May Court in a free-field position at a height of 4.5 metres. The measurement position (**MP1**) is identified in **Figure 3**. The consented boundary for Units 9 and 10 is outlined in yellow.

Figure 3: Noise Measurement Position



At the start of the noise measurements the weather was clear with 0% cloud cover. The daytime temperature was 18°C and there was a westerly wind with speeds of up to 1.3 m/s. At the end of the noise measurement period the weather was clear with 0% cloud cover. There was a daytime

temperature of 19°C and there was a south-westerly wind with speeds of up to 1.1 m/s. Weather conditions throughout the survey were suitable for noise measurements.

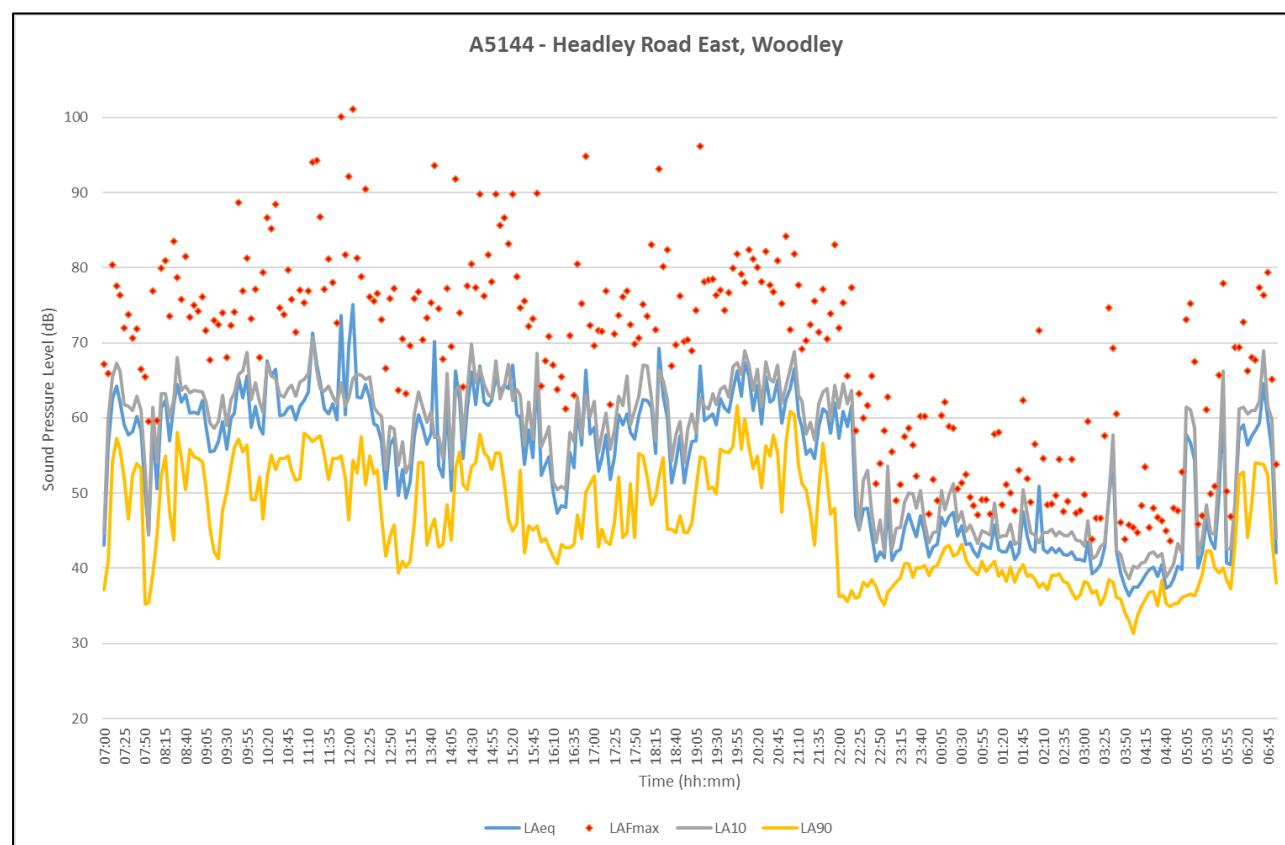
The unattended noise levels are summarised in **Table 5**. The noise level summary identifies the average period noise level during the measurement period (L_{Aeq}), the measured maximum noise level (L_{Amax}) and importantly the background noise level (L_{A90}) which is the underlying noise level between specific noise events.

Table 4: Noise Measurement Results

Position	Period	$L_{Aeq,T}$ (dB)	L_{AFmax} (dB)	$L_{A10,T}$ (dB)	Mean $L_{A90,T}$ (dB)	Modal $L_{A90,T}$ (dB)
MP1	0700 hrs to 2300 hrs	62	89	63	51	55
	2300 hrs to 0700 hrs	52	68 (69)	47	40	39

The time history graph for the noise measurements at **MP1** is provided in **Figure 4**.

Figure 4: MP1 Time History



Traffic Movements

Table 6 below provides the night-time hourly traffic flows for Viscount Way between the 26th April 2024 and the 13th May 2024. The traffic count data was provided by Simone Surveys.

Table 6: Night-time hourly traffic flows for Viscount Way

Date	Time Period	Westbound Total Count	Eastbound Total Count
Friday 26 th April 2024 – Saturday 27 th April 2024	2300 hrs – 0700 hrs	7	5
Saturday 27 th April 2024 – Sunday 28 th April 2024	2300 hrs – 0700 hrs	1	1
Sunday 28 th April 2024 – Monday 29 th April 2024	2300 hrs – 0700 hrs	26	14
Monday 29 th April 2024 – Tuesday 30 th April 2024	2300 hrs – 0700 hrs	28	16
Tuesday 30 th April 2024 – Wednesday 1 st May 2024	2300 hrs – 0700 hrs	30	20
Wednesday 1 st May 2024 – Thursday 2 nd May 2024	2300 hrs – 0700 hrs	23	16
Thursday 2 nd May 2024 – Friday 3 rd May 2024	2300 hrs – 0700 hrs	27	19
Friday 3 rd May 2024 - Saturday 4 th May 2024	2300 hrs – 0700 hrs	10	6
Saturday 4 th May 2024 – Sunday 5 th May 2024	2300 hrs – 0700 hrs	0	0
Sunday 5 th May 2024 – Monday 6 th May 2024 (Bank Holiday)	2300 hrs – 0700 hrs	3	3
Monday 6 th May 2024 – Tuesday 7 th May 2024	2300 hrs – 0700 hrs	24	12
Tuesday 7 th May 2024 – Wednesday 8 th May 2024	2300 hrs – 0700 hrs	29	20
Wednesday 8 th May 2024 – Thursday 9 th May 2024	2300 hrs – 0700 hrs	23	16
Thursday 9 th May 2024 – Friday 10 th May 2024	2300 hrs – 0700 hrs	23	11
Friday 10 th May 2024 – Saturday 11 th May 2024	2300 hrs – 0700 hrs	8	6

Date	Time Period	Westbound Total Count	Eastbound Total Count
Saturday 11 th May 2024 – Sunday 12 th May 2024	2300 hrs – 0700 hrs	8	6
Sunday 12 th May 2024 – Monday 13 th May 2024	2300 hrs – 0700 hrs	26	12
Monday 13 th May 2024 – Tuesday 14 th May 2024	2300 hrs – 0700 hrs	24	13

It can be identified from the traffic counts that on weekdays the two way traffic movements are between 34 to 50 vehicle movements apart from on the Bank Holiday Monday on the 6th May 2024.

Noise Modelling

The CadnaA noise modelling software has been utilised to calculate the external noise levels from road traffic movements and the consented development.

Table 7 identifies the predicted period noise levels (L_{Aeq}) from night-time delivery noise in respect of the property at Lilly May Court at ground floor level (representative of the closest noise sensitive receptors). **Table 8** identifies the predicted noise levels at first floor level and **Table 9** at second floor level.

Table 7: Predicted Period Noise Levels ($L_{Aeq,15mins}$) from Delivery Noise compared to the Measured Night-time Background Sound Levels (L_{A90}) – Lilly May Court: Ground Floor

Time	Lilly May Court: Ground Floor		
	Measured Background Sound Level L_{A90}	Predicted Night-time Delivery Noise Levels (L_{Aeq})	Difference between the Predicted Night-time Period Noise Levels and Measured Background Sound Levels (dB)
2300 hrs to 0000 hrs	39	32	-7
0000 hrs to 0100 hrs	41	32	-9
0100 hrs to 0200 hrs	40	32	-8
0200 hrs to 0300 hrs	38	32	-6
0300 hrs to 0400 hrs	36	32	-4
0400 hrs to 0500 hrs	35	32	-3
0500 hrs to 0600 hrs	39	32	-7
0600 hrs to 0700 hrs	48	32	-16

Table 8: Predicted Period Noise Levels ($L_{Aeq,15mins}$) from Delivery Noise compared to the Measured Night-time Background Sound Levels (L_{A90}) – Lilly May Court: First Floor

Time	Lilly May Court: First Floor		
	Measured Background Sound Level L_{A90}	Predicted Night-time Delivery Noise Levels (L_{Aeq})	Difference between the Predicted Night-time Period Noise Levels and Measured Background Sound Levels (dB)
2300 hrs to 0000 hrs	39	34	-5
0000 hrs to 0100 hrs	41	34	-7
0100 hrs to 0200 hrs	40	34	-6
0200 hrs to 0300 hrs	38	34	-4
0300 hrs to 0400 hrs	36	34	-2
0400 hrs to 0500 hrs	35	34	-1
0500 hrs to 0600 hrs	39	34	-5
0600 hrs to 0700 hrs	48	34	-14

Table 9: Predicted Period Noise Levels ($L_{Aeq,15mins}$) from Delivery Noise compared to the Measured Night-time Background Sound Levels (L_{A90}) – Lilly May Court: Second Floor

Time	Lilly May Court: Second Floor		
	Measured Background Sound Level L_{A90}	Predicted Night-time Delivery Noise Levels (L_{Aeq})	Difference between the Predicted Night-time Period Noise Levels and Measured Background Sound Levels (dB)
2300 hrs to 0000 hrs	39	34	-5
0000 hrs to 0100 hrs	41	34	-7
0100 hrs to 0200 hrs	40	34	-6
0200 hrs to 0300 hrs	38	34	-4
0300 hrs to 0400 hrs	36	34	-2
0400 hrs to 0500 hrs	35	34	-1
0500 hrs to 0600 hrs	39	34	-5
0600 hrs to 0700 hrs	48	34	-14

Tables 7 to 9 demonstrate that the predicted noise levels from delivery noise associated with Units 9 and 10 would be below the measured existing background noise level at Lilly May Court during the

night-time period. As a very worst-case noise from delivery movements would be 1 dB below the background noise level of 35 L_{A90} measured between 0400 hrs to 0500 hrs and 19 dB below the existing measured period noise level of 52 L_{Aeq} . It should also be noted that Viscount Way is currently used by a relatively high number of HGVs during the night-time period not associated with the application site but the adjacent site only (as identified in **Table 6**). Units 9 and 10 will not be introducing new noise in the vicinity of the existing residential properties surrounding the consented development as all HGV movements associated with the application site are being directed from Headley Road East through the main site onto the very short section of Viscount Way in front of Units 9 and 10.

Additionally, internal noise levels within bedrooms at night, assuming an open window provides a minimum attenuation of 15 dB, would be a maximum level of 18 L_{Aeq} from delivery noise. This level of noise is significantly below World Health Organisation Guidelines for Noise for bedrooms at night.

Conclusions

ACCON has assessed the potential impacts of the proposal to remove Planning Condition 32 at Headley Road East, Woodley such that deliveries can be accepted or dispatched from Units 9 and 10 throughout the night-time period (2300 hrs to 0700 hrs). It has been identified that even with additional HGV movements, there is No Observed Adverse Effect Level in line with the Noise Policy Statement for England and therefore, Planning Condition 32 can be removed.

Graham Parry FIOA

Managing Director

ACCON UK Limited