



**Noise Impact Assessment**

**C11024**

**Land to South of Sketchley Lane, Hinckley**

*Prepared for*

**Charles Church**

Davidson House, Meridian East

Meridian Business Park

Leicester

LE19 1WZ

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| Date           | November 2023              |            |            |            |
| Prepared by    | Martyn Parker              |            |            |            |
| Signature      |                            |            |            |            |
| Position       | Senior Acoustic Consultant |            |            |            |
| Checked by     | John Goodwin MIOA          |            |            |            |
| Signature      |                            |            |            |            |
| Position       | Director                   |            |            |            |
| Project number | C11024/NIA/1.0             |            |            |            |

### North

Office 4, No.3 Fulwood,  
3 Caxton Road, Preston,  
PR2 9ZZ  
01772 963 024

### Midlands

Unit 1, 12 High Pavement,  
Lace Market, Nottingham  
NG1 1HN  
0115 7043 492

### South

Suite 1, Pure Offices, One Port  
Way, Port Solent,  
Portsmouth, PO6 4TY  
01489 808 088

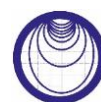
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Ecology



Acoustics



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Geo-environmental



Air Quality

## Executive Summary

|                     |                                        |
|---------------------|----------------------------------------|
| <b>Site Address</b> | Land South of Sketchley Lane, Hinckley |
|---------------------|----------------------------------------|

The Noise Impact Assessment has determined that the internal noise levels will exceed the criteria stated within BS8233:2014. Accordingly, appropriate consideration has been given towards the mitigation measures required to ensure an adequate level of protection against noise for future residents.

With regards to the external amenity areas the Assessment has determined that during the daytime, that all garden areas fall below the adopted 55dB LAeq,16hr criteria noise level, as such, no mitigation measures are required.

This Assessment has shown that with regards to commercial noise, that the rated level of noise falls below the typical background sound level the closest proposed receptor for the daytime and night-time period which affords the following outcome according to BS4142:

*'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 conclusion this assessment shows compliance with Condition 7 of the Outline planning permission.

The assessment has been based upon robust and worst-case assumptions and demonstrates that, assuming the implementation of the recommended mitigation measures, the site shall be suitable for purpose.

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## 1 INTRODUCTION

### 1.1 Background

Omnia was instructed by Persimmon Homes North Midlands to prepare a Noise Impact Assessment ('the Assessment') for a proposed residential development on a parcel of land located to the south of Sketchley Lane in Burbage, Hinckley LE10, to be referred to hereafter as 'the Site'.

It is understood that the Site will include for 125 residential units.

The Site has a number of potentially significant noise sources within the vicinity, including the A5 Watling Street to the south west, the Sketchley Grange hotel and spa to the north and a number of commercial units off Watling Drive and Watling Close to the north west.

Outline planning permission was granted for the development in January 2023 (Appeal Ref APP/K2420/W/22/3301735) the following condition relates to noise:

*'7. Reserved matters applications relating to layout, scale and appearance shall be accompanied by a scheme for protecting the proposed dwellings from noise from the road network and the nearby hotel. The agreed scheme shall be implemented in full prior to the first occupation of any dwelling.'*

This Assessment has been undertaken to identify and assess any surrounding noise-generating activities which may have the potential to adversely impact the proposed noise-sensitive development. Accordingly, this Assessment has been completed with due regard to the National Planning Policy Framework and its associated National Planning Policy Guidance. In addition, various British Standard and guidance documents exist which are applicable to the assessment of noise impacts and these are detailed in Section 2.

During the sound survey no noise was audible from the hotel located the north as such this has no been included in the assessment.

### 1.2 Site Location and Proposed Development

The Site occupies a parcel of land to the south of Sketchley Lane in Burbage, Hinckley LE10.

It is understood that the Site will include for 125 residential units.

This assessment has been undertaken with due regard to the supplied planning layout shown on the following planning drawing:

- *Drawing issued by The Greenfield Design Partnership*

The Site Layout is shown in Figure 1 of Appendix III.

### 1.3 Acronyms

All acronyms used within this report are defined in the Glossary presented in Appendix II.

### 1.4 Limitations

The limitations of this report are presented in Appendix I.

### 1.5 Confidentiality

This report has been prepared solely for the use of the Client. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from Omnia; a charge may be levied against such approval.

## 2 POLICY & GUIDANCE

### 2.1 National Planning Policy Framework & National Planning Practice Guidance

The Government updated the National Planning Policy Framework (NPPF) and its associated National Planning Practice Guidance (NPPG) on 5<sup>th</sup> September 2023. Together, the NPPF and NPPG set out what the Government expects of local authorities. The overall aim is to ensure the planning system allows land to be used for new homes and jobs, while protecting valuable natural and historic environments.

The NPPG adds further context to the NPPF and it is intended that the two documents should be read together.

Noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment. When preparing local or neighbourhood plans, or taking decisions about new development, there may also be opportunities to consider improvements to the acoustic environment.

Local planning authorities' plan-making and decision making should 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.

The Observed Effect Levels are as follows:

- Significant observed adverse effect level: This is the level of noise exposure above which significant adverse effects on health and quality of life occur;
- Lowest observed adverse effect level: this is the level of noise exposure above which adverse effects on health and quality of life can be detected; and
- No observed effect level: this is the level of noise exposure below which no effect at all on health or quality of life can be detected.

Table 2.1 summarises the noise exposure hierarchy, based on the likely average response.

**Table 2.1 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    |
| <b>Lowest Observed Adverse Effect Level</b> |                                                                                                                                                                                                                               |                            |                                  |
| 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 | Observed adverse effect    | Mitigate and reduce to a minimum |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |         |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|
|                                                  | 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.                                                                                                                                                                                                                                                                                        |                             |         |
| <b>Significant Observed Adverse Effect Level</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |         |
| 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 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 adverse effect | Prevent |

The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation.

These factors include:

- The source and absolute level of the noise together with the time of day it occurs. Some types and level of noise will cause a greater adverse effect at night than if they occurred during the day – this is because people tend to be more sensitive to noise at night as they are trying to sleep. The adverse effect can also be greater simply because there is less background noise at night;
- For non-continuous sources of noise, the number of noise events, and the frequency and pattern of occurrence of the noise;
- The spectral content of the noise and the general character of the noise. The local topology and topography should also be taken into account along with the existing and, where appropriate, the planned character of the area.

More specific factors to consider when relevant:

- Where applicable, the cumulative impacts of more than one source should be taken into account along with the extent to which the source of noise is intermittent and of limited duration;
- Consideration should also be given to whether adverse internal effects can be completely removed by closing windows and, in the case of new residential development, if the proposed mitigation relies on windows being kept closed most of the time. In both cases a suitable alternative means of ventilation is likely to be necessary. Further information on ventilation can be found in the Building Regulations; and,
- If external amenity spaces are an intrinsic part of the overall design, the acoustic environment of those spaces should be considered so that they can be enjoyed as intended.

## 2.2 BS8233:2014 'Guidance on sound insulation and noise reduction for buildings'

### Noise Criteria Limits

The scope of this standard is the provision of recommendations for the control of noise in and around buildings. It suggests appropriate criteria and limits for different situations, which are primarily intended to guide the design of new buildings or refurbished buildings undergoing a change of use, rather than to assess the effect of changes in the external noise climate.

The standard suggests suitable internal noise levels within different types of buildings, including dwellings, as shown in Table 2.2.

**Table 2.2 BS8233:2014 Internal Target Noise Levels**

| Criterion                                                                                                                                     | Typical Situation | Design $L_{Aeq,T}$ (dB) |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------|
| Suitable resting / sleeping conditions                                                                                                        | Living Room       | 35                      |
|                                                                                                                                               | Bedroom*          | 30                      |
| *For a reasonable standard in bedrooms at night, individual noise events (measured with fast time weighting) should not exceed 45dB $L_{max}$ |                   |                         |

BS8233 goes on to recommend noise levels for gardens as follows:

*"It is desirable that the external noise level does not exceed 50dB  $L_{Aeq,T}$ , with an upper guideline value of 55dB  $L_{Aeq,T}$  which would be acceptable in noisier environments. However, it is also recognised that these guideline values are not achievable in all circumstances where development might be desirable. In higher noise areas, such as city centres or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors might be warranted".*

BS8233 goes on to say:

*"In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces but should not be prohibited".*

### Ventilation Requirements

Where a partially open window cannot be relied upon to provide an adequate level of sound insulation performance, it is necessary to consider alternative ventilation for habitable rooms. Section 8.4.5.4 within BS8233 states:

*"The Building Regulations' supporting documents on ventilation [48, 49, 50] recommend that habitable rooms in dwellings have background ventilation. Where openable windows cannot be relied upon for this ventilation, trickle ventilators can be used and sound attenuating types are available. However, windows may remain openable for rapid or purge ventilation, or at the occupant's choice.*

*Alternatively, acoustic ventilation units (see 7.7.2 below) are available for insertion in external walls. These can provide sound reduction comparable with double glazed windows. However, ducted systems with intakes on the quiet side of the building might be required in very noisy situations, or where appearance rules out through-the-wall fans."*

Section 7.7.2 states:

*"NOTE 5 If relying on closed windows to meet the guide values, there needs to be an appropriate alternative ventilation that does not compromise the façade insulation or the resulting noise level."*

## 2.3 World Health Organisation's (WHO) 'Guidelines for Community Noise'

The WHO 'Guidelines for Community Noise' offers advice with regard to setting noise criteria applicable to sleep disturbance. Section 4.2.3 specifies:

*'If the noise is not continuous,  $L_{Amax}$  or SEL are used to indicate the probability of noise-induced awakenings. Effects have been observed at individual  $L_{Amax}$  exposures of 45 dB or less. Consequently, it is important to limit the number of noise events with a  $L_{Amax}$  exceeding 45 dB.'*

The guidelines go on to state:

*'At night, sound pressure levels at the outside façades of the living spaces should not exceed 45 dB  $L_{Aeq}$  and 60 dB  $L_{Amax}$ , so that people may sleep with bedroom windows open. These values have been obtained by assuming that the noise reduction from outside to inside with the window partly open is 15 dB.'*

The sound insulation performance value of 15dB for a façade containing a partially open window accords with the guidance offered in BS8233:2014.

The guidelines reference a study by Vallet & Vernet, 1991, which concluded that:

*'For a good sleep, it is believed that indoor sound pressure levels should not exceed approximately 45 dB  $L_{AF,max}$  more than 10-15 times per night.'*

Accordingly, this assessment has utilised the 10<sup>th</sup> highest measured maximum noise level from the night-time period and allows for an assessment of a typical maximum noise level in determining façade sound insulation performance.

## 2.4 Acoustic Ventilation and Overheating: Residential Design Guide (AVO Guide) 2020

The Acoustics, Ventilation and Overheating Residential Design Guide (Version 1.1) was issued in January 2020 by the Association of Noise Consultants (ANC) and the Institute of Acoustics (IOA). This document provides guidance on the interdependence between acoustics, ventilation and overheating.

The AVO guide recommends a two-level approach to assess the potential impact of noise ingress through windows that have been opened to mitigate overheating and also noise from any mechanical services used to provide comfort cooling. The level 1 assessment relates to incident environmental noise levels across a proposed site, it is used to define "risk categories" for each building façade based on these levels. Below are the tables 2.3 and 2.4 are directly from AVO 2020 upon which this assessment is based.

**Table 2.3: Guidance for Level 1 site risk assessment of noise from transport noise sources relating**

| Risk category for Level 1 assessment <sup>[Note 5]</sup>                                                                                                                                                                         | Potential Effect without Mitigation                                                                                | Recommendation for Level 2 assessment |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <p>LAeq,T <sup>[Note 3]</sup> during 07:00 - 23:00</p> <p>LAeq,8hr during 23:00 - 07:00</p> <p>65 dB</p> <p>55 dB</p> <p>60 dB</p> <p>50 dB</p> <p>55 dB</p> <p>50 dB</p> <p>High</p> <p>Medium</p> <p>Low</p> <p>Negligible</p> | <p>Increasing risk of adverse effect</p>                                                                           | <p>Recommended</p> <p>Optional</p>    |
|                                                                                                                                                                                                                                  | <p>Use of opening windows as primary means of mitigating overheating is not likely to result in adverse effect</p> | <p>Not required</p>                   |

**Table 2.4: Guidance for Level 2 assessment of noise from transport noise sources relating to overheating condition**

| Internal ambient noise level <sup>[Note 2]</sup>                                                                    |                                      |                                                                           | Examples of Outcomes <sup>[Note 5]</sup>                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $L_{Aeq,T}$ <sup>[Note 3]</sup><br>during<br>07:00 – 23:00<br><sup>[Note 4]</sup>                                   | $L_{Aeq,th}$ during<br>23:00 – 07:00 | Individual noise<br>events during<br>23:00 – 07:00<br><sup>[Note 4]</sup> |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| > 50 dB                                                                                                             | > 42 dB                              | Normally<br>exceeds 65 dB<br>$L_{A,max}$                                  | Noise causes<br>a material<br>change in<br>behaviour<br>e.g. having to<br>keep windows<br>closed most<br>of the time                  | Avoiding certain activities during<br>periods of intrusion. Having to keep<br>windows closed most of the time<br>because of the noise. Potential<br>for sleep disturbance resulting<br>in difficulty in getting to sleep,<br>premature awakening and difficulty<br>in getting back to sleep. Quality<br>of life diminished due to change<br>in acoustic character of the area.                                                                                                                                                                                                                                            |
| <br>Increasing<br>noise<br>level |                                      |                                                                           | Increasing<br>likelihood of<br>impact on<br>reliable speech<br>communication<br>during the<br>day or sleep<br>disturbance<br>at night | At higher noise levels, more<br>significant behavioural change<br>is expected and may only be<br>considered suitable if occurring<br>for limited periods.<br><br>As noise levels increase, small<br>behaviour changes are expected<br>e.g. turning up the volume on the<br>television; speaking a little more<br>loudly; having to close windows<br>for certain activities, for example<br>ones which require a high level of<br>concentration. Potential for some<br>reported sleep disturbance. Affects<br>the acoustic environment inside<br>the dwelling such that there is a<br>perceived change in quality of life. |
|                                                                                                                     |                                      |                                                                           | Do not<br>normally<br>exceed $L_{A,max}$<br>45 dB more<br>than 10 times<br>a night                                                    | Noise can<br>be heard, but<br>does not cause<br>any change in<br>behaviour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ≤ 35 dB                                                                                                             | ≤ 30 dB                              |                                                                           |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

Table 2.5: AVO guide ADF system definition

| ADF System | External noise ingress considerations                                                                                                                                                                                                                                                                                                          | Mechanical system noise considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Approximate guideline free-field external noise limits. <sup>[Note 1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 or 2     | <p>Noise ingress is likely to be defined by the performance of the background ventilators (trickle vents), windows and other façade elements.</p> <p>Note that use of System 1, relying on the use of open trickle vents without opening windows may give rise to poor indoor air quality in airtight dwellings outside the winter period.</p> | <p>For System 1, intermittent kitchen and bathroom fans should have suitable noise levels to meet the guidelines in Table 3-4.</p> <p>System 2 has no mechanical components.</p>                                                                                                                                                                                                                                                                                                                                                                                                      | <p>With standard double glazing and two trickle vents:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 56 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 51 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 67</math> dB more than 10x per night</li> </ul> <p>With high performing acoustic glazing and two 'acoustic' trickle vents:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 66 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 61 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 80</math> dB more than 10x per night</li> </ul>                                          |
| 3          | <p>Noise ingress is likely to be defined by the performance of the background ventilators (trickle vents), windows and other façade elements.</p> <p>ADF advises that:<br/>"controllable background ventilators having a minimum equivalent area of 2,500 mm<sup>2</sup> should be fitted in each room, except wet rooms..."</p>               | <p>This could be a centralised or decentralised MEV system. Guideline levels are shown in Table 3-4.</p> <p>For a centralised system, the location of the fan is important for structure-borne and airborne noise. System noise may affect living rooms and bedrooms as well as the rooms in which the extract inlets are located i.e. wet rooms.</p> <p>For a decentralised system, there are individual fans extracting from each bathroom, toilet, kitchen and utility room. The noise effects on adjacent living rooms and bedrooms should be considered. <sup>[Note 2]</sup></p> | <p>With standard double glazing and trickle vent:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 58 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 53 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 69</math> dB more than 10x per night</li> </ul> <p>With high performing acoustic glazing and an 'acoustic' trickle vent:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 68 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 63 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 83</math> dB more than 10x per night</li> </ul>                                                 |
| 4          | <p>No trickle vents required. Consider noise ingress through other façade elements.</p>                                                                                                                                                                                                                                                        | <p>MVHR is a centralised system ducted to supply outlets in living rooms and bedrooms as well as to extracts in wet rooms. Guideline levels are shown in Table 3-4.</p> <p>The unit location is important for structure-borne and airborne noise. Consider ducted noise, particularly to bedrooms. Consider also cross-talk sound transmission via ducts. <sup>[Note 2]</sup></p>                                                                                                                                                                                                     | <p>With standard double glazing and no trickle vent:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 62 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 57 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 76</math> dB more than 10x per night</li> </ul> <p>With high performing acoustic glazing:</p> <ul style="list-style-type: none"> <li>• <math>\sim L_{Aeq,16h}</math> 73 dB day</li> <li>• <math>\sim L_{Aeq,8h}</math> 68 dB night</li> <li>• <math>L_{AFmax}</math> not normally exceeding <math>\sim 90</math> dB more than 10x per night</li> </ul> <p>N.B. With secondary glazing higher sound insulation may be achieved.</p> |

## 2.5 BS4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'

This standard describes methods for rating and assessing sound of an industrial or commercial nature which includes:

- Sound from industrial and manufacturing processes;
- Sound from fixed installations which comprise mechanical and electrical plant and equipment;
- Sound from the loading and unloading of goods and materials at industrial and / or commercial premises; and,
- Sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from processes or premises, such as that from forklift trucks, or that from train or ship movements on or around an industrial or commercial Site.

The procedure detailed in the standard compares the measured or predicted noise level 'the specific noise level' from any of the above detailed noise sources with the background sound level at a residential dwelling. The measured background sound level at a receptor should be reliable and should not necessarily ascertain a lowest measured background sound level, but rather to quantify what is 'typical.'

The specific noise level also acknowledges the following reference time intervals depending upon whether the noise source operates during daytime or night-time periods:

- Daytime (07:00 - 23:00): 1 hour; and
- Night-time (23:00 - 07:00): 15 minutes.

There are a number of 'penalties' which can be attributed to the specific sound level, either subjectively or objectively, depending upon the 'acoustic features' of the sound level under investigation as follows. These penalties vary in their weighting depending upon the severity of the acoustic feature, as follows (with regards to the subject method):

#### Tonality

- +2dB: where the tonality is just perceptible;
- +4dB: where the tonality is clearly perceptible; and
- +6dB: where the tonality is highly perceptible.

#### Impulsivity

- +3dB: where the impulsivity is just perceptible;
- +6dB: where the impulsivity is clearly perceptible; and
- +9dB: where the impulsivity is highly perceptible.

#### Intermittency

- +3dB: where the intermittency is readily distinctive against the acoustic environment.

Where the assessment is carried out using the objective method, the tonality penalty is either 0dB or 6dB and the impulsivity penalty can range from 0dB up to 9dB in increments of 1dB, depending on the level of impulsivity identified.

In addition to the above acoustic features, there is a penalty for 'other sound characteristics' of +3dB where a sound exhibits characteristics that are neither tonal nor impulsive, though is readily distinctive against the acoustic environment.

BS4142 goes on to state that the rating level is equal to the specific sound level if there are no such features present or expected to be present.

Assessment of the rating level relative to the background noise level can yield the following commentary:

- Typically, the greater this difference (between the rating level and the background sound level), the greater the magnitude of impact;
- A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context;

- A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context; and
- 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. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact.

Whilst the amended 2019 Standard does make various references to it not being intended to assess noise impacts at indoor locations, section 1.1 does state 'The methods described in this British Standard use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident'. Example 6 in the Standard states 'In addition to the rating/background sound level comparison shown in Table A.6, the primary concern is the potential for disturbance of residents who could be sleeping with open bedroom windows. Other guidance, such as BS 8233, might also be applicable in this instance'.

With the above in mind, and for a clear need to ensure that any potential commercial or industrial noise impacts at the building façade do not give rise to internal noise level which causes sleep disturbance in bedrooms, this Assessment will ensure that the predicted rating level (specific sound level including any character corrections) does not exceed 30dB in bedrooms.

## 2.6 Hinckley & Bosworth Borough Council's Environmental Health Department

The following consultation was provided to Hinckley & Bosworth Borough Council on 31<sup>st</sup> October 2023:

*'We have been appointed by a client to undertake a Noise Impact Assessment in support for a proposed residential development at Sketchley Lane in Burbage, Hinckley. A review of on-line mapping indicates that the proposed residential dwellings are likely to be impacted by noise from road traffic vehicles using the A5 which is located to the south of the site, as well as the Sketchley Spa and hotel to the northwest and a number of commercial units to the west of the site.'*

*Professional Consult will complete the following noise surveys:*

|                                      |                                                                                                                 |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <i>Noise Measurement Position 1:</i> | <i>A 24-hour road traffic noise survey will be completed for road traffic vehicles using the A5.</i>            |
| <i>Noise Measurement Position 2:</i> | <i>A noise survey will be completed for any noise associated with the commercial units to the west; and</i>     |
| <i>Noise Measurement Position 3:</i> | <i>A noise survey will be completed for any noise associated with the Sketchley Spa and Hotel.</i>              |
| <i>Background Sound Survey:</i>      | <i>A background sound survey will be completed on Site in an area representative of the proposed dwellings.</i> |

*Professional Consult will complete the following assessment:*

|                            |                                                                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Road Traffic Noise:</i> | <i>An assessment of road traffic noise will be completed in line with the guidance and noise criteria levels presented in BS8233:2014; and</i>                                                      |
| <i>Commercial Noise:</i>   | <i>An assessment of any audible commercial noise associated with the commercial units as well as the spa and hotel will be assessed in line with the criteria presented in BS4142:2014+A1:2019.</i> |

*Where exceedances of any noise criteria are identified, Professional Consult will recommend appropriate and reasonable noise mitigation measures to ensure that the noise level criteria will not be exceeded at the proposed residential dwellings.*

*If you have any comments, then please do advise at your earliest convenience.'*

At the time of issuing this report, no response had been received.

### 3 NOISE SURVEYS

#### 3.1 Road Traffic Noise Survey – A5 Watling Street

Omnia has conducted a Road Traffic Noise Survey in order to measure the level of noise generated by vehicles using the A5. The noise survey took place over the following period:

- 10:00 to 13:00 on 8<sup>th</sup> November 2023.

The following location was chosen for the survey:

- Noise Measurement Position 1 (NMP1): Omnia undertook a road traffic noise measurement at 7.5m from the centre of the A5 in free-field conditions at a height of 1.5m above local ground level.

A summary of the measured sound pressure levels are presented below.

**Table 3.1 Summary of Measured Road Traffic Noise Levels**

| Period Start Time                                                        | Average Measured Sound Pressure Levels, Free-Field (dB) |             | 10 <sup>th</sup> highest $L_{Amax,fast}$ |
|--------------------------------------------------------------------------|---------------------------------------------------------|-------------|------------------------------------------|
|                                                                          | $L_{Aeq,T}$                                             | $L_{A10,T}$ |                                          |
| 12/10/22 12:30                                                           | 62.0                                                    | 64.8        | 85.9                                     |
| 12/10/22 13:30                                                           | 62.4                                                    | 65.2        |                                          |
| 12/10/22 14:30                                                           | 64.9                                                    | 66.9        |                                          |
| <b><math>L_{Aeq,16hr}</math> as calculated from CRTN</b>                 | <b>75.6</b>                                             |             |                                          |
| <b><math>L_{Aeq,8hr}</math> as calculated from CRTN and TRL Document</b> | <b>66.1</b>                                             |             |                                          |

The  $L_{Amax}$  parameter tabulated is obtained by outputting the  $L_{Amax,f}$  parameter for each 10 second period during the 3 hour noise survey. These are ordered in declining intensity and the 10<sup>th</sup> highest value selected.

#### 3.2 Commercial Noise Survey

Omnia has conducted a series of commercial noise measurements for the neighbouring commercial uses over the following period:

- 10:20 to 12:45 on 8<sup>th</sup> November 2023.

The following location was chosen for the survey:

- Noise Measurement Position 2 (NMP2): Omnia undertook source noise measurements of various commercial noise sources along the boundary of the Site with the neighbouring commercial uses in free-field conditions at a height of 1.5m above local ground level.

A summary of the measured sound pressure levels are presented below.

**Table 3.2 Summary of Measured Commercial Noise Levels**

| Noise Source    | Measured Noise Level, $L_{Aeq,T}$ (dB) | Measurement Distance (m) | Notes                                   |
|-----------------|----------------------------------------|--------------------------|-----------------------------------------|
| Fan (Source 1)  | 69.4                                   | 2                        | Noise source is located 1m above ground |
| Fan (Source 2)  | 61.1                                   | 5                        | Noise source is located 1m above ground |
| Pump (Source 3) | 52.7                                   | 9                        | Noise source is located 2m above ground |

During the attended noise survey no fixed plant noise was audible on site from the hotel located to the north.

### 3.3 Background Sound Survey

Omnia has conducted a background sound survey in the absence of any commercial noise over the following period:

- 16:15, 7<sup>th</sup> November to 09:45, 8<sup>th</sup> November 2023.

The following location was chosen for the survey:

- Noise Measurement Position 3 (NMP3): Omnia undertook a background sound survey to the south east of the development in free-field conditions at a height of 1.5m above local ground level. The dominant noise source at this location was from road traffic using the A5.

A summary of the measured background sound levels are presented below.

**Table 3.3 Summary of Measured Background Noise Levels**

| Period     | Measured Range & (Mode Average) Noise Levels |
|------------|----------------------------------------------|
|            | $L_{A90,T}$                                  |
| Daytime    | 50 - 59 (54)                                 |
| Night-time | 43 - 58 (47)                                 |

### 3.4 Noise Survey Equipment

The following equipment was used for the Noise Surveys.

**Table 3.4 Noise Measurement Equipment**

| Measurement Position | Equipment Description | Manufacturer & Type No | Serial No. | Calibration Due Date |
|----------------------|-----------------------|------------------------|------------|----------------------|
| NMP1 + NMP3          | Sound Level Meter     | 01dB Fusion            | 11755      | 29 June 2024         |
|                      | Pre-amplifier         | 01dB PRE22             | 1707173    |                      |
|                      | Microphone            | GRAS 40CE              | 291693     |                      |

|      |                   |             |         |               |
|------|-------------------|-------------|---------|---------------|
|      | Calibrator        | 01dB CAL-31 | 84086   | 27 June 2024  |
| NMP2 | Sound Level Meter | 01dB Fusion | 12038   | 14 March 2025 |
|      | Pre-amplifier     | 01dB PRE22  | 2113007 |               |
|      | Microphone        | GRAS 40CE   | 330801  |               |
|      | Calibrator        | 01dB CAL-31 | 87280   | 02 July 2024  |

The sound level meters were field calibrated prior to and following the noise surveys and there was no drift beyond the allowable limit of 1dB.

During the noise surveys the weather conditions were conducive to the measurement of environmental noise, i.e. wind speeds of no more than 5m/s and dry conditions.

## 4 NOISE IMPACT ASSESSMENT

### 4.1 Road Traffic Noise

In order to accurately assess road traffic noise across the Site, a 3D Noise Model has been constructed using the modelling software CadnaA.

The following assumptions, inputs and considerations have been included in the model:

- Planning Layout Drawing as described in Section 1;
- Existing buildings that provide shielding from any of the noise sources have been included in the model;
- Noise Measurement Position 1 has been used to calibrate the noise model;
- A reflection order of 2 has been used in all calculations;
- Building heights are as supplied by the client; and
- Noise levels generated using ISO 9613-1 and ISO 9613-2 "Acoustics – Attenuation of sound during propagation outdoors" as incorporated into CadnaA software.

#### External Noise Impact in Garden Areas of Proposed Dwellings

In order to assess noise levels in external amenity areas across the Site, a grid noise map was calculated in the noise model. The grid noise map shows that all garden areas fall below the adopted 55dB LAeq,16hr criteria noise level. Figure 2 of Appendix III shows the grid noise map.

#### Internal Noise Impact for Proposed Dwellings

With regards internal noise levels, BS8233:2014 suggests that standard thermal double glazing will afford 33dB Rw of sound reduction, however this is for the pink noise spectrum and the same configuration will afford 30dB Rw+Ctr for average noise levels from road traffic noise and so this value has been used to calculate internal noise levels. With regard to the maximum noise level (LAmax,fast), the value of 33dB Rw has been used. BS8233:2014 also goes on to recommend that a partially open window provides approximately 15dB of attenuation.

Professional Consult uses a library database of glazing configurations issued by Saint Gobain and the glazing configuration 6mm glass / 12mm air space / 6mm glass affords 30dB Rw +Ctr and 33dB Rw respectively.

Appendix IV calculates the average daytime noise levels at the various facades of the plots and determines the requirement for upgraded glazing or alternative ventilation. Appendix IV indicates that standard thermal double glazing will be adequate in controlling external noise to meet the internal noise criteria limits and a number of living rooms will require alternative ventilation.

Appendix V calculates the average night-time noise levels at the various facades of the plots and determines the requirement for upgraded glazing or alternative ventilation. Appendix V indicates that standard thermal double glazing will be adequate in controlling external noise to meet the internal noise criteria limits and a number of bedrooms will require alternative ventilation.

It is also necessary to consider maximum noise levels for the night-time period in addition to the average noise levels. The measured 10th highest maximum noise level was 85.9dB at 7.5m and the Site closest boundary to the road lies at 200m and so the calculated noise level at the closest point of the Site is 57.4dB. Allowing 13dB for an open window suggests an internal noise level of 44.4dB which is 0.6dB below the internal target noise criteria level of 45dB. This calculation is worst-case as the houses facing the A5. As such, the specification of any acoustic trickle ventilators is not required based on the maximum road traffic noise level. Furthermore, standard thermal double glazing will be adequate in controlling maximum noise levels.

## 4.2 Commercial Noise

It is necessary to calculate sound power levels for inclusion in the noise model and so a specific noise level can be calculated at the closest residential dwellings and Table 4.1 presents the sound power levels.

**Table 4.1 Calculation of Sound Power Levels**

| Noise Source    | Measured Noise Level, $L_{Aeq,T}$ (dB) | Measurement Distance (m) | Calculated Sound Power Level, $L_{WA}$ (dB) |
|-----------------|----------------------------------------|--------------------------|---------------------------------------------|
| Fan (Source 1)  | 69.4                                   | 2                        | 83.4                                        |
| Fan (Source 2)  | 61.1                                   | 5                        | 83.1                                        |
| Pump (Source 3) | 52.7                                   | 9                        | 79.8                                        |

A noise model has been constructed in order to calculate noise levels at the building facades. The following inputs have been included in the model:

- *Proposed Scheme Layout;*
- *Site elevations have been taken as existing using 1m LiDAR data that has been converted into 1m contours;*
- *Existing buildings or features that provide shielding from the road have been included in the model;*
- *A reflection order of 2 has been used in all calculations; and*
- *Noise levels generated using ISO 9613-1 and ISO 9613-2 "Acoustics – Attenuation of sound during propagation outdoors" as incorporated into CadnaA software.*

Figures 2 and 3 in Appendix 3 show the grid noise maps which indicate the predicted level of noise at the closest receptor (Plot 92), as follows:

Receptor R1 (Daytime): 25.2dB  $L_{Aeq,1hr}$   
Receptor R1 (Night-time): 28.0dB  $L_{Aeq,15mins}$

The following has been considered in determining if any acoustic features exist in the predicted noise level at the closest residential receptors:

- *Tonality: In determining if any tones exist in the measured noise levels, the methodology set out in BS4142:2014 has been followed using the subjective method;*
- *Impulsivity: In determining if any impulsiveness is evident in the measured noise levels, the methodology set out in BS4142:2014 has been followed using the subjective method;*
- *Intermittency: Whether or not the measured operations turn on or off during the assessment reference periods; and*
- *Other sound characteristics: Where no penalties are allocated for the above features, but there will be an audible noise at the closest receptor.*

Table 4.2 allocates the character corrections.

**Table 4.2 Application of Character Corrections**

| Noise Source   | Tonality Correction (dB) | Impulsivity Correction (dB) | Intermittency Correction (dB) | Other Sound Characteristics Correction (dB) |
|----------------|--------------------------|-----------------------------|-------------------------------|---------------------------------------------|
| Fan (Source 1) | +2                       | 0                           | 0                             | 0                                           |
| Fan (Source 2) | +2                       | 0                           | 0                             | 0                                           |

|                            |    |   |   |   |
|----------------------------|----|---|---|---|
| Pump (Source 3)            | +2 | 0 | 0 | 0 |
| Highest Overall Character  | +2 | 0 | 0 | 0 |
| Total Character Correction | +2 |   |   |   |

Table 4.2 has included for 'just perceptible' tonality from the proposed mechanical and electrical plant. It is expected that any intermittency of the plant will not be discernible above the existing ambient ( $L_{Aeq,T}$ ) noise climate and impulsivity is not considered to be applicable for such mechanical plant.

Table 4.3 completes the BS4142 Assessment.

**Table 4.3 BS4142 Assessment**

| Receptor | Period     | Calculated Specific Noise Level at Receptor, $L_{Aeq,T}$ (dB) | Total Overall Character Correction (dB) | Calculated Rated Level, $L_{A,r}$ (dB) | Typical Background Sound Level ( $L_{A90,15mins}$ ) (dB) | Difference +/- (dB) |
|----------|------------|---------------------------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------------------------------|---------------------|
| R1       | Daytime    | 25.2                                                          | 2                                       | 27.2                                   | 44                                                       | -16.8               |
|          | Night-time | 28.0                                                          | 2                                       | 30.0                                   | 36                                                       | -6.0                |

Table 4.3 indicates that the rated level of noise falls below the typical background sound level the closest proposed receptor for the daytime and night-time period which affords the following outcome according to BS4142:

*'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.'*

## 5 MITIGATION

### 5.1 Internal Noise Levels

The previous section has indicated that standard thermal double glazing which provides a sound reduction of at least 30dB Rw+ctr will be suitable for the Site. Additionally, various living room and bedroom windows will require alternative ventilation as per the schedule set out in Appendices IV and V of this Assessment which accord with the requirements of the AVO Design Guide.

Where System 1 & 2 alternative ventilation is required for habitable rooms, then ventilation can be achieved by using a window-frame mounted acoustic trickle ventilator as follows:

- Greenwoods EAR42W (affords up to 42dB Dn,e,w +Ctr).

Please see below for the plots that require System 1 or 2 based on the worst-case façade level:

#### Daytime

- Plot 37 – Living Room;
- Plots 47 to 56 – Living Room;
- Plots 64 to 72 – Living Room;
- Plots 73 and 74 – Living Room; and
- Plots 81 to 103 – Living Room.

#### Night-Time

- Plot 48 to 50 – Bedroom;
- Plots 64 to 68 – Bedroom; and
- Plots 79 to 95 – Bedroom.

With mitigation in place, it is concluded that the NOAEL is achieved which would be noticeable and not intrusive resulting in the following:

‘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.’

### 5.2 External Noise Levels

The previous section determined that during the daytime, that all garden areas fall below the adopted 55dB LAeq,16hr criteria noise level, as such, no mitigation measures are required.

## 6 CONCLUSION

Omnia has been commissioned by Persimmon Homes North Midlands to provide a Noise Impact Assessment for a proposed residential development for a parcel of land south of Setchley Lane in Hinckley.

The Site has a number of potentially significant noise sources within the vicinity, including the A5 Watling Street to the south west, the Sketchley Grange hotel and spa to the north and a number of commercial units off Watling Drive and Watling Close to the north west.

Outline planning permission was granted for the development in January 2023 (Appeal Ref APP/K2420/W/22/3301735) the following condition relates to noise:

*'7. Reserved matters applications relating to layout, scale and appearance shall be accompanied by a scheme for protecting the proposed dwellings from noise from the road network and the nearby hotel. The agreed scheme shall be implemented in full prior to the first occupation of any dwelling.'*

The Noise Impact Assessment has been completed with due regard to the requirements as stated within BS8233:2014. A CadnaA noise model has been constructed including all significant noise sources, existing buildings and with full topography. The noise model has been used to predict the noise levels within the external amenity areas as well as incident upon the facades of the proposed residential development due to noise associated with the road traffic and commercial sound.

The Noise Impact Assessment has determined that that standard thermal double glazing which provides a sound reduction of at least 30dB  $R_{w+ctr}$  will be suitable for the Site. Additionally, various living room and bedroom windows will require alternative ventilation as per the schedule set out in Appendices IV and V of this Assessment.

With regards to the external amenity areas the Assessment has determined that during the daytime, that all garden areas fall below the adopted 55dB LAeq,16hr criteria noise level, as such, no mitigation measures are required.

This Assessment has shown that with regards to commercial noise, that the rated level of noise falls below the typical background sound level the closest proposed receptor for the daytime and night-time period which affords the following outcome according to BS4142:

*'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.'*

The assessment has been based upon robust and worst-case assumptions and demonstrates that, assuming the implementation of the recommended mitigation measures, the site shall be suitable for purpose.

**END OF REPORT**



## **APPENDIX I**

### **LIMITATIONS**

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between Omnia and the Client as indicated in Section 1.3.
2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination, which are enforced, by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.
5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
9. Omnia cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by Omnia is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by OEC in this connection without their explicit written agreement there to by Omnia.
10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.

## **APPENDIX II**

### **GLOSSARY OF ACOUSTIC TERMINOLOGY**

Noise is defined as unwanted sound. Human ears are able to respond to sound in the frequency range 20 Hz (deep bass) to 20,000 Hz (high treble) and over the audible range of 0 dB (the threshold of perception) to 140 dB (the threshold of pain). The ear does not respond equally to different frequencies of the same magnitude, but is more responsive to mid- frequencies than to lower or higher frequencies. To quantify noise in a manner that approximates the response of the human ear, a weighting mechanism is used. This reduces the importance of lower and higher frequencies, in a similar manner to the human ear.

Furthermore, the perception of noise may be determined by a number of other factors, which may not necessarily be acoustic. In general, the impact of noise depends upon its level, the margin by which it exceeds the background level, its character and its variation over a given period of time. In some cases, the time of day and other acoustic features such as tonality or impulsiveness may be important, as may the disposition of the affected individual. Any assessment of noise should give due consideration to all of these factors when assessing the significance of a noise source.

The most widely used weighting mechanism that best corresponds to the response of the human ear is the 'A'-weighting scale. This is widely used for environmental noise measurement, and the levels are denoted as dB(A) or LAeq, LA90 etc., according to the parameter being measured.

The decibel scale is logarithmic rather than linear, and hence a 3 dB increase in sound level represents a doubling of the sound energy present. Judgement of sound is subjective, but as a general guide a 10 dB(A) increase can be taken to represent a doubling of loudness, whilst an increase in the order of 3 dB(A) is generally regarded as the minimum difference needed to perceive a change under normal listening conditions.

An indication of the range of sound levels commonly found in the environment is given in the following table.

**Table A1: Typical Sound Pressure Levels**

| Sound Pressure Level (dB) | Location/Example           |
|---------------------------|----------------------------|
| 0                         | Threshold of hearing       |
| 20 - 30                   | Quiet bedroom at night     |
| 30 - 40                   | Living room during the day |
| 40 - 50                   | Typical office             |
| 50 - 60                   | Inside a car               |
| 60 - 70                   | Typical high street        |
| 70 - 90                   | Inside factory             |
| 100 - 110                 | Burglar alarm at 1m away   |
| 110 - 130                 | Jet aircraft on take off   |
| 140                       | Threshold of pain          |

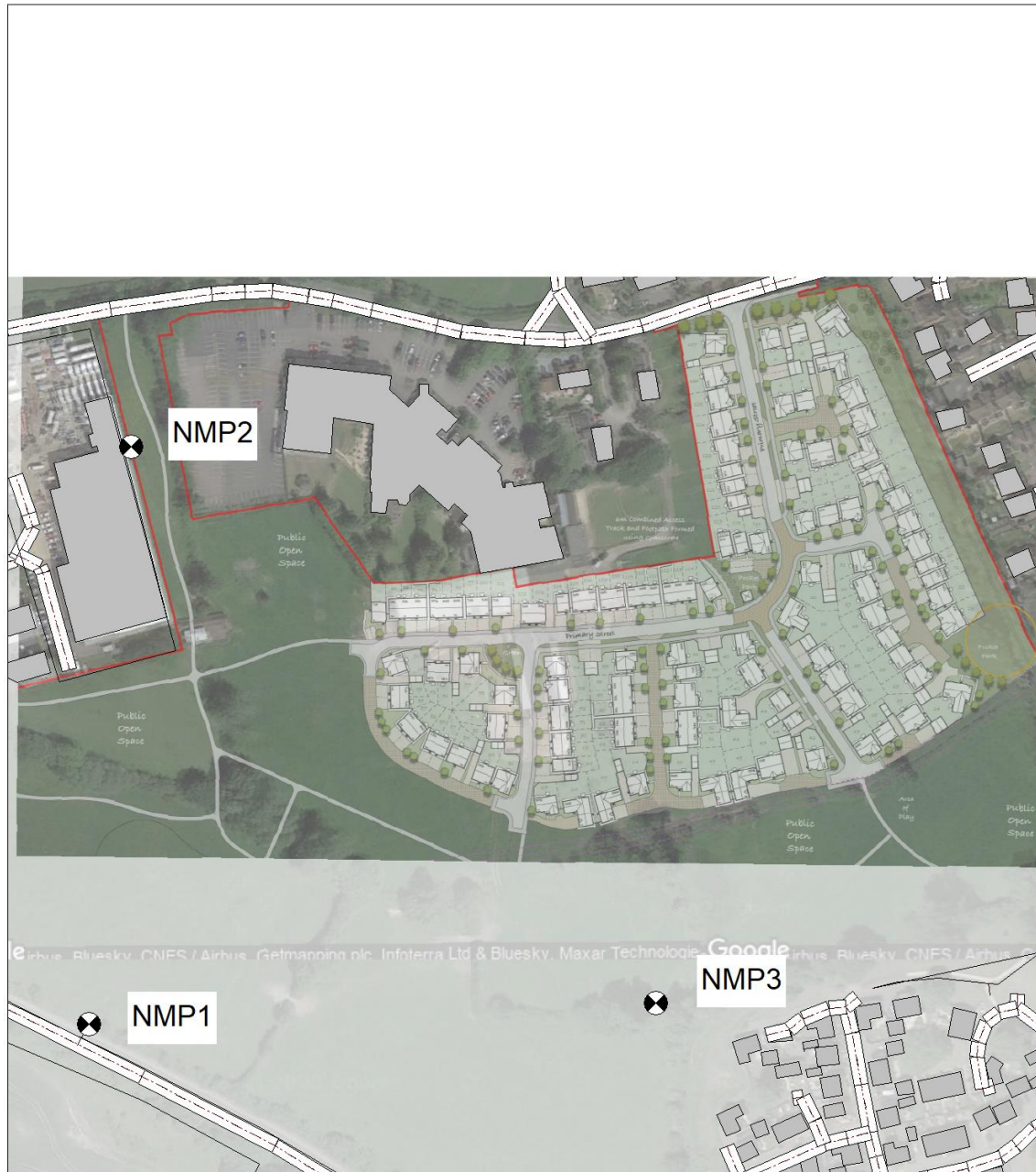
**Table A2: Terminology**

| Descriptor          | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dB (decibel)        | The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean square pressure of the sound field and a reference pressure ( $2 \times 10^{-5}$ Pa).                                                                                                                                                                                                                                                                                                           |
| dB(A)               | A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.                                                                                                                                                                                                                                                                                    |
| $L_{Aeq, T}$        | $L_{Aeq}$ is defined as the notional steady sound level which, over a stated period of time (T), would contain the same amount of acoustical energy as the A – weighted fluctuating sound measured over that period.                                                                                                                                                                                                                                                                                                             |
| $L_{Amax}$          | $L_{Amax}$ is the maximum A - weighted sound pressure level recorded over the period stated. $L_{Amax}$ is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall $L_{eq}$ noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.                                                                                                                             |
| $L_{10}$ & $L_{90}$ | If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The $L_n$ indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence $L_{10}$ is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, $L_{90}$ is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the $L_{10}$ index to describe traffic noise. |
| Free-field Level    | 2A sound field determined at a point away from reflective surfaces other than the ground with no significant contributions due to sound from other reflective surfaces. Generally as measured outside and away from buildings.                                                                                                                                                                                                                                                                                                   |
| Fast                | A time weighting used in the root mean square section of a sound level meter with a 125millisecond time constant.                                                                                                                                                                                                                                                                                                                                                                                                                |
| Slow                | A time weighting used in the root mean square section of a sound level meter with a 1000millisecond time constant.                                                                                                                                                                                                                                                                                                                                                                                                               |

### **APPENDIX III**

#### **FIGURE**

**Figure 1 – Site Layout and Noise Measurement Positions**



Title : Proposed Site Layout and  
Noise Measurement Positions

Figure 1

Built by: MP

Date : 28/11/2023

Checked by: JG

Figure 2 – Daytime Grid Noise Map -Road Traffic

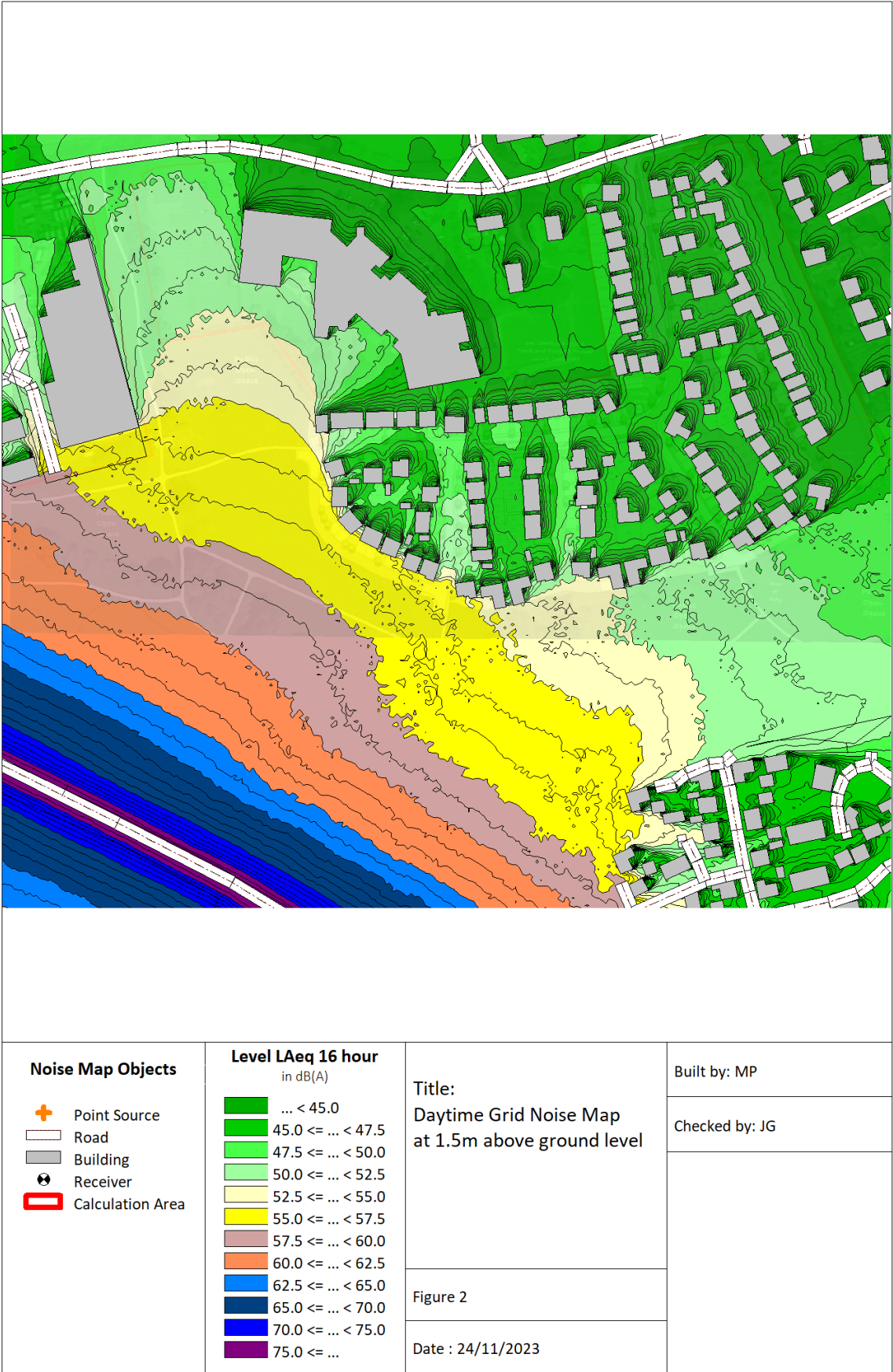


Figure 3 – Night-Time Grid Noise Map – Road Traffic

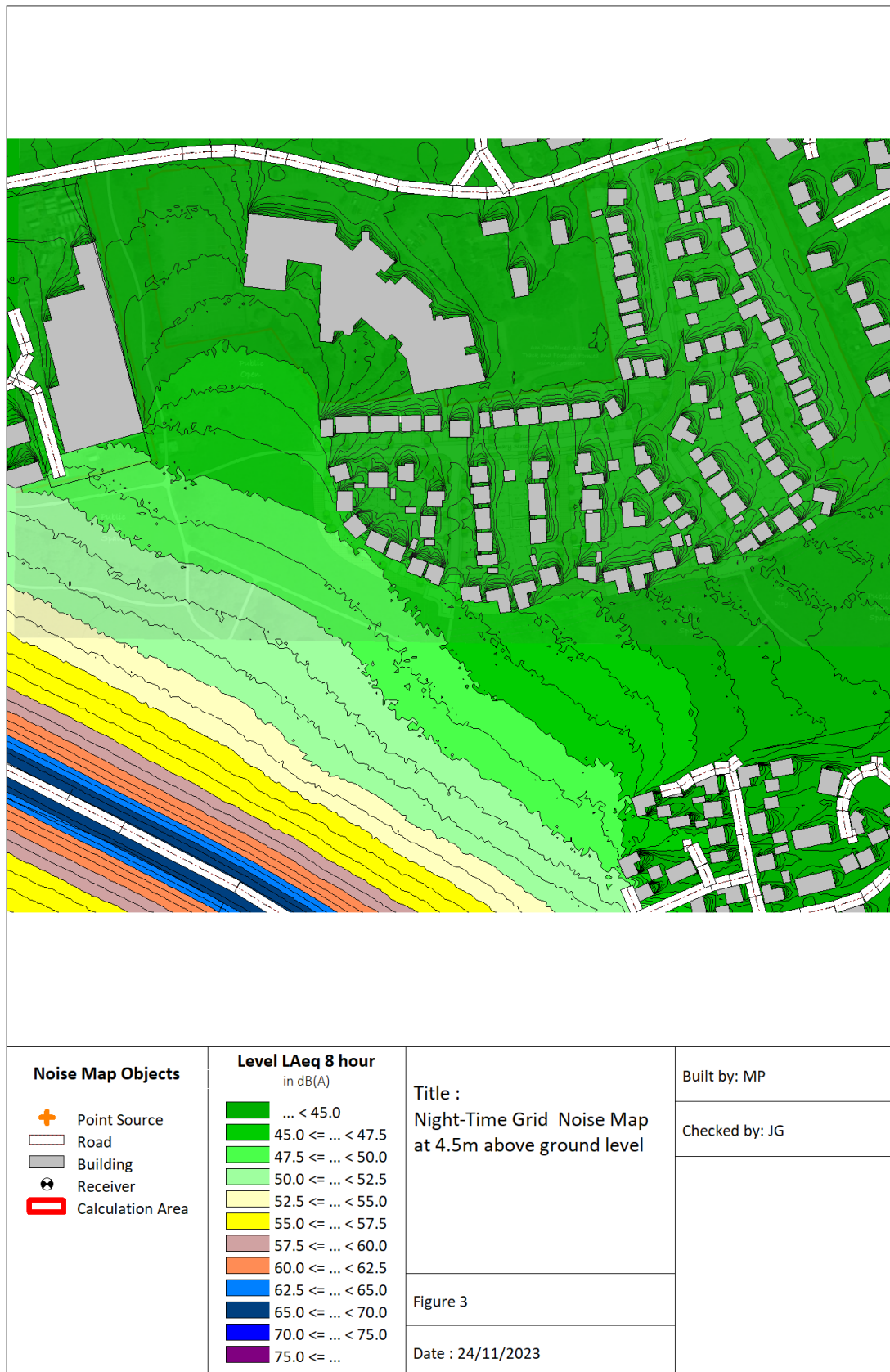


Figure 4 – Daytime Grid Noise Map - Commercial

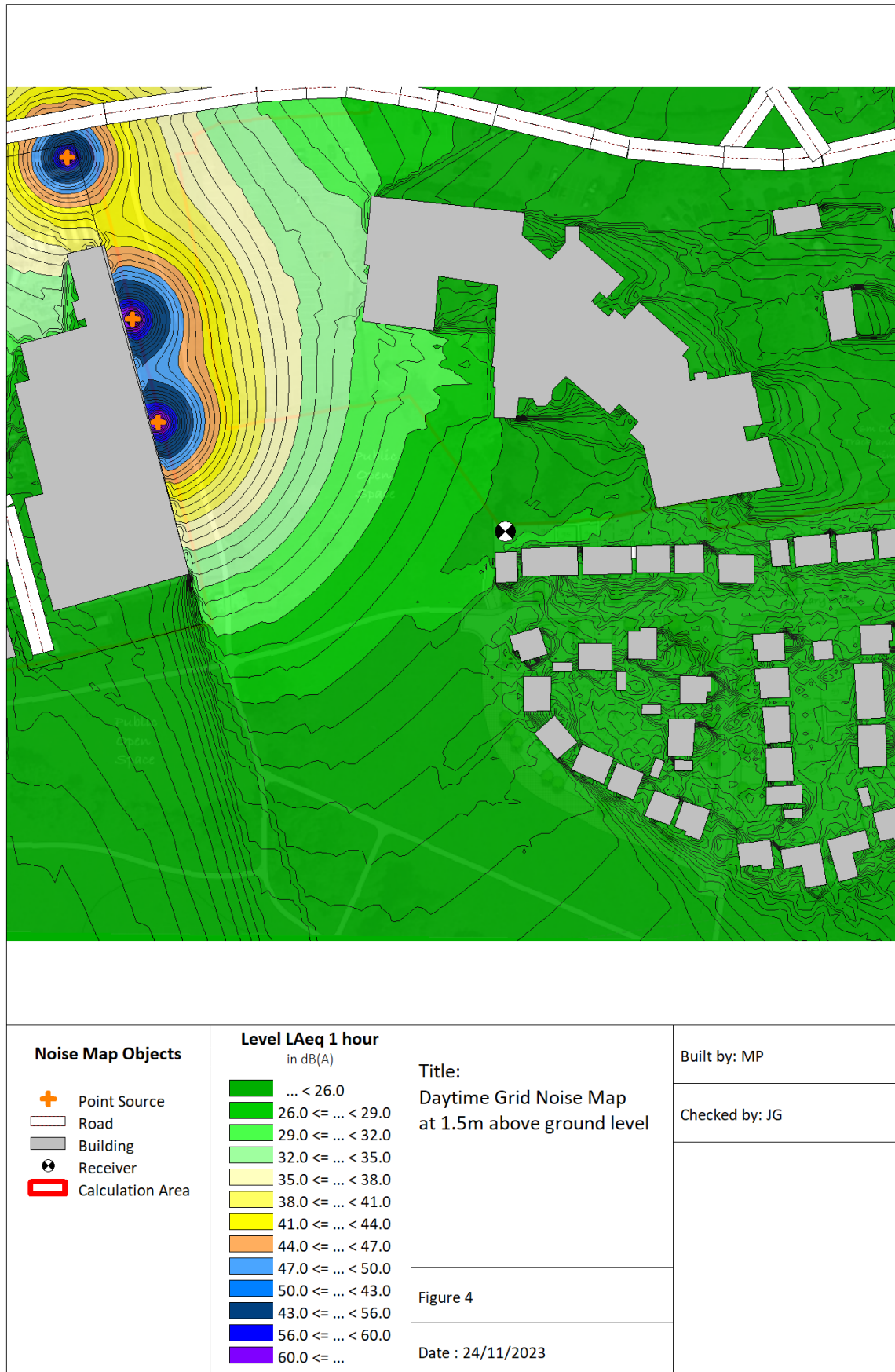
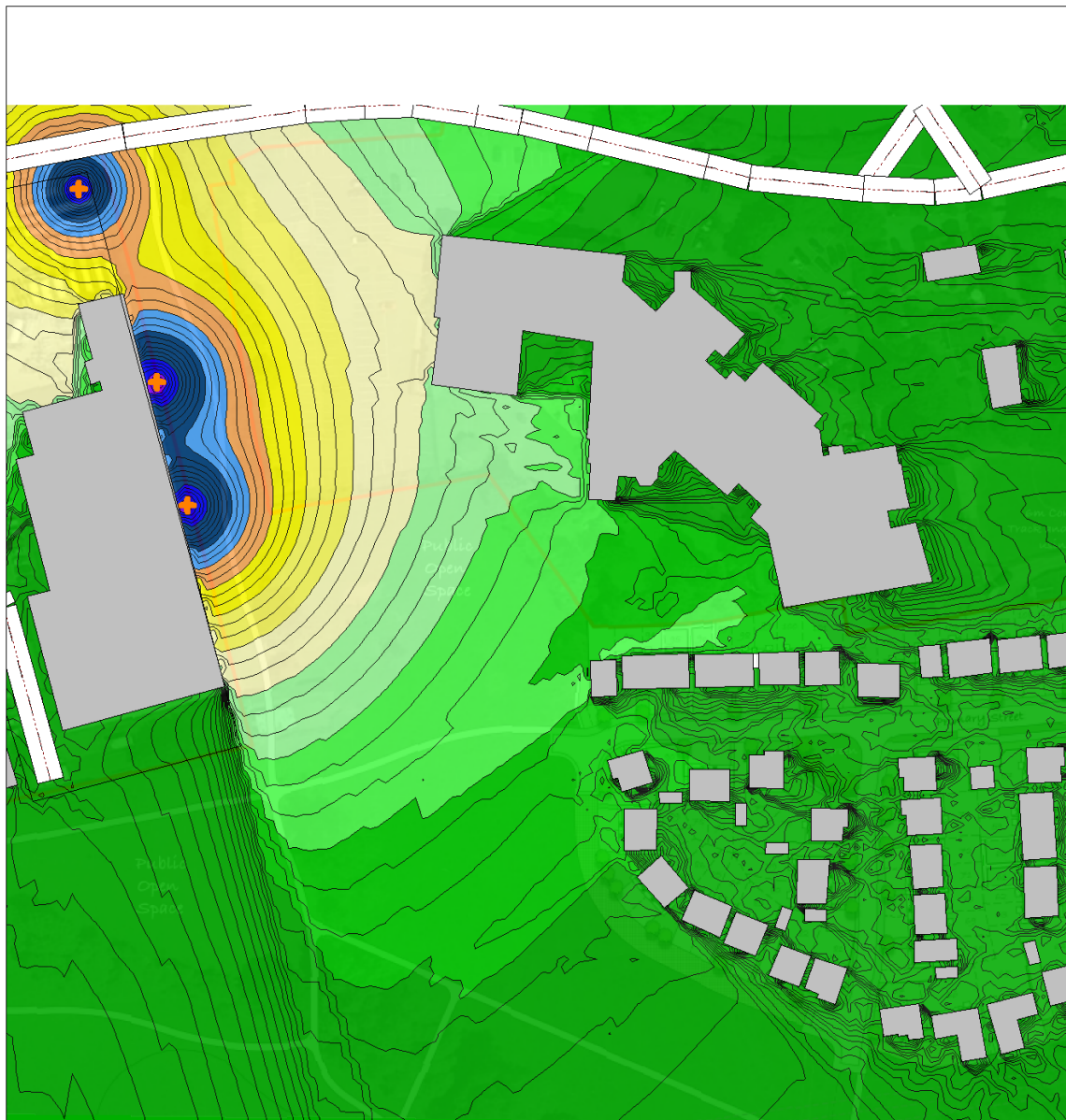


Figure 5 – Night-Time Grid Noise Map -Commercial



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                           |  |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|----------------|
| <b>Noise Map Objects</b><br><br> Point Source<br> Road<br> Building<br> Receiver<br> Calculation Area | <b>Level LAeq 15 min</b><br>in dB(A)<br><br> ... < 26.0<br> 26.0 <= ... < 29.0<br> 29.0 <= ... < 32.0<br> 32.0 <= ... < 35.0<br> 35.0 <= ... < 38.0<br> 38.0 <= ... < 41.0<br> 41.0 <= ... < 44.0<br> 44.0 <= ... < 47.0<br> 47.0 <= ... < 50.0<br> 50.0 <= ... < 43.0<br> 43.0 <= ... < 56.0<br> 56.0 <= ... < 60.0<br> 60.0 <= ... | <b>Title :</b><br>Night-Time Grid Noise Map<br>at 4.5m above ground level |  | Built by: MP   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Figure 5                                                                  |  | Checked by: JG |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Date : 24/11/2023                                                         |  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                           |  |                |

**APPENDIX IV**  
**DAYTIME FAÇADE NOISE LEVELS**  
**(Living Rooms)**

**Table A3: Daytime Façade Levels**

| Plot    | Storey | Facade Direction | Calculated LAeq, 16hr at Facade (dB) | Calculated Noise Level Inside Room (30dB reduction) (dB) | Difference with Criteria (35dB) +/- | Required Sound Insulation Performance for Glazing (Rw +Ctr) (dB) | Commentary on Required Glazing | Calculated Internal Noise Level with a Partially Open Window (dB) | Alternative Ventilation Required? | Acoustics Ventilation & Overheating Assessment - Appropriate AD-F System | Example Alternative Ventilation Scheme |
|---------|--------|------------------|--------------------------------------|----------------------------------------------------------|-------------------------------------|------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------------------------|----------------------------------------|
| Plot 1  | GF     | SE               | 40.2                                 | 10.2                                                     | -24.8                               | 5                                                                | Standard thermal glazing       | 27.2                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 1  | GF     | NE               | 34.7                                 | 4.7                                                      | -30.3                               | 0                                                                | Standard thermal glazing       | 21.7                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 1  | GF     | NW               | 37.5                                 | 7.5                                                      | -27.5                               | 3                                                                | Standard thermal glazing       | 24.5                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 1  | GF     | SW               | 42.1                                 | 12.1                                                     | -22.9                               | 7                                                                | Standard thermal glazing       | 29.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 2  | GF     | W                | 41.8                                 | 11.8                                                     | -23.2                               | 7                                                                | Standard thermal glazing       | 28.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 2  | GF     | S                | 43.1                                 | 13.1                                                     | -21.9                               | 8                                                                | Standard thermal glazing       | 30.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 2  | GF     | E                | 35.5                                 | 5.5                                                      | -29.5                               | 1                                                                | Standard thermal glazing       | 22.5                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 2  | GF     | N                | 35.2                                 | 5.2                                                      | -29.8                               | 0                                                                | Standard thermal glazing       | 22.2                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 3  | GF     | W                | 43.6                                 | 13.6                                                     | -21.4                               | 9                                                                | Standard thermal glazing       | 30.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 3  | GF     | S                | 43.7                                 | 13.7                                                     | -21.3                               | 9                                                                | Standard thermal glazing       | 30.7                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 3  | GF     | E                | 35.8                                 | 5.8                                                      | -29.2                               | 1                                                                | Standard thermal glazing       | 22.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 3  | GF     | N                | 35.4                                 | 5.4                                                      | -29.6                               | 0                                                                | Standard thermal glazing       | 22.4                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 4  | GF     | W                | 43.8                                 | 13.8                                                     | -21.2                               | 9                                                                | Standard thermal glazing       | 30.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 4  | GF     | S                | 43.8                                 | 13.8                                                     | -21.2                               | 9                                                                | Standard thermal glazing       | 30.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 4  | GF     | E                | 35.8                                 | 5.8                                                      | -29.2                               | 1                                                                | Standard thermal glazing       | 22.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 4  | GF     | N                | 36.3                                 | 6.3                                                      | -28.7                               | 1                                                                | Standard thermal glazing       | 23.3                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 5  | GF     | W                | 38.1                                 | 8.1                                                      | -26.9                               | 3                                                                | Standard thermal glazing       | 25.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 5  | GF     | S                | 42.9                                 | 12.9                                                     | -22.1                               | 8                                                                | Standard thermal glazing       | 29.9                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 5  | GF     | E                | 36.1                                 | 6.1                                                      | -28.9                               | 1                                                                | Standard thermal glazing       | 23.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 5  | GF     | N                | 35.6                                 | 5.6                                                      | -29.4                               | 1                                                                | Standard thermal glazing       | 22.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 6  | GF     | S                | 42.5                                 | 12.5                                                     | -22.5                               | 8                                                                | Standard thermal glazing       | 29.5                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 6  | GF     | W                | 41.2                                 | 11.2                                                     | -23.8                               | 6                                                                | Standard thermal glazing       | 28.2                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 6  | GF     | N                | 35.9                                 | 5.9                                                      | -29.1                               | 1                                                                | Standard thermal glazing       | 22.9                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 6  | GF     | E                | 35.3                                 | 5.3                                                      | -29.7                               | 0                                                                | Standard thermal glazing       | 22.3                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 7  | GF     | SE               | 38.8                                 | 8.8                                                      | -26.2                               | 4                                                                | Standard thermal glazing       | 25.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 7  | GF     | NE               | 35.6                                 | 5.6                                                      | -29.4                               | 1                                                                | Standard thermal glazing       | 22.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 7  | GF     | NW               | 37                                   | 7                                                        | -28                                 | 2                                                                | Standard thermal glazing       | 24                                                                | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 7  | GF     | SW               | 42.8                                 | 12.8                                                     | -22.2                               | 8                                                                | Standard thermal glazing       | 29.8                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 8  | GF     | SW               | 42.2                                 | 12.2                                                     | -22.8                               | 7                                                                | Standard thermal glazing       | 29.2                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 8  | GF     | SE               | 38.6                                 | 8.6                                                      | -26.4                               | 4                                                                | Standard thermal glazing       | 25.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 8  | GF     | NE               | 35.7                                 | 5.7                                                      | -29.3                               | 1                                                                | Standard thermal glazing       | 22.7                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 8  | GF     | NW               | 37.9                                 | 7.9                                                      | -27.1                               | 3                                                                | Standard thermal glazing       | 24.9                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 9  | GF     | SW               | 43.6                                 | 13.6                                                     | -21.4                               | 9                                                                | Standard thermal glazing       | 30.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 9  | GF     | SE               | 39.9                                 | 9.9                                                      | -25.1                               | 5                                                                | Standard thermal glazing       | 26.9                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 9  | GF     | NE               | 35.4                                 | 5.4                                                      | -29.6                               | 0                                                                | Standard thermal glazing       | 22.4                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 9  | GF     | NW               | 37                                   | 7                                                        | -28                                 | 2                                                                | Standard thermal glazing       | 24                                                                | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 12 | GF     | W                | 44.1                                 | 14.1                                                     | -20.9                               | 9                                                                | Standard thermal glazing       | 31.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 12 | GF     | S                | 44.5                                 | 14.5                                                     | -20.5                               | 10                                                               | Standard thermal glazing       | 31.5                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 12 | GF     | E                | 36.1                                 | 6.1                                                      | -28.9                               | 1                                                                | Standard thermal glazing       | 23.1                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 12 | GF     | N                | 36.6                                 | 6.6                                                      | -28.4                               | 2                                                                | Standard thermal glazing       | 23.6                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 13 | GF     | W                | 45.3                                 | 15.3                                                     | -19.7                               | 10                                                               | Standard thermal glazing       | 32.3                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |
| Plot 13 | GF     | N                | 37.7                                 | 7.7                                                      | -27.3                               | 3                                                                | Standard thermal glazing       | 24.7                                                              | No                                | N/A                                                                      | Alternative Ventilation not Required   |

|         |    |    |      |      |       |    |                          |      |    |     |                                      |
|---------|----|----|------|------|-------|----|--------------------------|------|----|-----|--------------------------------------|
| Plot 13 | GF | E  | 37.1 | 7.1  | -27.9 | 2  | Standard thermal glazing | 24.1 | No | N/A | Alternative Ventilation not Required |
| Plot 13 | GF | S  | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No | N/A | Alternative Ventilation not Required |
| Plot 14 | GF | W  | 40.7 | 10.7 | -24.3 | 6  | Standard thermal glazing | 27.7 | No | N/A | Alternative Ventilation not Required |
| Plot 14 | GF | S  | 44.8 | 14.8 | -20.2 | 10 | Standard thermal glazing | 31.8 | No | N/A | Alternative Ventilation not Required |
| Plot 14 | GF | E  | 36.5 | 6.5  | -28.5 | 2  | Standard thermal glazing | 23.5 | No | N/A | Alternative Ventilation not Required |
| Plot 14 | GF | N  | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No | N/A | Alternative Ventilation not Required |
| Plot 15 | GF | W  | 39.7 | 9.7  | -25.3 | 5  | Standard thermal glazing | 26.7 | No | N/A | Alternative Ventilation not Required |
| Plot 15 | GF | S  | 45   | 15   | -20   | 10 | Standard thermal glazing | 32   | No | N/A | Alternative Ventilation not Required |
| Plot 15 | GF | E  | 36.7 | 6.7  | -28.3 | 2  | Standard thermal glazing | 23.7 | No | N/A | Alternative Ventilation not Required |
| Plot 15 | GF | N  | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No | N/A | Alternative Ventilation not Required |
| Plot 16 | GF | SE | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No | N/A | Alternative Ventilation not Required |
| Plot 16 | GF | NE | 35.6 | 5.6  | -29.4 | 1  | Standard thermal glazing | 22.6 | No | N/A | Alternative Ventilation not Required |
| Plot 16 | GF | NW | 38.9 | 8.9  | -26.1 | 4  | Standard thermal glazing | 25.9 | No | N/A | Alternative Ventilation not Required |
| Plot 16 | GF | SW | 42.8 | 12.8 | -22.2 | 8  | Standard thermal glazing | 29.8 | No | N/A | Alternative Ventilation not Required |
| Plot 17 | GF | SE | 41.4 | 11.4 | -23.6 | 6  | Standard thermal glazing | 28.4 | No | N/A | Alternative Ventilation not Required |
| Plot 17 | GF | NE | 35.9 | 5.9  | -29.1 | 1  | Standard thermal glazing | 22.9 | No | N/A | Alternative Ventilation not Required |
| Plot 17 | GF | NW | 37.3 | 7.3  | -27.7 | 2  | Standard thermal glazing | 24.3 | No | N/A | Alternative Ventilation not Required |
| Plot 17 | GF | SW | 43.5 | 13.5 | -21.5 | 9  | Standard thermal glazing | 30.5 | No | N/A | Alternative Ventilation not Required |
| Plot 18 | GF | SW | 43.8 | 13.8 | -21.2 | 9  | Standard thermal glazing | 30.8 | No | N/A | Alternative Ventilation not Required |
| Plot 18 | GF | SE | 38.7 | 8.7  | -26.3 | 4  | Standard thermal glazing | 25.7 | No | N/A | Alternative Ventilation not Required |
| Plot 18 | GF | NE | 35.7 | 5.7  | -29.3 | 1  | Standard thermal glazing | 22.7 | No | N/A | Alternative Ventilation not Required |
| Plot 18 | GF | NW | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No | N/A | Alternative Ventilation not Required |
| Plot 19 | GF | SW | 43.7 | 13.7 | -21.3 | 9  | Standard thermal glazing | 30.7 | No | N/A | Alternative Ventilation not Required |
| Plot 19 | GF | SE | 39.6 | 9.6  | -25.4 | 5  | Standard thermal glazing | 26.6 | No | N/A | Alternative Ventilation not Required |
| Plot 19 | GF | NE | 35.7 | 5.7  | -29.3 | 1  | Standard thermal glazing | 22.7 | No | N/A | Alternative Ventilation not Required |
| Plot 19 | GF | NW | 38.1 | 8.1  | -26.9 | 3  | Standard thermal glazing | 25.1 | No | N/A | Alternative Ventilation not Required |
| Plot 20 | GF | SW | 43.9 | 13.9 | -21.1 | 9  | Standard thermal glazing | 30.9 | No | N/A | Alternative Ventilation not Required |
| Plot 20 | GF | SE | 38.8 | 8.8  | -26.2 | 4  | Standard thermal glazing | 25.8 | No | N/A | Alternative Ventilation not Required |
| Plot 20 | GF | NE | 36.2 | 6.2  | -28.8 | 1  | Standard thermal glazing | 23.2 | No | N/A | Alternative Ventilation not Required |
| Plot 20 | GF | NW | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No | N/A | Alternative Ventilation not Required |
| Plot 21 | GF | SW | 44   | 14   | -21   | 9  | Standard thermal glazing | 31   | No | N/A | Alternative Ventilation not Required |
| Plot 21 | GF | SE | 39.9 | 9.9  | -25.1 | 5  | Standard thermal glazing | 26.9 | No | N/A | Alternative Ventilation not Required |
| Plot 21 | GF | NE | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No | N/A | Alternative Ventilation not Required |
| Plot 21 | GF | NW | 37.3 | 7.3  | -27.7 | 2  | Standard thermal glazing | 24.3 | No | N/A | Alternative Ventilation not Required |
| Plot 22 | GF | SW | 43.9 | 13.9 | -21.1 | 9  | Standard thermal glazing | 30.9 | No | N/A | Alternative Ventilation not Required |
| Plot 22 | GF | SE | 41.6 | 11.6 | -23.4 | 7  | Standard thermal glazing | 28.6 | No | N/A | Alternative Ventilation not Required |
| Plot 22 | GF | NE | 36.2 | 6.2  | -28.8 | 1  | Standard thermal glazing | 23.2 | No | N/A | Alternative Ventilation not Required |
| Plot 22 | GF | NW | 38.1 | 8.1  | -26.9 | 3  | Standard thermal glazing | 25.1 | No | N/A | Alternative Ventilation not Required |
| Plot 23 | GF | SW | 43.7 | 13.7 | -21.3 | 9  | Standard thermal glazing | 30.7 | No | N/A | Alternative Ventilation not Required |
| Plot 23 | GF | SE | 43.2 | 13.2 | -21.8 | 8  | Standard thermal glazing | 30.2 | No | N/A | Alternative Ventilation not Required |
| Plot 23 | GF | NE | 35.9 | 5.9  | -29.1 | 1  | Standard thermal glazing | 22.9 | No | N/A | Alternative Ventilation not Required |
| Plot 23 | GF | NW | 39.1 | 9.1  | -25.9 | 4  | Standard thermal glazing | 26.1 | No | N/A | Alternative Ventilation not Required |
| Plot 24 | GF | W  | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No | N/A | Alternative Ventilation not Required |
| Plot 24 | GF | S  | 45.4 | 15.4 | -19.6 | 10 | Standard thermal glazing | 32.4 | No | N/A | Alternative Ventilation not Required |
| Plot 24 | GF | E  | 39.1 | 9.1  | -25.9 | 4  | Standard thermal glazing | 26.1 | No | N/A | Alternative Ventilation not Required |
| Plot 24 | GF | N  | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No | N/A | Alternative Ventilation not Required |

|              |    |    |      |      |       |    |                          |      |     |                    |                                      |
|--------------|----|----|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 25      | GF | SW | 45.1 | 15.1 | -19.9 | 10 | Standard thermal glazing | 32.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 25      | GF | SE | 43   | 13   | -22   | 8  | Standard thermal glazing | 30   | No  | N/A                | Alternative Ventilation not Required |
| Plot 25      | GF | NE | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 25      | GF | NW | 40   | 10   | -25   | 5  | Standard thermal glazing | 27   | No  | N/A                | Alternative Ventilation not Required |
| Plot 26      | GF | SW | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 26      | GF | SE | 44.3 | 14.3 | -20.7 | 9  | Standard thermal glazing | 31.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 26      | GF | NE | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 26      | GF | NW | 39.7 | 9.7  | -25.3 | 5  | Standard thermal glazing | 26.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 27      | GF | SW | 44.9 | 14.9 | -20.1 | 10 | Standard thermal glazing | 31.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 27      | GF | SE | 41.6 | 11.6 | -23.4 | 7  | Standard thermal glazing | 28.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 27      | GF | NE | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 27      | GF | NW | 40.6 | 10.6 | -24.4 | 6  | Standard thermal glazing | 27.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 28      | GF | SE | 42.5 | 12.5 | -22.5 | 8  | Standard thermal glazing | 29.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 28      | GF | NE | 36.7 | 6.7  | -28.3 | 2  | Standard thermal glazing | 23.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 28      | GF | NW | 39.2 | 9.2  | -25.8 | 4  | Standard thermal glazing | 26.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 28      | GF | SW | 45   | 15   | -20   | 10 | Standard thermal glazing | 32   | No  | N/A                | Alternative Ventilation not Required |
| Plot 29 - 30 | GF | W  | 45.8 | 15.8 | -19.2 | 11 | Standard thermal glazing | 32.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 29 - 30 | GF | NW | 39.8 | 9.8  | -25.2 | 5  | Standard thermal glazing | 26.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 29 - 30 | GF | NE | 36.8 | 6.8  | -28.2 | 2  | Standard thermal glazing | 23.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 29 - 30 | GF | SE | 41.5 | 11.5 | -23.5 | 7  | Standard thermal glazing | 28.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 31      | GF | W  | 45.1 | 15.1 | -19.9 | 10 | Standard thermal glazing | 32.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 31      | GF | S  | 42   | 12   | -23   | 7  | Standard thermal glazing | 29   | No  | N/A                | Alternative Ventilation not Required |
| Plot 31      | GF | E  | 37   | 7    | -28   | 2  | Standard thermal glazing | 24   | No  | N/A                | Alternative Ventilation not Required |
| Plot 31      | GF | N  | 38.1 | 8.1  | -26.9 | 3  | Standard thermal glazing | 25.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 32      | GF | W  | 45.3 | 15.3 | -19.7 | 10 | Standard thermal glazing | 32.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 32      | GF | S  | 44.7 | 14.7 | -20.3 | 10 | Standard thermal glazing | 31.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 32      | GF | E  | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 32      | GF | N  | 37.5 | 7.5  | -27.5 | 3  | Standard thermal glazing | 24.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 33      | GF | SE | 43   | 13   | -22   | 8  | Standard thermal glazing | 30   | No  | N/A                | Alternative Ventilation not Required |
| Plot 33      | GF | NE | 36.5 | 6.5  | -28.5 | 2  | Standard thermal glazing | 23.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 33      | GF | NW | 43.4 | 13.4 | -21.6 | 8  | Standard thermal glazing | 30.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 33      | GF | SW | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 34      | GF | SW | 45.7 | 15.7 | -19.3 | 11 | Standard thermal glazing | 32.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 34      | GF | SE | 40.4 | 10.4 | -24.6 | 5  | Standard thermal glazing | 27.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 34      | GF | NE | 36.7 | 6.7  | -28.3 | 2  | Standard thermal glazing | 23.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 34      | GF | NW | 40.3 | 10.3 | -24.7 | 5  | Standard thermal glazing | 27.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 34      | GF | SW | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 35      | GF | SW | 47.1 | 17.1 | -17.9 | 12 | Standard thermal glazing | 34.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 35      | GF | SE | 42.1 | 12.1 | -22.9 | 7  | Standard thermal glazing | 29.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 35      | GF | NE | 36.8 | 6.8  | -28.2 | 2  | Standard thermal glazing | 23.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 35      | GF | NW | 39.4 | 9.4  | -25.6 | 4  | Standard thermal glazing | 26.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 36      | GF | SW | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 36      | GF | SE | 43.2 | 13.2 | -21.8 | 8  | Standard thermal glazing | 30.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 36      | GF | NE | 36.8 | 6.8  | -28.2 | 2  | Standard thermal glazing | 23.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 36      | GF | NW | 40.3 | 10.3 | -24.7 | 5  | Standard thermal glazing | 27.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 37      | GF | SW | 49.7 | 19.7 | -15.3 | 15 | Standard thermal glazing | 36.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |

|              |    |    |      |      |       |    |                          |      |     |                    |                                      |
|--------------|----|----|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 37      | GF | NW | 41.7 | 11.7 | -23.3 | 7  | Standard thermal glazing | 28.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 37      | GF | NE | 37   | 7    | -28   | 2  | Standard thermal glazing | 24   | No  | N/A                | Alternative Ventilation not Required |
| Plot 37      | GF | SE | 48.5 | 18.5 | -16.5 | 14 | Standard thermal glazing | 35.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 38      | GF | SW | 38.3 | 8.3  | -26.7 | 3  | Standard thermal glazing | 25.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 38      | GF | SE | 45.6 | 15.6 | -19.4 | 11 | Standard thermal glazing | 32.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 38      | GF | NE | 36.9 | 6.9  | -28.1 | 2  | Standard thermal glazing | 23.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 38      | GF | NW | 42.1 | 12.1 | -22.9 | 7  | Standard thermal glazing | 29.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 39      | GF | SE | 47.4 | 17.4 | -17.6 | 12 | Standard thermal glazing | 34.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 39      | GF | SW | 42.1 | 12.1 | -22.9 | 7  | Standard thermal glazing | 29.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 39      | GF | NW | 41.1 | 11.1 | -23.9 | 6  | Standard thermal glazing | 28.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 39      | GF | NE | 36.5 | 6.5  | -28.5 | 2  | Standard thermal glazing | 23.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 10 - 11 | GF | E  | 36.3 | 6.3  | -28.7 | 1  | Standard thermal glazing | 23.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 10 - 11 | GF | N  | 35.9 | 5.9  | -29.1 | 1  | Standard thermal glazing | 22.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 10 - 11 | GF | W  | 44   | 14   | -21   | 9  | Standard thermal glazing | 31   | No  | N/A                | Alternative Ventilation not Required |
| Plot 10 - 11 | GF | S  | 44   | 14   | -21   | 9  | Standard thermal glazing | 31   | No  | N/A                | Alternative Ventilation not Required |
| Plot 40      | GF | S  | 44.6 | 14.6 | -20.4 | 10 | Standard thermal glazing | 31.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 40      | GF | E  | 38.3 | 8.3  | -26.7 | 3  | Standard thermal glazing | 25.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 40      | GF | N  | 38.6 | 8.6  | -26.4 | 4  | Standard thermal glazing | 25.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 40      | GF | W  | 46.6 | 16.6 | -18.4 | 12 | Standard thermal glazing | 33.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 41 - 42 | GF | SE | 44.8 | 14.8 | -20.2 | 10 | Standard thermal glazing | 31.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 41 - 42 | GF | NE | 37.2 | 7.2  | -27.8 | 2  | Standard thermal glazing | 24.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 41 - 42 | GF | NW | 41.3 | 11.3 | -23.7 | 6  | Standard thermal glazing | 28.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 41 - 42 | GF | SW | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 43      | GF | S  | 46.5 | 16.5 | -18.5 | 12 | Standard thermal glazing | 33.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 43      | GF | E  | 39.6 | 9.6  | -25.4 | 5  | Standard thermal glazing | 26.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 43      | GF | N  | 37.9 | 7.9  | -27.1 | 3  | Standard thermal glazing | 24.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 43      | GF | W  | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 44      | GF | SW | 45.8 | 15.8 | -19.2 | 11 | Standard thermal glazing | 32.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 44      | GF | SE | 43.9 | 13.9 | -21.1 | 9  | Standard thermal glazing | 30.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 44      | GF | NE | 37.2 | 7.2  | -27.8 | 2  | Standard thermal glazing | 24.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 44      | GF | NW | 40.9 | 10.9 | -24.1 | 6  | Standard thermal glazing | 27.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 45      | GF | SW | 46.3 | 16.3 | -18.7 | 11 | Standard thermal glazing | 33.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 45      | GF | SE | 44.3 | 14.3 | -20.7 | 9  | Standard thermal glazing | 31.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 45      | GF | NE | 37.3 | 7.3  | -27.7 | 2  | Standard thermal glazing | 24.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 45      | GF | NW | 41.5 | 11.5 | -23.5 | 7  | Standard thermal glazing | 28.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 46      | GF | W  | 50.6 | 20.6 | -14.4 | 16 | Standard thermal glazing | 37.6 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 46      | GF | N  | 39.7 | 9.7  | -25.3 | 5  | Standard thermal glazing | 26.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 46      | GF | E  | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 46      | GF | S  | 51.2 | 21.2 | -13.8 | 16 | Standard thermal glazing | 38.2 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 47      | GF | S  | 50.1 | 20.1 | -14.9 | 15 | Standard thermal glazing | 37.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 47      | GF | W  | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 47      | GF | N  | 40.8 | 10.8 | -24.2 | 6  | Standard thermal glazing | 27.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 47      | GF | E  | 39.1 | 9.1  | -25.9 | 4  | Standard thermal glazing | 26.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 48      | GF | W  | 43.5 | 13.5 | -21.5 | 9  | Standard thermal glazing | 30.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 48      | GF | S  | 52.8 | 22.8 | -12.2 | 18 | Standard thermal glazing | 39.8 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 48      | GF | E  | 39.2 | 9.2  | -25.8 | 4  | Standard thermal glazing | 26.2 | No  | N/A                | Alternative Ventilation not Required |

|              |    |   |      |      |       |    |                          |      |     |                    |                                      |
|--------------|----|---|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 48      | GF | N | 40.2 | 10.2 | -24.8 | 5  | Standard thermal glazing | 27.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 49      | GF | S | 53.2 | 23.2 | -11.8 | 18 | Standard thermal glazing | 40.2 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 49      | GF | E | 39.4 | 9.4  | -25.6 | 4  | Standard thermal glazing | 26.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 49      | GF | N | 38.9 | 8.9  | -26.1 | 4  | Standard thermal glazing | 25.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 49      | GF | W | 52.1 | 22.1 | -12.9 | 17 | Standard thermal glazing | 39.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 50      | GF | S | 53.4 | 23.4 | -11.6 | 18 | Standard thermal glazing | 40.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 50      | GF | E | 43   | 13   | -22   | 8  | Standard thermal glazing | 30   | No  | N/A                | Alternative Ventilation not Required |
| Plot 50      | GF | N | 39.3 | 9.3  | -25.7 | 4  | Standard thermal glazing | 26.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 50      | GF | W | 52.2 | 22.2 | -12.8 | 17 | Standard thermal glazing | 39.2 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 51 - 53 | GF | S | 48   | 18   | -17   | 13 | Standard thermal glazing | 35   | No  | N/A                | Alternative Ventilation not Required |
| Plot 51 - 53 | GF | E | 40.3 | 10.3 | -24.7 | 5  | Standard thermal glazing | 27.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 51 - 53 | GF | N | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 51 - 53 | GF | W | 49.1 | 19.1 | -15.9 | 14 | Standard thermal glazing | 36.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 54      | GF | S | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 54      | GF | W | 48.9 | 18.9 | -16.1 | 14 | Standard thermal glazing | 35.9 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 54      | GF | N | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 54      | GF | E | 41.1 | 11.1 | -23.9 | 6  | Standard thermal glazing | 28.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 55      | GF | W | 48.1 | 18.1 | -16.9 | 13 | Standard thermal glazing | 35.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 55      | GF | S | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 55      | GF | E | 40   | 10   | -25   | 5  | Standard thermal glazing | 27   | No  | N/A                | Alternative Ventilation not Required |
| Plot 55      | GF | N | 38.4 | 8.4  | -26.6 | 3  | Standard thermal glazing | 25.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | W | 48.4 | 18.4 | -16.6 | 13 | Standard thermal glazing | 35.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 56      | GF | S | 44.8 | 14.8 | -20.2 | 10 | Standard thermal glazing | 31.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | E | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | N | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | W | 45.8 | 15.8 | -19.2 | 11 | Standard thermal glazing | 32.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | S | 42.5 | 12.5 | -22.5 | 8  | Standard thermal glazing | 29.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | E | 43.9 | 13.9 | -21.1 | 9  | Standard thermal glazing | 30.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 56      | GF | N | 38.8 | 8.8  | -26.2 | 4  | Standard thermal glazing | 25.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 58 - 60 | GF | S | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 58 - 60 | GF | W | 46.9 | 16.9 | -18.1 | 12 | Standard thermal glazing | 33.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 58 - 60 | GF | N | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 58 - 60 | GF | E | 41.7 | 11.7 | -23.3 | 7  | Standard thermal glazing | 28.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 61 - 63 | GF | W | 46.6 | 16.6 | -18.4 | 12 | Standard thermal glazing | 33.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 61 - 63 | GF | S | 47.6 | 17.6 | -17.4 | 13 | Standard thermal glazing | 34.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 61 - 63 | GF | E | 41.4 | 11.4 | -23.6 | 6  | Standard thermal glazing | 28.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 61 - 63 | GF | N | 38.6 | 8.6  | -26.4 | 4  | Standard thermal glazing | 25.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 64      | GF | S | 52.5 | 22.5 | -12.5 | 18 | Standard thermal glazing | 39.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 64      | GF | E | 40.1 | 10.1 | -24.9 | 5  | Standard thermal glazing | 27.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 64      | GF | N | 43   | 13   | -22   | 8  | Standard thermal glazing | 30   | No  | N/A                | Alternative Ventilation not Required |
| Plot 64      | GF | W | 50   | 20   | -15   | 15 | Standard thermal glazing | 37   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 65      | GF | W | 49.7 | 19.7 | -15.3 | 15 | Standard thermal glazing | 36.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 65      | GF | S | 54.4 | 24.4 | -10.6 | 19 | Standard thermal glazing | 41.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 65      | GF | E | 40.5 | 10.5 | -24.5 | 6  | Standard thermal glazing | 27.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 65      | GF | N | 41.4 | 11.4 | -23.6 | 6  | Standard thermal glazing | 28.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 66      | GF | S | 54.9 | 24.9 | -10.1 | 20 | Standard thermal glazing | 41.9 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |

|              |    |   |      |      |       |    |                          |      |     |                    |                                      |
|--------------|----|---|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 66      | GF | E | 44.9 | 14.9 | -20.1 | 10 | Standard thermal glazing | 31.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 66      | GF | N | 39.6 | 9.6  | -25.4 | 5  | Standard thermal glazing | 26.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 66      | GF | W | 52.1 | 22.1 | -12.9 | 17 | Standard thermal glazing | 39.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 67      | GF | E | 46.5 | 16.5 | -18.5 | 12 | Standard thermal glazing | 33.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 67      | GF | N | 44.7 | 14.7 | -20.3 | 10 | Standard thermal glazing | 31.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 67      | GF | W | 54.3 | 24.3 | -10.7 | 19 | Standard thermal glazing | 41.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 67      | GF | S | 55.3 | 25.3 | -9.7  | 20 | Standard thermal glazing | 42.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 68      | GF | W | 50   | 20   | -15   | 15 | Standard thermal glazing | 37   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 68      | GF | S | 49.4 | 19.4 | -15.6 | 14 | Standard thermal glazing | 36.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 68      | GF | E | 41.7 | 11.7 | -23.3 | 7  | Standard thermal glazing | 28.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 68      | GF | N | 39.8 | 9.8  | -25.2 | 5  | Standard thermal glazing | 26.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 69 - 70 | GF | S | 42.4 | 12.4 | -22.6 | 7  | Standard thermal glazing | 29.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 69 - 70 | GF | W | 50   | 20   | -15   | 15 | Standard thermal glazing | 37   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 69 - 70 | GF | N | 39.1 | 9.1  | -25.9 | 4  | Standard thermal glazing | 26.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 69 - 70 | GF | E | 40.6 | 10.6 | -24.4 | 6  | Standard thermal glazing | 27.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 71 - 72 | GF | S | 42.8 | 12.8 | -22.2 | 8  | Standard thermal glazing | 29.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 71 - 72 | GF | W | 49.8 | 19.8 | -15.2 | 15 | Standard thermal glazing | 36.8 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 71 - 72 | GF | N | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 71 - 72 | GF | E | 44.2 | 14.2 | -20.8 | 9  | Standard thermal glazing | 31.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 73      | GF | S | 43.4 | 13.4 | -21.6 | 8  | Standard thermal glazing | 30.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 73      | GF | E | 45.1 | 15.1 | -19.9 | 10 | Standard thermal glazing | 32.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 73      | GF | N | 39.2 | 9.2  | -25.8 | 4  | Standard thermal glazing | 26.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 73      | GF | W | 48.6 | 18.6 | -16.4 | 14 | Standard thermal glazing | 35.6 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 74      | GF | S | 41.5 | 11.5 | -23.5 | 7  | Standard thermal glazing | 28.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 74      | GF | E | 43.5 | 13.5 | -21.5 | 9  | Standard thermal glazing | 30.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 74      | GF | N | 38.7 | 8.7  | -26.3 | 4  | Standard thermal glazing | 25.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 74      | GF | W | 48.7 | 18.7 | -16.3 | 14 | Standard thermal glazing | 35.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 75 - 76 | GF | S | 47.7 | 17.7 | -17.3 | 13 | Standard thermal glazing | 34.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 75 - 76 | GF | W | 46.1 | 16.1 | -18.9 | 11 | Standard thermal glazing | 33.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 75 - 76 | GF | N | 38.7 | 8.7  | -26.3 | 4  | Standard thermal glazing | 25.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 75 - 76 | GF | E | 43.6 | 13.6 | -21.4 | 9  | Standard thermal glazing | 30.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 77      | GF | S | 47.7 | 17.7 | -17.3 | 13 | Standard thermal glazing | 34.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 77      | GF | W | 45.4 | 15.4 | -19.6 | 10 | Standard thermal glazing | 32.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 77      | GF | N | 39.4 | 9.4  | -25.6 | 4  | Standard thermal glazing | 26.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 77      | GF | E | 42.4 | 12.4 | -22.6 | 7  | Standard thermal glazing | 29.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 78      | GF | S | 47.9 | 17.9 | -17.1 | 13 | Standard thermal glazing | 34.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 78      | GF | W | 46.9 | 16.9 | -18.1 | 12 | Standard thermal glazing | 33.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 78      | GF | N | 39.1 | 9.1  | -25.9 | 4  | Standard thermal glazing | 26.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 78      | GF | E | 47.8 | 17.8 | -17.2 | 13 | Standard thermal glazing | 34.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 79 - 80 | GF | N | 39.3 | 9.3  | -25.7 | 4  | Standard thermal glazing | 26.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 79 - 80 | GF | E | 47.1 | 17.1 | -17.9 | 12 | Standard thermal glazing | 34.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 79 - 80 | GF | S | 47.5 | 17.5 | -17.5 | 13 | Standard thermal glazing | 34.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 79 - 80 | GF | W | 47.5 | 17.5 | -17.5 | 13 | Standard thermal glazing | 34.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 81      | GF | W | 49   | 19   | -16   | 14 | Standard thermal glazing | 36   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 81      | GF | N | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 81      | GF | E | 52.1 | 22.1 | -12.9 | 17 | Standard thermal glazing | 39.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |

|                |    |    |      |      |       |    |                          |      |     |                    |                                      |
|----------------|----|----|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 81        | GF | S  | 55.5 | 25.5 | -9.5  | 21 | Standard thermal glazing | 42.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82        | GF | S  | 56   | 26   | -9    | 21 | Standard thermal glazing | 43   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82        | GF | W  | 53.5 | 23.5 | -11.5 | 19 | Standard thermal glazing | 40.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82        | GF | N  | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 82        | GF | E  | 49.5 | 19.5 | -15.5 | 15 | Standard thermal glazing | 36.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 83        | GF | S  | 56.3 | 26.3 | -8.7  | 21 | Standard thermal glazing | 43.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 83        | GF | NW | 49.1 | 19.1 | -15.9 | 14 | Standard thermal glazing | 36.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 83        | GF | NE | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 83        | GF | SE | 51.3 | 21.3 | -13.7 | 16 | Standard thermal glazing | 38.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 84 - 85   | GF | SW | 56.3 | 26.3 | -8.7  | 21 | Standard thermal glazing | 43.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 84 - 85   | GF | E  | 47.7 | 17.7 | -17.3 | 13 | Standard thermal glazing | 34.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 84 - 85   | GF | NE | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 84 - 85   | GF | NW | 52.8 | 22.8 | -12.2 | 18 | Standard thermal glazing | 39.8 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87   | GF | SW | 56.3 | 26.3 | -8.7  | 21 | Standard thermal glazing | 43.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87   | GF | SE | 53.9 | 23.9 | -11.1 | 19 | Standard thermal glazing | 40.9 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87   | GF | NE | 39   | 9    | -26   | 4  | Standard thermal glazing | 26   | No  | N/A                | Alternative Ventilation not Required |
| Plot 86 - 87   | GF | NW | 51   | 21   | -14   | 16 | Standard thermal glazing | 38   | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 88 - 89   | GF | W  | 54.8 | 24.8 | -10.2 | 20 | Standard thermal glazing | 41.8 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 88 - 89   | GF | N  | 40.1 | 10.1 | -24.9 | 5  | Standard thermal glazing | 27.1 | No  | N/A                | Alternative Ventilation not Required |
| Plot 88 - 89   | GF | E  | 41.5 | 11.5 | -23.5 | 7  | Standard thermal glazing | 28.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 88 - 89   | GF | S  | 54.5 | 24.5 | -10.5 | 20 | Standard thermal glazing | 41.5 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 90        | GF | W  | 54.7 | 24.7 | -10.3 | 20 | Standard thermal glazing | 41.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 90        | GF | N  | 45.3 | 15.3 | -19.7 | 10 | Standard thermal glazing | 32.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 90        | GF | E  | 41.6 | 11.6 | -23.4 | 7  | Standard thermal glazing | 28.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 90        | GF | S  | 51.4 | 21.4 | -13.6 | 16 | Standard thermal glazing | 38.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92   | GF | S  | 53.7 | 23.7 | -11.3 | 19 | Standard thermal glazing | 40.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92   | GF | W  | 53.2 | 23.2 | -11.8 | 18 | Standard thermal glazing | 40.2 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92   | GF | N  | 38.9 | 8.9  | -26.1 | 4  | Standard thermal glazing | 25.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 91 - 92   | GF | E  | 42.6 | 12.6 | -22.4 | 8  | Standard thermal glazing | 29.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 93 - 95   | GF | S  | 51.3 | 21.3 | -13.7 | 16 | Standard thermal glazing | 38.3 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 93 - 95   | GF | W  | 43.2 | 13.2 | -21.8 | 8  | Standard thermal glazing | 30.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 93 - 95   | GF | N  | 38.9 | 8.9  | -26.1 | 4  | Standard thermal glazing | 25.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 93 - 95   | GF | E  | 40.9 | 10.9 | -24.1 | 6  | Standard thermal glazing | 27.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 96 - 98   | GF | W  | 42.6 | 12.6 | -22.4 | 8  | Standard thermal glazing | 29.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 96 - 98   | GF | N  | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 96 - 98   | GF | E  | 41.2 | 11.2 | -23.8 | 6  | Standard thermal glazing | 28.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 96 - 98   | GF | S  | 49.7 | 19.7 | -15.3 | 15 | Standard thermal glazing | 36.7 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 99 - 100  | GF | W  | 42   | 12   | -23   | 7  | Standard thermal glazing | 29   | No  | N/A                | Alternative Ventilation not Required |
| Plot 99 - 100  | GF | N  | 38.5 | 8.5  | -26.5 | 4  | Standard thermal glazing | 25.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 99 - 100  | GF | E  | 41.7 | 11.7 | -23.3 | 7  | Standard thermal glazing | 28.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 99 - 100  | GF | S  | 48.4 | 18.4 | -16.6 | 13 | Standard thermal glazing | 35.4 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 101       | GF | S  | 48.8 | 18.8 | -16.2 | 14 | Standard thermal glazing | 35.8 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 101       | GF | W  | 42.4 | 12.4 | -22.6 | 7  | Standard thermal glazing | 29.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 101       | GF | N  | 38.3 | 8.3  | -26.7 | 3  | Standard thermal glazing | 25.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 101       | GF | E  | 45.6 | 15.6 | -19.4 | 11 | Standard thermal glazing | 32.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 102 - 103 | GF | W  | 46.9 | 16.9 | -18.1 | 12 | Standard thermal glazing | 33.9 | No  | N/A                | Alternative Ventilation not Required |

|                |    |    |      |      |       |    |                          |      |     |                    |                                      |
|----------------|----|----|------|------|-------|----|--------------------------|------|-----|--------------------|--------------------------------------|
| Plot 102 - 103 | GF | N  | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 102 - 103 | GF | E  | 40.9 | 10.9 | -24.1 | 6  | Standard thermal glazing | 27.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 102 - 103 | GF | S  | 49.1 | 19.1 | -15.9 | 14 | Standard thermal glazing | 36.1 | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 104       | GF | S  | 47.2 | 17.2 | -17.8 | 12 | Standard thermal glazing | 34.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 104       | GF | W  | 44.2 | 14.2 | -20.8 | 9  | Standard thermal glazing | 31.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 104       | GF | N  | 38.6 | 8.6  | -26.4 | 4  | Standard thermal glazing | 25.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 104       | GF | E  | 43.8 | 13.8 | -21.2 | 9  | Standard thermal glazing | 30.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 105 - 106 | GF | W  | 44   | 14   | -21   | 9  | Standard thermal glazing | 31   | No  | N/A                | Alternative Ventilation not Required |
| Plot 105 - 106 | GF | N  | 38.6 | 8.6  | -26.4 | 4  | Standard thermal glazing | 25.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 105 - 106 | GF | E  | 42.2 | 12.2 | -22.8 | 7  | Standard thermal glazing | 29.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 105 - 106 | GF | S  | 47.9 | 17.9 | -17.1 | 13 | Standard thermal glazing | 34.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 107 - 108 | GF | W  | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 107 - 108 | GF | N  | 38.3 | 8.3  | -26.7 | 3  | Standard thermal glazing | 25.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 107 - 108 | GF | E  | 40   | 10   | -25   | 5  | Standard thermal glazing | 27   | No  | N/A                | Alternative Ventilation not Required |
| Plot 107 - 108 | GF | S  | 47.9 | 17.9 | -17.1 | 13 | Standard thermal glazing | 34.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 109 - 111 | GF | W  | 42.2 | 12.2 | -22.8 | 7  | Standard thermal glazing | 29.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 109 - 111 | GF | N  | 38.4 | 8.4  | -26.6 | 3  | Standard thermal glazing | 25.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 109 - 111 | GF | E  | 39.9 | 9.9  | -25.1 | 5  | Standard thermal glazing | 26.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 109 - 111 | GF | S  | 48   | 18   | -17   | 13 | Standard thermal glazing | 35   | No  | N/A                | Alternative Ventilation not Required |
| Plot 112 - 114 | GF | W  | 45.8 | 15.8 | -19.2 | 11 | Standard thermal glazing | 32.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 112 - 114 | GF | N  | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 112 - 114 | GF | E  | 39.3 | 9.3  | -25.7 | 4  | Standard thermal glazing | 26.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 112 - 114 | GF | S  | 47   | 17   | -18   | 12 | Standard thermal glazing | 34   | No  | N/A                | Alternative Ventilation not Required |
| Plot 115 - 116 | GF | NW | 38.7 | 8.7  | -26.3 | 4  | Standard thermal glazing | 25.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 115 - 116 | GF | NE | 37   | 7    | -28   | 2  | Standard thermal glazing | 24   | No  | N/A                | Alternative Ventilation not Required |
| Plot 115 - 116 | GF | SE | 46.7 | 16.7 | -18.3 | 12 | Standard thermal glazing | 33.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 115 - 116 | GF | SW | 46.3 | 16.3 | -18.7 | 11 | Standard thermal glazing | 33.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 117       | GF | W  | 44.9 | 14.9 | -20.1 | 10 | Standard thermal glazing | 31.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 117       | GF | S  | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No  | N/A                | Alternative Ventilation not Required |
| Plot 117       | GF | E  | 37.8 | 7.8  | -27.2 | 3  | Standard thermal glazing | 24.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 117       | GF | N  | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 118       | GF | W  | 40   | 10   | -25   | 5  | Standard thermal glazing | 27   | No  | N/A                | Alternative Ventilation not Required |
| Plot 118       | GF | S  | 46.3 | 16.3 | -18.7 | 11 | Standard thermal glazing | 33.3 | No  | N/A                | Alternative Ventilation not Required |
| Plot 118       | GF | E  | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No  | N/A                | Alternative Ventilation not Required |
| Plot 118       | GF | N  | 36.6 | 6.6  | -28.4 | 2  | Standard thermal glazing | 23.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 119       | GF | E  | 37.6 | 7.6  | -27.4 | 3  | Standard thermal glazing | 24.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 119       | GF | N  | 36.6 | 6.6  | -28.4 | 2  | Standard thermal glazing | 23.6 | No  | N/A                | Alternative Ventilation not Required |
| Plot 119       | GF | W  | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 119       | GF | S  | 46.4 | 16.4 | -18.6 | 11 | Standard thermal glazing | 33.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 120       | GF | W  | 45.4 | 15.4 | -19.6 | 10 | Standard thermal glazing | 32.4 | No  | N/A                | Alternative Ventilation not Required |
| Plot 120       | GF | S  | 44.2 | 14.2 | -20.8 | 9  | Standard thermal glazing | 31.2 | No  | N/A                | Alternative Ventilation not Required |
| Plot 120       | GF | E  | 36.8 | 6.8  | -28.2 | 2  | Standard thermal glazing | 23.8 | No  | N/A                | Alternative Ventilation not Required |
| Plot 120       | GF | N  | 37.9 | 7.9  | -27.1 | 3  | Standard thermal glazing | 24.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 121       | GF | W  | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No  | N/A                | Alternative Ventilation not Required |
| Plot 121       | GF | S  | 40   | 10   | -25   | 5  | Standard thermal glazing | 27   | No  | N/A                | Alternative Ventilation not Required |
| Plot 121       | GF | E  | 37.1 | 7.1  | -27.9 | 2  | Standard thermal glazing | 24.1 | No  | N/A                | Alternative Ventilation not Required |

|          |    |   |      |      |       |    |                          |      |    |     |                                      |
|----------|----|---|------|------|-------|----|--------------------------|------|----|-----|--------------------------------------|
| Plot 121 | GF | N | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No | N/A | Alternative Ventilation not Required |
| Plot 122 | GF | W | 46.1 | 16.1 | -18.9 | 11 | Standard thermal glazing | 33.1 | No | N/A | Alternative Ventilation not Required |
| Plot 122 | GF | S | 39.7 | 9.7  | -25.3 | 5  | Standard thermal glazing | 26.7 | No | N/A | Alternative Ventilation not Required |
| Plot 122 | GF | E | 36.7 | 6.7  | -28.3 | 2  | Standard thermal glazing | 23.7 | No | N/A | Alternative Ventilation not Required |
| Plot 122 | GF | N | 37.7 | 7.7  | -27.3 | 3  | Standard thermal glazing | 24.7 | No | N/A | Alternative Ventilation not Required |
| Plot 123 | GF | S | 39.2 | 9.2  | -25.8 | 4  | Standard thermal glazing | 26.2 | No | N/A | Alternative Ventilation not Required |
| Plot 123 | GF | E | 36.9 | 6.9  | -28.1 | 2  | Standard thermal glazing | 23.9 | No | N/A | Alternative Ventilation not Required |
| Plot 123 | GF | N | 37.2 | 7.2  | -27.8 | 2  | Standard thermal glazing | 24.2 | No | N/A | Alternative Ventilation not Required |
| Plot 123 | GF | W | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No | N/A | Alternative Ventilation not Required |
| Plot 124 | GF | W | 45.9 | 15.9 | -19.1 | 11 | Standard thermal glazing | 32.9 | No | N/A | Alternative Ventilation not Required |
| Plot 124 | GF | S | 40.2 | 10.2 | -24.8 | 5  | Standard thermal glazing | 27.2 | No | N/A | Alternative Ventilation not Required |
| Plot 124 | GF | E | 36.1 | 6.1  | -28.9 | 1  | Standard thermal glazing | 23.1 | No | N/A | Alternative Ventilation not Required |
| Plot 124 | GF | N | 36.9 | 6.9  | -28.1 | 2  | Standard thermal glazing | 23.9 | No | N/A | Alternative Ventilation not Required |
| Plot 125 | GF | W | 45.5 | 15.5 | -19.5 | 11 | Standard thermal glazing | 32.5 | No | N/A | Alternative Ventilation not Required |
| Plot 125 | GF | S | 38.7 | 8.7  | -26.3 | 4  | Standard thermal glazing | 25.7 | No | N/A | Alternative Ventilation not Required |
| Plot 125 | GF | E | 36.9 | 6.9  | -28.1 | 2  | Standard thermal glazing | 23.9 | No | N/A | Alternative Ventilation not Required |
| Plot 125 | GF | N | 36.8 | 6.8  | -28.2 | 2  | Standard thermal glazing | 23.8 | No | N/A | Alternative Ventilation not Required |
| Plot 126 | GF | W | 45.3 | 15.3 | -19.7 | 10 | Standard thermal glazing | 32.3 | No | N/A | Alternative Ventilation not Required |
| Plot 126 | GF | S | 39.6 | 9.6  | -25.4 | 5  | Standard thermal glazing | 26.6 | No | N/A | Alternative Ventilation not Required |
| Plot 126 | GF | E | 36.7 | 6.7  | -28.3 | 2  | Standard thermal glazing | 23.7 | No | N/A | Alternative Ventilation not Required |
| Plot 126 | GF | N | 35.9 | 5.9  | -29.1 | 1  | Standard thermal glazing | 22.9 | No | N/A | Alternative Ventilation not Required |
| Plot 127 | GF | S | 41.9 | 11.9 | -23.1 | 7  | Standard thermal glazing | 28.9 | No | N/A | Alternative Ventilation not Required |
| Plot 127 | GF | W | 44.1 | 14.1 | -20.9 | 9  | Standard thermal glazing | 31.1 | No | N/A | Alternative Ventilation not Required |
| Plot 127 | GF | N | 35   | 5    | -30   | 0  | Standard thermal glazing | 22   | No | N/A | Alternative Ventilation not Required |
| Plot 127 | GF | E | 38.2 | 8.2  | -26.8 | 3  | Standard thermal glazing | 25.2 | No | N/A | Alternative Ventilation not Required |

**APPENDIX V**  
**NIGHT TIME FAÇADE NOISE LEVELS**  
**(Bedrooms)**

**Table A4: Night Time Façade Levels**

| Plot    | Storey | Facade Direction | Calculated LAeq, 8hr at Facade (dB) | Calculated Noise Level Inside Room (30dB reduction) (dB) | Difference with criteria (30dB) +/- | Required Sound Insulation Performance for Glazing (Rw +Ctr) (dB) | Commentary on Required Glazing | Calculated Internal Noise Level with a Partially Open Window (dB) | Alternative Ventilation Required? | Do Average Night-time Internal Noise Levels Achieve Compliance with AD-Q? | Acoustics Ventilation & Overheating Assessment - Appropriate AD-F System | Example Alternative Ventilation Scheme |
|---------|--------|------------------|-------------------------------------|----------------------------------------------------------|-------------------------------------|------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------|
| Plot 1  | 1st    | SE               | 33.9                                | 3.9                                                      | -26.1                               | 4                                                                | Standard thermal glazing       | 20.9                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 1  | 1st    | NE               | 28.6                                | -1.4                                                     | -31.4                               | -1                                                               | Standard thermal glazing       | 15.6                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 1  | 1st    | NW               | 31                                  | 1                                                        | -29                                 | 1                                                                | Standard thermal glazing       | 18                                                                | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 1  | 1st    | SW               | 35.4                                | 5.4                                                      | -24.6                               | 5                                                                | Standard thermal glazing       | 22.4                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 2  | 1st    | W                | 35.3                                | 5.3                                                      | -24.7                               | 5                                                                | Standard thermal glazing       | 22.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 2  | 1st    | S                | 36.3                                | 6.3                                                      | -23.7                               | 6                                                                | Standard thermal glazing       | 23.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 2  | 1st    | E                | 29.2                                | -0.8                                                     | -30.8                               | -1                                                               | Standard thermal glazing       | 16.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 2  | 1st    | N                | 29.1                                | -0.9                                                     | -30.9                               | -1                                                               | Standard thermal glazing       | 16.1                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 3  | 1st    | W                | 36.4                                | 6.4                                                      | -23.6                               | 6                                                                | Standard thermal glazing       | 23.4                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 3  | 1st    | S                | 36.5                                | 6.5                                                      | -23.5                               | 7                                                                | Standard thermal glazing       | 23.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 3  | 1st    | E                | 29.3                                | -0.7                                                     | -30.7                               | -1                                                               | Standard thermal glazing       | 16.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 3  | 1st    | N                | 29.2                                | -0.8                                                     | -30.8                               | -1                                                               | Standard thermal glazing       | 16.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 4  | 1st    | W                | 36.7                                | 6.7                                                      | -23.3                               | 7                                                                | Standard thermal glazing       | 23.7                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 4  | 1st    | S                | 36.8                                | 6.8                                                      | -23.2                               | 7                                                                | Standard thermal glazing       | 23.8                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 4  | 1st    | E                | 29.5                                | -0.5                                                     | -30.5                               | -1                                                               | Standard thermal glazing       | 16.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 4  | 1st    | N                | 30                                  | 0                                                        | -30                                 | 0                                                                | Standard thermal glazing       | 17                                                                | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 5  | 1st    | W                | 32.2                                | 2.2                                                      | -27.8                               | 2                                                                | Standard thermal glazing       | 19.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 5  | 1st    | S                | 36.2                                | 6.2                                                      | -23.8                               | 6                                                                | Standard thermal glazing       | 23.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 5  | 1st    | E                | 29.5                                | -0.5                                                     | -30.5                               | -1                                                               | Standard thermal glazing       | 16.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 5  | 1st    | N                | 29.5                                | -0.5                                                     | -30.5                               | -1                                                               | Standard thermal glazing       | 16.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 6  | 1st    | S                | 35.6                                | 5.6                                                      | -24.4                               | 6                                                                | Standard thermal glazing       | 22.6                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 6  | 1st    | W                | 35.5                                | 5.5                                                      | -24.5                               | 6                                                                | Standard thermal glazing       | 22.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 6  | 1st    | N                | 29.4                                | -0.6                                                     | -30.6                               | -1                                                               | Standard thermal glazing       | 16.4                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 6  | 1st    | E                | 29.2                                | -0.8                                                     | -30.8                               | -1                                                               | Standard thermal glazing       | 16.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 7  | 1st    | SE               | 32.7                                | 2.7                                                      | -27.3                               | 3                                                                | Standard thermal glazing       | 19.7                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 7  | 1st    | NE               | 29.2                                | -0.8                                                     | -30.8                               | -1                                                               | Standard thermal glazing       | 16.2                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 7  | 1st    | NW               | 30.5                                | 0.5                                                      | -29.5                               | 1                                                                | Standard thermal glazing       | 17.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 7  | 1st    | SW               | 35.9                                | 5.9                                                      | -24.1                               | 6                                                                | Standard thermal glazing       | 22.9                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 8  | 1st    | SW               | 35.7                                | 5.7                                                      | -24.3                               | 6                                                                | Standard thermal glazing       | 22.7                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 8  | 1st    | SE               | 32.9                                | 2.9                                                      | -27.1                               | 3                                                                | Standard thermal glazing       | 19.9                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 8  | 1st    | NE               | 29.3                                | -0.7                                                     | -30.7                               | -1                                                               | Standard thermal glazing       | 16.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 8  | 1st    | NW               | 31                                  | 1                                                        | -29                                 | 1                                                                | Standard thermal glazing       | 18                                                                | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 9  | 1st    | SW               | 36.5                                | 6.5                                                      | -23.5                               | 7                                                                | Standard thermal glazing       | 23.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 9  | 1st    | SE               | 33.5                                | 3.5                                                      | -26.5                               | 4                                                                | Standard thermal glazing       | 20.5                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 9  | 1st    | NE               | 29.3                                | -0.7                                                     | -30.7                               | -1                                                               | Standard thermal glazing       | 16.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 9  | 1st    | NW               | 30.8                                | 0.8                                                      | -29.2                               | 1                                                                | Standard thermal glazing       | 17.8                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 12 | 1st    | W                | 37                                  | 7                                                        | -23                                 | 7                                                                | Standard thermal glazing       | 24                                                                | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 12 | 1st    | S                | 37.4                                | 7.4                                                      | -22.6                               | 7                                                                | Standard thermal glazing       | 24.4                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 12 | 1st    | E                | 29.8                                | -0.2                                                     | -30.2                               | 0                                                                | Standard thermal glazing       | 16.8                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 12 | 1st    | N                | 30.3                                | 0.3                                                      | -29.7                               | 0                                                                | Standard thermal glazing       | 17.3                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |
| Plot 13 | 1st    | W                | 38.4                                | 8.4                                                      | -21.6                               | 8                                                                | Standard thermal glazing       | 25.4                                                              | No                                | Yes                                                                       | N/A                                                                      | Alternative Ventilation Not Required   |

|         |     |    |      |      |       |    |                          |      |    |     |     |                                      |
|---------|-----|----|------|------|-------|----|--------------------------|------|----|-----|-----|--------------------------------------|
| Plot 13 | 1st | N  | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 13 | 1st | E  | 30.4 | 0.4  | -29.6 | 0  | Standard thermal glazing | 17.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 13 | 1st | S  | 38.6 | 8.6  | -21.4 | 9  | Standard thermal glazing | 25.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 14 | 1st | W  | 34.3 | 4.3  | -25.7 | 4  | Standard thermal glazing | 21.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 14 | 1st | S  | 37.6 | 7.6  | -22.4 | 8  | Standard thermal glazing | 24.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 14 | 1st | E  | 30.2 | 0.2  | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 14 | 1st | N  | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 15 | 1st | W  | 32.8 | 2.8  | -27.2 | 3  | Standard thermal glazing | 19.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 15 | 1st | S  | 37.8 | 7.8  | -22.2 | 8  | Standard thermal glazing | 24.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 15 | 1st | E  | 30   | 0    | -30   | 0  | Standard thermal glazing | 17   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 15 | 1st | N  | 30.7 | 0.7  | -29.3 | 1  | Standard thermal glazing | 17.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 16 | 1st | SE | 32.8 | 2.8  | -27.2 | 3  | Standard thermal glazing | 19.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 16 | 1st | NE | 29.5 | -0.5 | -30.5 | -1 | Standard thermal glazing | 16.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 16 | 1st | NW | 31.8 | 1.8  | -28.2 | 2  | Standard thermal glazing | 18.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 16 | 1st | SW | 36.1 | 6.1  | -23.9 | 6  | Standard thermal glazing | 23.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 17 | 1st | SE | 35   | 5    | -25   | 5  | Standard thermal glazing | 22   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 17 | 1st | NE | 29.6 | -0.4 | -30.4 | 0  | Standard thermal glazing | 16.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 17 | 1st | NW | 31   | 1    | -29   | 1  | Standard thermal glazing | 18   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 17 | 1st | SW | 36.6 | 6.6  | -23.4 | 7  | Standard thermal glazing | 23.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 18 | 1st | SW | 36.7 | 6.7  | -23.3 | 7  | Standard thermal glazing | 23.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 18 | 1st | SE | 33.2 | 3.2  | -26.8 | 3  | Standard thermal glazing | 20.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 18 | 1st | NE | 29.5 | -0.5 | -30.5 | -1 | Standard thermal glazing | 16.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 18 | 1st | NW | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 19 | 1st | SW | 36.8 | 6.8  | -23.2 | 7  | Standard thermal glazing | 23.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 19 | 1st | SE | 33.7 | 3.7  | -26.3 | 4  | Standard thermal glazing | 20.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 19 | 1st | NE | 29.6 | -0.4 | -30.4 | 0  | Standard thermal glazing | 16.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 19 | 1st | NW | 31.6 | 1.6  | -28.4 | 2  | Standard thermal glazing | 18.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 20 | 1st | SW | 37.1 | 7.1  | -22.9 | 7  | Standard thermal glazing | 24.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 20 | 1st | SE | 33.1 | 3.1  | -26.9 | 3  | Standard thermal glazing | 20.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 20 | 1st | NE | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 20 | 1st | NW | 31.6 | 1.6  | -28.4 | 2  | Standard thermal glazing | 18.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 21 | 1st | SW | 37.2 | 7.2  | -22.8 | 7  | Standard thermal glazing | 24.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 21 | 1st | SE | 34.3 | 4.3  | -25.7 | 4  | Standard thermal glazing | 21.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 21 | 1st | NE | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 21 | 1st | NW | 31.1 | 1.1  | -28.9 | 1  | Standard thermal glazing | 18.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 22 | 1st | SW | 37.1 | 7.1  | -22.9 | 7  | Standard thermal glazing | 24.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 22 | 1st | SE | 35.7 | 5.7  | -24.3 | 6  | Standard thermal glazing | 22.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 22 | 1st | NE | 29.9 | -0.1 | -30.1 | 0  | Standard thermal glazing | 16.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 22 | 1st | NW | 31.7 | 1.7  | -28.3 | 2  | Standard thermal glazing | 18.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 23 | 1st | SW | 36.9 | 6.9  | -23.1 | 7  | Standard thermal glazing | 23.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 23 | 1st | SE | 36.1 | 6.1  | -23.9 | 6  | Standard thermal glazing | 23.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 23 | 1st | NE | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 23 | 1st | NW | 32.6 | 2.6  | -27.4 | 3  | Standard thermal glazing | 19.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 24 | 1st | W  | 39.4 | 9.4  | -20.6 | 9  | Standard thermal glazing | 26.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 24 | 1st | S  | 40.1 | 10.1 | -19.9 | 10 | Standard thermal glazing | 27.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 24 | 1st | E  | 31.6 | 1.6  | -28.4 | 2  | Standard thermal glazing | 18.6 | No | Yes | N/A | Alternative Ventilation Not Required |

|              |     |    |      |     |       |    |                          |      |    |     |     |                                      |
|--------------|-----|----|------|-----|-------|----|--------------------------|------|----|-----|-----|--------------------------------------|
| Plot 24      | 1st | N  | 30.1 | 0.1 | -29.9 | 0  | Standard thermal glazing | 17.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 25      | 1st | SW | 38.4 | 8.4 | -21.6 | 8  | Standard thermal glazing | 25.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 25      | 1st | SE | 36.5 | 6.5 | -23.5 | 7  | Standard thermal glazing | 23.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 25      | 1st | NE | 30.2 | 0.2 | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 25      | 1st | NW | 33.8 | 3.8 | -26.2 | 4  | Standard thermal glazing | 20.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 26      | 1st | SW | 38.7 | 8.7 | -21.3 | 9  | Standard thermal glazing | 25.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 26      | 1st | SE | 37.3 | 7.3 | -22.7 | 7  | Standard thermal glazing | 24.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 26      | 1st | NE | 30.2 | 0.2 | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 26      | 1st | NW | 33.5 | 3.5 | -26.5 | 4  | Standard thermal glazing | 20.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 27      | 1st | SW | 38.2 | 8.2 | -21.8 | 8  | Standard thermal glazing | 25.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 27      | 1st | SE | 35.7 | 5.7 | -24.3 | 6  | Standard thermal glazing | 22.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 27      | 1st | NE | 30.2 | 0.2 | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 27      | 1st | NW | 34   | 4   | -26   | 4  | Standard thermal glazing | 21   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 28      | 1st | SE | 36.6 | 6.6 | -23.4 | 7  | Standard thermal glazing | 23.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 28      | 1st | NE | 30.3 | 0.3 | -29.7 | 0  | Standard thermal glazing | 17.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 28      | 1st | NW | 32.6 | 2.6 | -27.4 | 3  | Standard thermal glazing | 19.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 28      | 1st | SW | 38.1 | 8.1 | -21.9 | 8  | Standard thermal glazing | 25.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 29 - 30 | 1st | W  | 39   | 9   | -21   | 9  | Standard thermal glazing | 26   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 29 - 30 | 1st | NW | 32.9 | 2.9 | -27.1 | 3  | Standard thermal glazing | 19.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 29 - 30 | 1st | NE | 30.3 | 0.3 | -29.7 | 0  | Standard thermal glazing | 17.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 29 - 30 | 1st | SE | 36.1 | 6.1 | -23.9 | 6  | Standard thermal glazing | 23.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 31      | 1st | W  | 38.3 | 8.3 | -21.7 | 8  | Standard thermal glazing | 25.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 31      | 1st | S  | 35.6 | 5.6 | -24.4 | 6  | Standard thermal glazing | 22.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 31      | 1st | E  | 30.4 | 0.4 | -29.6 | 0  | Standard thermal glazing | 17.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 31      | 1st | N  | 31.2 | 1.2 | -28.8 | 1  | Standard thermal glazing | 18.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 32      | 1st | W  | 38.5 | 8.5 | -21.5 | 9  | Standard thermal glazing | 25.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 32      | 1st | S  | 38.1 | 8.1 | -21.9 | 8  | Standard thermal glazing | 25.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 32      | 1st | E  | 31.5 | 1.5 | -28.5 | 2  | Standard thermal glazing | 18.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 32      | 1st | N  | 30.8 | 0.8 | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 33      | 1st | SE | 36.8 | 6.8 | -23.2 | 7  | Standard thermal glazing | 23.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 33      | 1st | NE | 30.4 | 0.4 | -29.6 | 0  | Standard thermal glazing | 17.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 33      | 1st | NW | 36.6 | 6.6 | -23.4 | 7  | Standard thermal glazing | 23.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 33      | 1st | SW | 39.4 | 9.4 | -20.6 | 9  | Standard thermal glazing | 26.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 34      | 1st | SW | 39.2 | 9.2 | -20.8 | 9  | Standard thermal glazing | 26.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 34      | 1st | SE | 34.9 | 4.9 | -25.1 | 5  | Standard thermal glazing | 21.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 34      | 1st | NE | 30.6 | 0.6 | -29.4 | 1  | Standard thermal glazing | 17.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 34      | 1st | NW | 34.3 | 4.3 | -25.7 | 4  | Standard thermal glazing | 21.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 34      | 1st | SW | 38.9 | 8.9 | -21.1 | 9  | Standard thermal glazing | 25.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 35      | 1st | SW | 40   | 10  | -20   | 10 | Standard thermal glazing | 27   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 35      | 1st | SE | 36.3 | 6.3 | -23.7 | 6  | Standard thermal glazing | 23.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 35      | 1st | NE | 30.7 | 0.7 | -29.3 | 1  | Standard thermal glazing | 17.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 35      | 1st | NW | 33.2 | 3.2 | -26.8 | 3  | Standard thermal glazing | 20.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 36      | 1st | SW | 39   | 9   | -21   | 9  | Standard thermal glazing | 26   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 36      | 1st | SE | 37.4 | 7.4 | -22.6 | 7  | Standard thermal glazing | 24.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 36      | 1st | NE | 30.7 | 0.7 | -29.3 | 1  | Standard thermal glazing | 17.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 36      | 1st | NW | 33.9 | 3.9 | -26.1 | 4  | Standard thermal glazing | 20.9 | No | Yes | N/A | Alternative Ventilation Not Required |

|              |     |    |      |      |       |    |                          |      |     |     |                    |                                      |
|--------------|-----|----|------|------|-------|----|--------------------------|------|-----|-----|--------------------|--------------------------------------|
| Plot 37      | 1st | SW | 41.4 | 11.4 | -18.6 | 11 | Standard thermal glazing | 28.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 37      | 1st | NW | 35.2 | 5.2  | -24.8 | 5  | Standard thermal glazing | 22.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 37      | 1st | NE | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 37      | 1st | SE | 40.1 | 10.1 | -19.9 | 10 | Standard thermal glazing | 27.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 38      | 1st | SW | 32.5 | 2.5  | -27.5 | 3  | Standard thermal glazing | 19.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 38      | 1st | SE | 37.7 | 7.7  | -22.3 | 8  | Standard thermal glazing | 24.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 38      | 1st | NE | 30.7 | 0.7  | -29.3 | 1  | Standard thermal glazing | 17.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 38      | 1st | NW | 35.3 | 5.3  | -24.7 | 5  | Standard thermal glazing | 22.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 39      | 1st | SE | 39.2 | 9.2  | -20.8 | 9  | Standard thermal glazing | 26.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 39      | 1st | SW | 35   | 5    | -25   | 5  | Standard thermal glazing | 22   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 39      | 1st | NW | 35.1 | 5.1  | -24.9 | 5  | Standard thermal glazing | 22.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 39      | 1st | NE | 30.4 | 0.4  | -29.6 | 0  | Standard thermal glazing | 17.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 10 - 11 | 1st | E  | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 10 - 11 | 1st | N  | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 10 - 11 | 1st | W  | 37   | 7    | -23   | 7  | Standard thermal glazing | 24   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 10 - 11 | 1st | S  | 37   | 7    | -23   | 7  | Standard thermal glazing | 24   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 40      | 1st | S  | 38.7 | 8.7  | -21.3 | 9  | Standard thermal glazing | 25.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 40      | 1st | E  | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 40      | 1st | N  | 31.8 | 1.8  | -28.2 | 2  | Standard thermal glazing | 18.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 40      | 1st | W  | 40.2 | 10.2 | -19.8 | 10 | Standard thermal glazing | 27.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 41 - 42 | 1st | SE | 38.6 | 8.6  | -21.4 | 9  | Standard thermal glazing | 25.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 41 - 42 | 1st | NE | 31.1 | 1.1  | -28.9 | 1  | Standard thermal glazing | 18.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 41 - 42 | 1st | NW | 35   | 5    | -25   | 5  | Standard thermal glazing | 22   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 41 - 42 | 1st | SW | 39.5 | 9.5  | -20.5 | 10 | Standard thermal glazing | 26.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 43      | 1st | S  | 40.2 | 10.2 | -19.8 | 10 | Standard thermal glazing | 27.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 43      | 1st | E  | 32.7 | 2.7  | -27.3 | 3  | Standard thermal glazing | 19.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 43      | 1st | N  | 31.8 | 1.8  | -28.2 | 2  | Standard thermal glazing | 18.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 43      | 1st | W  | 39.7 | 9.7  | -20.3 | 10 | Standard thermal glazing | 26.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 44      | 1st | SW | 39.6 | 9.6  | -20.4 | 10 | Standard thermal glazing | 26.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 44      | 1st | SE | 38.2 | 8.2  | -21.8 | 8  | Standard thermal glazing | 25.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 44      | 1st | NE | 31.1 | 1.1  | -28.9 | 1  | Standard thermal glazing | 18.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 44      | 1st | NW | 34.7 | 4.7  | -25.3 | 5  | Standard thermal glazing | 21.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 45      | 1st | SW | 39.8 | 9.8  | -20.2 | 10 | Standard thermal glazing | 26.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 45      | 1st | SE | 38.3 | 8.3  | -21.7 | 8  | Standard thermal glazing | 25.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 45      | 1st | NE | 31.2 | 1.2  | -28.8 | 1  | Standard thermal glazing | 18.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 45      | 1st | NW | 35.7 | 5.7  | -24.3 | 6  | Standard thermal glazing | 22.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 46      | 1st | W  | 42.1 | 12.1 | -17.9 | 12 | Standard thermal glazing | 29.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 46      | 1st | N  | 33.2 | 3.2  | -26.8 | 3  | Standard thermal glazing | 20.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 46      | 1st | E  | 31.6 | 1.6  | -28.4 | 2  | Standard thermal glazing | 18.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 46      | 1st | S  | 42.7 | 12.7 | -17.3 | 13 | Standard thermal glazing | 29.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 47      | 1st | S  | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 47      | 1st | W  | 35.7 | 5.7  | -24.3 | 6  | Standard thermal glazing | 22.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 47      | 1st | N  | 33.9 | 3.9  | -26.1 | 4  | Standard thermal glazing | 20.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 47      | 1st | E  | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 48      | 1st | W  | 36.7 | 6.7  | -23.3 | 7  | Standard thermal glazing | 23.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 48      | 1st | S  | 44.1 | 14.1 | -15.9 | 14 | Standard thermal glazing | 31.1 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |

|              |     |   |      |      |       |    |                          |      |     |     |                    |                                      |
|--------------|-----|---|------|------|-------|----|--------------------------|------|-----|-----|--------------------|--------------------------------------|
| Plot 48      | 1st | E | 32.3 | 2.3  | -27.7 | 2  | Standard thermal glazing | 19.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 48      | 1st | N | 33.7 | 3.7  | -26.3 | 4  | Standard thermal glazing | 20.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 49      | 1st | S | 44.6 | 14.6 | -15.4 | 15 | Standard thermal glazing | 31.6 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 49      | 1st | E | 32.6 | 2.6  | -27.4 | 3  | Standard thermal glazing | 19.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 49      | 1st | N | 33.1 | 3.1  | -26.9 | 3  | Standard thermal glazing | 20.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 49      | 1st | W | 43.4 | 13.4 | -16.6 | 13 | Standard thermal glazing | 30.4 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 50      | 1st | S | 44.8 | 14.8 | -15.2 | 15 | Standard thermal glazing | 31.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 50      | 1st | E | 35.4 | 5.4  | -24.6 | 5  | Standard thermal glazing | 22.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 50      | 1st | N | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 50      | 1st | W | 43.6 | 13.6 | -16.4 | 14 | Standard thermal glazing | 30.6 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 51 - 53 | 1st | S | 41.2 | 11.2 | -18.8 | 11 | Standard thermal glazing | 28.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 51 - 53 | 1st | E | 33.6 | 3.6  | -26.4 | 4  | Standard thermal glazing | 20.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 51 - 53 | 1st | N | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 51 - 53 | 1st | W | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 54      | 1st | S | 36.4 | 6.4  | -23.6 | 6  | Standard thermal glazing | 23.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 54      | 1st | W | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 54      | 1st | N | 31.9 | 1.9  | -28.1 | 2  | Standard thermal glazing | 18.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 54      | 1st | E | 34   | 4    | -26   | 4  | Standard thermal glazing | 21   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 55      | 1st | W | 41.2 | 11.2 | -18.8 | 11 | Standard thermal glazing | 28.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 55      | 1st | S | 36.9 | 6.9  | -23.1 | 7  | Standard thermal glazing | 23.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 55      | 1st | E | 32.7 | 2.7  | -27.3 | 3  | Standard thermal glazing | 19.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 55      | 1st | N | 32.1 | 2.1  | -27.9 | 2  | Standard thermal glazing | 19.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | W | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | S | 38.5 | 8.5  | -21.5 | 9  | Standard thermal glazing | 25.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | E | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | N | 32.1 | 2.1  | -27.9 | 2  | Standard thermal glazing | 19.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | W | 39.5 | 9.5  | -20.5 | 10 | Standard thermal glazing | 26.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | S | 37.9 | 7.9  | -22.1 | 8  | Standard thermal glazing | 24.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | E | 36.5 | 6.5  | -23.5 | 7  | Standard thermal glazing | 23.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 56      | 1st | N | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 58 - 60 | 1st | S | 36.8 | 6.8  | -23.2 | 7  | Standard thermal glazing | 23.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 58 - 60 | 1st | W | 40.4 | 10.4 | -19.6 | 10 | Standard thermal glazing | 27.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 58 - 60 | 1st | N | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 58 - 60 | 1st | E | 35   | 5    | -25   | 5  | Standard thermal glazing | 22   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 61 - 63 | 1st | W | 40.4 | 10.4 | -19.6 | 10 | Standard thermal glazing | 27.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 61 - 63 | 1st | S | 41.5 | 11.5 | -18.5 | 12 | Standard thermal glazing | 28.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 61 - 63 | 1st | E | 34.9 | 4.9  | -25.1 | 5  | Standard thermal glazing | 21.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 61 - 63 | 1st | N | 32.5 | 2.5  | -27.5 | 3  | Standard thermal glazing | 19.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 64      | 1st | S | 43.9 | 13.9 | -16.1 | 14 | Standard thermal glazing | 30.9 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 64      | 1st | E | 33.2 | 3.2  | -26.8 | 3  | Standard thermal glazing | 20.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 64      | 1st | N | 35.9 | 5.9  | -24.1 | 6  | Standard thermal glazing | 22.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 64      | 1st | W | 42.1 | 12.1 | -17.9 | 12 | Standard thermal glazing | 29.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 65      | 1st | W | 41.8 | 11.8 | -18.2 | 12 | Standard thermal glazing | 28.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 65      | 1st | S | 45.9 | 15.9 | -14.1 | 16 | Standard thermal glazing | 32.9 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 65      | 1st | E | 33.6 | 3.6  | -26.4 | 4  | Standard thermal glazing | 20.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 65      | 1st | N | 34.9 | 4.9  | -25.1 | 5  | Standard thermal glazing | 21.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |

|              |     |   |      |      |       |    |                          |      |     |     |                    |                                      |
|--------------|-----|---|------|------|-------|----|--------------------------|------|-----|-----|--------------------|--------------------------------------|
| Plot 66      | 1st | S | 46.4 | 16.4 | -13.6 | 16 | Standard thermal glazing | 33.4 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 66      | 1st | E | 37.2 | 7.2  | -22.8 | 7  | Standard thermal glazing | 24.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 66      | 1st | N | 33.8 | 3.8  | -26.2 | 4  | Standard thermal glazing | 20.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 66      | 1st | W | 43.6 | 13.6 | -16.4 | 14 | Standard thermal glazing | 30.6 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 67      | 1st | E | 38.7 | 8.7  | -21.3 | 9  | Standard thermal glazing | 25.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 67      | 1st | N | 37.5 | 7.5  | -22.5 | 8  | Standard thermal glazing | 24.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 67      | 1st | W | 46.1 | 16.1 | -13.9 | 16 | Standard thermal glazing | 33.1 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 67      | 1st | S | 46.8 | 16.8 | -13.2 | 17 | Standard thermal glazing | 33.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 68      | 1st | W | 42.4 | 12.4 | -17.6 | 12 | Standard thermal glazing | 29.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 68      | 1st | S | 42.5 | 12.5 | -17.5 | 13 | Standard thermal glazing | 29.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 68      | 1st | E | 35.9 | 5.9  | -24.1 | 6  | Standard thermal glazing | 22.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 68      | 1st | N | 33.4 | 3.4  | -26.6 | 3  | Standard thermal glazing | 20.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 69 - 70 | 1st | S | 37.3 | 7.3  | -22.7 | 7  | Standard thermal glazing | 24.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 69 - 70 | 1st | W | 42.4 | 12.4 | -17.6 | 12 | Standard thermal glazing | 29.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 69 - 70 | 1st | N | 32.9 | 2.9  | -27.1 | 3  | Standard thermal glazing | 19.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 69 - 70 | 1st | E | 34.8 | 4.8  | -25.2 | 5  | Standard thermal glazing | 21.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 71 - 72 | 1st | S | 37.6 | 7.6  | -22.4 | 8  | Standard thermal glazing | 24.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 71 - 72 | 1st | W | 42.2 | 12.2 | -17.8 | 12 | Standard thermal glazing | 29.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 71 - 72 | 1st | N | 32.7 | 2.7  | -27.3 | 3  | Standard thermal glazing | 19.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 71 - 72 | 1st | E | 37.4 | 7.4  | -22.6 | 7  | Standard thermal glazing | 24.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 73      | 1st | S | 38.2 | 8.2  | -21.8 | 8  | Standard thermal glazing | 25.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 73      | 1st | E | 38.3 | 8.3  | -21.7 | 8  | Standard thermal glazing | 25.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 73      | 1st | N | 32.8 | 2.8  | -27.2 | 3  | Standard thermal glazing | 19.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 73      | 1st | W | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 74      | 1st | S | 35.6 | 5.6  | -24.4 | 6  | Standard thermal glazing | 22.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 74      | 1st | E | 36.4 | 6.4  | -23.6 | 6  | Standard thermal glazing | 23.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 74      | 1st | N | 32.4 | 2.4  | -27.6 | 2  | Standard thermal glazing | 19.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 74      | 1st | W | 41.3 | 11.3 | -18.7 | 11 | Standard thermal glazing | 28.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 75 - 76 | 1st | S | 41.4 | 11.4 | -18.6 | 11 | Standard thermal glazing | 28.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 75 - 76 | 1st | W | 40.5 | 10.5 | -19.5 | 11 | Standard thermal glazing | 27.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 75 - 76 | 1st | N | 32.7 | 2.7  | -27.3 | 3  | Standard thermal glazing | 19.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 75 - 76 | 1st | E | 38.3 | 8.3  | -21.7 | 8  | Standard thermal glazing | 25.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 77      | 1st | S | 41.7 | 11.7 | -18.3 | 12 | Standard thermal glazing | 28.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 77      | 1st | W | 39   | 9    | -21   | 9  | Standard thermal glazing | 26   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 77      | 1st | N | 32.8 | 2.8  | -27.2 | 3  | Standard thermal glazing | 19.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 77      | 1st | E | 36.3 | 6.3  | -23.7 | 6  | Standard thermal glazing | 23.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 78      | 1st | S | 40.8 | 10.8 | -19.2 | 11 | Standard thermal glazing | 27.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 78      | 1st | W | 40.1 | 10.1 | -19.9 | 10 | Standard thermal glazing | 27.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 78      | 1st | N | 32.8 | 2.8  | -27.2 | 3  | Standard thermal glazing | 19.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 78      | 1st | E | 40.4 | 10.4 | -19.6 | 10 | Standard thermal glazing | 27.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 79 - 80 | 1st | N | 33.1 | 3.1  | -26.9 | 3  | Standard thermal glazing | 20.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 79 - 80 | 1st | E | 39.9 | 9.9  | -20.1 | 10 | Standard thermal glazing | 26.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 79 - 80 | 1st | S | 43.1 | 13.1 | -16.9 | 13 | Standard thermal glazing | 30.1 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 79 - 80 | 1st | W | 42   | 12   | -18   | 12 | Standard thermal glazing | 29   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 81      | 1st | W | 40.9 | 10.9 | -19.1 | 11 | Standard thermal glazing | 27.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 81      | 1st | N | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |

|               |     |    |      |      |       |    |                          |      |     |     |                    |                                      |
|---------------|-----|----|------|------|-------|----|--------------------------|------|-----|-----|--------------------|--------------------------------------|
| Plot 81       | 1st | E  | 43.4 | 13.4 | -16.6 | 13 | Standard thermal glazing | 30.4 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 81       | 1st | S  | 47.1 | 17.1 | -12.9 | 17 | Standard thermal glazing | 34.1 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82       | 1st | S  | 47.5 | 17.5 | -12.5 | 18 | Standard thermal glazing | 34.5 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82       | 1st | W  | 45.3 | 15.3 | -14.7 | 15 | Standard thermal glazing | 32.3 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 82       | 1st | N  | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 82       | 1st | E  | 41.2 | 11.2 | -18.8 | 11 | Standard thermal glazing | 28.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 83       | 1st | S  | 47.8 | 17.8 | -12.2 | 18 | Standard thermal glazing | 34.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 83       | 1st | NW | 41   | 11   | -19   | 11 | Standard thermal glazing | 28   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 83       | 1st | NE | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 83       | 1st | SE | 42.9 | 12.9 | -17.1 | 13 | Standard thermal glazing | 29.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 84 - 85  | 1st | SW | 47.8 | 17.8 | -12.2 | 18 | Standard thermal glazing | 34.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 84 - 85  | 1st | E  | 39.8 | 9.8  | -20.2 | 10 | Standard thermal glazing | 26.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 84 - 85  | 1st | NE | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 84 - 85  | 1st | NW | 44.6 | 14.6 | -15.4 | 15 | Standard thermal glazing | 31.6 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87  | 1st | SW | 47.8 | 17.8 | -12.2 | 18 | Standard thermal glazing | 34.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87  | 1st | SE | 45.4 | 15.4 | -14.6 | 15 | Standard thermal glazing | 32.4 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 86 - 87  | 1st | NE | 33   | 3    | -27   | 3  | Standard thermal glazing | 20   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 86 - 87  | 1st | NW | 42.8 | 12.8 | -17.2 | 13 | Standard thermal glazing | 29.8 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 88 - 89  | 1st | W  | 46.2 | 16.2 | -13.8 | 16 | Standard thermal glazing | 33.2 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 88 - 89  | 1st | N  | 33.4 | 3.4  | -26.6 | 3  | Standard thermal glazing | 20.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 88 - 89  | 1st | E  | 36.3 | 6.3  | -23.7 | 6  | Standard thermal glazing | 23.3 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 88 - 89  | 1st | S  | 46.1 | 16.1 | -13.9 | 16 | Standard thermal glazing | 33.1 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 90       | 1st | W  | 46.2 | 16.2 | -13.8 | 16 | Standard thermal glazing | 33.2 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 90       | 1st | N  | 37.5 | 7.5  | -22.5 | 8  | Standard thermal glazing | 24.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 90       | 1st | E  | 36   | 6    | -24   | 6  | Standard thermal glazing | 23   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 90       | 1st | S  | 43.3 | 13.3 | -16.7 | 13 | Standard thermal glazing | 30.3 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92  | 1st | S  | 45.4 | 15.4 | -14.6 | 15 | Standard thermal glazing | 32.4 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92  | 1st | W  | 44.8 | 14.8 | -15.2 | 15 | Standard thermal glazing | 31.8 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 91 - 92  | 1st | N  | 32.5 | 2.5  | -27.5 | 3  | Standard thermal glazing | 19.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 91 - 92  | 1st | E  | 36.6 | 6.6  | -23.4 | 7  | Standard thermal glazing | 23.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 93 - 95  | 1st | S  | 43.5 | 13.5 | -16.5 | 14 | Standard thermal glazing | 30.5 | Yes | Yes | ADF Systems 1 or 2 | Acoustic-grade Trickle Ventilator    |
| Plot 93 - 95  | 1st | W  | 36.6 | 6.6  | -23.4 | 7  | Standard thermal glazing | 23.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 93 - 95  | 1st | N  | 32.5 | 2.5  | -27.5 | 3  | Standard thermal glazing | 19.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 93 - 95  | 1st | E  | 35   | 5    | -25   | 5  | Standard thermal glazing | 22   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 96 - 98  | 1st | W  | 36.7 | 6.7  | -23.3 | 7  | Standard thermal glazing | 23.7 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 96 - 98  | 1st | N  | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 96 - 98  | 1st | E  | 35.6 | 5.6  | -24.4 | 6  | Standard thermal glazing | 22.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 96 - 98  | 1st | S  | 42.4 | 12.4 | -17.6 | 12 | Standard thermal glazing | 29.4 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 99 - 100 | 1st | W  | 35.9 | 5.9  | -24.1 | 6  | Standard thermal glazing | 22.9 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 99 - 100 | 1st | N  | 32.2 | 2.2  | -27.8 | 2  | Standard thermal glazing | 19.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 99 - 100 | 1st | E  | 35.5 | 5.5  | -24.5 | 6  | Standard thermal glazing | 22.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 99 - 100 | 1st | S  | 41.2 | 11.2 | -18.8 | 11 | Standard thermal glazing | 28.2 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 101      | 1st | S  | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 101      | 1st | W  | 36.1 | 6.1  | -23.9 | 6  | Standard thermal glazing | 23.1 | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 101      | 1st | N  | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No  | Yes | N/A                | Alternative Ventilation Not Required |
| Plot 101      | 1st | E  | 38.5 | 8.5  | -21.5 | 9  | Standard thermal glazing | 25.5 | No  | Yes | N/A                | Alternative Ventilation Not Required |

|                |     |    |      |      |       |    |                          |      |    |     |     |                                      |
|----------------|-----|----|------|------|-------|----|--------------------------|------|----|-----|-----|--------------------------------------|
| Plot 102 - 103 | 1st | W  | 39.6 | 9.6  | -20.4 | 10 | Standard thermal glazing | 26.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 102 - 103 | 1st | N  | 31.7 | 1.7  | -28.3 | 2  | Standard thermal glazing | 18.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 102 - 103 | 1st | E  | 34.7 | 4.7  | -25.3 | 5  | Standard thermal glazing | 21.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 102 - 103 | 1st | S  | 41.6 | 11.6 | -18.4 | 12 | Standard thermal glazing | 28.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 104       | 1st | S  | 40.2 | 10.2 | -19.8 | 10 | Standard thermal glazing | 27.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 104       | 1st | W  | 37.7 | 7.7  | -22.3 | 8  | Standard thermal glazing | 24.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 104       | 1st | N  | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 104       | 1st | E  | 37   | 7    | -23   | 7  | Standard thermal glazing | 24   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 105 - 106 | 1st | W  | 37.8 | 7.8  | -22.2 | 8  | Standard thermal glazing | 24.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 105 - 106 | 1st | N  | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 105 - 106 | 1st | E  | 35.6 | 5.6  | -24.4 | 6  | Standard thermal glazing | 22.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 105 - 106 | 1st | S  | 41.1 | 11.1 | -18.9 | 11 | Standard thermal glazing | 28.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 107 - 108 | 1st | W  | 39.1 | 9.1  | -20.9 | 9  | Standard thermal glazing | 26.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 107 - 108 | 1st | N  | 31.8 | 1.8  | -28.2 | 2  | Standard thermal glazing | 18.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 107 - 108 | 1st | E  | 33.3 | 3.3  | -26.7 | 3  | Standard thermal glazing | 20.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 107 - 108 | 1st | S  | 41.1 | 11.1 | -18.9 | 11 | Standard thermal glazing | 28.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 109 - 111 | 1st | W  | 36.7 | 6.7  | -23.3 | 7  | Standard thermal glazing | 23.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 109 - 111 | 1st | N  | 31.7 | 1.7  | -28.3 | 2  | Standard thermal glazing | 18.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 109 - 111 | 1st | E  | 33.3 | 3.3  | -26.7 | 3  | Standard thermal glazing | 20.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 109 - 111 | 1st | S  | 40.8 | 10.8 | -19.2 | 11 | Standard thermal glazing | 27.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 112 - 114 | 1st | W  | 39   | 9    | -21   | 9  | Standard thermal glazing | 26   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 112 - 114 | 1st | N  | 31.6 | 1.6  | -28.4 | 2  | Standard thermal glazing | 18.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 112 - 114 | 1st | E  | 32   | 2    | -28   | 2  | Standard thermal glazing | 19   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 112 - 114 | 1st | S  | 40.1 | 10.1 | -19.9 | 10 | Standard thermal glazing | 27.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 115 - 116 | 1st | NW | 32.7 | 2.7  | -27.3 | 3  | Standard thermal glazing | 19.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 115 - 116 | 1st | NE | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 115 - 116 | 1st | SE | 39.9 | 9.9  | -20.1 | 10 | Standard thermal glazing | 26.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 115 - 116 | 1st | SW | 39.6 | 9.6  | -20.4 | 10 | Standard thermal glazing | 26.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 117       | 1st | W  | 38.1 | 8.1  | -21.9 | 8  | Standard thermal glazing | 25.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 117       | 1st | S  | 38.8 | 8.8  | -21.2 | 9  | Standard thermal glazing | 25.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 117       | 1st | E  | 31.1 | 1.1  | -28.9 | 1  | Standard thermal glazing | 18.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 117       | 1st | N  | 31.3 | 1.3  | -28.7 | 1  | Standard thermal glazing | 18.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 118       | 1st | W  | 33.6 | 3.6  | -26.4 | 4  | Standard thermal glazing | 20.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 118       | 1st | S  | 39.4 | 9.4  | -20.6 | 9  | Standard thermal glazing | 26.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 118       | 1st | E  | 31.1 | 1.1  | -28.9 | 1  | Standard thermal glazing | 18.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 118       | 1st | N  | 30.6 | 0.6  | -29.4 | 1  | Standard thermal glazing | 17.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 119       | 1st | E  | 30.9 | 0.9  | -29.1 | 1  | Standard thermal glazing | 17.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 119       | 1st | N  | 30.6 | 0.6  | -29.4 | 1  | Standard thermal glazing | 17.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 119       | 1st | W  | 35.4 | 5.4  | -24.6 | 5  | Standard thermal glazing | 22.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 119       | 1st | S  | 39.4 | 9.4  | -20.6 | 9  | Standard thermal glazing | 26.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 120       | 1st | W  | 38.3 | 8.3  | -21.7 | 8  | Standard thermal glazing | 25.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 120       | 1st | S  | 37.6 | 7.6  | -22.4 | 8  | Standard thermal glazing | 24.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 120       | 1st | E  | 30.5 | 0.5  | -29.5 | 1  | Standard thermal glazing | 17.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 120       | 1st | N  | 31   | 1    | -29   | 1  | Standard thermal glazing | 18   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 121       | 1st | W  | 38.6 | 8.6  | -21.4 | 9  | Standard thermal glazing | 25.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 121       | 1st | S  | 33.4 | 3.4  | -26.6 | 3  | Standard thermal glazing | 20.4 | No | Yes | N/A | Alternative Ventilation Not Required |

|          |     |   |      |      |       |    |                          |      |    |     |     |                                      |
|----------|-----|---|------|------|-------|----|--------------------------|------|----|-----|-----|--------------------------------------|
| Plot 121 | 1st | E | 30.6 | 0.6  | -29.4 | 1  | Standard thermal glazing | 17.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 121 | 1st | N | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 122 | 1st | W | 38.6 | 8.6  | -21.4 | 9  | Standard thermal glazing | 25.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 122 | 1st | S | 33.4 | 3.4  | -26.6 | 3  | Standard thermal glazing | 20.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 122 | 1st | E | 30.2 | 0.2  | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 122 | 1st | N | 30.8 | 0.8  | -29.2 | 1  | Standard thermal glazing | 17.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 123 | 1st | S | 33.1 | 3.1  | -26.9 | 3  | Standard thermal glazing | 20.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 123 | 1st | E | 30.2 | 0.2  | -29.8 | 0  | Standard thermal glazing | 17.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 123 | 1st | N | 30.5 | 0.5  | -29.5 | 1  | Standard thermal glazing | 17.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 123 | 1st | W | 38.3 | 8.3  | -21.7 | 8  | Standard thermal glazing | 25.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 124 | 1st | W | 38.2 | 8.2  | -21.8 | 8  | Standard thermal glazing | 25.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 124 | 1st | S | 33.7 | 3.7  | -26.3 | 4  | Standard thermal glazing | 20.7 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 124 | 1st | E | 29.8 | -0.2 | -30.2 | 0  | Standard thermal glazing | 16.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 124 | 1st | N | 30.3 | 0.3  | -29.7 | 0  | Standard thermal glazing | 17.3 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 125 | 1st | W | 37.8 | 7.8  | -22.2 | 8  | Standard thermal glazing | 24.8 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 125 | 1st | S | 32.5 | 2.5  | -27.5 | 3  | Standard thermal glazing | 19.5 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 125 | 1st | E | 30.1 | 0.1  | -29.9 | 0  | Standard thermal glazing | 17.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 125 | 1st | N | 30.1 | 0.1  | -29.9 | 0  | Standard thermal glazing | 17.1 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 126 | 1st | W | 37.6 | 7.6  | -22.4 | 8  | Standard thermal glazing | 24.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 126 | 1st | S | 33.2 | 3.2  | -26.8 | 3  | Standard thermal glazing | 20.2 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 126 | 1st | E | 30   | 0    | -30   | 0  | Standard thermal glazing | 17   | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 126 | 1st | N | 29.6 | -0.4 | -30.4 | 0  | Standard thermal glazing | 16.6 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 127 | 1st | S | 35.4 | 5.4  | -24.6 | 5  | Standard thermal glazing | 22.4 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 127 | 1st | W | 36.9 | 6.9  | -23.1 | 7  | Standard thermal glazing | 23.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 127 | 1st | N | 28.9 | -1.1 | -31.1 | -1 | Standard thermal glazing | 15.9 | No | Yes | N/A | Alternative Ventilation Not Required |
| Plot 127 | 1st | E | 31   | 1    | -29   | 1  | Standard thermal glazing | 18   | No | Yes | N/A | Alternative Ventilation Not Required |