

REBUTTAL PROOF OF
EVIDENCE
**PLANNING, DESIGN
AND LANDSCAPE**

Table of Contents

1.0	Introduction	1
2.0	Rebuttal Comments – Quality of Homes	2
	Planning Policy	2
	District Design Guide Supplementary Planning Document (SPD)	4
	Overheating	4
	Parameter Plans – Flexible Design	6
	Landscape Design	6
	Eastern Edge	7

1.0 Introduction

- 1.1 In this rebuttal proof of evidence, we seek to respond to Annemarie de Boom’s proof of evidence (CD9.04) on behalf of the Local Planning Authority (LPA). This rebuttal is prepared by Mike Derbyshire in respect of Planning matters, with input from Friedrich Ludewig and Robert Myers in respect of Design and Landscape matters respectively.
- 1.2 References to paragraph numbers are to those used in Ms de Boom’s proof unless otherwise stated.
- 1.3 Appendices are bound separately.

2.0 Rebuttal Comments – Quality of Homes

Planning Policy

- 2.1 Paragraph 5.91 : Ms de Boom quotes from the London Plan Guidance on Housing Design Standards (Consultation Draft February 2022) Appendix 2 which states that;

“A dual aspect dwelling is one with opening windows on two external walls, which may be on opposite sides of the building or on adjacent sides of a dwelling where the external walls of a dwelling wrap around the corner of a building. One aspect may be towards an external access deck or courtyard, although the layout of the dwelling needs to be carefully considered in these cases to maintain privacy. The design of the dual aspect dwelling should enable passive/natural ventilation across the whole dwelling. The provision of bay windows, stepped frontage, shallow recesses, or projecting facades does not constitute dual aspect.”

- 2.2 This is currently draft guidance that has not been adopted by the Greater London Authority (GLA).

- 2.3 The adopted London Plan 2021 Glossary says:

“A dual aspect dwelling is defined as one with openable windows on two external walls, which may be either on opposite sides of a dwelling or on adjacent sides of a dwelling where the external walls of a dwelling wrap around the corner of a building. The provision of a bay window does not constitute dual aspect.”

- 2.4 The Appendix referred to by Ms de Boom flows from two London Plan policies – D3: Optimising site capacity through the design-led approach and Policy D6: Housing quality and standards.

- 2.5 I attach the full policy wording of Policy D3 at **Appendix 1** to this rebuttal but for this response I highlight parts (a) and (b);

(a) All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations. Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site. The design-led approach requires consideration of design options to determine the most appropriate form of development that responds to a site’s context and capacity for growth, and existing and planned supporting infrastructure capacity (as set out in Policy D2 Infrastructure requirements for sustainable densities), and that best delivers the requirements set out in Part D; (emphasis added)

(b) Higher density developments should generally be promoted in locations that are well connected to jobs, services, infrastructure and amenities by public transport, walking and cycling, in accordance with Policy D2 Infrastructure requirements for sustainable densities. Where these locations have existing areas of high density buildings, expansion of the areas should be positively considered by Boroughs where appropriate. This could also include expanding Opportunity Area boundaries where appropriate. (emphasis added).

2.6 I attach the full policy wording of Policy D6 at **Appendix 2** to this rebuttal but for this response I highlight parts (c) and (d);

(c) Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

(d) The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.

2.7 The thrust of the London Plan is to focus on a design led approach and where appropriate optimise density. It talks about high density generally being promoted in locations that are well located to jobs, services, infrastructure and amenities by public transport, walking and cycling.

2.8 My Ludewig sets out the design led approach to the scheme in his main evidence (CD8.04 (a) – (j)) particularly the approach to perimeter blocks and the generous internal open spaces.

2.9 Ms de Boom's quote, at paragraph 5.91 of her proof, is from the draft, not the adopted, guidance and fails to recognise the context of policy D3 and D6 in seeking to optimise land but with the golden thread of a design led approach.

2.10 In very general terms, single aspect apartments should be incorporated into developments proportionately and with an eye to overall good design. Mr Ludewig deals with this in his evidence referring to his experience and how he has approached the site in accordance with Policy HQ/1.

District Design Guide Supplementary Planning Document (SPD)

- 2.11 Paragraph 5.93: Ms de Boom makes reference to the 45 degree rule set out in the District Design Guide (CD5.11).
- 2.12 This SPD was adopted by the LPA to provide guidance to support the previous adopted Development Plan Documents that have now been superseded by the current Local Plan 2018. They are still material considerations when making planning decisions, but the weight in decision making is to be determined on a case by case basis having regard to consistency with national planning guidance and the adopted South Cambridgeshire Local Plan 2018.
- 2.13 The 45 degree rule is within the daylight and sunlight heading of the Design Guide. The reference is to the 45 degree “rule of thumb” and that is precisely how it should be treated. In my experience, the 45 degree rule was applied to properties where they had adjoining neighbouring properties and that is the terminology used within the District Design Guide when referring to the 45 degree rule. I do not think that this was intended as guidance for new build apartments and detailed design matters on major new build projects.
- 2.14 I also note the point is specifically in relation to sunlight and daylight, not in relation to overheating or climate change resilience.

Overheating

- 2.15 A principle concern raised from the LPA on the number of single aspect was in relation to overheating and climate change resilience.
- 2.16 The energy statement (CD1.68) and energy statement addendum (CD2.11) was prepared by Hilson Moran on behalf of the Appellant. The residential element of the Cambridge North proposals do not currently have enough detail to model, as they are currently in outline.
- 2.17 As the development progresses, in line with building regulations and Policy CC/1 Mitigation and Adaptation to Climate Change and the Sustainable Design and Construction SPD (2020) (CD5.03), more detailed thermal modelling will be undertaken to show the residential proposals can meet Approved Document Part O. Analysis will consider 2050 weather files in line with Greater Cambridge aspirations.

2.18 The Sustainable Design and Construction SPD recognises that in some cases, for example at the outline application stage, it may not be possible to provide detailed calculations.

2.19 As new residential buildings they fall under the guidance of approved document Part O which follows CIBSE TM59 Procedures.

O1 Overheating mitigation

(1) Reasonable provision must be made in respect of a dwelling, institution or any other building containing one or more rooms for residential purposes, other than a room in a hotel (“residences”) to—

(a) limit unwanted solar gains in summer;

(b) provide an adequate means to remove heat from the indoor environment.

(2) In meeting the obligations in paragraph (1)—

(a) account must be taken of the safety of any occupant, and their reasonable enjoyment of the residence; and

(b) mechanical cooling may only be used where insufficient heat is capable of being removed from the indoor environment without it.

2.20 In line with the above Part O principles, Hilson Moran confirm the development will be designed to optimise the passive design features in the development, and following the cooling hierarchy, making reasonable provision to reduce solar gain. They are experienced overheating assessors, and are used to working in areas with difficult overheating scenarios; for example in London. They often have to meet Part O with windows that are unable to open due to noise constraints on the site, even in these situations they do not pull mechanical cooling into the site. They follow the cooling hierarchy, prioritising passive design measures and features, before considering mixed mode ventilation and try to avoid any cooling. Some of the following measures will be introduced to reduce solar gains and meet Part O;

- I. early stage analysis to advise on glazing area. This will be undertaken during detailed design.
- II. Hilson Moran will consider if mechanical ventilation with heat recovery, and energy saving measures can also help with the overheating. MVHR under CIBSE TM59 is still considered natural ventilation when used in normal practice, (i.e. not used regularly with the boost function)

- III. Hilson Moran will work with the design team to consider other measures such as external shading, fins, shutters, all of which are detailed design matters appropriate to the reserved matters.
- IV. Introduce Exhaust air heat pumps, that provide heating to the space, hot water and can also provide minimal cooling efficiently to remove the peak loads.

2.21 They prioritise passive measures before considering any mechanical measures.

Parameter Plans – Flexible Design

2.22 Mr Ludewig already opines that the parameter plans do provide flexibility for amendments within the detailed design phases of any reserved matters submissions. The keys in Parameter Plan 04 “maximum building envelope – ground floor” (CD2.24) and Parameter Plan 05 “maximum building envelope – typical level” (CD2.25) have the following text:-

“Design principles for outline application buildings”

“Residential quarter S11-S21”

1 Massing and articulation

a) Stepping in massing to breakdown long facades

b) Stepping to introduce more double aspect units

c) Different heights within same building block

2.23 Mr Ludewig confirms that the layouts shown within the masterplan are for illustrative purposes to demonstrate one possible interpretation of the prescribed design guidelines. Mr Ludewig has prepared a study, included at **Appendix 3**, that illustrates the flexibility provided by the parameters, using Block S16 as a case study. This study illustrates that the quantum of single aspect and north only facing apartments can be addressed in subsequent design development.

Landscape Design

2.24 Whilst the Parameter Plans offer sufficient flexibility, if necessary, minor amendments to the landscape design can be secured by condition which is not unusual on a detailed scheme. The draft conditions proposed by the LPA reflect the need to submit a full detailed landscaping scheme for approval.

- 2.25 Mr Myers confirms that the fluid, organic nature of the landscape design for Chesterton Gardens means that should the typology or internal layouts of the buildings be altered in the detailed design of the residential blocks, the layout of the gardens could easily be flexed as required to accommodate changes to footprint, door or window positions without any material change to the detailed landscape design or the appearance and character of the scheme. The overall quantum of open space, planting, SUDS and play would not be reduced and the general arrangement of the gardens as a whole would remain intact. Any minor amendments to paths, access, private terraces and planting near to the buildings could be dealt with via the discharge of a landscape condition in the normal course of design development and coordination.

Eastern Edge

- 2.26 Mr Ludewig confirms that heights along the eastern side of the scheme have been tested through the design process. This is illustrated in a document included at **Appendix 4**.



BIDWELLS