



# **Waverley Borough Council Scrutiny Review**

## **Housing Design Standards for New Council Homes**

### **A Review Report of the Housing Overview & Scrutiny Committee**

**July 2018**

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# Housing Design Standards Scrutiny Review

## Task Group Members:

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Councillor Liz Townsend  
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Adrian Waller (Tenants' Panel)

## Sponsor:

Councillor John Ward (Chair of Housing Overview and Scrutiny Committee)

## Chairman's Foreword

Waverley Borough Council (the Council) last published standards for Council House design in 2014. This report documents the detailed scrutiny work carried out by a task group of the Housing Overview and Scrutiny Committee between November 2017 and May 2018 to support the scheduled review of those standards, which are due to be brought to Council for approval in Autumn 2018.

Not all borough councils maintain a stock of council housing or build new houses. The Council is proud to both maintain a large stock of council owned accommodation and to augment that stock by renovating older properties, and building new properties when funding allows.

In April 2018 the Council published a new Five Year Housing Strategy. The timing of the design standards review work fits well with the release of the new Housing Strategy in that two of the four key pillars of that strategy are to *Increase delivery of well designed, well built affordable housing*, and to *make best use of existing homes*. The first of these two pillars talks explicitly of good design. The second implicitly requires good design if it is to be delivered.

Notwithstanding the pre-determined requirement to periodically update the design standards, in addition to the publication of the Housing Strategy, several other events have happened since 2014 that warrant a thorough review. The Code for Sustainable Homes (CfSH) was replaced by the National Technical Standards in 2015. In 2017 the Grenfell Tower tragedy occurred, the enquiry into the causes of which is ongoing. The updated Waverley standards need to incorporate changes and learnings from these events.

In conducting the review, members of the task group (the Group) have consistently challenged officers to ensure that the new standards are current in terms of legislation and good building practice, that properties to be constructed using the new standards will blend with market housing, and that any improvements to the standards have minimal cost impact, thus enabling the Council to deliver as many new properties as possible for the available budget. The review has looked to the

future and sought to include good levels of provision for existing technology such as power points and internet connection as well recognising the need to accommodate emerging technology such as making provision for external electric car charging points. Wherever possible, flexibility has been built into the standards to allow for future adaptation of properties to accommodate more challenged tenants.

Design aspects to be improved have been identified by interacting with residents, and site visits to a variety of recently completed, newly completed and under-construction properties have been used to sense check the decisions that have been made. The purpose was to gauge what the proposed minimum bedroom sizes look like in reality; how much garden space is appropriate; and how much storage space a family needs.

The members of the Group have tackled the review with considerable commitment and enthusiasm, supported ably by the excellent co-operation, hard work and diligence of Officers from Scrutiny, Democratic Services and the Housing Development team. A shared commitment to making the next generation of Waverley Council properties even better than those built in recent years has driven the effort that has gone into this review.

***Councillor Richard Seaborne,***

***Chairman of the Housing Design Standards Task Group***

## 1. EXECUTIVE SUMMARY

### Background

- 1.1 Waverley Borough Council (the Council) maintains Housing Design Standards for New Council Homes, which it sets out to review and update every 3 years. This report sets out the findings from the Member Scrutiny Review of the 2018 update of these standards.
- 1.2 Good quality homes consist of well thought out internal design with optimised use of internal space, provide adequate and well designed external amenity space and are high performing in terms of energy performance and sustainability.
- 1.3 Members reviewed 3 aspects of Housing Design: internal design (space) standards, external space standards and building regulations and sustainability.
- 1.4 Particular attention was paid to relevant changes in regulations and to other relevant factors occurring since the 2014 standards was written. These include:
  - the replacement of the Code for Sustainable Homes in 2015;
  - updates to Building Regulations; and
  - safety concerns arising from the 2017 Grenfell Tower disaster.
- 1.5 It is expected that the recommendations of this Scrutiny Review will inform the design proposals for Site C at Ockford Ridge and future housing development schemes.

## 2. CONCLUSIONS

- 2.1 The Group recognised the huge importance to tenants' well-being of a well-designed and comfortable home. Undertaking this review allowed the Housing Design Standards task and finish group to take a step back from the day-to-day housing role of the Council and examine the nuts and bolts of Waverley new builds.
- 2.2 The review has made every effort to ensure that the updated standards are current and complete in terms of incorporating changes to housing design practice that have emerged since 2014. The review greatly benefited from the knowledge and understanding of visiting officers with expert understanding in their particular and relevant field and from site visits which were very helpful.
- 2.3 The Council has an ambitious and exciting aim to build new affordable social rent homes that are well-designed, sustainable and support strong and vibrant communities. The aim is to provide homes in attractive

neighbourhoods with the space and layout required for modern day living, with adaptability built in from the start to meet the changing physical needs of tenants throughout their lives.

- 2.4 As part of the review process the Group visited newly built houses in the borough as well as homes occupied by tenants. The Group would like to thank tenants who invited them into their homes and provided this invaluable opportunity. The Group listened to their experiences of every day living in our properties and through this identified areas for improvement as well as discovering what was working well.
- 2.5 The Group considered the fact that housing needs change over a period of time that is relatively short compared to the expected life of properties, necessitating future-proofing through careful design of the standards.
- 2.6 In order to achieve best value for money for tenants, building costs were always considered. Visiting existing properties allowed the Group to learn from current practice and make suggestions for improved value for money which were then reflected in the standards.
- 2.7 The proposals recognise the changes in residents' expectations and the Council's need to comply with legislation in many areas and requirements associated with climate change, building regulations and sustainability.
- 2.8 The Council wants to ensure resources are used as efficiently and effectively as possible. Subject to confirmation of cost, the review aspires to achieve a target improvement of 35% in Dwelling Emission Rate (CO<sub>2</sub>) prioritising 'fabric first'<sup>1</sup> principles. This will also assist in delivering lower energy bills and water consumption for tenants. The proposed standards ensure that homes are future-proofed for the increasing use of electric vehicles, with the installation of easily accessible charging point wiring.
- 2.9 Incorporation of new design technology in terms of insulation and roof design should lead to significantly more energy efficient homes and better use of roof space.
- 2.10 The Group paid great attention to the differing needs of modern family units in terms of design, space (including outside space), noise pollution and car parking. The Group has been scrupulous in not only taking into account associated costs and land availability but the comfort, pride and enjoyment of future residents and their future needs.
- 2.11 The proposed space standards meet, and in some areas exceed, those set nationally, including those for storage.

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<sup>1</sup> According to [Design Buildings Wiki](#) 'a 'fabric first' approach to [building design](#) involves maximising the performance of the [components](#) and [materials](#) that make up the [building fabric](#) itself, before considering the use of mechanical or electrical [building services](#) systems. This can help reduce capital and [operational costs](#), improve energy efficiency and reduce carbon emissions. A fabric first method can also reduce the need for [maintenance](#) during the building's life'.

2.12 This review of the design standards will assist Waverley to deliver quality homes that fit in with the character of the area and support the health, safety and well-being of the occupants.

### **3. RECOMMENDATIONS**

The Portfolio Holder for Housing and the Executive are asked to consider the following recommendations:

#### **RECOMMENDATIONS FOR INCLUSION IN THE REVISED 'DESIGN STANDARDS FOR NEW COUNCIL HOMES' AND;**

#### **FOR DWELLINGS ON SITE C AT OCKFORD RIDGE TO MEET THE FOLLOWING RECOMMENDED MINIMUM m<sup>2</sup> DESIGN STANDARDS:**

##### **Design Principles**

1. To expand the text describing the principle 'Future Proof' to reflect emerging new technologies as suggested in paragraph 4.8 of this report.
2. To include the words 'Safe' in front of the principle 'Secure' to safeguard tenants against the risk of fire hazards; flooding, and trips, slips and falls.
3. That a statement outlining Waverley's commitment to meeting all building regulations is made explicit in the revised design standards.
4. That the principle 'Sound: Homes that meet all building regulations to minimise noise pollution' is adopted.
5. For Officers to incorporate the relevant findings from the inquiry into the Grenfell Fire disaster into the revised 'Housing Design Standards for new Council Homes' when they become available and to adopt the regulatory framework as a package, as outlined in the [Building a Safer Future – Independent Review of Building Regulations and Fire Safety: Final Report](#) May 2018.

##### **Ockford Ridge Proposed Site Layout Options:**

6. Site 'C' Ockford Ridge development is delivered in accordance with the recommendations of the Group.

## Internal Design Standards

7. For new builds to meet the minimum gross internal area<sup>2</sup> requirements per property type:

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/5 person House (m <sup>2</sup> )
<b>RECOMMENDATION:</b> Proposed new Waverley Standard	<b>50</b>	<b>70</b>	<b>83</b>	<b>86 (1 storey)</b> <b>96 (2 storey)</b> <b>102 (3 storey)</b>

8. For the minimum size of a single bedroom to be no less than 7.5m<sup>2</sup>, for a double bedroom to be no less than 12.5m<sup>2</sup> and a twin room to be the equivalent of two single rooms of 7.5m<sup>2</sup>, and for all to have the below corresponding widths:

	Single Bedrooms (m)	Double Bedrooms (m)	Twin rooms (m)
<b>RECOMMENDATION:</b> Proposed Waverley Standard	<b>2.15</b>	<b>2.75</b>	<b>2.75</b>

9. For ceilings to be a maximum of 2.4m in height, excluding rooms with sloped ceilings<sup>3</sup>.

10. For new builds to meet the minimum living space requirements per property type:

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/ 5 person House (m <sup>2</sup> )
<b>RECOMMENDATION:</b> Proposed new Waverley Standard	<b>23</b>	<b>27</b>	<b>27</b>	<b>29</b>

<sup>2</sup> Gross internal area of a dwelling is defined as the total floor space measured between the internal faces of perimeter walls that enclose the dwelling.

<sup>3</sup> In rooms with sloping ceilings, at least 50% of the floor area should have a floor to ceiling height of 2.1m



11. For new builds to meet the minimum storage space per property type:

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/5 person House (m <sup>2</sup> )
<b>RECOMMENDATION:</b> Proposed new Waverley standard	<b>2.5</b>	<b>3.0</b>	<b>3.0</b>	<b>3.5</b>

12. The revised standard should reflect the space standards contained in table 4 (page 20) and should specify separate floor to ceiling ventilated airing cupboard of a minimum area of 1m<sup>2</sup> with a heat source.

13. For the design standards to include a covered porch at the main defined entrance point (either at the front of the house, but not necessarily enclosed, or where there is a defined rear access), with the additional optional provision of a reception area adjacent to the main defined entrance point.

### External Appearance

14. That the number of car parking spaces per dwelling meets the requirements set out in the current Waverley parking guidelines<sup>4</sup>.

15. To continue to make the distinction between the number of spaces in urban and rural settings by following the existing Waverley Parking Guidelines.

16. Continue to provide 4.8m x 2.4m for C3<sup>5</sup> general needs in-curtilage parallel / bay car parking with at least one space that can be widened to 3.3m.

17. Continue to provide 6.1m x 2.4m for C3 general needs 0°/linear car parking with at least one space that can be widened to 3.3m.

18. For group parking specify disabled parking dimensions and ensure spaces are no less than 4.8m x 3.6m, with an additional demarcated area of 1.2m at the rear to enable wheelchair access; and in grouped parking situations where 10 or more spaces are provided, for 10% of spaces to meet the minimum

<sup>4</sup> At the time the report was written the parking guidelines in use were the Waverley Parking Guidelines 2013.

<sup>5</sup> C3 is a classification within 'Use Classes'. Use Class C3 refers to Dwelling Houses, which is covered by three parts (a, b and c). See link for more information:  
[https://www.planningportal.co.uk/info/200130/common\\_projects/9/change\\_of\\_use](https://www.planningportal.co.uk/info/200130/common_projects/9/change_of_use)

disabled parking dimensions. For grouped parking situations with fewer than 10 spaces one space shall meet the minimum disabled parking dimensions.

19. To include provision of wiring for one electrical charging point per residential property with in-curtilage parking, and provision of wiring for one electrical charging point per 10% of group or undedicated parking spaces with a minimum of one space.
20. Continue to provide per dwelling a 6' x 4' shed with a secure locking cycle point within the rear private garden.
21. Where a communal play area is part of the design in a development, for 'A' frame stands to be included to accommodate secure visitor and children's cycle parking.
22. New builds should aim to meet the recommended garden space size per property type, whilst seeking to utilise the site's full development potential:

	1 and 2 bed flat (m <sup>2</sup> )	2 bed house (m <sup>2</sup> )	3 bed house (m <sup>2</sup> )	4 bed house (m <sup>2</sup> )	5 bed house (m <sup>2</sup> )
<b>RECOMMENDATION:</b> Proposed new Waverley Standard	<b>25m<sup>2</sup></b>	<b>50m<sup>2</sup></b>	<b>60m<sup>2</sup></b>		

23. To continue to ensure paths within the curtilage of individual dwellings are a minimum 900mm (0.9m) in width.
24. To continue to ensure building entrances with communal paths are a minimum 1.2m in width.
25. Gateways should be a minimum of 850mm wide.
26. For significant developments, particularly where planning and construction are carried out in distinct phases, to include an integration and whole site design plan; and
27. For significant developments to include an infrastructure needs assessment, which includes broadband, mobile phone coverage and fifth generation wireless (5G).

## Building Regulations and Sustainability

28. For new builds to achieve a minimum of 9 out of the 12 Building for Life 12 criteria in order to secure Built for Life™ accreditation.
29. Depending on the outcome of the ongoing cost analysis referred to in paragraph 4.66, Waverley should aspire to adopt the standard set out in the 2016 London Plan Policy 5.2, with a target of achieving a 35% improvement in Dwelling Emission Rate (CO<sub>2</sub>) on site relative to Part L of the 2013 Building Regulations.
30. For new builds to continue to achieve <105 litres of water per person per day.
31. For the level of access and adaptability (M4)<sup>6</sup> to be defined by type of building and specify the following:
  - Flats/maisonettes: M4 level 2 standard for ground floor accommodation. Accommodation on upper floors would require installation of a lift or its own staircase to meet M4 level 2 standard.
  - General need dwelling: M4 level 2.
  - Wheelchair user dwelling: M4 level 3.

## Roof space

32. That the revised Design Standards include a design element for loft space to incorporate a habitable bedroom; and that this should only apply to house types with 3 + bedrooms and would therefore vary scheme to scheme.
33. Building into the roof to create a habitable bedroom should be considered per scheme as a cost effective solution for creating additional bedroom space in 1 and 2 bed homes without increasing the building's footprint.

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<sup>6</sup> M4 refers requirement 'M' in Building Regulations on Access to and use of Buildings. M4 is divided into 3 categories: M4(1), M4(2) and M4(3). M4 (1) is the a minimum requirement for all visitable dwellings and is achieved when a dwelling makes reasonable provision for most people, which includes wheelchair users able to access and enter the dwelling, including habitable rooms. M4(2) and M4(3) are 'optional requirements' as defined in the Building Regulations and are only required if specified in planning permission, otherwise dwellings only need to meet M4(1). M4(2) is a requirement for accessible and adaptable dwellings and M4(3) is a requirement for wheelchair user dwellings. For more information on M4 categories, see either figure 2 of this report (page 27), or visit: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/540330/BR\\_PDF\\_AD\\_M1\\_2015\\_with\\_2016\\_amendments\\_V3.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/540330/BR_PDF_AD_M1_2015_with_2016_amendments_V3.pdf)

## 4. REPORT

### Conduct of the Review

- 4.1 **Four councillors and one member of the Tenants' Panel from the Housing O&S Committee were assigned to form a Task Group<sup>7</sup> to conduct a Scrutiny Review prior to the drafting of updated standards and specifications. Members received the scoping report which sets out the terms of reference for the task group (Appendix B) in November 2017.**
- 4.2 The Group reviewed internal design (space) standards, external space standards and building regulations and sustainability. Members have also been on site visits to a number of council housing sites, including Wey Court, Godalming (WBC scheme), Church View, Station Road, Godalming (WBC scheme) and Furze Lane, Farncombe (Croudace / Mount Green Housing Association), Site B at Ockford Ridge.

### BACKGROUND

- 4.3 The Council adopted the current Housing Standards and Specifications in April 2014. When this report was brought to full Council it was recommended that as government guidance, building standards and best practice changes, current standards and specifications should be regularly reviewed to reflect these changes.
- 4.4 Since the Council adopted the new Design Standards and Specifications in 2014 the Government has concluded a Housing Standards Review (2015) that aimed to simplify government regulations and standards within a set of Building Regulations. The Government also provided further guidance on Housing Standards by introducing new Technical Housing Standards.<sup>8</sup>
- 4.5 The Housing Standards Review gave local authorities the optional requirement to require developers to build to higher standards than the minimum requirements in the Building Regulations Part M (Access to and use of buildings) and Part L (water usage). In addition the Government no longer requires local authorities to adopt the Code for Sustainable Homes as a planning condition for new developments.
- 4.6 Members of the Housing Overview and Scrutiny Committee went on a site visit around Ockford Ridge, a Council-owned housing estate in Godalming, in August 2017 to look at the new social homes being built. Members observed that the loft space in the show homes on site 'A' appeared much larger than

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<sup>7</sup> The notes of the Group's meetings are available on request from officers.

<sup>8</sup> <https://www.gov.uk/government/publications/technical-housing-standards-nationally-described-space-standard>

is normally the case. Furthermore Waverley's standard tenancy agreement specifies that the loft space is not accessible to tenants. The observation that use of loft space for additional accommodation of storage may represent an opportunity provided increased impetus for members to review the Council's design standards for new builds. The opportunity to review the Council's Design Standards for new Council Homes is therefore timely. It also provided an opportunity to collect and review feedback from tenants in recent new builds to learn what aspects of design worked well for them and what they would like to see improved.

4.7 The existing standards<sup>9</sup> for new Council homes had been prepared in 2013 (adopted 2014) and had taken account the following set of standards: Design and Quality Standards, HCA (2007); the Housing Quality Indicators, HCA (2011); Consultation by the DCLG on Housing Standards; Waverley's Parking Standards (2013); and feedback from residents who live in new housing association homes.

4.8 Members met to discuss the scope of the scrutiny review design principles:

- **Fit for purpose:** homes that reflect modern lifestyles and meet the current needs of tenants.
- **Future-proof:** homes that are robust but flexible, with the ability to adapt to the changing needs of existing and future tenants, **and which are designed to make provision for incorporation of emerging technologies.**
- **Community:** homes that respect and enhance the character of the local area and create mixed communities where people want to live.
- **Sustainability:** homes that meet high levels of sustainability to reduce the impact on tenants of rising fuel costs and minimise environmental impact.
- **Choice:** homes that provide a range of sizes and types to reflect local needs and provide choice to households on the housing register.
- **Secure:** homes that provide safe places for tenants to live and discourage crime in the local community.
- **Good management:** homes that enable the Council to manage better and maintain its stock.

4.9 Members felt that the principle 'Future Proof' should also make reference to new technologies, such as electric charging for bikes and cars.

**RECOMMENDATION: To expand the text describing the principle 'Future Proof' to reflect emerging new technologies as suggested in 4.8.**

4.10 Members agreed that 'Secure' should become 'Safe and Secure' to reflect the need to minimise through design the risk of fire, flood and trips, slips and falls.

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<sup>9</sup>[http://www.waverley.gov.uk/downloads/download/1841/design\\_standards\\_and\\_specifications\\_for\\_new\\_council\\_homes](http://www.waverley.gov.uk/downloads/download/1841/design_standards_and_specifications_for_new_council_homes)

**RECOMMENDATION:** To include the words ‘Safe’ in front of the principle ‘Secure’ to safeguard tenants against the risk of fire hazards; flooding, and trips, slips and falls.

4.11 The Grenfell fire disaster in Kensington on 14 June 2017 brought into question the safety standards of building control regulations, but also implications on housing design.

**RECOMMENDATION:** For Officers to incorporate the relevant findings from the inquiry into the Grenfell Fire disaster into the revised ‘Housing Design Standards for new Council Homes’ when they become available and to adopt the regulatory framework as a package, as outlined in the [Building a Safer Future – Independent Review of Building Regulations and Fire Safety: Final Report](#) May 2018.

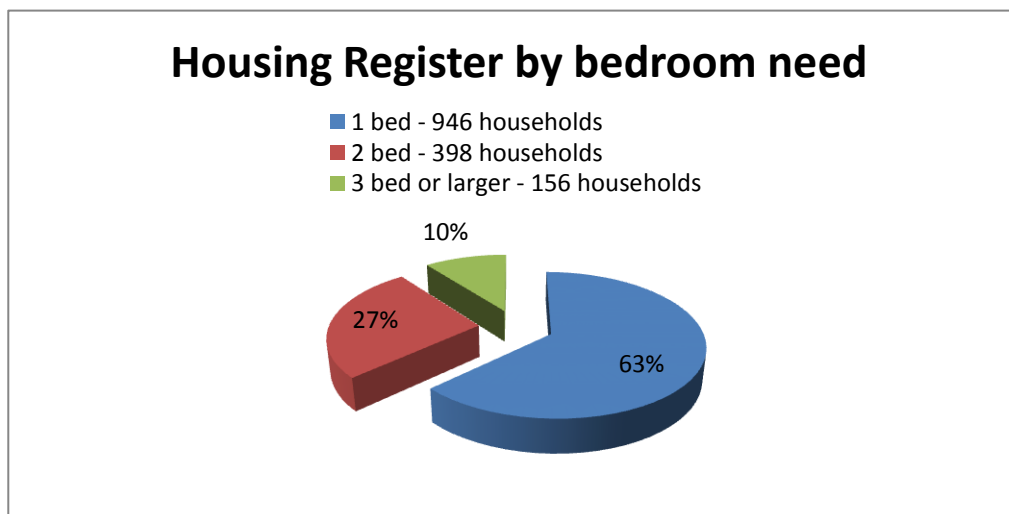
4.12 Members also felt that whilst it was a given that all Waverley developments would meet building regulations, this should be explicitly stated in the principles, including the addition of the management of sound so as to minimise noise pollution.

**RECOMMENDATION:** That a statement outlining Waverley’s commitment to meeting all building regulations is made explicit in the revised design standards.

**RECOMMENDATION:** That the principle ‘Sound: Homes that meet all building regulations to minimise noise pollution’ is adopted.

4.13 Members felt an analysis of housing need based on the Council’s housing register gives a better indication of the type and size of properties on which the Group should focus its attention.

**Figure 1: Housing Register applicants housing need as of 1 April 2017**



4.14 It is clear from data shown in figure 1 that there is a predominant need in Waverley for 1 bed homes. However, members were informed that the greatest demand currently is for 2-bed, 4-person homes rather than 1-bed

homes, as outlined in the West Surrey Strategic Housing Market Assessment (SHMA) 2015 This was because a 2-bed home is more flexible for couples who want to have a family and is more practical as a 2-bed could have slightly larger bedrooms that could be divided if necessary to accommodate two children of different sexes. Members were informed that housing need changes periodically and that 10 years ago the greatest need was for 3-4 bed homes. Members subsequently agreed to review the design standards for 1 bed / 2 person flat; 2 bed / 4 person flat; 2 bed / 4 person house; and 3 bed / 5 person house.

4.15 In order to get a better understanding of the design standards Waverley were working to, members went on a site visit to view new build social housing being developed in partnership with the Council. These were Wey Court (WBC scheme), Godalming, Church View (WBC scheme) and Godalming and Furze Lane, Farncombe (Croudace / Mount Green Housing Association Scheme). Observations made by members were:

- Some fitted cupboards are beneficial.
- Large windows provided a good level of natural light into the property.
- Bathroom storage (e.g. vanity unit or bathroom cabinet) would be nice to provide for tenants.
- In mixed market and affordable developments, the different tenures should not be obvious from the external appearance.

4.16 Members also had the opportunity to speak to some tenants who had moved into newly developed homes. The feedback from tenants was that:

- Rear parking led to the front door not being sufficiently used.
- Carpets in the kitchen are not practical.
- Insufficient provision of storage space was a challenge.

4.17 Members heard how Housing Design Standards acted as guidance for developers and were not currently adopted Council policy. Designs were assessed on a site-by-site basis in order to strike balance between financial and practical constraints. Housing standards could only be enforced if they were included in a local planning document. As a result, numerous national examples of design standards exist, for example: The Housing Manual (1949); Parker Morris dwelling space standards (1961); Homes and Communities Agency Design and Quality Standards (2007); Standards and Quality in Development, HATC (2008); The London Plan (2011: including the London Housing Design Guideline SPD 2012, London Plan 2016 & 2017); Building for Life 12 (2016). In 2015 the Government set out the nationally described space standard to try to standardise minimum gross internal floor areas for developers to work to (enforceable through local planning documents). In addition the Group reviewed a handful of design standards that Local Authorities work to in order to compare and judge Waverley's current standards (2014).

4.18 The Scrutiny Review applies to new homes developed and funded by Waverley Borough Council, and focussed on:

- general needs affordable housing for rent;
- internal design (space) standards, including internal storage space provision and potential use of roof space;
- accessibility and adaptability standards;
- external space standards / gardens / amenity space;
- parking provision;
- materials – e.g. shaver sockets/towel rails; and
- opportunities for future proofing and adaptation to changing circumstances.

4.19 External expertise was brought in to inform discussions of sustainability and the use of roof space.

4.20 During the same time as the scrutiny review, Waverley completed a review of its tender specification, which included some elements of design. The latest tender specification was produced in 2017 and is referenced in this report as the 'Draft Waverley General Design and Information Requirements 2017' (GDI). Any approved changes to the Design Standards as a result of this scrutiny review will be incorporated into the next update of this tender specification.



## **EVIDENCE TO THE TASK GROUP**

### **INTERNAL DESIGN STANDARDS**

4.21 Members reviewed four aspects of internal design: gross internal area, bedroom size, living spaces and design layouts; and internal storage. Desktop research was conducted to showcase a range of space standards to compare with Waverley's current (2014) standard in order to make a judgement whether to increase or decrease the space standard. This can be found in Appendix C<sup>10</sup>. To help make this judgement, members were informed about the cost implications of any proposed changes and were mindful of the need to balance relative design quality with the number of homes that can be built for a given specification. This exercise was repeated for each design standard throughout the duration of the review.

#### **Gross internal area**

4.22 Members reviewed the comparison of gross internal areas between Waverley's 2014 standards, the National Standards, other written guidance and a handful of examples from local authorities. Whilst Waverley's 2014 standards were not too dissimilar from the Nationally Described Space Standard (2015), members agreed that the standards set out in the London Plan (2011) were a good standard to follow as the London Plan (2011) corresponded to the 2015 standards except for 2 bed/4 person house and the 3 bed/ 5 person house (2 and 3 storey) where it was slightly more generous.

4.23 Members were informed that the standards in the London Plan (2011) would have been considered carefully in the context of cost of land, and the marginal increases in gross internal area over the Nationally Described Space Standard were not extravagant. The proposed new standards are presented in Table 1.

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<sup>10</sup> Please note, information contained in appendix C was obtained before the report was published and developments since publication may mean this information is no longer correct.

**Table 1: Gross Internal Area**

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/5 person House (m <sup>2</sup> )
Waverley 2014	48	70	83	96
National Standards 2015	50	70	79	86 (1 storey) 93 (2 storey) 99 (3 storey)
London Plan 2011	50	70	83	86 (1 storey) 96 (2 storey) 102 (3 storey)
<b>RECOMMENDATION: Proposed new Waverley Standard</b>	<b>50</b>	<b>70</b>	<b>83</b>	<b>86 (1 storey) 96 (2 storey) 102 (3 storey)</b>

4.24 The incremental costs of increasing gross internal area by 10%, for example on a two bed house from 48m<sup>2</sup> to 52.8m<sup>2</sup>, are £9,600. The increase from 48m<sup>2</sup> to 50m<sup>2</sup> increases the cost build cost by £4,000 based on a build cost rate per m<sup>2</sup> of £2,000.

**Table 2: Cost comparison of house types**

Unit Type	1-bed/2 person flat	2-bed/3 person flat	2-bed/4 person flat	2-bed/4 person house	3-bed 5/ person house
Floor area of unit in m <sup>2</sup>	48	61	70	83	96
Addition of 10% *	4.8	6.1	7	0	0
Total floor area in m <sup>2</sup> *	52.8	67.2	77	83	96
Works cost per m <sup>2</sup>	£2,000	£2,000	£2,000	£2,000	£2,000
Works cost only	£105,600	£134,400	£154,000	£166,000	£192,000
Total scheme cost per m <sup>2</sup> **	£2,412.48	£2,408.88	£2,412.48	£2,653.72	£2,653.71
Total cost per unit **	£127,379	£161,877	£185,761	£220,259	£254,757

\* To allow for communal and circulation space in flats

\*\* The total cost per unit is inclusive of works, professional fees, contingency and interest costs within the development appraisal.

## Bedroom Size

4.25 Waverley's current 2014 design standard (m<sup>2</sup>) at level 2 for minimum bedroom space is 7.5m<sup>2</sup> for a single bedroom and 12.0m<sup>2</sup> for a principle double bedroom. The Waverley General Design and Information Requirements (GDRs) specify that the minimum size of a single room should be 7.5m<sup>2</sup> and the minimum size for the main double room should be 12.0m<sup>2</sup> with other double bedrooms being at least 11.5m<sup>2</sup>.

4.26 Members reviewed a range of bedroom size examples for a principle double bedroom (details can be found in Appendix C). Across the majority of examples reviewed, 12m<sup>2</sup> appeared to be the accepted standard for a double bedroom.

4.27 Members agreed that the minimum size for a single room should be 7.5m<sup>2</sup> (with a minimum width of 2.15m), and 12.5m<sup>2</sup> for a double bedroom (with a minimum width of 2.75m). Members noted that a twin room should be the equivalent of two single rooms of 7.5m<sup>2</sup> to allow for sub-division.

**RECOMMENDATION: For the minimum size of a single bedroom to be no less than 7.5m<sup>2</sup> for a double bedroom to be no less than 12.5m<sup>2</sup> and a twin room to be the equivalent of two single rooms of 7.5m<sup>2</sup>, and for all to have the below corresponding widths:**

	Single Bedrooms (m)	Double Bedrooms (m)	Twin rooms (m)
<b>RECOMMENDATION: Proposed Waverley Standard</b>	<b>2.15</b>	<b>2.75</b>	<b>2.75</b>

4.28 Some members of the Housing Overview and Scrutiny Committee went on an additional site visit to Site D at Ockford Ridge in March 2018 to review progress with the development. During the visit, members observed the high ceiling heights in some of the properties they visited (2.7m – 2.8m). Members noted that whilst the minimum floor to ceiling height is 2.1m, the practical maximum standard ceiling height (2.4m) should be adopted in the revised set of design standards.

**RECOMMENDATION: For ceilings to be a maximum of 2.4m in height, excluding rooms with sloped ceilings.<sup>11</sup>**

<sup>11</sup> In rooms with sloping ceilings, at least 50% of the floor area should have a floor to ceiling height of 2.1m

## Living Spaces and Design Layouts

4.29 The Living area is defined as the lounge, kitchen and dining area. Waverley's preference is for kitchen/diners rather than a separate dining and living room as this is more convenient for modern living, and more practical for families and older people with mobility issues.

4.30 Members felt that the living areas set out in the Waverley GDR 2017 were low (18.5m<sup>2</sup> combined living/dining and kitchen area) when compared to other design standards adopted by Councils, and that this did not allow for additional living space needed when there are more people in the home. NB: In Appendix C 'Living area size comparison' shows for the majority of examples combined living / dining and kitchen space. When this is the case it is specified in the footnotes.

4.31 The London Plan 2011 standard increased the living area by 2m<sup>2</sup> for each additional person; members felt this was a reasonable approach and should be incorporated into the revised set of design standards.

**Table 3: Living space area**

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/ 5 person House (m <sup>2</sup> )
Waverley General Design and Information Requirements 2017	18.5	18.5	-	-
London Plan 2011	23	27	27	29
<b>RECOMMENDATION: Proposed new Waverley Standard</b>	<b>23</b>	<b>27</b>	<b>27</b>	<b>29</b>

## Internal Storage

4.32 Storage space is defined useable space in an airing cupboard with the addition of kitchen cupboards (i.e. built in storage space excluding furniture). Members felt that having an airing cupboard was a useful facility for airing laundry as well as a useable storage space. In addition, the airing cupboard should be provided with a heat source.

4.33 Waverley’s current 2014 standard specify 2.5m<sup>2</sup> of internal storage for a 1 bed / 2 people flat and a 2 bed / 4 person home. This increases to 3.0m<sup>2</sup> for a 3 bed / 5 person home. Members felt that the amount of storage space should increase in line with the number of bed-spaces in the home and should reflect the measurements and criteria outlined in the Waverley 2017 GDRs (see table 4).

4.34 Members also commented that it would be helpful to define storage space as volume m<sup>3</sup> as well as prescribing inclusion of some storage to accommodate bulky items such as ironing boards, upright vacuum cleaners and brooms.

**Table 4: Storage space**

	1 bed/2 person Flat (m <sup>2</sup> )	2 bed/4 person Flat (m <sup>2</sup> )	2 bed/4 person House (m <sup>2</sup> )	3 bed/5 person House (m <sup>2</sup> )
Waverley 2014	2.5	-	2.5	3.0
Waverley General Design and Information Requirements 2017	2.5	-	3.0	3.5
<b>RECOMMENDATION: Proposed new Waverley standard</b>	<b>2.5</b>	<b>3.0</b>	<b>3.0</b>	<b>3.5</b>

**RECOMMENDATION:** The revised standard should specify a separate floor to ceiling ventilated airing cupboard space of 1m<sup>2</sup> with heat source.

## Porches

4.35 Members discussed the exterior of homes and whether the design standards should include provision of a covered porch area situated at the front of the house, and / or a reception area towards the front of the property to avoid having to enter through the front door directly into the living room.

**RECOMMENDATION:** For the design standards to include a covered porch at the main defined entrance point (either at the front of the house, but not necessarily enclosed, or where there was a defined rear access), with the additional optional provision of a reception area adjacent to the main defined entrance point.

## EXTERNAL APPERANCES

4.36 Members reviewed a handful of external design standards, such as car parking (including disabled parking), cycle storage provision and garden size.

### Car Parking

4.37 Members looked at both general needs car parking as well as disabled user parking and reviewed both the number of parking spaces provided, and the size of the spaces. As there are many use classifications, members focused on car parking standards for use class C3: dwelling houses / residential development (family houses, up to 6 residents living as a single household, including households where care is provided). Members noted that homes provided by Waverley had always provided in-curtilage parking and did not rely on the availability of on-street parking. Members proceeded to discuss parking space numbers and dimensions with this in mind.

4.38 The Waverley Parking Guidelines (2013) sets out standards for general use car parking. The guidance is based off 'Vehicular and Cycle Parking Guidance' Surrey County Council (January 2012) and supersedes the County Councils 2003 parking guidelines.

4.39 The number of spaces per dwelling as set out in the Waverley Parking Guidelines (2013) for residential development (C3) is presented below:

**Table 5: Number of car parking spaces per dwelling**

Locational Characteristics	Town Centre	Rest of Waverley
1 bed	1 space per unit	1 space per unit
2 bed	1 space per unit	2 spaces per unit
3 + bed	1.5 spaces per unit	2.5 spaces per unit

4.40 Members agreed that the number of spaces provided would need to follow the adopted Waverley Parking Guidelines (2013) and expressed a preference for there to be a continued distinction between the number of spaces in urban and rural settings.

**RECOMMENDATION: That the number of car parking spaces per dwelling meets the requirements set out in the current Waverley parking guidelines.**

**RECOMMENDATION: To continue to make the distinction between the number of spaces in urban and rural settings by following the existing Waverley Parking Guidelines.**

- 4.41 The current Waverley Design Standards for new Council Homes (2014) adopted the guidance presented in table 5, however was silent on technical standards (dimensions). However, members were informed that Waverley had defined the dimensions of car parking spaces within the 2017 Employer's Requirements; these were slightly larger than the Department of Transport Manual for Streets Guidance (2007).
- 4.42 The Waverley 2013 Parking Guidelines also references 'Surrey Design' (2002), which provides guidance for technical specifications and design for parking standards. Surrey Design (2002) recommends the following dimensions for parking spaces:

**Table 6: Surrey Design (2002) car parking dimensions**

Access from the end	2.4m x 4.8m
Access from the side	2.4m x 4.8m
Disabled parking bay	At least 3m x 4.8m

- 4.43 Members also considered the draft Waverley 2017 GDRs, which outline that individual parking spaces shall have minimum dimensions 4.8m x 2.4m for parallel / bay parking, and 6.1m x 2.4m for 0°/linear parking (nose to tail). In addition the GDRs provide guidance for disabled parking bays: in a grouped parking situation where 10 or more spaces are provided, 10% of spaces must have a minimum dimension of 4.8m x 3.3m to account for disabled car users. For grouped parking situations with fewer than 10 spaces one space shall meet the minimum disabled parking dimensions.
- 4.44 Members were satisfied with the requirement of 4.8m x 2.4m for general needs in-curtilage parking and 6.1m x 2.4m for 0°/linear parking. However, members felt that for disabled parking spaces there should be a minimum width of 3.6m with an additional demarcated area of 1.2m at the rear to enable wheelchair access. This is in accordance with the Building for Life standard.

**RECOMMENDATION: Continue to provide 4.8m x 2.4m for C3 general needs in-curtilage parallel / bay car parking with at least one space that can be widened to 3.3m; and**

**RECOMMENDATION: Continue to provide 6.1m x 2.4m for C3 general needs 0°/linear car parking with at least one space that can be widened to 3.3m.**

**RECOMMENDATION: For group parking specify disabled parking dimensions and ensure spaces are no less than 4.8m x 3.6m, with an additional demarcated area of 1.2m at the rear to enable wheelchair access; and in grouped parking situations where 10 or more spaces are provided, for 10% of spaces to meet the minimum disabled parking**

**dimensions. For grouped parking situations with fewer than 10 spaces one space shall meet the minimum disabled parking dimensions.**

- 4.45 Members also discussed the future proofing of new homes by specifying built in wiring for electric car charging points to be installed on site. Members expressed concern about the need to reduce CO<sub>2</sub> emissions and gave a preference for the exterior design to permit the installation of an electric car charging point.

**RECOMMENDATION: To include provision of wiring for one electrical charging point per residential property with in-curtilage parking, and provision of wiring for one electrical charging point per 10% of group or undedicated parking spaces with a minimum of one space.**

## Cycle Parking

- 4.46 The standard for cycle parking spaces across the examples presented to members (see Appendix C) was one traditional Sheffield hoop-stand per dwelling. Waverley has traditionally provided a 6' x 4' shed with a secure locking point inside for each dwelling with private amenity (garden) space.

- 4.47 The Waverley 2017 GDRs provide provision of one cycle storage place per dwelling, provided communally for apartments or on an allocated basis within curtilage for houses.

- 4.48 Members had reservations about providing sheds with secure locking points on the presumption that they were underused. However, members recognised there ought to be some provision for cycle parking to promote active lifestyles, and there was no harm in continuing the current approach. It was further recognised that the increase in use of e-bikes may, in future, justify secure cycle parking.

**RECOMMENDATION: Continue to provide per dwelling a 6' x 4' shed with a secure locking cycle point within the rear private garden.**

- 4.49 Members also discussed the provision of cycle parking for visitors, and it was agreed that if visitors choose to travel by bike, visitors' cycles should be stored in their host's private garden.

- 4.50 Members heard that Waverley's flatted blocks were provided with 1 hoop stand per dwelling in a communal area. Members felt that there should be capacity for visitors, and if play areas are provided in a development, 'A' frame stands should be incorporated.

**RECOMMENDATION: Where a communal play area is part of the design in a development, for 'A' frame stands to be included to accommodate secure visitor and children's cycle parking.**



## Garden Size

4.51 Members focused on rear private garden space when discussing garden sizes. The current Waverley Design Standards for New Council Homes (2014) and the Waverley GDRs (2017) specify a minimum private garden space (rear) of 50m<sup>2</sup>. Across a range of examples from other local authorities members reviewed, 50m<sup>2</sup> was a common size for rear private garden space.

4.52 Members felt that 50m<sup>2</sup> was generous for a 1-bed/2 person home as previous experience from tenants who live in new builds at Ockford Ridge found the large gardens difficult to manage. Members agreed to reduce the garden size for all 1 and 2 bed flats to a minimum of 25m<sup>2</sup>. Members felt however, that 25m<sup>2</sup> would be too small for a family home with children, and agreed that a range of minimum sizes starting at 25m<sup>2</sup> for a 1-bed/2 person home ranging up to 60m<sup>2</sup> for a 3 or 4 bed home was more appropriate guidance for the Design Standards.

**Table 7: Garden space size**

	1 and 2 bed flat (m <sup>2</sup> )	2 bed house (m <sup>2</sup> )	3 bed house (m <sup>2</sup> )	4 bed house (m <sup>2</sup> )	5 bed house (m <sup>2</sup> )
Waverley 2014 and GDR 2017	50m <sup>2</sup>				
<b>RECOMMENDATION: Proposed new Waverley Standard*</b>	<b>25m<sup>2</sup></b>	<b>50m<sup>2</sup></b>	<b>60m<sup>2</sup></b>		

\* whilst seeking to utilise the site's full development potential.

4.53 Members also briefly discussed provision of communal amenity space for flats, and were informed planning guidance exists on the minimum measurement. In the Waverley GDR 2017, for schemes which include apartments should have a communal garden area of 10m<sup>2</sup> per dwelling.

## Landscaping (pathways)

4.54 Members briefly discussed landscaping and were informed that the Lifetime Home Standard provided good guidance on the topic. Waverley's 2017 GDI's specify that paths are to be, as a minimum, 900mm wide (0.9m), and entrance points should be a minimum of 1.2m wide (Accessible and Lifetime Home Standard).

4.55 The Lifetime Homes Standard specifies the width of the path between the parking and the dwelling within the curtilage of individual dwellings should be a minimum width of 900mm (0.9m) and recommends increasing the width to 1.2m.<sup>12</sup> Furthermore the standard specifies that communal paths should have a minimum width of 1.2m, and recommends increasing the width to 1.8m<sup>13</sup>.

4.56 The Group agreed that it was important to also specify a minimum width for gateways. The Lifetime Homes Standard specifies that the minimum width of all dwelling entrance doors should be 800mm. Members felt that it was reasonable to exceed this by a small amount in order to improve access

**RECOMMENDATION: To continue to ensure paths within the curtilage of individual dwellings are a minimum 900mm (0.9m) in width.**

**RECOMMENDATION: To continue to ensure building entrances with communal paths are a minimum 1.2m in width.**

**RECOMMENDATION: Gateways should be a minimum of 850mm wide.**

4.57 Members briefly discussed the desire for a development that is conducted in a phased manner, like Ockford Ridge, to be well integrated and cohesive, both in design and in its exterior appearance in relation to other dwellings on site. Additionally, members mentioned that new developments of this scale should include an infrastructure needs assessment to inform broadband infrastructure and mobile phone coverage.

**RECOMMENDATION: For significant developments, particularly where planning and construction are carried out in distinct phases, to include an integration and whole site design plan; and**

**RECOMMENDATION: For significant developments to include an infrastructure needs assessment, which includes broadband, mobile phone coverage and fifth generation wireless (5G).**

## **Refuse Bin Storage**

4.58 Members discussed provision for storing refuse bins when not in use at the property and were informed that planning required a defined space for refuse bin storage to be shown in block plans, but there was no prescription on the location or materials required. Members were informed that it was common practice to provide an area behind the garden shed or on the patio for home with a private rear garden to store the refuse bins. Members looked at 'Bindock' as an option to disguise refuse bins at the front of the property. However, members came to the conclusion that for the time being there was

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<sup>12</sup> <http://www.lifetimehomes.org.uk/pages/3-approach-to-all-entrances.html>

<sup>13</sup> Ibid.

suitable provision to store refuse bins in the designated space behind the garden shed provided, or on the patio in the rear private garden.

## **BUILDING REGULATIONS AND SUSTAINABILITY**

### **Background**

4.59 The Code for Sustainable Homes (CfSH) was replaced with the introduction of the National Technical Standards in 2015. As a result, many of the CfSH requirements were consolidated into a national framework centred on building regulations.<sup>14</sup> Furthermore the National Technical Standards (2015) also included higher optional building regulations regarding access (part M) and water (part G). These optional requirements were comparable with the former requirement Code level 4. Members reviewed both of these optional requirements.

4.60 Waverley's 2014 Design Standards reflected CfSH Level 4 as a target. Members were informed that where this was not achievable, at least the energy, CO<sub>2</sub> and water standards of the CfSH Level 4 had to be met.<sup>15</sup>

4.61 The former CfSH now only existed for legacy projects and, or specific funding streams; otherwise there was no requirement to meet the standards in excess of what was required by the revised set of building regulations. Officers and members therefore had a desire to describe both a minimum and desired standard for all categories previously used by the CfSH. In the scope of this review, members looked at energy and CO<sub>2</sub> requirements and water requirements.

4.62 The 'Building for Life 12 is a government-endorsed industry standard for well-designed homes and neighbourhoods'<sup>16</sup>. There are twelve criteria set out by the standard, including standards regarding public transport and car parking. In order to achieve the Built for Life 12™ accreditation, a development must secure 9 'greens' against the individual criteria. Members considered this standard and recommended its adoption.

**RECOMMENDATION: For new builds to achieve a minimum of 9 out of the 12 Building for Life 12 criteria in order to secure Built for Life™ accreditation.**

### **Energy and CO<sub>2</sub> emissions**

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<sup>14</sup> <https://www.gov.uk/government/collections/approved-documents>

<sup>15</sup> Categories of the former CfSH include: energy and CO<sub>2</sub> emissions, water, materials, surface water run-off, waste, pollution, health and wellbeing and management ecology.

<sup>16</sup>

[https://www.designcouncil.org.uk/sites/default/files/asset/document/Building%20for%20Life%2012\\_0.pdf](https://www.designcouncil.org.uk/sites/default/files/asset/document/Building%20for%20Life%2012_0.pdf)

- 4.63 Waverley Current Design Standards (2014) worked to the equivalent of Code level 4 (deliver a minimum 25% improvement in energy preservation and CO<sub>2</sub> emission reduction for the dwelling emission rate (DER) 2010. To understand how the former CfSH, Part L of the Building Regulations 2013, London Plan 2016 and the Passivhaus standards perform against each other, members met with a representative of Stephen Taylor Architects, who provided a comparison of the energy and CO<sub>2</sub> requirements in each of these standards. The papers can be found in Appendix D.
- 4.64 The former CfSH required a minimum 19% improvement in CO<sub>2</sub> emission relative to Part L of the 2013 Building Regulations. However, the London Plan 2016 set out CO<sub>2</sub> emission reductions in excess of Part L in order to achieve zero carbon homes. This translates into a 35% improvement in CO<sub>2</sub> emissions on site relative to Part L of the 2013 building regulations.
- 4.65 Passivhaus housing on the other hand is a voluntary certification that demonstrates a high level of energy performance. Members were informed that homes would still have to meet the Part L requirement in building regulations, but the standard is focussed on achieving zero energy use for heating: buildings are very highly insulated, with air-tight triple-glazed windows, and air-tight construction with very efficient mechanical heat recovery ventilation. The representative of Stephen Taylor Architects advised that according to Passivhaus Trust<sup>17</sup> the estimated increase in building costs to achieve the Passivhaus standard over the minimum requirements set out in the building regulations was around 17%; and achieving the equivalent of CfSH Level 4 was estimated to add an additional 5% to the costs<sup>18</sup>.

**Table 8: Comparison of CO<sub>2</sub> and energy performance relative to Part L Building Regulations 2010.**

Standard	Energy performance
Part L Building Regulations 2013	6% CO <sub>2</sub> improvement relative to Part L 2010
CfSH Level 4	19% improvement relative to Part L 2013
London Plan 2016	35% improvement on site relative to Part L 2013
Passivhaus	30-45% improvement in carbon emissions relative to Part L 2010.

- 4.66 Members were advised by the representative of Stephen Taylor Architects that whilst the London Plan 2016 requirements were higher than Part L 2013

<sup>17</sup> Passivhaus Capital Cost Research Project:  
<http://www.passivhaustrust.org.uk/UserFiles/File/Passivhaus%20Capital%20Cost%20Research%20Project%20-%20Passivhaus%20Trust,%20January%202015.pdf>

<sup>18</sup> Cost of building to the Code for Sustainable Homes:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6378/1972728.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6378/1972728.pdf)

building regulations, schemes would be financially viable with outcomes broadly comparable to Passivhaus standard. Members requested that officers established the cost associated with achieving the London Plan 2016 requirements in comparison to the former CfSH Level 4 and Part L 2013 building regulations.

4.67 Members concluded that the Passivhaus standard would be too costly to achieve (a 17% uplift in costs compared to the CfSH level 4) and that it also relied on a high degree of adherence to operational requirements by tenants, e.g. keeping windows closed, which could not be guaranteed. There would also be additional costs in the use of land due to thicker walls required – this would have a direct impact on the number of homes that could be built per site. Members did however, agree that going beyond the Standards set out in Building Regulations (minimum 6% carbon dioxide saving relative to Part L 2010) and the Code for Sustainable Homes (minimum 19% relative to Part L in 2013) was desirable. The aspiration of achieving 35% will depend on the outcome of an analysis of cost of achieving the various levels of CO<sub>2</sub> Dwelling Emission Rates, which was ongoing at the time this report was generated but will be incorporated into the final updated standards.

**RECOMMENDATION: Depending on the outcome of the cost analysis referred to in paragraph 4.66, Waverley should aspire to adopt the standard set out in the 2016 London Plan Policy 5.2, with a target of achieving a 35% improvement in Dwelling Emission Rate (CO<sub>2</sub>) on site relative to Part L of the 2013 Building Regulations.**

#### **Optional Requirement (Water)**

4.68 Members reviewed part G, the optional requirement for water, in building regulations. Waverley currently achieves <105 litres of water per person per day, which is equivalent to former CfSH levels 3 and 4. This standard was already being achieved at no additional cost through specification of restricted water flow. Members felt this was a good standard to achieve as it was less the standard set out in building regulations; <125 litres per person per day (<115 litres per person per day for the higher optional requirement).

**Table 9: Building Regulations: Water usage**

<b>Legislation</b>	<b>Water</b>
Code for Sustainable Homes Level 4 / Waverley 2014	< 105 litres of water per persons per day equates to levels 3 and 4
Building Regulations	<125 litre's per person per day (115 litre's per person per day for optional requirement)
<b>RECOMMENDATION: Proposed new Waverley Standard</b>	<b>&lt; 105 litres of water per day per person</b>

## Building Regulations Requirement (Access to and use of Building)

4.69 Members considered part M, the requirement for access to and use of buildings. For context, see figure 2 which outlines the levels of categories for access to and use of buildings.

### Figure 2: M4 Categories for access to and use of buildings

- Requirement M4 (1): Category 1 – Visitable dwellings.
  - Compliance with this requirement is achieved when a new dwelling makes reasonable provision for most people, which includes wheelchair users to access and enter the dwelling, and access habitable rooms and sanitary facilities on the entrance level.
- Requirement M4 (2): Category 2 – Accessible and adaptable dwellings.
  - Step free access from parking to the dwelling, and to a ground floor WC, with provision for wheelchair users and the elderly.
  - Wall mounted switches and sockets at a height suitable for occupants with reduced reach.
  - Capability for adaptations in later life or for disabled occupants.
- Requirement M4 (3): Category 3 – Wheelchair user dwellings.
  - Fully adapted or adaptable dwellings for wheelchair users. The requirements of this option are more comprehensive and supersede those above.

4.70 Members agreed that M4 (2) should be further defined to specify that for flats to be M4 (2) compliant, the property would need to have a lift or its own staircase. All properties must be compliant with M4 (2), as adopted in Local Plan Part 1.

Waverley 2014	M4 level 2 for of the accessible and adaptable requirements for all general use dwellings. M4 level 3 for wheelchair user dwellings.
<b>RECOMMENDATION: Proposed new Waverley Standard</b>	<b>All dwellings must comply with M4 level 2 for of the accessible and adaptable requirements for all general use dwellings. M4 level 3 for wheelchair user dwellings.</b>

## ROOF SPACE

- 4.71 Members of the Housing Overview and Scrutiny Committee went on a site visit around Ockford Ridge, a housing estate in Godalming, in August 2017 to look at the new social homes being built. Members observed that the loft space in the show homes on site 'A' appeared much larger than is normally the case. Furthermore Waverley's standard tenancy agreement specifies that the loft space is not accessible to tenants. However, the design for Site A does include scope to build into the roof space on some of the properties if required in the future through the specifications for adaptability by design.
- 4.72 Whilst Members recognised the benefit of having the potential to extend properties in to the roof, they also felt that by not designing built in habitable use of the roof space would be a missed opportunity. Members rejected the idea of converting lofts for the sole use of creating additional storage space, but instead gave preference to incorporating a habitable room within the space of the loft. This would provide an additional bedroom without increasing the buildings footprint and it would also provide additional storage capacity within the eaves of the loft.
- 4.73 Members and Officers were therefore keen to explore a design whereby a habitable room built into the loft space could be provided. The representative of Stephen Taylor Architects provided information and guidance on the matter, including some examples of schemes where houses had included a room in the roof. This highlighted a number of issues for members to consider, including: roof pitch height; whether to create space for a habitable room or primarily for storage space; insulation requirements and type, cost etc.
- 4.74 The representative of Stephen Taylor Architects provided examples of schemes where some houses had included a habitable room in the space of the roof. This illustrated the difference in room pitch needed. Members thought the mix of dwellings with and without the use of the additional bedroom in the roof added visual interest to the street scene by varying height and pitch of the roofline. The representative also showed an example of a development where the bedroom ceiling had been removed to give upper first rooms with high, pitched ceilings. This used the roof space effectively and allowed for the roof line to be kept low.
- 4.75 The representative also informed members that whilst it was a little more costly to insulate the roof to make a habitable roof space, it was not difficult to do and the benefit would be an additional bedroom for marginal increase in the footprint. Members heard that creating capacity to build into the roof space, then not doing so, was costly.
- 4.76 Figure 1, page 13, shows housing applicants housing need. It is clear from the data that there is a need in Waverley for 1 and 2 bed homes. In the context of building into the roof space, there is less of a need to build into the roof space of 1 and 2 bed homes to provide an additional bedroom.

However, building a habitable room into the loft space would provide a cost effective solution and be a better use of space if a family wishes to upsize.

**RECOMMENDATION:** That the revised Design Standards include a design element for loft space to incorporate a habitable bedroom; and that this should only apply to house types with 3 + bedrooms and would therefore vary scheme to scheme.

**RECOMMENDATION:** Building into the roof to create a habitable bedroom should be considered per scheme as a cost effective solution for creating additional bedroom space in 1 and 2 bed homes without increasing the buildings footprint.



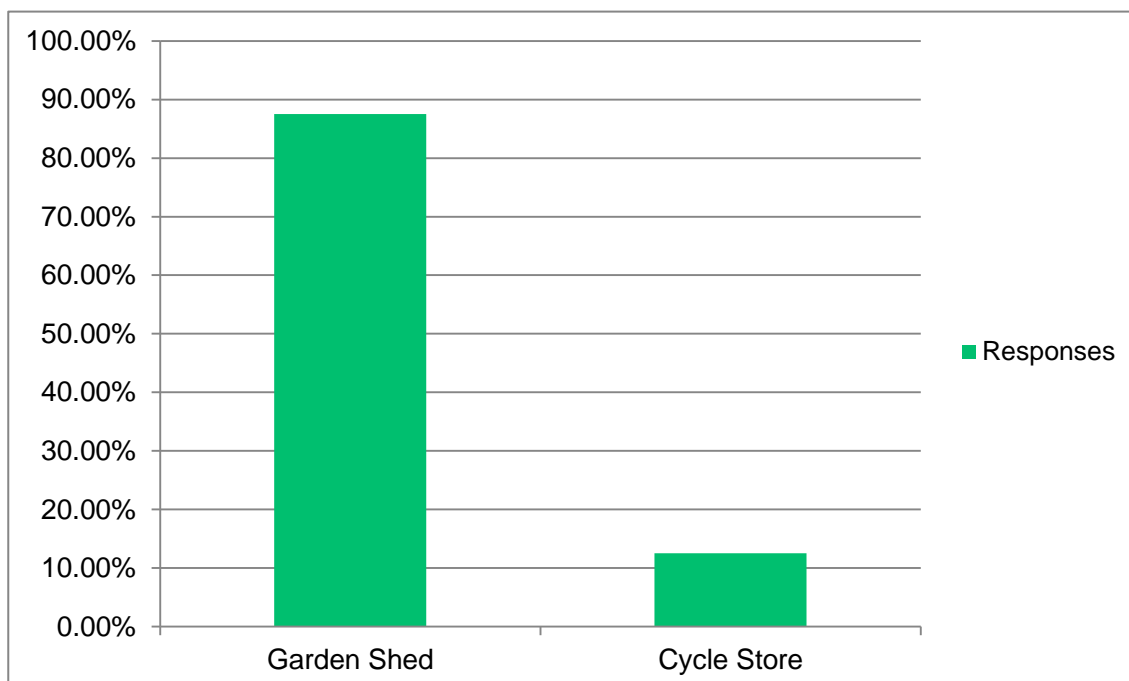
## ‘DO YOU LIKE WHERE YOU LIVE’ SURVEY RESULTS

4.77 Members issued a survey<sup>19</sup> to tenants who reside in Waverley’s new homes. The Group was keen to understand tenant’s opinion about the design of their home and what could be improved in the future.

4.78 The survey was sent to 28 tenants. 10 people (36%) answered the survey. Out of the 10 total responses, 8 completed the survey and 2 partially completed the survey. Common themes were made by observing the survey data trends. While these themes were common among the responses, it is not possible to make inferences due to the small sample size. Tenants generally commented that there was a lack of space in the property, as well as a lack of space in the kitchen and lounge; criticism to the open plan design; and the property not being suitable for families with children in pushchairs, which has led to issues with accessibility. However, tenants did praise the availability of car parking onsite; improved health; lower energy bills; lower rent costs; improved environment for children (e.g. garden, own bedroom); general design of the home and good natural lighting.

4.79 Below is a snapshot analysis of the questions that received the most vocal and informative feedback.

### Question 5: If cycle storage was selected, do you store your cycle in the designated space within the garden shed or cycle store?



<sup>19</sup> The full results of the survey are available from officers on request.

Answer Choices	Responses	
Garden Shed	87.50%	7
Cycle Store	12.50%	1
Other (please specify)		1
	<b>Answered</b>	<b>8</b>
	<b>Skipped</b>	<b>2</b>

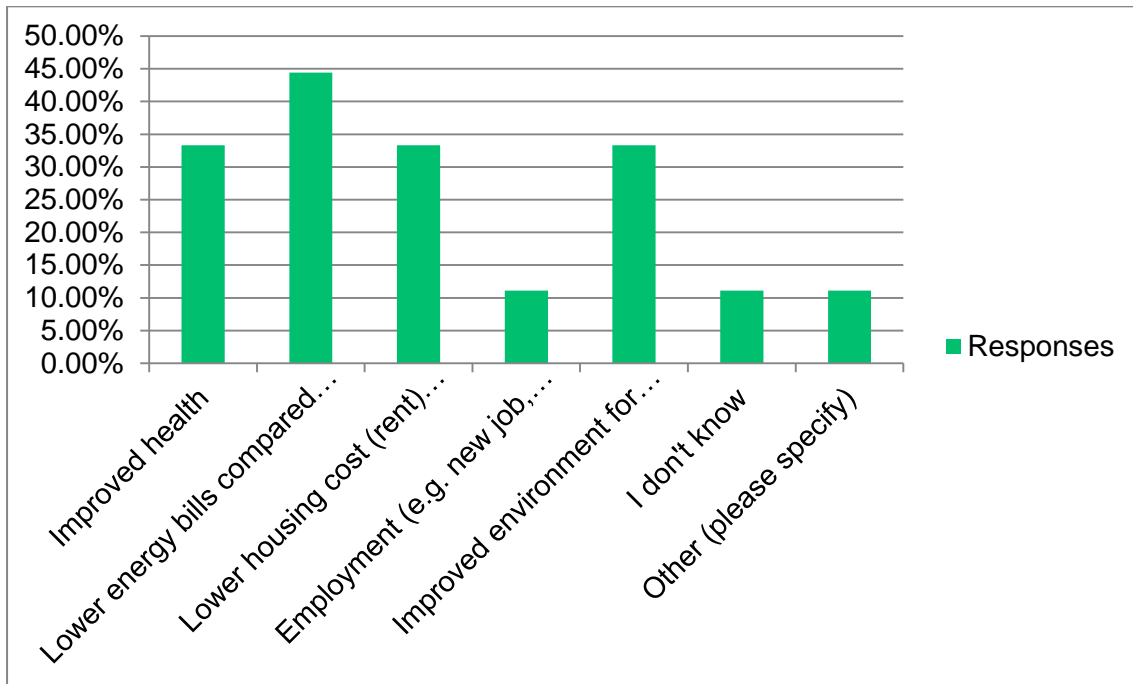
**Question 9: Looking specifically at your home, is there anything you particularly like about it?**

Responses
<p>How much storage space there is.</p> <p>I like the garden and that there is parking. My house is cosy and I like that it is energy efficient.</p> <p>The look of the house as it's a new build.</p> <p>Apartment design, location, accessibility.</p> <p>Am happy.</p> <p>Lots of light into the house and space to park car.</p> <p>The bedrooms are both a good size. I like having an energy efficient home with solar panels etc. I like having private parking at the back.</p> <p>I have a lot of windows that allows a lot of natural light.</p>

**Question 10: Is there anything you particularly dislike about your home?**

Responses
<p>Mould on walls, doors and windows keep dropping and people prams etc. out by my door not giving me enough room to get my own pram out.</p> <p>Layout/design is bad and no built in storage. Rooms are small and the house always looks cluttered.</p> <p>Our front driveway.</p> <p>It's become too small for my family, I am also on the second floor without a lift and have two toddlers and a baby. It's a struggle getting in and out and I have also broken two pushchairs trying to get it up the stairs. Also the rent is ridiculous and it's putting quite a big financial strain on me. I can't stand it here.</p> <p>The kitchen is so small it is very hard to fit a dining table. The lounge is also too small. We were told it would fit if we didn't have a dryer. Without a dryer I would never be able to dry all their clothes quickly enough. I have had to take off two internal doors downstairs to create space. The car park could have been designed more sensibly there are two areas that are meant to be planted, one got shrubs but the other has just been left to overgrow with weeds.</p> <p>Yes would like balcony bigger. Do not think there should be very light cream carpets through out as all of my block have children don't like open plan kitchen/lounge I think we should be allowed to have pets in our properties Walls are so thick we can all hear each other. We need a pram storage cupboard on ground floor as our prams keep braking.</p>

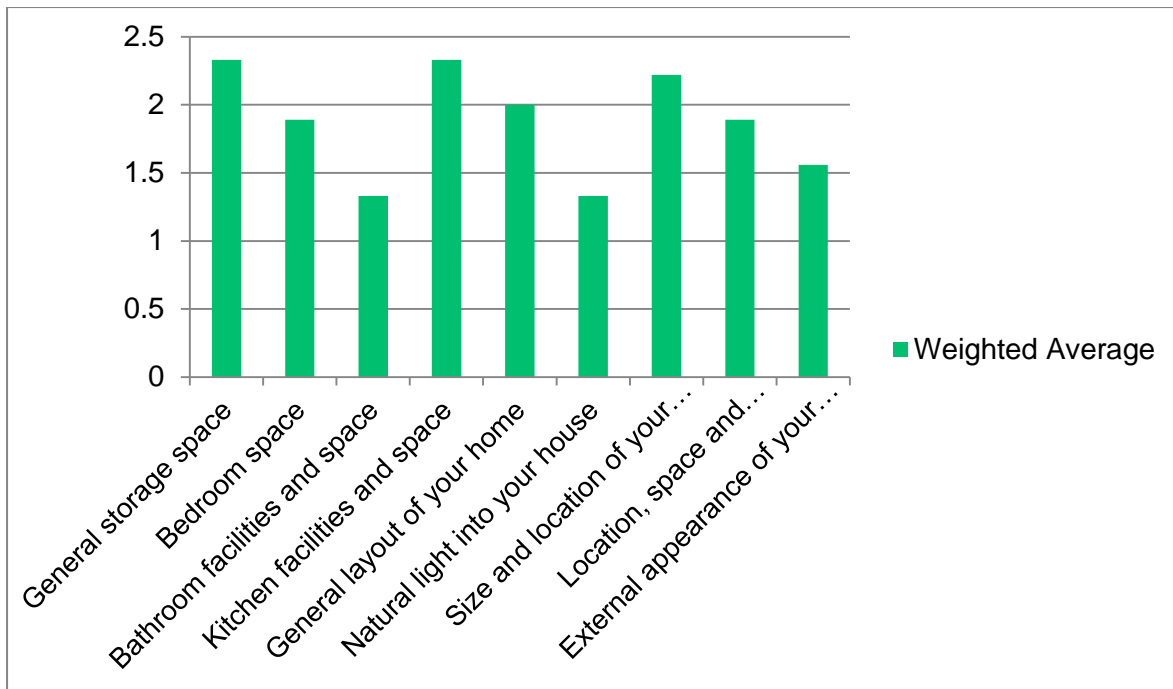
**Question 12: Has moving to your new home had any of the following benefits for you or members of your family?**



Answer Choices	Responses	
Improved health	33.33%	3
Lower energy bills compared with previous home	44.44%	4
Lower housing cost (rent) compared with previous home	33.33%	3
Employment (e.g. new job, closer to work, increased chance of finding work)	11.11%	1
Improved environment for children (e.g. garden, own bedroom)	33.33%	3
I don't know	11.11%	1
Other (please specify)	11.11%	1
	<b>Answered</b>	<b>9</b>
	<b>Skipped</b>	<b>1</b>

**Question 13: More specifically, how satisfied / dissatisfied are you with the following:**

	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
General storage space	33.33% 3	33.33% 3	11.11% 1	11.11% 1	11.11% 1
Bedroom space	33.33% 3	44.44% 4	22.22% 2	0.00% 0	0.00% 0
Bathroom facilities and space	66.67% 6	33.33% 3	0.00% 0	0.00% 0	0.00% 0
Kitchen facilities and space	33.33% 3	33.33% 3	0.00% 0	33.33% 3	0.00% 0
General layout of your home	44.44% 4	22.22% 2	22.22% 2	11.11% 1	0.00% 0
Natural light into your house	66.67% 6	33.33% 3	0.00% 0	0.00% 0	0.00% 0
Size and location of your private outdoor space	44.44% 4	22.22% 2	11.11% 1	11.11% 1	11.11% 1
Location, space and convenience for refuse and recycling containers	55.56% 5	22.22% 2	11.11% 1	0.00% 0	11.11% 1
External appearance of your house	55.56% 5	33.33% 3	11.11% 1	0.00% 0	0.00% 0

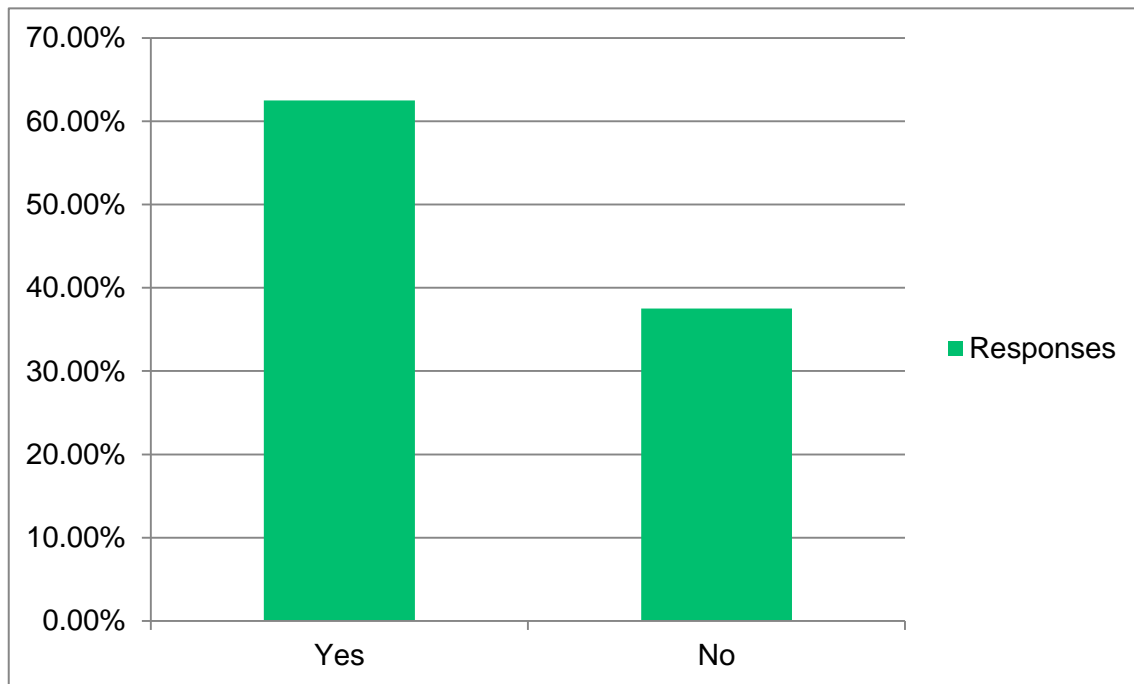


**Question 14: If you are particularly dissatisfied with any of the above points, please provide additional information:**

**Responses**

As stated previously the rooms have not been designed well, they lack space and the house generally looks cluttered. No built in storage. Downstairs toilet is huge and could have easily made it much smaller which would have allowed room for a cupboard behind. There is nowhere for the bins. I have put them in the carpark. Disappointed in kitchen there's no space for a tumble dryer or a dishwasher it's also open plan that is awful makes my lounge furniture smell of cooking

**Question 19: When you have visitors, can they easily find somewhere to park?**

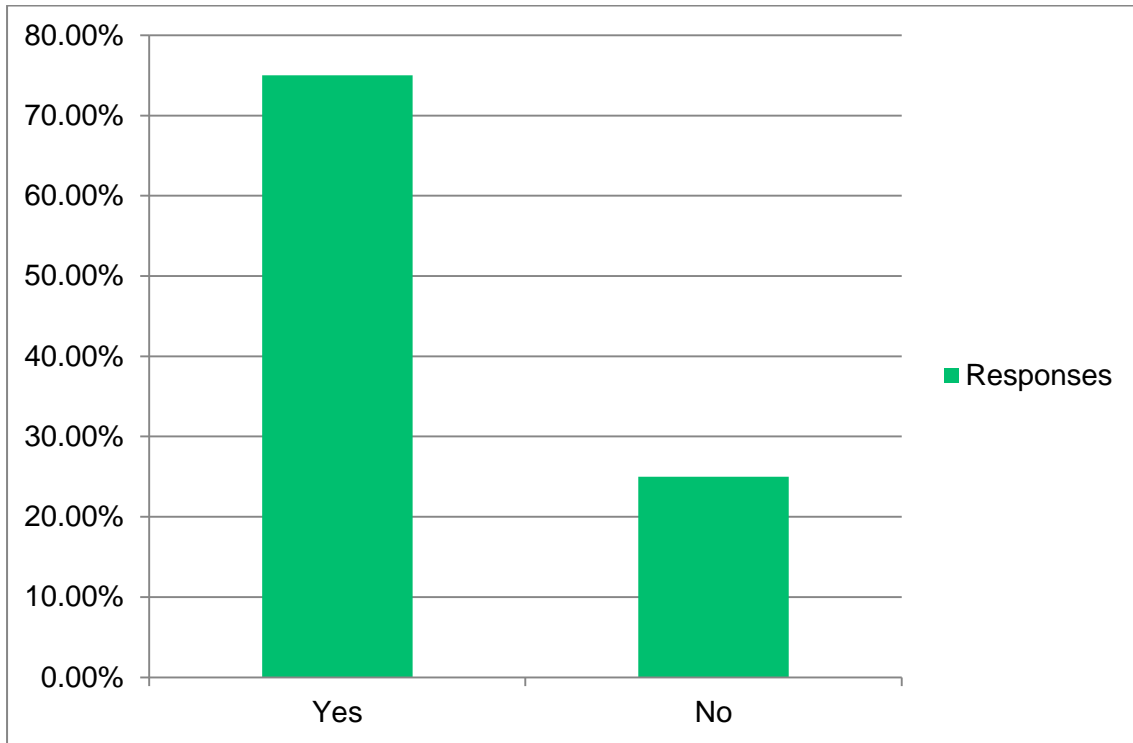


Answer Choices	Responses	
Yes	62.50%	5
No	37.50%	3

**Question 20: Please state any additional comments you may have in relation to car parking**

Responses
<p>Some times can't get in my space when people want to come round</p> <p>Car park is a great help. A big plus for moving here</p> <p>I have my own allocated parking space but don't have car, everyone seems to park in space. No one has any consideration, when family visits my space has usually been taken by someone else do the struggle to park here</p>

**Question 23: Do you think your home is well designed and looks good?**

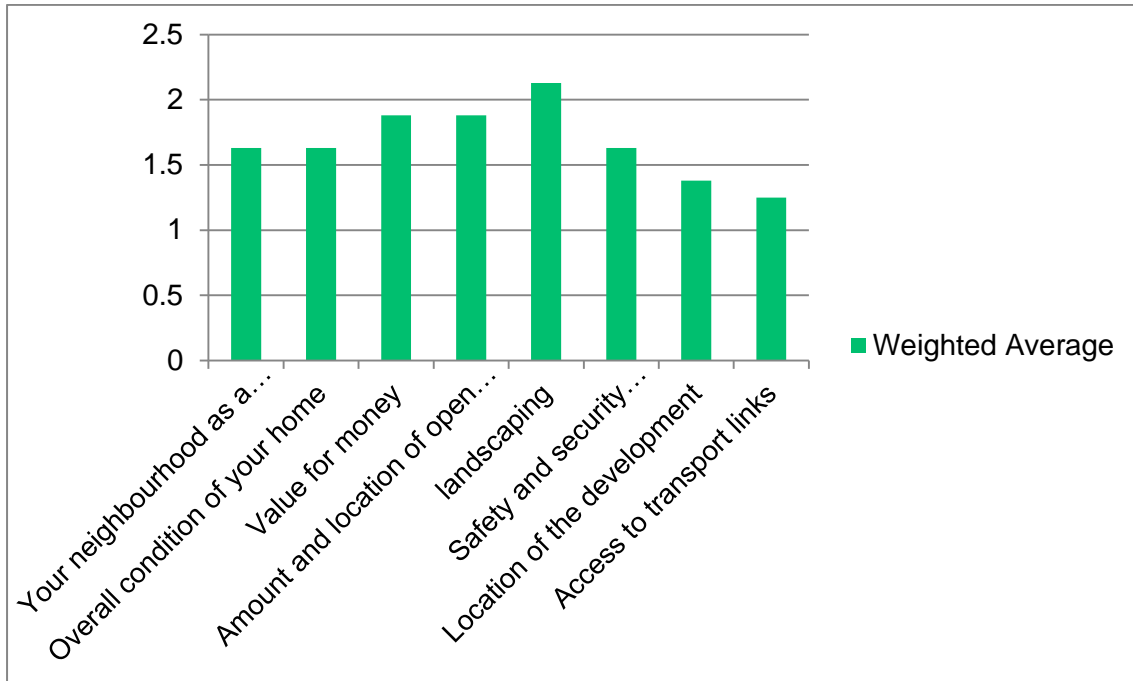


What are the reasons for your answer?
More space.
I think it looks nice but that's design isn't great, like one tiny window at the front and a larger one. Very difficult to find curtains/blinds.
Modern and spacious layout.
It's not right to raise children with no table to sit at for meals. The kitchen is too small for a table, likewise the lounge.

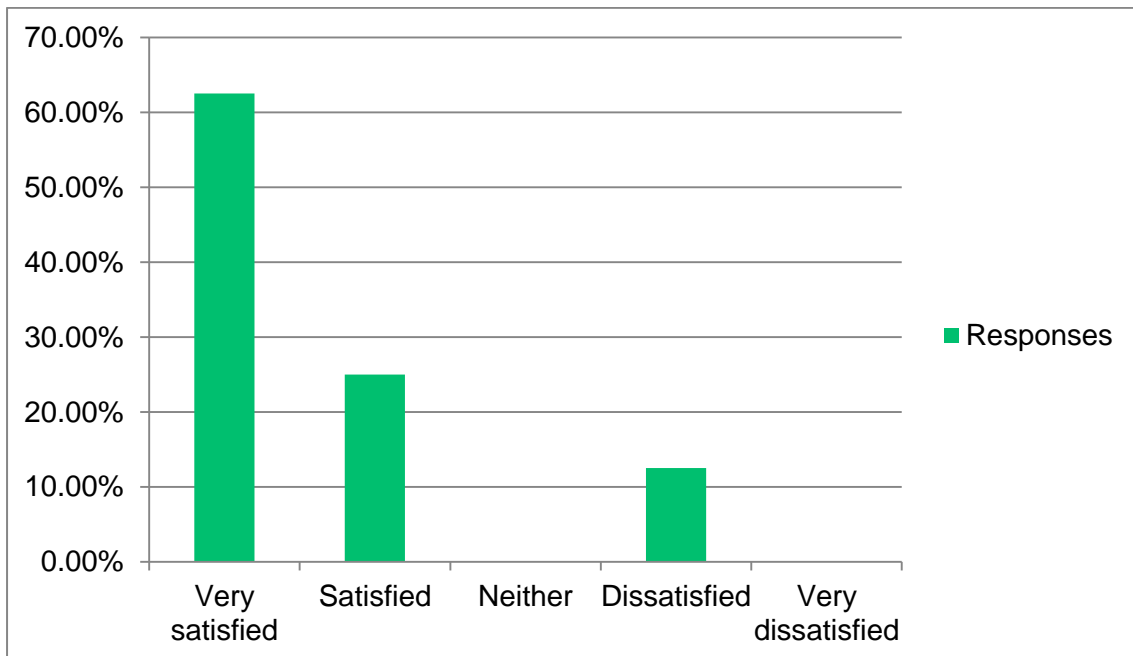
**Question 27: How satisfied / dissatisfied are you with the following?**

	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
Your neighbourhood as a place to live	62.50% 5	25.00% 2	0.00% 0	12.50% 1	0.00% 0
Overall condition of your home	37.50% 3	62.50% 5	0.00% 0	0.00% 0	0.00% 0
Value for money	50.00% 4	37.50% 3	0.00% 0	0.00% 0	12.50% 1
Amount and location of open space	50.00% 4	25.00% 2	12.50% 1	12.50% 1	0.00% 0
landscaping	50.00% 4	12.50% 1	12.50% 1	25.00% 2	0.00% 0
Safety and security throughout the development	37.50% 3	62.50% 5	0.00% 0	0.00% 0	0.00% 0
Location of the development	62.50% 5	37.50% 3	0.00% 0	0.00% 0	0.00% 0
Access to transport links	75.00% 6	25.00% 2	0.00% 0	0.00% 0	0.00% 0





**Question 29: Overall, how satisfied are you with your home and development as a whole?**



Answer Choices	Responses	
Very satisfied	62.50%	5
Satisfied	25.00%	2
Neither	0.00%	0
Dissatisfied	12.50%	1
Very dissatisfied	0.00%	0

## 5. Financial, Legal and Other Implications

### 5.1 Financial Implications

Changes in design standards might have financial and viability implications on any future development schemes. If standards are increased they may increase development costs. Financial appraisals are completed for each new scheme as part of the budget approval process. This will include Site C Ockford Ridge when the scheme has been developed and the impact of changes can be measured in the first instance on this scheme.

### 5.2 Legal Implications

In March 2015, the government published the “Technical Housing Standards – Nationally Described Space Standard” (amended in 2016). These standards replaced the different space standards previously used by local authorities. The technical standards remain within the planning system as a form of technical planning standard.

The standard was one of a wider housing standards review package. There are also optional building regulations requirements for access and water efficiency. Powers to introduce these optional requirements are included in the Building Act 1984 (as amended). The optional regulations and space standard can only be applied where there is a local plan policy based on evidenced local need and where the viability of development is not compromised. The review also clarified statutory building regulation guidance on waste storage to ensure it is properly considered in new housing development.

### 5.3 Equality Implications

Recommendations that reflect the Working Group’s consideration of accessibility and adaptability standards have been made within the report.

## **6. Summary of Appendices**

Appendix A – Executive Response to Scrutiny

Appendix B – Scoping report

Appendix C – Research to support task group meetings

Appendix D – Stephen Taylor Architects: comparison of energy and carbon standards

## **7. Officers to Contact**

Yasmine Makin  
Policy Officer – Scrutiny  
Tel: 01483 523078

Louisa Blundell  
Housing Development Manager  
Tel: 01483 523205

## Appendix A: Executive Response to Scrutiny

The following table sets out the Executive's response to the Overview and Scrutiny report

### Introduction

<b>Scrutiny Recommendation</b>	<b>Executive Decision</b>	<b>Progress/Action</b>	<b>Timescales</b>

# **Waverley Borough Council**

## **Scrutiny Review**

Review of Housing Design Standards and  
Specifications

November 2017

## **SCOPING A SCRUTINY REVIEW**

### **Background**

Overview and Scrutiny by definition of the Local Government Act 2000 has the power to investigate and review an issue or concern by conducting an in-depth scrutiny review. Choosing the right topic for an in-depth scrutiny review is the first step in guaranteeing that the work of scrutiny adds value to the corporate priorities and benefits the Borough's residents. The Overview and Scrutiny Committee may wish to appoint a members task and finish group to undertake a majority of the research and to evaluate the evidence.

### **What makes an effective scrutiny review?**

An effective scrutiny review must be properly project managed. The review must clearly state the aims & objectives, rationale and how the review will contribute to policy development / improve service delivery. To ensure the review goes well it is vital that the scope is robust and thorough and is treated as a project plan. The review should be SMART (Specific, Measurable, Achievable, Realistic & Time-bound) in its scope in order to have the most impact. The scoping template is designed to ensure that the review from the outset is focused exactly on what the members hope to achieve.

The scoping document should be treated as the primary source of information that helps others understand what the review inquiry is about, who is involved and how it will be undertaken. Once the scoping document is complete it should be circulated to relevant officers and key members of the Executive for comment before being agreed by the relevant Overview & Scrutiny Committee. The scrutiny review will be supported by the Scrutiny Policy Officer.

### **What happens after the review is complete?**

It is important that the relevant Overview & Scrutiny committee considers whether an on-going monitoring role is appropriate in relation to the review topic and how frequent progress is reported back to the Overview & Scrutiny committee after completion. Overview & Scrutiny should be monitoring the progress and reviewing the changes that have been made as a result of a scrutiny review to ensure the work undertaken has been effective in achieving its objectives.

## FOR COMPLETION BY MEMBERS PROPOSING THE REVIEW

Topic		
1.	Title of proposed review:	Housing Design Standards and Specifications
2.	Proposed by:	Cllr John Ward

Who is involved?		
3.	Chair of the task and finish group:	
4.	Members on the task group:	Cllr John Ward Cllr Richard Seaborne Cllr Liz Townsend Cllr Gordon-Smith Cllr Patricia Ellis Adrian Waller – Waverley Tenants Panel
5.	Scrutiny Policy Officer:	Alex Sargeson

Research programme	
6.	<p><b>Rationale / background to the review:</b> Why do you want to undertake this review? What has prompted the review? E.g. legislation, public interest, local issue, performance information etc</p> <p>The Council adopted the current housing standards and specifications in April 2014 at full Council and as part of the guidance notes it was recommended that these standards should be reviewed two years time after adoption. In the meantime, in March 2015, the Government reviewed the national space standards and has removed the code for sustainable homes in a move to embed energy targets within building regulations as part of the Deregulation Bill within the new standards.<sup>20</sup> Therefore these two circumstances provide a timely opportunity to review the design standards and specifications for social housing provided by Waverley. It is intended that the outcome of this review will inform proposals for Site C at Ockford Ridge and other Waverley Borough Council housing development schemes.</p>
7.	<p><b>Terms of reference:</b> What are your desired outcomes? What are the objectives for this review? (Linked to the research questions but are used to describe the general aims and outcomes of the review). Which research questions do you want to answer? (Questions upon which the review will be focused and for which timely and informed answers can be developed in accordance to the evidence collected)</p> <p style="text-align: center;"><b><u>Terms of reference</u></b></p>

<sup>20</sup> <https://www.gov.uk/government/publications/technical-housing-standards-nationally-described-space-standard>

### **Desired outcomes**

To make recommendations for the practical and effective use of social housing internal design standards and specifications. Other desired outcomes are for the findings of this review to inform current and future housing developments, e.g. site C in the Ockford Ridge development programme. Furthermore members wish to gain reassurance of the health and safety of structures following the Grenfell disaster.

### **Objectives for the review**

To review the housing designs standards and specifications adopted in April 2014 and carry out scrutiny in relation to the development of the Waverley Housing Standard to take into account the following:

The removal of the Code for Sustainable Homes by the Government.

Previous commitment to reviewing the standards and specification in two years<sup>21</sup>

To review the space guidelines with particular attention to internal layout, storage space and room layout.

To understand the difference between what are the nationally described standards including:

What is and isn't legally binding

What are optional requirements / recommendations for Local Housing Authorities (building regulations), which only apply 'where it is right to do so'.<sup>22</sup>

To consider through building regulations how future developments can become more sustainable for energy (low carbon energy efficient homes) and waste disposal.<sup>23</sup>

To what extent do we want to implement any of the optional requirements against meeting our housing objectives?

To understand if the current internal design standards and specifications are meeting local needs and if not to identify which aspects can be improved.

To learn through examples from other Local Authorities what best in class affordable housing looks like in terms of design standards.

To learn from the experiences of tenants about potential areas for improvement in standards and space specifications.

To review housing health and safety aspects, including the health and safety risk register in light of the Grenfell disaster.

To address the shortfalls in the Governments 2015 Housing Standards review (partly addressed in section 8).

### **Research questions**

Are the overarching principles in the Design Standards and Specifications for New Council Homes (Waverley Borough Council, December 2013) acceptable?

What design standard guidance do members want to review?

What is the current legislation on building regulations?<sup>24</sup>

What are the Government's new Housing Standards (2015) and to what extent has Waverley Borough Council adopted any of the optional requirements? (If none, which (if any) of the optional requirements should the Council adopt?

<sup>21</sup> The Government is reviewing building regulations as a result of the Grenfell disaster – results due in spring 2018

<sup>22</sup> NB: the optional requirements / regulations on access and water efficiency and the nationally described space standard can only be applied where there is a local plan policy in place based on evidenced local need.

<sup>23</sup> Optional requirements introduced in building regulations also include accessibility and water efficiency.

<sup>24</sup> The Government are currently reviewing building regulations as a result of the Grenfell disaster with results due in Spring 2018.



	<p>As housing designs are assessed on a site-by-site basis, in the circumstance of conflicting priorities between housing size and number of houses per site, what should be the top priorities in order to maximise local need?</p> <p>What scope is there for loft space to be used as either additional storage space or a bedroom?<sup>25</sup> And what are the implications of this move, e.g. on internal space standards, bed room size, and required living space designs?</p> <p>How will a change to the space standard impact on the risk to health and safety and on energy conservation targets in building regulations?</p> <p>What are the implications of changes to either principles or guidance on the new tenancy agreement? E.g. in the event of changes to the provision for loft storage space.</p> <p>Given the growing number of residents over 65 and 85 years of age in Waverley (highest in Surrey and this number is predicted to increase by approximately 30% over the next 5 years), what are good examples of accessible bungalow designs and ground floor flats?</p>
8.	<p><b>Policy Development and Service Improvement</b></p> <p>How will this review add value to policy development and/or service improvement?</p> <p><b><u>Policy Development</u></b></p> <p>It is expected that the conclusions and recommendations of this review will go on to inform the design proposals for Site C at Ockford Ridge and future housing development schemes.</p> <p><b><u>Issues in the current Government Housing Standards (March 2015):</u></b></p> <p>As part of the Government’s changes to the Housing Standards in 2015 sustainability performance is assessed on a site wide basis and is considered as a planning policy matter.</p> <p>There is no compulsion for ‘walk around’ space if minimum standards are met as furnished layouts are not required to demonstrate compliance. Plus there is no national guidance for those wanting to go further than the baseline minimum.</p> <p>There are no housing quality indicators outside of London.<sup>26</sup></p> <p>What are the implications of the national described space standard on local neighbourhood plans.</p> <p>The national described space standard and the optional regulations can only be applied where there is a local plan policy based on evidenced local need and where the viability of development is not compromised.</p> <p>The Housing Standards 2015 do not include guidance on internal daylight, indoor air quality and guidance and evidence of materials for sustainable practice.</p> <p><b><u>Service Improvement</u></b></p> <p>This review will be inviting evidence from the Waverley Tenants Panel on the first homes delivered to the current standard (Cedar Close, Farnham., Show Homes, Ockford Ridge, Godalming and Bridge Road, Haslemere, Badgers Close, Farncombe, Wey Court, Godalming and Nursery Hill, Shamley Green) in order to incorporate their comments and suggestions to continuously improve the quality and design structure of new Council homes.</p>

<sup>25</sup> The current Design Standards and Specifications (Dec 13’) state that the Council supports the minimum storage standards and that storage should be provided through dedicated, built-in storage cupboards such as airing, utility and cloak cupboards, cupboards under the stairs or built-in wardrobes. Again, it raises the question over what are the optional requirements / recommendations and what is standard design guidance from Government.

<sup>26</sup> As there are no housing quality indicators outside of London the group should consider developing a set of indicators for Waverley.

9.	<p><b>Corporate priorities:</b>  How does the review link with the corporate priorities?  <a href="http://www.waverley.gov.uk/info/200009/council_performance/524/waverley_corporate_plan_2016_-_2019#">http://www.waverley.gov.uk/info/200009/council_performance/524/waverley_corporate_plan_2016 - 2019#</a></p> <p>Community Wellbeing (Housing)  Environment (The Built Environment)</p>
10.	<p><b>Scope:</b>  What is and what isn't included in the scope? E.g. which services does the scope cover?</p> <p><b>What is within the scope:</b></p> <p>New homes developed and funded by Waverley Borough Council including;  A focus on the internal design (space) standards  General needs affording housing for rent  Flats  Standards for residential development (internal and external space standards)  External space standards / gardens / amenity space  Parking provision</p> <p><b>What isn't within the scope:</b></p> <p>Privately developed accommodation  Void homes  Standards for refurbished properties (private and social)  Garages  Physical external materials  Design standards for Disabled Adaptations  Supported Living Accommodation  Connectivity and Surroundings – (planning)</p> <p><b>Services included:</b></p> <p>Housing Development  Housing Operations  Planning Services (Local plan and Site C, Ockford Ridge).</p> <p>There are also implications for the Tenancy and Estates team as well as the Legal team in relation to health and safety aspects (fire safety).</p>
11.	<p><b>Methodology and methods:</b>  Your methodology underpins how you will undertake the review. For example what evidence will need to be gathered in-house and from external stakeholders / partners?  Your research methods are the techniques used to gather knowledge and information. These include but are not limited to desk based research, interviews, site visits, engagement exercises, surveys, focus groups etc.  How do these methods help you to answer your research questions in section 7?</p> <p><b>Methodology:</b></p> <p><b>Preliminary / core evidence that will need to be collected to inform this review is as follows:</b></p>

	<p>The Design and Specifications for new Council Homes, Waverley Borough Council, December 2013          Technical housing standards – nationally described space standard, Department for Communities and Local Government, March 2015.          Summary of energy requirements</p> <p><b>Methods:</b></p> <p>A series of Member task group meetings will be held to hear evidence from both internal and external guests. Members will hear information and statements from witnesses and then provide questions to probe additional information to answer the key research questions as set out in this scope.</p>
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Council services expected to contribute	
Council Service	Reason / Intention for evidence
12. Housing Development	
13. Housing Operations	
14. Planning Services	Local plan & Site C at Ockford Ridge

External Witnesses to be invited / submit evidence	
Organisation	Reason / Intention for evidence
15. Waverley Tenants Panel	
16.	
17.	
19.	

20.	<p><b>Project plan:</b>          What is the proposed start and finish date?          How many task and finish group meetings are there likely to be?          Are the task and finish group meetings going to be thematic in approach? If so, what themes / policy issues will the task group consider in each respective task and finish group?</p>
<b>Timescale</b>	
Proposed start date:	November 2017
Proposed finish date:	March 2018
<b>Task and finish group plan</b>	
How many task and finish group meetings are anticipated to support this review? Fill in and strike through as	4

appropriate.

**Task group theme (1): Context and Introduction: Overarching principle guidelines**

**Aim:** To receive and understand the context for this scrutiny review and to examine the overarching principles in the design standards and specifications for new council homes to assess if the standards are up to date in light of the changes in legislation to housing design standards from the Government. Members will also be reviewing external appearances (including health and safety aspects), town and village designs as well as considering the implications on the Local Plan. In addition members will decide which design standards they would like to review in more detail for future task group meetings.

**Witnesses:**

**Task group theme (2): Design standards (x 2)**

**Aim:** To review a selection of internal design standards with the aim to make a judgement as to whether the current internal space standards selected for review are meeting current and future tenants needs, for example loft space. Members will hear experiences from existing tenants about potential areas for improvement; in addition to evidence provided from other Local Housing Authorities on best practice. Members should also decide if they wish to develop a 'Waverley Standard' and therefore consider if any extensions to the nationally described space should be sought in relation to internal space design.

Members should also bear in mind what (if any) optional requirements they would like to explore in relation to building regulations (energy and sustainability) in preparation for the next session.

**Part 1, Design Standards.**

**Areas covered:**

Internal Space Standards  
Bedroom size  
Living spaces and design layouts  
Internal storage

**Part 2, External appearance and design.**

**Areas covered:**

External appearance  
Accessibility standard  
Residential development standards

	<p><b>Task group theme (3): Building regulations and sustainability<sup>27</sup></b></p> <p><b>Aim:</b> In this session members will be looking at building regulations and sustainability in relation to the removal of the Code for Sustainable Homes, which was replaced by new optional technical national standards, which include optional building regulations (water and access). Members should consider whether first and foremost if Waverley has added any optional requirements and if so what these are, but if not, if any optional requirements should be added. Members should also consider what challenge this may present to planning (these additional options can be required by a planning permission).</p> <p><b>Areas covered:</b></p> <p>Sound insulation  Post Code for Sustainable Homes</p> <hr/> <p><b>Task group theme (4): Conclusions and recommendations</b></p> <p><b>Aim:</b> To reflect on the previous sessions and conclude and make recommendations.</p>
21.	<p>Scrutiny resources:  In-depth scrutiny reviews are facilitated and supported by the Scrutiny Policy Officer.</p> <p>Alex Sargeson, Scrutiny Policy Officer (research and policy support to task group with the responsibility to compile information and write the final report).</p> <p>Yasmine Makin, Graduate Management Trainee (research and policy support to the task group).</p> <p>Fiona Cameron, Democratic Services Officer (organisation of task group meetings and recording key points and actions in task groups).</p>

<sup>27</sup> Ahead of this session members should bare in mind that the Government are currently reviewing building regulations and are due to publish a revised version in Spring 2018.

For completion by Corporate Policy Manager

22.	<p>Corporate Policy Manager comments:</p> <p>Will the proposed scrutiny timescale impact negatively on the scrutiny policy officer's time? Or conflict with other work commitments?</p> <p>The proposed timescale is manageable in relation to other demands on the Scrutiny Officer's time as we have the additional support of the Graduate Management Trainee.</p>	
	Name:	Louise Norie, Corporate Policy Manager
	Date:	23/11/2017

For completion by Lead Director

23.	<p>Lead Director comments:</p> <p>Scrutiny's role is to influence others to take action and it is important for the task and finish group to seek and understand the views of the Lead Director.</p> <p>Are there any potential risks involved that may limit or cause barriers that scrutiny needs to be made aware of?</p> <p>None.</p> <p>I would encourage the scrutiny review group to link Housing design with the promotion of wellbeing to ensure homes are compatible with modern and family lifestyles, e.g. by exploring the benefits of kitchen diners, lots of power sockets, broadband, wet rooms, smaller gardens and adequate parking provision. It is also important that accommodation is cost effective and easy to heat, maintain and keep clean. I would also encourage the scrutiny review group to consider how we can minimise the risk of mould and damp given the risks to health and how the accommodation facilitates personal independence, particular as tenants become older.</p>	
	<p>Are you able to assist with the proposed review? If not please explain why? (Are you or Senior Officers able to provide supporting documentation to this task group via the coordination of the Scrutiny Policy Officer?)</p> <p>Yes – the Head of Strategic Housing and Delivery and the Housing Development Manager will be able to support the Scrutiny Policy Officer in this review.</p>	
	Name and position:	Damian Roberts, Strategic Director – Frontline Services
	Date:	23 <sup>rd</sup> November 2017

For completion by Executive Portfolio Holder

24.	<p><b>Executive Portfolio Holder comments</b></p> <p>As the executive lead for this portfolio area it is important for the task group to seek and understand your views so that recommendations can be taken on board where appropriate.</p> <p>The nationally described space figures provide a starting point when determining room sizes but it has been widely accepted that this is a minimum standard and that the more space provided the healthier the home. Overcrowding and lack of built in storage leads to an increase in the risk of condensation and damp creating an unhealthy atmosphere and potential damage to the fabric of the property.</p> <p>Consultation with tenants when refurbishing the sheltered housing units at Rolston House revealed that built-in storage was the key to living in a smaller property, thus avoiding clutter and the subsequent reduction in circulation space. All units were provided with built-in wardrobes and additional storage cupboards, a move which has been very well received by the residents.</p> <p>Storage is a key issue but access to loft space should be denied as it presents an opportunity for hoarding and creates serious issues for maintenance staff when carrying out basic maintenance to loft-based utilities. However, consideration should be given to building out into the roof space in larger properties. This will be informed by housing need and the constraints of individual sites. In any case, properties should be designed with sufficient roof space to allow an extension into the roof should the need arise.</p> <p>Good thermal insulation and energy efficient heating is provided in all Waverley’s new builds. It should be ascertained whether modern, high-tech control of heating systems has produced added value where it has been installed in other social housing developments. Hastoe Housing Association introduced Passivhaus mechanical ventilation and heat recovery systems, and higher levels of the Code for Sustainable Homes. It would be useful to explore whether this has been of benefit to the tenant in terms of living environment and energy cost, and to the landlord’s installation and maintenance costs.</p> <p>Waverley’s ambition is to continue building high quality, well designed, healthy homes to meet the needs of our tenants now and into the future.</p>	
	Name and position:	Cllr Carole King, Portfolio Holder for Housing.
	Date:	13 November 2017

**Appendix C: Research to support task group meetings  
Internal Design Space Standards Comparison**

	<b>1 bed / 2 person flat (1 storey dwelling unless specified)</b>	<b>2 bed / 4 person flat (1 storey dwelling unless specified)</b>	<b>2 bed / 4 person House (2 storey dwelling unless specified)</b>	<b>3 bed / 5 person house</b>
<b>Waverley Council 2014<sup>28</sup></b>	48	70	83	96
<b>Nationally described space standard 2015</b>	50	70	79	86 (1 storey dwelling ) 93 (2 storey dwelling) 99 (3 storey dwelling)
<b>Parker Morris dwelling space standards 1961</b>	44.6	69.7	71.5 / 74.3 <sup>29</sup>	93.8 (3 storey dwelling)
<b>Parker Morris Modified 1967 Space Standards</b>				79.9 (1 storey dwelling) 86.4/89.1 (2 storey dwelling) 98.4 (3 storey dwelling)
<b>Quality Standards: English Partnership 'EP Standards' 2008</b>	51	-	77	93
<b>Standards and Quality in Development (2 eds.) Andrew Drury, HATC, 2008?</b>	50	70	82	86 (1 storey dwelling) 96 (2 storey dwelling) 102 (3 storey dwelling)
<b>HATC March 2010: The Amount and Use of Space in New Dwellings in London &amp; the South East</b>	51	77	77	93
<b>London Housing Design Guideline 2010</b>	50	70	83	86 (1 storey dwelling) 96 (2 storey dwelling) 102 (3 storey dwelling)
<b>London Plan 2011</b>	50	70	83	86 (1 storey dwelling) 96 (2 storey dwelling) 102 (3 storey dwelling)
<b>Circle Housing</b>	51	61	75	91
<b>Lambeth Council 2008</b>	45	-	-	-
<b>Eastleigh Council 2012<sup>30</sup></b>	51	66	77	93
<b>Worthing Council 2012<sup>31</sup></b>	51	66	77	93
<b>Exeter Council</b>	50	70	83	102
<b>Edinburgh Council 2010</b>	52	-	81	91 <sup>32</sup>
<b>Portsmouth Council SPD 2012</b>	45	67	78	84 (2 storey) 104 (3 storey)
<b>Glasgow 2017 'Interim Standards' <sup>33</sup></b>	48.5	73.5 <sup>34</sup>	79.0	82.5 (1 storey) 89.5 (2 storey) 98.5 (3 storey)

<sup>28</sup> Figures based on Level 2 Standards

<sup>29</sup> \* Semi/end terrace and centre terrace

<sup>30</sup> NB: Figures do not include no. of people

<sup>31</sup> NB: Figures do not include no. of people

<sup>32</sup> Large Dwellings as defined as a minimum floor area of 91sq m at three or more bedrooms.

<sup>33</sup> Figures based on requirements for general units

<sup>34</sup> NB: No. of beds not specified



### Main Double Bedroom size comparison<sup>35</sup>

	1 bed / 2 person flat	2 bed / 4 person flat	2 bed / 4 person House	3 bed / 5 person house
Waverley Council June 2017	12 <sup>36</sup>	12	12	12
Nationally described space standard 2015	-	-	-	-
GLC 1977	11	11	11	11
Standards and Quality in Development (2 eds.) Andrew Drury, HATC, 2006	12	12	12	12
London Housing Design Guideline 2010	12	12	12	12
London Plan 2011	12	12	12	12
Draft London Plan 2017	11.5	11.5	11.5	11.5
Lambeth Council 2008 <sup>37</sup>	12.0	12	12	12
Eastleigh Council 2012	12	19	24	31
Worthing Council 2012 <sup>38</sup>	12	19	24	31
Glasgow 2017 'Interim Standards' <sup>39</sup>	11.5	11.5	11.5	11.5

<sup>35</sup> General figure for single room is 7m<sup>2</sup> (Waverley 2017 is 7.5m<sup>2</sup>) and for a double is 12m<sup>2</sup>.

<sup>36</sup> NB: This room size is calculated based on the presumption that the minimum size of a 1 bed 2 person dwelling is 51msq

<sup>37</sup> Despite the no. of beds and people differing from the categories set out, the room sizes are all 12.0 across the board despite the increase in the no. of beds and people.

<sup>38</sup> Does not specify no. of people

<sup>39</sup> Figures based on minimum area required for general units (m<sup>2</sup>)

## 'Living area' size comparison<sup>40</sup>

	1 bed / 2 person flat	2 bed / 4 person flat	2 bed / 4 person House	3 bed / 5 person house
Waverley Council June 2017 <sup>41</sup>	18.5	18.5	-	-
Nationally described space standard 2015	-	-	-	-
GLC 1977 <sup>42</sup>	12	14	14	15
Standards and Quality in Development (2 eds.) Andrew Drury, HATC, 2006	22	-	27	30
London Housing Design Guideline 2010	23	-	27	29
London Plan 2011 <sup>43</sup>	23	27	27	29
Lambeth Council 2008 <sup>44</sup>	15.5	-	-	-
Eastleigh Council 2012 <sup>45</sup>	22	24	27	30
Worthing Council 2012 <sup>46</sup>	22	24	27	30
Glasgow 2017 'Interim Standards' <sup>47</sup>	-	23	23	25

<sup>40</sup> Living area is defined as the lounge / kitchen & dining area

<sup>41</sup> Combined Living/Dining/Kitchen Area based on no. of people

<sup>42</sup> Living room with Kitchen / Diner

<sup>43</sup> Combined floor area of living, dining and kitchen spaces based upon no. of people

<sup>44</sup> Living / Dining area

<sup>45</sup> Living, cooking & eating area

<sup>46</sup> Living, cooking and eating area

<sup>47</sup> Figures based on requirements for general units

## Storage space comparison

	1 bedroom / 2 bed spaces (flat)	2 bedroom / 4 bed spaces (flat)	2 bedroom / 4 bed spaces (house)	3 bedroom / 5 bed spaces
Waverley Council 2014	2.5	-	2.5	3.0
Waverley Council 2017	2.5	-	3.0	3.5
Nationally described space standard 2015	1.5	2.0	2.0	2.5
Parker Morris dwelling space standards 1961	2.8 (flat)	3	4.6	4.6
Standards and Quality in Development (2 eds.) Andrew Drury, HATC, 2006 <sup>48</sup>	1.25	-	2	2.025
London Housing Design Guideline 2010	1.5	-	2.5	3.0
London Plan 2011 <sup>49</sup>	1.5	2.5	2.5	3.0
Draft London Plan 2017	1.5	2.0	2.0	2.5
Eastleigh Council 2012	2.5	3.5	3.75	4.5
Worthing Council 2012	2.5	3.5	3.75	4.5
Edinburgh Council 2010	2.5	-	3	4.5
Glasgow 2017 'Interim Standards' <sup>50</sup>	-	-	1.5	2

<sup>48</sup> On storage cupboards: 1m<sup>2</sup> floor area for 1p dwellings plus 0.25m per additional person.

<sup>49</sup> Minimum of 1.5sq m should be provided for 2 person dwelling, in addition to storage provided by furniture inhabitable rooms. For each additional occupant an additional 0.5 sq m of storage space is required.

<sup>50</sup> Figures based on requirements for general units

## External Appearances include the following design elements:

Car Parking space  
Cycle Parking space  
Outside Amenity Space / Gardens  
Landscaping (Footpaths and Pathways)

### Car Parking Space

#### Waverley 2017<sup>51</sup>

#### General Parking Standards

035 Parking provision is to reflect the current and planned future needs of the dwelling occupants.

037 The Council requires the provision of parking standards, sightlines, etc. which must comply, as a minimum, with the requirements of the Local Authority.

038 Grouped parking areas are to be identifiable with the group of dwellings which they serve and such areas and associated access paths are to be well and sensitively lit.

#### Location/ Positioning

039 Space for residents' parking should be positioned as close as possible to the individual dwellings but in a manner to minimise the visual intrusion of cars in a residential environment.

040 For housing and bungalows, parking is to be within the garden area for individual dwellings (in- curtilage).

041 The distance from the car parking space to the home should be kept to a minimum and should be level or gently sloping and accord with Part 'M' of the Building Regulations.

042 Where the car parking space is outside of the curtilage of the dwelling or is part of a grouped parking area, the absolute maximum allowable distance between the allotted space and the dwelling entrance is **30 m**.

043 The positioning of car parking adjacent to windows of habitable rooms is to be avoided.

044 Car parking location should enable natural surveillance.

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<sup>51</sup> Waverley 2017 refers to the General Design Information and Requirements which have been produced with help from external experts. These are still draft and therefore the requirements are not public knowledge.

## DIMENSIONS

047 Individual parking spaces shall have minimum dimensions **4.8 m x 2.4 m for 90°/parallel parking** (side by side) and **6.1 m x 2.4 m for 0°/linear parking (nose to tail)**.

048 In grouped parking situations, **10% of spaces provided are to have minimum dimensions of 4.8 m x 3.3 m**. The areas are to be near level without ponding, providing only the necessary falls to ensure adequate drainage.

049 Where **in-curtilage** parking is provided, at least one space serving each dwelling is to have an adjoining firm even surface of **900 mm width giving overall dimensions of 4.8 m x 3.3 m**. The areas are to be near level, providing only the necessary falls to ensure adequate drainage.

050 All other car parking spaces adjacent to the home are to be capable of enlargement to attain **3.3 m width wherever practical**.

### Driveways

051 Drives for general needs dwellings must not be ramped steeper than 1 in 10 (10%) and **ramp widths should be minimum 2.5 m for single lane and 4.8 m for two-lane traffic**. Drives to individual dwellings are to be finished in tarmac.

### Waverley Draft Local Plan Part 1 Policy ST1: Sustainable Transport

9. *“Make appropriate provision for car parking, having regard to the type of development and its location, in accordance with local standards”*

### Waverley: Adopted Parking Guidelines October 2013<sup>52</sup>

#### Recommended Guidance for Residential Development

Locational Characteristics	Town Centre	Rest of Waverley
1 bed	1 space per unit	1 space per unit
2 bed	1 space per unit	2 spaces per unit
3 + bed	1.5 spaces per unit	2.5 spaces per unit

Surrey Design (2002) also recommends that parking spaces conform to the requirements of the design guide to ensure the required size is provided as well as the appropriate manoeuvring space.

#### The minimum sizes are as follows:

Access from the end	2.4m x 4.8m
Access from the side	2.4m x 4.8m
Disabled parking bay	At least 3m x 4.8m

<sup>52</sup> Parking Guidelines October 2013 – applied in Current Design Standards for Council Homes in 2014 version

Parking spaces at right angles to the carriageway should have an 800 mm clearance between the parking space and the footway in order to accommodate any overhang. This can be surfaced or planted in order to deter pedestrian use, although pedestrian crossing points should be provided. A 6m paved surface is required to manoeuvre into and out of these spaces, such as in parking squares and courts.

**Surrey County Council 2012**

**FIGURE 1 – Recommended Guidance for Residential Parking**

Locational Characteristics	Town Centre	Edge of Centre	Suburban	Suburban edge/ Village/Rural
1 & 2 bed flats	1 space per unit	1 space per unit	1 space per unit	1 space per unit
1 & 2 bed houses	1 space per unit	1 space per unit	1 + space per unit (note 1)	1.5 + spaces per unit (note 1)
3 bed houses	1 space per unit	1 + space per unit (note 1)	2 + spaces per unit (note 1)	2 + spaces per unit (note 1)
4 + bed houses	1 space per unit	2 + spaces per unit (note 1)	2 + spaces per unit (note 1)	2 + spaces per unit (note 1)

**Notes on Figure 1**

1. Where space permits, it may be appropriate to consider increased provision.
2. Reduced or even nil provision may be appropriate in support of demand management and the most efficient use of land.
3. Allocated or unallocated parking may be acceptable where appropriate.
4. Unallocated parking should be available only to the proposed development.
5. Visitor parking is encouraged where appropriate (eg: flats) though is not always necessary.
6. Garages, open carports and/or car barns are acceptable subject to good design. It is acknowledged that in certain locations garages may be used for purposes other than parking. The appropriate size and provision of garages is considered to be a matter for the local authority.

**The Draft New London Plan 2017**

**Electric / ultra low emission vehicles**

All residential car parking spaces must provide infrastructure for electric or Ultra-Low Emission vehicles. At least 20% of spaces should have active charging facilities, with passive provision for all remaining spaces

## Maximum residential parking standards

number of beds	4 or more	3	1-2
parking spaces	up to 2 per unit	up to 1.5 per unit	less than 1 per unit

Notes:

All developments in areas of good public transport accessibility (in all parts of London) should aim for significantly less than 1 space per unit

Adequate parking spaces for disabled people must be provided preferably on-site<sup>[1]</sup>

20 per cent of all spaces must be for electric vehicles with an additional 20 per cent passive provision for electric vehicles in the future.

In outer London areas with low PTAL (generally PTALs 0-1), boroughs should consider higher levels of provision, especially to address 'overspill' parking pressures.<sup>53</sup>

### Barnet Council 2011<sup>54</sup>

Number of beds	Barnet UDP (Policy M14)	London Plan
4 or more	2 to 1.5 per unit	2 to 1.5 per unit
3	1.5 to 1 per unit	1.5 to 1 per unit
2	1.5 to 1 per unit	Less than 1 per unit
1	1 to less than 1 per unit	Less than 1 per unit

### Department for Transport: Manual for Streets (2007)

For **parking parallel** to the street, each vehicle will typically need an area of about **6m long and 2m wide**.

**Bays** will need to be indicated or marked and be a minimum of **4.2m long and 2.4m wide**.

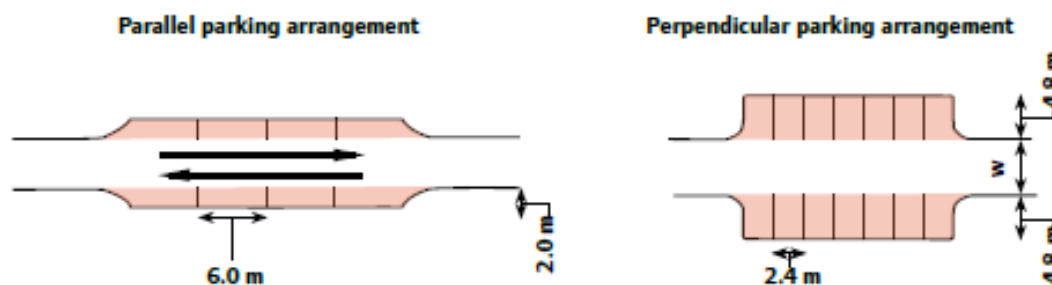


Figure 8.18 Suggested parallel and perpendicular parking arrangements.

<sup>53</sup> Details for car parking standards are the same as in the London Plan 2011 (see next page).

<sup>54</sup> Note comparison with the London Plan 2011.

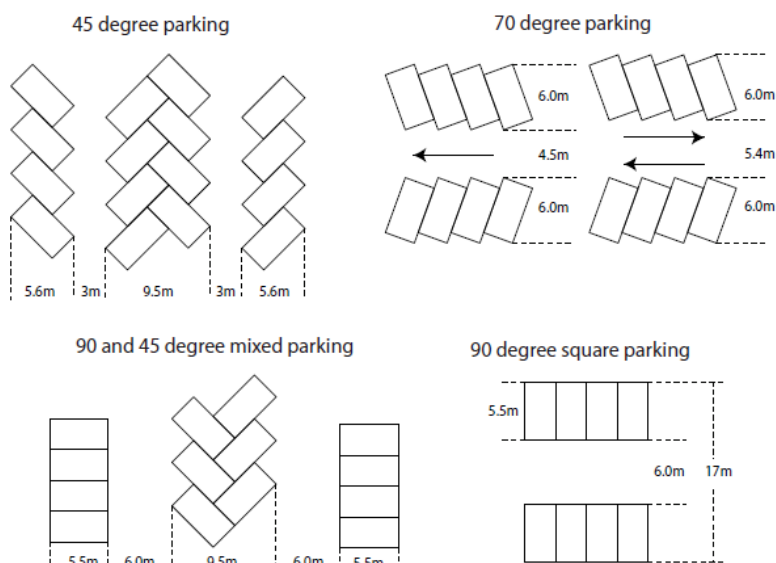
The width needed to access echelon or perpendicular spaces in figure 8.18 depends on the width of the bay and the angle of approach.

For a **2.4m wide bay**,

**At 90 degrees (Bay), 6.0m wide;**

**At 60 degrees, 4.2m wide; and**

**At 45 degrees, 3.6m wide.**



### Spelthorne: Parking Standards 2011

	Car Parking Spaces per dwelling	Cycle Parking Per Dwelling (see note 14)
<b>a. General Needs Housing</b>		
One bedroom dwellings	1.25	1
Two bedroom dwellings	1.5	1
Three bedroom dwellings (80 sq m gross floor area or less excluding garages)	2	1
(above 80 sq m gross floor area excluding garages)	2.25	1
Four bedroom dwellings or larger	2.5	1
<b>b. Affordable Housing</b>		
One bedroom dwellings	1	1
Two bedroom dwellings	1.25	1
Three bedroom dwellings	1.75	1
Four bedroom dwellings	1.75	1
<b>c. Sheltered Housing</b>	0.4	1 per resident warden plus 1 per 10 units
<b>d. Special Needs Accommodation</b>	5 for first 10 residents, plus 1 for every additional 5 residents	1 per 10 residents
<b>e. Residential Hostels</b>		
Homeless families	1 per family unit	1 per family unit
Single People	1 per 2 residents	1 per 10 residents



8. The minimum size of parking spaces and internal dimensions of single garages is **4.8 x 2.4m**

9. No more than half the width or area of a dwelling's front garden should be used for car parking and the width of drop kerbs should not exceed half the width of the frontage.

10. A minimum separation distance of 2 metres, which includes some landscaping, will be required between the front building line of any dwelling or other elevation with a window to a habitable room, and the footway or shared carriageway surface.

11. Parking spaces should be located at the front or side of dwellings and will only be accepted at the rear of new or existing dwellings if:

- i. a satisfactory buffer of garden and/or landscaping is provided between any parking space or garage, including the associated access, and the adjoining residential property,
- ii. a garden area of suitable size is maintained,
- iii. there is no adverse impact in terms of visual intrusion, loss of privacy or through high activity levels.

12. In assessing parking provision, the Council will not only expect the requirements of the standards and qualifying notes to be met but that any scheme is also appropriate in terms of the character of the locality in which it is situated. Landscaping of parking areas and appropriate surfacing materials should be used to complement any scheme as a whole.

13. Parking provision for warden accommodation in sheltered housing schemes should be in accordance with the standard for a dwelling with the appropriate number of bedrooms.

14. Separate cycle parking facilities in residential developments will normally only be required where space is not otherwise available within the curtilage of the development. In flats and communal accommodation a cycle parking/storage area should normally be provided within the building.

## Reading 2011

Based on a zonal scheme.<sup>55</sup>

### Number of spaces per dwelling

	Residential Parking Provision			
	Zone 1	Zone 2	Zone 3	Zone 4
<b>Residential</b>				
C3 Retirement Home with Warden (spaces per individual units)	0.5 + 1 space on site for staff	1 + 1 space on site for staff	1 + 1 space on site for staff	1 + 1 space on site for staff
C3 Dwelling Flat 1-2 bed	0.5	1	1.5	1.5
C3 Dwelling Flat 3+ bed	1	1.5	2	2
C3 Dwelling House 1 bed	0.5	1	1	1
C3 Dwelling House 2 bed	1	1	1.5	2
C3 Dwelling House 3 bed	1	2	2	2
C3 Dwelling House 4+ bed	2	2	2	3
Visitor Parking	0	1 space per 10 dwellings (Flats only)	1 space per 4 dwellings (Flats only)	1 space per 4 dwellings (Flats only)
Houses in Multiple Occupation (HMOs)	0.25 per bedroom**	0.25 per bedroom**	0.25 per bedroom**	0.25 per bedroom**

- For a retirement village, parking requirements will be determined separately.
  - Adopted Core Strategy Policy CS18 on residential conversions refers to the need for the provision and location of adequate on-site car parking
- \*\* Occupiers will not be entitled to on-street car parking permits. Where planning permission is required for small HMOs falling within the C4 Use Class, this standard will apply to both C4 HMOs and Sui Generis HMOs.

### Car parking layout and dimensions

Parking spaces are recommended to be designed at **5000mm long x 2500mm wide (5m x 2.5m wide)**

Where car parking is proposed in the front garden, the following design features shall be incorporated:

In line with the Permitted Development rights, permeable paving or border gardens should be part of the parking area.

The parking area shall keep existing trees and hedges where possible.

Retain existing built features such as walls, pavements and gates.

<sup>55</sup> Zone 1, Central Core Area: Retail and commercial office developments, with limited residential.

Zone 2, Primary Core Area: 400m walking distance from zone 1, smaller local centres, providing day-to-day access to retail and some commercial facilities.

Zone 3, Secondary Core Area: Variety of land uses and densities and include some local centres for day-to-day needs.

Zone 4, Wider Urban Area: Residential and protected open space areas

Ensure that clear sight lines are maintained for cars reversing out of car parks onto the highway.

The parking space in front of the house must meet the minimum dimensions and no part of a vehicle should overhang the footway, there by obstructing pedestrians.

### Lincolnshire 2010

#### **Residential Houses and Flats Maximum Standard**

Central: 1 space per dwelling

Elsewhere in Lincoln and in other major towns: 1.5 spaces per dwelling

Rest of County: A maximum on average of 2 spaces for dwellings with 3 or less bedrooms and 3 spaces for dwellings with 4 or more bedrooms

### Essex County Council 2009

Preferred bay size for cars: **5.5m x 2.9m**

Parallel parking bay length: **6.0m**

#### **Standard:**

Flats and Houses are to be treated the same.

Use	Vehicle	Cycle	PTW	Disabled
	Minimum	Minimum	Minimum	Minimum
1 bedroom	1 space per dwelling*	1 secure covered space per dwelling. None if garage or secure area is provided within curtilage of dwelling	N/A	N/A if parking is in curtilage of dwelling, otherwise as Visitor/unallocated
2+ bedroom	2 spaces per dwelling*			
Retirement developments (e.g. warden assisted independent living accommodation)	1 space per dwelling	1 space per 8 units (visitors)	2 PTW spaces and 1 space per 2 dwellings for mobility scooters	N/A if parking is in curtilage of dwelling, otherwise as Visitor/unallocated

continued over >

## East Sussex County 2013

<u>Type of Dwelling:</u>	<u>Size (number of bedrooms):</u>	<u>Cycle provision (per unit):</u>
Flat	1 and 2 bedrooms	0.5 spaces if communal storage 1 space if no communal storage
Flat	3 bedrooms or more	1 space
House	1 and 2 bedrooms	1 space
House	3 bedrooms or more	2 spaces

Open car ports minimum dimensions of **5.0m x 2.8m wide**.

## Cycle Parking

### **Waverley 2017**

One cycle storage place per dwelling, provided communally for apartments or on an allocated basis within curtilage for houses

### **Surrey 2012**

*C3 (Dwelling houses: family houses, up to 6 residents living as a single household, including households where car is provided).*

Flats / houses without garages or gardens

1 and 2 bedroom unit: 1 space

3 or more bedroom unit: 2 spaces

### **The Draft New London Plan 2017**

C3 Dwellings (all)

1 space per studio

1.5 spaces per 1 bedroom unit

2 spaces per all other dwellings

## Manual for Streets 2007 (guidance on dimensions)

Cycles are not suited to overnight storage outdoors as they are vulnerable to theft and adverse weather. At the very least, any outdoor cycle parking needs to be covered, and preferably locked. In flats, cycle parking has often been inadequate, leading to cycles being stored in hallways or balconies.

The preferred spacing of cycle stands in about 1m, so that cycle cycles can be stored per meter run (on both sides). Where space is limited, an absolute minimum spacing of 800mm should be used. The outermost stands should be no closer than 550mm to a parallel wall. In addition there should be atleast 500mm clear space between the ends of individual stands and any wall.

## Spelthorne 2011

One bedroom dwelling – 1

Two bedroom dwelling – 1

Three bedroom dwelling – 1

Four bedroom dwellings or larger – 1

(Separate cycle parking facilities in residential developments will normally only be required where space is not otherwise available within the curtilage of the developments. In flats and communal accommodation a cycle parking/storage area should normally be provided within the building).

## Reading 2011 (Refers to Sustrans Design Manual: Handbook for cycle-friendly design, April 2014)

Cycle parking and storage facilities for all developments should be designed with consideration for the following objectives:

Conveniently located in relation to the trip origin and destination. It is considered that cycle activity is encouraged when parking is provided in more convenient locations to car parking, i.e. parking entrances;

Easy to use; Where the cycle can be secured easily and quickly to the parking device;

Secure; where parking is overlooked by development nearby, located close to well used areas or is within the coverage of a local security camera system. After dark lighting is required to ensure personal safety for bike users; and

Covered; particularly important for overnight and all day parking at places of employment and transport interchanges.

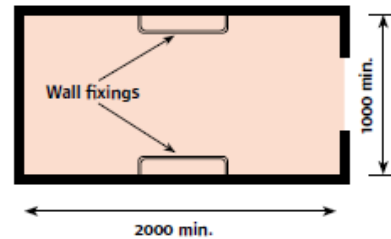
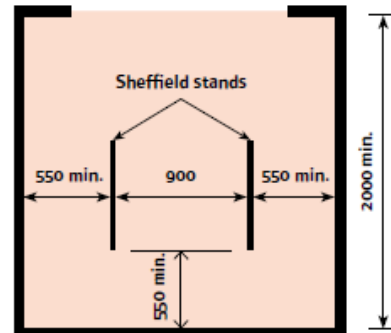
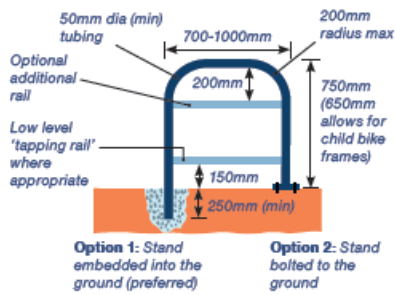


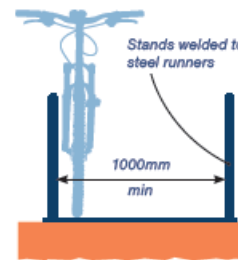
Figure 8.5 Plan of store for two cycles using wall fixings.



### Sheffield stands

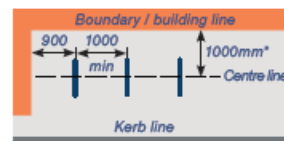


### 'Toast rack' of Sheffield stands



### Layouts

#### Perpendicular

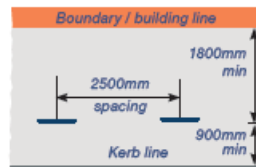


\*If no pedestrian access required, otherwise 2500mm



Visitor parking, Cambridge

#### Along kerb



Stands to be oriented at right angles to any slope



Parking alongside kerb, London

## Lincolnshire 2010

All long stay cycle parking for employees should be under cover and secure (e.g. within a locked compound). A range of proprietary systems is available, including covered racks capable of holding a number of bikes and cycle lockers which provide secure storage for the bike and associate equipment e.g. helmets.

## Location

In general, cycle parking should be:

In a secure, easily accessible position regularly overlooked by staff or passers-by  
Adjacent to the entrance, particularly for visitors

Well signed and lit

Ideally under cover

Positioned so as not to present a hazard to pedestrians, particularly those with impaired vision

In town centre locations, it may be preferable for developers to contribute towards the provision of cycle parking stands for general public use.

## Essex County Council 2009

1 secure covered space per dwelling (1 bedroom, 2+ bedroom)

## East Sussex 2013

Flat: 1 and 2 bedrooms: 0.5 space if communal storage. 1 space if no communal storage

Flat: 3 bedrooms or more: 1 space

House: 1 and 2 bedrooms: 1 space

House: 3 bedrooms or more: 2 spaces

### London Cycling Design Standards

Figure 8.1 Recommended cycle parking space requirements  
(based on bays of multiple Sheffield stands in a parallel arrangement)

	Recommended	Minimum
Bay width (length of cycle parked on a stand)	2m	2m
Access aisle width (if larger cycles are accommodated on end of bay)	3m	1.8m
Access aisle width (if larger cycles need to use the aisle)	4m	3m
Width needed for access aisle + bay on one side	5m - 6m	3.8m - 5m
Width needed for access aisle + bay on both sides	7m - 8m	5.8m - 7m
Spacing between stands	1.2m	1.0m

## Outside Amenity / Gardens

### Waverley 2017

#### GARDENS

071 In urban locations it will be acceptable to have communal gardens for schemes which include apartments. Ideally developments comprising apartments should have a communal garden area of 10m<sup>2</sup> per dwelling.

072 In most situations houses would be expected to have private space, comprising of fenced rear garden areas, which is accessible to disabled people. Where flatted schemes are intended for families communal space must be suitable for children's play.

073 **The Council would not normally state a minimum garden area for houses, but would expect any garden to be useable, adequately drained and to benefit from good**

**daylight/sunlight. In this regard guidance should also be sought from the local planning authority on any minimum requirements.**<sup>56</sup>

074 Paved patio areas are required adjacent to the rear doors/patio doors to houses. The area of paving must be 3.25 sq.m or 1.5 sq m per bedroom (whichever is the greater).

075 In all circumstances private/communal gardens should be adequately and securely fenced. This also includes schemes where flatted dwellings are provided with access to their own private gardens.

076 Where a scheme involves ground floor units with access to a communal garden, it would normally be expected that the ground floor units would have the benefit of a patio door and a defined and paved patio area of at least 2.25 sq.m, or 1 sq m per bedroom (whichever is the greater).

077 Gardens are to be landscaped, planted and turfed to the front and rear of houses.

078 Where development of formerly contaminated land is considered the Employer will normally look to the removal of contaminated soil back to natural ground rather than capping.

079 Rainwater collection systems are to include the provision of water butts for collection and storage of rainwater for gardening.

080 All dwellings shall have direct access to garden areas which should be of regular shape.

081 Front and rear gardens to houses shall be turfed.

082 Gardens should have maximum gradients of 1:15, but for family dwellings every effort is to be made to achieve level gardens. **Minimum area of gardens to be 50m<sup>2</sup>.**<sup>57</sup>

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<sup>56</sup> See Draft Local Plan Part 1 in Policy TD1: Townscape and Design. "Maximising opportunities to improve the quality of life and health and well-being of current and future residents, for example the provision of private, communal and public amenity space..."

<sup>57</sup> Same standard as in Current Design Standards in Waverley 2014.



## Basingstoke (Residential Amenity Design Guidance) 2012<sup>58</sup>

### Provision of Residential Amenity Space

- A1** New housing development is required to provide amenity space to meet the recreational and domestic needs of the occupants. Depending on the type of dwelling proposed, amenity space is required to provide for passive recreational activity such as sitting out, for active recreational activity such as play space for children and gardening, and for other outdoor requirements such as drying clothes.

### Private Gardens for Houses

- A2** The following minimum garden sizes will be required subject to the flexibility set out in paragraph 2.6:

Number of bedrooms:	Minimum Garden Size:
1 and 2 bedrooms	50 square metres
3+ bedrooms	60 square metres

- A3** Each dwelling should have a minimum garden depth of 10 metres subject to the flexibility set out in paragraph 2.6.

### Amenity Space for Flats

- A4** New flatted development should provide amenity space for all occupants within the curtilage of the building. This may be in the form of outdoor private space for ground floor accommodation, balconies for accommodation above ground floor level, or communal amenity space. Alternative provision such as where there is good access to public open space, or in the form of roof gardens, may be considered on its merits. Regard should be paid to the detailed considerations set out in paragraph 2.7 below.

## Leicester (2008)

Back gardens should back onto back gardens in order to provide maximum privacy and security. Where this arrangement cannot be achieved due to site constraints, the principle considerations will be:

Private amenity space providing adequate space that is private and not overlooked by the public realm

No high fence/boundary walls facing onto the public realm.

This will help ensure that the safety and security of the property and the residents are protected. The amount of space necessary as private amenity is **100 sq metres for townhouse, semi-detached and detached**. This is because of the amount of bedrooms and people expected to reside at the property. **A bungalow should provide 75 sq metres of private amenity space.**

## Ealing 2006

Gardens for Houses and Flats

All residential development should provide private garden space in addition to appropriate landscaping and children's playspace. The following provision should be made:

**Each new dwelling should have a private usable garden space of no less than 50 sqm for a house with under 5 rooms and at least 75 sqm for a larger house.** Forecourts or front gardens which are primarily for access to the dwelling and areas which are in continuous shade are not included in these figures. Permitted development rights will usually be removed by condition where the smaller space is provided in a housing development.

<sup>58</sup> <https://www.basingstoke.gov.uk/content/doclib/634.pdf>

The layout of private garden space should take into account:-

Plot size, shape, aspect and sunshine;

Maintaining 21m (70 feet), between habitable rooms to avoid overlooking

The particular need for visual privacy in the area adjoining the dwellings so that this can be used as outdoor living space;

Adequate drainage, depth of soil and landscaping;

The need for the minimum garden standard to be provided in a single convenient shape.

### Central Bedfordshire 2014

#### Private garden requirements for houses

Number of Bedrooms	Minimum areas (m <sup>2</sup> ) based on 5m width	Minimum depth (m)
2	50	10
3+	60	12

The minimum depth for all rear gardens should be 10m to ensure both that suitable levels of privacy are maintained, and that reasonable sized gardens are created. Wider frontage properties will therefore tend to provide larger gardens. ***Rear gardens for three and four bedroom homes should ideally be about 100sqm but generally no less than 60sqm.***

### Lambeth 2008

For new houses, the minimum area required as private amenity/garden space is **30m<sup>2</sup>**

**For new flatted developments, shared amenity space of at least 50m<sup>2</sup> per scheme should be provided.** A further 10sq m per flat should also be provided, either as a balcony, terrace, private garden or consolidated with the communal space.

### Draft London Plan 2017

**A minimum of 5 sqm** of private outdoor space should be provide for 1 – 2 person dwellings and an extra 1 sqm should be provided for each additional occupant.

The minimum depth and width for all balconies and other private external spaces should be 1.5m

### Dudley 2001

<i>House Type</i>	<i>Min. Area</i>	<i>Min. Length</i>
One/two bedroom terrace or semi-detached "starter home" with plot width of up to 4 metres	40-44m <sup>2</sup> depending on plot width	11m
Two and three bedroom terraced semi-detached or detached homes with plot width over 4 metres	65m <sup>2</sup>	11m
Four bedroom or more homes	80m <sup>2</sup>	11m
Five bedroom or more homes	100m <sup>2</sup>	13m
Flats with private gardens or amenity areas	30m <sup>2</sup>	-
Flats with communal gardens or amenity areas	30m <sup>2</sup> (per flat)	-

### Southampton 2009

Family homes are dwellings of three or more bedrooms with direct access to useable private amenity space or garden for the sole use of the household. The private amenity space or garden should be fit for purpose and with the following minimum sizes

- Flats and maisonettes – 20sq m
- Terraced homes – 50sq m
- Semi-detached homes – 70sq m
- Detached homes – 90sq m

*Flats or maisonettes with balconies or terraces may be regarded as family homes providing such areas are designed in way that is suitable and safe for children and should also respect the character of the area and avoid overlooking*

## Landscaping

### Waverley 2017

#### FOOTPATHS AND PATHWAYS

053 Footway provision must comply with Part 'M' of the Building Regulations and ensure that pedestrians (including people with disabilities) can move safely and directly to and from their homes and around the development, including between public spaces and amenities within the project. ***Footpaths and pathways should be of generous width, well-lit and not conflict with vehicular traffic***

054 Walkways and the like should be well defined with clear differentiation between vehicular and pedestrian access.

055 The crossing of vehicular routes by pedestrian ways should be avoided but where necessary, **drop kerbs to allow pushchair/wheelchair access must be employed.**

056 Gradients of pedestrian ways should be a maximum of 1:12. Where disabled or elderly access is anticipated, a maximum gradient of 1:20 is required. The use of stairs and steps should be avoided.

057 Pavements and paths should be direct (although not necessarily straight) through landscaped and external areas to avoid 'short cut' unmarked paths appearing across lawns and beds. The use of deflecting walls, etc. should be considered to avoid long lines of paving and numerous paths in larger developments.

058 **Paths are to be, as a minimum, 900 mm wide** (0.9m). Wider paths are to be provided where frequent use is envisaged or where necessary in order to meet other requirements within this Guide.

059 Approaches to dwellings are further detailed in 'Accessibility (and Lifetime Homes)

## External design appearances:

Car parking, cycle parking, outside Amenity Space / Gardens, landscaping (Footpaths and Pathways)

## Car Parking Standards

	Size of space (minimum in m)	Number of spaces per unit (minimum if not otherwise specified)				
		1 bed/ 2 person flat (1 storey dwelling unless specified)	2 bed / 4 person flat (1 storey dwelling unless specified)	2 bed / 4 person house (2 storey dwelling unless specified)	3 bed / 5 person house	4+ bed
<b>Waverley 2017</b>	Bay: 4.8m x 2.4m Linear: 6.1m x 2.4m 10% of grouped parking spaces: 4.8m x 3.3m In-curtilage parking: 4.8m x 3.3m Driveways: 2.5m (single), 4.8m (two-lane).	-	-	-	-	-
<b>Waverley: Adopted Parking Guidance Oct 2013</b>		Town centre: 1 space per unit	Town centre: 1 space per unit		Town centre: 1.5 spaces per unit	
		Rest of Waverley: 1 space per unit	Rest of Waverley: 2 space per unit		Rest of Waverley: 2.5 spaces per unit	
<b>Surrey Country Council 2012</b>		Town centre: 1		Town centre: 1	Town centre: 1	Town centre: 1
		Edge of centre: 1		Edge of centre: 1	Edge of centre: 1+ (note 1)	Edge of centre: 2+ (note 1)
		Suburban: 1		Suburban: 1+ (see note 1)	Suburban: 2+ (note 1)	Suburban: 2+ (note 1)
		Suburban edge/village/rural: 1		Suburban edge /village/rural: 1+ (note1)	Suburban edge /village/rural: 2+ (note 1)	Suburban edge /village/rural: 2+ (note 1)
<b>London Plan 2011</b>		Fewer than 1		1.5 – 1	2 – 1.5	
<b>The draft New London Plan 2017</b>		Fewer than 1		Up to 1.5	Up to 2	
<b>Barnet Council 2011</b>		Fewer than 1 – 1	1.5 – 1		2 – 1.5	
<b>Department for Transport: Manual for Streets (2007)</b>	Bays: 4.2m x 2.4m					
	Linear: 6m x 2m					
	Echelon/ perpendicular spaces: 2.4m x 6m (90° angle of approach)	-	-	-	-	-
	2.4m x 4.2m (60°) 2.4m x 3.6m (45°)					
<b>Lincolnshire 2010</b>		Central: 1				
		Elsewhere: 1.5				
		Rest of country: Max on av. of 2				Rest of country: Max on av. of 3
<b>East Sussex County 2013</b>	5.0m x 2.8m	-	-	-	-	-
<b>Essex County Council 2009</b>	Bays: 5.5m x 2.9m	1	2			
	Linear: 6.0m x 2.9m					
<b>Spelthorne: Parking Standards 2011</b>	4.8m x 2.4m	1.25	1.5	2 (90sqm gross floor area or less excluding garages) 2.25 (above 80sqm gross floor area excluding garages)		2.5

## Cycle Parking (C3 Dwelling Houses)

	Size of space (mm)	1 bed / 2 person flat	2 bed / 4 person flat	2 bed / 4 person house	3 bed / 5 person house
Waverley 2017	-	One cycle storage place per dwelling, provided communally for apartments or on an allocated basis within the curtilage for houses			
Surrey 2012	-	1	1	1	2
The Draft London Plan 2017 <sup>59</sup>	-	1.5	2	2	2
Manual for Streets 2007 <sup>60</sup>					
	Recommended				
	Minimum				
	Spacing between cycle stands	1m	800mm		
Outermost stand to a parallel wall	-	550mm	-	-	-
Space between ends of individual stands and any wall	-	500mm			
Spelthorne 2011	-	1	1	1	1
Reading 2011 / Sustrans Design Manual 2014 <sup>61</sup>					
	Recommended				
	Space between stands	1m			
	Height of stand	750mm			
	Length of stand	700mm – 1m			
Distance from building	1m				
Distance from outer most stand and wall	900m				
Lincolnshire 2010					
	Minimum				
	Height	600mm-800mm	1	1	1
Length	700mm				
Essex County Council 2009	-	1	1	1	1
East Sussex 2013	-	0.5 * <sup>62</sup> / 1	0.5 / 1	1	2
London Cycling Design Standards <sup>63</sup>					
	Recommended				
	Minimum				
	Bay Width (length of cycle parked on stand)	2m	2m		
	Access aisle width (if larger cycles are accommodated on end of bay)	3m	1.8m		
	Access aisle width (if larger cycled need to use the aisle)	4m	3m		
Width needed for access aisle + bay on one side	5m-6m	3.8m-5m			
Width needed for access aisle + bay on both sides	7m-8m	5.8m-7m			
Spacing between stands	1.2m	1.0m			
Bristol City Council 2005 <sup>64</sup>					
	Recommended				
	Space between stands	900m			
	Height	700-800m			
	Distance from building	550mm			
Distance from outer stand to wall	550mm				

<sup>59</sup> 1 space per studio apartment

<sup>60</sup> Based on Sheffield design of cycle parking and at 90 degrees (perpendicular)

<sup>61</sup> Based on Sheffield design of cycle parking and at 90 degrees (perpendicular)

<sup>62</sup> 0.5 if communal storage / 1 space if no communal storage

<sup>63</sup> Recommended cycle parking space requirements based on bays of multiple Sheffield stands in a parallel arrangement

<sup>64</sup> Based on Sheffield Stand Model and at a 90 degree angle to a wall

## Outside Amenity / Garden Space

### Minimum standards

	Flat (1 and 2 bed)	2 bed house	3 bed house	4 bed house	5 bed house +
<b>Waverley 2017</b>	50sqm				
<b>Basingstoke 2012<sup>65</sup></b>	50sqm	50sqm	60sqm		
<b>Leicester 2008</b>	The amount of space necessary as private amenity is 100sqm for townhouse, semi-detached and detached properties (this is in accordance to the amount of bedrooms and people expected to reside at the property). A bungalow should provide 75 sqm of private amenity space.				
<b>Ealing 2006</b>	50sqm				75 sqm
<b>Central Bedfordshire 2014</b>	-	50sqm (10m minimum depth)	60 sqm (12m minimum depth)		
<b>Lambeth 2008</b>	50m <sup>2</sup> <sup>66</sup>	30sqm			
<b>Draft London Plan 2017<sup>67</sup></b>	5sqm	5sqm	6sqm	7sqm	8sqm
<b>Dudley 2001<sup>68</sup></b>	30sqm <sup>69</sup>	65sqm <sup>70</sup> (11m minimum depth)	65sqm <sup>71</sup> (11m minimum depth)	80sqm (11m minimum depth)	100sqm (13m minimum depth)
<b>Southampton 2009</b>	20sqm <sup>72</sup>	50smq / 70sqm <sup>73</sup>	50sqm / 70sqm <sup>74</sup>	90sqm <sup>75</sup>	

<sup>65</sup> Each dwelling should have a minimum garden depth of 10m

<sup>66</sup> For new flatted developments, shared amenity space of at least 50m<sup>2</sup> per scheme should be provided.

<sup>67</sup> 5sqm for a 1-2 person dwelling and an extra 1sqm should be provided for each additional occupant.

<sup>68</sup> One / two bedroom terrace or semi-detached "starter home" with plot width of 4m should have a minimum area of 40-44sqm depending on plot width.

<sup>69</sup> Flats with private gardens or amenity areas should have 30sqm and flats with communal gardens or amenity gardens should be 30sqm (per flat).

<sup>70</sup> Two or three bedroom terraced semi-detached or detached homes with plot width over 4m.

<sup>71</sup> Ibid.

<sup>72</sup> Flats or maisonettes – 20sqm

<sup>73</sup> Terraced homes – 50sqm / Semi – detached homes – 70sqm.

<sup>74</sup> Terraced homes – 50sqm / Semi – detached homes – 70sqm.

<sup>75</sup> Detached homes – 90 sqm

## Landscaping (footpaths and pathways)

- A “footway” is generally remote from a carriageway and over which the public have a right of way on foot only.
- A “footpath” is generally adjacent to a carriageway and over which the public have a right of way on foot only. (pavement)

### Waverley 2017

Paths are **900mm wide**

Paved patio areas are required adjacent to the rear doors/patio doors to houses. The area of paving must be **3.25 sqm or 1.5sqm** per bedroom (whichever is greater).

Ground floor units with access to a communal garden: area of **at least 2.25 sqm** or 1sqm per bedroom (whichever is greater),

### Surrey County Council 2002 (Technical Appendix to ‘Surrey Design’)

#### Footway fundamentals

- Generally be **2.0m wide** although they can be reduced to 1.2m for short distance to avoid obstructions.

#### Footpath fundamentals

- Separate cycle paths and footpaths: **minimum of 1.5m wide with 1.8m wide passing places for wheelchairs / pushchairs every 25m**. Local narrowing to 1.2m is acceptable for short distances in order to retain existing features.
- Combined cycle path/footpath: **minimum of 2m wide**. Where flanked on both sides by walls or fences more than **900mm high**, width should be at least **2.5m**
- Footpaths and cycle paths passing under structures should have a headroom of **2.5m**

#### Drive Fundamentals

##### Width

The minimum width of a domestic driveway is **2.75m**.

Where dwellings are more than 45 meters from the highway, the design of the driveway should provide a **3.7m** wide corridor.

Driveways should be widened to **4.1m** where parking may regularly occur or where they regularly provide pedestrian access.

Single driveways should not exceed a width of **3.32m** at the highway boundary.



## Length

In roads serving more than 50 dwellings, driveways leading to garages should be at least **6m long to** allow for parking in front of the garage, clear of the carriageway.

Where roads serve less than 50 dwellings, driveways leading to garages can be **between 1m and 3m in length**.

## **Housing Design and Standards Scrutiny Review: Session 5 Building Regulations and Sustainability**

### **Introduction**

#### **Background**

The Code for Sustainable Homes was launched in December 2006 (operational in 2007) and was the national standard for sustainable design and construction of new homes. It aimed to reduce carbon emissions and promote higher standards of sustainable design above the current minimum standards set out in building regulations for the following categories:

Energy and CO<sub>2</sub> Emissions

Water

Materials

Surface Water Run-Off

Waste

Pollution

Health and Well-being

Management Ecology

In March 2014 the Government started to wind down the Code for Sustainable Homes as part of the Housing Standards review to rationalise the many differing standards into one national technical standard (what we now know as the new national technical standards 2015). Many of the Codes requirements were consolidated into a national framework centred on Building Regulations.<sup>76</sup>

Local Authorities no longer require code level 3, 4, 5 or 6 as part of the conditions imposed on planning permissions. Energy requirements for dwellings are instead set by building regulations, which is the equivalent to code level 4.<sup>77</sup>

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<sup>76</sup> <https://www.gov.uk/government/collections/approved-documents>

<sup>77</sup> See regulations A through to R.

## **Waverley 2014: Design Standards and Specifications for new Council Homes**

### **Sustainability**

Commitment to building homes that are future proof and have high sustainability considerations to keep energy costs down

All New Council Homes should strive to achieve Code for Sustainable Homes level 4 and where Code 4 is unachievable overall, the energy and CO2 as well as water elements of Code 4 must be achieved

< 25% of Energy and CO2 emissions equates to Code level 4

< 105 litres of water per person per day equates to Levels 3 and 4

The efficient use of building fabric is the preferred method to reduce energy consumption and the need to heat homes. Where possible, passive design should be considered from the offset with regard to orientation, glazing and materials.

Design proposals should aim to take into account and facilitate the potential use of future technologies designed to promote sustainable energy use so that they can be installed retrospectively.

All new developments should adhere to the Sustainable Timbers Policy.

### **Accessibility Standards**

The Council supports development at accessibility and adaptability standard level 2:

Level 2: Provides adaptability as well as improved access for everyone; making homes suitable for the majority of older people and many part-time wheelchair users, as well as young families with buggies. Also provides good visitor access to wheelchair users.

## **Waverley 2017: General Design Information and Requirements**

### **Energy Efficiency**

The Employer requires that due regard is given to the incorporation of cost-effective energy efficiency measures in all designs. The Employer's requirement is for the above to be achieved using the Building Fabric.

The Contractor's attention is drawn to "Energy Efficient Housing Association Schemes" published by the Energy Saving Trust.

Regarding energy performance the Contractor is required to provide Energy Performance Certificates for all dwellings at Handover

### **Renewable energy:**

Design and Build Contractors must consider renewable energy systems, for example; CHP (combined heat and power), PV (photovoltaic), HP (ground source heat pump), etc. to comply with the requirements of the Code for Sustainable Homes and any conditions included within the Planning Approval for the development.

The Employer requires that renewable energies are avoided wherever possible and **a fabric first approach is employed to conserving energy and water**. No renewable energies are to be incorporated into the project without the Employer's express written consent.

### Accessibility and adaptability standards (not to be confused with design standards for disabled adaptations):

The Employer requires that dwellings are designed to facilitate future internal remodelling by:

Full-span floor construction.  
Non-loadbearing internal walls.  
Floor/ceiling space service runs.

Consideration is also to be given to the incorporation of other 'Adaptability Through Design' features and designers are required to put forward to the Employer innovative ideas in this regard at pre-design stage. Features that are to be particularly considered are as follows:

**Loft extension** – where the project is designed to facilitate future extension to, or within, the roof structure. Including, for example, special open trusses, sized for floor loadings in conjunction with additional circulation space suitable for extension of the existing staircase or the location of a new staircase.  
Space for extension/adaptability – where the project is designed to facilitate future extension/adaptability by incorporating additional internal or external space. Including, for example, as follows:

Side/rear extension.  
Entrance level bedroom.  
Wheelchair accessible ground floor W.C.  
Vertical lift provision

### Post the Code for Sustainable Homes

The national technical standards (2015) include additional higher optional Building Regulations regarding access (M) and water (G). These additional options were comparable with requirements for the former Code level 4 and can be required by planning permission. Building regulation approvals can be sought either from building control in the local authority.

#### New 'optional' building regulations

##### **\* Part 'M': Access to and use of buildings**

This optional requires deals with issues concerning accessible, adaptable and wheelchair housing standards. It requires the inclusive provision of ease of access to, and circulation within, all buildings, together with requirements for facilities for disabled people.<sup>78</sup> This is set out in a three tier standard with a mandatory baseline minimum requirement (category 1) for access to and use of buildings.

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\* Part M of the Building Regulations sets a distinction between wheelchair accessible (a home readily useable by a wheelchair user at the point of completion) and wheelchair adaptable (a home that can be easily adapted to meet the needs of a household including wheelchair users) dwellings.

<sup>78</sup> [https://www.designingbuildings.co.uk/wiki/Approved\\_Document\\_M](https://www.designingbuildings.co.uk/wiki/Approved_Document_M)

*Optional Requirements for Access are as follows:*

Requirement M4 (1): Category 1 – Visitable dwellings.

Compliance with this requirement is achieved when a new dwelling makes reasonable provision for most people, which includes wheelchair users to access and enter the dwelling, and access habitable rooms and sanitary facilities on the entrance level

Requirement M4 (2): Category 2 – Accessible and adaptable dwellings.

Step free access from parking to the dwelling, and to a ground floor WC, with provision for wheelchair users and the elderly

Wall mounted switches and sockets high enough for occupants with reduced reach

Capability for adaptations in later life or for disabled occupants

Requirement M4 (3): Category 3 – Wheelchair user dwellings.

Fully adapted or adaptable dwellings for wheelchair users. The requirements of this option are more comprehensive and supersede those above

Members should take into account the following factors when considering the optional requirement:

The likely future need for housing for older and disabled people (including wheelchair user dwellings).

Size, location, type and quality of dwellings needed to meet specifically evidenced needs (for example retirement homes, sheltered homes or care homes).

The accessibility and adaptability of existing housing stock.

How needs vary across different housing tenures.

The overall impact on viability. The optional new national technical standards should only be required through new Local Plan Policies ([DM policies in LP2](#)) and as a condition of planning permission. They should only be included where they address a clear evidenced need and where impact on viability has been considered.

## **Part G: Sanitation, hot water safety and water efficiency**

Standards for the provision of sanitary and washing facilities, bathrooms and hot water provision. It also covered safety requirements in respect to unvented hot water systems.<sup>79</sup>

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<sup>79</sup> G1: Cold water supply; G2: Water efficiency; G3: Hot water supply and systems; G4: Sanitary conveniences and washing facilities; G5: Bathrooms; G6: Food preparation areas.

Optional requirement for consideration are as follows:

Water use remains limited to **125 liters** per person per day, as measured through a Part G Water Calculation, which uses occupancy assumptions and a sanitary-ware specification to calculate usage. **Planning authorities have the option to reduce this further to 110 liters per person per day if desired through planning permission.**<sup>80</sup>

## **Loft Space**

### **Waverley 2017:**

**Loft extension** – where the project is designed to facilitate future extension to, or within, the roof structure. Including, for example, special open trusses, sized for floor loadings in conjunction with additional circulation space suitable for extension of the existing staircase or the location of a new staircase.

**Key Question: Should the loft space be part of the living space, and therefore constitute a room, or should it just be used as additional storage space?**

### **'LoftZone' – a new British Company with innovative solutions for loft space**<sup>81</sup>

Issue of utilising loft-space vs retaining loft insulation to trap and prevent heat loss. Risk of squashing loft insulation by using this space for storage / additional bedroom. However this risks contributing to tenant fuel poverty. The Solution is to have raised 'Store Floor' loft space platforms (as shown below) to keep insulation fluffy to trap air whilst being able to store belongings on top.



This design will need to take into consideration 'Part L' of Building Regulation: 'the conservation of fuel and power', specifically U values and 'Part P': Electrical Safety, due to cables needing to be raised above the insulation.

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<sup>80</sup> This requirement includes external water use (of 5 litres per person per day) – therefore the optional equipment is equivalent to a previous Code for Sustainable Homes Level 3 requirement of 105 l/r/d as this was a measure of internal water use only.

<sup>81</sup> <http://www.loftzone.co.uk/index.html>

## Facts about loft space

The loft space can form up to 50% of the floor space – a boarded loft can become a beneficial useable space.<sup>82</sup>

Cold vs Warm Loft: a **cold loft** is where heat is kept in the house and out of the loft by insulation placed on the floor of the loft (this is the most common type of loft in Britain). Building regulations state there must be at least 270mm (11') of insulation, if mineral wool insulation products are used. **A warm loft is a room in the loft that is a habitable part of the property and has sound insulation in the rafters under the roof.**

## Things to bear in mind<sup>83</sup>

How to achieve adequate headroom ( a new angle to the roof in the form of a rear box shape could give the house a top heavy look, damaging the character of the house and area)

Any roof extension to the design should be proportionate to the size of the house

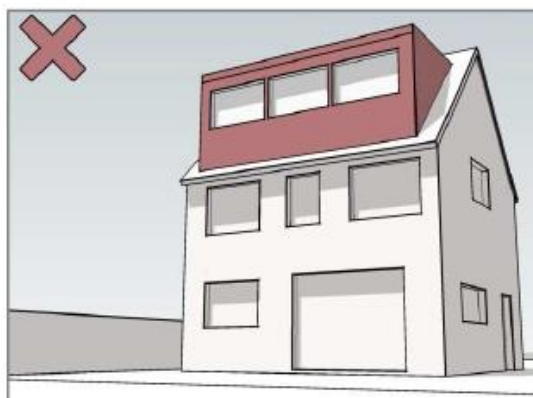
Any proposals that change the roof should seek to preserve and enhance the existing appearance of the property.

Roof lighting

Any extension in the height of the roof should be designed to ensure there is no significant loss of privacy to neighbouring dwellings or gardens (including overshadowing and blocking sunlight to neighbours)

Brick colour, tone and texture.

Sustainability opportunities: e.g. improving environmental performance through the use of energy generation by using solar panels.



<sup>82</sup> <http://www.loftzone.co.uk/about-lofts.html>

<sup>83</sup> Points courtesy of

<https://consultations.royalgreenwich.gov.uk/UploadedFiles/Residential%20Extensions%20Conversions%20and%20Basements%20SPD.pdf>

**Appendix D: Stephen Taylor Architects: comparison of energy and carbon standards**

**OVERVIEW AND SCRUTINY COMMITTEE**

document prepared for Waverley Borough Council

GUIDELINES ON DESIGN STANDARDS

**BUILDING REGULATIONS, SUSTAINABILITY  
AND ATTIC STOREYS**

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This document has been prepared by Stephen Taylor Architects in order to share our knowledge with the Waverley Borough Council Overview and Scrutiny Committee.



# Comparison of Energy and Carbon Standards

## Building Regulations

Part L  
Concerned Primarily with the carbon footprint and fabric energy efficiency of dwellings, measured through SAP.

*Schedule 1 – Part L Conservation of fuel and power* states that provision for conservation of fuel and power shall be made by:  
limiting heat gain and losses;  
providing building service which are efficient, have effective controls and are properly commissioned and that information is provided so that the building can be operated efficiently.

Key criterion described in Approved Document L include:

The designed carbon emission rate (Dwelling Emission Rate (DER) for self-contained dwellings and individual flats (excluding common areas) must not exceed the Target Emission Rate (TER) for a notional building of similar type, size and shape. Both are expressed in kgCO<sub>2</sub>/m<sup>2</sup> per year.

Fixed building services should achieve a reasonable standard of energy efficiency.

Solar gains should be limited.

As-built performance should be consistent with the DER. This includes air-permeability testing and appropriate commissioning of building services systems. Provision should be made for energy efficient operation by providing the building owner. This might be done by the preparation of a building log book. Limiting fabric parameters.

A summary of the Part L 2013 notional dwelling is published at Table 4 in the approved document with the full detail in SAP 2012 Appendix R. If the actual dwelling is constructed entirely to the notional dwelling specifications it will meet the carbon dioxide and fabric energy efficiency targets and the limiting values for individual fabric elements and buildings services. Developers are, however, free to vary the specification, provided the same overall level of carbon dioxide emissions and fabric energy efficiency performance is achieved or bettered.

The Part L 2013 specifications have been strengthened to deliver 6% carbon dioxide savings relative to Part L 2010.

## Code for Sustainable Homes

Level 4  
The Code for Sustainable Homes is a method for assessing and certifying the sustainable design and construction of new homes, measured by Code Assessors.

Following the 2015 Housing Standards Review, the Code is still operational, but is now generally voluntary.

The Code measures sustainability against nine categories:  
Energy and carbon dioxide emissions.  
Water.  
Materials.  
Surface water run-off.  
Waste.  
Pollution.  
Health and well-being.  
Management.  
Ecology.

Each category represents a known source of environmental impact for which mitigation measures can be cost-effectively implemented.

Performance targets are set for each area, and these targets are more demanding than those required by the building regulations. Credits are awarded depending on the performance of the dwelling in each area, and weightings are then applied to adjust their relative values.

In addition, mandatory minimum performance standards are set for seven specific areas:  
Environmental impact of materials.  
Management of surface water run-off from.  
Storage of non-recyclable and recyclable waste.  
Emission rate.  
Indoor water use.  
Fabric energy efficiency  
Lifetime homes.

Government research suggests that building to Code Level 4 adds an extra over cost of approximately 5% compared with Part L 2010.

CfSH Level 4 requires a minimum 25% improvement in DER relative to Part L 2010, or 19% relative to Part L 2013.

## London Planning Policy

London Plan  
The London Plan sets out carbon dioxide emissions reductions in excess of Part L, in order to deliver zero carbon homes.

Policy 5.2 states that development proposals should be designed in accordance with the London Plan energy hierarchy, and should meet the minimum targets for carbon dioxide emissions reduction.

The hierarchy consists of the following steps:

Step 1. Be lean: use less energy (promotes the use of passive design measures such as orientation and site layout, natural ventilation and lighting, high thermal mass and solar shading, maximise the insulating properties (U-values) of the building fabric, achieve high levels of air tightness, and provide efficient services and lighting to reduce energy demand in dwellings.)

Step 2. Be clean: supply energy efficiently (seek to supply the expected energy demands of a development as efficiently as possible, to evaluate the feasibility of decentralised energy systems (which may be fed by combined heat and power systems), and where possible to connect to existing district heating networks.)

Step 3. Be green: use renewable energy (incorporate renewable energy technologies in developments, such as: energy from waste; photo-voltaics; solar water heating; wind and heat pumps.)

'Zero carbon' homes are homes forming part of major development applications where the residential element of the application achieves at least a 35% reduction in regulated carbon dioxide emissions (beyond Part L 2013) on-site. The remaining regulated carbon dioxide emissions, to 100%, are to be off-set through a cash in lieu contribution to the relevant borough to be ring fenced to secure delivery of carbon dioxide savings elsewhere. The carbon off-set price is generally set at £60 per tonne of carbon dioxide for a period of 30 years.

The London Plan requires a minimum 40% improvement in DER on site relative to Part L 2010, or 35% on site relative to Part L 2013.

## Passivhaus

The Standard  
The Passivhaus Standard is a voluntary certification that demonstrates a high level of energy performance. It requires a more involved assessment of a building's expected energy use performance compared to SAP, using the PassivHaus Planning Package (PHPP).

Passivhaus homes still need to demonstrate compliance with Part L. The standard is almost entirely focussed on energy use reduction measures, rather than allowing energy to be offset through the use of renewables or other technologies. Passivhaus therefore should always result in dwellings with much lower energy demands.

The simple techniques necessary to achieve PassivHaus design are:  
Insulation (typically 30cm thick);  
PassivHaus windows (airtight, triple glazed with an overall U-value of 0.8);  
Airtight construction (max 0.6 air changes/hr under 50 pascals pressure) with very efficient mechanical heat recovery ventilation.

Assuming that these three main performance targets are met, together with detailing to eliminate cold bridging and numerous other detailed requirements prescribed by the PHPP software, it is possible to eliminate the need for a boiler and the need for radiators or underfloor heating.

The Passivhaus Trust and AECOM have produced a research study into the cost of building to certified Passivhaus standards across a number of affordable housing projects in the UK, using a standardised cost tool to compare projects on a like for like basis. The results of this study show that for the project type analysed, there was a 17% uplift in costs compared to the CfSH 4 standard. In Germany, where Passivhaus is more established, extra over costs are considered to be between 3 and 8%.

If a compliant design specification is derived from PHPP and transposed into SAP, a 30-45% improvement in carbon emissions can be realised relative to Part L 2010 – without the use of low carbon or renewable technology.

Case Studies: Passivhaus

Carrowbreck, Drayton

Client

Broadland Growth Ltd (partnership between Broadland District Council and NPS Property)

Local Authority

Broadland District Council

Brief

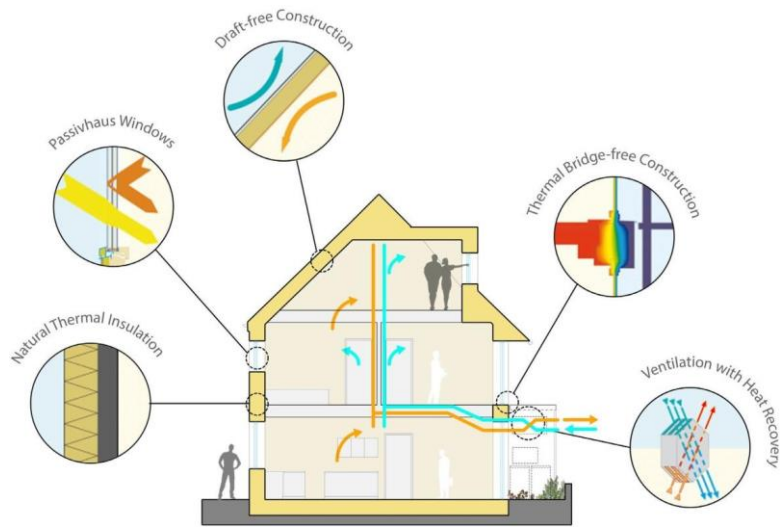
14 houses

8 for open-market sale (57%)

6 affordable units (43%)

Architect

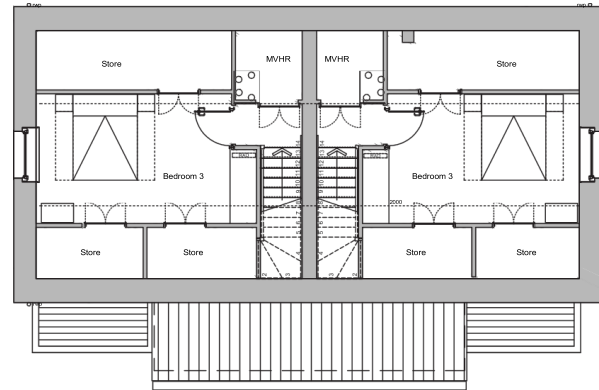
Hamson Barron Smith



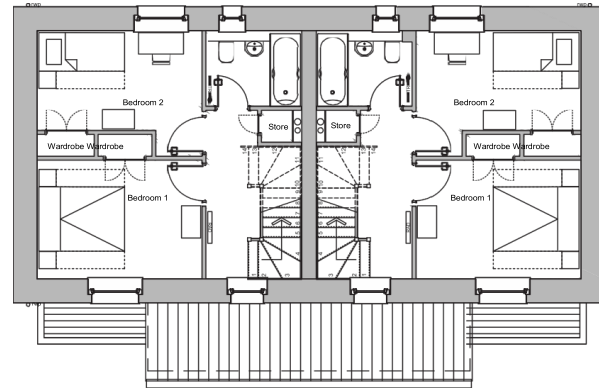
High performance  
High levels of comfort and health



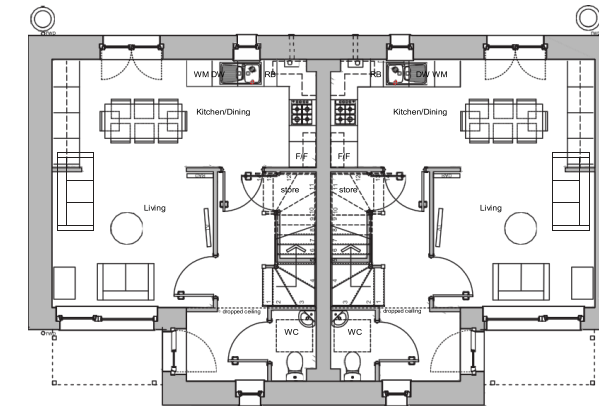
Site Plan  
NTS



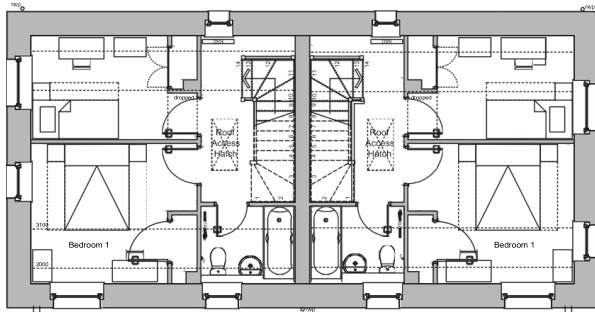
bed house type: second floor



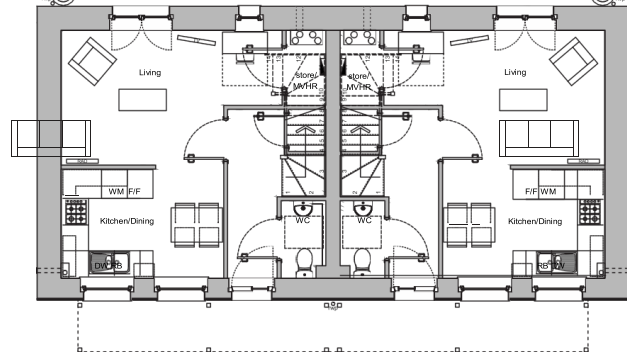
3-bed house type: first floor



3-bed house type: ground floor



bed house type: first floor



2-bed house type: ground floor





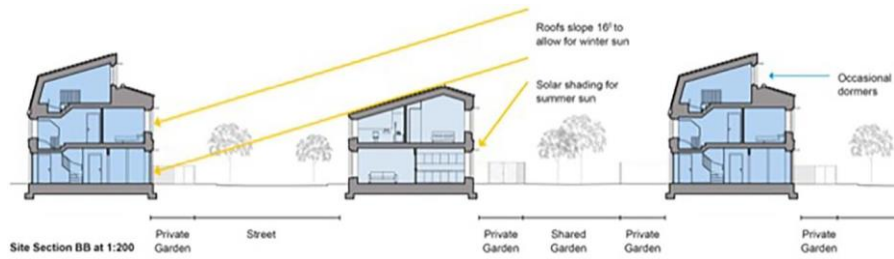
Case Studies: Passivhaus  
Goldsmith Street, Norwich

Client  
Norwich City Council

Local Authority  
Norwich City Council

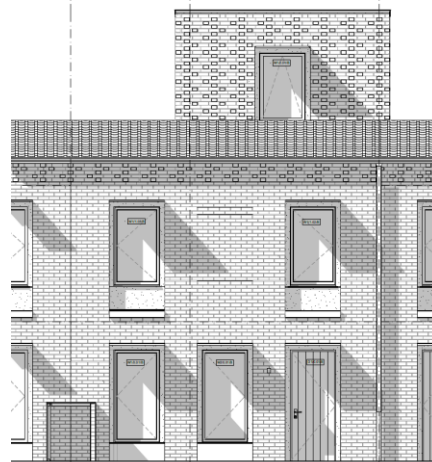
Brief

1 Bedroom Flats : 56 (53%)  
2 Bedroom Houses: 32 (31%)  
3 Bedroom Houses: 12 (11%)  
4 Bedroom House: 5 (5%)  
Total: 105 100% social rent  
Architect  
Mikhail Riches

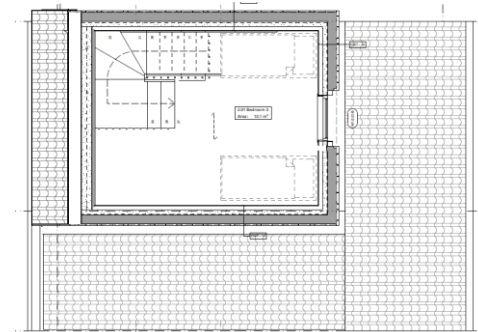




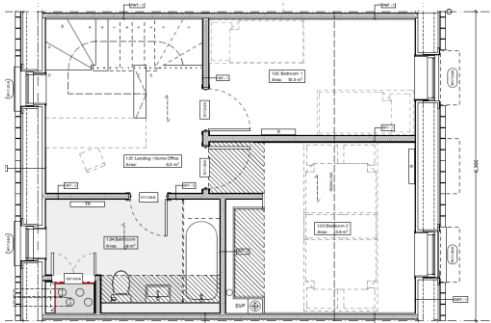
2-bed housetype: elevation



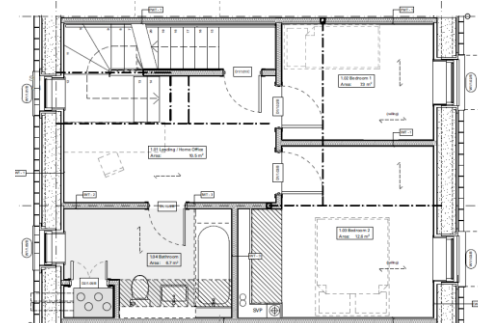
3-bed housetype: elevation



3-bed house type: second floor



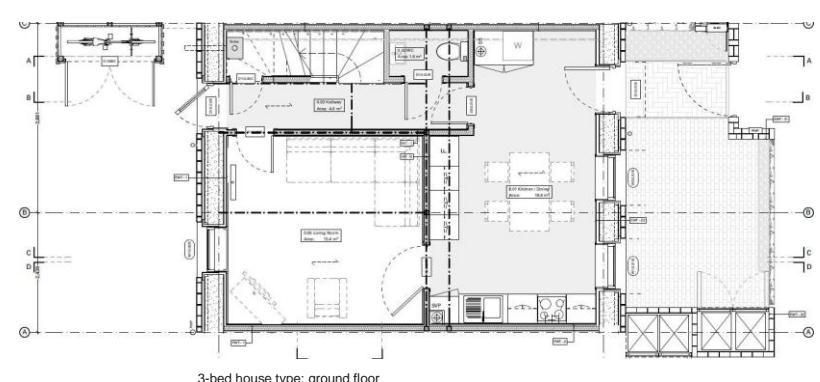
2-bed house type: first floor



3-bed house type: first floor



2-bed house type: ground floor



3-bed house type: ground floor



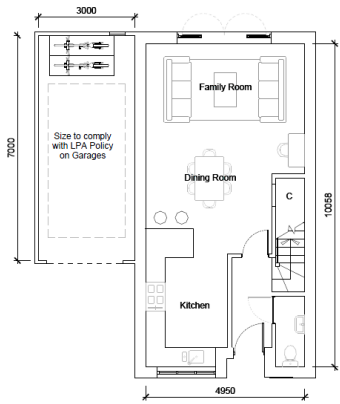
Case Studies: Attic Storeys  
Horsted Park, Chatham

Client  
Countryside Properties

Local Authority  
Medway Council

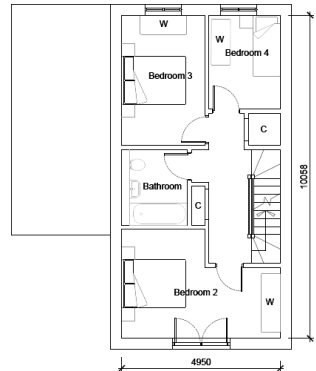
Brief  
1 and 2 Bedroom Flats: 112 (42%)  
2, 3 and 4 Bedroom Houses: 90 (34%)  
Extra Care Apartments: 63 (24%)  
Total: 265  
24% Affordable rent  
Architect  
Proctor and Matthews Clague



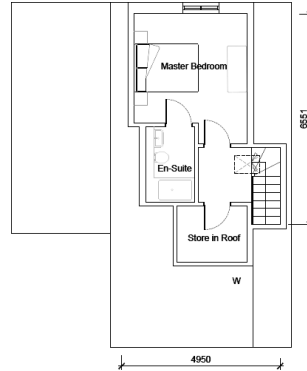


GROUND FLOOR PLAN

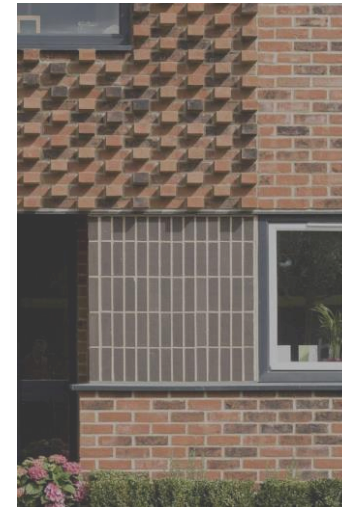
Total Floor Area: 121.7sq.m / 1310sq.ft



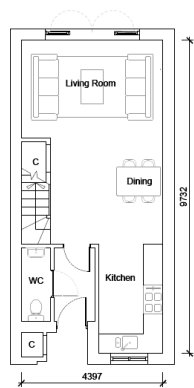
FIRST FLOOR PLAN



SECOND FLOOR PLAN

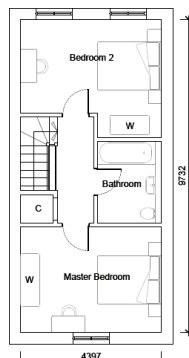


4-bed house type



GROUND FLOOR PLAN

Total Floor Area: 83.18sq.m / 895.34 sq.ft



FIRST FLOOR PLAN

2-bed house type





Case Studies: Attic Storeys  
St Chads, Thurrock

Client  
Gloriana (Thurrock Council housing company)

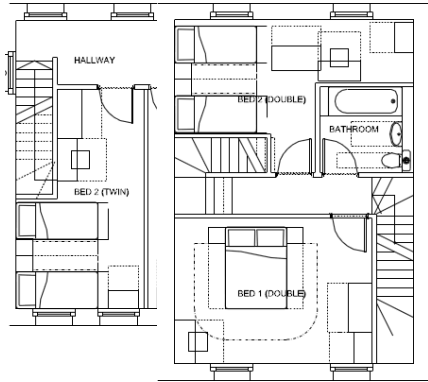
Local Authority  
Thurrock Council

Brief  
2 beds: 57 (45%)  
3 beds: 63 (49%)  
4 beds: 8 (6%)  
Total: 128

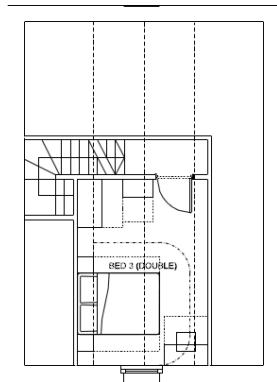
Architect  
Bell Phillips







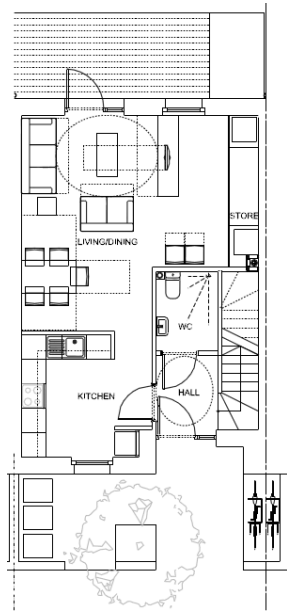
3-bed house type: first floor



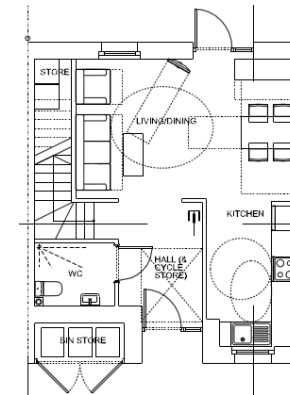
3-bed house type: second floor



2-bed house type: first floor



3-bed house type: ground floor



2-bed house type: ground floor

Case Studies: Attic Storeys  
Craddock Cottages, Gomshall  
Client  
Baylight

Local Authority  
Guildford Borough Council

Brief  
One two-bed and one three-bed house

Architect  
Stephen Taylor Architects

