

# Jaywick Sands Design Guide

Supplementary Planning  
Document

January 2023

# Contents

1. Introduction	3
2. Characterisation	6
3. Designing flood safe buildings	30
4. Massing, scale and building form	36
5. Streetscape and parking	38
6. Internal and external space standards	40
7. Accessibility	42
8. Climate change and biodiversity	43
Appendix: Worked examples of design guidance in practice	

# 1. Introduction

Jaywick Sands is a unique and resilient community with a distinctive sense of place. It is a rare example of a plotlands development where the original small plots, gridded street pattern and chalet-style buildings survives largely unchanged since it was founded in the 1930s. Jaywick Sands' position by the sea is both its greatest asset and also its greatest challenge as the community now faces an increasing risk of flooding, which is particularly concerning as many homes in Jaywick Sands are now in very poor condition. It is therefore vital to encourage the replacement and upgrading of homes in Jaywick Sands to a flood safe standard while also enhancing the character of the area and supporting its regeneration.

The Jaywick Sands Design Guide Supplementary Planning Document provides guidance to support the following policies within the Tendring Local Plan (2013 - 2033):

- PP 14 Priority Areas for Regeneration
- SPL 3 Sustainable Design
- LP 3 Housing Density and Standards
- LP 4 Housing Layout
- PPL 5 Water Conservation, Drainage and Sewerage

This SPD applies to all development within the Priority Area for Regeneration as defined in Policy PP14. It does not apply to development in the northern part of Jaywick Sands (the Tudor Estate). The SPD has been developed to address the design issues relating to replacement dwellings and new development within the existing built-up area, but the design requirements apply to all development within the PP14 area, including undeveloped land. It supports the policy aims of transforming housing quality and the built environment in Jaywick Sands, providing flood resilient homes built to modern building standards.

The Design Guide shows how the Local Plan policies should be interpreted within the specific context of Jaywick Sands, with regard to its character, layout and setting as well as the requirement to develop flood resistant and resilient buildings. It demonstrates how the essence of the settlement's design characteristics can be maintained while also delivering much-needed improvements in safety from flooding. The Design Guide has been developed in dialogue with the Environment Agency and other stakeholders, to show how flood safe development should be designed so that it creates a high quality living environment for residents of the development itself and the wider community of Jaywick Sands.

## Who should use this guide?

This Design Guide is a tool for:

- Property owners and developers, and their design and planning consultants, in producing proposals for their sites
- Community members when commenting on planning applications or early stage proposals
- Planning officers in determining planning applications and pre-application submissions

## Status of this document

This Design Guide Supplementary Planning Document has been published for adoption in January 2023.

## Achieving betterment of housing quality in Jaywick Sands

Jaywick Sands contains a large number of homes which were not originally designed or built for year round, permanent inhabitation. Although many have been upgraded over time, most still have features of their design and/or construction which impact the health and wellbeing of their residents, including:

- Lack of flood resistance or resilience, combined with poor structural performance, which could endanger life in a severe flood event
- Poor energy performance leading to higher energy bills and health impacts
- Poor internal and external space standards leading to overcrowding, internal fire hazards and mental and physical health impacts.

The Design Guide has been developed to assist applicants, agents, and planning officers in balancing design requirements with the wider regeneration aims of PPL14. The Council wish to encourage the replacement of poor quality homes with better quality, more resilient homes that provide a safer and better quality environment for their residents. However within the Priority Area for Regeneration, many plot sizes are very small and a strict adherence to every standard usually applied to residential development in Tendring would prevent some owners of single plot homes from upgrading them to a better standard, as it would not be possible to design a fully compliant replacement home.

Tendring Council recognises that proposals to replace existing homes with new, better quality homes, but which do not increase the number of people living within the area of flood risk, will increase the safety and resilience of the community even if they do not meet every design standard in full. This SPD therefore sets out which design standards can be relaxed for proposals of this nature, which include the required floor level for habitable rooms, and minimum parking requirements. It provides clear guidance and worked examples to assist applicants in preparing compliant proposals.

Proposals that will increase the number of people living in Jaywick Sands and at risk of flooding, must meet all the design standards and requirements that would apply in other locations in Tendring. The SPD also sets out worked examples to show how these standards should be applied in the context and built form pattern of Jaywick Sands, to create good quality development that contributes to the regeneration of Jaywick Sands.

## Checklist of design standards

	Proposals resulting in no net increase in bedspaces on the site	Proposals resulting in a net increase in bedspaces on the site
Internal floor levels for habitable rooms – refer to section 3A	Must be higher than existing floor levels in the property being replaced; must not result in more than 0.3m internal flooding in a 0.5% AEP present day event.	Must be set above the design flood level which is the 0.5% AEP flood level plus lifetime climate change allowance and appropriate freeboard.
Massing, scale and building form	All requirements set out in chapter 4 must be met.	All requirements set out in chapter 4 must be met.
Parking standards – refer to section 5B	A minimum of 1 car parking space for a 1 or 2-bedroom unit must be provided; a minimum of 2 car parking spaces for a 3 or 4 bedroom unit must be provided.	Essex Parking Standards must be met in full.
Internal and external space standards	All internal and external space standards set out in chapter 6 must be met.	All internal and external space standards set out in chapter 6 must be met.
Accessibility	All accessibility requirements set out in chapter 7 must be met.	All accessibility requirements set out in chapter 7 must be met.
Climate change and biodiversity	All requirements set out in chapter 8 must be met.	All requirements set out in chapter 8 must be met.

# 2. Characterisation

## 2.1 History and character areas

Jaywick Sands is located on the Essex coast, in Tendring District. The village of just under 4,800 residents (2,600 households) is sited along the seafront a few miles south west of Clacton-on-Sea.

Jaywick Sands has a unique history which is reflected in its distinctive layout and architectural character. A century ago the village did not exist - the community was founded as a 'plotlands' development of holiday chalets in 1928 and most of the estate was not purpose built for permanent year round occupation. A unique combination of social, political, economical and geographic factors have meant that Jaywick Sands has retained its distinctive low-rise, self-built character of small plots and gridded streets. It is one of the sole remaining examples of a plotlands development which retains this form, and this has been widely recognised by architectural and social historians.

Jaywick Sands is made up of four distinct areas, which are shown on Fig. 1. These correspond to different stages of development of the settlement.

- Brooklands and Grasslands have the smallest plots and were the earliest areas to be developed. These areas are almost all single storey or 1.5 storey (room in the roof) chalet-type dwellings.
- The Village has slightly larger plots and includes the commercial shopfronts of the village centre, which have flats above them.
- The Tudor Estate is the only part of Jaywick Sands to be planned as permanent year-round dwellings. The street layout is more conventionally suburban, with large plots, a school and GP surgery.
- The Guinness Trust social housing to the north of Brooklands was developed in the early 2000s and does not follow the typical street layout or characteristics of the rest of the settlement.

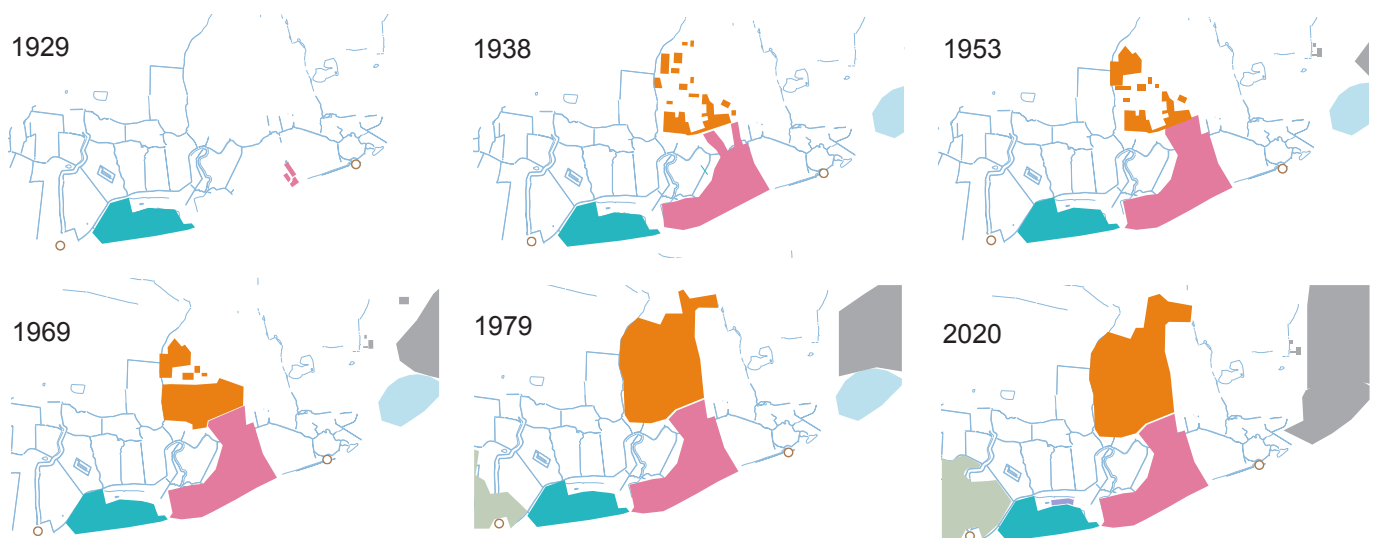


Fig. 1. Historical development of Jaywick Sand derived from historic OS maps.

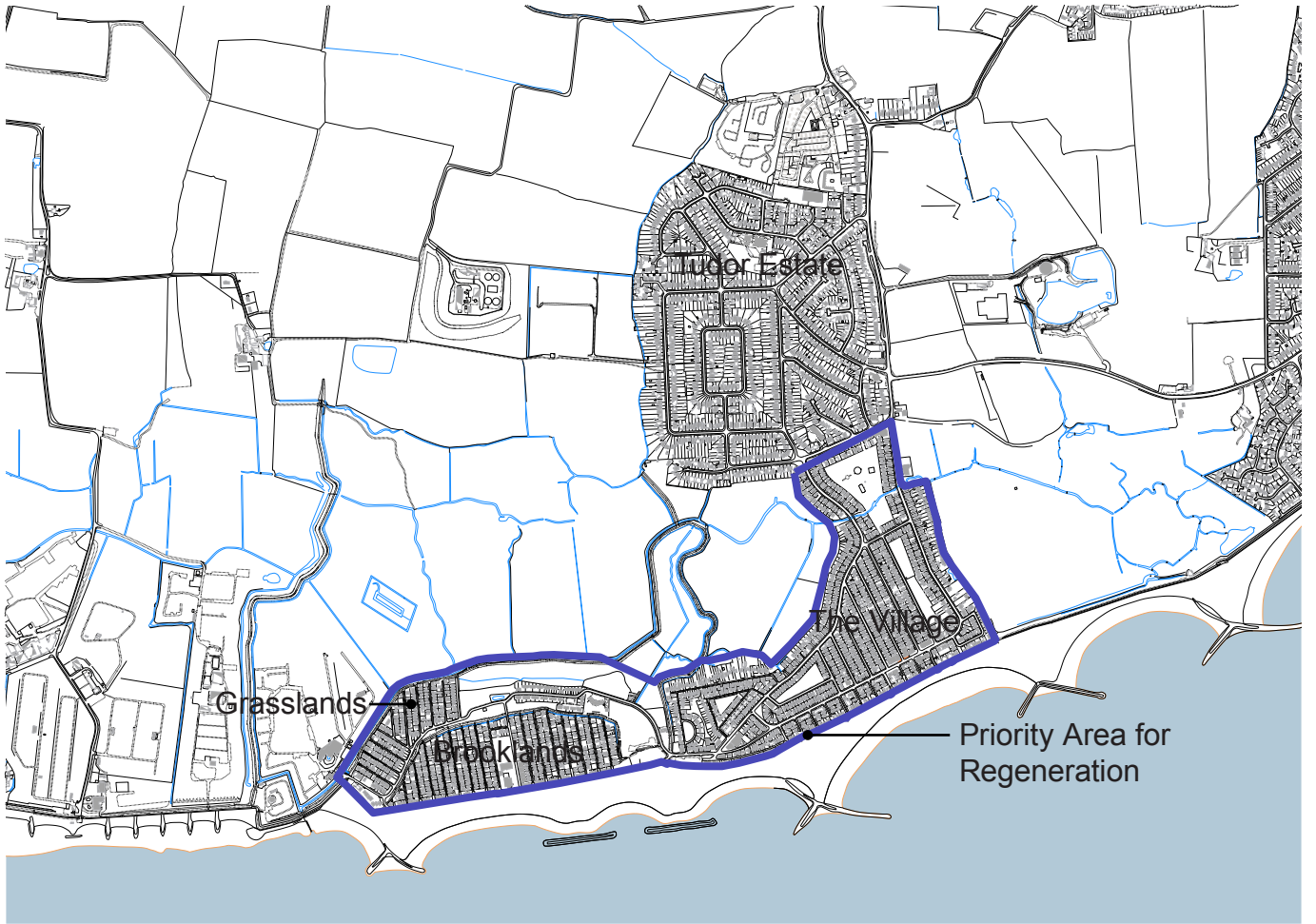


Fig. 2. Plan of Jaywick Sands showing character areas

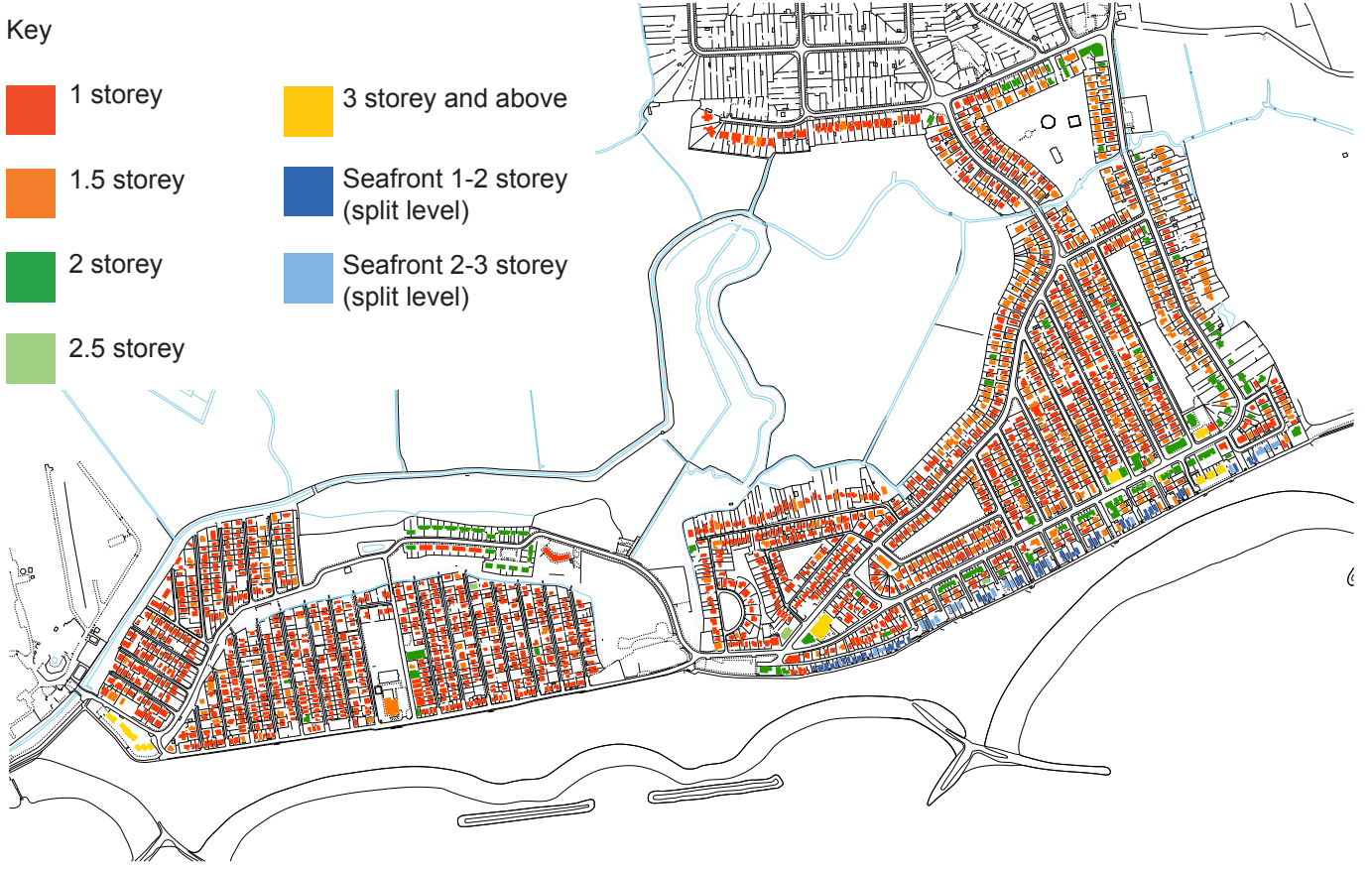


Fig. 3. Storey heights in Jaywick Sands (HAT Projects survey 2019)

## 2.2 Landscape setting

Jaywick Sands is set on former grazing marshland typical of the Essex coastline. The flat landscape rises up to the north out of the coastal floodplain and the Tudor Estate sits on this raised area. Views both from and to the settlement are therefore expansive - very slight changes in height and topography register significantly on the skyline, particularly as there are no mature tree belts screening the village. Elevations with light colours are particularly visible at long range, while closer up, boundary treatments are varied and do not always create a positive transition from the settlement to the surrounding landscape.

The predominantly low-rise character of Jaywick Sands preserves these expansive views and stops the relatively large settlement having a disproportionate visual impact on the surrounding landscape. The heritage asset of the Martello Tower retains its visual separation from the community and its sense of scale and presence, appropriate to its original purpose and siting.

### 2A: Landscape character and visual impact

- New development must maintain the low-rise skyline of Jaywick Sands when seen from the surrounding rural areas, but taller buildings may be appropriate if carefully designed.
- The colour of elevations facing the countryside should be carefully considered.
- Boundary treatments to open landscapes must create an appropriate and high quality edge, close boarded fencing does not achieve this.
- Visual separation between Tudor Estate and Village/Brooklands/Grasslands should be maintained.
- An appropriate setting for the Martello Tower must be preserved. Proposals must preserve visual separation around the Tower and not dominate it in terms of scale.
- Seafront development must present a high quality frontage when seen from the beach, which does not appear out of scale with the neighbouring built form.



Fig. 4. 1895 Ordnance Survey map showing the site of Jaywick Sands as grazing marsh and saltings - the sea wall runs around the north of what is now Brooklands.





Fig. 5. View from the south of the Tudor Estate, looking towards the tandem plots along Meadow Way



Fig. 6. View from the south of the Tudor Estate, looking towards Lotus Way



Fig. 7. View looking east from Seawick towards Jaywick Sands and the Martello Tower

## 2.2 Brooklands and Grasslands

Brooklands and Grasslands have the smallest plot sizes and the smallest existing homes. These areas have the well-known 'radiator grille' layout of narrow streets running north-south.

### Density

- The area contains around 710 homes, excluding Guinness Trust and Belsize Avenue flatted development (HAT Projects Survey, 2018)
- Including roads and pavements but excluding areas of public open space (i.e. Brooklands Gardens), the area has a density of 49 dwellings per hectare.
- If all empty plots were occupied with a dwelling, this would rise to around 60 dwellings per hectare.

### Mix and tenure

- Most homes in the area have one or two bedrooms only. (2011 census data for LSOA 018A)
- Proportion of privately rented homes is high, at 48% (2011 census data for LSOA 018A)
- The area contains the only (purpose built) social housing in Jaywick Sands - the Guinness Trust homes developed in the early 2000s.
- The area is highly overcrowded, with 94% of all households judged to have insufficient space to meet the household's needs according to the Index of Multiple Deprivation (2019).
- The area has the highest proportion of children of all the Jaywick areas. (2011 census data for LSOA 018A)

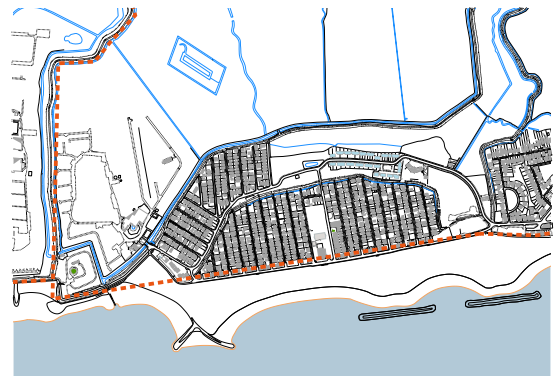
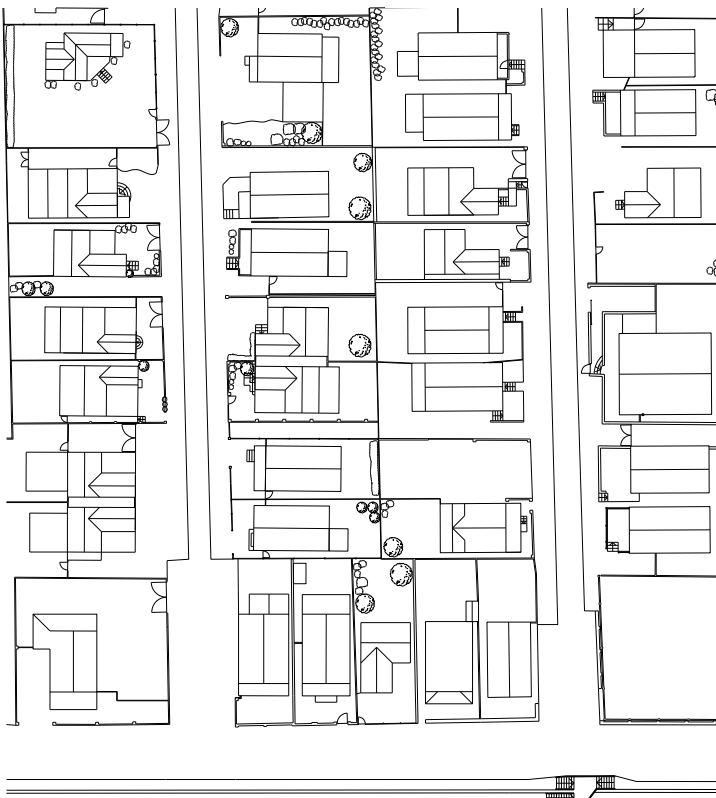


Fig. 8. Plan showing location of Brooklands and Grasslands in Jaywick Sands

Fig. 9. Plan showing seafront and typical plot arrangements in Brooklands



Fig. 10. View looking west on Brooklands seafront



Fig. 11. Brooklands in the 1930s



Fig. 12. View looking west on Brooklands seafront following the 1953 east coast tidal flood

## Brooklands and Grasslands: typical plots

Typically, plots in Brooklands and Grasslands are:

- 15m long
- 6-8m wide

Setbacks of buildings from plot boundaries are typically:

- 0.7-1m from side boundaries
- 2.5-3.5m from front boundaries
- 3.5-4.5m from rear boundaries.

Buildings are almost all single storey, or 1.5 storey (room in the roof) with gable ends facing the street. Many of the original 1930s chalets remain: although in most cases they have been overclad and altered, their distinctive form is still recognisable. Ground floors are typically raised around 0.1-0.7m from street level. 2022 flood levels in a 0.5% AEP event reach up to 0.3m above ground level in some parts of Brooklands.

Typical Brooklands streets have been resurfaced to form an asphalt carriageway with a level concrete pavement without a kerb on either side. This is due to the narrowness of the streets which does not permit a full compliant carriageway and pavement, so cars need to be able to overrun the pavement to pass each other. However this streetscape design has been sensitively achieved and gives a distinctive character to the streets akin to a 'home zone' or 'shared surface' approach.

Typically parking takes place informally on-plot at the front of buildings, or on-street where plot sizes don't allow for on-plot parking. On-street parking narrows the carriageway further and creates a challenge for the safe flow of traffic.



Fig. 13. Typical street in Brooklands.



Fig. 14. Typical junction between Brooklands and north-south streets.



Fig. 15. Typical street in Grasslands

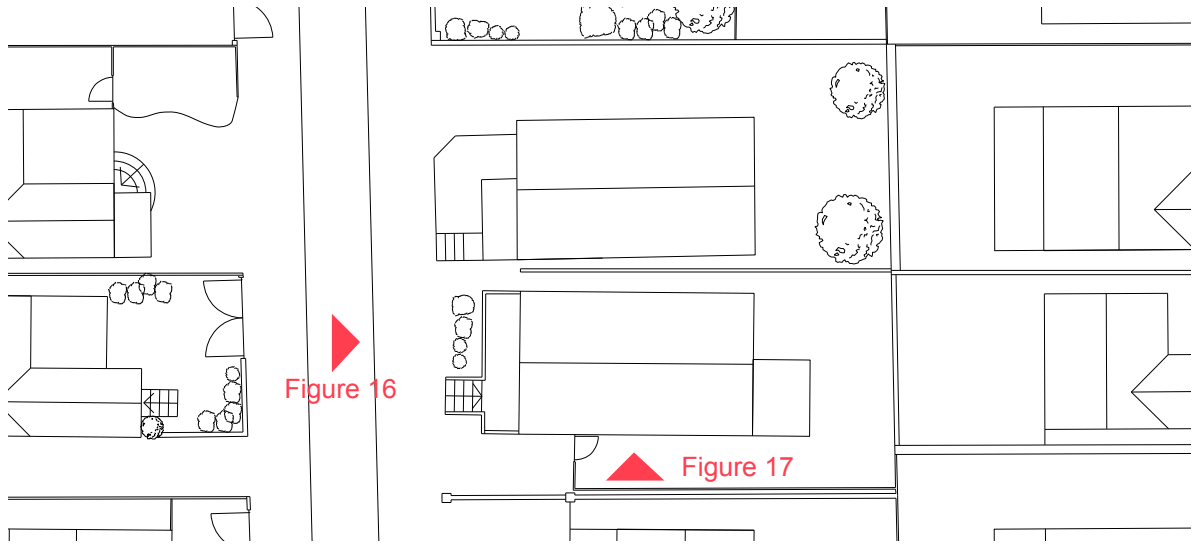


Fig. 16. Plan of typical plots in Brooklands

0m 2m 5m 10m



Fig. 17. Typical street elevation of Brookland plots.

0m 2m 5m 10m

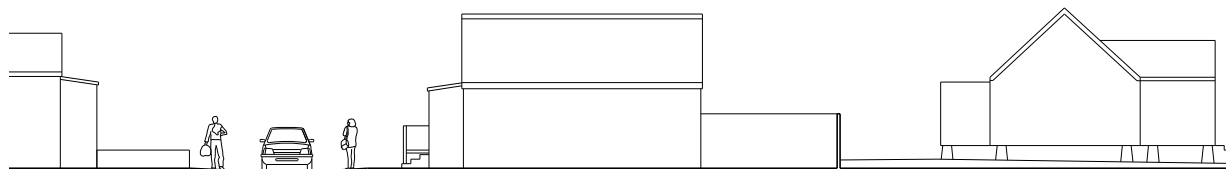


Fig. 18. Typical side elevation of Brooklands plots

0m 2m 5m 10m

## Brooklands: Seafront plot characteristics

Seafront plots in Brooklands are typically:

- 15.5-16.5m long
- 5-6m wide

Setbacks of buildings from plot boundaries are typically:

- 0.7-1m from side boundaries
- 2.5-3.5m from front boundaries
- 4.5-5.5m from rear boundaries.

Buildings are typically single storey, or 1.5 storey (room in the roof) with gable ends facing the seafront. Ground floors are typically raised around 0.1-0.7m from street level. As in the rest of Brooklands, most of the original 1930s chalets remain but are overclad.

Brooklands Avenue does not have a pavement - the asphalt road surface runs right up to plot boundaries. This is unacceptable from a safety and accessibility perspective and the aspiration is to remedy this in the future.

Typically parking takes place informally on-plot at the front of buildings, or on-street where plot sizes don't allow for on-plot parking. On-street parking narrows the carriageway further and creates a challenge for the safe flow of traffic which is particularly critical as Brooklands Avenue is a bus route.



Fig. 19. View showing Brooklands seafront plots and the steps to access the beach.



Fig. 20. Historic postcard photo of Brooklands seafront.

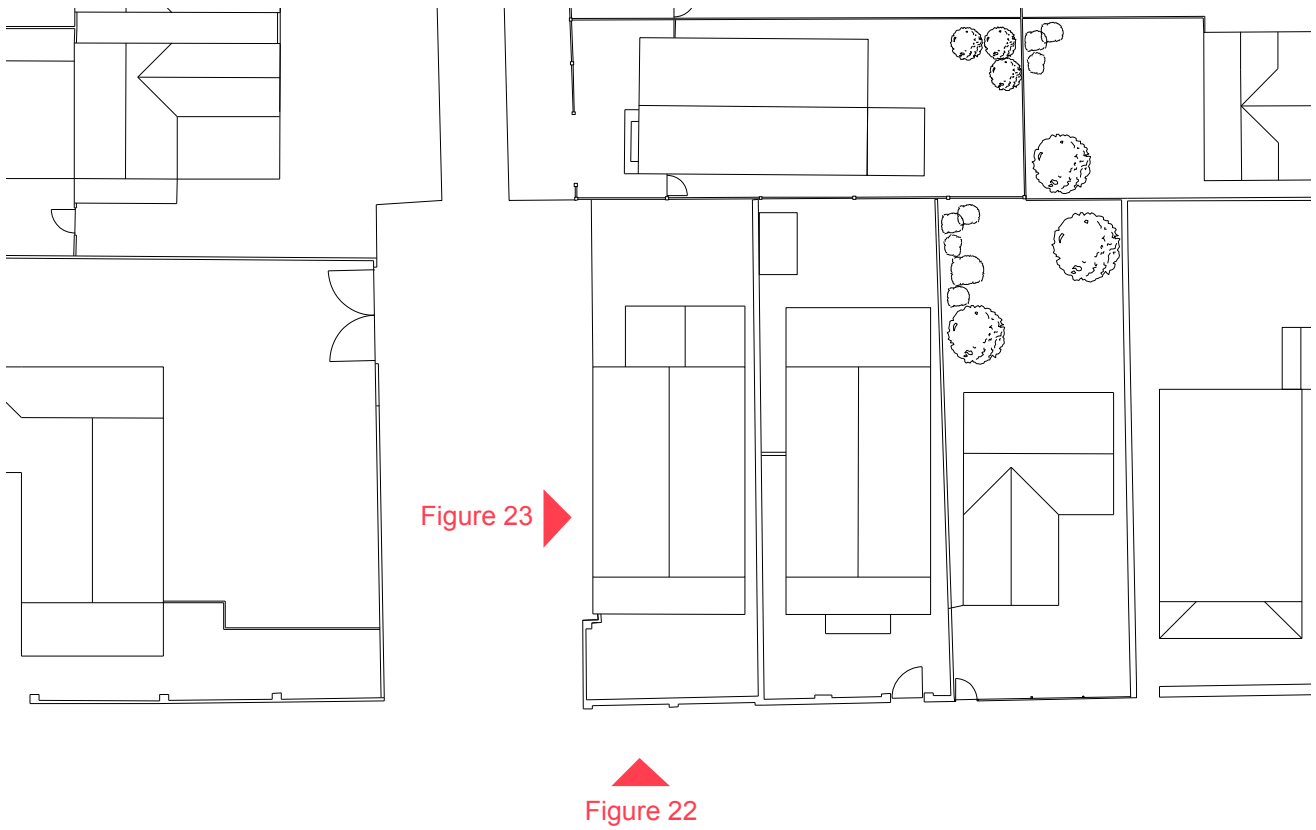


Fig. 21. Plan of typical seafront plot in Brooklands



Fig. 22. Typical seafront (south) elevation of seafront plots.

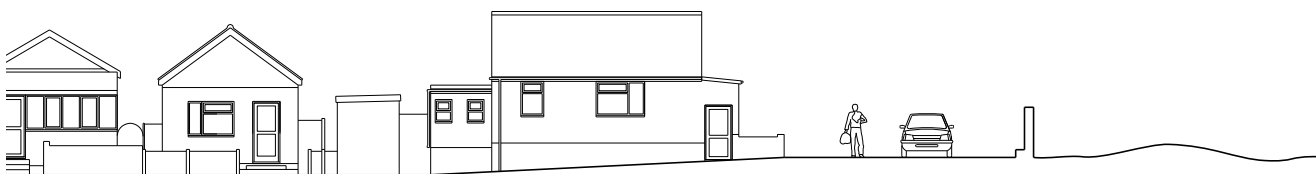


Fig. 23. Typical side elevation of seafront plots



## 2.3 The Village

The Village is the central area of Jaywick Sands, including Broadway, Meadow Way and the plots between. It has a more varied character than Brooklands including:

- A number of green spaces of different scales;
- Plots at the western end of the Village which are similar in scale to Brooklands plots;
- Typical inland plots on north-south streets, but of a larger size than Brooklands;
- Broadway itself has a number of commercial premises with flats over, and was designed from the start as the commercial heart of the settlement. There are some three-storey buildings.
- The Village seafront is a pedestrian promenade at a higher level to the rest of the streets, resulting in split-level dwellings on the seafront, often of a highly individual design;
- Along Golf Green Road, Meadow Way and Crossways there are a number of 'tandem plots'.

### Density

- The area contains around 1134 homes, with few plots vacant.
- Including roads and pavements but excluding areas of public open space, the area has a density of around 30 dwellings per hectare.

### Mix and tenure

- The Village has a more varied mix of unit sizes.
- Proportion of privately rented homes is lower than in Brooklands - 17% of households (2011 census data for LSOA 018C).
- Overcrowding and the proportion of households with children is lower, despite more green spaces and larger dwellings (2011 census data for LSOA 018C).

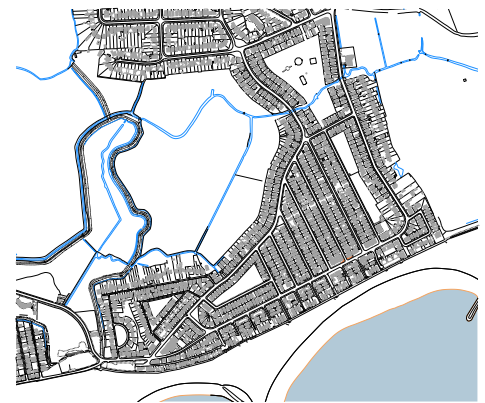
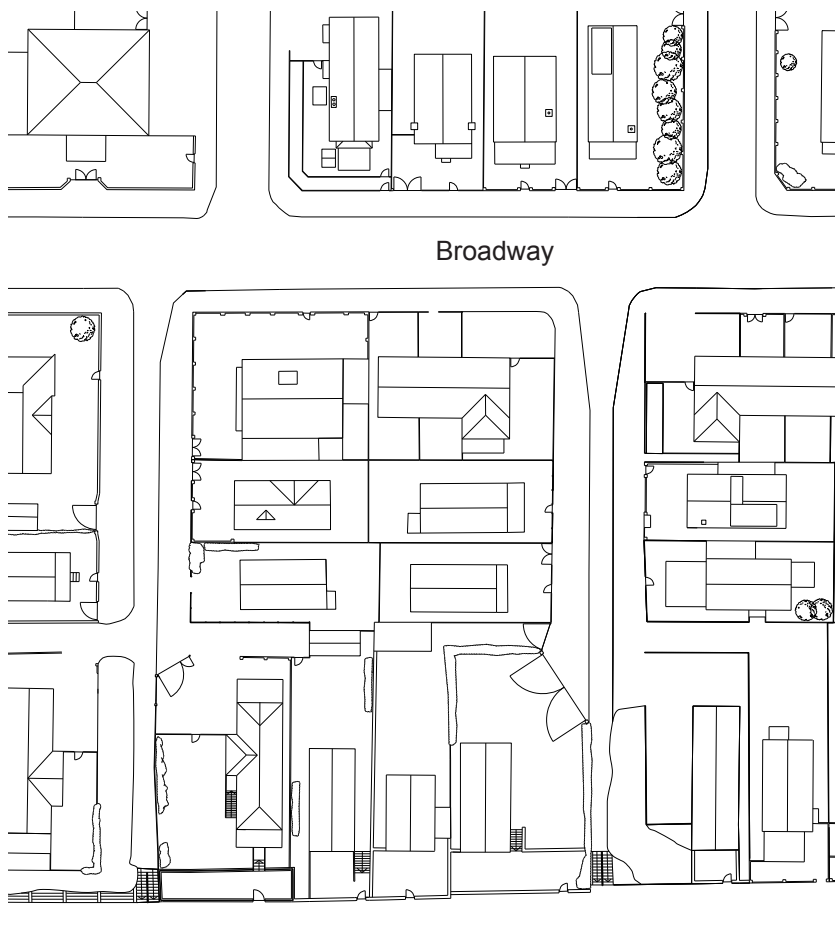


Fig. 24. Plan showing location of the Village in Jaywick Sands

Fig. 25. Plan of typical area of the Village, either side of Broadway





Fig. 26. Village seafront



Fig. 27. The Village has several distinctive 'greens' within the street pattern.



Fig. 28. The Village seafront as depicted on a 1950s postcard

## Village: typical plots

Most plots in the Village along the north-south streets are typically:

- 20m long
- 7.5-8.5m wide

Setbacks of buildings from plot boundaries are typically:

- 1-2m from side boundaries
- 3-4m from front boundaries
- 5m from rear boundaries.

Buildings are typically single storey, or 1.5 storey (room in the roof) with gable ends facing the road. Ground floors are typically raised around 0.2-0.5m from street level. Many original chalets remain, adapted and overclad - some of the most ornate and well-maintained homes can be found in this area. 2022 flood levels in a 0.5% AEP event reach up to 0.5m above ground level in some areas close to the seafront.

Most Village streets have a full pavement, typically 1.5-2m wide. Some plots are arranged to accommodate on-plot parking either at the side or the front but this is not the case for all plots and there is significant on-street parking.

There are a few anomalous areas in the Village, including Beach Way, Sea Way, Lake Way, Fern Way, Yew Way and Gorse Way, where roads are still unsurfaced and are very narrow, similar to Brooklands streets. These are particularly challenging areas for redevelopment of plots and must be considered carefully in the assessment of suitable design.



Fig. 29. View along the north-south Willow Way in the direction of Meadow Way

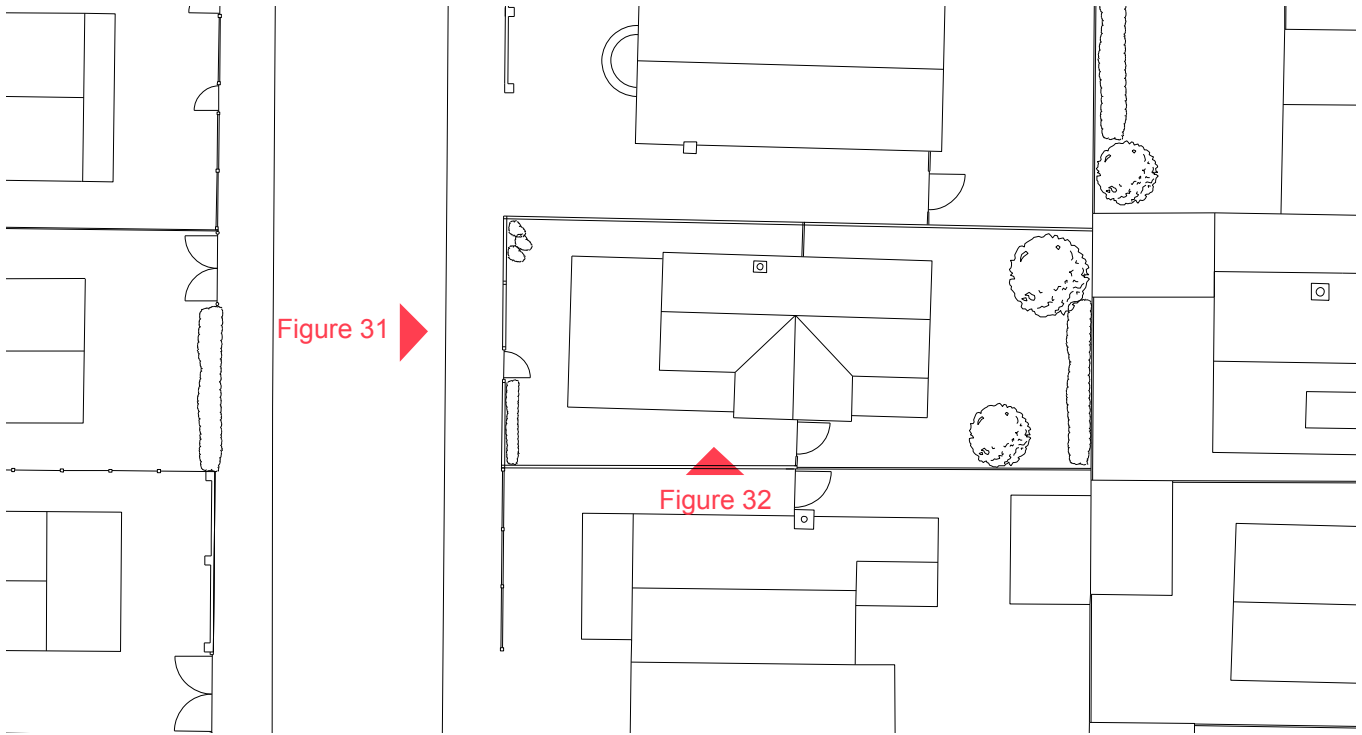


Fig. 30. Plan of typical plot in the Village (on north-south street)



Fig. 31. Typical street elevation of Village plots

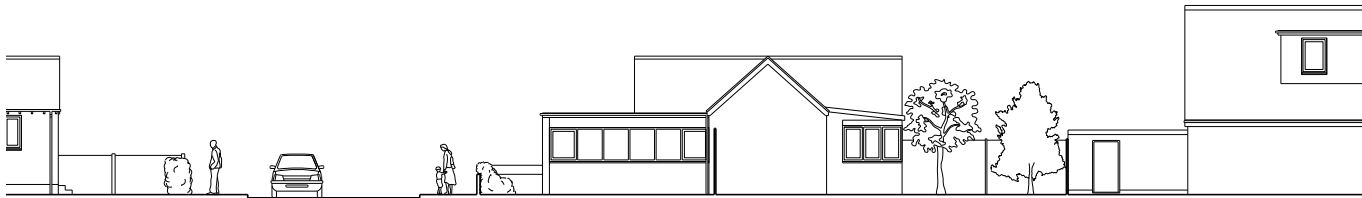


Fig. 32. Typical side elevation of Village plots.



## Village seafront plots

Seafront plots in the Village are typically:

- 24.5-25.5m long
- 7-10m wide

Setbacks of buildings from plot boundaries are typically:

- 0-2m from side boundaries
- 3-4m or 10-11m from front boundaries
- 6-11m from rear boundaries

Buildings are typically single/two storey, or two/three storey (due to the change of ground level from the Broadway to the seafront) with gable ends facing the seafront. The first floor level is typically around 0.2-1m from the seafront street level. Homes exhibit a great variety of design which adds to the charm and character of the area - many take advantage of the south-facing aspect and quiet car-free location to have extensive balconies and terraces overlooking the sea.

There is access from the higher seafront level and the lower north facing level. The lower north facing level provides amenity and car parking space.



Fig. 33. View of the Village seafront promenade



Fig. 34. View of the Village seafront plots showing the level difference between the seafront & the inland plots

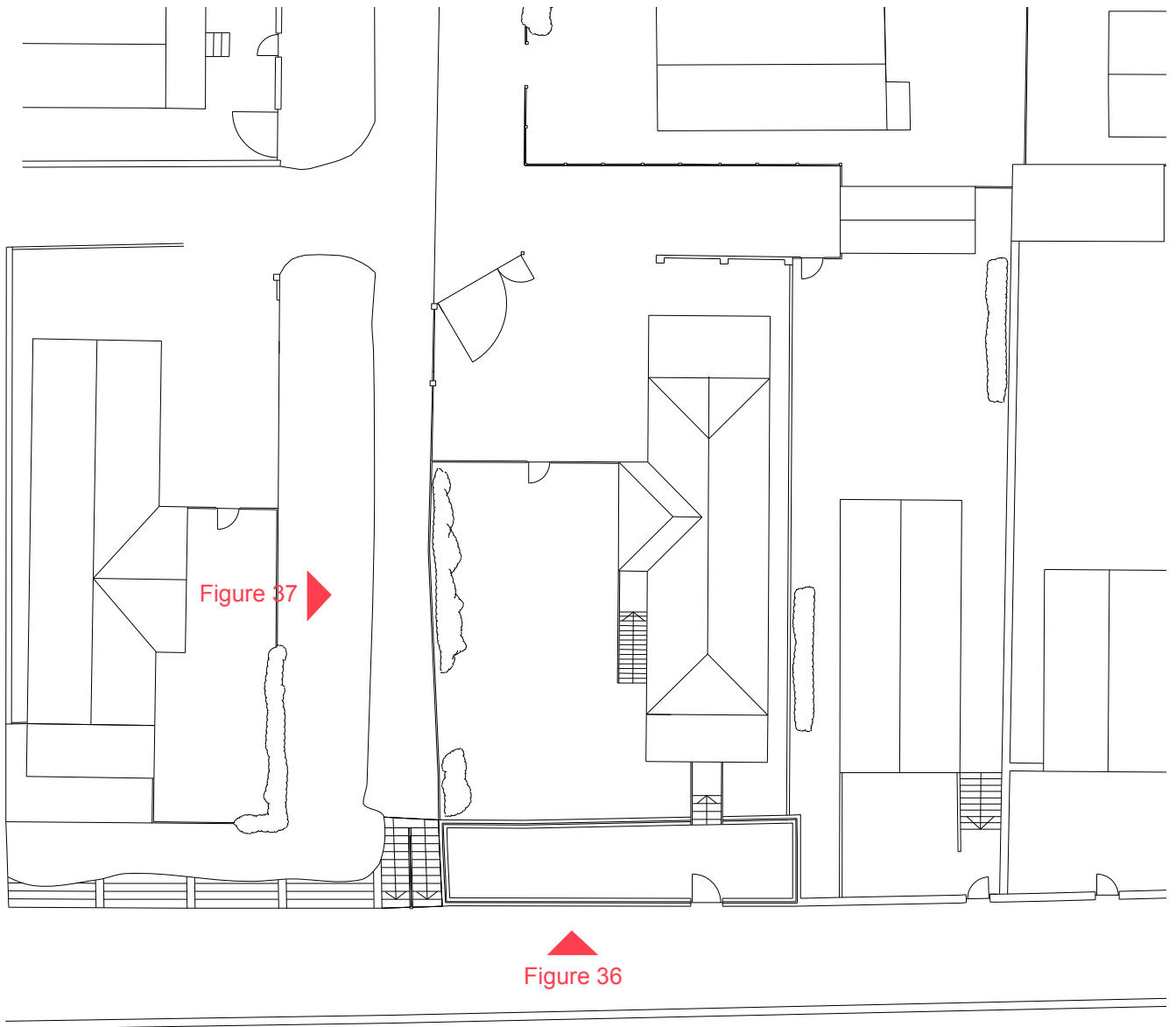


Fig. 35. Plan of typical seafront plot in the Village

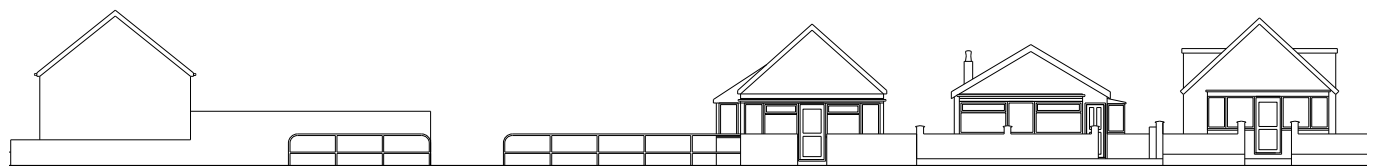


Fig. 36. Elevation of typical seafront plot in the Village



Fig. 37. Side elevation / cross-section of seafront plot and level change to promenade



## Broadway

Broadway has a mix of residential and commercial properties along the street. The eastern end is mostly residential, and the west has a mix of shops, eateries and residential properties, often with flats at first floor level. The street itself is wide with generous pavements both sides.

The western end was designed from the outset as the commercial heart of the settlement and the mixed-use buildings were originally designed in a modernist style - flat-roofed and stucco-fronted - in contrast to the chalet architecture of the residential pattern book. Some buildings were even more architecturally flamboyant, such as the former 'Cafe Morrocco' which was designed in a Hollywood-inflected North African style.

Residential plots on the eastern end of Broadway vary in character. Originally they were narrow plots, with four plots between each cross street, but many have been combined into larger plots, each occupying a corner. Some blocks have been rebuilt as a terrace of homes fronting Broadway. This has resulted in a shift in density and character that is appropriate to the wide and more urban 'high street' setting.

Broadway itself has a generous pavement and plots typically have front and side gardens, but side gardens do not always present a positive frontage to the street, as where dwellings are set back considerably from the street, the side 'garden' is frequently occupied by informal sheds or enclosed with high close boarded fences.

Typically parking is accommodated on-plot at the front of the dwelling but where houses form a terrace, plots lack space for parking so cars are parked on-street.



Fig. 38. Former amusement arcade building along Broadway, with flats above.



Fig. 39. Historic photo of Broadway showing Café Morocco



Fig. 40. Historic photo of Broadway - the building on the right is now Wonderland



Fig. 41. Historic photo of Broadway

## Tandem plots

Tandem plots are found along Meadow Way, Golf Green Road, and the southern side of Crossways. Each plot in the tandem arrangement is typically:

- 18-19m long
- 6.5-7.5m wide

Setbacks of buildings from plot boundaries are typically:

- 1m from side boundaries
- 3-4m from front boundaries
- 4-5m from rear boundaries.

Buildings are typically single storey, or 1.5 storey (room in the roof) with gable ends facing the road. Ground floors are typically raised around 0.25m from street level.

The area has pavements and front gardens and some plots have side gardens. The front plots are accessed directly from the street and some, but not all, have on-plot parking at the front or in a garage. The rear plots are accessed by shared driveways between the front plots - one driveway serves two rear plots. Rear plots typically have garages/carports or park cars in the space between the two front plots. There is typically some on-street parking as plot layouts rarely accommodate two cars per household.



Fig. 42. View between the tandem plots along Meadow Way



Fig. 43. Example of the relationship between the front and rear houses on the tandem plots



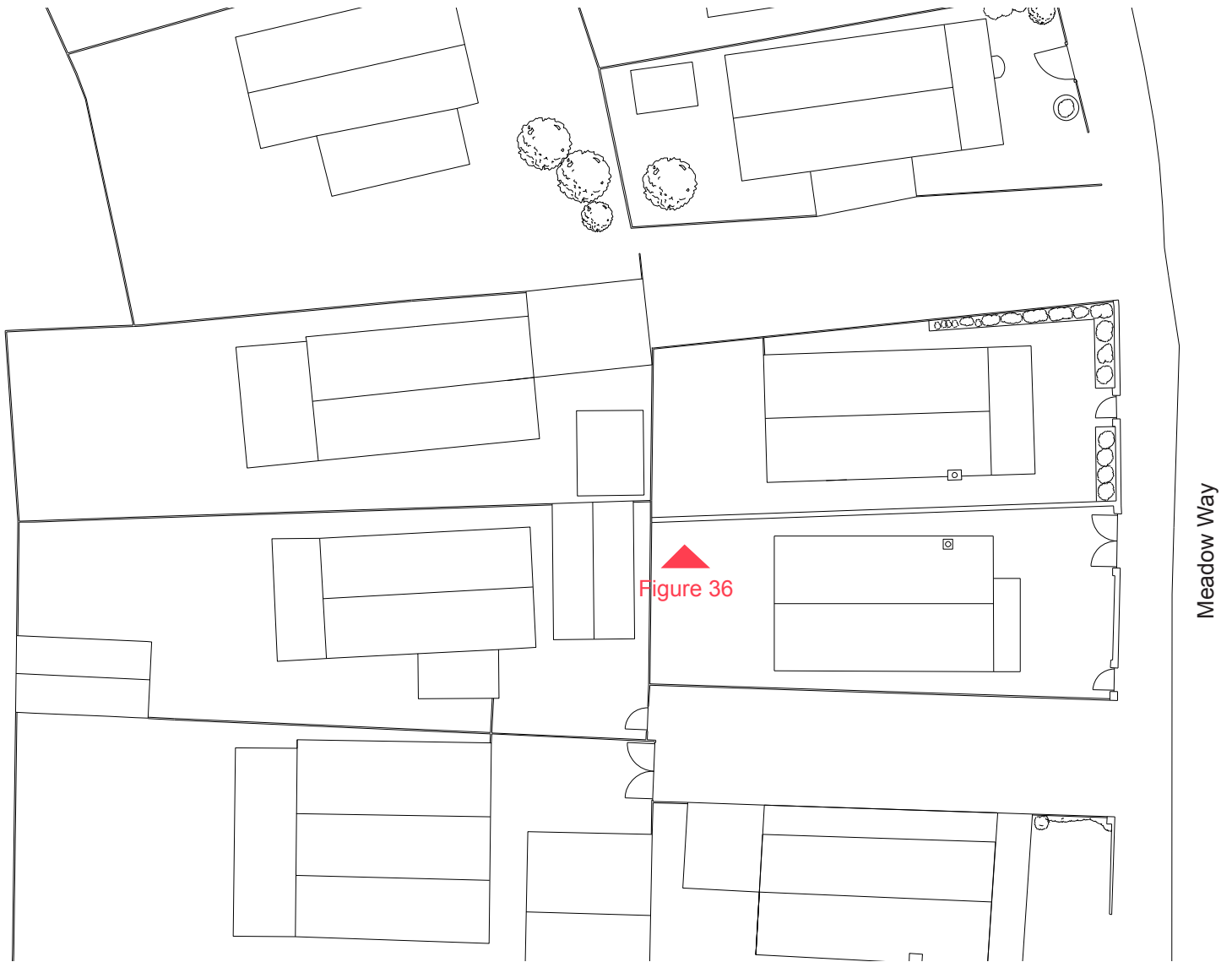


Fig. 45. Plan of typical Tandem plots

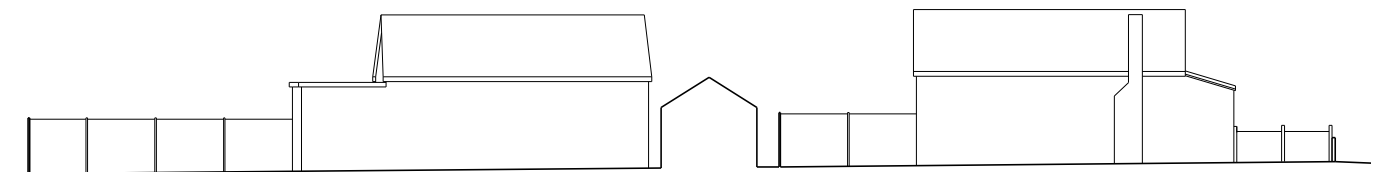


Fig. 44. Typical side elevation / cross-section of Tandem plots



## 2.4 Architectural character and detail

Jaywick Sands has an original and distinctive character which differs from other parts of Essex and indeed is notable nationally as it retains its plotland architecture.

Its uniqueness stems from the gridded layout and uniformity of scale across the community, in contrast to the almost limitless individuality of dwellings in their use of materials, colour, detail and architectural style. Although many started life as chalets from the catalogues of the plotlands development company, they have been heavily modified and in many cases almost entirely rebuilt in ways which represent the personalities of their owners. The recent over-cladding of many chalets in pebble-dashed render has had a negative effect on this variety, and redevelopment or replacement dwellings should be designed to restore the “charm of an indigenous vernacular”<sup>1</sup> which has been recognised as special to Jaywick Sands, while meeting the need for safe and flood resilient dwellings.

The generally north-south oriented street pattern allows sunlight down the narrow streets and ensures almost all terminate in a sea view. This orientation also assists in avoiding overshadowing of back gardens by buildings and as a result, although the sizes of the gardens are small, the amenity they offer is relatively high.

The original chalets typically have a linear or L-shaped plan and many were designed originally to have a sun-deck at roof level. Many of the chalets are raised above ground level on piers, which provides some protection from surface water flooding to property, but will not withstand tidal flooding. All the chalet dwellings were pitched roof - some models have mansard/gambrel type roofs with either gable or eaves to street - and this still strongly influences the character of Jaywick Sands. Larger homes exhibit varied architectural styles but the ‘chalet’ roof where the eaves line is below the head of the first floor windows, creating a 1.5 storey home, is the predominant type and highly characteristic of Jaywick Sands. Overhanging roofs, balconies and other whimsical flourishes are also typical.

Commercial buildings were originally in a 1930s seaside modernist architecture and some individual homes also adopted this aesthetic.

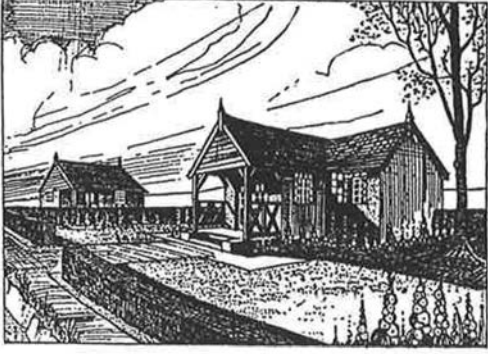
The marine environment is challenging for weathering and maintenance of external materials must be considered. A variety of materials are appropriate but render and the recent painted pebbledash has not aged well due to its monolithic nature. Timber and board cladding and brick are seen to have aged better.

### 2B: Sustaining local character and distinctiveness

- The distinctive gridded street pattern and plot pattern of Jaywick Sands should be maintained, including the primary north-south orientation of the streets.
- Developments of multiple homes should achieve variety and visual interest along the street. Groups of more than eight identical homes should be avoided. Custom build and custom finish should be considered to allow occupiers to individualise their properties.
- Pitched roof buildings should seek to use chalet roof forms to create ‘rooms in the roof’ where the eaves line is below the head of first floor windows, flat roofed designs may be appropriate if carefully designed, including parapet detailing.
- External materials should be resilient to the marine environment and easily maintained.

1 Colin Ward, *Arcadia for All*, p161

### Jaywick Sands Estate

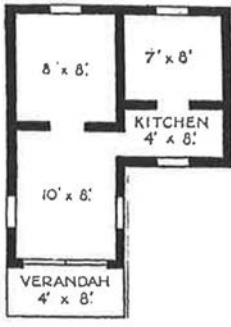


Type No. 4

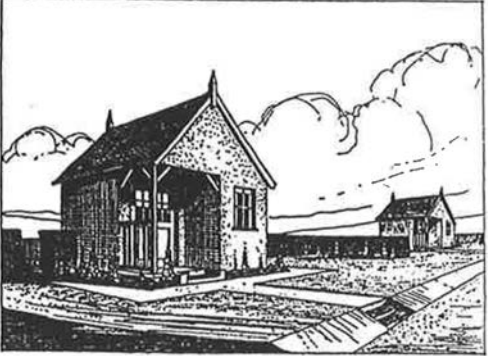
Price - £74  
including concreting over site and complete erection. Rough-cast asbestos. Contains two bedrooms, sitting-room, kitchenette and verandah.

OR

Price built in brick £92



### Jaywick Sands Estate



Type No. 3

Price - £52  
including concreting over site and complete erection. Rough-cast asbestos. Contains two bedrooms, lounge and verandah.

OR

Price built in brick £66

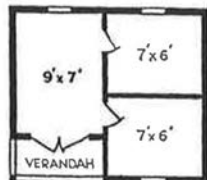


Fig. 46. Advertisements for the original chalets that could be purchased as kits to be erected on plots.

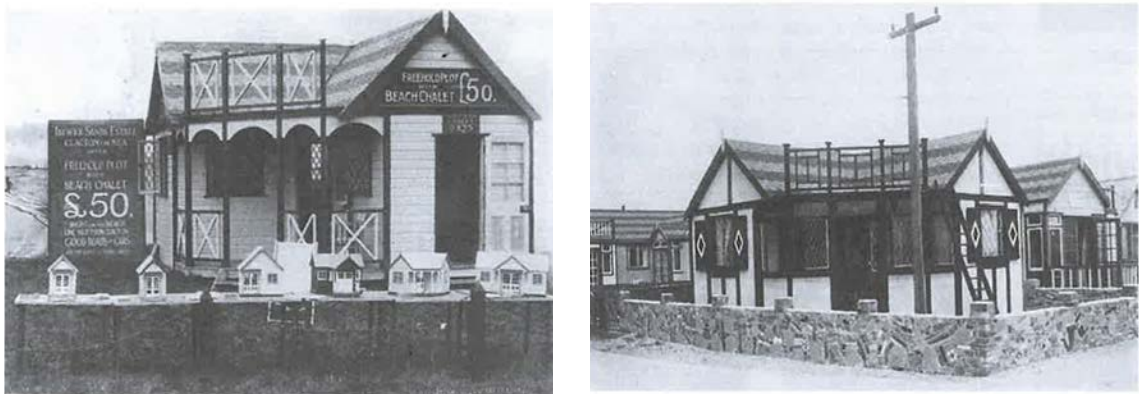


Fig. 47. 'Show chalets' exhibited for prospective purchasers to see.



Fig. 48. The original chalet forms can still be found but in these examples, the overcladding in pebbledash has removed much of their charm and detail.

## Examples of positive and distinctive architecture in Jaywick Sands



Fig. 49. Simple single storey home with generous glazing



Fig. 50. Distinctive former estate office



Fig. 51. Articulated frontage using setbacks and relief



Fig. 53. Newer homes articulated with balconies to reduce visual impact of garages



Fig. 52. Decorative frontage with deep roof overhang



Fig. 54. Mansard/gambrel roof form typical to many Village homes



Fig. 55. Seafront home with generous glazing oriented to maximise sea views



Fig. 56. Seafront home with balcony set back within walled garden

## Examples of new-build house design that could be suitable in Jaywick Sands



Fig. 57. Gable end to street with room in the roof



Fig. 58. Semi-detached gabled homes with varied materials



Fig. 59. Use of brickwork neatly detailed



Fig. 60. Simple extruded gabled form made distinctive by choice of cladding



Fig. 61. House raised slightly above ground level

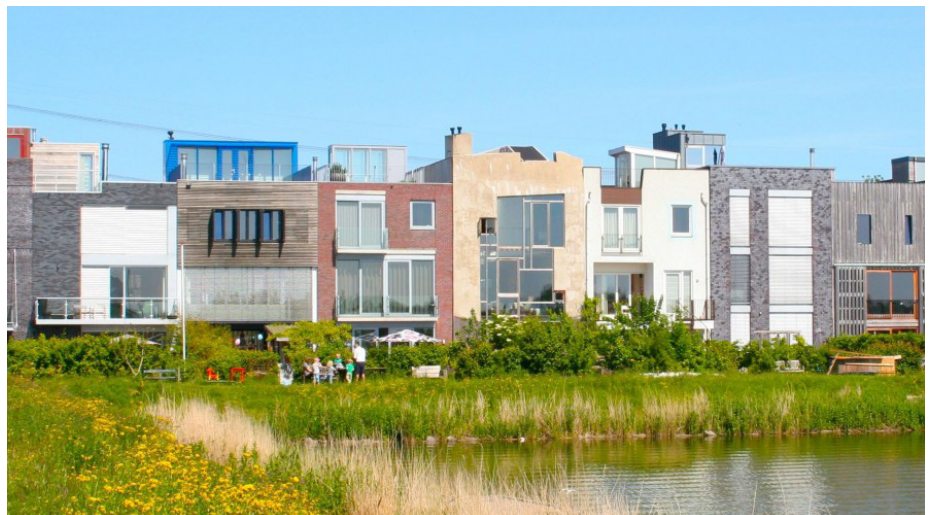


Fig. 62. New self-build homes in Almere, Netherlands showing how variety can be achieved while regulating scale.

### 3. Designing flood safe buildings

Brooklands, Grasslands and the Village lie within Flood Zone 3 and therefore flooding issues represent a major consideration for the design of new development. Actual flood risk today includes flood depths of 500mm (0.5m) for some homes along the seafront in the (0.5% AEP), and rises to depths of 3m and above for the same AEP, taking into account climate change over the next 100 years. Not only the residential areas, but also the only road in and out of the settlement at present, are predicted to be severely inundated in both over-topping and breach scenarios, when climate change is taken into account.

It is therefore essential that new development - whether a replacement dwelling or more comprehensive schemes - is designed to an appropriate level of safety, flood resistance and flood resilience. It is also important to ensure that substandard homes which are not currently flood safe, can be rebuilt or replaced with on-plot with homes that offer a better standard of safety and quality. Tendring District Council has worked closely with the Environment Agency to establish this guidance regarding designing for betterment and flood safety.

#### Current standard of protection

In the 2015 Shoreline Management Plan (SMP), Jaywick Sands falls into Policy Development Zone C4. The SMP states that the short and medium term (epochs 1 and 2, up to 2055) policy is

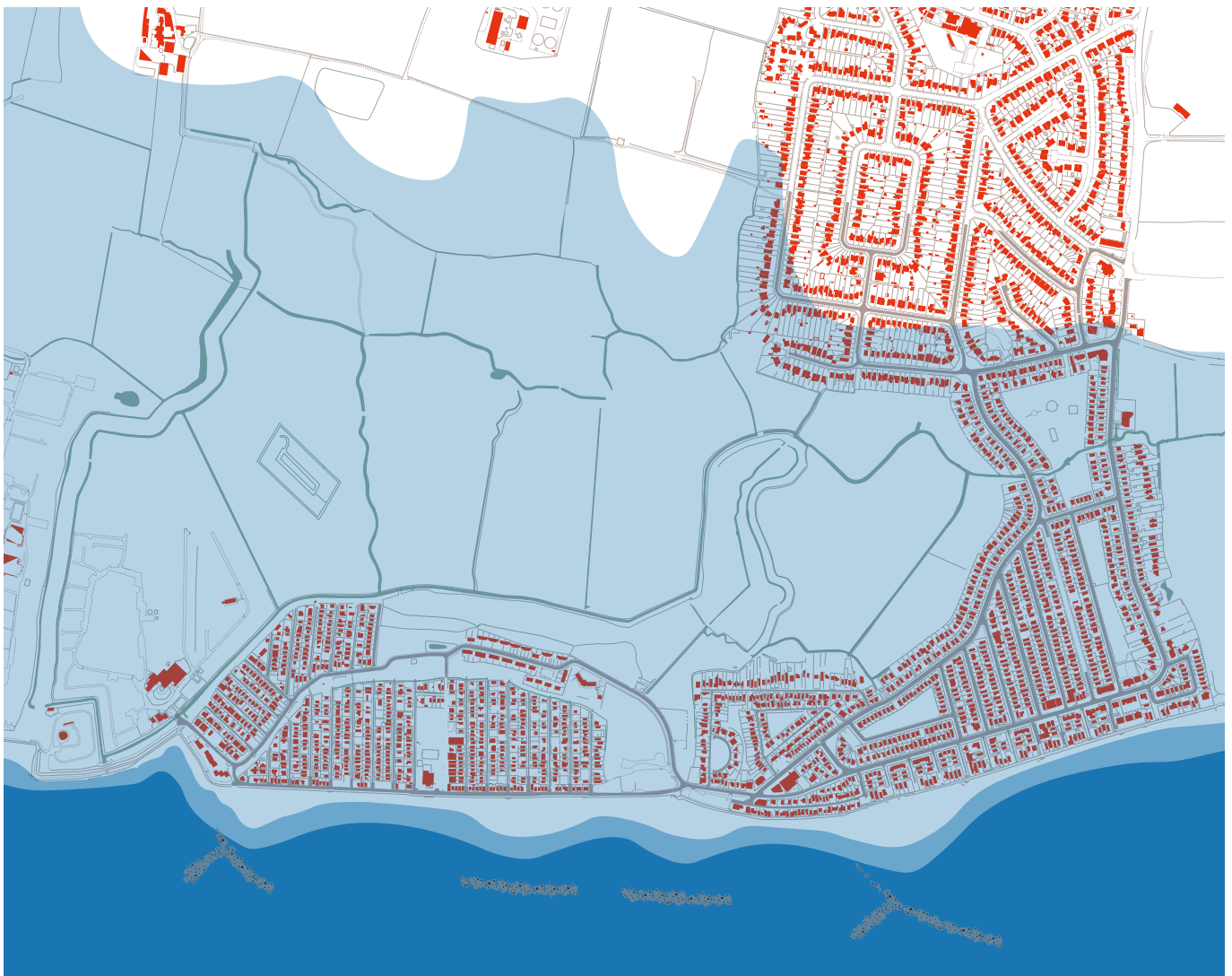


Fig. 63. Map showing flood extent in a 0.5% AEP + 100 years of climate change event (2122)

for Hold the Line, with a dual policy for epoch 3 (up to 2105) of Managed Realignment (breach of frontline defence after building landward defence) and Hold the Line, dependent on further work as part of the Local Development Framework.

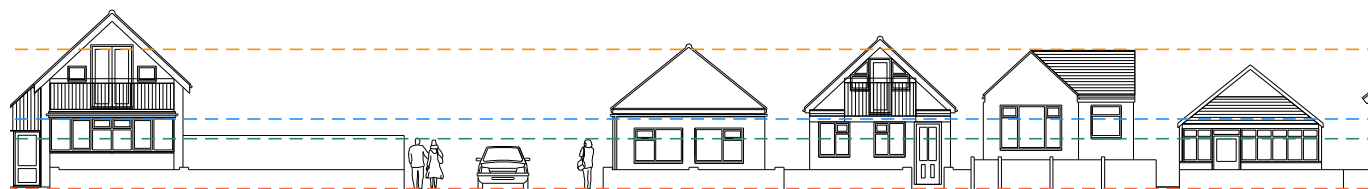
In late 2018, the Environment Agency indicated that they were recommending moving towards a full Hold the Line policy for epoch 3, however a revised Shoreline Management Plan has not yet been published. A Hold the Line policy would maintain defences to the current standard of protection - approximately equivalent to a 0.5% AEP event. Annual Exceedance Probability (AEP) is the expression of a likelihood of a flood event in a given year as a percentage.

Hold the Line is an aspirational policy within the SMP as no funding has yet been sought or allocated for maintaining defences to current standards. Its delivery will require continued partnership working, and significant partnership funding. While uncertainties regarding funding and viability exist, it is important that any new development is designed to be both resilient to flooding (should there be any delay to the delivery of improved coastal flood defences) as well as being safe for the future occupants.

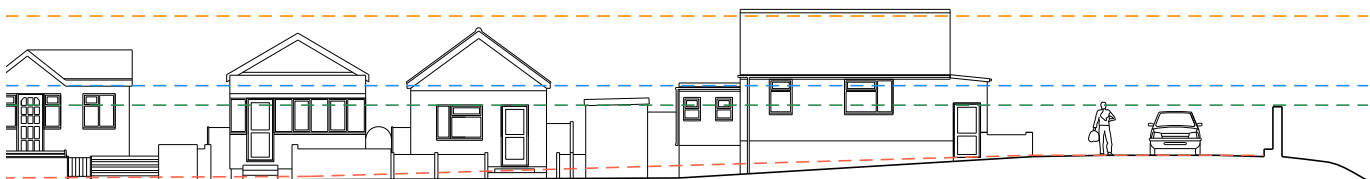
As the design life of the current defences is limited and sea level rise occurs continuously, there is significant actual risk of flooding today, which increases year on year. Sea level rise due to climate change means that, during the lifetime of a home built today, some areas of Jaywick Sands will see over 3m of floodwater above ground level if sea defences are not built higher. The primary risk is from over-topping of the sea wall, but breach events - similar to the 1953 flood,



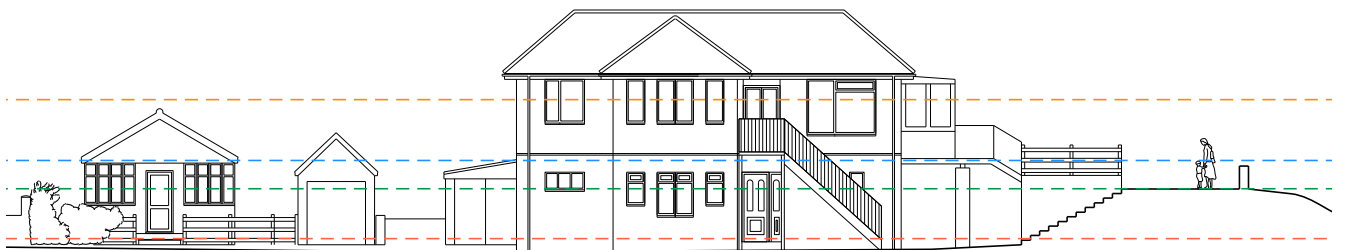
Fig. 64. Photograph of flooding along Golf Green Road in 1953.



Brooklands seafront



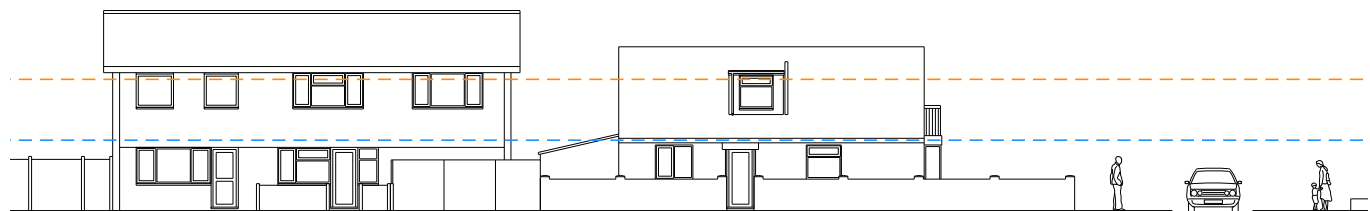
Brooklands north-south streets and cross-section through Brooklands seafront



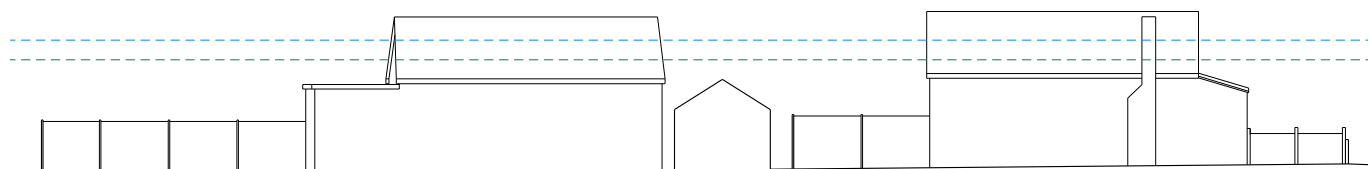
Village seafront



Village north-south streets.



Broadway (residential areas)



Tandem plots off Meadow Way



- |     |  |  |
|-----|--|--|
| Key | ----- Minimum internal ceiling height above refuge level (allowing 2.3m floor to ceiling height) | ----- Flood level - 0.5% AEP + 100 years of climate change + 300mm freeboard |
|     | ----- Refuge level - 0.1% AEP + 100 years of climate change + 300mm 'freeboard'                  | ----- Flood level - 0.5% AEP   |

Fig. 65. Indicative flood levels for different areas in Jaywick Sands (2022 baseline for present day AEP)



where the counterwall to the east of Jaywick Sands failed - could also result in similar levels of flood water. This represents a serious risk to life as well as to property, as in a breach scenario there is very little time to evacuate. Due to the topography of Jaywick Sands, flooding spreads quickly and to considerable depths once defences are overtopped or breached.

Developers of new homes, whether replacement dwellings or entirely new dwellings, must design in physical safeguards to ensure flood resilience, safe areas of refuge are provided, as well as putting in place robust emergency plans. Frontline defences do not assure residents that there will be no flooding in Jaywick Sands - they only reduce the risk, but flood events can still occur and when they do, the consequences will be severe.

### Requirements of the National Planning Policy Framework

All new development within Flood Zone 3 should demonstrate that it has passed the sequential and the exception tests where required and as set out in the National Planning Policy Framework and Planning Practice Guidance: Flood Risk and Coastal Change. <https://www.gov.uk/guidance/flood-risk-and-coastal-change>.

The National Planning Policy Framework (paragraph 159) states that:  
“Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.”

The sequential test is a method to test if a suitable alternative location for the development is available. The exception test is a method to test if a proposal will provide wider sustainability benefits to the community that outweigh the flood risk; and be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will



THE ESSEX BUNGALOW TOWN OF JAYWICK, NEAR CLACTON, AFTER THE SEA HAD SWEEPED OVER IT : 600 PEOPLE HAD TO TAKE REFUGE ON ROOFS AND SUN BALCONIES UNTIL THEY WERE RESCUED BY SMALL BOATS, AFTER THE FLOOD-WATER HAD SWIRLED INTO THEIR HOUSES ; AND THIRTY-FOUR WERE ON FEB. 2 REPORTED DEAD.

Fig. 66. Chalets displaced in the aftermath of 1953 flooding.

reduce flood risk overall.

Both tests may need to be passed in order for the proposal to comply with the NPPF. Planning Practice Guidance sets out the process for applying the sequential and exception tests, in order to comply with the National Planning Policy Framework position. A guidance note has been published by Tendring District Council, advising on the application of the sequential and exception tests in the specific circumstances of Jaywick Sands<sup>1</sup>.

It is the preferred approach of Tendring Council and the Environment Agency for new properties not to flood internally in a design flood event, given that it may be many years before the defences are renewed and raised. However, it is recognised that, due to the unusual plot pattern and land ownership in Jaywick Sands, replacing a single dwelling on-plot is highly challenging to achieve, without detrimental impacts on future residents and neighbouring occupiers. In effect this means that replacing existing individual dwellings on the smallest plots, if required to have all habitable space above the design flood level, would not be possible without consolidating multiple plots into a single property holding. This could act as a barrier to improving housing quality and flood resilience in Jaywick Sands and would therefore work against the aims of Policy PP14 of the Tendring Local Plan, and NPPF paragraphs 152, 153 and 161c.

The Environment Agency has indicated that a holding objection will not be raised for proposals in the areas of Jaywick Sands which lie within Flood Zone 3, if the following criteria are met in full by proposals.

### 3A: Designing for flood safety

- A site-specific Flood Risk Assessment must be submitted with all planning applications for new development
- Floor levels for habitable space in replacement dwellings must be higher than the floor levels of the property being replaced;
- Floor levels for habitable space should be set, if possible, above the design flood level of 0.5% AEP flood level plus lifetime climate change allowance and appropriate freeboard. If this is not possible without contravening the other design guidance within this SPD regarding parking, internal and external space standards, amenity, daylight, sunlight and overlooking, **and only in circumstances where the proposal results in no net increase in bedspaces on the site**, floor levels can be set so that internal flooding in a 0.5% AEP present day event would be no greater than 0.3m (the FD2320 matrix threshold for 'danger to some').
- Flood resistant and/or flood resilient construction measures (as appropriate) are used to minimise damage to the property in a flood event, and to allow the re-occupancy of the building quickly;
- A secure and accessible area of refuge is provided above the flood level of a 0.1% AEP event, plus the appropriate climate change allowance and freeboard;
- Buildings and their foundations are designed to withstand the hydrostatic and hydrodynamic pressures of flood water so that they will remain standing during flood conditions when refuge is relied on.
- An escape window or hatch is provided from the refuge level to facilitate communication with neighbours and emergency response authorities and to provide options for rescue should this become necessary. An external escape stair is not required.

1 [https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning\\_Policy/TDC%20SequentialExceptionTest.pdf](https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC%20SequentialExceptionTest.pdf)

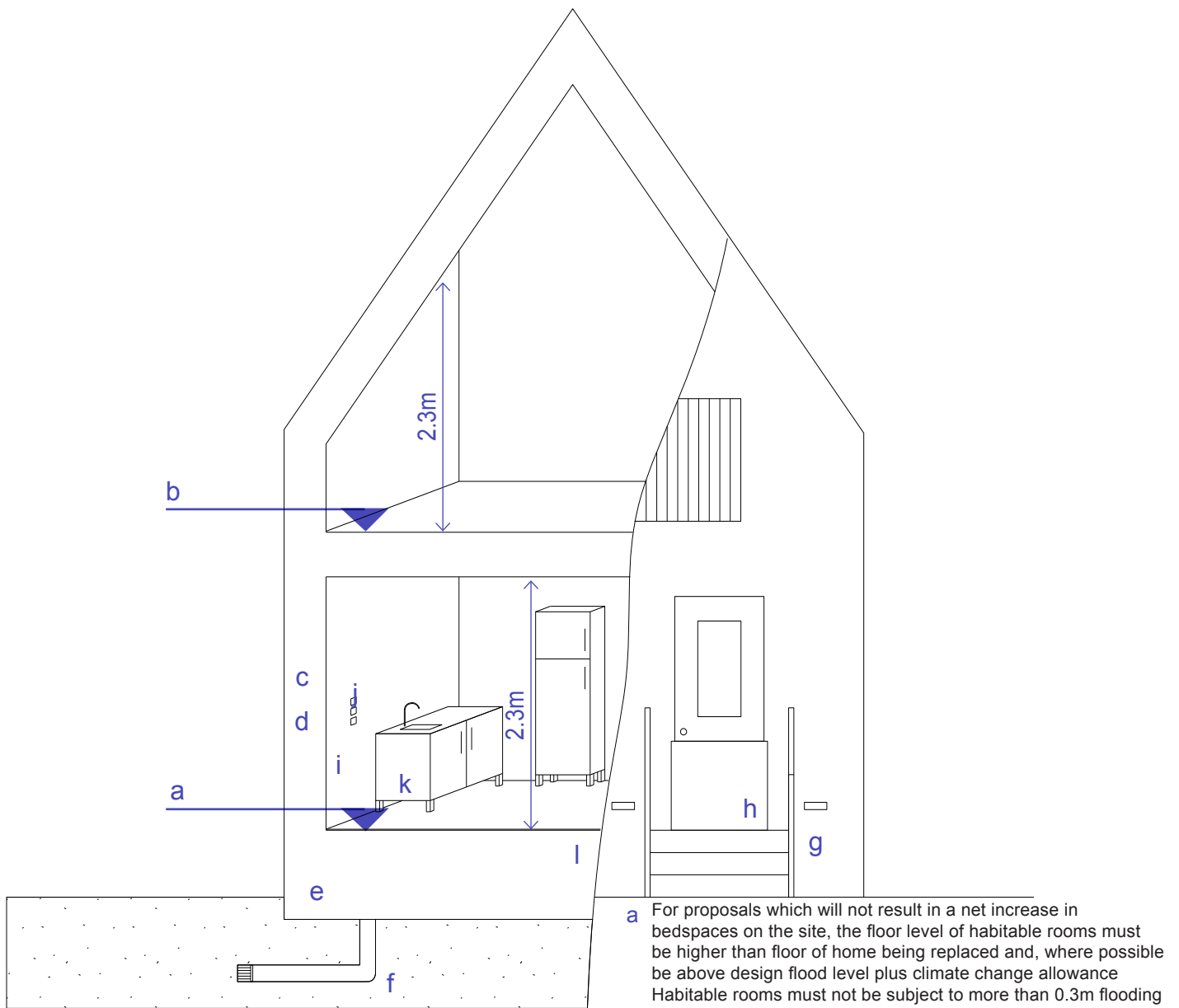


Fig. 67. Diagram of flood resilient design and construction

The diagram above shows the principles of flood resilient design and construction, and the requirements for floor and refuge levels as set out in this guidance.

More detailed guidance on flood resilient construction can be found at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7730/flood\\_performance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7730/flood_performance.pdf)

- a For proposals which will not result in a net increase in bedspaces on the site, the floor level of habitable rooms must be higher than floor of home being replaced and, where possible be above design flood level plus climate change allowance. Habitable rooms must not be subject to more than 0.3m flooding in a present day 0.5% AEP (design flood) event. Development which results in a net increase in bedspaces on the site must have all habitable space set above the lifetime design flood event - 0.5% AEP + 100 years climate change allowance + 300mm freeboard.
- b Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm freeboard
- c Masonry structure up to 0.5% AEP + 100 years climate change level (lifetime design flood event)
- d Closed cell insulation to masonry structure
- e Flood proof foundation design and structure able to withstand hydrostatic pressure from lifetime design flood event
- f One way valves in drains to stop sewage backflow into the home
- g Air brick covers
- h Door flood guards/flood barrier (only effective up to 600mm of floodwater above ground - for flooding above this level, water should be allowed to enter and flow through the home)
- i Water resistant internal lining materials up to 0.5% AEP + 100 years climate change level - e.g. magnesium oxide boards
- j Sockets and switches higher on the wall
- k Kitchen units made from water resilient materials and higher above floor
- l Hard floor finishes at ground floor level

## 4. Massing, scale and building form

Jaywick Sands has a distinctive scale and massing of predominantly 1 and 1.5 storey (room in the roof) buildings. Taller buildings are only found along Broadway and in a few locations along the seafront.

The small plot sizes and the requirement to create a safe refuge space above the flood datum, mean that all new dwellings will be at least 1.5 storeys high above street level. Scale, massing and building form must therefore be very carefully considered to ensure adequate amenity and privacy for existing and new residents.

Key considerations for the siting, massing and scale of new development include:

- Creating usable and private outdoor amenity areas (garden, terrace, and/or balcony space) which enjoy an adequate amount of sunlight. Rear gardens become unusable and dark if they become too shallow, and new dwellings therefore need to be set back adequately from rear boundaries.
- Safeguarding the privacy of existing and new residents. First floor living areas or balconies significantly overlook neighbouring rear gardens, and internal rooms in neighbouring properties, in the high density layout of Jaywick Sands.
- Maintaining sunlight to existing private gardens. While the generally north-south street pattern helps introduce sunlight to rear gardens, seafront buildings can significantly overshadow gardens to their north. Steps in the general building line can also compromise sunlight to private amenity space of neighbouring dwellings.
- Back-to-back distances, and overall scale and massing, must ensure that internal spaces of existing and new dwellings receive adequate daylight and sunlight.
- Spaces between the side (flank) walls of buildings, and the property boundary becomes overgrown and litter-filled if it is not wide enough to allow for easy access and maintenance.



Fig. 68. View of green space in the Village character area

## **4A: Building footprint**

### **Front setbacks**

- Dwelling frontages should maintain the general building line along frontages facing the street, or facing the landscape to the rear of tandem plots. Small steps in the frontage line, up to 1.5m forward or back from the line of frontages either side, will be permitted subject to other design considerations. Massing which steps out beyond the building line at the rear of plots must demonstrate that it does not compromise sunlight to adjacent private amenity spaces.
- Development on corner plots can extend beyond the general building line up to the pavement edge on the side frontage to avoid unmaintained open space within the building curtilage.

### **Side setbacks**

- Dwellings can be built hard up against the property boundary line (i.e. creating a party wall condition, where the side walls can have no windows and can only be maintained by access from the neighbouring property.)
- However, if dwellings are not to create a party wall condition, a minimum gap of 1m must be created between the inside face of the boundary wall or fence, and the side of the building, to allow for maintenance access to the side wall.

### **Rear setbacks**

- Setbacks from the rear boundary (and in the case of corner plots, both boundaries to adjacent plots) should be a minimum of 4m. Where new development creates living spaces or balconies on upper floors which will overlook the private gardens of neighbouring properties, the building line should be set back from the rear boundary by a minimum of 15m as recommended by the Essex Design Guide.

## **4B: Scale and massing**

- Building scale and massing must be designed to allow at least 50% of the private or communal garden space, for new and existing dwellings, to receive at least 2 hours of sunlight on 21 March. For existing dwellings this standard may already not be met. In this case new development should not worsen the existing level of sunlight received.
- New development across multiple plots creating apartments or maisonettes may be permitted up to 4 storeys, subject to other design considerations. Taller development must ensure that existing dwellings and private gardens receive adequate daylight and sunlight, and that their privacy is safeguarded. This should be evidenced by sunpath modelling based on measured topographic survey information. Alternatively the 25° rule of thumb can be utilised.
- For this reason, 4-storey development is unlikely to be acceptable except on the Village seafront or Broadway, unless comprehensive development of a full block is proposed.
- Balconies are not permitted to the rear of buildings, unless they are a minimum of 15m from facing properties, to safeguard the privacy of existing private gardens. Balconies are not permitted to extend more than 1.5m beyond the line of the building frontages to either side of the development plot, and may not overhang the pavement.

## 5. Streetscape and parking

Jaywick Sands has a distinctive pattern of gridded streets, many of which are narrow. Creating active and attractive street frontages is key to maintaining and enhancing the quality and character of the area, as well as creating natural surveillance and a sense of safety.

On-street parking on most streets narrows the carriageway and has a negative impact on pedestrian and cyclist safety, smooth flow of traffic including buses, safe access for emergency vehicles, and the visual appearance of the street. All parking should therefore be provided off-street and to the ratios stated in 5B.

Boundary treatments in Jaywick Sands are varied and are a significant factor for both safety and visual appearance. Typically plots in Jaywick Sands had visually permeable boundary treatments such as post and rail fencing, picket fencing, or railings. In many cases no boundary fence at all was created at the front of properties. New boundary treatments should create a safe and attractive frontage which maximises natural surveillance of the street from front windows while providing adequate screening and privacy, and which reinforces the character of the settlement. Boundary treatments along the pathways leading up to the seafront promenade in the Village are particularly important.

### 5A: Creating safe and attractive streets

- Detached and terraced houses can include ground floor garages or carports accessed from the street but must also have front doors facing the street.
- 'Half in half out' parking spaces are not acceptable. Garages or carports must be sited so that a vehicle can wait safely off the street while opening garages, except on Brooklands plots where the front door of the garage is less than 2m from the rear of the footway.
- Apartment buildings must have active ground floors and rows of garages facing the street are not acceptable. Parking should preferably be provided at the rear of the building and front doors and communal or private living areas should front the street to ensure active frontages and natural surveillance of the street.
- Waste storage within dedicated enclosures must be provided. It is acceptable for waste bins to be kept to the rear of dwellings and brought out for collection.
- Boundary treatments to streets and greens should comprise low fences, walls or hedges facing the street (not over 1.1m in height). Close boarded fences to boundaries to the public realm do not create an acceptable environment.

### 5B: Vehicle and cycle parking standards

- Car parking for proposals which will not result in a net increase in bedspaces on the site, can be provided at the following minimum ratios: 1 space for 1 or 2-bedroom unit; 2 spaces for 3/4 bedroom unit.
- Car parking for development which will result in a net increase in bedspaces on the site, to meet full Essex Parking Standards including unallocated/visitor parking.
- Secure dedicated cycle storage must be provided, which could be in the form of a cycle hangar or cycle garage, and should include electric bike charging facilities, in line with the Essex Design Guide and Essex Parking Standards.
- All new dwellings to be equipped with an electric car charging point.



Fig. 69.  
 Left: Boundary treatment which does not have a positive impact on the public realm.  
 Right. Appropriate and positive boundary treatment.



Fig. 70. Boundary treatments to the Greens comprise both 'front' and 'back' conditions. Ensuring all are high quality as well as secure, will enhance these public green spaces and their safety.



Fig. 71. Boundary treatments leading up to the seafront promenade should create a safe and welcoming gateway to the seafront.

## 6. Internal and external space standards

Existing homes in Jaywick Sands, particularly within Brooklands and Grasslands, are very small and overcrowded, with 94% of homes within the worst areas being officially overcrowded, defined as having insufficient space to meet the household's needs. Overcrowding impacts residents' physical and mental health; the ability of children to study, and family relationships.

The level of overcrowding in Jaywick Sands contributes to its poor ranking in the national Index of Deprivation and a key policy goal for Tendring District Council and stakeholder partners is to reduce the level of deprivation experienced by the community. Replacing substandard, cramped accommodation with better quality homes is an important part of achieving this aim.

The dimensions of the smallest plots require careful planning in order to accommodate replacement homes which provide good quality internal and external space as well as a flood safe design. However, even the smallest plots can accommodate a 1 bedroom home which meets the Nationally Described Space Standards, alongside a reasonable provision of external amenity space, and therefore there is no requirement to relax these standards in order to secure good quality dwellings to replace existing substandard homes.

### **6A: Internal space standards**

- No relaxation on Nationally Described Space Standards for minimum internal areas or floor-to-ceiling heights.

External private amenity space to existing dwellings is limited by the small plot sizes and ad hoc extension of dwellings which has encroached on rear gardens. There is also an underprovision of public open green space, particularly in Brooklands and Grasslands. A lack of adequate external space impacts residents' health and wellbeing and as there is little mitigating provision of communal or public open space, it is important that sufficient private amenity space is provided for all dwellings, proportionately to the occupancy of the dwelling.

The Tendring Local Plan states that private amenity space must be provided of a size and configuration that meets the needs and expectations of residents, and which is commensurate to the size of the dwelling and the character of the area. The Essex Design Guide suggests that 40-50m<sup>2</sup> may be appropriate for one or two-bedroom homes in medium density areas, and 25m<sup>2</sup> as a small walled yard for homes in high density areas.

In Jaywick Sands, due to the density, scale and layout of plots, it is reasonable that relatively low levels of private amenity space may be provided for smaller dwellings, but this should be safeguarded through withdrawing Permitted Development rights to extend the dwelling.

If dwellings are not designated as unextendable, amenity space should be provided in line with the Essex Design Guide standards for size, layout, sunlight and overlooking of amenity space. This may mean that the number of bedrooms per home is limited by the size of the overall development plot.



## 6B: External private amenity space

- The following minimum size of private external amenity space must be provided where homes are designated as unextendable through withdrawal of Permitted Development rights:
  - a. One bedroom homes - 25m<sup>2</sup> private amenity space
  - b. Two bedroom homes - 40m<sup>2</sup> private amenity space.
  - c. Three or more bedroom homes - 75m<sup>2</sup> private amenity space
  - d. For flats, a minimum of 5m<sup>2</sup> private balcony space must be provided, along with private shared amenity space to Essex Design Guide standards (a minimum of 25m<sup>2</sup> per dwelling)
- If new homes are not designated as unextendable, Essex Design Guide standards for the provision of private garden space apply.
- Private amenity space must be provided in a single area, not divided between front and back gardens, and must have adequate privacy, daylight and sunlight. Balconies from upper floor flats must not overlook private amenity space to maisonettes below.

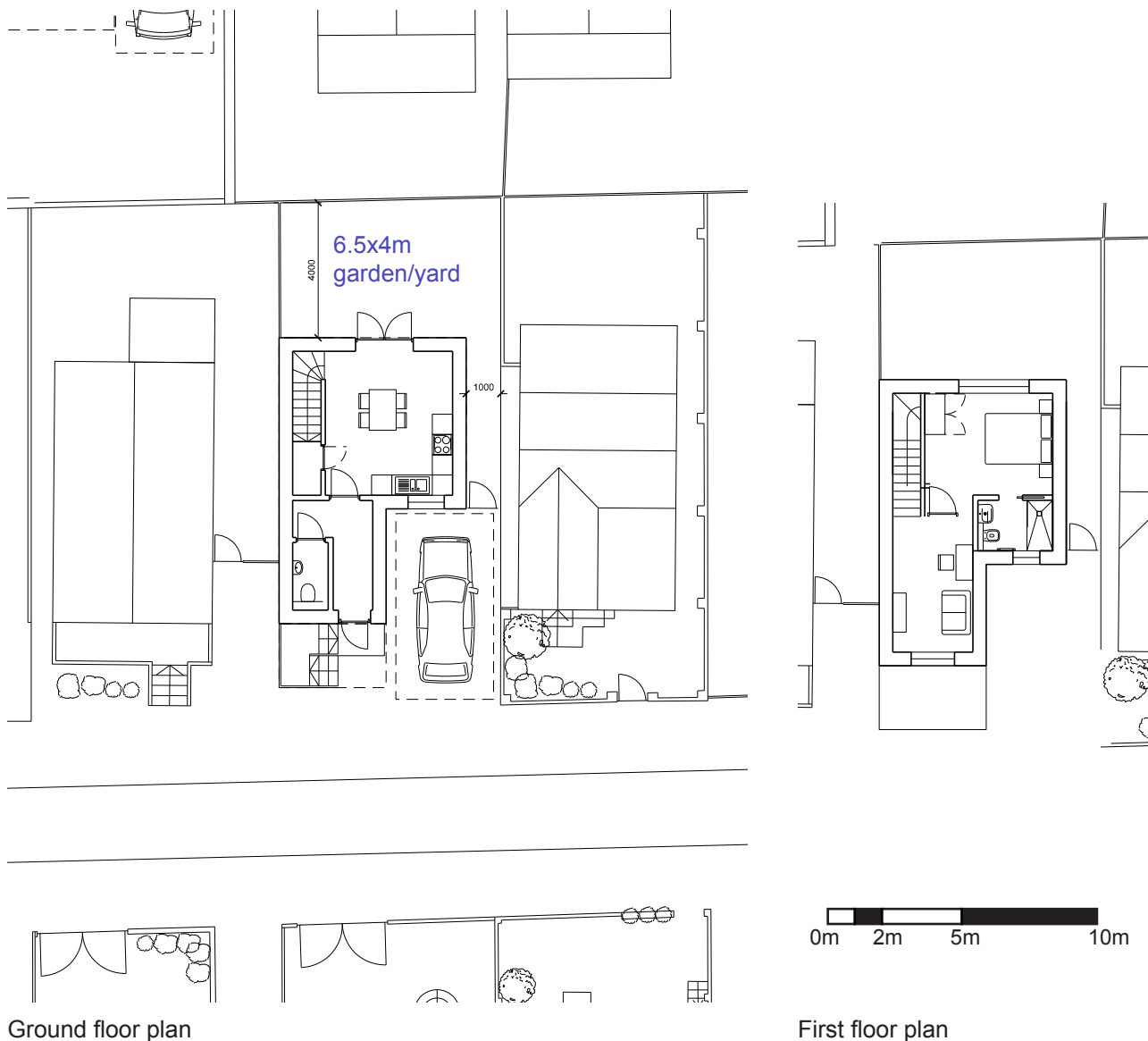


Fig. 72. Sample 1 bedroom house plan on small Brooklands plot, demonstrating compliance with internal and external space standards and other guidance within this SPD

# 7. Accessibility

Jaywick Sands has a high proportion of people in poor health, disabled people and families among its residents. Brooklands and Grasslands residents experience rates of poor health almost five times higher than the national average (2011 census data). Brooklands has the highest proportion of households with children out of all the Jaywick neighbourhoods, despite having the smallest homes and a high proportion of households with children are single-parent families (2011 census data). Ensuring homes are designed suitably for all users is important to meeting the needs of local residents and maintaining a balanced and stable community. Policy SPL3 in the Tendring Local Plan requires that “the design and layout of the development maintains and/or provides safe and convenient access for people with mobility impairments”

External access stairs, of more than a small number of risers, do not provide this in the exposed marine environment of Jaywick Sands. They are not suitable for people with limited mobility; for small children or for those carrying car seats or children in their arms. External access stairs also do not permit parents or carers to safely place children at the doorstep while unlocking doors. When used to access private garden space, external stairs do not encourage parents to allow children to access gardens independently and play outside unsupervised, with the consequent health and wellbeing benefits.

The design and construction of external access stairs is very important. External access stairs constructed with open risers present a risk to babies and young children who may trap limbs. Steps with metal treads and handrails can easily become slippery in rain and icy in cold weather. Metal handrails can become extremely hot or cold to the touch, causing discomfort and in some instances injury.

It is therefore important that new and replacement dwellings do not rely on long flights of external access stairs as the primary access to the front doors of dwellings, nor as the only access from habitable rooms to private gardens, and that external stairs are suitably designed.

Policy LP3 in the Tendring Local Plan states “On housing developments of 10 or more dwellings, 10% of market housing should be to Building Regulations Part M4(2) ‘adaptable and accessible’ standard. For affordable homes, 10% should be to Building Regulations Part M4(2) and 5% should be to Part M4(3) ‘wheelchair-user’ standards.” Where required to meet this standard, internal lift access must be provided to the entrance level of dwellings in order to satisfy the requirement for living space to be located on the entrance level.

## **7A: Access to front doors and habitable spaces from ground level**

- External access stairs should not be the means of access to the external entrance door to a dwelling or block of dwellings, unless they consist of 6 risers or fewer.
- External access stairs should be constructed from suitable, non-slip materials and avoid open risers, uncoated metal handrails and use of metal for treads.
- External access stairs should not be the only means of access from the primary living spaces of a dwelling, to its private garden or yard space, unless they consist of 6 risers or fewer.
- For developments where a proportion of M4(2) or M4(3) dwellings is required to meet policy LP3 of the Tendring Local Plan, internal lift access should be provided to the entrance level of dwellings where habitable space is required to be raised above ground level.

## 8. Climate change and biodiversity

Tendring District Council has declared a climate emergency and national government also requires all areas to achieve net zero carbon by 2050. Ensuring new development limits its climate impacts from construction and in-use is a key part of achieving the aim of mitigating climate change and transitioning to net zero carbon. Households in Jaywick Sands experience high levels of fuel poverty, with 29% of households in Brooklands and Grasslands fuel poor, so ensuring energy efficient homes is a key aim in reducing deprivation in the community.

National planning policy and the Tendring Local Plan require new development to minimise the production of greenhouse gases and all new residential development to be fitted with electric vehicle charging points and, where appropriate, roof solar panels. Applicants should consider climate change adaptation measures and technology from the outset including reduction of emissions, renewable and low carbon, passive design and green infrastructure techniques. Minimising overheating is a particular priority for small homes, and passive design techniques, including orientation and external shading of windows and cross-ventilation, must be used to avoid the need for artificial cooling.

Development in Jaywick Sands should also ensure that surface water drainage is adequately considered to avoid worsening existing issues with surface water drainage. The ground conditions in Jaywick Sands do not generally permit the use of soakaways, so on-plot attenuation must be used with permeable surfaces to avoid rainwater run-off onto streets and footways, or into mains drainage. Essex Country Council are the Lead Local Flood Authority responsible for surface water management and are advised by the Essex Climate Action Commission (ECAC). They should be consulted on all development proposals.

Jaywick Sands is adjacent to a designated Local Wildlife Site and exhibits good biodiversity, in particular with high levels of invertebrates, bats and an exceptional number of house sparrows as well as reptiles on undeveloped land. All bats and their roosts are legally protected, so appropriate levels of survey will be required to confirm if bats are present, prior to any demolition. Restrictions on the timing and methods of work, and requirements for mitigation and enhancement, will depend on the outcomes of survey work. House sparrow nests, as with all birds, are protected against damage or destruction while in use, so appropriate mitigation must be provided. On larger developments, the requirement for biodiversity net gain will apply.



Fig. 73. View of the Village seafront

### **8A: Design for climate change adaptation and mitigation**

- New development should demonstrate that it has been designed to limit overheating through use of passive environmental design.
- Roof mounted photovoltaic and solar thermal panels are encouraged. New development must avoid overshadowing onto existing solar panels.

### **8B: Design for water management**

- All surface water drainage must be retained and drained away on-site. Surface water entering mains drainage must be limited to 1-year greenfield rates, or 1 litre/second, whichever is greater. Development must have regard to the Essex SuDS Design Guide when designing sustainable drainage systems.
- Development should incorporate rainwater harvesting and grey-water recycling where possible

### **8C: Design for biodiversity**

- All proposals involving the demolition of existing structures must be accompanied by bat survey reports and, if required, proposals to mitigate loss of roosting sites.
- All proposals involving the demolition of existing structures must either demonstrate through surveys that no bird nesting sites will be disturbed, or if a survey is not provided, must provide a minimum of one house sparrow terrace as mitigation for likely nesting sites, and will be subject to a general condition that no demolition works can take place within house sparrow nesting season.
- All proposals must enhance biodiversity within the site, and this can be achieved through providing two of the following: bat box; house sparrow terrace; bee brick.
- Developers must demonstrate that plant species are appropriate for the coastal climate, support invertebrates, and are climate change resilient.



Fig. 74. View of Jaywick Sands in its landscape setting

## Notes on copyright and licensing.

This SPD has been produced by HAT Projects Ltd on behalf of Tendring District Council. Unless otherwise stated all images and graphics are © HAT Projects and must not be reproduced without permission.

License information for graphics and maps based on OS data:

© Crown copyright and database right 2022 Ordnance Survey License number 100018684.

Flood zones and other Environment Agency information © Environment Agency and may contain Ordnance Survey data © Crown copyright 2017 Ordnance Survey 100024198. All maps and graphics on flooding are developed using data from EA/JBA 2018 coastal modelling data including allowances for climate change. Flood maps are regularly updated. For further information and maps showing the latest flood zones, please visit <https://flood-map-for-planning.service.gov.uk/>

2011 Census. Office for National Statistics (2012): 2011 Census data. All of the data files and supporting documents for the English Indices of Deprivation 2019 are available from <https://www.ons.gov.uk/census>

2019 IODM. Office for National Statistics (2021): 2019 IODM data. All of the data files and supporting documents for the English Indices of Deprivation 2019 are available from: [www.gov.uk/government/statistics/english-indices-of-deprivation-2019](http://www.gov.uk/government/statistics/english-indices-of-deprivation-2019).

Credits not covered by the above as follows:

Fig. 11 © Unknown  
Fig. 12 © Clacton and District Local History Society  
Fig. 20 © Unknown  
Fig. 28 © Unknown  
Fig. 39 © Clacton and District Local History Society  
Fig. 40 © Lyons M. (2015) p.136  
Fig. 41 © Unkown  
Fig. 46 © Lyons M. (2015) p.14  
Fig. 47 © Lyons M. (2015) p.11  
Fig. 57 © Mole Architects  
Fig. 58 © Cathy Hawley  
Fig. 59 © Sarah Wigglesworth Architects  
Fig. 60 © Klaus-Dieter Weiss  
Fig. 61 © Mole Architects/ Matt Smith Photography  
Fig. 62 © LocalSelfBuildRegister  
Fig 64. © Unknown  
Fig. 66 © Unknown c/o Environment Agency

Other References:

Lyons, M. (2005) *The Story of Jaywick Sands*. Publisher Chichester: Phillimore & Co Ltd.

# Jaywick Sands Design Guide Supplementary Planning Document

## Appendix: Worked examples of application of design guidance

January 2023

## About this appendix

This appendix demonstrates how the Jaywick Sands Design Guide would be applied in practice, by showing worked examples of house designs for replacement dwellings in a range of configuration and plot types.

Worked examples A-J are designed to the standards for betterment in cases where no net increase in bedspaces is proposed. Habitable space is therefore accepted below the 0.5% AEP + climate change + freeboard level, but must not be at risk of internal flooding of more than 0.3m in a present day 0.5% AEP scenario. In all cases habitable floor levels must be set higher than the floor levels of the home being replaced, and refuge space must be created above the 0.1% AEP plus climate change plus freeboard level.

The final worked examples show notional potential approaches for more comprehensive development of a group of plots, with a potential increase in bedspaces. In these scenarios, all habitable floorspace must be above the design flood event level of 0.5% AEP plus an allowance for lifetime climate change (100 years) and the appropriate freeboard (typically 300mm). More onerous requirements are also placed on this form of comprehensive redevelopment with regard to parking and amenity space standards.

Flood resilient construction measures are required for developments in areas of flood risk. The principles of flood resilient design appropriate to a typical dwelling are shown on Fig. 67 of the main SPD document. Flood resilient construction measures must be integrated with the spatial and other requirements listed in the worked examples.

# 1. Brooklands/Grassland plots

Typical Brooklands and Grasslands plots are very small and therefore pose the greatest challenges in designing compliant replacement dwellings. The small plot size makes privacy, daylight and sunlight, and parking challenging, and Brooklands also has the highest predicted present day flood risk for a 0.5% AEP event. This means that habitable floor levels need to be raised up as much as 0.5m in some places in order to avoid more than 300mm of internal flooding.

Achieving large gardens is restricted by plot sizes so where a one-bedroom home is replaced with another one-bedroom home, a minimum of 25m<sup>2</sup> private rear amenity space will be accepted.

## Typical plots on north-south streets - primary design constraints

- Car parking must be accommodated on-plot in either a garage, carport or an uncovered parking space. Due to the small size of plots it will be acceptable for garages and carports not to have a full waiting area in front so long as the front of the garage or carport is less than 2.5m from the back of pavement as this will dissuade inappropriate parking that blocks the footway.
- To ensure daylight and sunlight to existing homes and gardens, unless multiple plots are consolidated for comprehensive redevelopment, new homes must be a maximum of 1.5 storeys.
- Eaves levels must be kept as low as possible to ensure new dwellings relate successfully in scale to existing homes.

## Seafront plots - primary design considerations

- Scale of existing homes along seafront, and plot depths, are small. To avoid visual discontinuity and to ensure adequate daylight to existing gardens north of the seafront plots, new dwellings will be limited to 1.5 storeys.
- Taller development could be acceptable if a larger parcel of plots is acquired and developed, allowing more space to the rear of seafront homes and adequate distance from the nearest adjacent garden.
- Parking must be accommodated on-plot and where possible, should be accessed from the side street, not Brooklands.



Fig. 1. Plan showing indicative locations for worked example layouts  
Scale 1:500

## A: One-bedroom replacement dwelling on a single plot

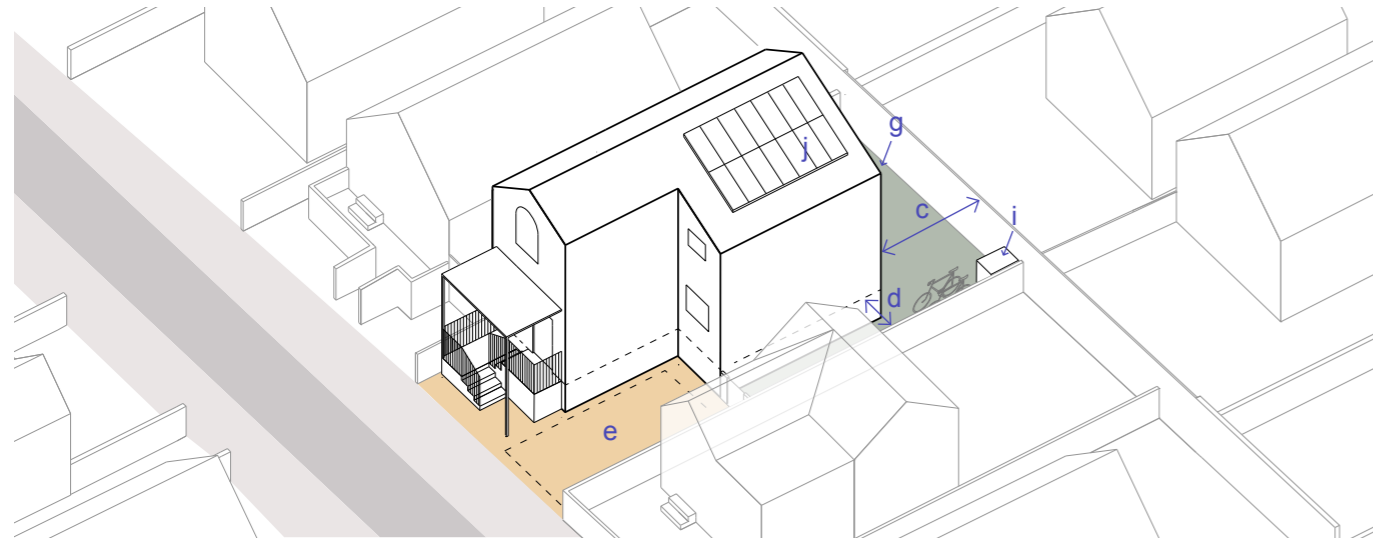


Fig. 2. Isometric view

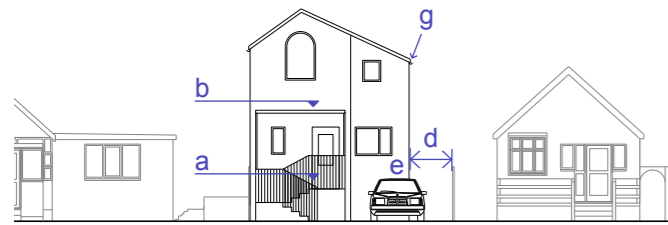


Fig. 3. Front elevation

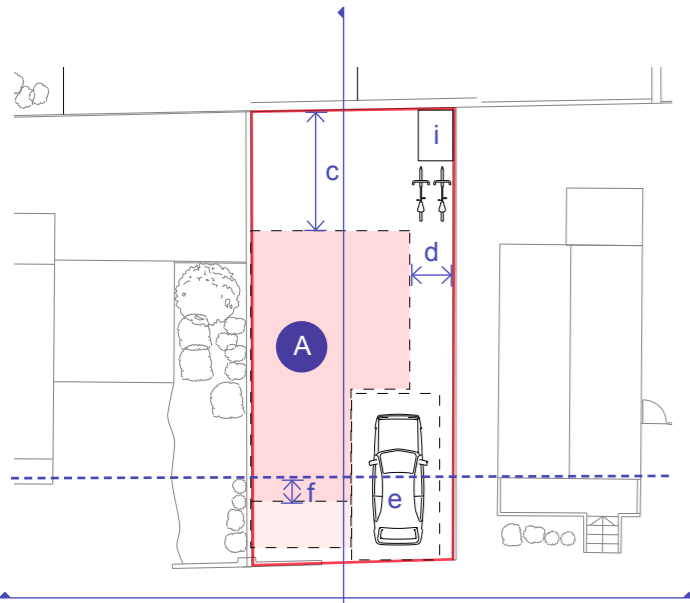


Fig. 4. Plan

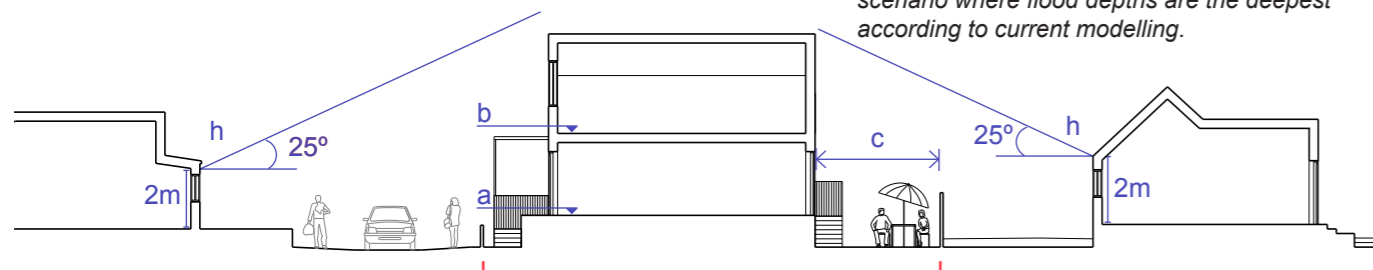


Fig. 5. Cross-section

- Plot boundary
- Parking/external circulation
- Notional building footprint
- Private amenity space

- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
- b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 25m<sup>2</sup> of private yard/garden to be provided.
- d** 1m setback from side boundary unless party wall is created.
- e** Parking on-plot - 2.9x5.5 minimum parking bay size.
- f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
- g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
- h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
- i** Refuse and cycle storage.
- j** Use roof for photovoltaic or solar thermal panels.

*This example shows a notional worst case scenario where flood depths are the deepest according to current modelling.*

## B: One-bedroom replacement dwellings on seafront corner plot

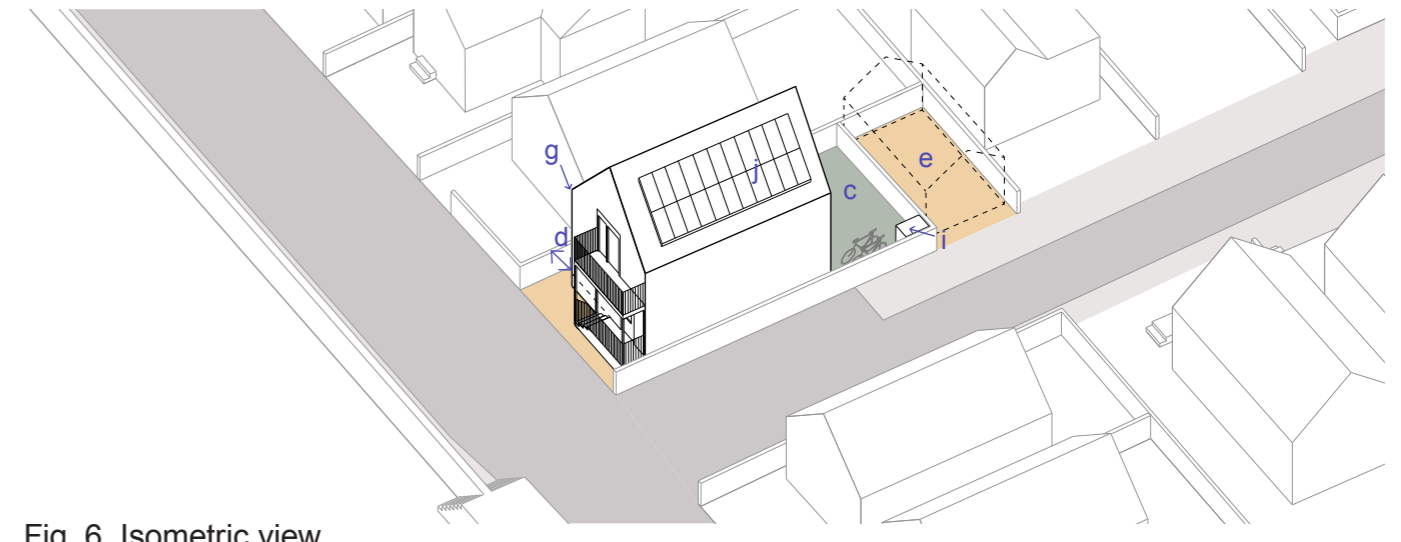


Fig. 6. Isometric view

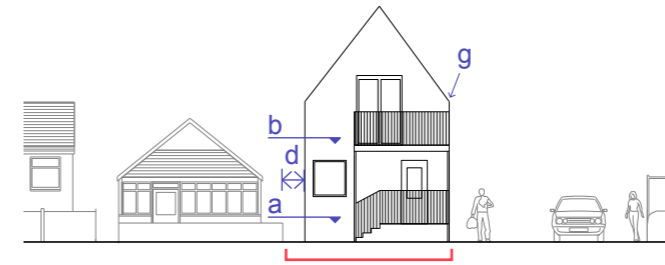


Fig. 7. Front elevation

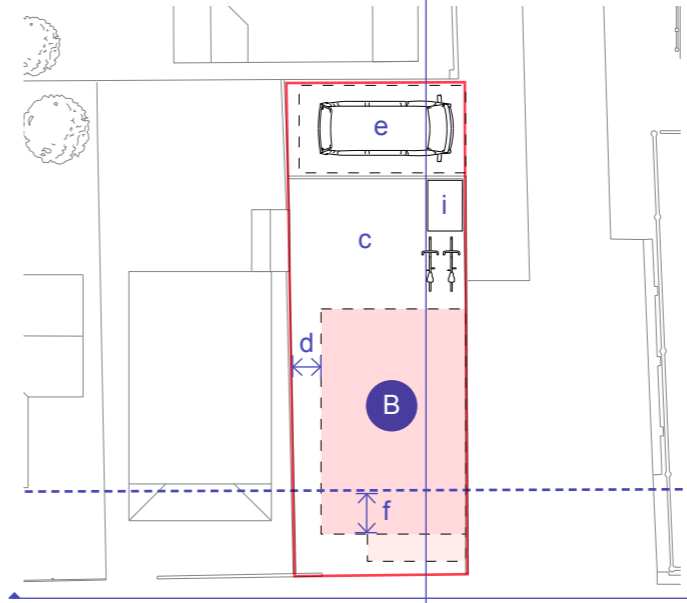


Fig. 8. Plan

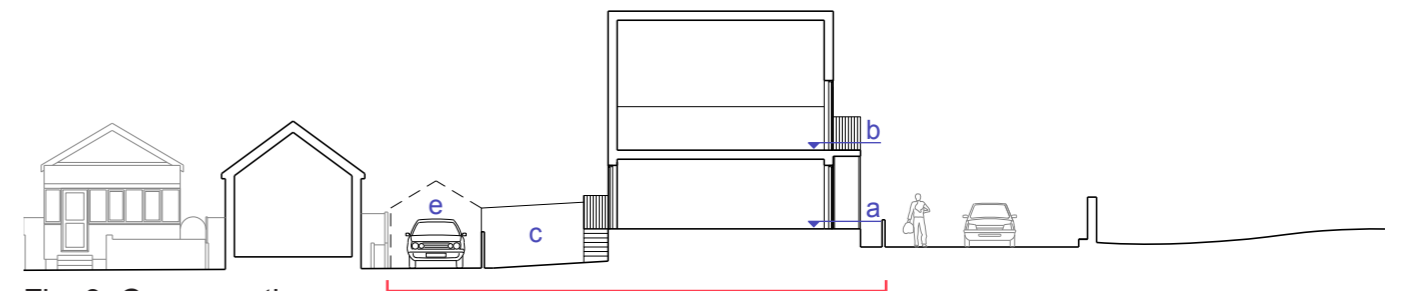


Fig. 9. Cross-section

- Plot boundary
- Parking/external circulation
- Notional building footprint
- Private amenity space

- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
- b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 25m<sup>2</sup> of private yard/garden to be provided.
- d** 1m setback from side boundary unless party wall is created.
- e** Parking on-plot and accessed from side street - 2.9x5.5 minimum parking bay size.
- f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
- g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
- h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
- i** Refuse and cycle storage.
- j** Use roof for photovoltaic or solar thermal panels.

0m 2m 5m 10m



C: 2 plots combined, 2 one-bedroom homes replaced with 1 two-bedroom (four bedspace) home.

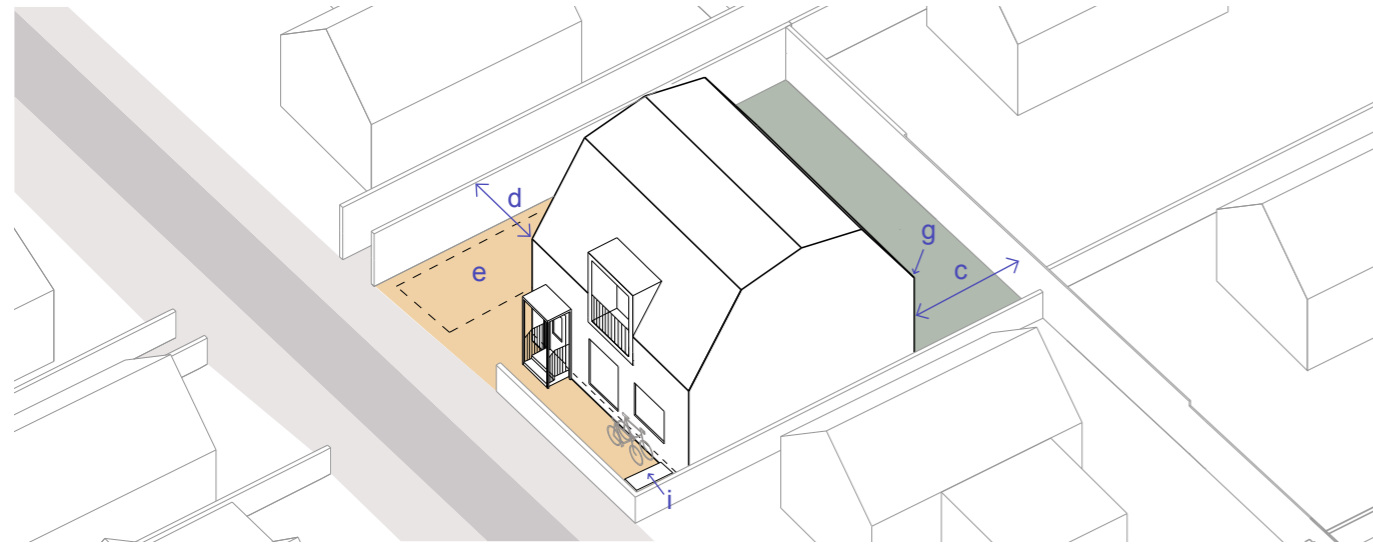


Fig. 10. Isometric view

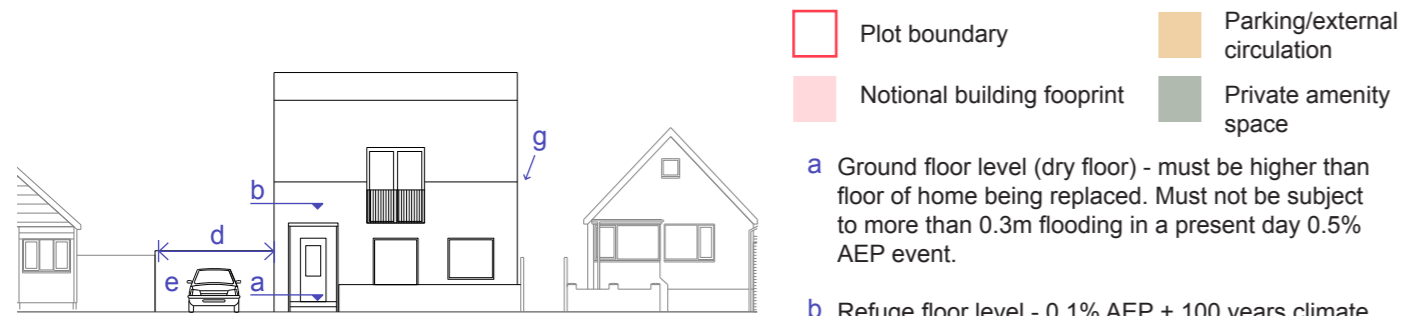


Fig. 11. Front elevation

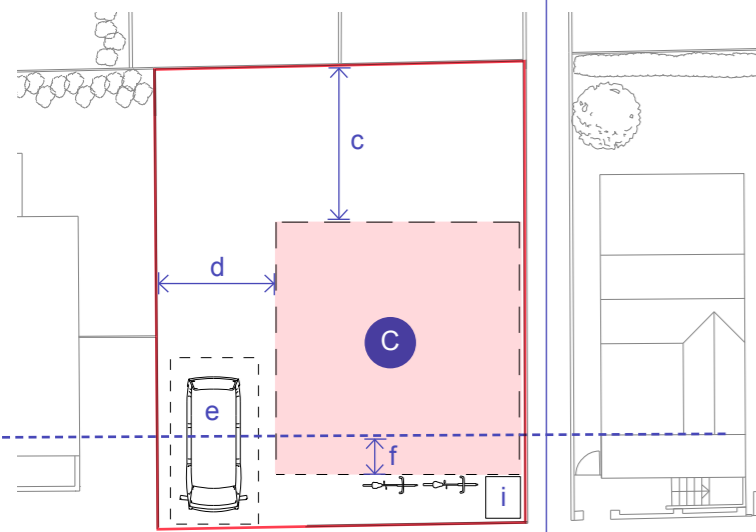


Fig. 12. Plan

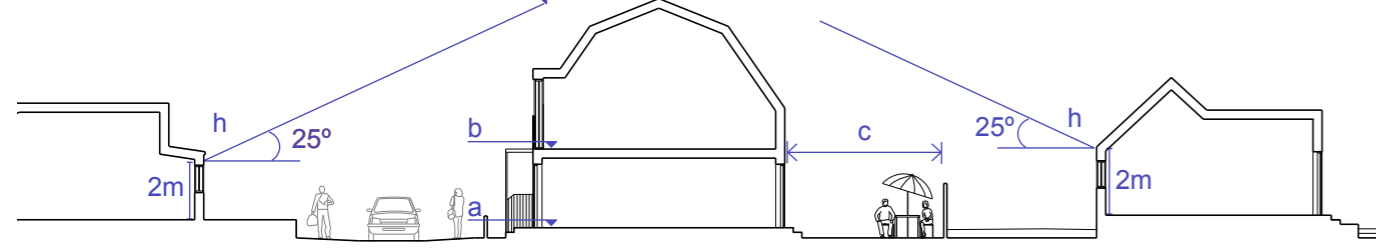


Fig. 13. Cross-section

- Plot boundary
- Parking/external circulation
- Notional building footprint
- Private amenity space

- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
- b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
- d** 1m setback from side boundary unless party wall is created.
- e** Parking on-plot - 2.9x5.5 minimum parking bay size.
- f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
- g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
- h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
- i** Refuse and cycle storage.

D: 3 plots combined, 3 one-bedroom homes replaced with 2 two-bedroom (three bedspace) homes

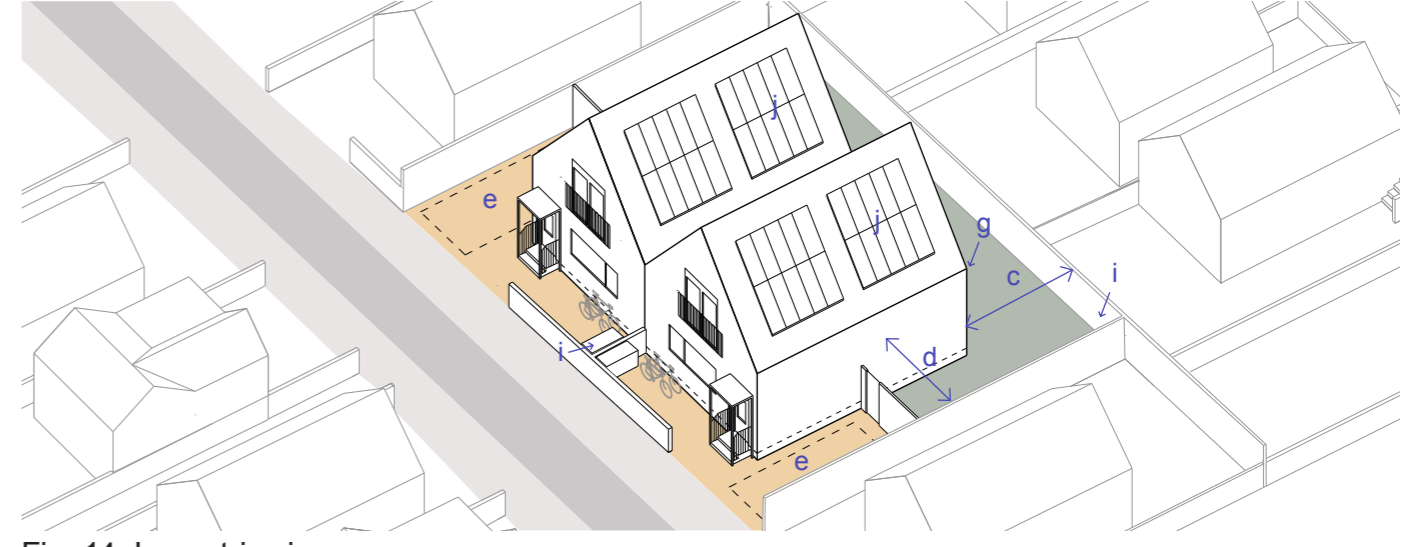


Fig. 14. Isometric view

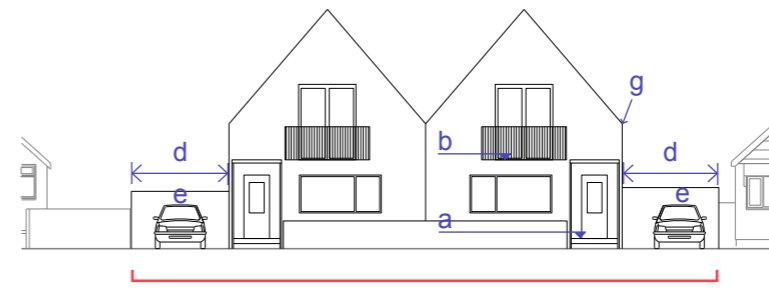


Fig. 15. Front elevation

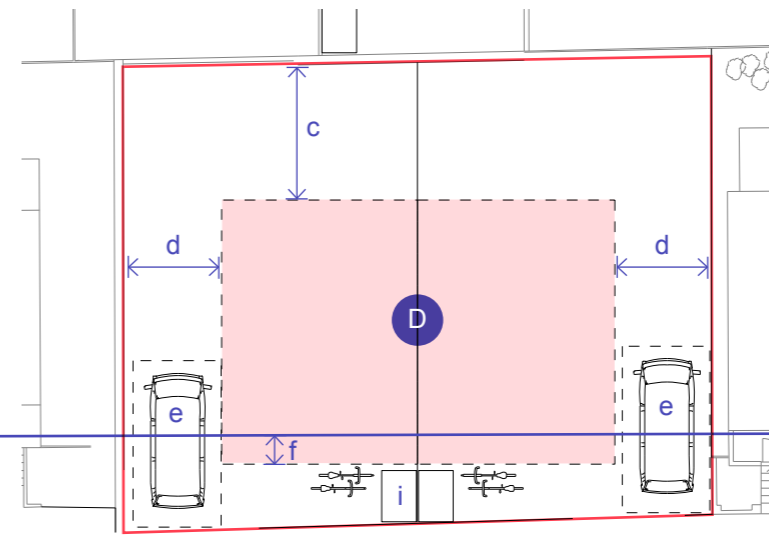


Fig. 16. Plan

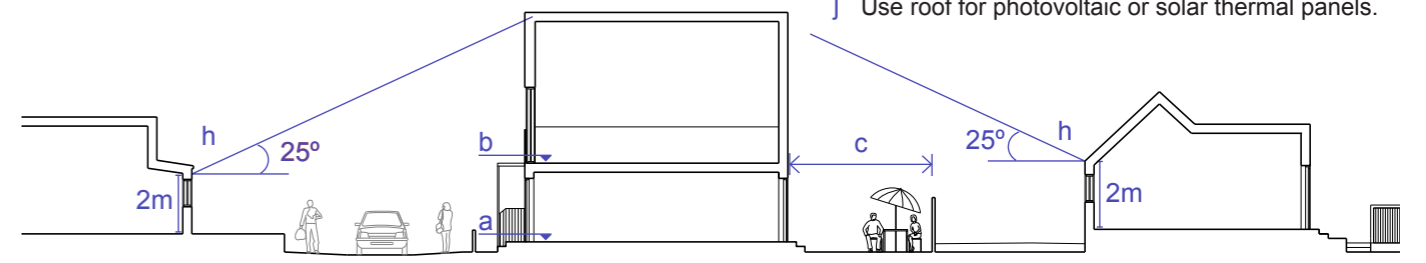


Fig. 17. Cross-section

- Plot boundary
- Parking/external circulation
- Notional building footprint
- Private amenity space

- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
- b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
- d** 1m setback from side boundary unless party wall is created.
- e** Parking on-plot - 2.9x5.5 minimum parking bay size.
- f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
- g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
- h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
- i** Refuse and cycle storage.
- j** Use roof for photovoltaic or solar thermal panels.



## 2. Village seafront/Broadway plots

For typical Village plots on north-south streets, the design principles demonstrated in the worked examples for Brooklands plots apply. The larger plot size allows more flexibility in terms of dwelling size and layout.

The blocks between the seafront and Broadway exhibit varied constraints and new development must be carefully designed to ensure a high quality streetscene as well as adequate privacy, daylight and sunlight to existing properties. Worked examples are shown to demonstrate the following parts of the design guidance:

- At corner plots, the building line can be brought out to the back of pavement to avoid unsightly side garden spaces and create a secure edge to the street.
- A high quality frontage to the seafront must be maintained - dwellings should have direct access to the promenade and parking should not be located on the seafront side of dwellings. All seafront plots have vehicle access to the rear from the side street.
- Taller buildings may be achieved on the seafront plots so long as daylight and sunlight to existing properties behind is not compromised.

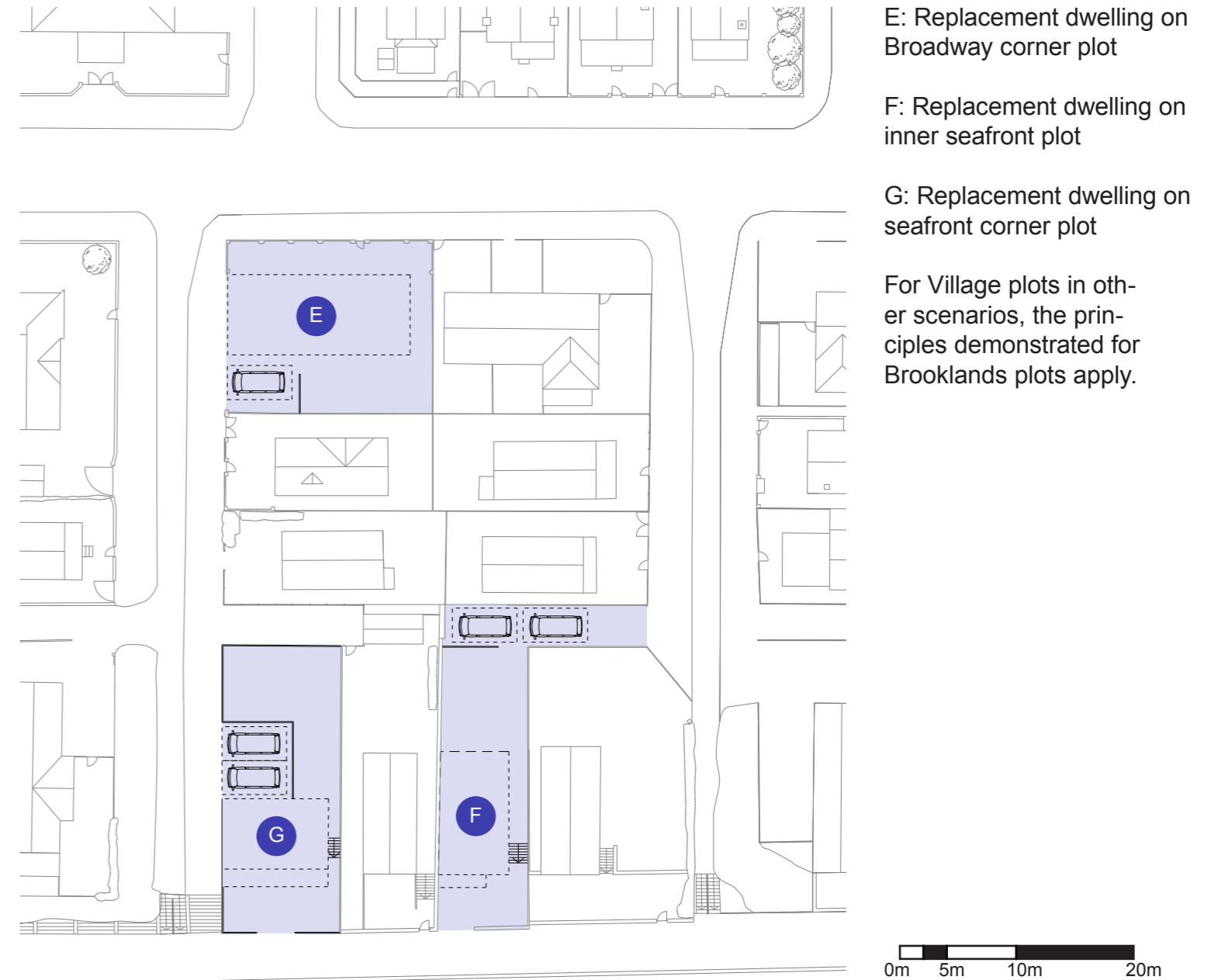


Fig. 18. Plan showing notional locations of worked examples.  
Scale 1:500

## E: Replacement dwelling on Broadway corner plot

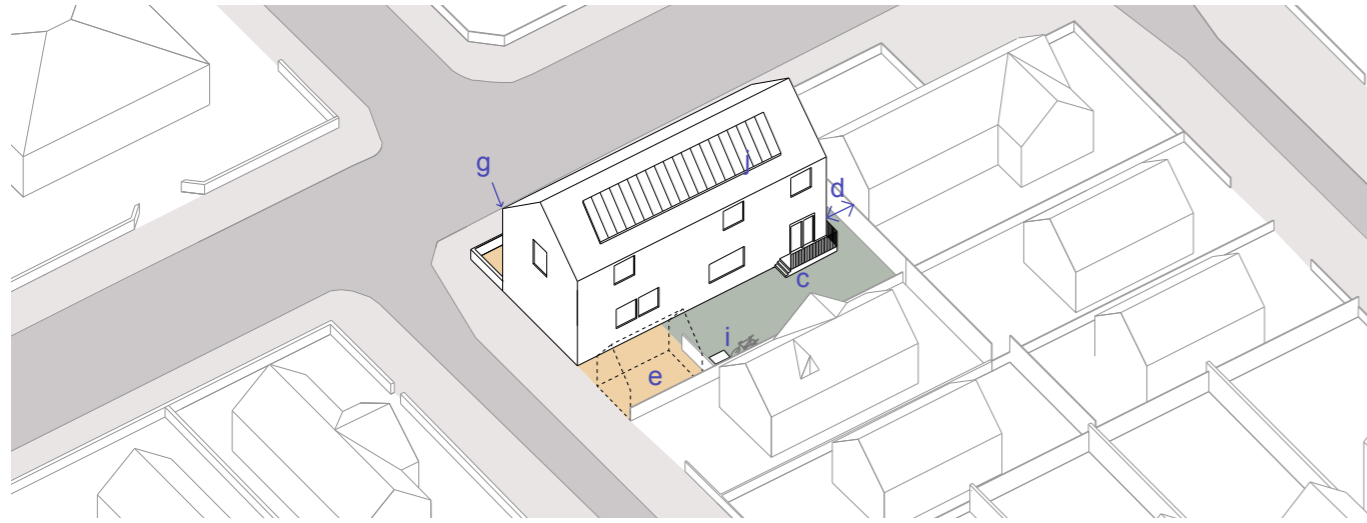


Fig. 19. Isometric view

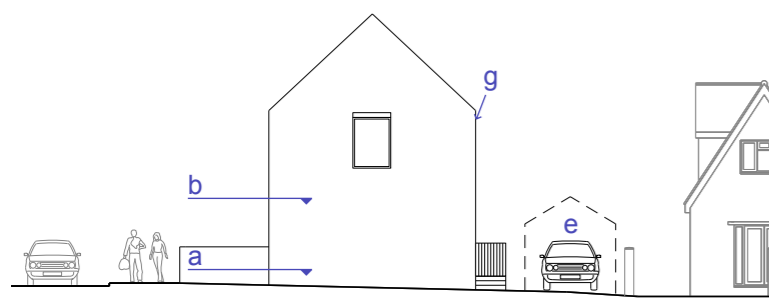


Fig. 20. Elevation to side street

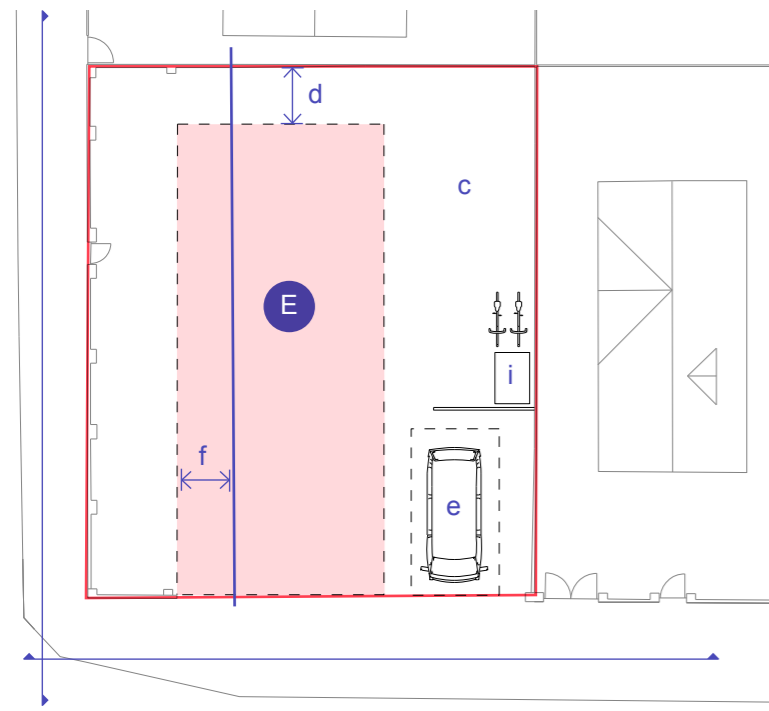


Fig. 21. Plan

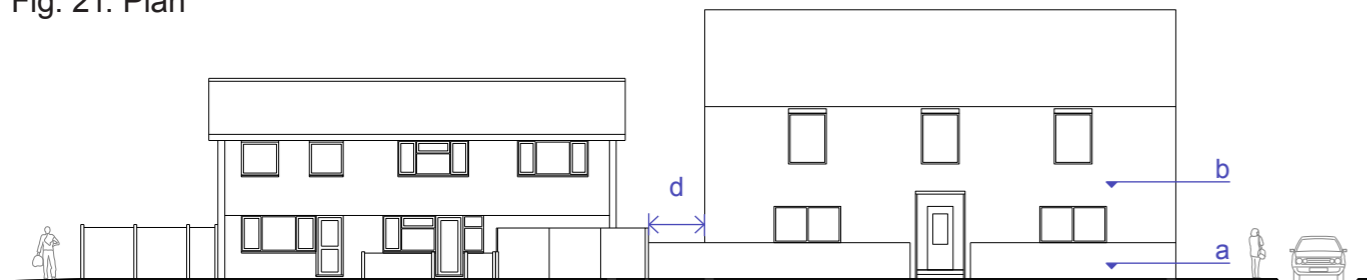


Fig. 22. Elevation to Broadway

- Plot boundary
  - Notional building footprint
  - Parking/external circulation
  - Private amenity space
- a Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
  - b Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
  - c 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
  - d 1m setback from side boundary unless party wall is created.
  - e Parking on-plot - 2.9x5.5 minimum parking bay size.
  - f Maintain building line to within 1.5m forward or back from the line of frontages either side.
  - g Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
  - h 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
  - i Refuse and cycle storage.
  - j Use roof for photovoltaic or solar thermal panels.

## F: Single plot replacement dwellings for typical Village seafront

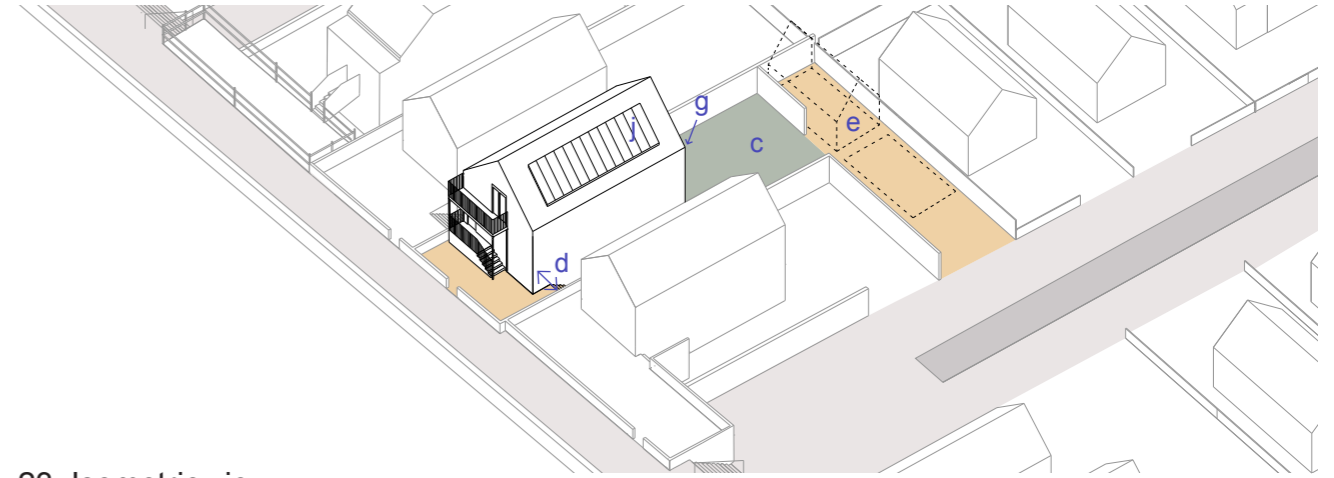


Fig. 23. Isometric view

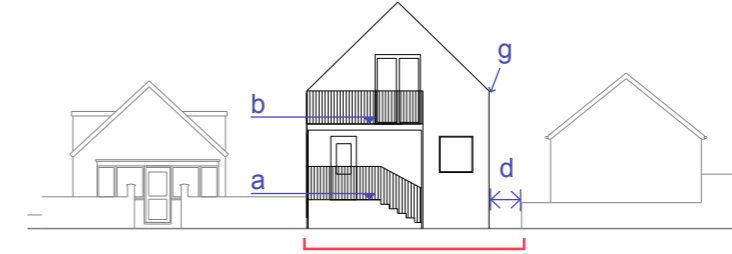


Fig. 24. Seafront elevation

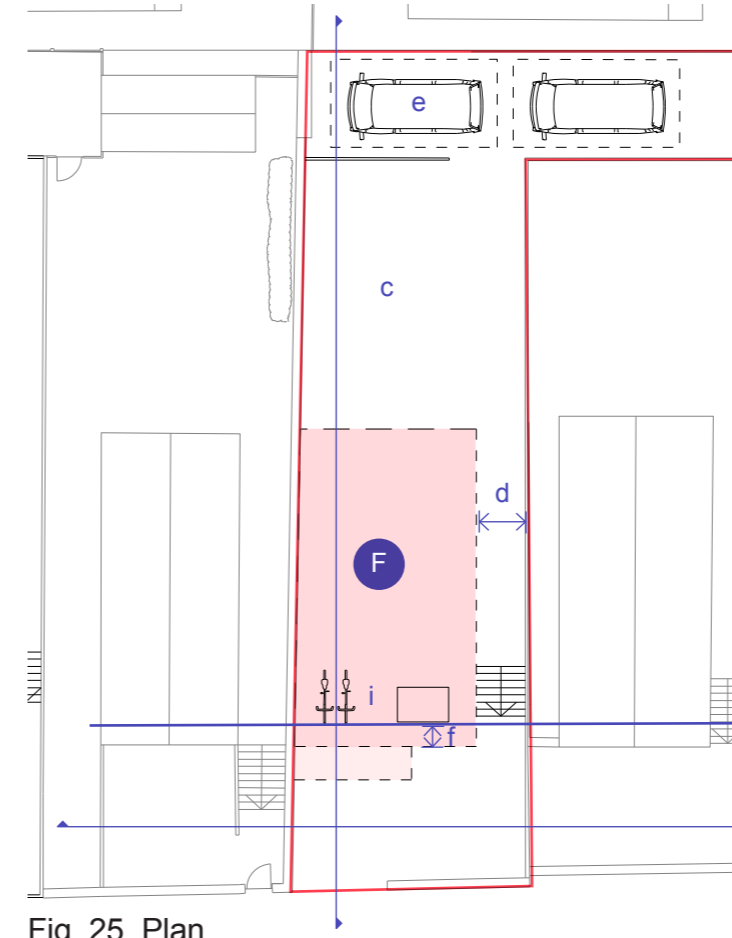


Fig. 25. Plan

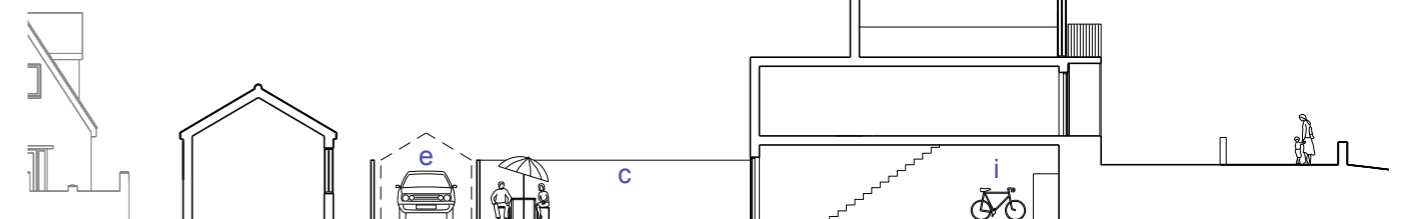


Fig. 26. Cross-section

- Plot boundary
  - Notional building footprint
  - Parking/external circulation
  - Private amenity space
- a Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
  - b Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
  - c 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
  - d 1m setback from side boundary unless party wall is created.
  - e Parking on-plot - 2.9x5.5 minimum parking bay size.
  - f Maintain building line to within 1.5m forward or back from the line of frontages either side.
  - g Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
  - h 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
  - i Refuse and cycle storage.
  - j Use roof for photovoltaic or solar thermal panels.

## G: Single plot replacement dwellings for typical Village seafront

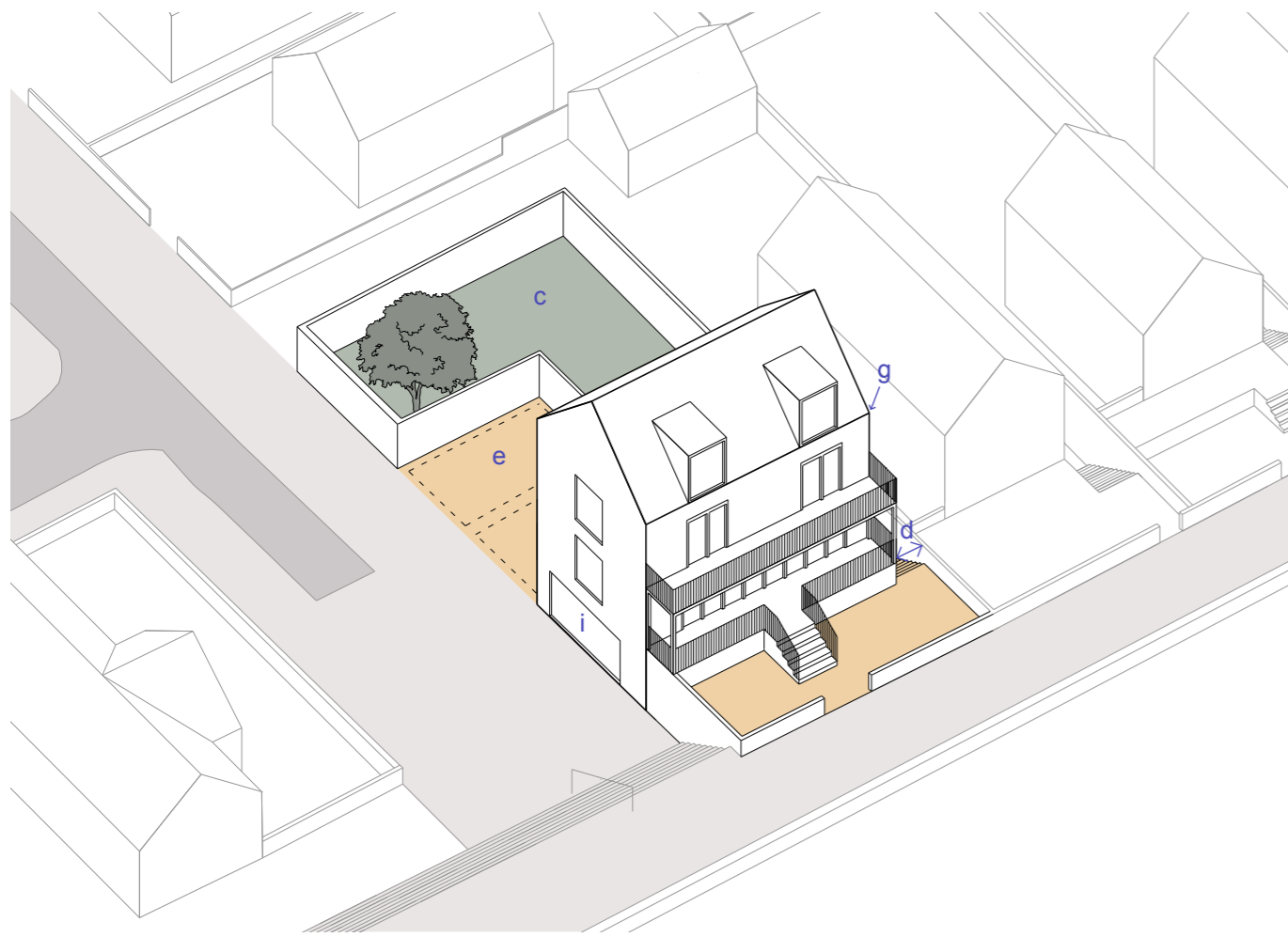


Fig. 27. Isometric view





- |   |   |
|---|---|
|  Plot footprint              |  Front garden/parking area |
|  Notional building footprint |  Private amenity space     |
- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
  - b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
  - c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
  - d** 1m setback from side boundary unless party wall is created.
  - e** Parking on-plot - 2.9x5.5 minimum parking bay size.
  - f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
  - g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
  - h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
  - i** Refuse and cycle storage.
  - j** Use roof for photovoltaic or solar thermal panels.



Fig. 28. Seafront elevation

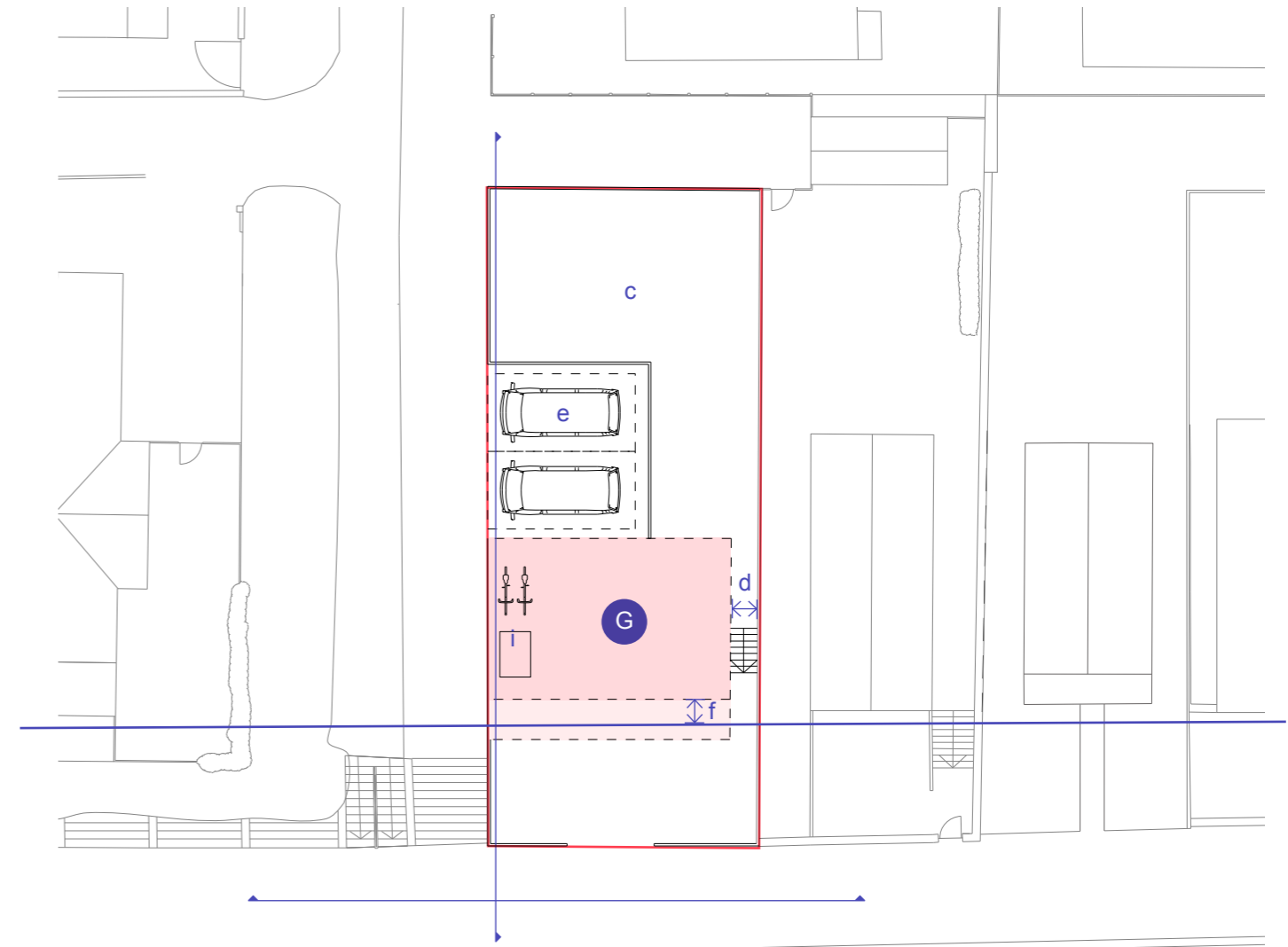


Fig. 29. Plan

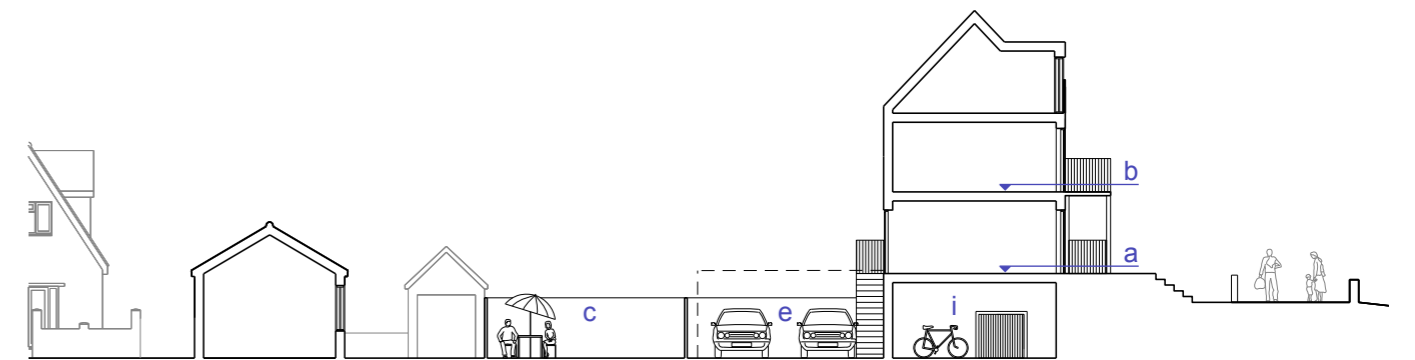


Fig. 30. Cross-section

0m 2m 5m 10m

### 3. Tandem plot replacement dwellings

- Tandem plots require careful design due to the close-knit layout, which creates privacy challenges, and, along Meadow Way, the height of the flood datum relative to the ground level.
- Rear tandem plots are highly visible from the surrounding landscape and must present a positive, high quality aspect. Rear boundary treatments must be of an appropriate design and materiality, close boarded fencing is not appropriate.
- Due to the height of the flood datum, along Meadow Way a 1.5 storey dwelling which creates the required refuge space, will be much taller than elsewhere in Jaywick Sands. For this reason, to reduce the visual dominance of buildings along the settlement's edge, three-storey dwellings are not appropriate.
- Parking must be dealt with on-plot and adequate private garden/amenity space must be created.

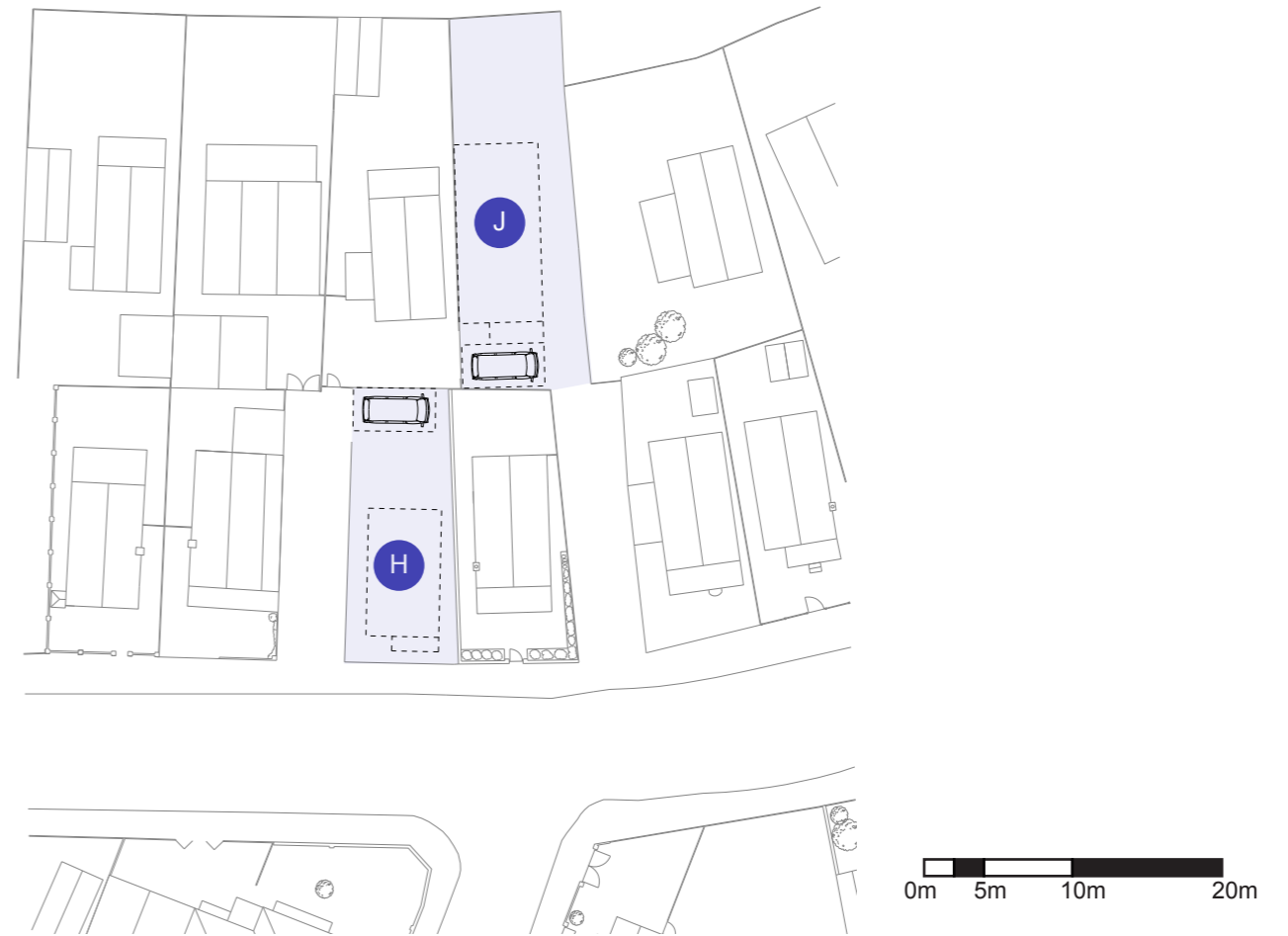


Fig. 31. Plan showing application of guidance to typical tandem plots. Scale 1:500

## H: Replacement dwelling on front tandem plot

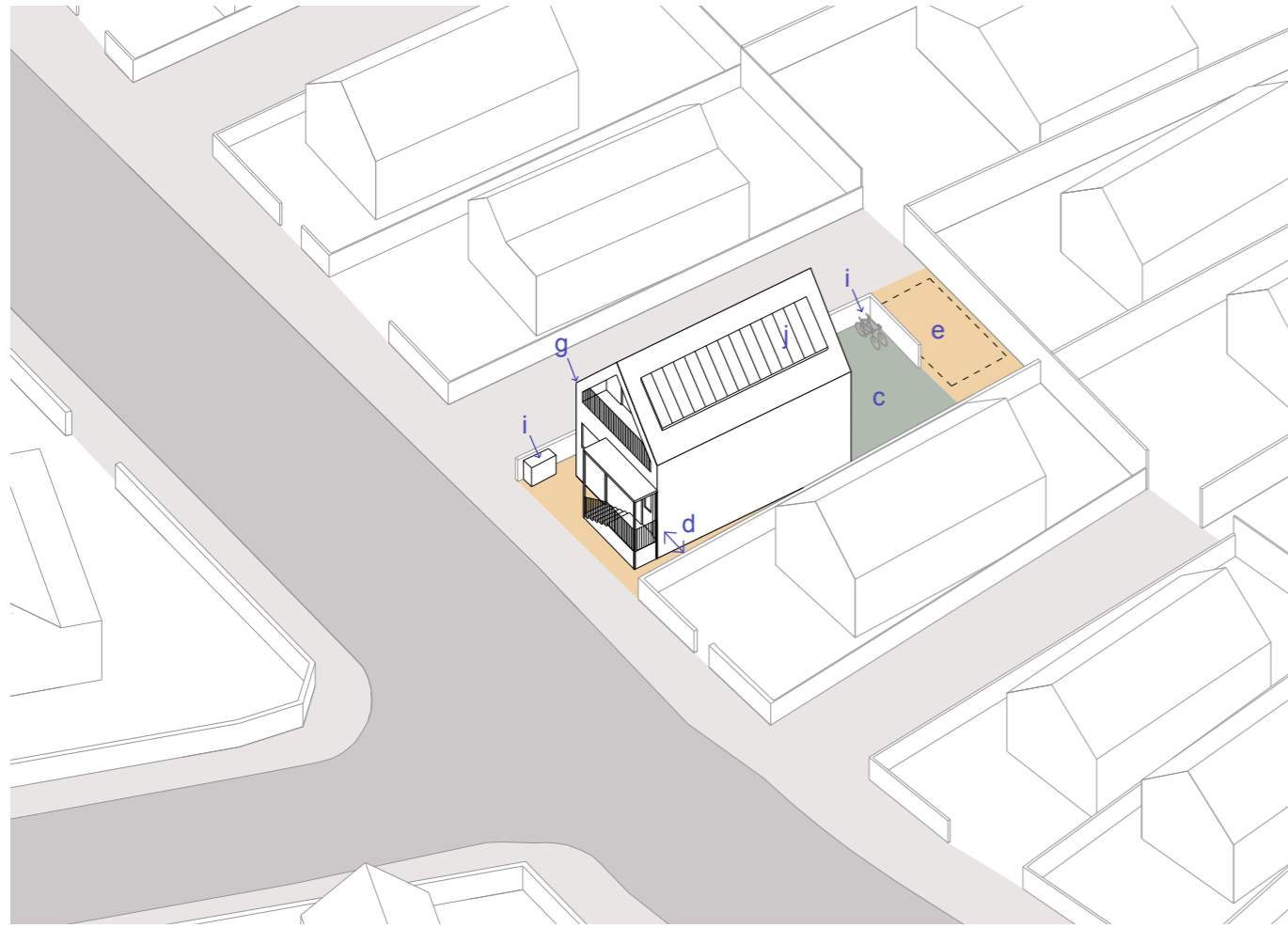


Fig. 32. Isometric view

Plot footprint

Notional building footprint

Parking/external circulation

Private amenity space

**a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.

**b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.

**c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.

**d** 1m setback from side boundary unless party wall is created.

**e** Parking on-plot - 2.9x5.5 minimum parking bay size.

**f** Maintain building line to within 1.5m forward or back from the line of frontages either side.

**g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.

**h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.

**i** Refuse and cycle storage.

**j** Use roof for photovoltaic or solar thermal panels.

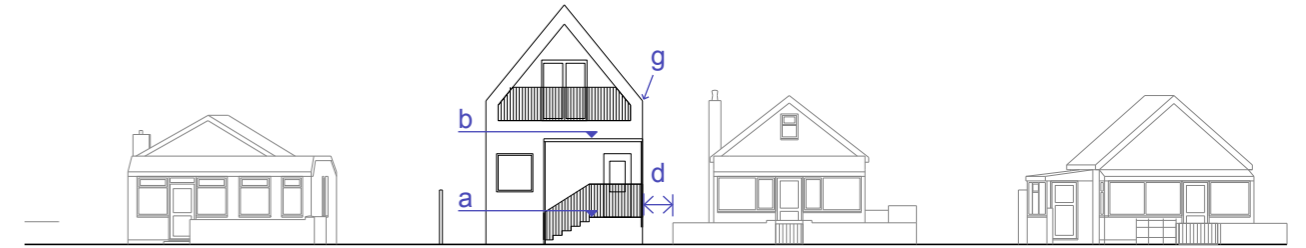


Fig. 33. Front elevation

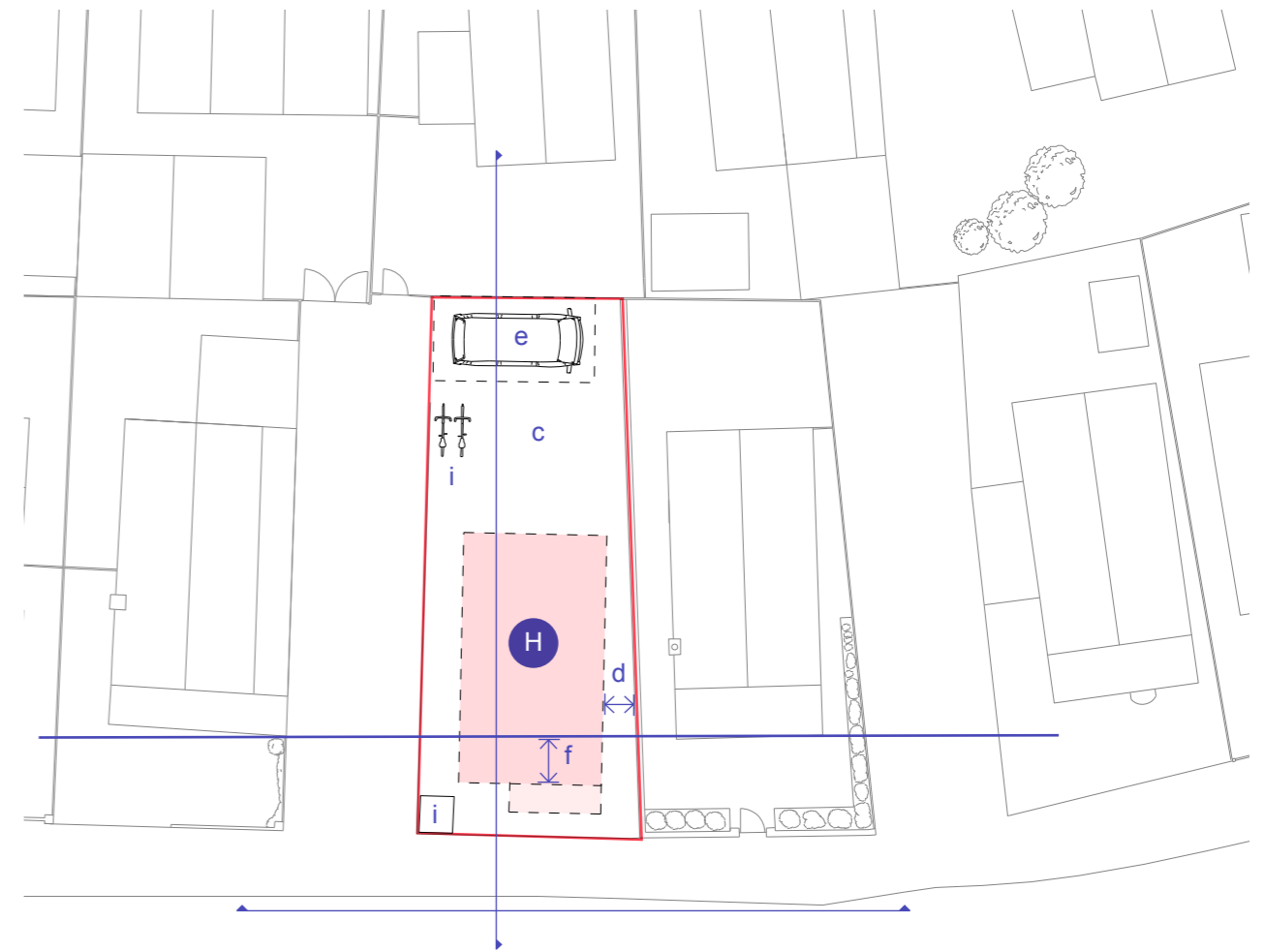


Fig. 34. Plan

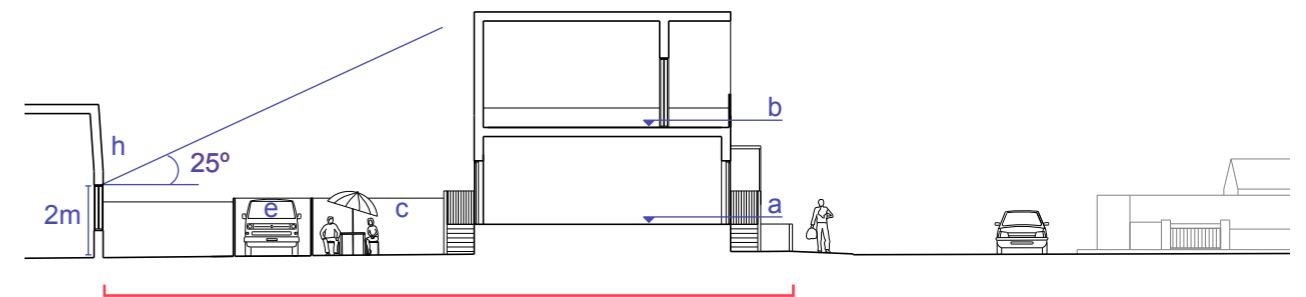


Fig. 35. Cross-section

## J: Replacement dwelling on rear tandem plot

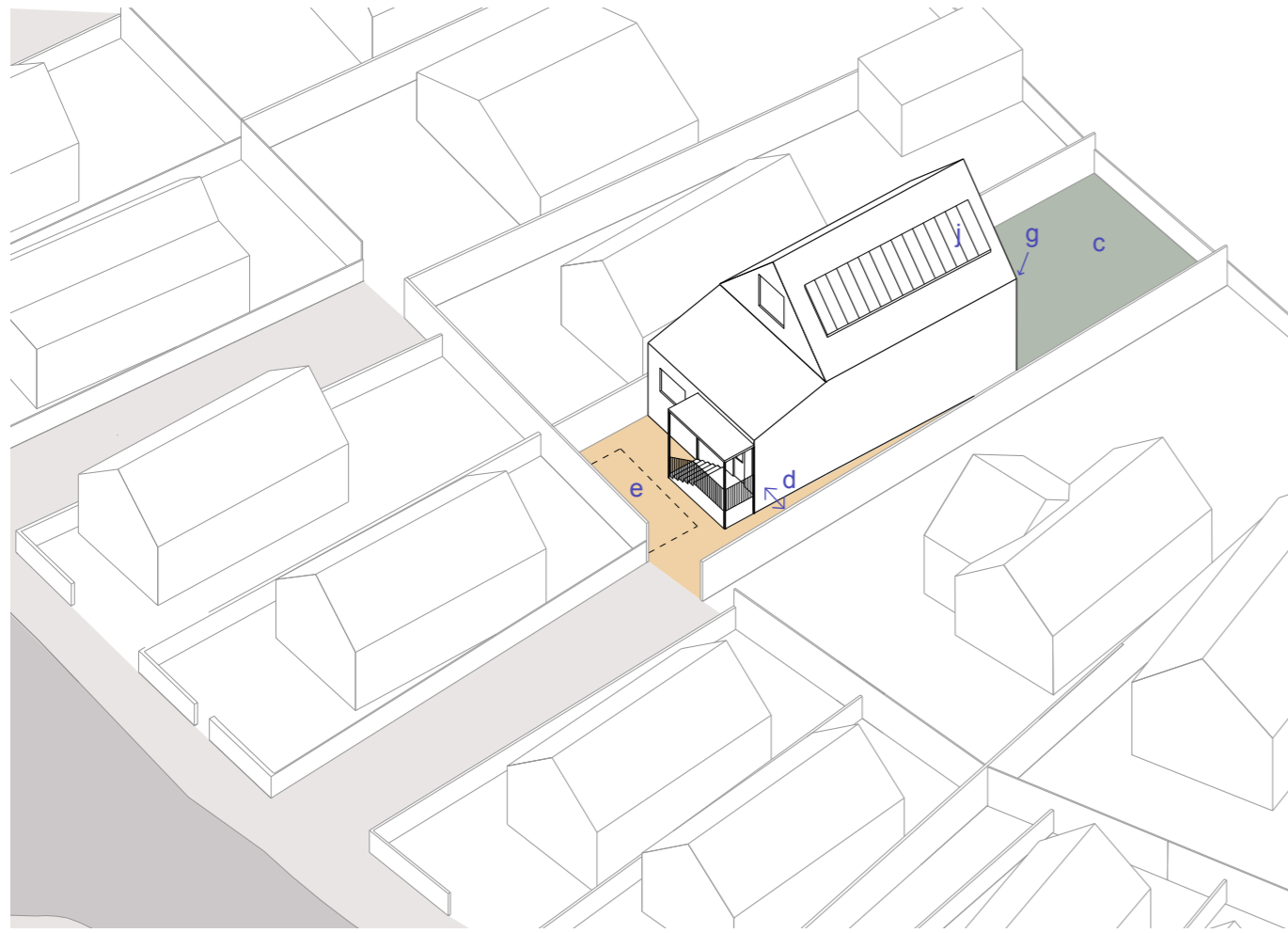


Fig. 36. Isometric view





- |   |  |
|---|--|
|  Plot footprint              |  Parking/external circulation |
|  Notional building footprint |  Private amenity space        |
- a** Ground floor level (dry floor) - must be higher than floor of home being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
  - b** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
  - c** 4m minimum rear setback. No upper floor, rear facing windows into living areas are permitted. At least 40m<sup>2</sup> of private garden to be provided for a two bedroom home.
  - d** 1m setback from side boundary unless party wall is created.
  - e** Parking on-plot - 2.9x5.5 minimum parking bay size.
  - f** Maintain building line to within 1.5m forward or back from the line of frontages either side.
  - g** Eaves to be kept low to minimise visual jump in scale along the street. Steeper pitches required to ensure adequate internal floor-to-ceiling height.
  - h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties, if full daylight/sunlight study is not provided.
  - i** Refuse and cycle storage.
  - j** Use roof for photovoltaic or solar thermal panels.



Fig. 37. Front elevation

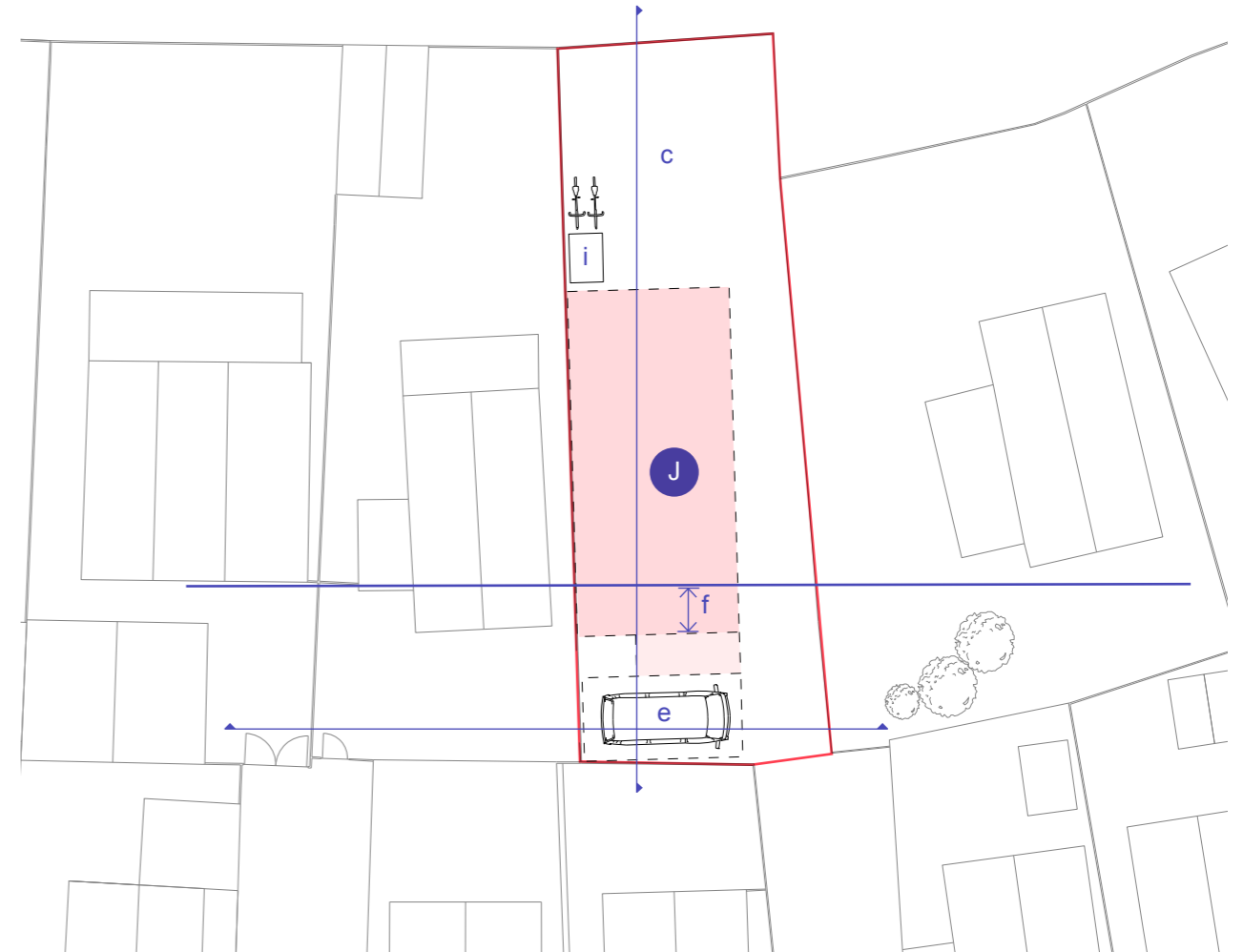


Fig. 38. Plan

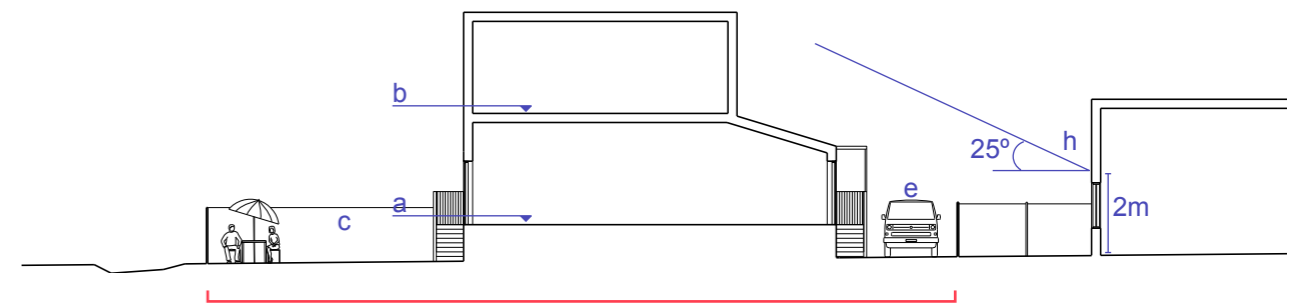


Fig. 39. Cross-section



## 4. Comprehensive redevelopment of multiple plots - up to 3 storeys

Comprehensive redevelopment of plots can provide efficiencies and allow for taller buildings and larger homes. However, care must be taken that the amenity of existing residents neighbouring the site remains protected, particularly in terms of daylight, sunlight and overlooking of what are already very small gardens and yards. In addition, new development must create a positive street frontage and provide adequate, good quality amenity space for new residents which should also enjoy sunlight in line with accepted BRE standards.

The following design requirements should be considered for all multi-plot comprehensive development:

- If a net increase in bedspaces is proposed, all habitable space must be set above the 0.5% AEP + climate change + freeboard level, meaning that living spaces will be at first floor level at minimum. This can create potentially difficult relationships with neighbouring homes with regard to overlooking. Rear setbacks should be increased in line with Essex Design Guide standards.
- If taller development is proposed, greater care must be taken to ensure that daylight and sunlight to neighbouring properties is not unreasonably impacted. It is recommended that a daylight/sunlight study is undertaken.
- Parking must be accommodated off-street to the full requirements of ECC's parking standards, including visitor parking. If garages are proposed, a full waiting space must be provided in front of garage doors, which does not obstruct the footway.
- Boundary treatments to the rear will form a 'front' to the street and must therefore be of high quality as well as secure. Close boarded fencing will not be an acceptable boundary treatment.
- Private gardens, balconies and/or shared private garden space must be provided to Essex Design Guide standards..
- Flat or pitched roof forms may be used but designs of 3 or more stories must be of very high quality due to their visibility within the landscape in long range as well as close up views.
- Comprehensive development of seafront plots can create the opportunity for three storey development if plots to the rear are incorporated within the development area.
- The seafront street (Brooklands) must retain an active frontage and parking courts should therefore be accessed from the side streets. Rows of garages facing Brooklands are not acceptable. Front doors should open onto Brooklands and ground floor space that cannot be used for habitable accommodation should be designed to incorporate other non-vulnerable uses such as co-working, meeting room, shared laundry, storage, cycle storage and similar. E class commercial uses are also suitable along Brooklands although servicing access must be carefully considered.
- In practice, seafront comprehensive redevelopment will require a large number of plots to be consolidated into a single site, in order to provide adequate amenity space and parking for both future and existing residents.

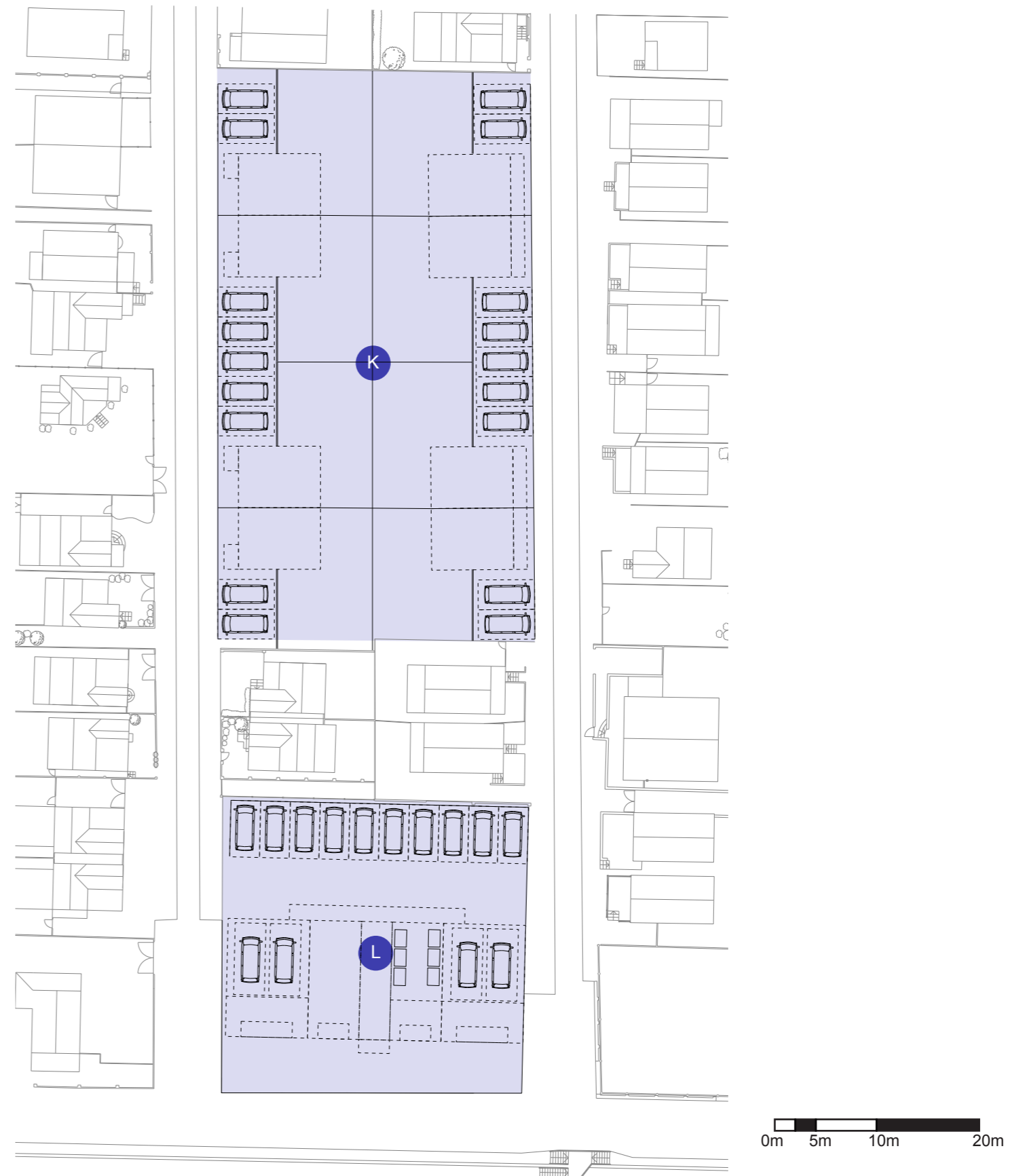


Fig. 40. Map showing notional locations of worked examples of comprehensive redevelopment. Scale 1:500



K. Indicative approach to acceptable three-storey development on a typical Brooklands street.  
 16 plots redeveloped to 8 new homes, assuming a betterment approach (no net increase in bedspaces)

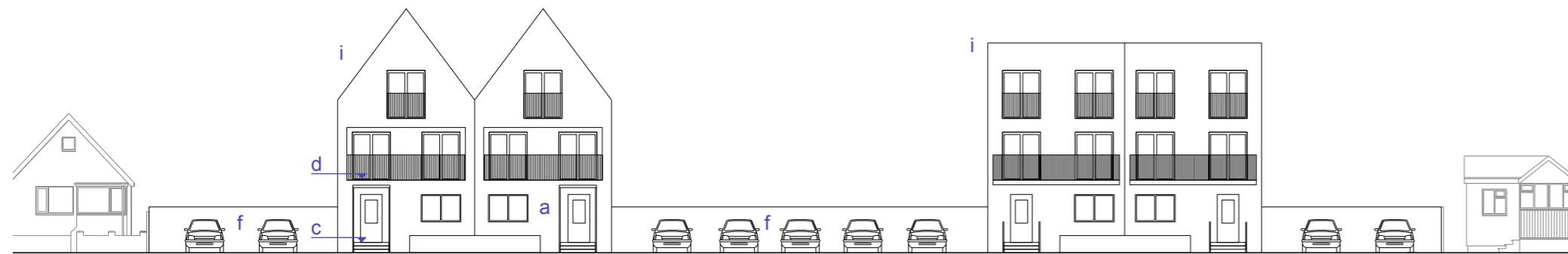


Fig. 41. Front Elevation

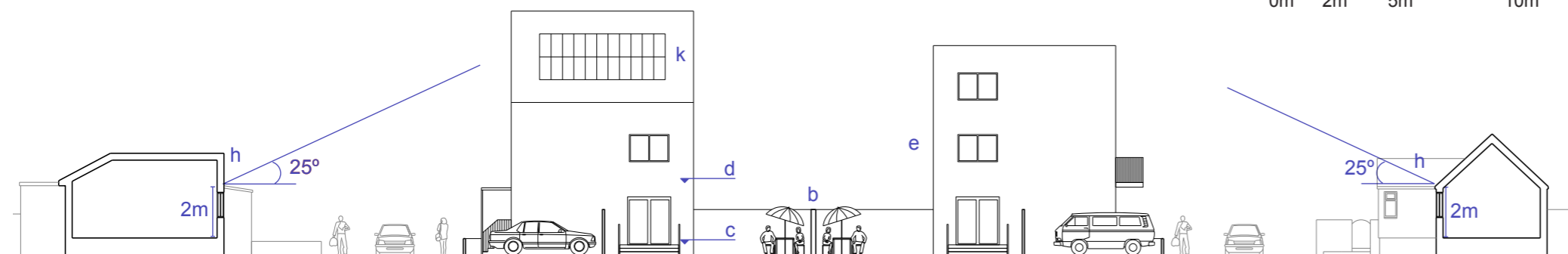


Fig. 42. Side Elevation

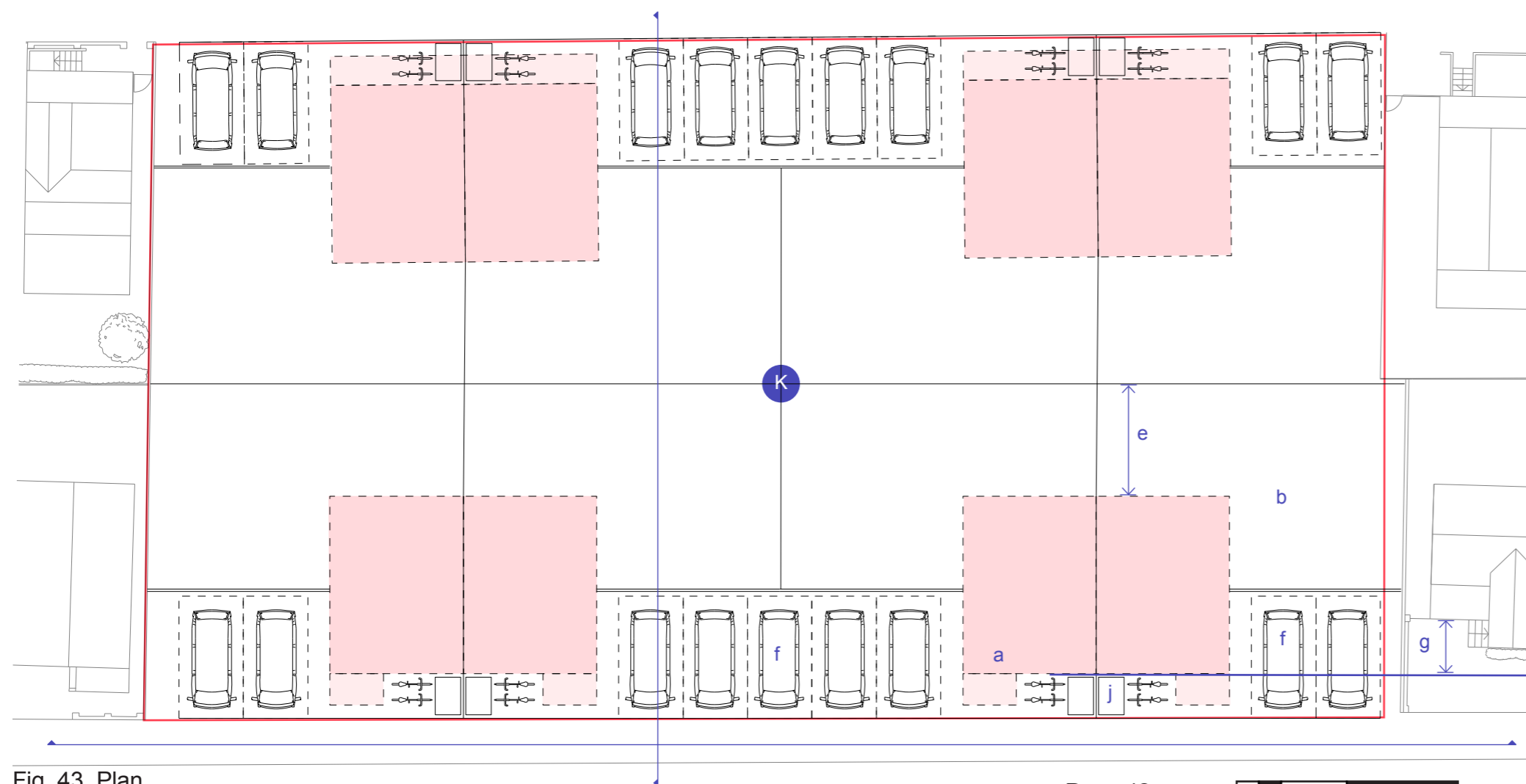


Fig. 43. Plan



- Plot boundary
- Notional building footprint

- a** Layout ensures active frontages to both streets and avoids overlooking and overshadowing of existing and new gardens.
- b** New gardens enjoy good quality sunlight and meet minimum standards of 75m<sup>2</sup> for a 3/4 bedroom home.
- c** Ground floor level (dry floor) - for a betterment proposal as shown, must be higher than floor of all homes being replaced. Must not be subject to more than 0.3m flooding in a present day 0.5% AEP event.
- d** Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- e** 4m minimum rear setback to plot boundary. Any first floor living spaces to face the street or the side of the property and not to the rear, to avoid overlooking of gardens.
- f** Parking on-plot - comprehensive development requires visitor parking to ECC highways standards. 1 space for 4 dwellings is shown.
- g** More flexibility in building line in relation to existing frontages can be accommodated due to more spacious layout.
- h** 25° rule of thumb should be used to ensure adequate daylighting to existing properties unless daylight/sunlight study is submitted. With more spacious layout as shown, daylight/sunlight study is likely to demonstrate that taller buildings will not have unacceptable impacts.
- i** Flat or pitched roof forms can work as more spacious layout means that change in scale from neighbouring properties is less problematic.
- j** Refuse and cycle storage.
- k** Use roof for photovoltaic or solar thermal panels where possible.

L. Three storey comprehensive development on seafront  
 5 seafront plots with four rear plots (nine total) redeveloped as 4 two-bedroom and 4 one-bedrom flats.  
 Net increase in bedspaces, no habitable ground floor space

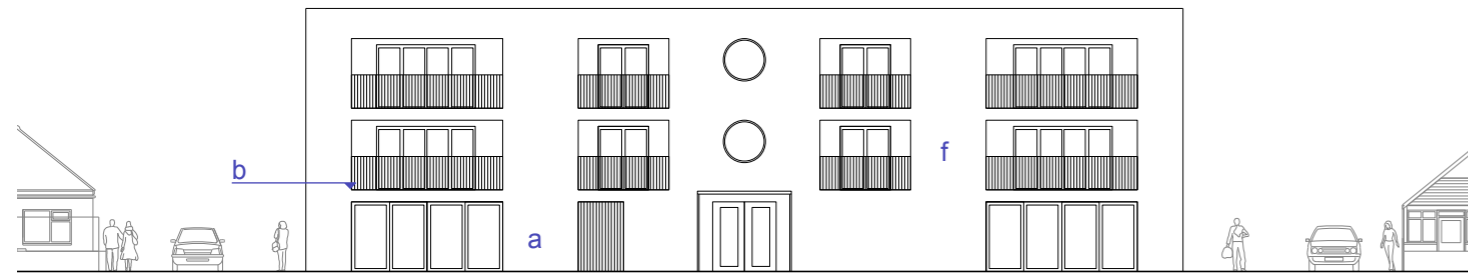


Fig. 44. Seafront elevation

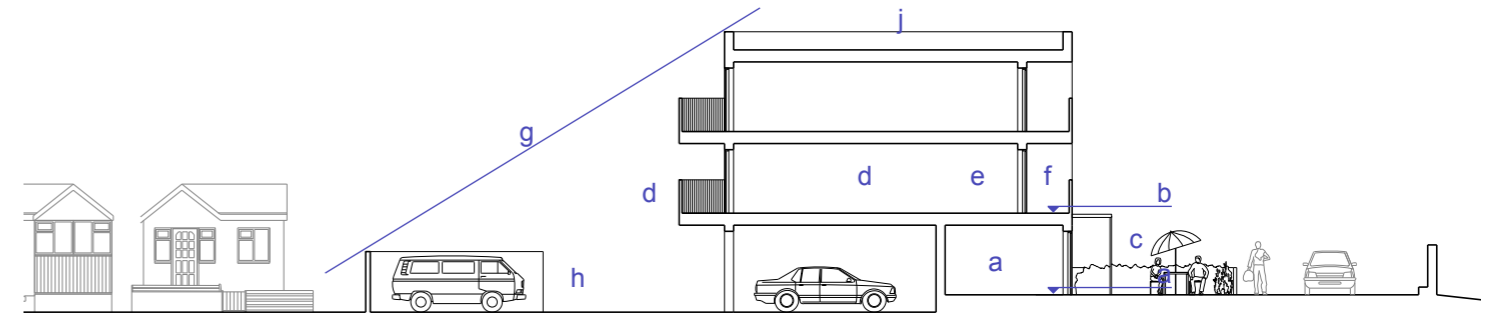


Fig. 46. Cross-section

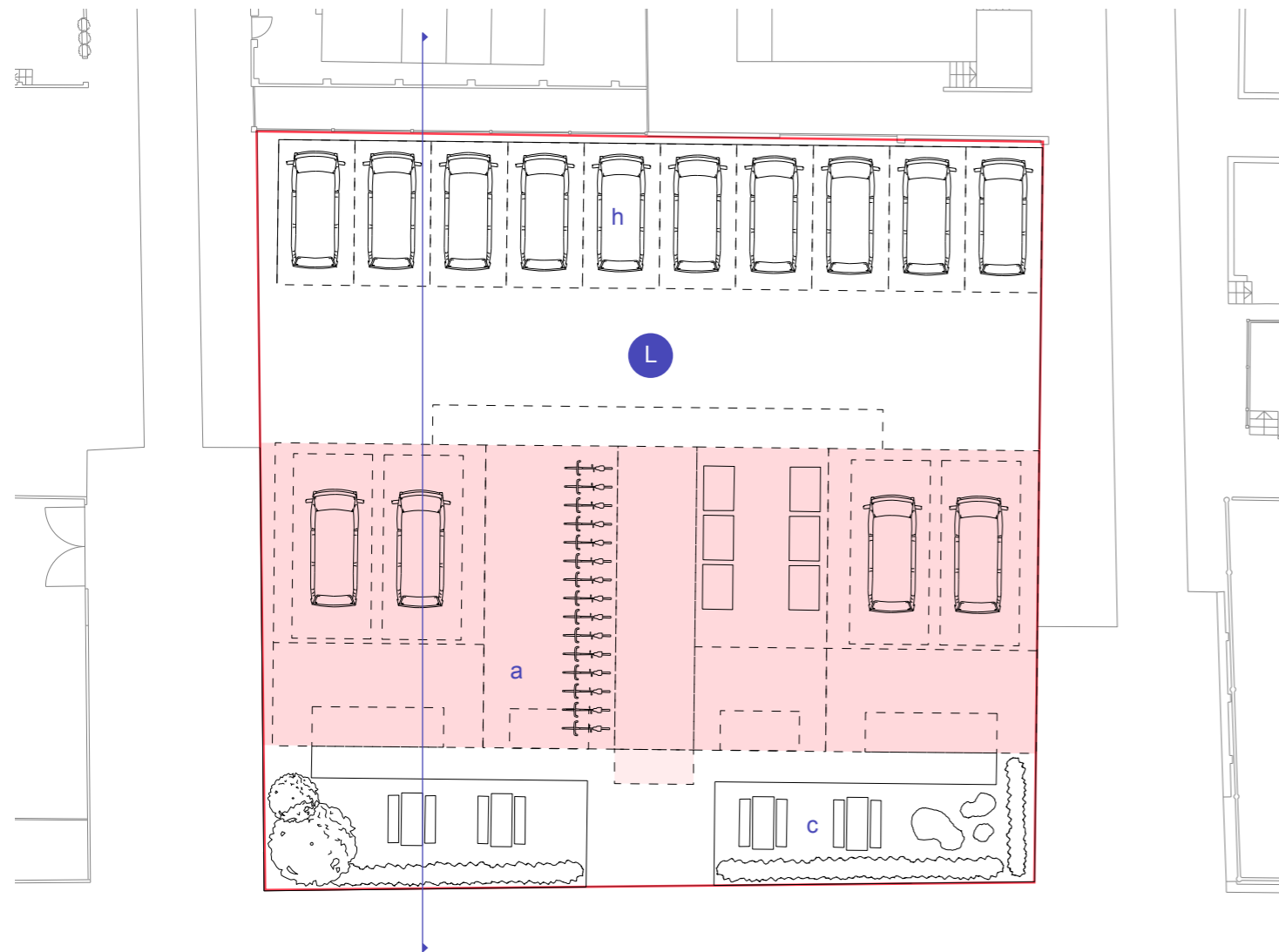


Fig. 45. Plan

- Plot footprint
- Notional building footprint

- a** For proposals resulting in a net increase in bedspaces, no ground floor habitable space is permitted. Ground floor to be designed for non-habitable uses only. Ensure active frontage with front doors to street. Ground floor space can be used for non-habitable purposes such as Class E uses, shared resident facilities such as co-working or laundry, cycle storage, refuse storage, garaging (accessed from rear only) or plant.
- b** Floor level for all habitable space - 0.5% AEP + 100 years climate change allowance + 300mm 'freeboard'. Refuge floor level - 0.1% AEP + 100 years climate change allowance + 300mm 'freeboard'.
- c** Resident shared outdoor amenity space (garden/courtyard) to be provided to Essex Design Guide Standards. Amenity space to be located and designed to receive direct sunlight in line with BRE guidelines. North-facing amenity space will not be acceptable.
- d** Apartments to be dual aspect to provide good daylighting and cross-ventilation to reduce overheating. Consider use of gallery access at rear.
- e** Living spaces to face the street to avoid overlooking of neighbouring gardens to the rear. If rear-facing living spaces are proposed, setbacks to neighbouring gardens must meet Essex Design Guide standard.
- f** Private balconies to all units, minimum 5m<sup>2</sup> with depth of not less than 1.5m. Inset balconies preferred on south and west-facing elevations to prevent overheating and provide privacy.
- g** Daylight and sunlight analysis should be provided to demonstrate that neighbouring gardens will continue to receive adequate sunlight.
- h** Parking to be on-plot and accessed from side street. Vehicle access from Brooklands is not acceptable due to the narrowness of the road, lack of footway, and requirement to retain active frontages. Resident and visitor parking must meet or exceed ECC minimum standards.
- i** Policy compliant provision of M4(2) and M4(3) units required, lift access required due to non-habitable ground floor.
- j** Use roof space for PV or solar thermal panels where possible.

