

# Design for Ebbfleet

Design guidance for a characterful  
and distinctive Ebbfleet Garden City



Ebbfleet  
Development  
Corporation





# Welcome to the 'Design for Ebbsfleet' Design Guide

The guide has been developed to help design teams develop characterful and distinctive homes and streets informed by the landscape and cultural heritage of the local area.

This guidance document is specifically focused on improving character, and should be used in conjunction with other appropriate national and local design guidance.

Design teams are encouraged to...

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A detailed historical map of the Ebbsfleet Garden City area, showing various streets, landmarks, and geographical features. The map includes labels such as 'Stone', 'Marshes', 'Green Hill', 'Stone Parsonage', 'Horns Croft', 'Stone Castle', 'Hedge Place', 'Stone Turnpike', 'Hungred Hall', 'Gore House', 'Flowerd Hill', 'Darent', 'Bean', 'Stone Wood', 'Park Wood', 'Milton Street', 'Knoekholt', 'Mr Hayes', 'Jas Calcraft Esq', 'SWANS COMBE Parsonage', 'Northfleet Parsonage', 'Welford', 'Winble Hall', 'Greenfoot Bank', 'Perry Street', 'Chalk Pits', 'Thos Chubb Esq', and 'Milton Street'. A large blue number '1' is overlaid on the map, indicating the first section of the guidance.

# 1. How to use the guidance

Introduction to Ebbsfleet Garden City  
How to use this guidance  
How does the guidance relate to planning policy?



## Welcome to Ebbsfleet, a Garden City for the 21st Century

Sitting on the banks of the River Thames, only 17 minutes from Kings Cross, Ebbsfleet is being planned to grow out of the chalk quarries and industrial heritage of northern Kent to become a healthy, happy new place to live, work, play and invest within.

Ebbsfleet is sponsored by Government to become the first 'Garden City' of the 21st Century, enabling ambition, quality and pace to planned development between Dartford and Gravesend. The Garden City benchmark is a commitment to build on the legacy of Ebenezer Howard's original Garden Cities at Welwyn and Letchworth, and create a place founded on quality place-making, community building and sustainability, making long term arrangements for the care of public spaces and assets.

Ebbsfleet Development Corporation published the Ebbsfleet Implementation Framework in 2017. The Framework interprets the Garden City principles to promote health and wellbeing in the planning and design of development in the area. Ebbsfleet will also be shaped by its own distinct character, the needs and aspirations of local communities, the opportunities created by the unique landscape and quarrying heritage, the transport infrastructure and relationship with surrounding places.

### **Ebbsfleet Development Corporation**

The Ebbsfleet Development Corporation (EDC) was established in April 2015 as an arms' length body of the Ministry for Housing, Communities and Local Government (MHCLG). The EDC's role is to enable the delivery of the Ebbsfleet Garden City.

The EDC are committed to continuing the tradition of great place-making in the UK; combining the best of urban and rural living and building on the ethos and pioneering spirit of early Garden Cities and New Towns.

EDC is the plan-determining authority for the Ebbsfleet area. Plan-making responsibilities remain with Dartford Borough Council, Gravesham Borough Council and Kent County Council.





# How to use the guidance

This guide sets out Ebbsfleet Development Corporation’s expectations for how designers can respond positively to the local context to create characterful and distinctive new neighbourhoods, streets, homes and buildings.

The study is a non-statutory design guide and will be used by EDC (as the planning determining authority) to inform discussions around character in pre-application meetings and within the general consenting process. While much of Ebbsfleet already has outline planning permissions in place, these permissions devolve detail on design character to later stages of the planning process. This guide is intended to support these critical stages;

**For designers embarking on the earliest phases of a project** without an existing planing permission, the guide provides a context driven design strategy. This resource is to be used as a springboard by designers to inspire creative responses to the context, rather than a prescriptive design code.

**For designers operating within the context of an existing outline planning permission** (where no details or guidance on how to respond to the local character exists either within the local planning framework or the existing permission) this guidance should be used to instill an identity and sense of place within area master plans, design codes and reserved matters applications, in alignment with any existing permission. EDC will look to align subsequent area masterplans and design codes to align with this guidance where possible. In both scenarios the study may also be used in the following;

- **Design and Access Statements :**  
To demonstrate how the site analysis has informed the final design response, in terms of the urban structure and area masterplanning, street design, landscape design and building design.
- **‘Building for Life’ assessments :**  
The study can also be used to demonstrate alignment with the ‘Character’ section of the Building for Life design tool, which is now being used in all planning applications to benchmark design performance in Ebbsfleet

## Step 1 >

### Review the analysis section, and gain an understanding of Ebbsfleet’s cultural heritage and landscape

The analysis section explores the landscape and cultural heritage of the Ebbsfleet area. Design teams are invited to familiarise themselves with this analysis, and undertake their own research into related areas of interest, to help to inform and evolve their own design strategy for the masterplanning and architectural design of their project.

## Step 2 >

### Explore Ebbsfleet’s design narratives

Four design narratives are presented in this guide, to establish a direction for the urban form, architectural language and materials & detailing of Ebbsfleet, and help to define a character for each area.

Design teams should use these narratives as the basis for developing their design strategy.

The approach is one of ‘comply or explain’, where designers choosing to develop an alternative narrative will be expected to explain how the urban structure, architecture, materials and detailing have been derived from an analysis of the local cultural heritage or landscape character. The narratives illustrated in this study have been tested with the planning committee, and provide a baseline approach, against which alternative narratives will be assessed.



# How does the guidance relate to planning policy?

## National Planning Policy

This guidance document has been developed by EDC to deliver against the ambitions of the National Planning Policy Framework, specifically supporting the following paragraphs;

To provide maximum clarity about design expectations at an early stage, plans or supplementary planning documents should use visual tools such as design guides and codes. These provide a framework for creating distinctive places, with a consistent and high quality standard of design. (P126)

Developments are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities); (P127 d))

Development establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit; (P127 e))

Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions, taking into account any local design standards or style guides in plans or supplementary planning documents. (P130)

## Local Planning Policy

The local planning frameworks of Dartford Borough Council and Gravesham Borough Council, and Kent County Council's Design Guide all require designs to respond to the local context;

Gravesham Local Plan : Policy CS19

Using BFL 12, and the Kent Design Guide, the design, layout and form will be derived from a robust analysis of the local context and character and will make a positive contribution to the street scene, the quality of the public realm and the character of the area.

Dartford Development Policies Plan : Policy DP2: Design

6.3 Design, architecture and construction materials should complement and enhance the valued character of an area and reflect or reinforce distinctive features. Innovative design that respects and complements the local character may be beneficial, particularly in the EDC area. It will always be important to demonstrate the attributes and significance of the natural, built and historic environment in the locality of the proposed development.

6.11 Development within the EDC area should be led by comprehensive masterplanning, addressing its particularly characteristics and constraints. It is expected to be guided by Garden City Principles, and through bespoke masterplanning and design policies.





## 2.

## Analysis

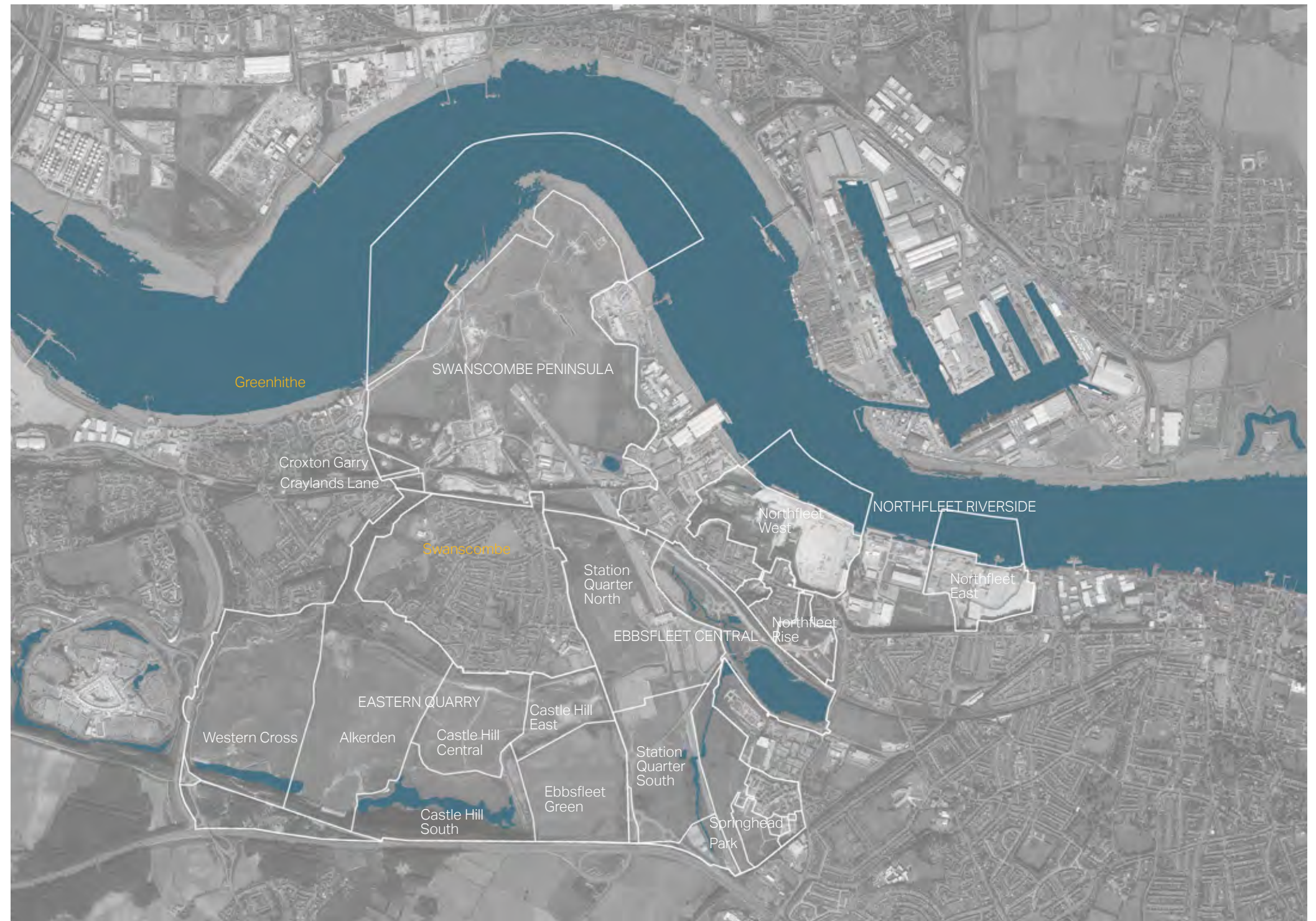
Learning from the landscape  
Learning from local villages  
Learning from distinctive local buildings  
Learning from the river and industry  
Learning from the marshland  
Learning from defined settlements



## Introduction to the analysis

**The analysis of the landscape and historic built context has identified a number of relevant themes:**

- Landscape and topography - The overriding characteristic that unites the Ebbsfleet Garden City area is the dramatic topography. To the north is the Thames and the Ebbsfleet River tributary and to the south are the slopes of the North Downs. Alongside are man-made topographic features created over centuries, in the form of chalk cliffs, hollows and lakes.
- Local historic villages - the layout and density of the historic centre of local villages and the form, detailing and materials of the dwellings.
- Distinctive buildings - there are a number of historic examples: buildings on a ridge or hill; distinctive buildings that look across the landscape and historic farmsteads.
- River and industry - the River Thames is a key influence on the locality, in providing trade links and stimulating the growth of industry across the Ebbsfleet area, particularly the excavation of chalk.
- Defined settlements - from Roman settlements, to the historic centre of Gravesend, to historic buildings such as Ingress Abbey - all demonstrate a geometrically ordered layout.
- Marshland - is a key characteristic of the Thames valley. Defensive forts of a defined geometry are located along the Thames (and Medway) on the edge or within marshland.





## Learning from the Landscape: place names & the landscape palimpsest

**Ebbsfleet's dramatic landscape and topography of chalk cliffs, river inlets, marshland, and its proximity to the Thames provides a unique opportunity to create a development that is characterful and distinctive.**

The River Thames and its estuary has throughout history been a vital corridor for trade, travel and industry. This landscape now contains a complex 'palimpsest' of landscape forms and features that have survived from prehistoric periods through to the modern day, influencing the areas development. The map to the right demonstrates the chalk escarpments in 1769, which have increased in extent over the last century; demonstrating how the landscape in this area has been dramatically altered through quarrying, and the construction of road and rail infrastructure.

Some of the local place names can be seen to have been derived from this topography. This study suggests that these place names, together with general Kentish landscape terms can be used to define and influence the design and grain of new development areas, residential, mixed use and civic typologies.

**HITHE** *a landing place or small port for ships or boats\*\**

**FLEET** *Estuary, inlet of the sea, or a small stream derived from the Old English flēot.*

**COOMBE** is used in parts of Kent to indicate a large hollow on the side of a hill, or alternatively a valley ( which is derived from the Ancient Celtic word *cumbā* )

However, it should also be noted that the 'coombe' in 'Swanscombe' is most likely to derive from a corruption of the word 'camp'. The Domesday Book refers to 'Suinescamp', and in this instance, 'camp' is understood to derive from the Old English simply meaning a field or enclosed piece of land.

**MARSH** *a low-lying tract of land*

PENT slope, inclination Kent \*

PINCH short, steep hill Kent \*

TOLL row of trees Kent \*\*\*

PETT clump of trees Kent \*\*\*

ROUGHET small wood of hazel or ash with  
undergrowth Kent \*\*\*

\* *Words and places: or, Etymological illustrations of history, ethnology and geography, Isaac Taylor.*

\*\* *The Place Names of Kent, Judith Glover.*

\*\*\* *Landmarks, Robert MacFarlane*



Historic map of the area from 1806 : University Library Bern, MUE Ryh 1806 : 22



# Landscape: geology

The geological strata diagram to the right also demonstrates the topographic features. The marshland and the Ebbsfleet river valley are clearly shown, as are the areas of chalk formations.

Prehistoric Ebbsfleet was open grass lands, with the river Thames previously flowing around 30 meters higher than today, through a broad flood plain with shallow wooded valleys.

The distinctive beds of chalk are Sedimentary Bedrock formed approximately 72 to 94 million years ago in the Cretaceous Period. The local environment was previously dominated by warm chalk seas and these sedimentary rocks are shallow-marine in origin. They are biogenic and detrital, generally comprising carbonate material (coccolith).

- 1. Superficial deposits: Tidal river deposits - clay and silt
- 2. Bedrock geology: Lewes Nodular Chalk Formation, Seaford Chalk Formation And Newhaven Chalk Formation (undifferentiated) - Chalk. or 'Coombe Rock'
- 3. Bedrock geology: London clay formation - clay and silt
- 4. Bedrock geology: Thanet Formation - Sand
- 5. Bedrock geology: Lambeth Group - Sand, Silt And Clay





## Landscape: figure ground showing river, marsh and chalk cliffs

The adjacent diagram shows the chalk cliffs in relation to the water bodies; the Thames, the marshes, the remnants of the Ebbsfleet river and the lakes formed within the base of quarries; the private and public realm spaces across the Ebbsfleet area; and the chalk cliffs that have been created adjacent to existing settlements and rail and road corridors.

The diagram reveals how the chalk cliffs (denoted in red) are so integral to the landscapes across Ebbsfleet, carving the city into defined areas, and forming a backdrop to most of the new neighbourhoods.





# Learning from local villages: Cliffe - a low chalk escarpment village

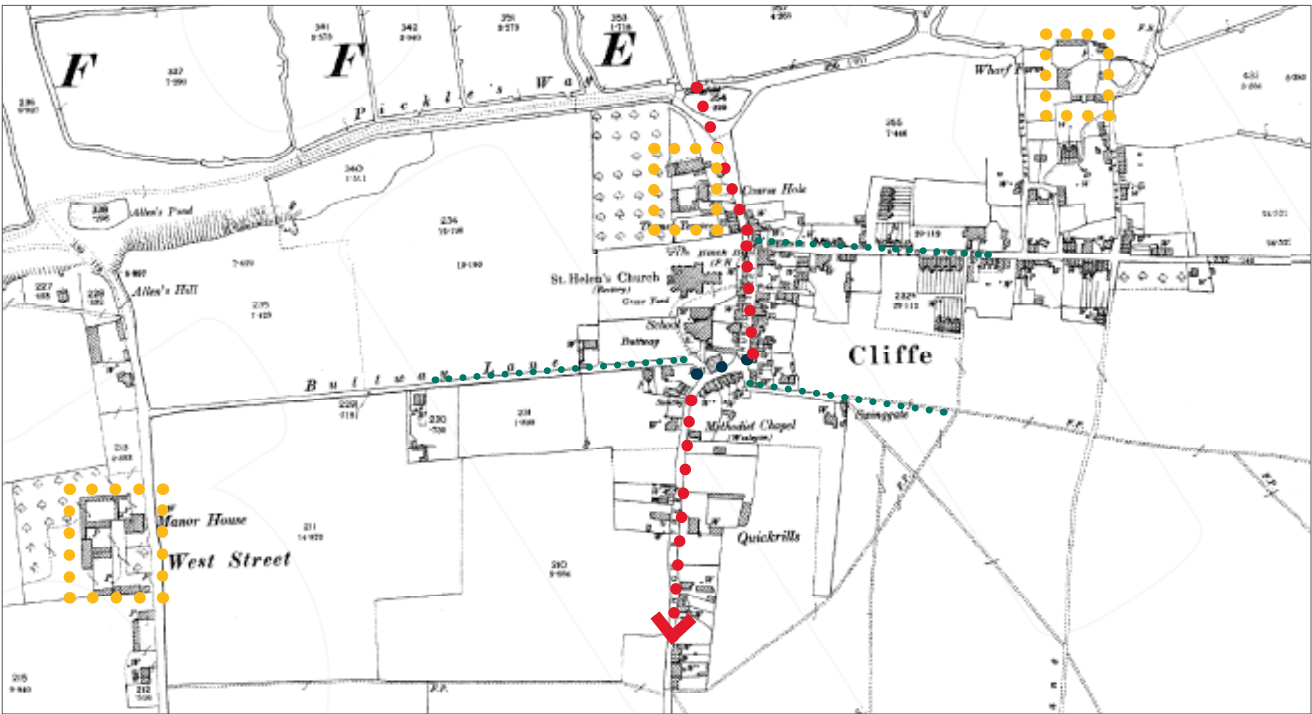
Villages and settlements have traditionally evolved at the boundary between the marshes of the Thames estuary, and the chalk spine of the North Kent downs. Understanding the characteristics of these settlements can provide some principles for developing streets and building forms for similar landscapes within Ebbsfleet.

The village of Cliffe on the Hoo Peninsula, provides a good historic example of such a settlement on the boundary of a low chalk escarpment and marshland. Prior to the silting of the Thames marshes, Cliffe supported a port on Cliffe Creek. As at Northfleet; there is a local cement works on the marshes, as can be seen on the aerial image (to the right).

The study of the morphology of Cliffe reveals that the high street follows the topography across the contours from the crest of the hill to the marshland edge, with secondary streets running in alignment with the general contours and the chalk escarpment. A number of specific buildings have been identified as being of interest in terms of form and materiality. There are also a number of historic farmsteads, located in the proximity of Cliffe, as can be seen highlighted on the map (right). During the 14th Century Cliffe was the site of a farm owned by the monks of Christ's Church, Canterbury.



Source: Bing maps



- Key**
- primary street
  - secondary street
  - village centre
  - farmstead set around a courtyard with aspect over the landscape

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## Learning from local villages:

Cliffe - simple materials palette / focus on form



The twin gable configuration common in local villages



'Ad hoc' window arrangement and horizontal boarding above black plinth



Long houses with characteristic plinth high-lighting the subtleties of topography



Gable with jettied frontage - a porch and a semi-private space



Juxtaposition of form at a step in level / highlighted window surrounds and black plinths



Coloured plinth. Red brick contrasted with big white mullioned and transomed windows



## Learning from local villages: Farningham- gables and yards

Farningham is also situated on chalk beds. The village straddles the River Darent which runs through the village as a tributary to the Thames, providing an insight into how the Ebbsfleet river may have once appeared.

*'Chalk and flint and clay tell the story of the houses, church and mill. The look of the place is determined by the soil...'* Farningham and its Mill, Hilary Harding.

The layout of the High Street / London Road is similar to Cliffe running perpendicular to the contours, with the buildings aligned perpendicular to the street creating long thin terraces and linear yards.

The historic centre is an example of a low rise and high density housing settlement.



Twin gables



Gable end rhythm along road frontage



Yards and houses in perpendicular alignment to the High Street



Source: Google maps



Linear red brick terrace aligned perpendicular to the High Street



Riverside court with feature gable house at the end creates a surprise opening out, off High Street where the river crosses the High Street





Yards and houses set back from the High Street



Gable entrance / flint feature panel



Plinth accommodating changes in topography. Warm red patterned brick



Plinth walls and stepping roof levels in response to the topography



Twin gables accommodate rooms in the roof



Twin gable motif creates townscape marker and rooms in the roof





Twin gables - white boarding above warm red brick



Juxtaposition of warm red brick / flint wall and white boarding, bay feature



Balance of dark roof form and light simplified facade



Continuous bay window feature - a townscape marker within the village



Juxtaposition of bay and dormer windows



Bay window looking down the High Street.



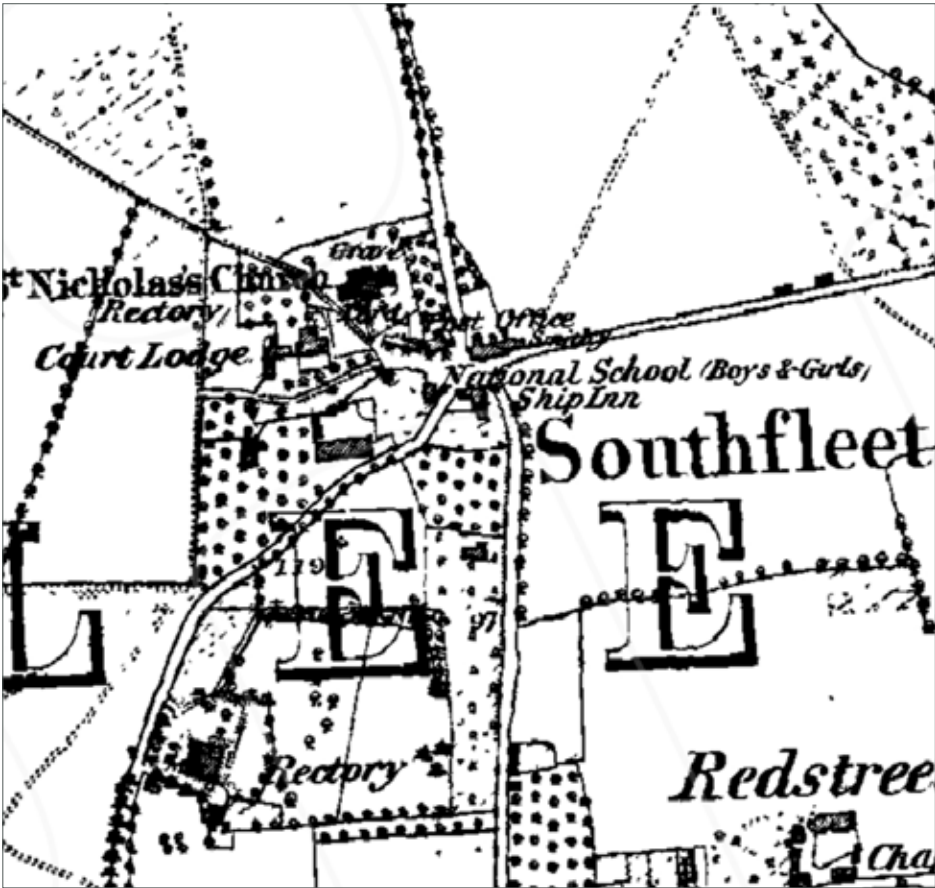
Springfield and Summerfield, Horton Way - a 20th Century example of horizontal white painted boarding. Source: Kent: West and the Weald, John Newman.



# Learning from local villages: Southfleet

Southfleet takes its name from the River Fleet, a minor tributary of the River Thames, which was subsequently renamed the River Ebbsfleet in recent times. The banks of the Fleet are where watercress was first commercially grown in the UK, just north of Southfleet at Springhead. The river flows on from Springhead into Robins Creek at Northfleet, where it once joined the Thames.

The original historic village is grouped around a crossroads. The distinctive Kentish red brick with patchwork of blue headers and typical brick and ragstone plinths, are combined with a palette of horizontal black boarding and earlier half-timbering.



Southfleet 1860s © Crown copyright and Landmark Information Group Limited 2018. All rights reserved



Warm red roof and patterned brick facade with band of projecting bricks and broad framed windows as contrast to background brickwork



Black boarding juxtaposed with red brick within the same form



Plinth house with warm red brick gable end



Plinth house - with contrasting geometric pattern in the timber detailing



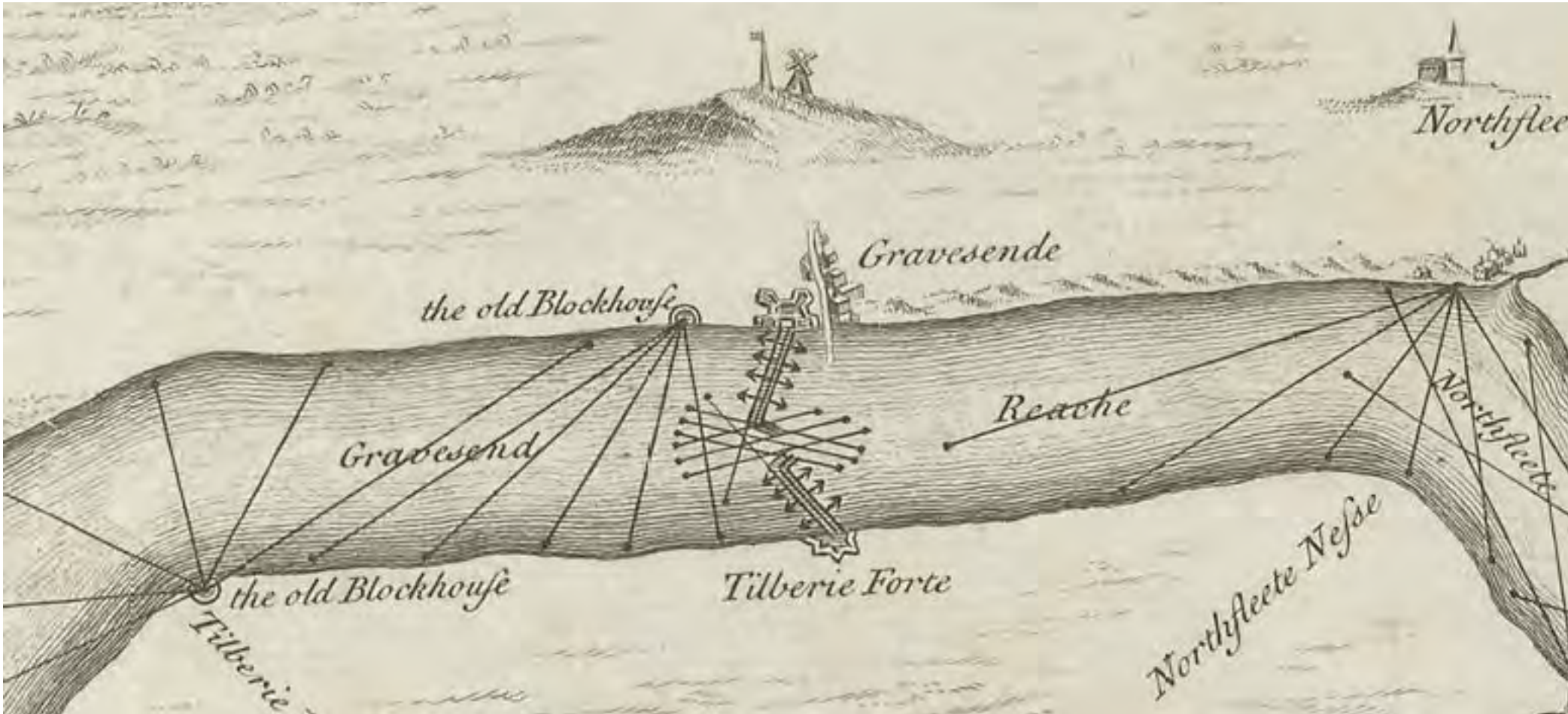
# Learning from distinctive local buildings: Historic ridge silhouette buildings

Across the Ebbsfleet area are numerous examples of historic marker buildings, forming a distinctive silhouette along the riverside landscape between Dartford and Gravesend.

The map of 1588 locates Thames defences (right). Windmill Hill in Gravesend and Northfleet Hill can be seen with buildings of strategic importance; possibly used as defensive look-outs and beacons.

Windmill Hill was originally the site of a beacon in 1377, which was instituted by King Richard II, and still in use 200 years later at the time of the Spanish Armada. The hill offers extensive views across the Thames and became a popular spot for Victorian visitors to the town with the installation of a camera obscura.

Rosherville Gardens, a Victorian pleasure garden that was located at Northfleet, contained a lookout tower (image below).



1588 map of Thames defences - extract. Robert Adams (architect) (1540–1595)



Rosherville Gardens



Mill Hill Gravesend



Greenhithe tower © Ash Rare Books



Greenhithe tower



Villas - site of Rosherville Pleasure gardens



There are three historic church spires within the area that are strategic townscape markers:

- Swanscombe - St Peter's & St Paul's
- Northfleet - St Botolph's
- Northfleet - Lady of the Assumption RC Church

In addition the Portlands Building (formerly the Factory Club) from 1878 is a landmark building on the ridge line within Northfleet. Before 1945, the club was open to all members of the public and was the cultural centre of Northfleet. Even today it is highly prominent on the ridge from a wide range of viewpoints in the area.

- Church spires
- 12m + Building Heights
- Portlands, Northfleet



Location of churches on the high ground



Portlands, Northfleet - Douglas Grierson postcard collection, Discover Gravesham



Swanscombe - St Peter's & St Paul's



Northfleet - St Botolph's



Northfleet - Lady of the Assumption RC Church



# Learning from distinctive local buildings: Civic / institutional buildings on the edge of the settlement

There are key examples of defined building clusters (past and present) which offer strong precedents for the form of civic or institutional buildings within the future development of Ebbsfleet. Historically the strong form of these building groups created a sense of enclosure and protection within a wild and uncontrolled landscape.

At Huggins College the building presents a strong geometrical terraced facade, defined by repetitive gables and chimneys facing out onto the landscape.

The farmstead cluster located outside the historic centre of Cliffe, is located within an open landscape. The configuration of the manor farm and attached / adjacent agricultural buildings helps create a defined grouping on the crest of the high ground around Cliffe.



Manor Farm, Cliffe © Crown copyright and Landmark Information Group Limited 2018. All rights reserved.



Huggins College © Crown copyright and Landmark Information Group Limited 2018. All rights reserved.



Tilbury Fort Barracks - flat fronted long regular terrace onto the parade



Huggins College - regular terraces of gables distinctive silhouette and distinctive feature chimneys - Douglas Grierson postcard collection, Discover Gravesham



Huggins College - outside Northfleet now demolished - Douglas Grierson postcard collection, Discover Gravesham



Farmstead outside Cliffe - mixture of strong roof forms. Frontages address the surrounding open land and the cluster forms a strong enclosure on the Cliffe high-ground



# Learning from distinctive local buildings: Farmstead, hop kilns, & barn forms

The map of 1870 (below), shows that Western Cross, Alkerden and Knockholt were the locations of historic farmsteads with adjacent hop fields and hop kilns. These building typologies present interesting precedents for the structured enclosure of space in future developments.



1872 Map Swanscombe © Crown copyright and Landmark Information Group Limited 2018. All rights reserved



Hop kiln / oast house, Southfleet - a key townscape marker



Farmstead Farningham - forming the edge to the High Street.



Farmstead Farningham - long linear form aligned with the village contours. White boarding to the courtyard



Farmstead outside Southfleet



Farmstead outside Southfleet



# Learning from the river and industry: Chalk / cement works- industrial landscapes

The Thames Gateway saw a series of firsts: the first industrial paper making; the world's first long-distance electric power station; the first dock railway; the unloading of the UK's first oil shipments and the first reliable cement production. This industrial legacy is embedded throughout Ebbsfleet's landscapes.

The chalk was extracted from quarries across the area for over a century to make lime for cement production, and in doing so creating a dramatic and distinctive land-form.

In 1868 Swanscombe was still a predominantly rural community with many acres producing hops. Several oast houses were located in the Swanscombe Street and Milton Street areas. Swanscombe Manor, sat on land to the south of Swanscombe Street, with it's estate to the east and north of the village. It was the sale of this land to Thomas Bevan (a local cement magnate) which signalled the demise of much of the arable land and woodland, and would, over the next century, be largely excavated for chalk and clay. Swanscombe became surrounded by large chalk pits and chalk escarpments creating a strong and dramatic edge to the existing settlement.



Marl Pit by Thomas Hennell (1903-1946) a local artist of national importance born in Ridley Kent © Courtesy Chris Beetles Gallery



Juxtaposition industry and chalk quarries Northfleet - Douglas Grierson postcard collection, Discover Gravesham



Eastern Quarries 1960 © Crown copyright and Landmark Information Group Limited 2018. All rights reserved.



**Learning from the river and industry:**  
Chalk / cement works - an industrial aesthetic



Northfleet Cement Works, 2007



Northfleet industry



Batch processing at Northfleet Works



Shoreham cement works



Gravel grader and batching plant machinery



Learning from the river and industry:  
Northfleet trade & industry - wharves, warehouses & kilns

The River Thames developed historically as a major communications corridor. In Roman times Northfleet was the trading connection on the Thames and the Fleet river was used to connect Watling Street to the Thames.

In 1796 when James Parker set up kilns along Northfleet creek to make his 'Roman' cement, it marked the beginning of the large cement works industry which developed along this stretch of the river.



The Bevan Portland Cement Works, Northfleet, 1939 - Britain From Above



Northfleet cement factory circa 1920 - barrel vaulted roof forms - Tony Larkin postcard collection - Discover Gravesham



The Creek Northfleet - saw tooth roof forms, warehouses and chimneys - Tony Larkin postcard collection - Discover Gravesham



# Learning from the river and industry:

## Northfleet trade & industry - dockyards, wharves, kilns, brick fields and 'chalk hills'

The map of 1860 to the right shows a hive of industry: cement works, wharfs, a brick field and ship building slips at the dockyard.

'... we comes to Gravesend, the whole shore being low, and spread with marshes and unhealthy grounds, except with small intervals, where the land bends onwards as at Erith, Greenwich, North-Fleet, etc in which places the chalk hills come close to the river, and from thence to the city of London, and adjacent countries, and even Holland and Flanders, are supplied with lime, for their building, or chalk to make lime, and for other uses..' Daniel Defoe A Tour Through the Whole Island of Great Britain - 1724-6

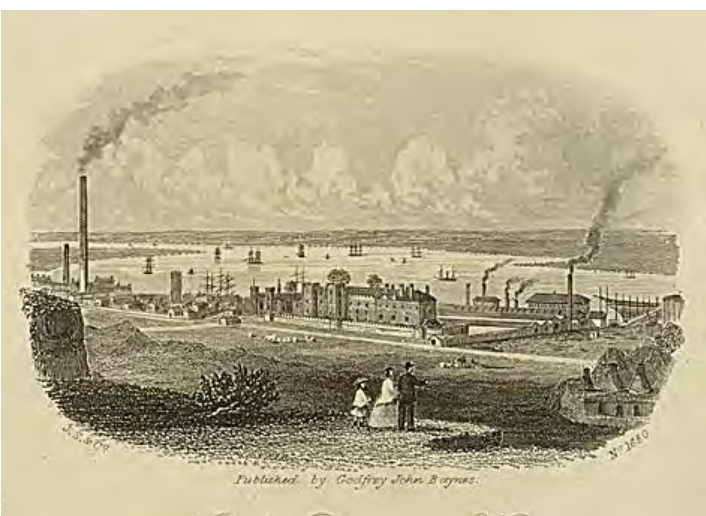
The drama and industry of the 'chalk hills' defined the character of Northfleet as early as the eighteenth century. Similarly it is interesting to note the strong trading links with the low countries through the manufacturing of lime.



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Lime kilns at Northfleet



Northfleet Dockyard © Thames Pilot



Launch of the Orinoco, West India Mail Steamer at Northfleet Dockyard, Kent, England, UK, 1851 Engraving Image ref: LC120402\_\_0197\_1, Liszt Collection



Bottle kiln - oldest cement kiln in world © Northfleet Harbour Restoration Trust

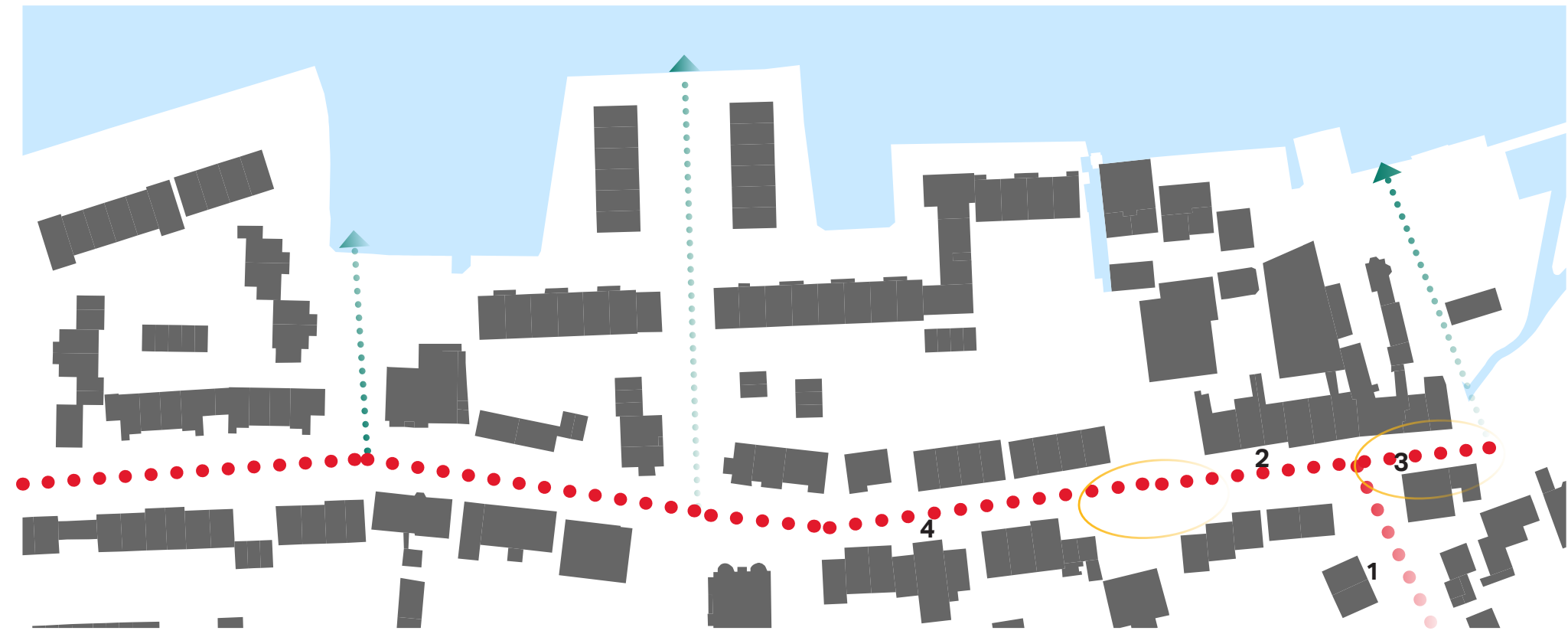


# Learning from the river and industry: Greenhithe

Greenhithe High Street is an inflected, meandering road located parallel to the river front with strong connections to the Thames. The buildings creating the street frontage are not in a formal alignment thereby adding townscape interest to the street.

A riverside hamlet from the twelfth century, Greenhithe's waterfront wharves were used for shipping corn, wood and other commodities, however its largest cargoes were chalk and lime.

The High Street has evolved over the centuries and is now characterised by buildings from different periods. The use of colour deployed through stucco, brick, flint and stones helps to create a strong identity for this riverside location. Similarly the attention to detail around the windows (variations on a theme), doorways and dormers, brings a coherence to the character of Greenhithe.



Northfleet High Street - inflected road with regular connections to the waterfront and focal areas created along the roadway.



1. Colour, symmetry & window proportions - a townscape marker at the termination of the High Street. The eastern end of the street is marked by the strategic location of a tall birch tree.



2. Window detailing



3. Windows with highlighted borders



4. Flint faced houses



# Learning from the marshland: The North Kent Marshes

The map opposite of the Thames valley is characterised by marshland. Historically there were few defined routes across the Marsh, although the 'Manorways' did provide well defined routes across Swanscombe Marshes.

One of these led out to a ferry across the Thames to Grays, used from medieval times as a pilgrim's route to Swanscombe Church and the shrine of St Hildefirth. The ferry finally ceased operation in the mid C19th.



Above: Mudge map of Kent 1807 (crop)  
© www.mernicks.com



*'... The dark flat wilderness beyond the churchyard, intersected with dykes and mounds and gates, with scattered cattle feeding on it, was the marshes; and that the low leaden line beyond was the river; and that the distant savage lair from which the wind was rushing, was the sea...'*

This vivid description of the Thames Marshes in Dickens' Great Expectations is an image that has characterised this area for Centuries. The Swanscombe peninsula although now sometimes reclaimed, was until the early 20th Century a water logged marsh typical of the east coast - vast areas of which are now protected as vital wetland habitat.

A study of aerial images of Cliffe Marshes identifies numerous farm buildings located on islands in the marshes.

*'There was a reasonably good path now, mostly on the edge of the river, with a divergence here and there where a dyke came with a miniature windmill on it and a muddy sluice-gate.'* Great Expectations



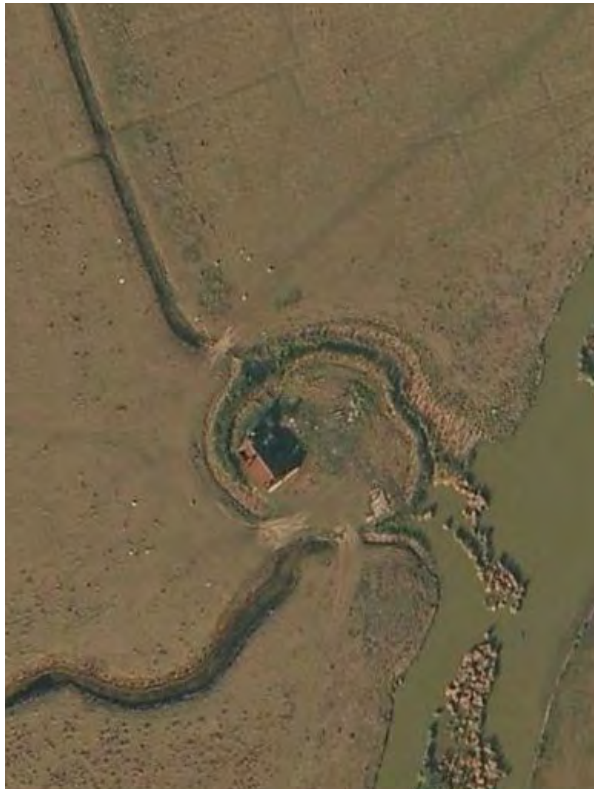
Broadness Salt Marsh towards the Thames; Botany Marsh and Northfleet Marshes to the east & Swanscombe Marsh defined by ditches.



Great Expectations - still images from David Lean's 1946 film



Polders / areas or reclaimed land in the Cliffe Marshes



Swanscombe Marsh - source: Google maps



# Learning from the marshland: precedent studies

Reclaimed marshland has a very specific landscape structure and boundary conditions.

An alternative approach to structuring these marshland landscapes can be gained from the 'polders' of the low countries. These polders have been developed through a combination of natural and man-made landscapes to create interesting solutions to hydrology, as well as unique environment for settlements, with defined edges, cultivated tables, drainage and particular housing typologies.



Kent farmhouse on a raised on a mound between Sittingbourne and Faversham



Inhabited polders



Polders within marshland

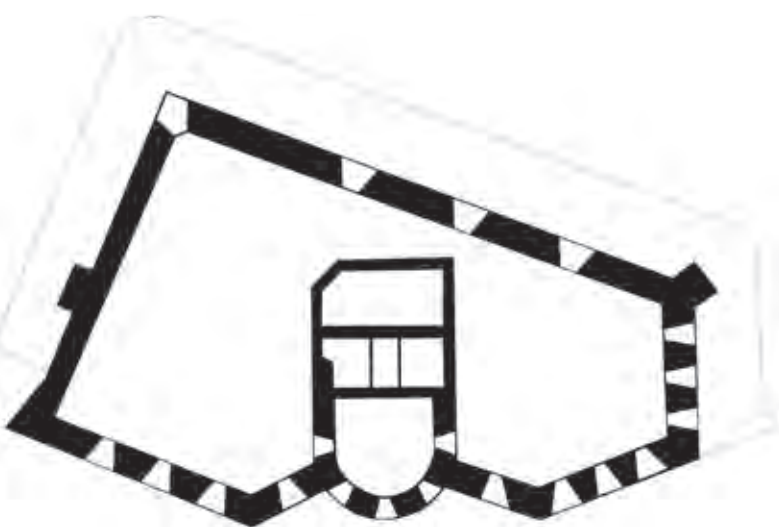


Learning from the marshland: defensive / defined geometrical forms

This section of river-scape is characterised by the strategic location of a strong defensive line of forts. Tilbury is one of the finest surviving 17th Century forts in England. The earliest version of the fort, comprising a small blockhouse with artillery covering the river, was constructed by King Henry VIII to protect London against potential attack from France. Similarly there is a block-house opposite in Gravesend, forming a strategic defensive 'gate' across the river.

King Charles II's Chief Engineer, a Dutchman called Sir Bernard de Gomme, was commissioned to develop Tilbury Fort's defences further. The result was a large, five-sided, star-shaped fort with four angular bastions, revetted in brick, with an outer curtain of defences, including two moats and a redoubt and two new gatehouses to defend the entrance from the north. The interior of the fort was raised up above the level of the marshes to prevent flooding, and barracks and other buildings were constructed inside.

The geometric formality of these forts bounded by water, could become an urban precedent for new settlements inserted into open or low lying land.



West Tilbury Blockhouse strong form / walled

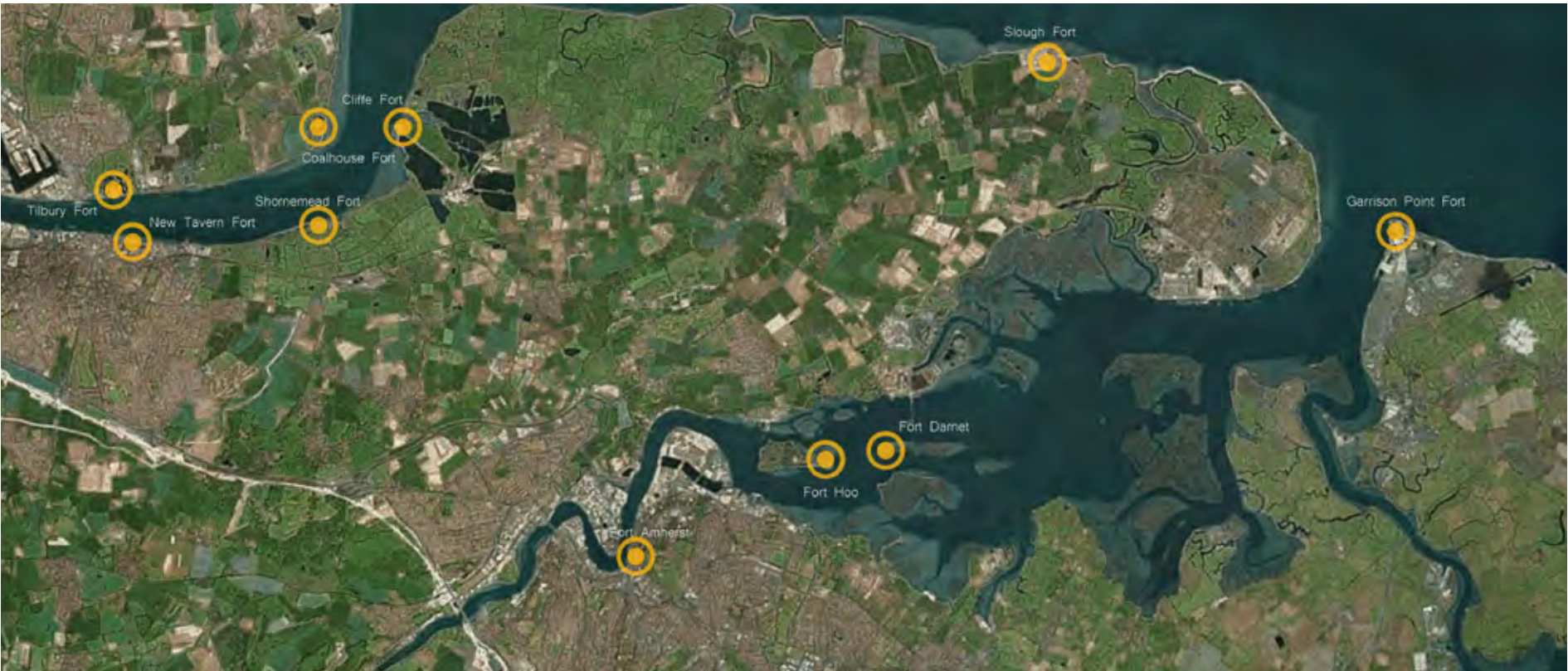


Diagram of Thames and Medway defences



Tilbury Fort - 5 sided geometric form and a series of dykes and land forms - source: Bing maps



Coalhouse Fort - blockhouse with dyke - source: Google maps



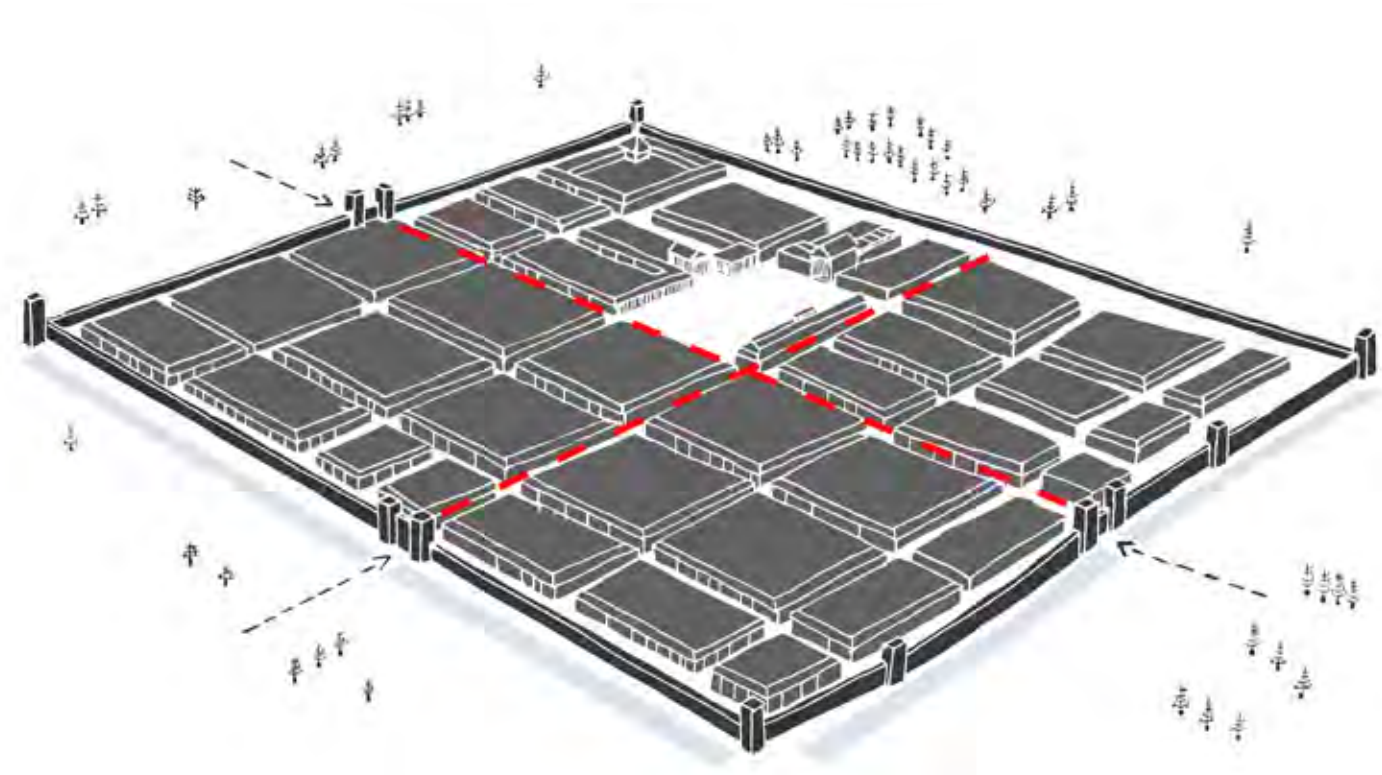
# Learning from defined settlements: Watling Street and Roman defined settlements

In Roman times, Watling Street connected Chester with London and then ran onto Canterbury and Dover via a Roman settlement at Springhead known as Vagniacae (the name signifies marshy ground), at the source of the Ebbsfleet river, and Rochester, known as Durobrivae (meaning fort or walled town). The Fleet river strategically linked Vagniacae with the river Thames at Northfleet, and Northfleet was also the site of a Roman Villa.

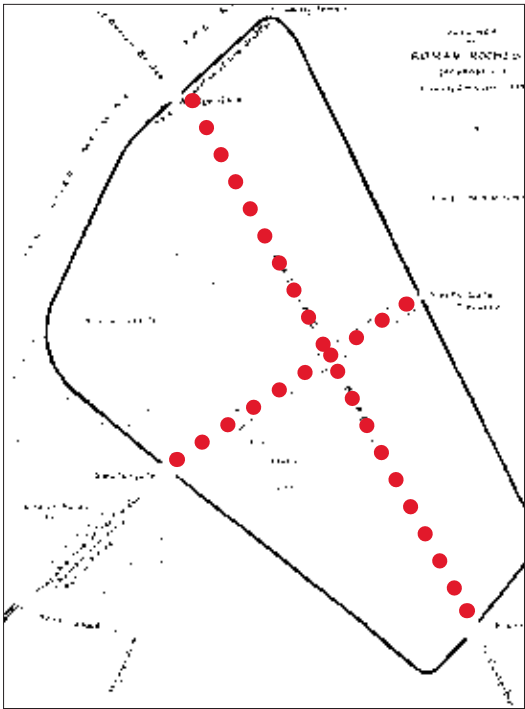
Vagniacae surrounded a pool formed from eight natural springs. The site had a large number of temples, together with various buildings used for trade. A substantial ditch defined an exclusion zone around the settlement and a ceremonial way most probably led to the springs.

Rochester was strategically placed at the lowest point on the Medway to bridge Watling Street. This was significant to Rochester's development and function up to and including the arrival of the railway and commercial shipping.

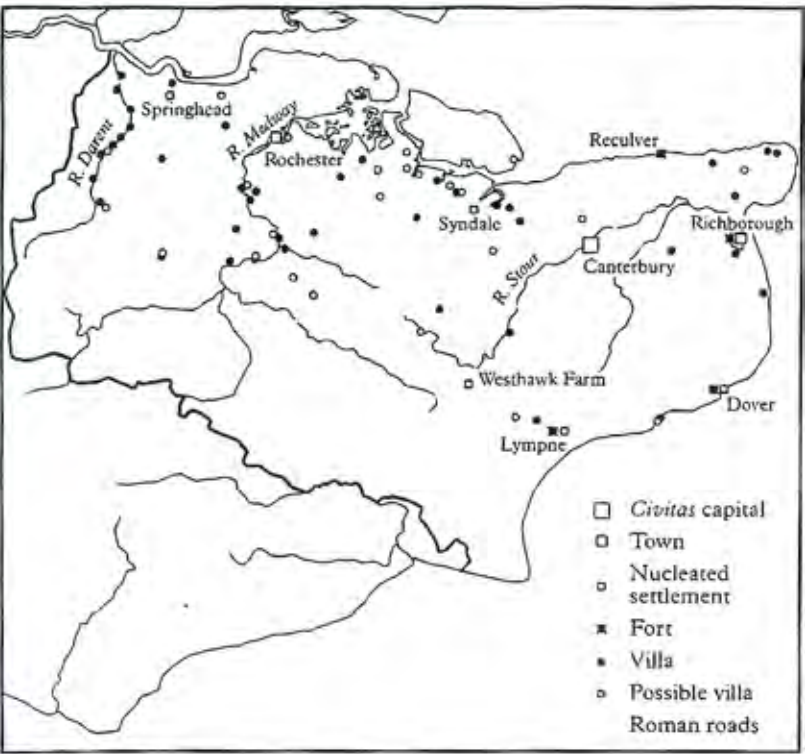
The general plan of Roman Rochester follows that of many large Roman towns; comprising two principal streets crossing at right angles to each other and exiting through gates on the four main sides of the city's defensive circuit.



A typical Roman settlement



Rochester - Roman Durobrivae ,  
Archaeologia Cantiana Vol. 21 1895



Roman Watling Street & associated settlements, take from  
Kent: West and the Weald, John Newman.



The Roman settlement of Springhead - illustration by  
Donato Spedaliere (in collaboration with G. L. A Albertini, S.  
S. Spedaliere



Roman marble found at  
Springhead



# Learning from defined settlements: Gravesend- historic town of fine grain streets

Gravesend lies immediately to the north of Watling Street. Its geographical situation has given Gravesend strategic importance throughout the maritime and communications history of South East England. The location of Gravesend is at a point where the lowest slope of the North Downs reaches the river bank. To the east are the low-lying Shorne Marshes; to the west, beyond Northfleet, the Swanscombe Marshes. The settlement established because it was a good landing place and sheltered by the prominent height of Windmill Hill. The Domesday Book recorded mills, hithes, and fisheries here.

Through observations of the morphology of this historic waterfront settlement, what is particularly noticeable is the orthogonal form of the original town. Historic maps of Gravesend (right), show a strong defined 'square' of development on the river frontage, bounded by Darnley Road to the west, Wellington Street and Milton Lane to the east and Trafalgar Road to the south.

The streets within this orthogonal built form, are fine grained. The pedestrianised high street is 3-4 storeys high with a width of around 7m with close grain shop fronts with apartments above providing a sense of enclosure and encouraging community engagement. Harman Street in contrast is more formal with uniform frontages, a clock tower and is slightly wider at around 13m. Both streets end with a pier.



Formal designs for Gravesend



Gravesend 1860 © Crown copyright and Landmark Information Group Limited 2018. All rights



High Street



High Street



Harman Street - with continuous painted articulation line giving a strong horizontal expression to the street



Learning from defined settlements:  
Gravesend - historic town fine grain streets



High Street - 3 storeys plus attic storey - mixed used ground level



High Street - horizontal boarding



Alley way from the High Street



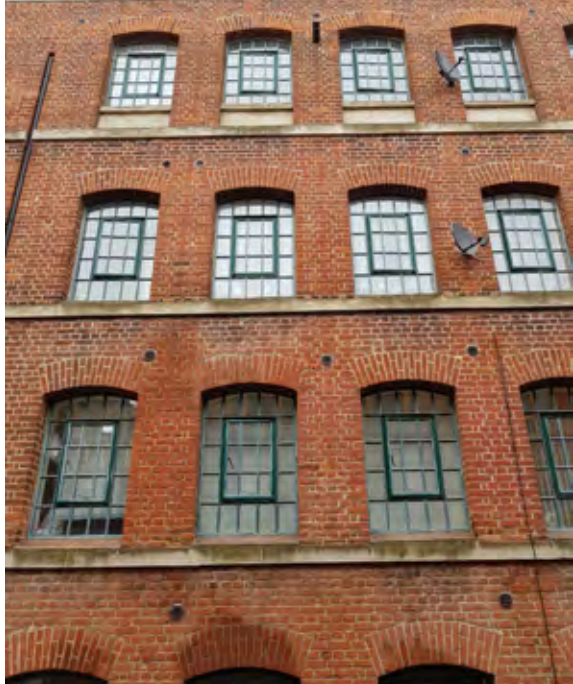
Commercial Place - gable and bay profile



Black plinth



Red brick and pale bath stone



Warehouse - storeys high-lighted with continuous stone articulation

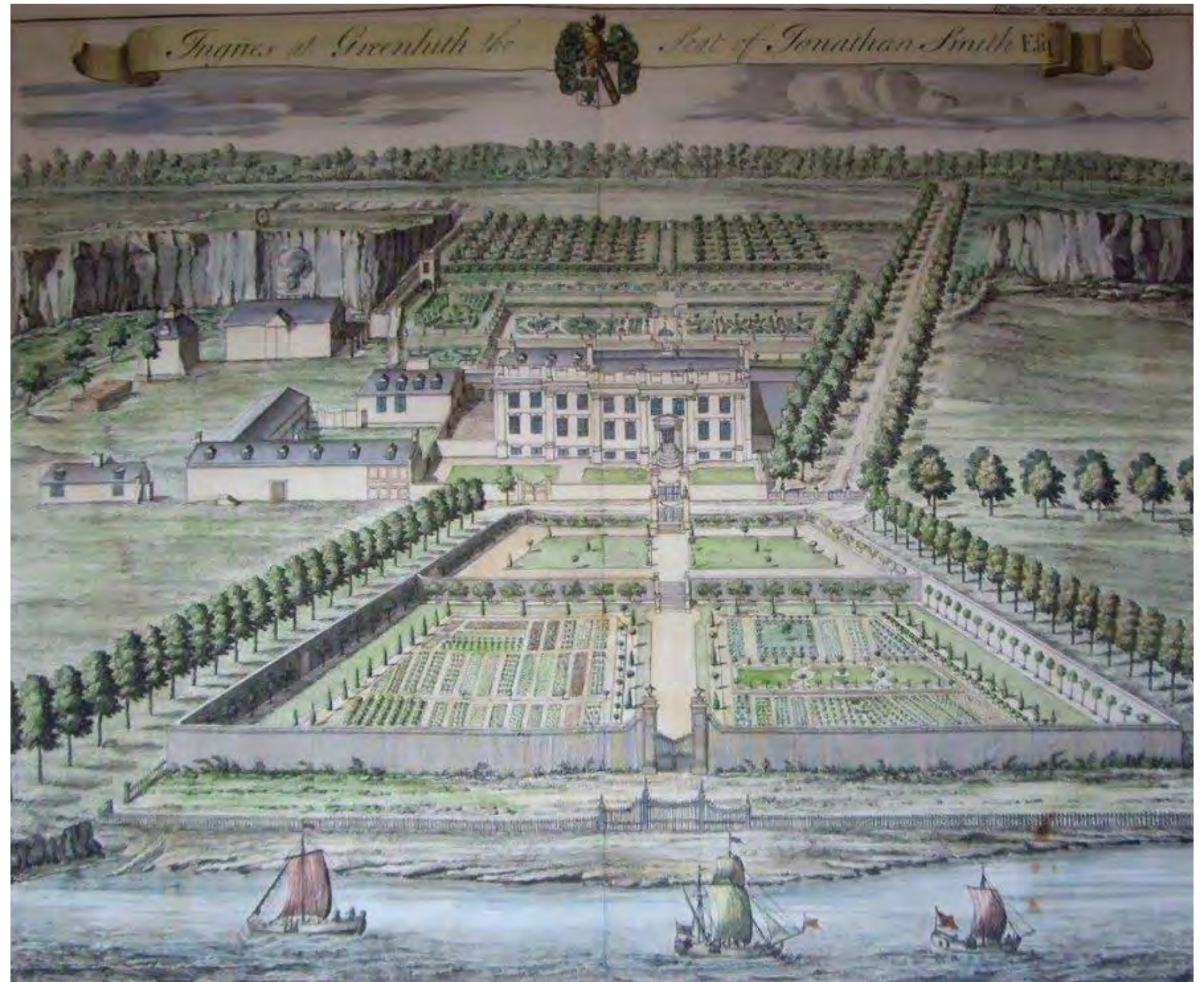


## Learning from defined settlements: Historic and contemporary examples: Ingress Park and Bluewater

Ingress Park is a local historic example of a defined settlement. An early engraving of the home of Jonathan Smith, shows a structured landscape of long tree lined avenues, orchards and walled gardens with a backdrop of chalk cliff to the 'high ground'. This defined orthogonal form within the wild marshland setting, offers an intriguing precedent for future developments.

The Ingress Estate was a seat (manor) in the hamlet of Greenhithe. In 1363 the manor was endowed upon the Prioress and Abbey of the Dominican Sisters in Dartford by Edward III (1307–1377) until the Dissolution of the Monasteries under King Henry VIII of England. The current Tudor-gothic-style mansion, Ingress Abbey, was constructed in 1833.

Bluewater is an example of a contemporary defined settlement; defined and contained by water and the surrounding chalk escarpments.





# Summary of Analysis: key drivers for a distinctive urban form, architectural language and materials & detailing

There are key built form and structure (morphological) characteristics or narratives, that can be identified within each of the settlements analysed: characteristics which should become the focus for new developments within the Ebbsfleet defined area.

Four distinct areas (which generally relate to specific topographical conditions) have been identified. It is envisaged that the characteristics identified below will be deployed as guiding precedents in the evolution of a language for each distinct area within Ebbsfleet.

## Urban Form:

- Lower tier residential streets to be 7-12m
- Hierarchy of memorable streets
- Permeability to the River Thames
- Lanes / mews
- A fine grain
- Defined settlement edge
- Defined orthogonal settlement form
- North-south / east- west road hierarchy
- ‘Market square / forum’ at the road intersection
- Combination of natural and man-made landscape
- Settlement defined by water
- Geometric form to the settlement
- Buildings around a courtyard ‘almshouse’ typology and Farm Courts

## Architectural Language:

- Plinths - at level change, entrances, gateways & corners
- Twin gable roof form
- Gables onto the street
- Yards
- Jettied gables - porch or semi private space
- Low sloping pitch roofs
- Irregular window openings
- Irregular bay windows
- Ridge silhouette articulated buildings / towers
- Warehouse / wharf / kiln roof forms
- Fleets & slip forms
- Rooms in the roof

## Materials & detailing:

- White timber horizontal boarding
- Black horizontal timber boarding
- Contrasting warm red bricks
- Contrasting material colours: white / red / black - emphasising horizontally and verticality
- Contrasting window surrounds
- Industrial aesthetic: verticality and deep reveal creating shadows
- Broad framed windows





# 3. Design Narratives

Introduction

'The Coombe' narrative

'The Defined Settlement' narrative

'The Fleet / Hithe' narrative

'The Marsh' narrative



# Introducing the design narratives: The Coombe, The Defined Settlement, The Fleet / Hithe & The Marsh

The following section sets out four design narratives, each of which has been developed to respond to the specific topographical characteristics of an area of Ebbsfleet, and the themes investigated in the analysis section.

The intention is to illustrate how the cultural heritage and landscape of the Ebbsfleet area can be interpreted into design principles for the urban structures, architectures and built form to instil a distinctive character into Ebbsfleet new neighbourhoods.

Kentish landscape terms and local place names derived from the topographical features are used to define the design narratives and influence the grain of new development areas, residential, mixed use and civic typologies:

Design teams are invited to use these narratives as a creative springboard for their own development within the specific conditions of their project, or use the methodology illustrated within this study to develop additional design narratives derived from the study of the local context.

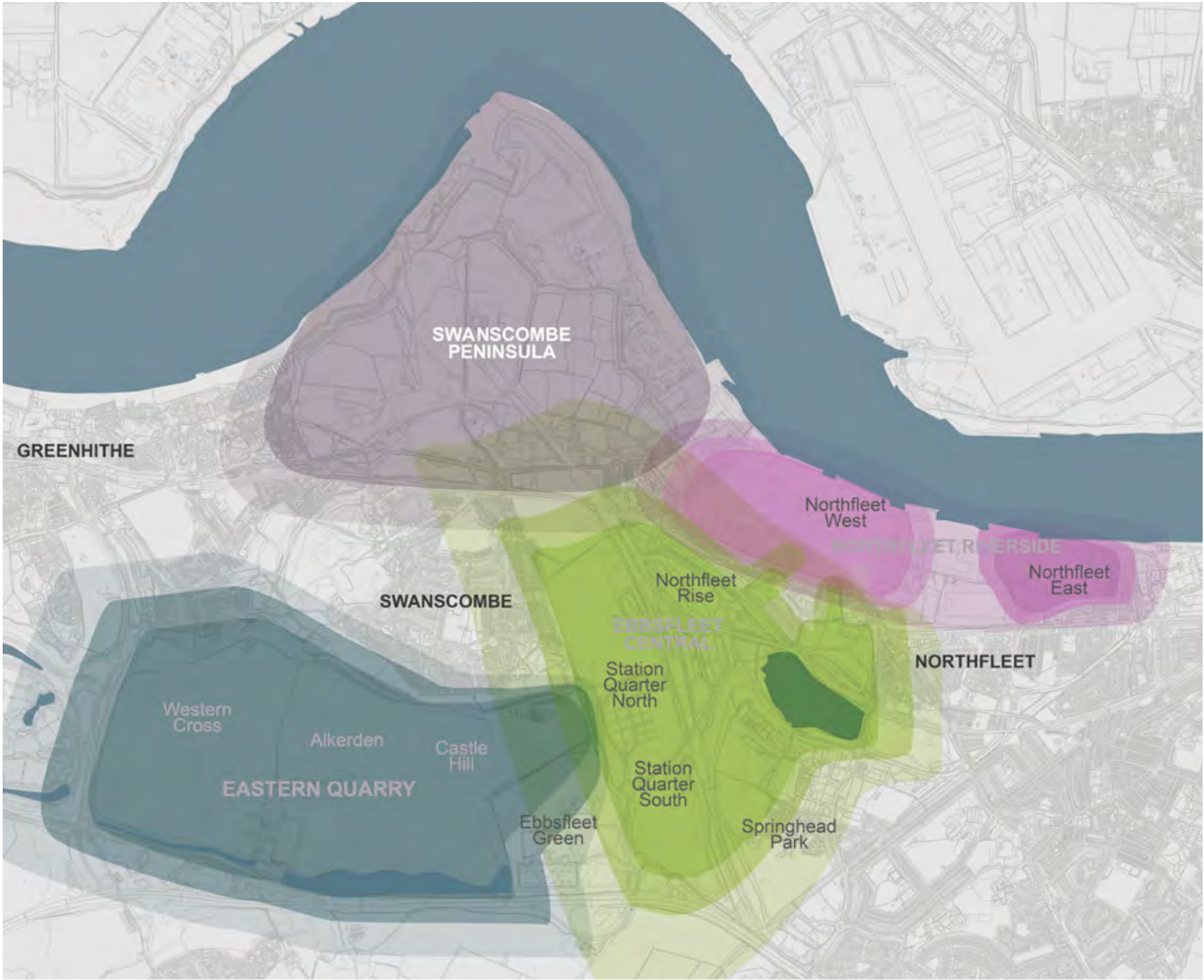
- Eastern Quarry is characterised by surrounding chalk cliffs and the range of gradients sloping down to the lakes on the southern boundary:
- Ebbsfleet Central sits on south and eastward facing slopes that lead down to the Ebbsfleet River valley.
- Northfleet is surrounded by chalk cliffs with the Thames to the north and Robin’s Creek to the west.

THE COOMBE

THE DEFINED SETTLEMENT

THE FLEET / HITHE

THE MARSH



The map above provides a general indication of where the narratives should be applied within the Ebbsfleet area. All narratives should be developed to align with principles set out within existing planning permissions for that area.



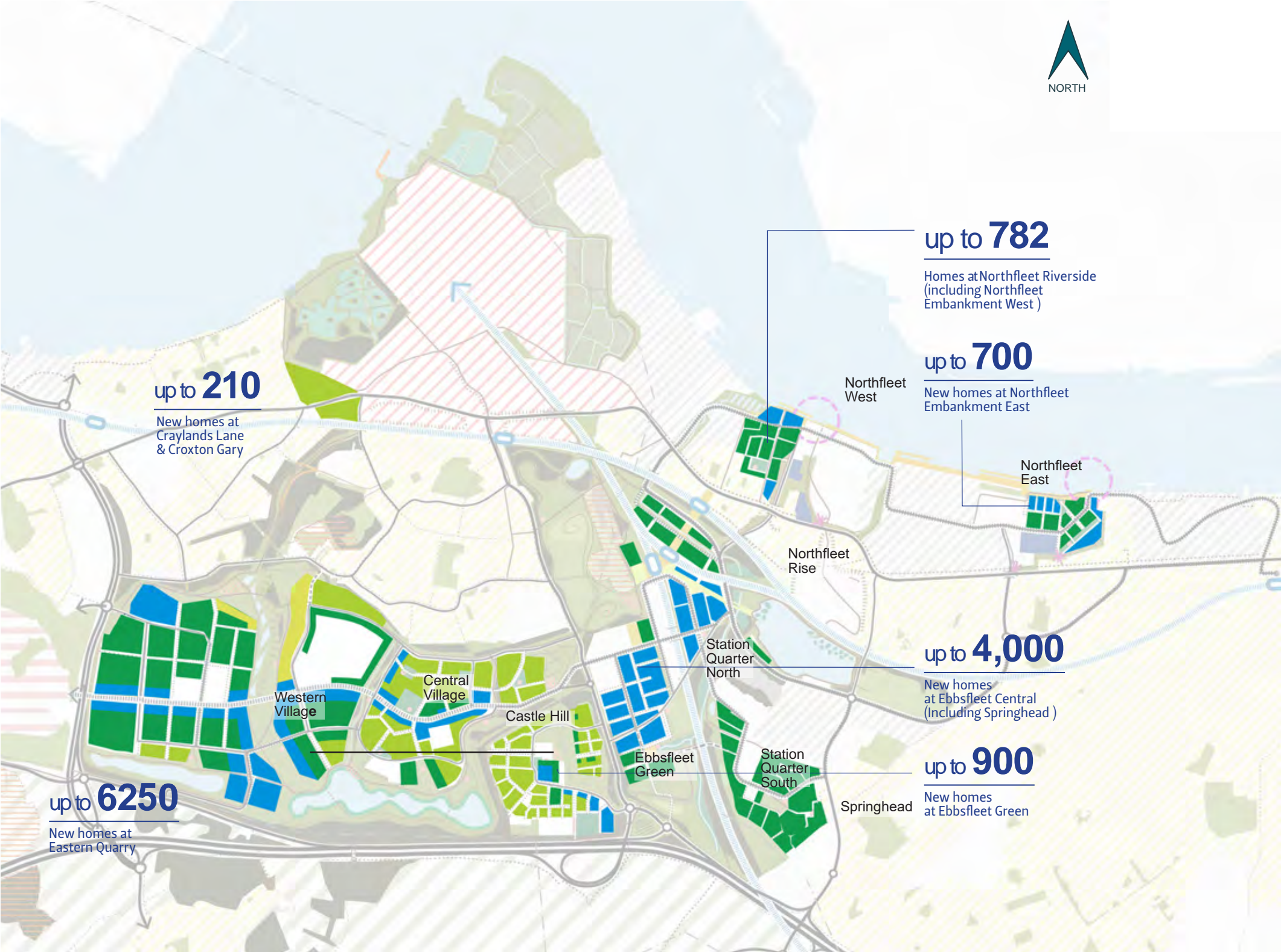
# Design narratives: relationship to the Ebbsfleet Implementation Framework

Each narrative has been defined by a set of principles for the urban structure and built form, which are then illustrated using diagrams and sketches to provide an interpretation of the principles.

The development blocks, building types and housing typologies illustrated in the diagrams have been developed to align with the density bands set-out in the existing planning permissions. The diagram to the right illustrates these densities within the consented schemes for all 10 new neighbourhoods that will form Ebbsfleet Garden City.

## Neighbourhoods and density

- < 30 Dwellings per Hectare (Net)
- 30-50 Dwellings per Hectare (Net)
- 51-90 Dwellings per Hectare (Net)
- 90+ Dwellings per Hectare (Net)





An isometric line drawing of a residential development. It features several houses with gabled roofs and dormer windows. Some houses have multiple stories. In the foreground, there are two cars parked on a street, with dashed lines indicating their movement or parking spots. A person is standing near the cars. In the background, there are more houses and a cluster of trees. The overall style is simple and illustrative.

## 3.2 NARRATIVE: The Coombe

EASTERN QUARRY

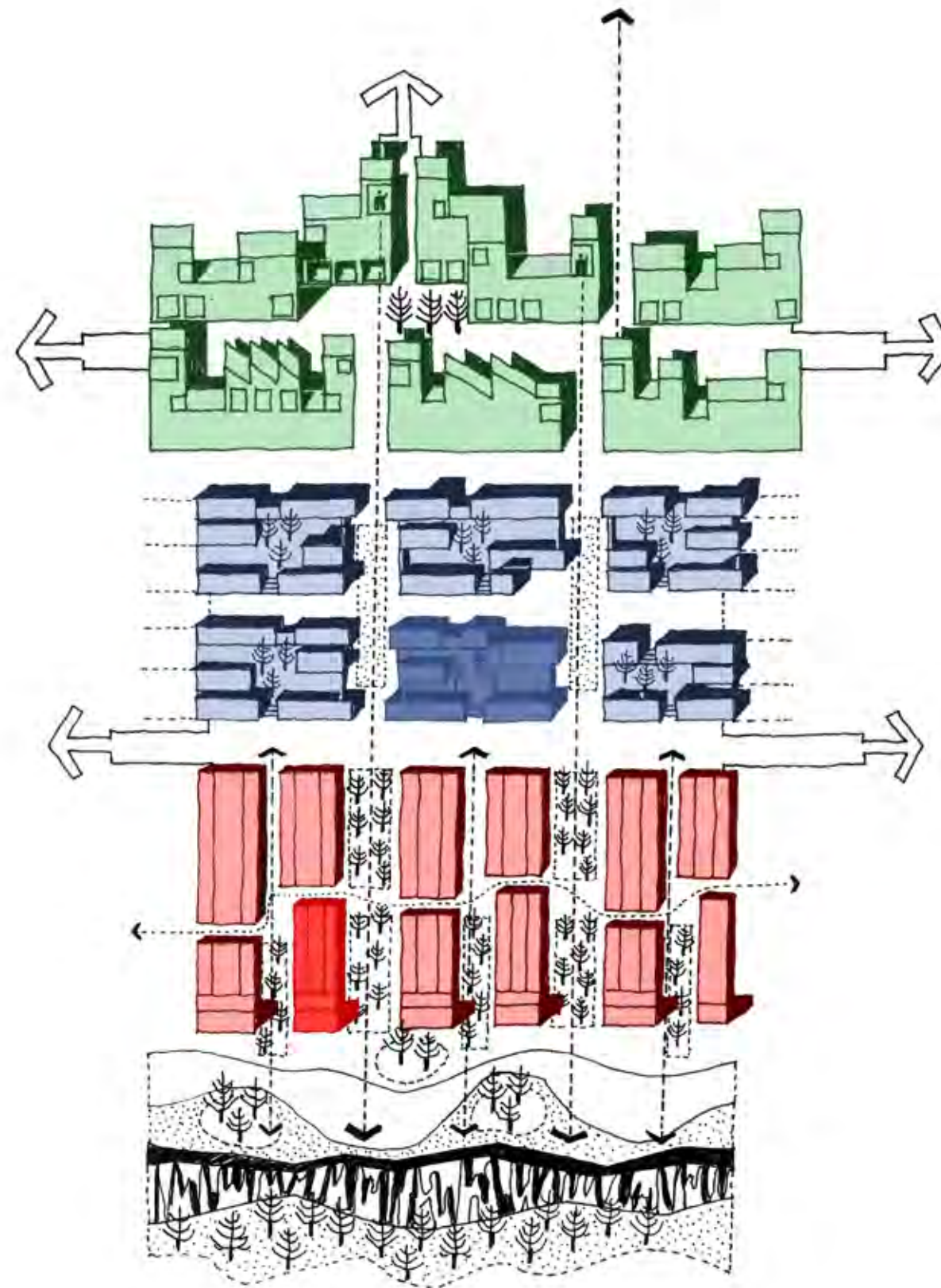


## The Coombe: Urban form - 'The Scarp', 'The Pinch' & 'The Pent'

The Coombe design narrative has been developed for the landscapes of the Eastern Quarry, which are characterised by surrounding chalk cliffs and a range of gradients sloping down to the lakes on the southern boundary.

The Coombe narratives have been informed by the analysis of the urban morphology of local villages at the boundary of chalk slopes and local rivers and marshland, and the industrial architectures of the cement works.

The diagram to the right illustrates how the Coombe narrative has been developed further into three sub-narratives ('the Scarp', 'the Pinch' and 'the Pent'), each one responding to a different type of slope, to demonstrate how housing types, car parking approaches and associated densities can respond to the differences in topography to create defined character areas.



### 'THE SCARP' for use on ridge line

- Express verticality of mass on the high ground
- An articulated silhouette and skyline

### 'THE PINCH' for steep slopes

- Accentuate topography with linear grain following the contours
- Fewer but strong north south connecting streets
- Focused views to the chalk cliffs maximised by the change in level the topography across the lake
- Hidden courts and less structured housing clusters

### 'THE PENT' for lower gentle slopes

- Maximise permeability from pinch to chalk cliffs
- Fine grain perpendicular to principal road network
- Introduction of green grain of 'tolls' and 'roughets'
- Capture and maximise dramatic views from pinch to the lake and chalk cliffs
- Meandering east west routes - secondary the grain direction
- Long low buildings as a counterpoint to the verticality of the chalk cliffs

The diagram to the right illustrates the urban structure design principles.



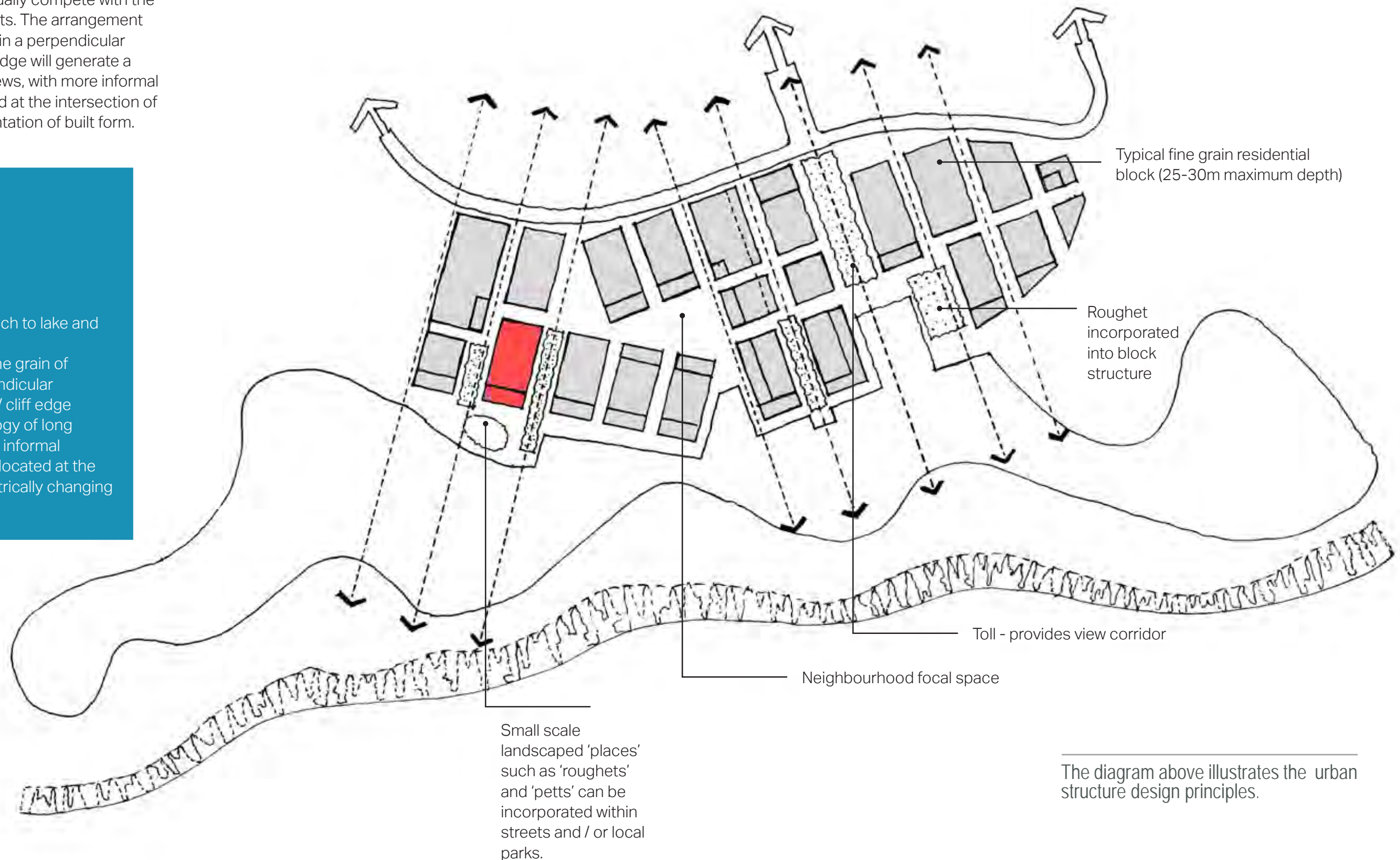
## The Coombe: 'The Pent' urban form

**'The Pent' is located on the low gentle slopes near the base of the chalk cliffs.**

The urban form should not visually compete with the drama of the chalk escarpments. The arrangement of a fine grain of development in a perpendicular alignment to the quarry / cliff edge will generate a morphology of long framed views, with more informal neighbourhood spaces located at the intersection of a geometrically changing orientation of built form.

### 'THE PENT' Urban form:

- Fine grain
- Strong north south permeability
- Captured views from pinch to lake and chalk cliffs
- The arrangement of a fine grain of development in a perpendicular alignment to the quarry / cliff edge will generate a morphology of long framed views, with more informal neighbourhood spaces located at the intersection of a geometrically changing orientation of built form



The diagram above illustrates the urban structure design principles.



## The Coombe: 'The Pent' architectural language

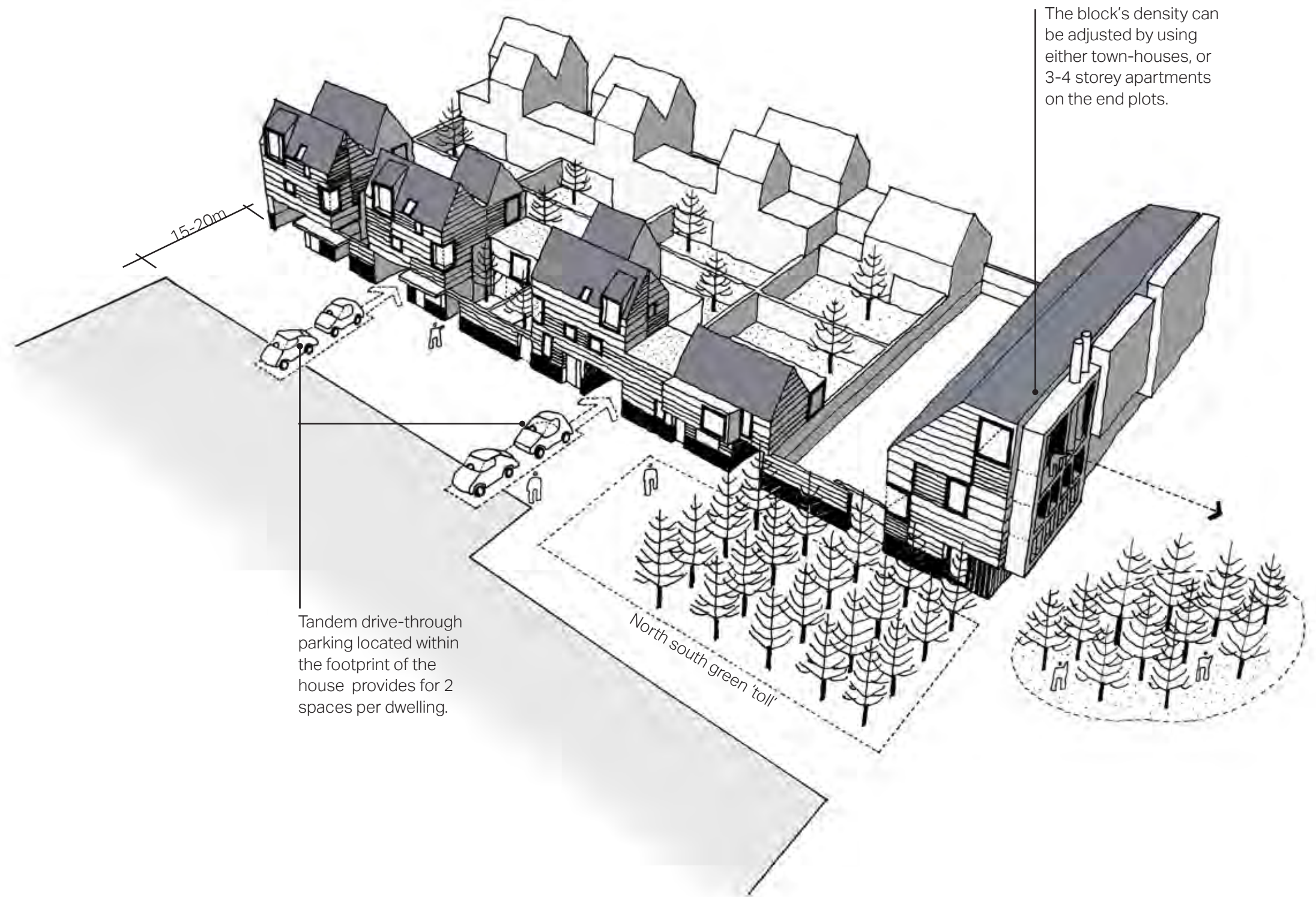
The architectural language of a typical housing block should relate to the backdrop of the white chalk cliffs, and have a strong horizontal emphasis as a counterpoint to the tall chalk cliffs. This should be a contemporary interpretation of historic Kentish forms. Parking to be integrated within the housing typologies.

The 'urban clusters' should deliver a range of housing types within each block, within a fine grain with block widths of between 25-30m, and roads of minimum width to accommodate limited car movements but to discourage on-street unofficial parking.

At the termination of the fine grain clusters the architectural language should change, making reference to the heavily modelled language of the industrial heritage of the cement working - an architecture of deep shaded reveals and simple framed assemblages.

### 'THE PENT' Architectural language:

- 30-50 dwellings per hectare
- Typical fine grain clusters of maximum 25-30m blocks width
- Roof profile reinforcing grain
- Kent town gable 'motif'
- Predominantly 2/3 storeys with taller buildings facing cliffs
- A white architecture with horizontal emphasis
- Black/dark plinth to all buildings
- 'Random' arrangement to windows on principal facades
- Edge buildings facing cliffs with 'industrial' scale and components
- In line parking to minimise impact on streets and green 'tolls'
- North / south tolls approx 15m width
- East / west lanes and other north south streets typically 7 -12m width
- Jettying to linear buildings





The Coombe: 'The Pent' references from the analysis

Longhouses with masonry plinth



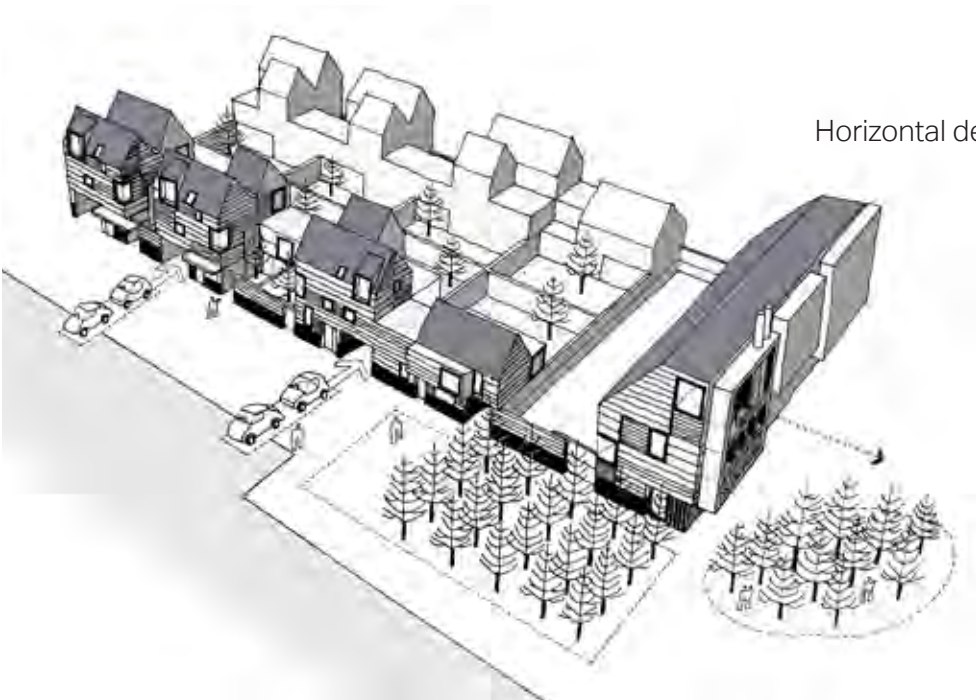
Random window composition



Twin gables



Horizontal detailing



Industrial detailing



## The Coombe: 'The Pent' contemporary architectural language, materials & detailing

### 'THE PENT' Materials & detailing

- The lower rise 'pent' on the settlement edge is composed of white boarding with dark blue, grey or black plinths and window surrounds
- The 4 storey end to the block facing the cliffs contains deep reveals generating dark shadows - a reference to the industrial heritage of the cement and paper industries





## The Coombe: 'The Pinch' urban form

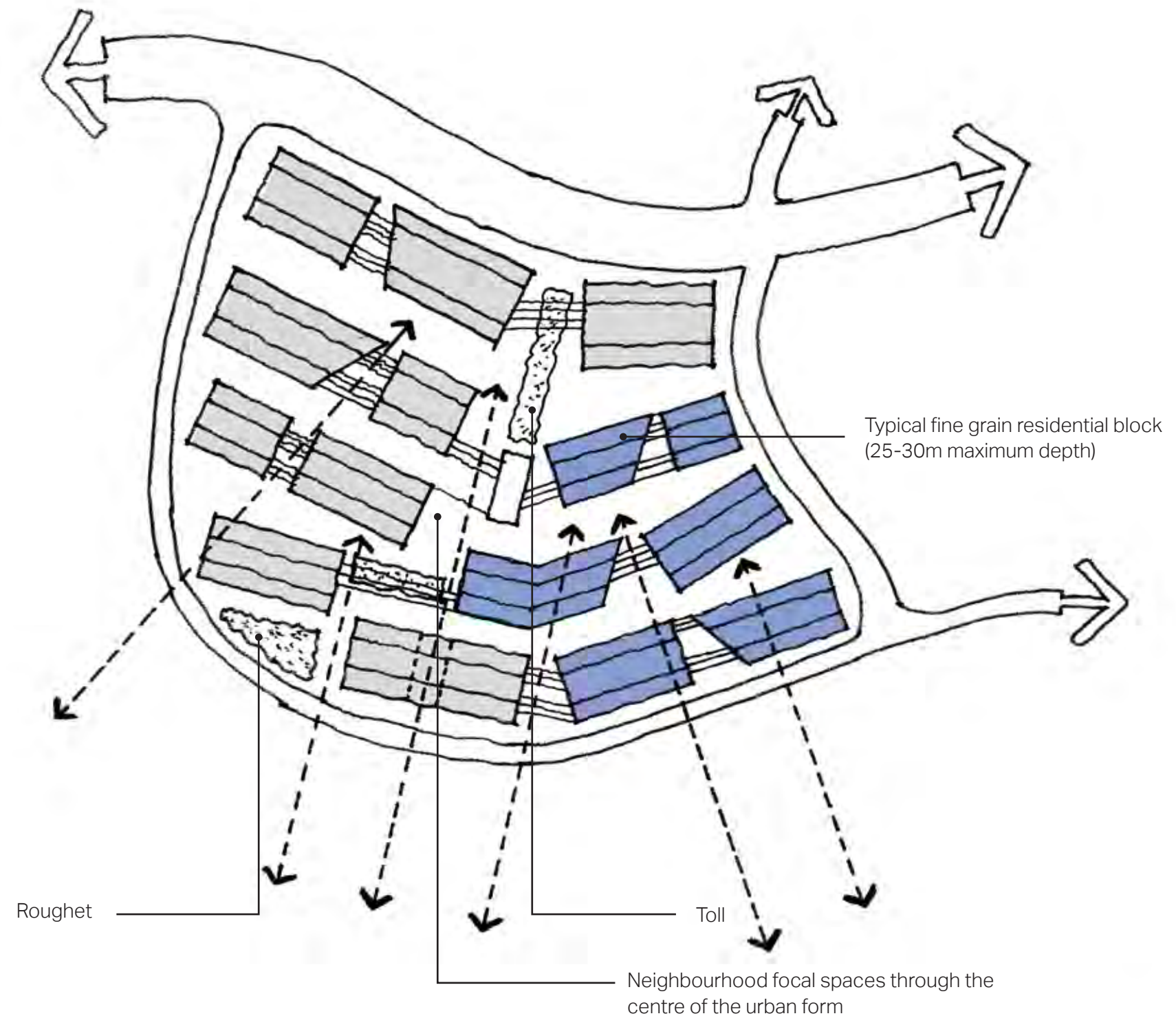
**'The Pinch' is located on the steeper slopes between 'the scarp' ridge and the shallow topography of 'The Pents'.**

The urban form should relate to the sloping topography, with a grain of development aligned in parallel with the contours. Views across the slopes towards the lake and chalk cliffs should be maximised from all dwellings. This should generate an architecture of projecting bays, which should dominate the architectural expression of this neighbourhood quarter.

The diagram to the right illustrates the urban structure design principles.

### 'THE PINCH' Urban form:

- Grain aligned to contours
- Key north/ south movement crossing contours
- Secondary north/ south meandering routes emphasising topography
- Stepped views across rooftops to chalk cliffs and pent clusters
- A shaped surface focus to housing clusters



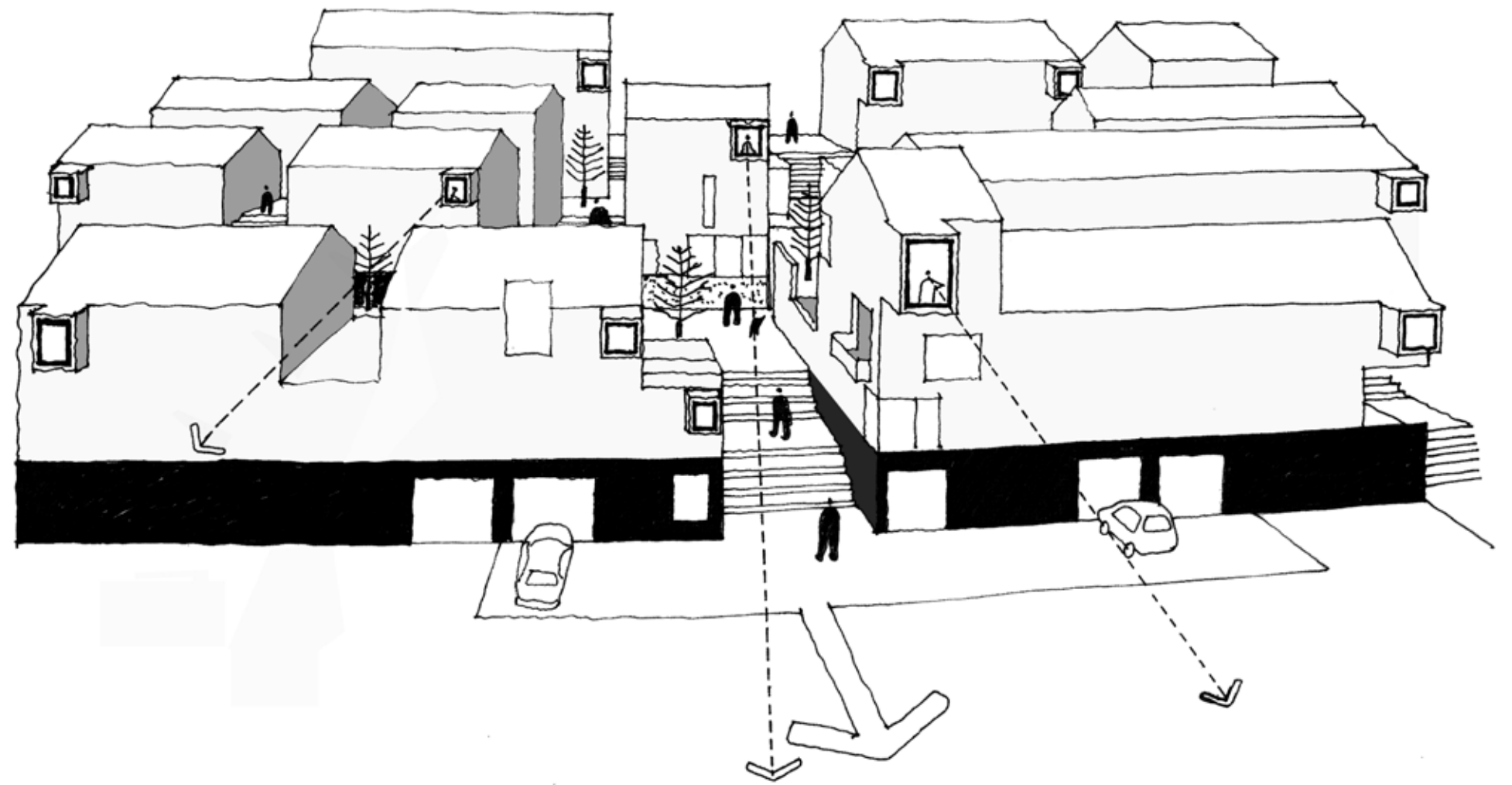


## The Coombe: 'The Pinch' architectural language

'The Pinch' is located on the steeper slopes which look down towards the chalk cliffs. The architectural language should relate to the sloping topography. Like many of the local historic examples; the grain of developments should be aligned along the contours. Views down the slopes towards the lake and cliffs should be maximised. This may generate a specific architectural vocabulary of projecting bays and large upper windows which capture views across the roof tops to the chalk cliffs beyond. Parking to be integrated within the building plinths and incorporated within the steep topography of the site.

### 'THE PINCH' Architectural language:

- 30-50 dwellings per hectare
- Roof profile aligned with contours
- Long 'house' configuration
- High density cluster (60-80dph)
- Shared surface 'mews address' clusters
- Architectural 'motif' - projecting bay to capture rooftop views of chalk cliffs
- Cutting out of the slope to be utilised for parking





The Coombe: 'The Pinch' references from the analysis

Longhouses with masonry plinth



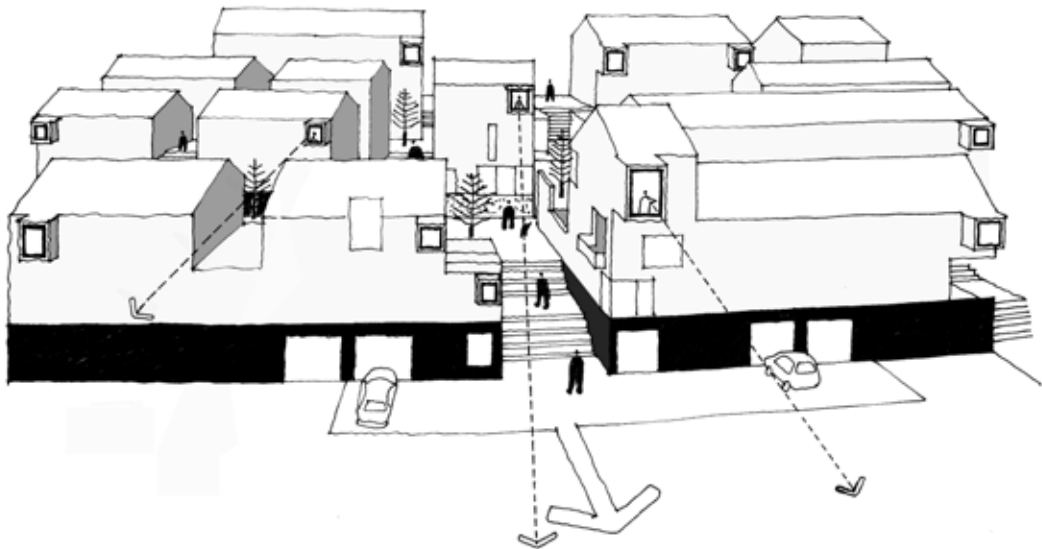
Random opening composition



Plinths, yards & projecting bays



Bay window feature



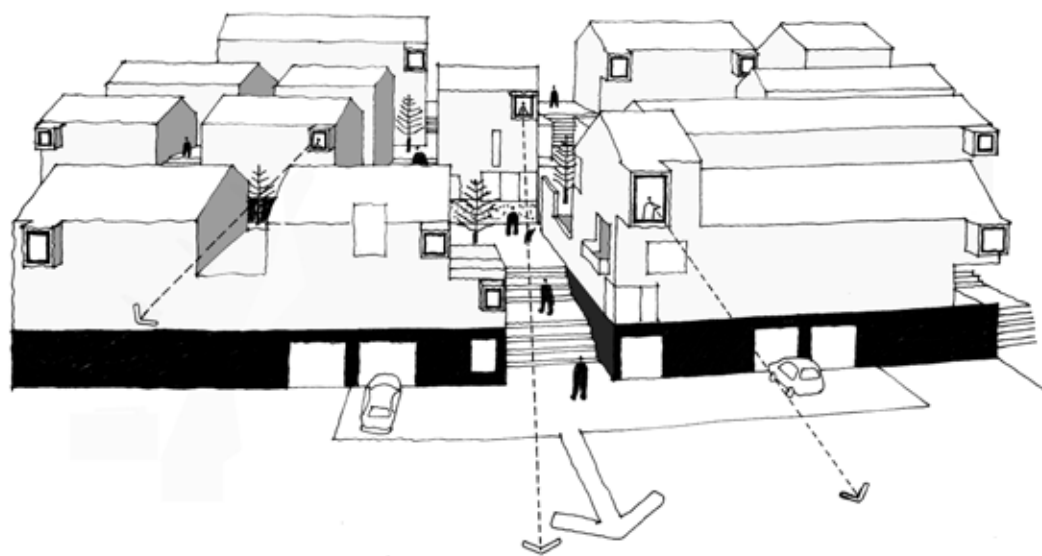


## The Coombe: 'The Pinch' contemporary architectural language, materials & detailing

### 'THE PINCH'

Materials & detailing:

- The pinch is composed of a dark blue/grey / black plinths to deal with the steeper level changes and to make a feature of this
- The buildings above are white in reference to the chalk cliffs
- Projecting bay and upper level windows should be dominant in the architectural composition of each home with articulated window surrounds in a dark colour palette
- Projecting bays positioned to take advantage of the views towards the cliffs should be a characteristic of this particular area

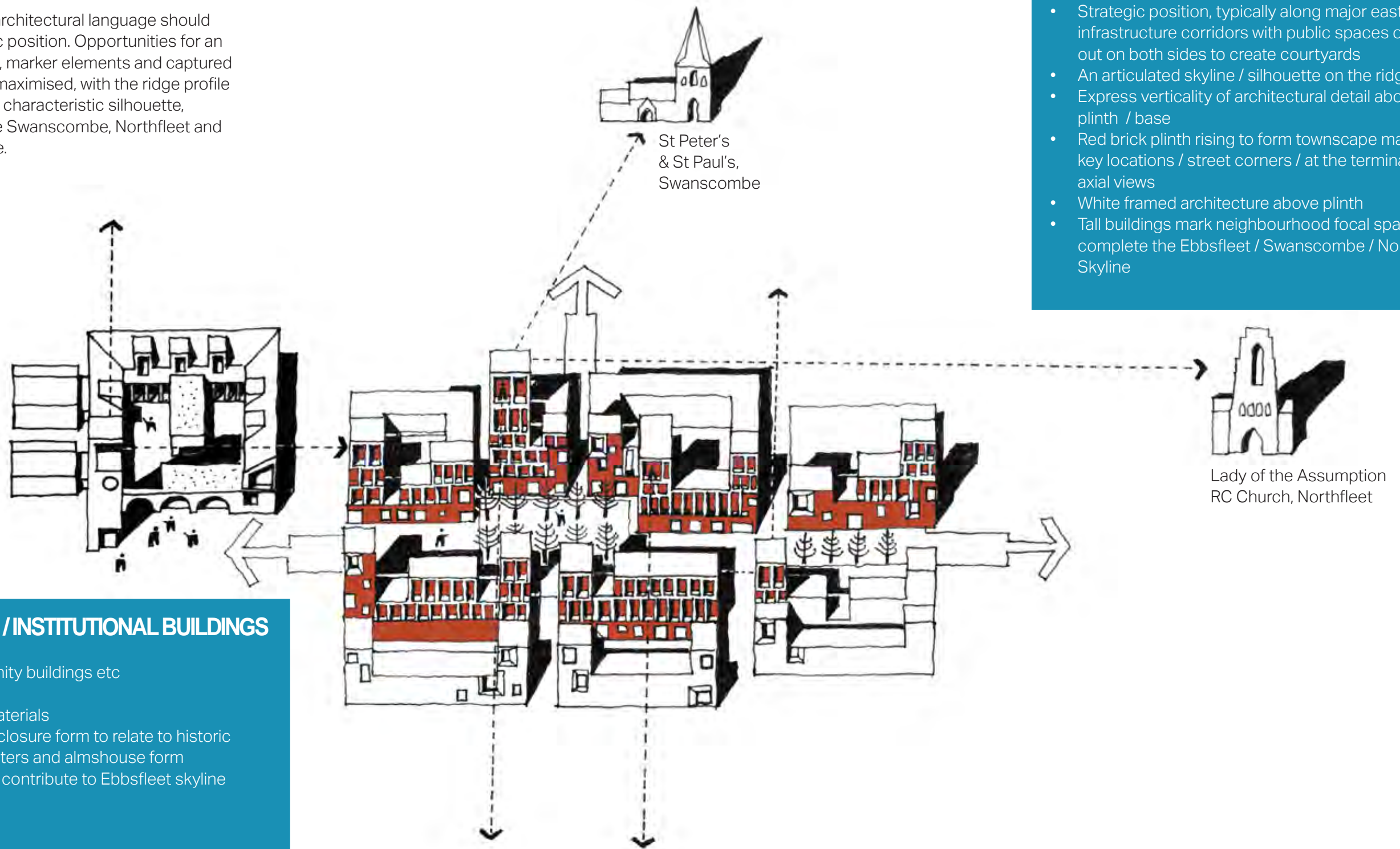




## The Coombe: 'The Scarp' urban form and architectural language

**'The Scarp' is located on the ridge or upper slopes farthest away from the chalk cliffs.**

The urban form and architectural language should relate to this strategic position. Opportunities for an articulated silhouette, marker elements and captured long views are to be maximised, with the ridge profile becoming part of the characteristic silhouette, which commands the Swanscombe, Northfleet and Gravesend landscape.



### 'THE SCARP'

Urban form / architectural language:

- 90+ dwellings per hectare
- Strategic position, typically along major east-west infrastructure corridors with public spaces opening out on both sides to create courtyards
- An articulated skyline / silhouette on the ridge
- Express verticality of architectural detail above a plinth / base
- Red brick plinth rising to form townscape markers in key locations / street corners / at the termination of axial views
- White framed architecture above plinth
- Tall buildings mark neighbourhood focal spaces and complete the Ebbsfleet / Swanscombe / Northfleet Skyline

### CIVIC / PUBLIC / INSTITUTIONAL BUILDINGS

Schools - community buildings etc

- Defined edges
- Contrasting materials
- Courtyard / enclosure form to relate to historic farmstead clusters and almshouse form
- Tall element to contribute to Ebbsfleet skyline silhouette



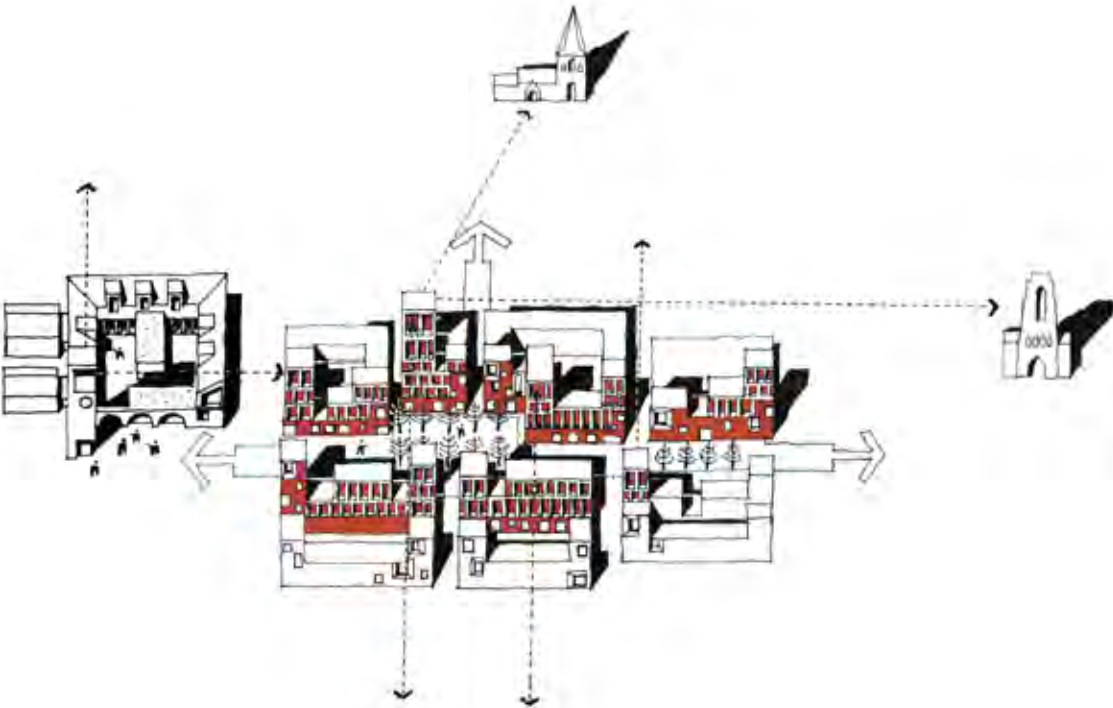
The Coombe: 'The Scarp' references from the analysis

Longhouses with masonry plinth



Red and white contrasting materials

Vertical emphasis to contrasting frame / grid configuration



Marker towers on a ridge



Industrial detailing of deep reveals creating shadows

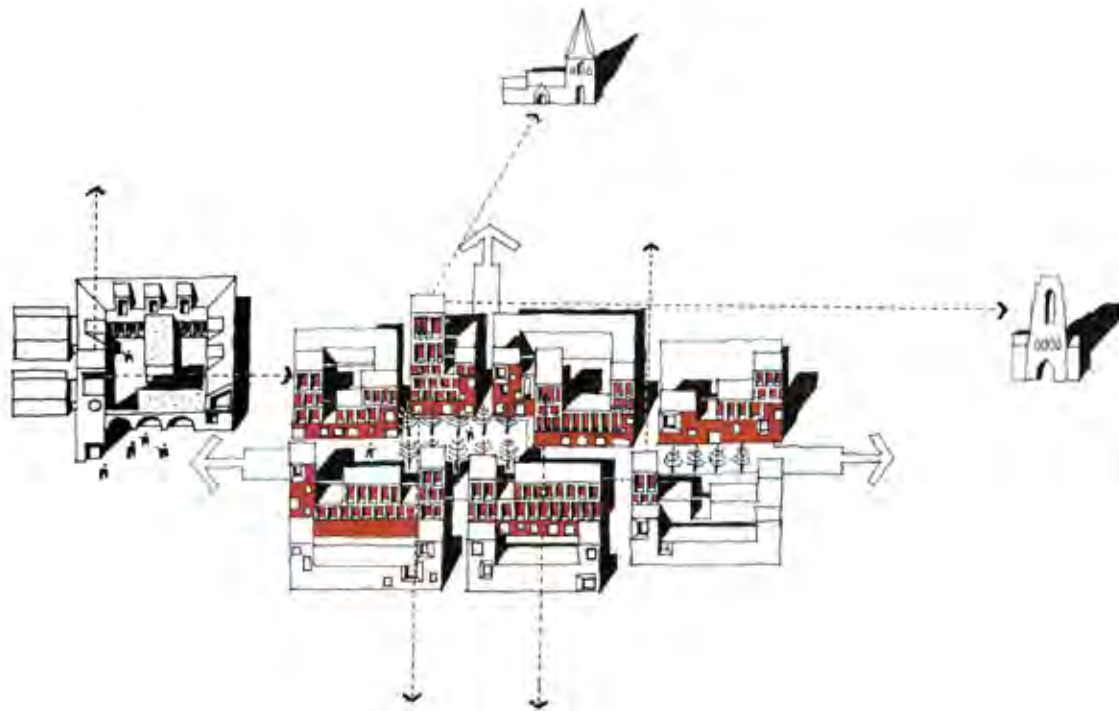
Bay window feature



## The Coombe: 'The Scarp' contemporary architectural language, materials & detailing

### 'THE SCARP' Materials & detailing:

- Opportunities for expressing verticality and delivering a more 'refined' expression of the 'industrial modelled' aesthetic of the lower 'pent' edge architecture.
- The scarp consists of red brick buildings with contrasting white / lighter coloured brick / masonry frames to emphasise verticality
- Large areas of glazing capturing views







### 3.3 NARRATIVE: The Defined Settlement

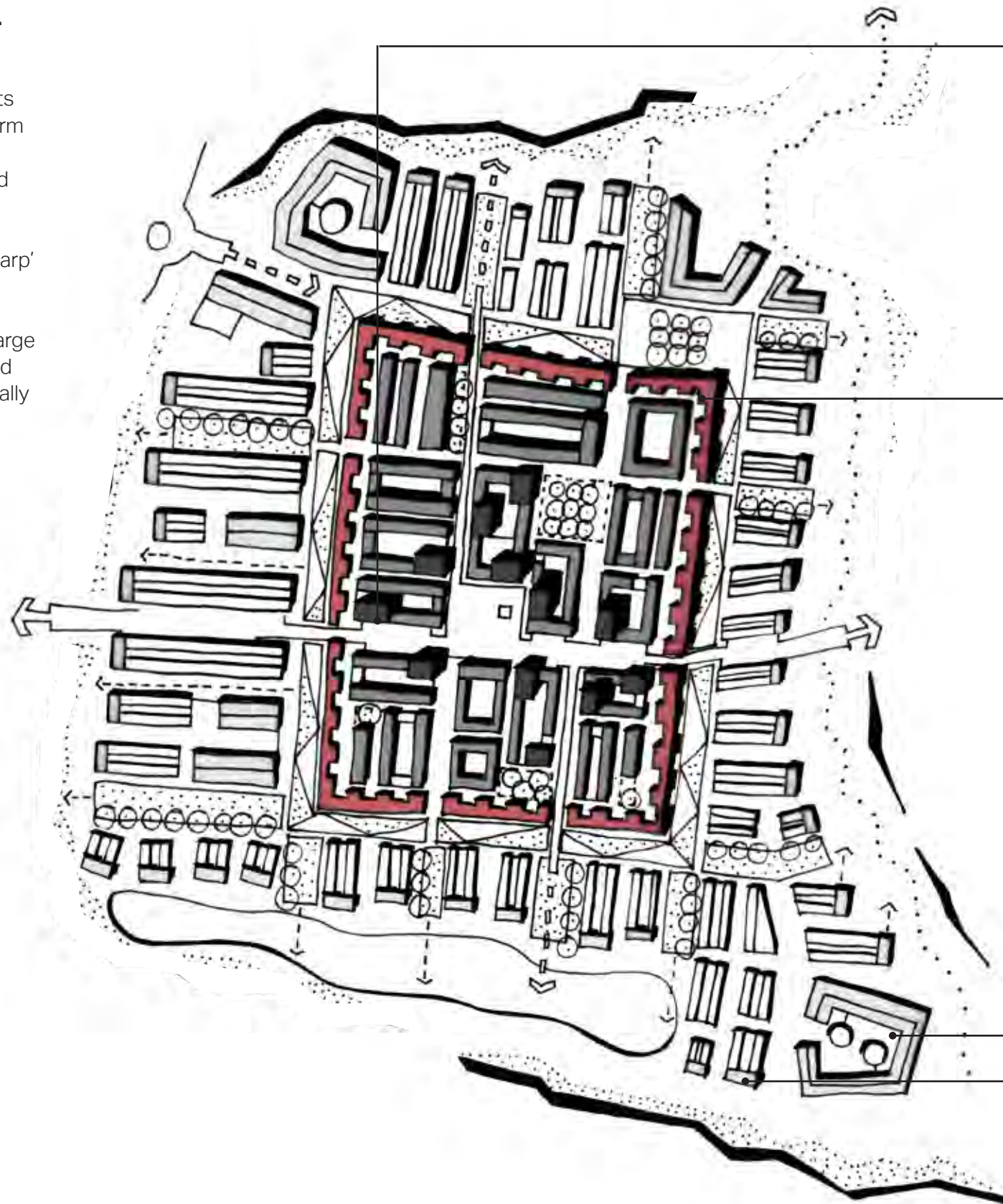


## The Defined Settlement: urban form

**'The Defined Settlement' is to be utilized where new higher density mixed-use neighbourhoods are to be developed.**

The urban form references the clearly defined, structured, historical settlements of the locality: the defined orthogonal form of Gravesend for example. The strong geometries of the Thameside forts could also form a relevant precedent.

Architecturally it should relate to 'The Scarp' as a strategic location within Ebbsfleet. Where chalk cliffs surround the site 'The Pent' typology could be incorporated. Large Civic buildings - such as schools - should follow 'The Farmstead' form that historically sits outside the settlement.



### 'THE DEFINED TOWN'

- Based on a clear north-south & east-west routes
- Higher density apartments buildings and terraces captured within the wall on a gridded block layout
- Apartment blocks with podium gardens over the car-parking to create a 'medieval' grain
- Fine grain street and hard shared surface landscaping

### 'THE NEIGHBOURHOOD EDGE'

- An articulated silhouette and skyline
- Gardens captured within the wall form
- Views through the pent to the cliffs and lakes
- 'Gate-house' marker buildings to define the entrance points to the north-south & east-west routes

### 'THE FARMSTEAD'

- Structured courtyard buildings that sit outside of the defined settlement around a courtyard - Sports / Leisure, Later Living, Community buildings?

### 'THE PENT'

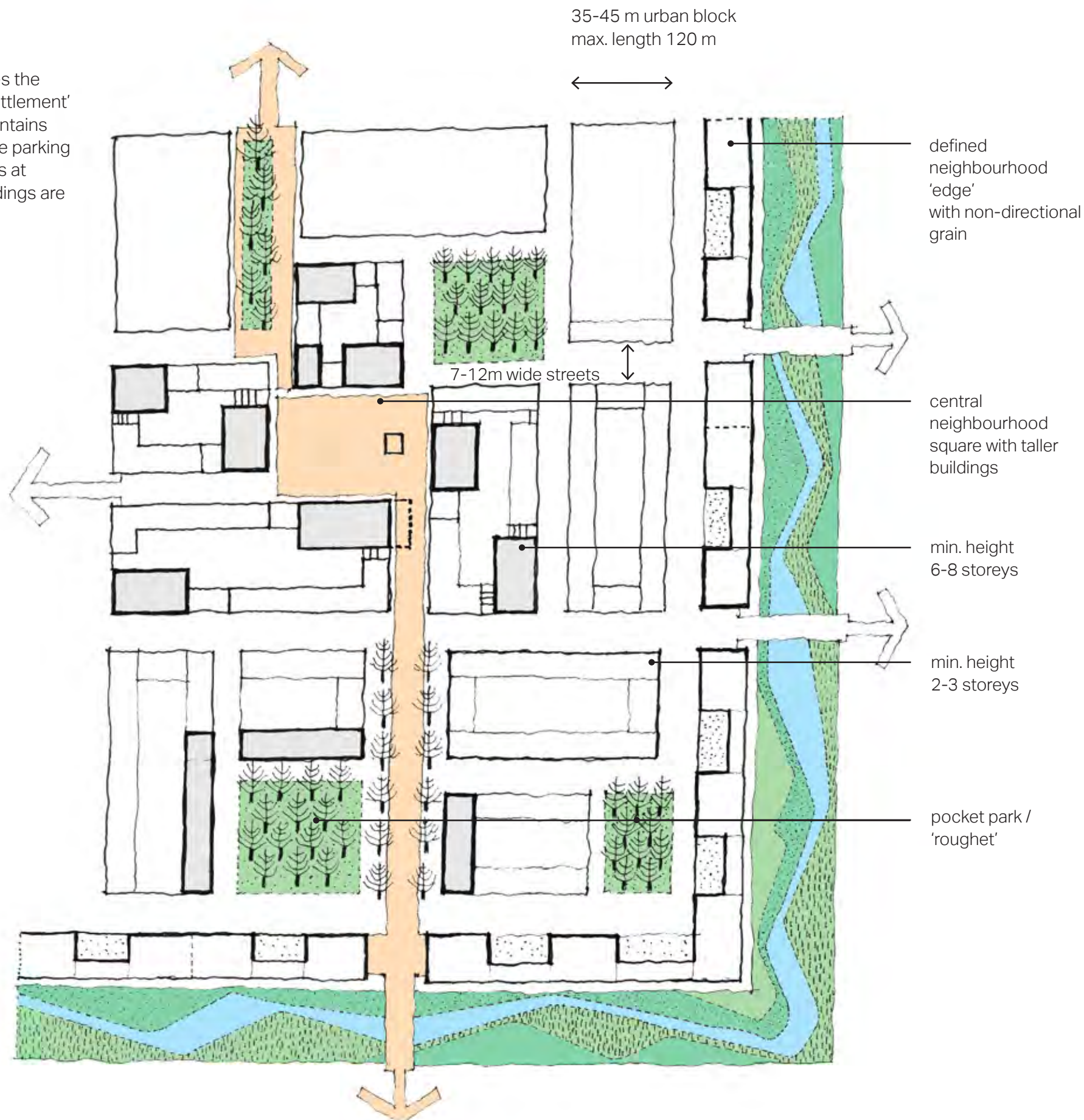
- Maximise permeability from pinch to chalk cliffs
- Fine grain perpendicular to principal road network
- Introduction of green grain of 'tolls' and 'roughets'
- Capture views from pinch to the lake and chalk cliffs
- Meandering north-south routes
- Long low buildings as a counterpoint to chalk cliffs
- Soft landscaping leading to the cliffs, woods and lakes with pocket parks

The diagram to the right illustrates the urban structure design principles.



## The Defined Settlement: urban form in more detail

The diagram to the right illustrates the principles behind the 'defined settlement' urban form. The defined edge contains podium buildings that incorporate parking at ground level with upper storeys at various heights. Streets and buildings are of a fine grain.



### HIGH DENSITY RESIDENTIAL CLUSTERS

#### Urban form:

- Based on a clear north-west & south-east routes
- Higher density apartments buildings and terraces captured within the wall on a gridded block layout
- Apartment blocks with podium gardens over the car parking to create a 'medieval' grain
- Fine grain street and hard landscaping
- 'Roughet' / pocket parks
- Generally minimum height 2-3 storeys
- Some buildings within each podium block are 6-8 storeys

### 'THE NEIGHBOURHOOD EDGE'

#### Urban form:

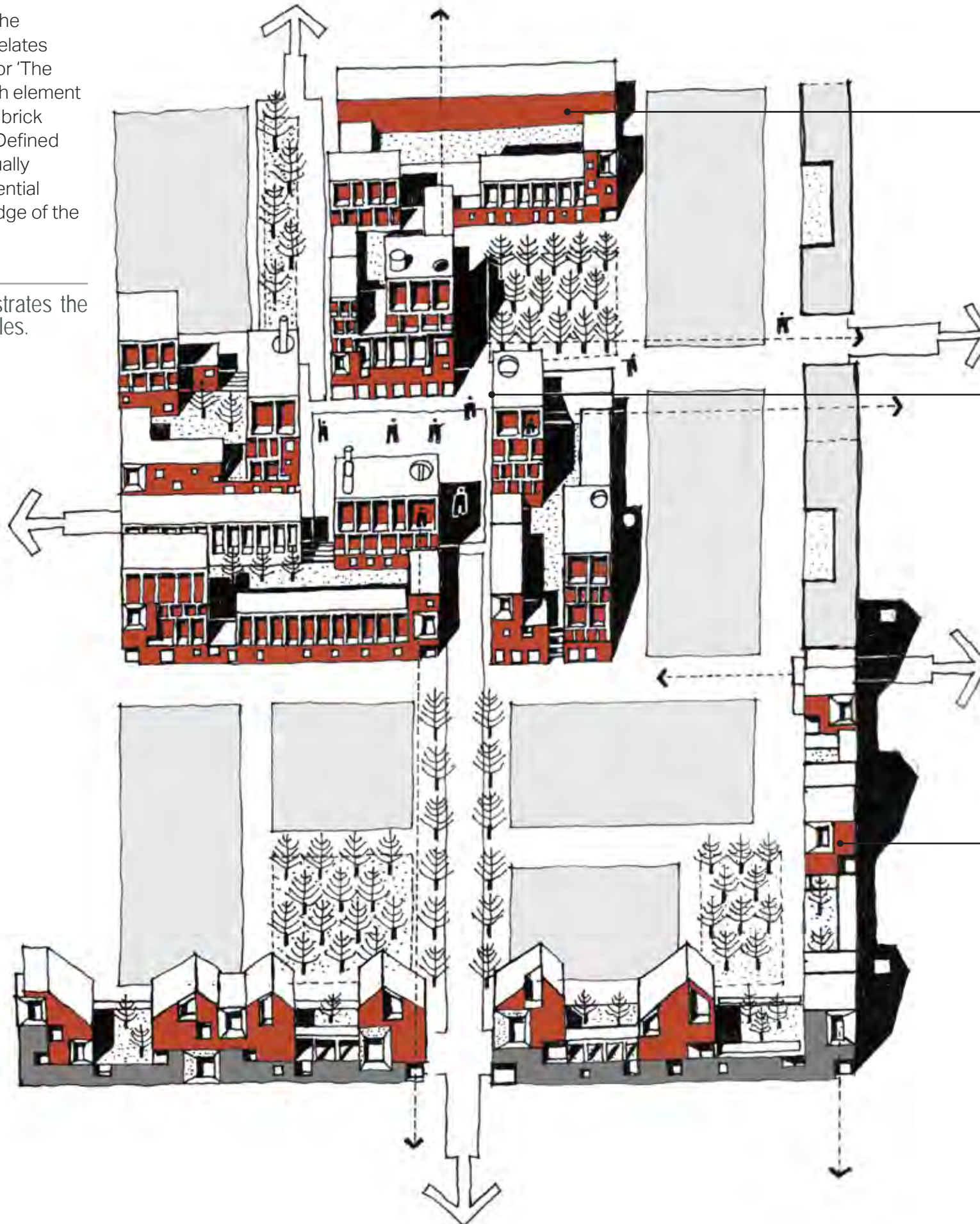
- An articulated silhouette and skyline
- Houses / apartments buildings with raised gardens above off-street parking
- Gardens captured within the wall form
- Views through the pent to the cliffs and lakes
- 'Gate-house' marker buildings to define the entrance points to the north-south & east-west routes



## The Defined Settlement: architectural language

The architectural language for the 'Defined Settlement' quarters, relates to the vocabulary established for 'The Scarp', with the consistent plinth element and verticality expressed in red brick and contrasting detailing. The 'Defined Settlement Edge' mediates visually between the high density residential clusters and 'The Pent' at the edge of the settlement.

The diagram to the right illustrates the urban structure design principles.



### HIGH DENSITY RESIDENTIAL CLUSTERS

- 90+ dwellings per hectare
- Non-directional grain to all clusters / ensembles within the defined settlement edge
- All clusters arranged as a townscape of defined streets, squares and mews spaces
- Each cluster block to have a width of between 35m and 45m with a maximum length of 120m
- Clusters designed with buildings above a ground level plinth (possible parking deck with active street frontage) at varying heights to maximise daylight / sunlight to central communal amenity spaces
- Upper storeys to be visually lighter than solid plinth level - an expressed white / light coloured frame with vertical emphasis and red brickwork panels
- Lower plinth storey - red brick with deep recessed windows and white / contrasting 'townscape' window / bay elements

### CENTRAL NEIGHBOURHOOD SQUARE

- Clear definition of corner and entry points
- Plinth level generally a constant 'visual' scale (this could be 2-3 storeys) to the square
- This should be a space with a strong sense of enclosure with no exposed or poorly defined edges

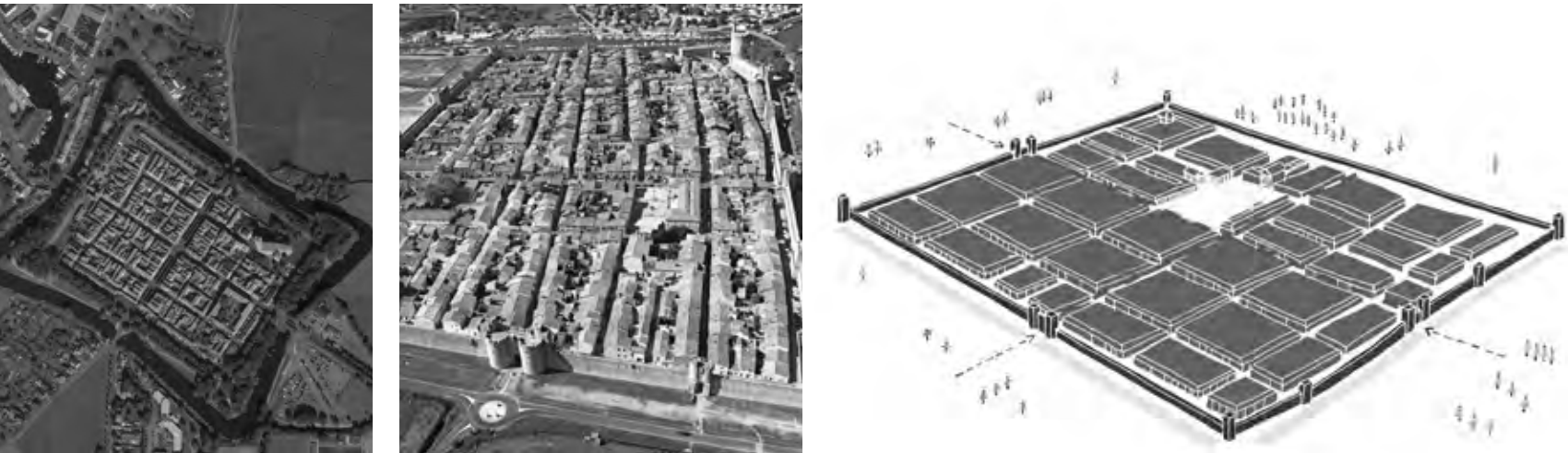
### 'THE NEIGHBOURHOOD EDGE'

- 50-90 dwellings per hectare
- Strong articulated upper profile on continuous plinth (ground storey with adjusted corner / townscape articulation)
- Simple large window openings - deep reveals in brickwork walls
- Dark brick (grey, blue / black) plinth (ground storey and corner articulation) with contrasting window surrounds
- Upper floors in red brickwork
- Twin gable motif and roof form with ridge / eaves in perpendicular alignment to linear form of the 'edge' terraces



The Defined Settlement: references from the analysis

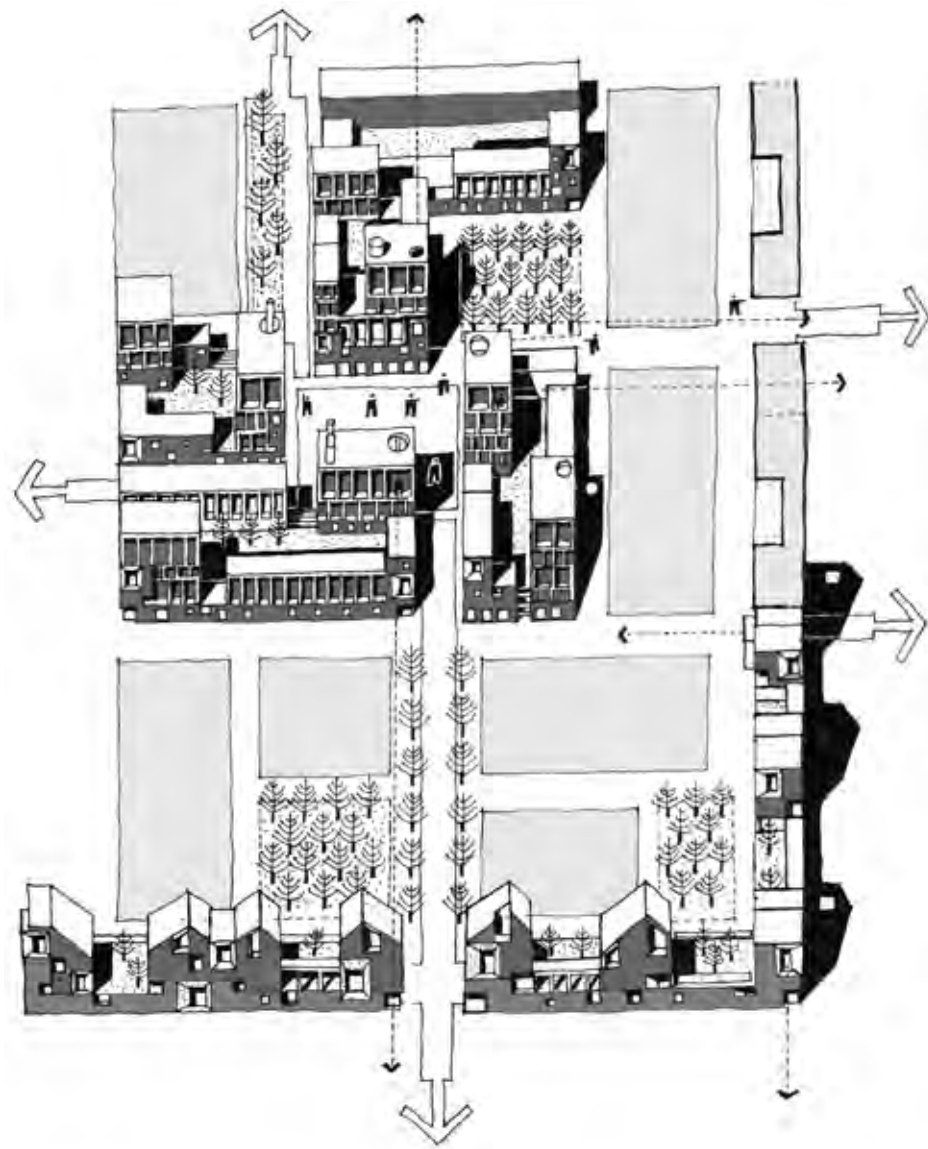
Defined settlement



Vertical / geometric articulation



Clear hierarchy of memorable streets





## The Defined Settlement: 'The Neighbourhood Edge' - architectural language

Typical higher density residential 'edge buildings' with twin gable form.

Raised communal landscape above plinth level parking.

### 'THE NEIGHBOURHOOD EDGE'

- Strong articulated upper profile on continuous plinth (ground storey with adjusted corner / townscape articulation)
- Simple large window openings - deep reveals in brickwork walls
- Dark brick (grey, blue / black) plinth (ground storey and corner articulation) with contrasting window surrounds
- Upper floors in red brickwork
- Twin gable motif and roof form with ridge / eaves in perpendicular alignment to linear form of the 'edge' terraces

Min. height  
4-5 storeys

Defined neighbourhood 'edge'  
with grain perpendicular to  
the edge alignment

Architectural  
treatment similar to  
'The Pent' termination  
adjacent to the chalk  
cliffs



## The Defined Settlement: 'The Neighbourhood Edge'

- contemporary architectural language, materials & detailing

### 'THE NEIGHBOURHOOD EDGE'

Materials & detailing:

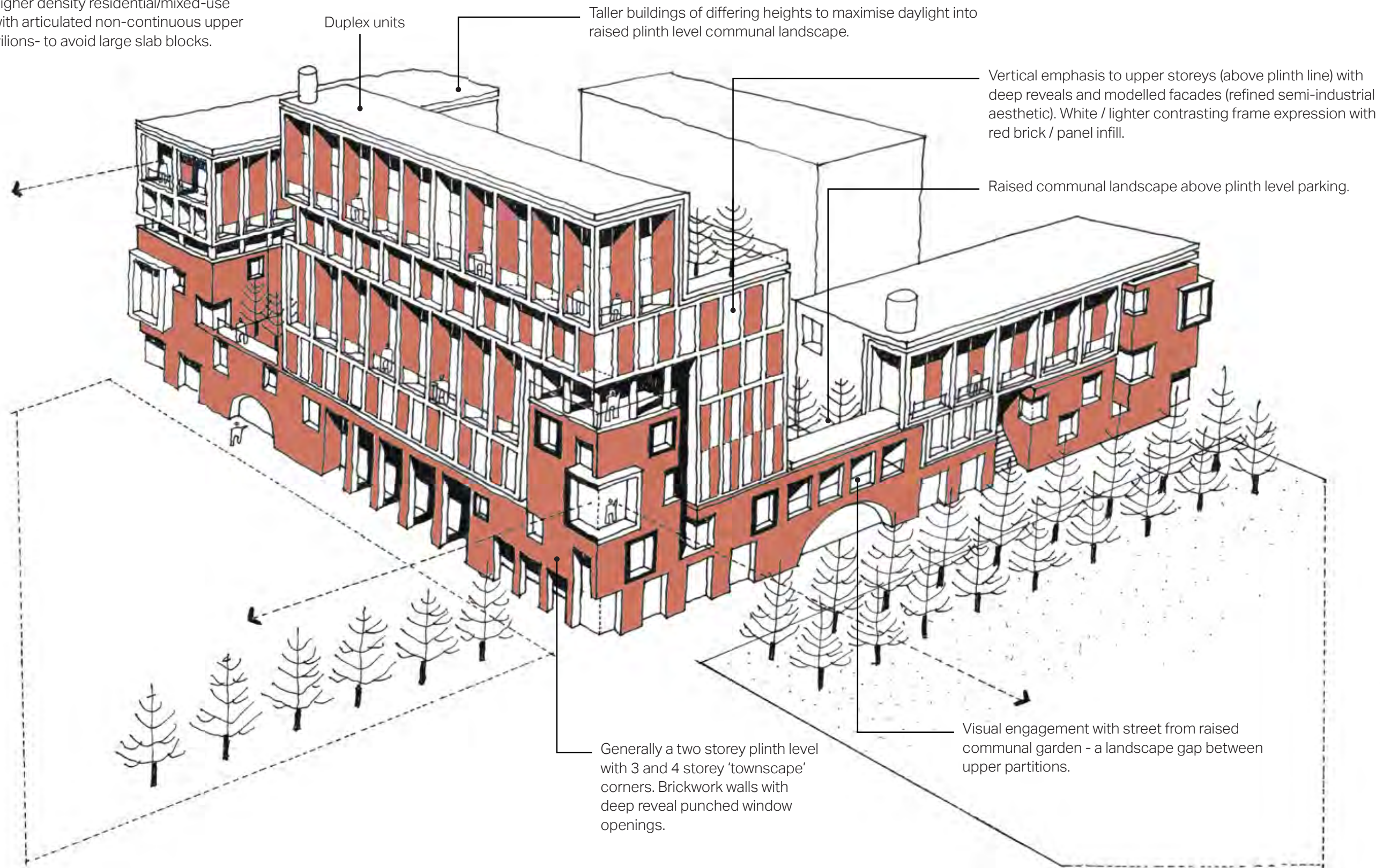
- The typical treatment of materials & detailing within 'The Defined Neighbourhood Edge' should relate to 'The Scarp' and also mediate between the 'High Density Residential Clusters' and 'The Pent' on the edge of settlement
- White opening reveals in a red brick wall create a transition from the materiality of the lower rise 'pent' on the settlement edge (composed of white, dark blue / grey / black plinths and window features) to the higher density central developments (of red brick with white / lighter coloured contrasting frames with vertical emphasis, generating dark shadows - a reference to the industrial heritage of the cement and paper industries)





## The Defined Settlement: 'The High Density Residential Cluster Building' - architectural language

Typical higher density residential/mixed-use cluster with articulated non-continuous upper floor pavilions- to avoid large slab blocks.





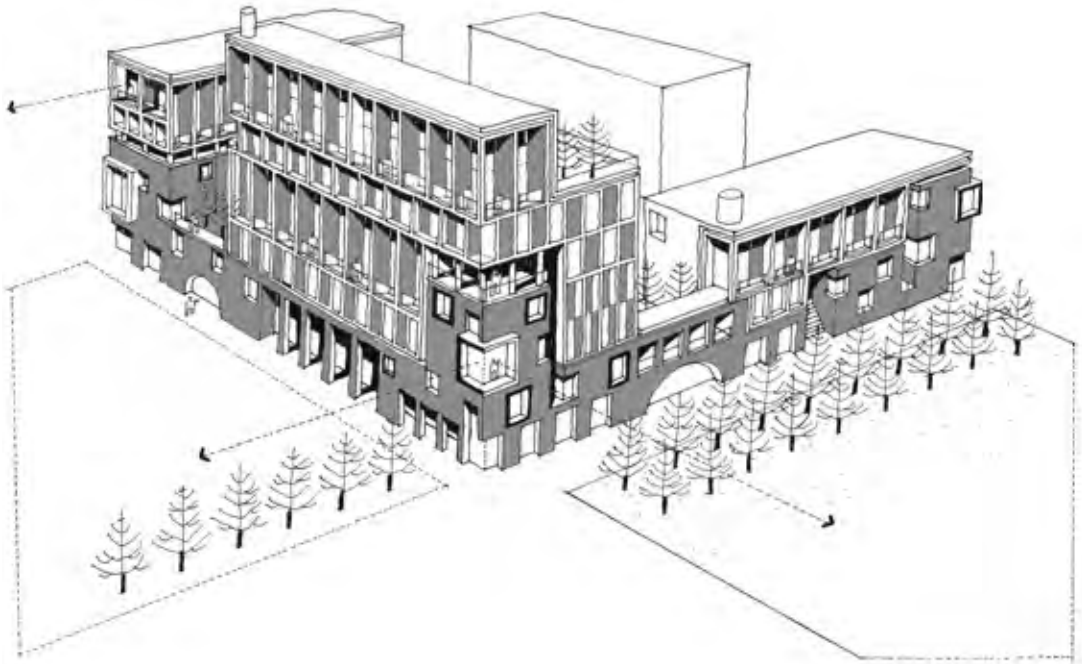
**The Defined Settlement:** architectural language  
- references from the analysis

Longhouses with  
masonry plinth



Red and white  
contrasting materials

Vertical emphasis to  
contrasting frame / grid  
configuration



Marker towers on a ridge



Industrial detailing of deep reveals creating shadows



Bay window feature

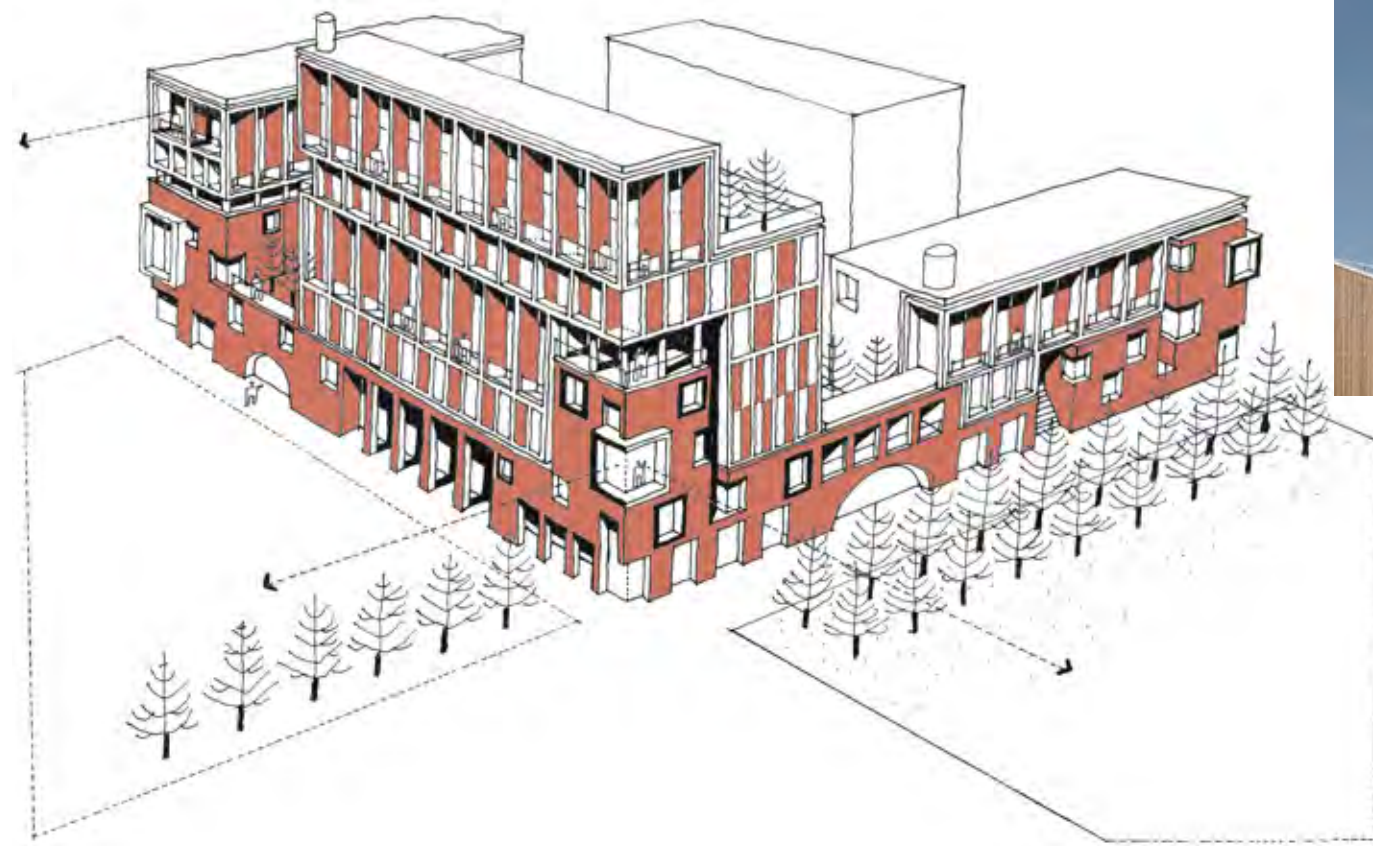


## The Defined Settlement: 'The High Density Residential Cluster Buildings' - contemporary architectural language

### 'THE HIGH DENSITY RESIDENTIAL CLUSTER BUILDING'

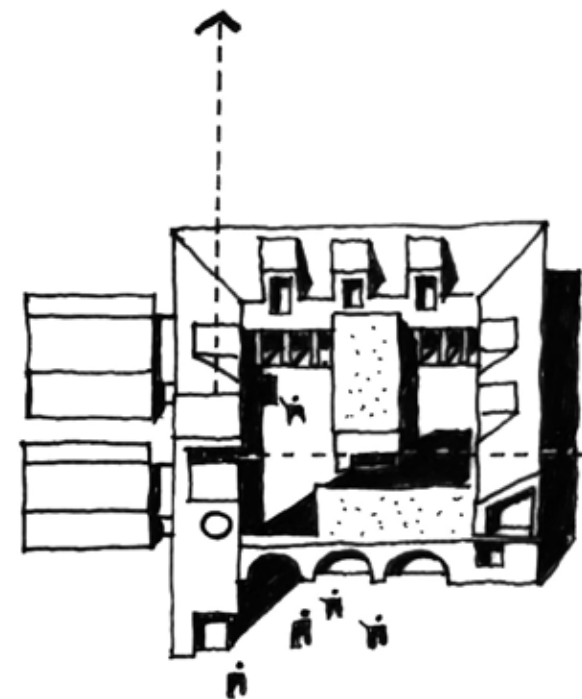
Materials & detailing:

- The high density residential cluster consists of red brick buildings with white or lighter contrasting frames to emphasise verticality
- Architectural language is directly related to that of 'the scarp'
- Large areas of glazing capturing views
- Articulated entrances

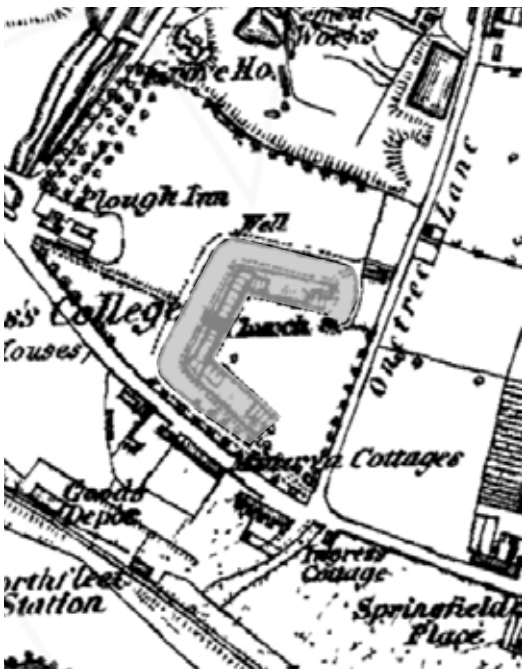




**The Defined Settlement:** 'The courtyard building  
- architectural language - references from the analysis



Historic local almshouse forms and farmhouses offer a defined precedent for proposed institutional / civic building typologies. These building typologies enclose an outdoor space, providing the opportunity for strong relationships to both the internal and exterior landscapes.



Historic farmsteads







## 3.4 NARRATIVE: The Fleet / Hithe

NORTHFLEET WEST

*inlet derived from the Norse 'fliot' - a small river or channel  
a landing place or small port for ships or boats*



## The Fleet / Hithe: urban form

**The Fleet / Hithe narrative has been developed to inform development along the 'Northfleet Riverside', on the banks of the Thames.**

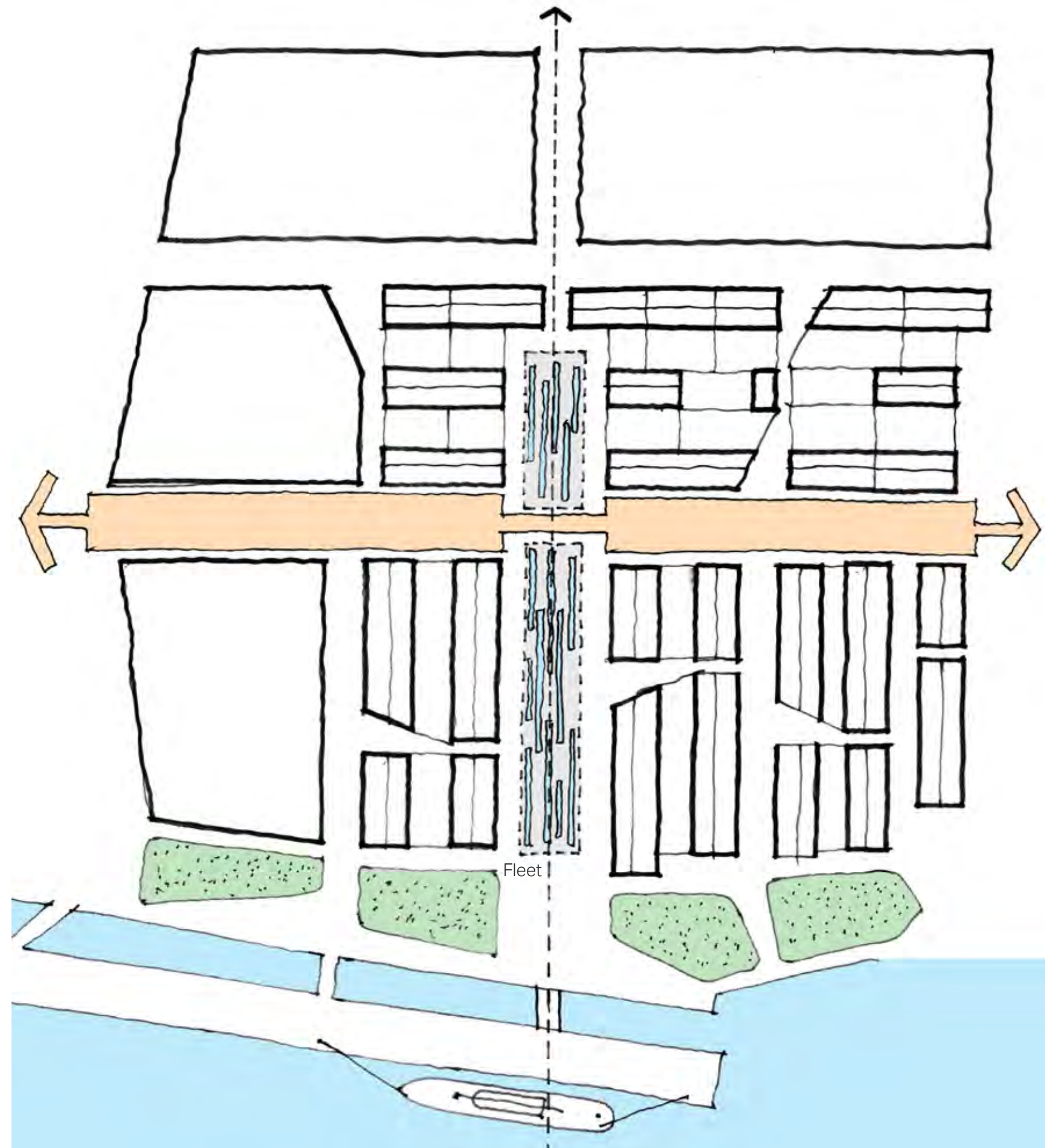
This narrative has been informed by the urban morphology of the local Thames and Fleet riversides. The proposed river front developments could be based on the spatial concept of an 'inlet' - a mediation between the built form and the spatial expanse of the river to maximise access to the water, while managing the scale and enclosure of public spaces between buildings.

'The Fleet / Hithe' urban form suggests a strong spatial inlet from the waters edge, with new public spaces created perpendicular to the River Thames. These should contain elements of water or sustainable drainage. 'The Fleet / Hithe' should contain high density residential buildings with mixed uses at the ground floor.

Residential clusters along the upper slopes relate to the fine grain of 'The Pinch' and should be aligned with the contours.

Streets and buildings are of a fine grain, with clusters on the areas immediately adjacent to the rivers edge aligned perpendicular to the wharf edge, to maximise views to the River Thames from within the development.

The diagram to the right illustrates the urban structure design principles.





## The Fleet / Hithe: urban form

'The Fleet / Hithe' urban form creates a strong and defined neighbourhood focus leading down to the river edge. A new sequence of public spaces should be dominated by their form based on a 'The Fleet' or inlet. 'The Fleet / Hithe' contains high density residential buildings with mixed uses within an expressed ground floor plinth. Residential clusters aligned with the contours of the steeper topography share characteristics with the urban form of the 'The Pinch'. Streets and buildings should generate a fine grain development.

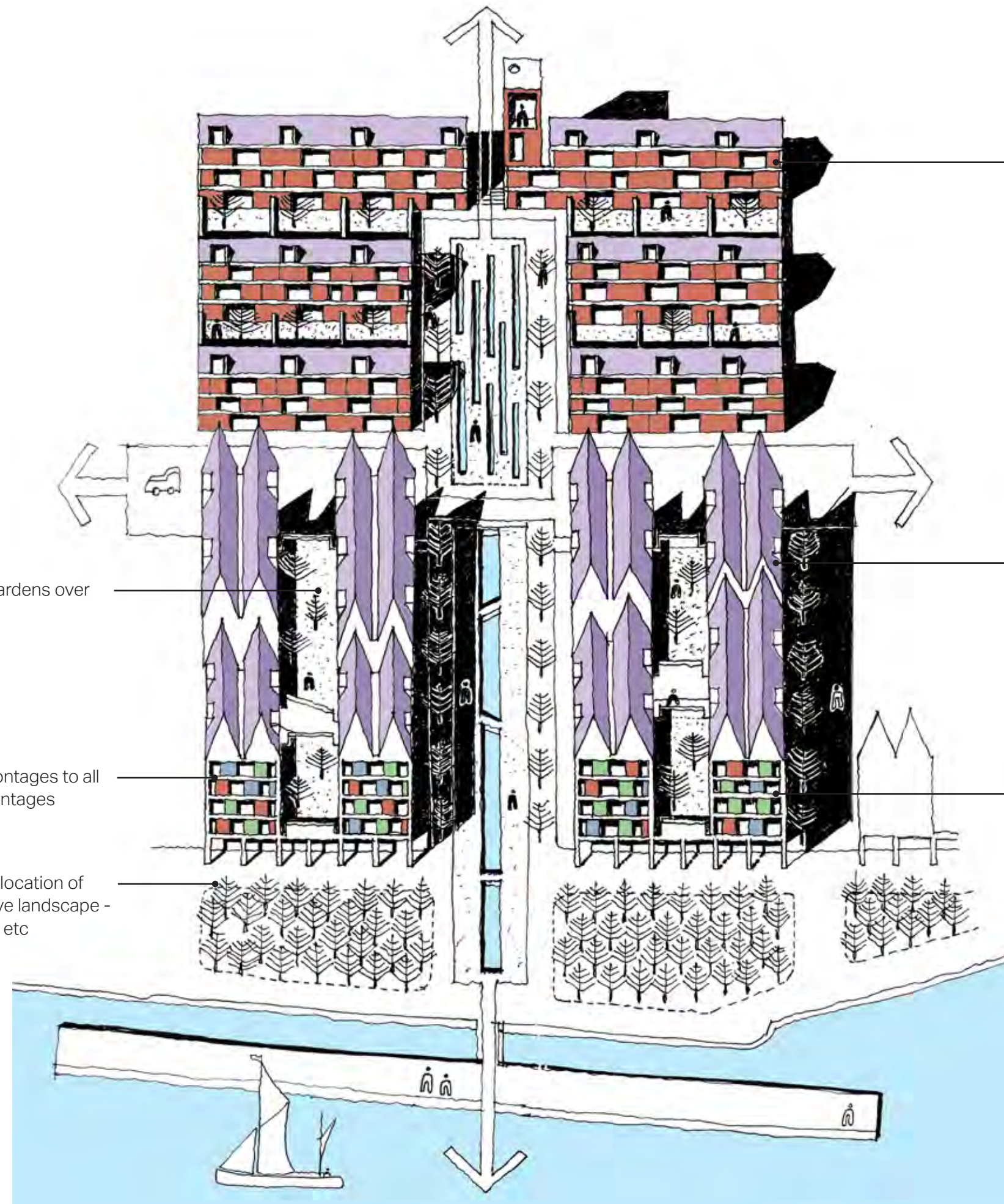
### 'THE FLEET / HITHE' Urban form:

- Based on clear north-south & east-west routes linking neighbourhoods,
- Fine grain blocks to maintain views and permeability towards the Thames
- Mixed use ground floors towards the river
- Houses on plinths to deal with levels changes relating to 'the scarp'.
- Fine grain street and hard landscaping
- Landscape 'fleets' created as public spaces containing water

Raised gardens over parking

Active frontages to all street frontages

Possible location of productive landscape - orchards etc



Development on steeper slopes should run in alignment with the contours

A perpendicular alignment of the clusters adjacent to the river will maximise views to the Thames from within the development and the public realm 6-8 storeys

Distinctive gable forms should be expressed on the river edge

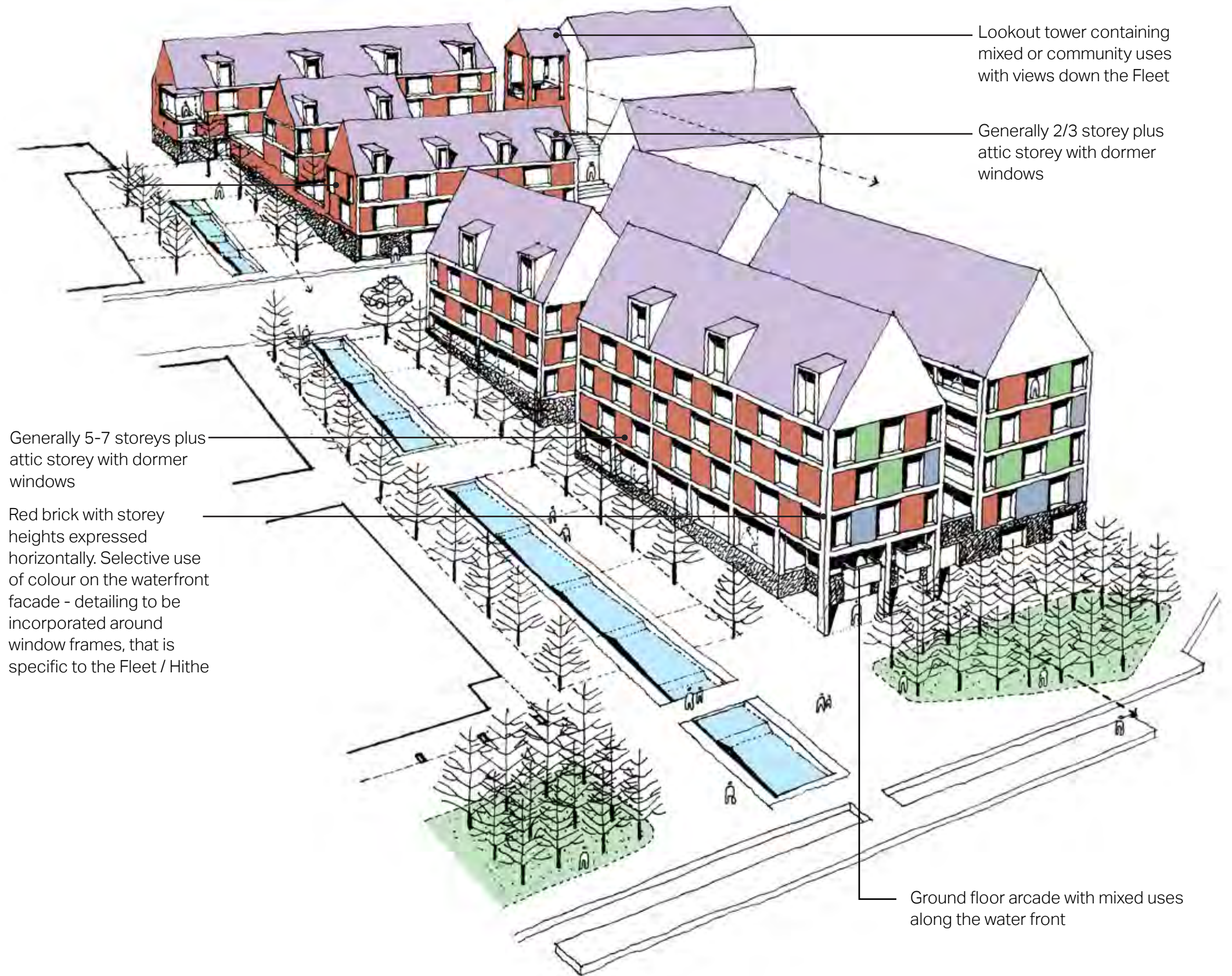


## The Fleet / Hithe: architectural language

'The Fleet / Hithe' architectural language makes reference to the historic Hithes or landing places of Greenhithe and Gravesend with the forms of the waterfront buildings referencing the historic wharfs of Northfleet. An expressed horizontality articulated at each floor level and an attic storey with dormer windows should predominate the architectural form around the new 'Fleet' spaces. A proposed red brickwork with the dark plinth also cross references the other design narratives for Ebbsfleet Garden City. The selective use of colour along the waterfront gable facades, reference the facades of Greenhithe and the use of colour within Gravesend High Street.

### 'THE FLEET / HITHE' Architectural character:

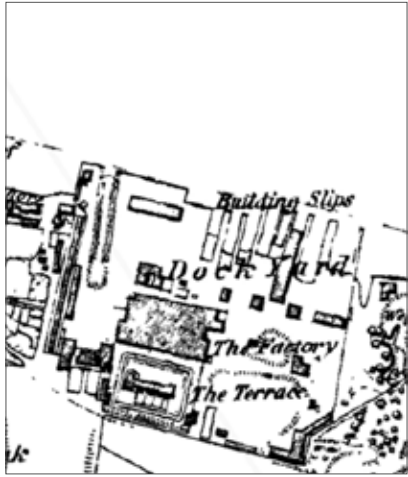
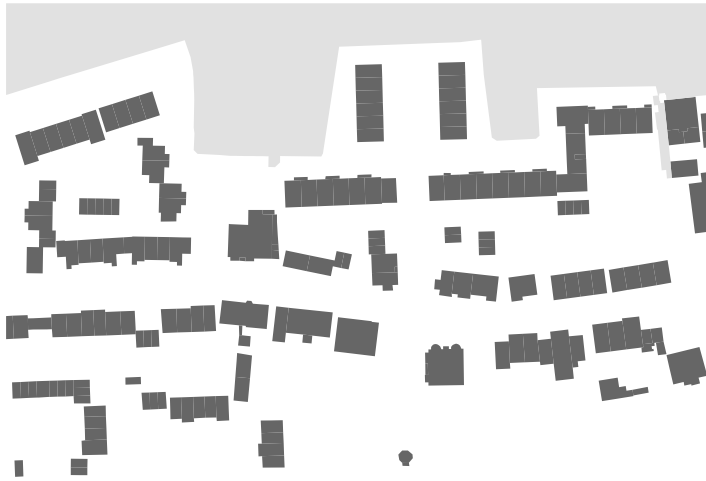
- Mixed use ground floors towards the river
- Houses on plinths to deal with levels changes relating to 'the scarp'
- Selective use of colour to the frontage
- The high density residential buildings consists of red brick white banding to emphasise horizontality
- Fine grain street and hard landscaping
- Landscape 'fleets' created as public spaces





The Fleet / Hithe: references from the analysis

- Permeability to the Thames
- Inlets / ship slips
- Window frames & detailing
- Selective use of colour



- Memorable hierarchy of streets
- Mixed use ground floors
- Horizontal banding at floor levels



- Wharf roof form
- Dormer windows / attic storey





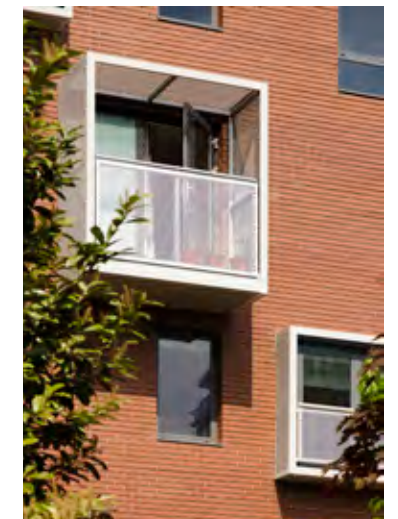
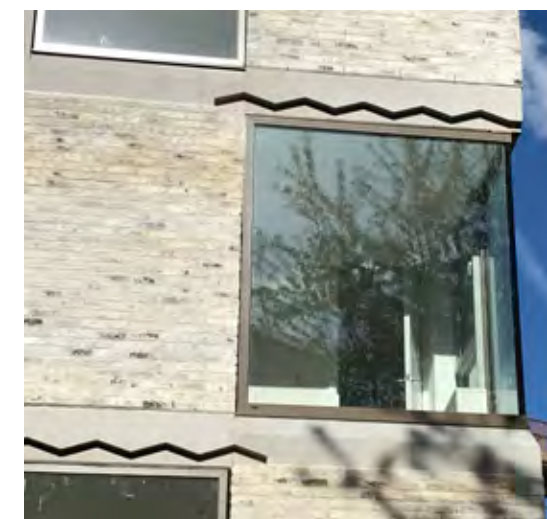
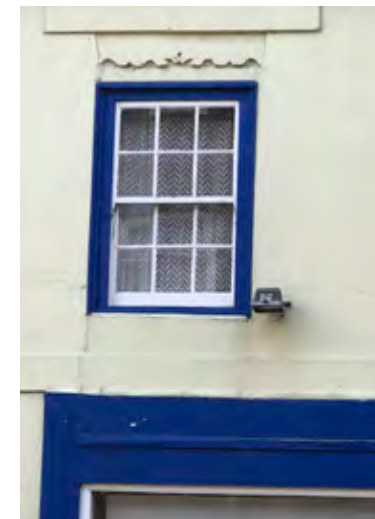
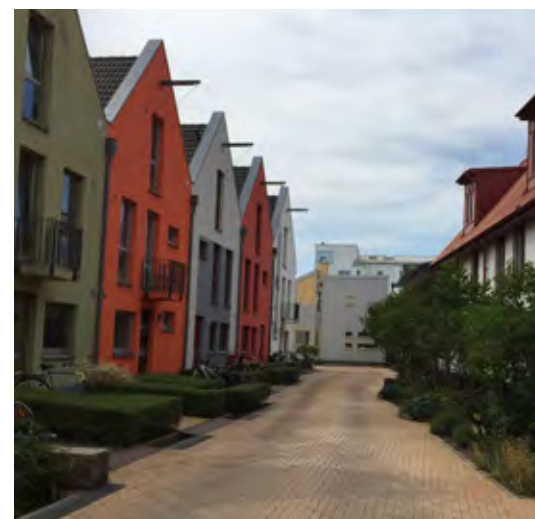
## The Fleet / Hithe: contemporary architectural language, materials & detailing

'The Fleet / Hithe' materials & detailing refers to the historic Hithe or landing places of Greenhithe and Gravesend. There is an expressed horizontality at each floor level within the red brickwork and a dark plinth. The selective use of colour along the waterfront facade and window detailing, refers to the facades of Greenhithe and the use of colour within Gravesend High Street. Similarly the distinctive Hanseatic trading buildings of Northern European and Scandinavian waterfronts offer useful precedent for a distinctive architectural vocabulary.



### THE FLEET / HITHE Materials & detailing

- Red brick with lighter horizontal banding at each storey
- Juxtaposed / off-set windows
- Selective use of colour to the north Thames facing elevations
- Arcade onto the Thames frontage (with mixed uses)
- Detailing to be incorporated around window frames, that is specific to the Fleet / Hithe



Specific and repeated architectural details could help to deliver a unique character to the architecture of the Fleet/ Hithe





## 3.5 NARRATIVE: The Marsh

SWANSCOMBE PENINSULA

*a low-lying tract of land defined by a dyke*

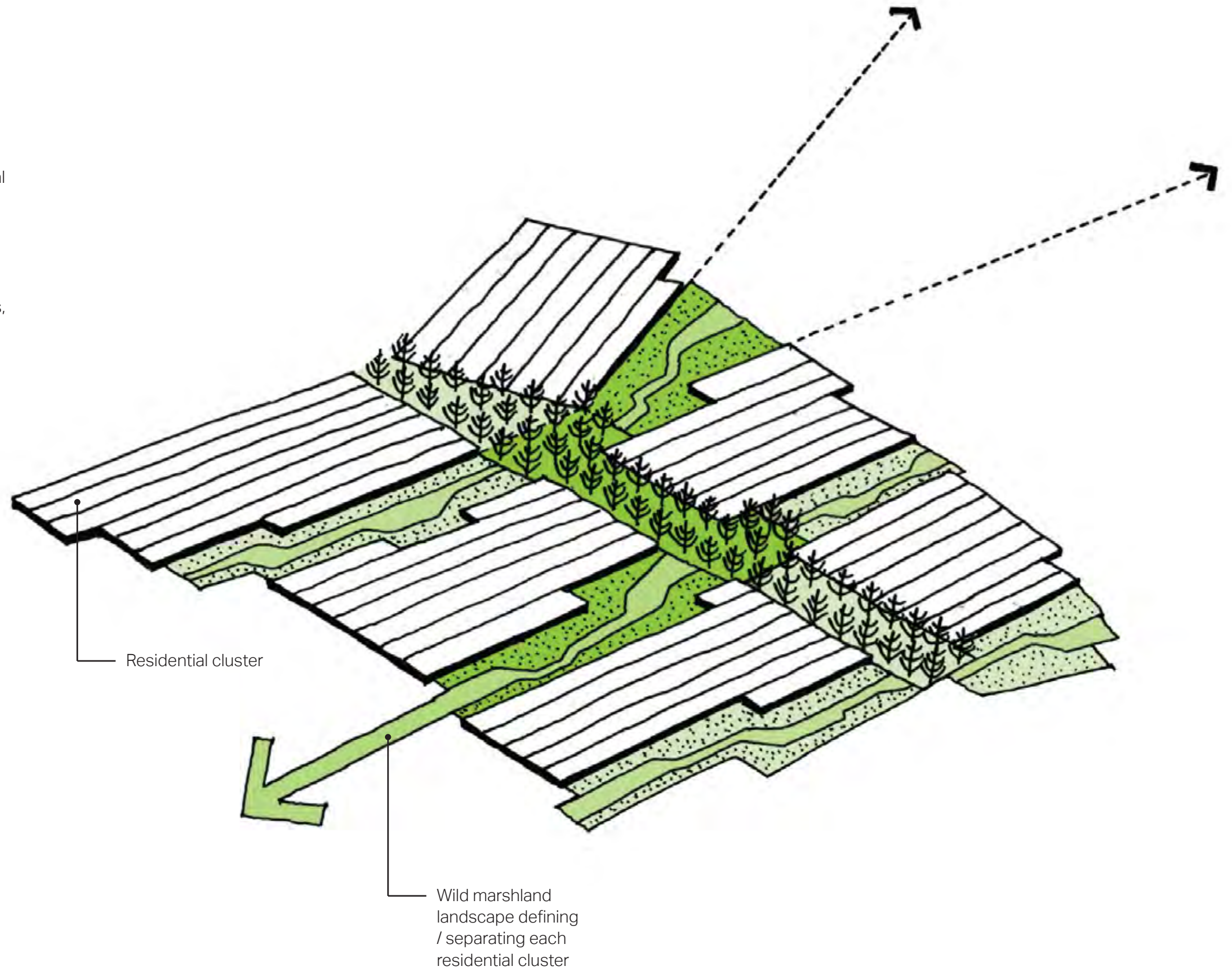


## The Marsh: urban form

**The 'Marsh' narrative responds to the historic structuring of the 'manorways' within the North Kent Marshes, and also considers the precedent of Dutch polders as an approach for structuring the marshland into 'productive gardens'.**

The linear patterns of the manorways are used to inform a distinctive approach to organising residential clusters in Ebbsfleet, structuring new residential typologies and associated gardens and shared courtyards.

Each defined cluster of homes could accommodate between 50-75 dwellings - with a hierarchy of streets, lanes and mews together with a neighbourhood focal space within the cluster. The existing historic 'manorways' routes should be preserved across the marshland and reinforced as access and pedestrian routes.





## The Marsh: urban form

'The Marsh' urban form has been derived from the structure patterns of the manorways which crossed the North Kent Marshes, and the defensive layouts of farm buildings within the marshland, such as those near Cliffe.

Water is to be embraced as a defining edge to any new settlement area.

High density low rise clusters maintain as much marshland natural landscape as possible. Each 'cluster' is arranged around a shared surface courtyard and linked through a minimal access road which should be based on the routes of the historic manorways which crossed the peninsula area.

The diagram to the right illustrates these urban structure design principles.

### 'THE MARSH' Urban form:

- Clusters of houses - make up areas of residential development within the marshland
- Density around 30 dwellings per hectare
- Clusters connected together by 'boardwalk' bridges over the marshland
- 2 / 3 storey houses
- Car parking courts and garages
- Some 3 & 4 storey apartment buildings
- Variety of public and 'green' space
- Retain historic pedestrian routes between dykes



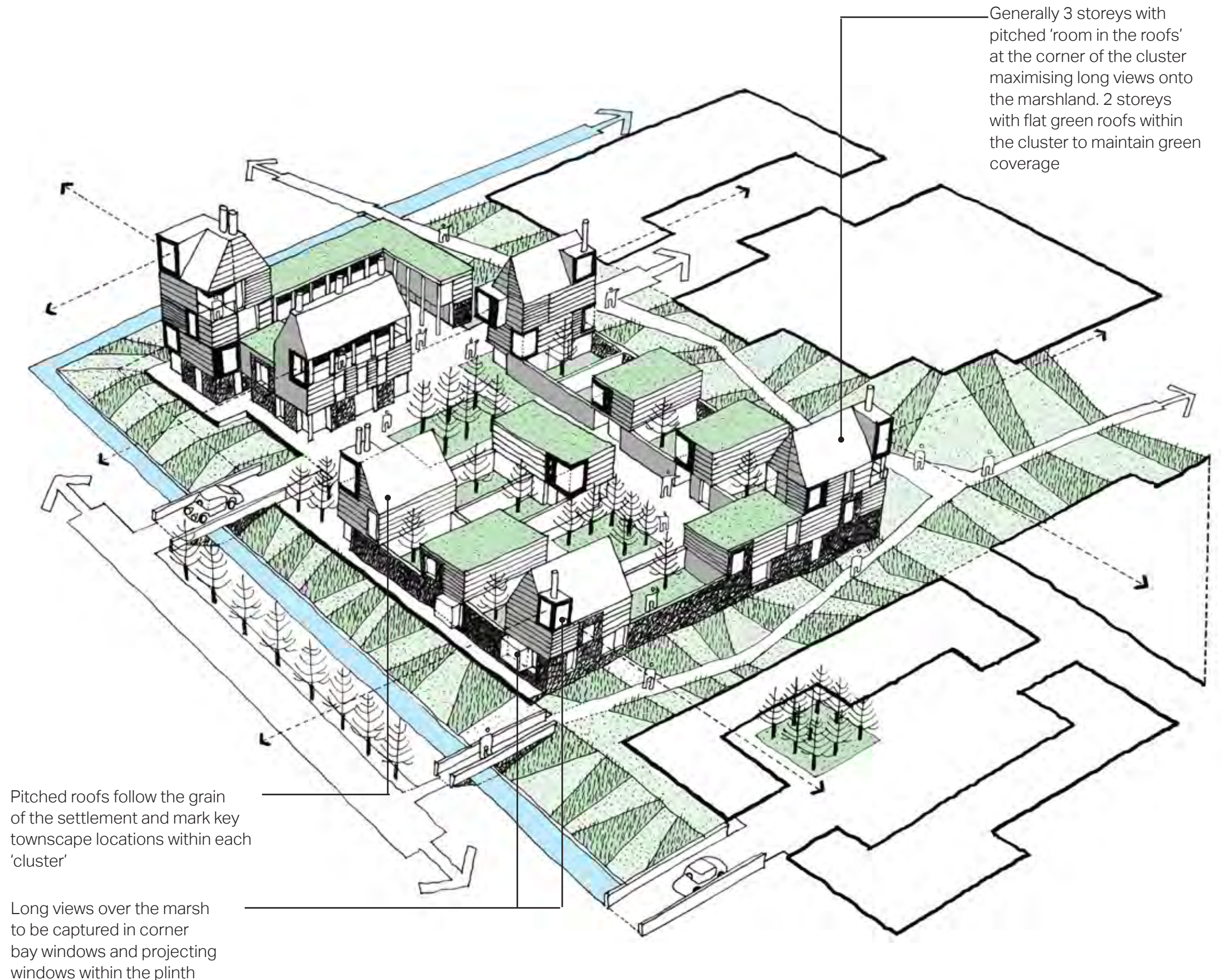


## The Marsh: architectural language

'The Marsh' architectural language makes strong cross reference to that of 'The Pent' areas and other Design Narratives for the Ebbsfleet Garden City. The horizontal expression of each dwelling and the dark plinth should be developed as a dominant architectural expression. Low rise elements are to be included with flat green roofs to maintain green coverage. Residential typologies have to incorporate frontages that address the landscape, side gardens and shared courtyards. Long views over the marsh should be captured in corner bay windows. The residential typologies incorporate car parking, and shared courtyards.

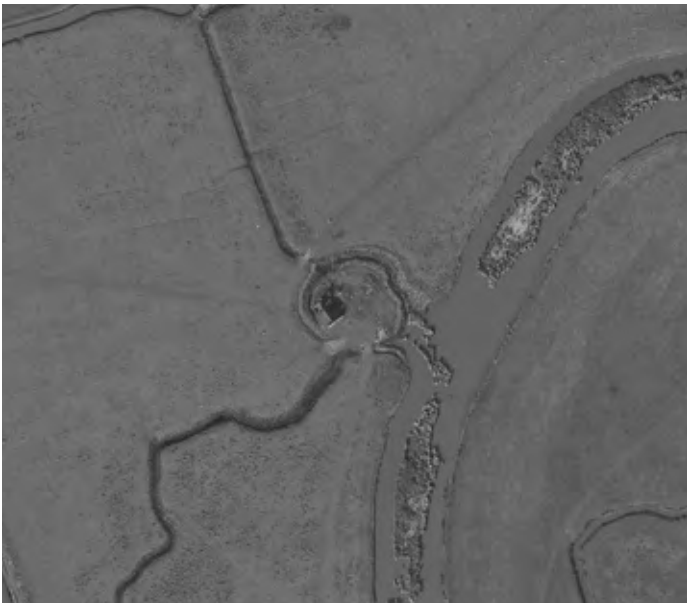
### 'THE MARSH' Architectural language:

- Black plinth at ground level
- Horizontal banding above
- Projecting window bays and dormer windows
- Gable windows with views out onto the marsh
- Flat roofs typically with pitched roofs and expressed gable ends at key townscape locations
- Green roofs to minimise loss of green cover
- Walled gardens form a strong edge to each 'cluster'
- Private gardens





The Marsh: references from the analysis



Long linear houses

Yards / shared surfaces

Roof form options

Black plinth

Windows:  
juxtaposition, projecting boxes,  
borders, dormers





## The Marsh: contemporary architectural language, materials & detailing

'The Marsh' materials & detailing refers to 'The Pent' and other Design Narratives for the Ebbsfleet Garden City, in terms of the horizontality and the dark plinth. Long views over the marsh to be captured in corner bay windows and projecting windows within the plinth.

### 'THE MARSH' Materials & detailing

- The low rise 'cluster' is composed of white boarding or 'white' brickwork with horizontal expression
- Dark blue, grey or black plinths and window surrounds



An architectural expression of horizontals



Articulated bays and windows capture views across the landscape



A garden wall defines the threshold to adjacent open landscape



Gables create strategic townscape markers



Ebbsfleet  
Development  
Corporation



**Proctor  
& Matthews  
Architects**

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Prepared by Proctor & Matthews Architects on behalf of EDC