

## Design Concepts & Principles



*"It will affect my future because there would be more jobs and houses to live in. The plan is good because its making Rushenden and Queenborough a better place / there is all glass on the roads and teenagers are wrecking all our stuff"*

*Rosemary Penfold age 9*



# Design Concepts & Principles

## Design concepts and principles

The previous chapter has set out the main components of the masterplan. This section deals with fundamental underlying principles that will guide the development of the detailed design of residential, employment, traffic related and other elements of the masterplan. Key issues such as project delivery and sustainability demand their own separate sections but here principles of massing, permeability, greenspace and density amongst others are set out. The masterplan contains a set of simple guiding principles that will lead to attractive, legible and well used places. These are all underpinned by good design practice as set out in key design guidance by the Government and its advisors such as CABI and The Kent Design Guide.

All detailed design and subsequent planning applications will be judged against the guidance set out in this masterplan and the key standards being set for design quality and sustainability in England. When preparing Design and Access Statements to accompany individual planning applications, applicants will be expected to demonstrate how they have

taken account of the design principles set out in this masterplan, with specific reference to its contents, and how the development will contribute to the achievement of the objectives of the masterplan.

### 1. Integrating and linking Queenborough and Rushenden



### 3. Grain: principles of height, massing and density



### 4. Spatial street hierarchy: streetscape design principles



### 5. Activity and movement: active frontages and safer places



# Design Concepts & Principles

6. Greenspace and landscape: landscape strategy and public space



8. Sustainability: the wider picture



9. Waterspace: the theme of water:



7. Art and community: arts & , community and . . . Lighting Strategy



10. Creating place and distinctiveness: Character Areas



# Design Concepts & Principles

## History, local distinctiveness and creation of sustainable communities

Socially sustainable communities are generally characterised as those where people can enjoy a quality of life which balances their needs for good housing, transportation, employment, health and leisure opportunities within the context of a quality physical environment. The creation and sustenance of a collective 'civic pride' and sense of belonging is arguably the glue which binds such individual well-being and physical space into a vibrant and sustainable community.

The Sustainable Communities Plan 2003 sets a very clear remit for government at all levels to consider the holistic needs of new and existing communities in the English growth areas. Indeed these aspirations are reflected in overarching planning policy guidance and filters down to the local development process - the requirement for planning authorities to prepare Statements of Community Involvement within the LDF process being a case in point. Equally the Regional Economic Strategy and the Regeneration Frameworks of the local regeneration delivery vehicles each recognise that economic growth can only be achieved as a by-product of establishing strong and inclusive communities that enhance quality of life and social opportunity.

Effective information exchange and partnership working amongst stakeholders and the community are powerful tools in developing inclusive communities. In particular a focus on empowering local people to access new skills training, employment, housing and community facilities arising from growth can help accrue the following benefits:

- creation of better chances and opportunities in life;
- strong communities that are safer and more able to tackle inequality;
- provision of more sustainable services and environments; and
- a healthier population.

## Queenborough and Rushenden

Once an important seafaring town, the area of Queenborough and Rushenden has a rich economic history but has witnessed decline in its industrial base since the 1960s, in keeping with the wider economy of the Isle of Sheppey. As such the area is characterised by high levels of social exclusion.

According to the 2004 Index of Multiple Deprivation Swale Local authority is the 13th most deprived ward out of the 67 in the South East containing 13 Super Output Areas (SOA) within the 20% most deprived nationally. 10 of these are on Sheppey of which four are in the worst 10% nationally. These areas score particularly poorly in terms of barriers to housing and service, health, income, employment and qualification levels. The Queenborough and Halfway SOA is ranked 82 out of the 5319 SOAs in the SE and Sheerness West SOA is the most deprived in North Kent. The education attainment and progression levels of Swale are amongst the worst in the SE (only 7.3% of the population is educated to degree level compared to Swale average of 12% and England and Wales average of 19.8%; 40.8% of the population have no qualifications compared to Swale average of 34.4% and England and Wales Average of 29.1%)

Although this is a relatively low statistical starting point the communities of Queenborough and Rushenden have *significant potential for regeneration*. The construction of the new Swale crossing presents a *major opportunity* for economic growth that can be the catalyst for environmental and social enhancements. Therefore a number of targets have been drawn up by partners and stakeholders to ensure that the Queenborough and Rushenden Regeneration project translates this opportunity into real benefits for local people:

- A high proportion of the new dwellings will be affordable housing, and these will be integrated throughout the regeneration area, taking into account the commercial issues driving the development.
- A range of new community facilities will be provided as part of the overall Masterplan, and existing provision will be enhanced to meet the future needs.
- All new development will be required to investigate whether it is feasible to sign up, or otherwise contribute to, a local training programme related to construction, and targets may be set on the sourcing of local labour during the construction phase.
- A range of skills initiatives will be undertaken with local partners and businesses to improve lifelong learning and relevant employment skills in the community.
- An appropriate long term management plan and structure will be developed with the community to ensure ongoing governance and operation of facilities is in ownership of the community.



# Creating distinctiveness

## Urban Design and a Sense of Place

### Background

Creating sustainable communities cannot be done without good urban design. The two are intrinsically linked. It is vitally important that the design of the regeneration creates both a high quality public realm coupled with the development of a real sense of place. This is important in that it will not only help maintain the historical and cultural dimension of the area, but also create a sense of belonging and attract people and businesses, an important driver of economic and social development.

In line with the guidance set down in the Masterplan as a whole concerning the form of development and the local characteristics of the area, all phases of the development will be designed such that they address these factors and encompass the strong environmental design principles outlined throughout this Masterplan.

### Queenborough and Rushenden

In order to address Urban Design considerations, any development design will be based on a well-founded and well-researched understanding of the local context and vernacular. Q&R has a renowned cultural and sea-faring heritage that must be retained and enhanced in any new development, and as such the urban and building design will be crucial in helping to rejuvenate a community that has been in decline for a number of years. Queenborough and Rushenden are characterised by some fine architecture and natural assets, such as the Swale, the marshes and the creek. A great deal of community consultation and research has been put into the Masterplan for the development, and it should be consulted regularly for guidance.

All elements of new development will have to comply with the principles of the Kent Design Guide and also with National Design key performance indicators. Open space must be provided in accordance with the Masterplan, other sections of this Volume, and with particular attention being paid to the Kent Design Technical Appendix on Biodiversity.

One of the key desires of the local population is to ensure that both the new development and its integration into the existing community helps to deliver a safe and secure environment for everyone. Developments must be planned such that they 'design out' crime. This will be coupled with the provision of facilities for existing and future residents, so that vandalism, intimidation and other anti-social behaviour is avoided.

The Masterplan outlines some key factors that must be applied in Queenborough and Rushenden:

#### Urban Design:

- A range of housing styles and different price levels will be delivered, and the regeneration will integrate both affordable and privately owned homes.
- In terms of the height of buildings, any development should respect existing heights, but those around the centre of the regeneration area will be taller to make a 'statement'.
- Existing building densities range from 22 (Rushenden) to 80 dwellings per hectare (in old Queenborough), and many better residential developments emulate historic qualities. The regeneration will aim for the upper end of this scale to create a vibrant, thriving community.
- Designing out crime to deliver a safer environment in which to live.

#### A Sense of Place:

- Development must protect and enhance the elements contributing to the character and distinctiveness of the area.
- The built heritage must be preserved and the development of new architecture must respect the local context.
- Environmental qualities adjacent to new and infill sites are to be protected and enhanced.
- The specification of local building materials and local indigenous plants.
- Enrichment of sense of place by working with landform, local landscape character, heritage and cultural assets.



# Design Concepts & Principles

## Principle 1: Linking Queenborough & Rushenden

The proposed regeneration and development at Queenborough and Rushenden is intended to bring a range of benefits locally and island wide. These include a wider range of housing, employment, environmental improvements and an improvement in the profile of the area. One of the key aims is to bring benefits to Rushenden, which, to a degree, is physically and socially isolated from Queenborough and the wider area. The benefits to Rushenden take a number of forms:

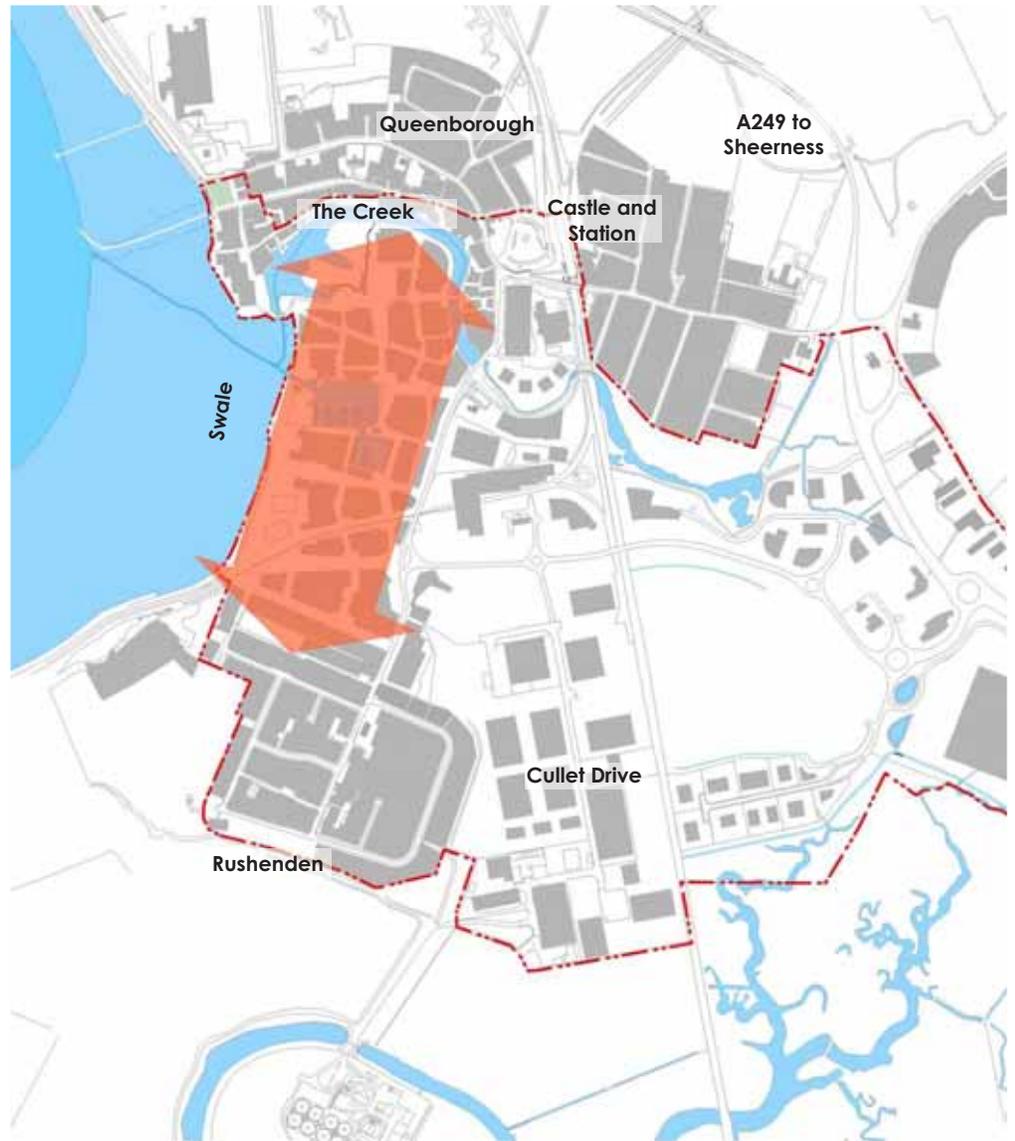
### Physical

Currently Rushenden feels isolated. It's at the 'end of the road' and as such seems to be apart from Queenborough and other parts of the island. This isolation seems to exaggerate the feeling of a poor quality place to the hindrance of the local community. Physical changes to the surrounding area and to the fabric of Rushenden will lessen this.

### Social

Residents in Rushenden could significantly benefit from opportunities in skills, learning and jobs and facilities the wider change to the community can bring.

Rushenden is too small in its own right to support community and make commercial facilities such as local shops truly successfully. Rushenden will greatly benefit by locating new proposed community and commercial facilities adjacent to its core. Increasing the population and thus critical mass needed to support these through the new development will ensure the viability of these facilities.



# Linking Queenborough & Rushenden

## *Infrastructure*

Located at the end of the Rushenden Road visitors to and residents of Rushenden have to drive through Queenborough and past currently empty brownfield sites. The Rushenden Relief Road will greatly improve access to and from Rushenden for vehicular traffic and will enable a much improved footpath and cycle route to Queenborough via a new railway crossing and link to 'over the arches'. Combined with improved access the Rushenden Road will be traffic calmed taking inspiration from the new Manual for Streets to give the pedestrian greater priority and to populate the public realm with residential development, improved lighting and street furniture and public spaces such as 'Rushenden Square' where shops, community facilities and a new school are proposed.

## *Amenity*

Rushenden benefits from a good provision of open space and play facilities but these are relatively isolated not part of a wider network of interconnected spaces, walks and activity opportunities. In addition the existing public realm is 'tired' and would benefit from a substantial invigoration. The proposals for the wider area seek to provide a seamless connection between the new and old through a number of initiatives:

- Footpaths and calmed streets will connect Rushenden to a series of public spaces both green and urban and thus enable residents to access a greater variety of amenity within a short walk. In fact the proposed marina and Swale Side Park will be within 5 or so minutes walk from the centre of Rushenden.
- Rushenden Road, the vehicular access to Rushenden, will be upgraded with planting, lighting and attractive traffic calming measures to create a consistent streetscape from Queenborough past the new development areas and into Rushenden thus ensuring that there is no perception of 'them and us'.
- The proposed Swale side park running from Queenborough in the north to Rushenden Hill in the south will provide a really substantial open space with footpath connections along the waterfront and penetrating into the existing and proposed developments.

## *Facilities*

Improved connectivity will enable the range of community facilities proposed across the whole area to be easily accessible. At 'Rushenden Square' where the link road joins Rushenden Road a new health facility, sports building, primary school and retail facility will benefit Rushenden and the rest of Queenborough. Within 800 metres (approx. 10 minutes walk) it will be possible to reach the new marina and its shops and leisure opportunities and Queenborough itself with four options for crossing the creek.

## *Employment*

The development of the Neatscourt area will bring hundreds of jobs to the area. Access to these areas for residents of Rushenden will be greatly improved via the link road and footpath links.

## *Development*

Rushenden has an attractive and green environment although it will benefit from upgrading and enhancement proposals being formulated in partnership between SEEDA, SBC, KCC and AmicusHorizon Group. There may be opportunities for some redevelopment of existing buildings and sites within Rushenden such as those in Manor Road; the centrally located sheltered housing block that does not meet the standard required for future needs. This site presents opportunities to bring good quality development into the heart of Rushenden and perhaps to revitalise this area in tandem with new developments to the north. It may be possible to develop a landmark community or similar facility at the southern end of the Rushenden Road thus completing the journey and helping to put Rushenden on the map.

## *Housing opportunity*

The development proposals for the land adjacent to Rushenden will provide a wide range of housing types including a range of affordable dwellings. This in tandem with potential development opportunities within Rushenden itself will broaden the 'offer' to existing residents and blur the line between new and existing. This will benefit of local residents as it will not only create a mix of opportunities but also bring the new into the heart of Rushenden.

## *Integration*

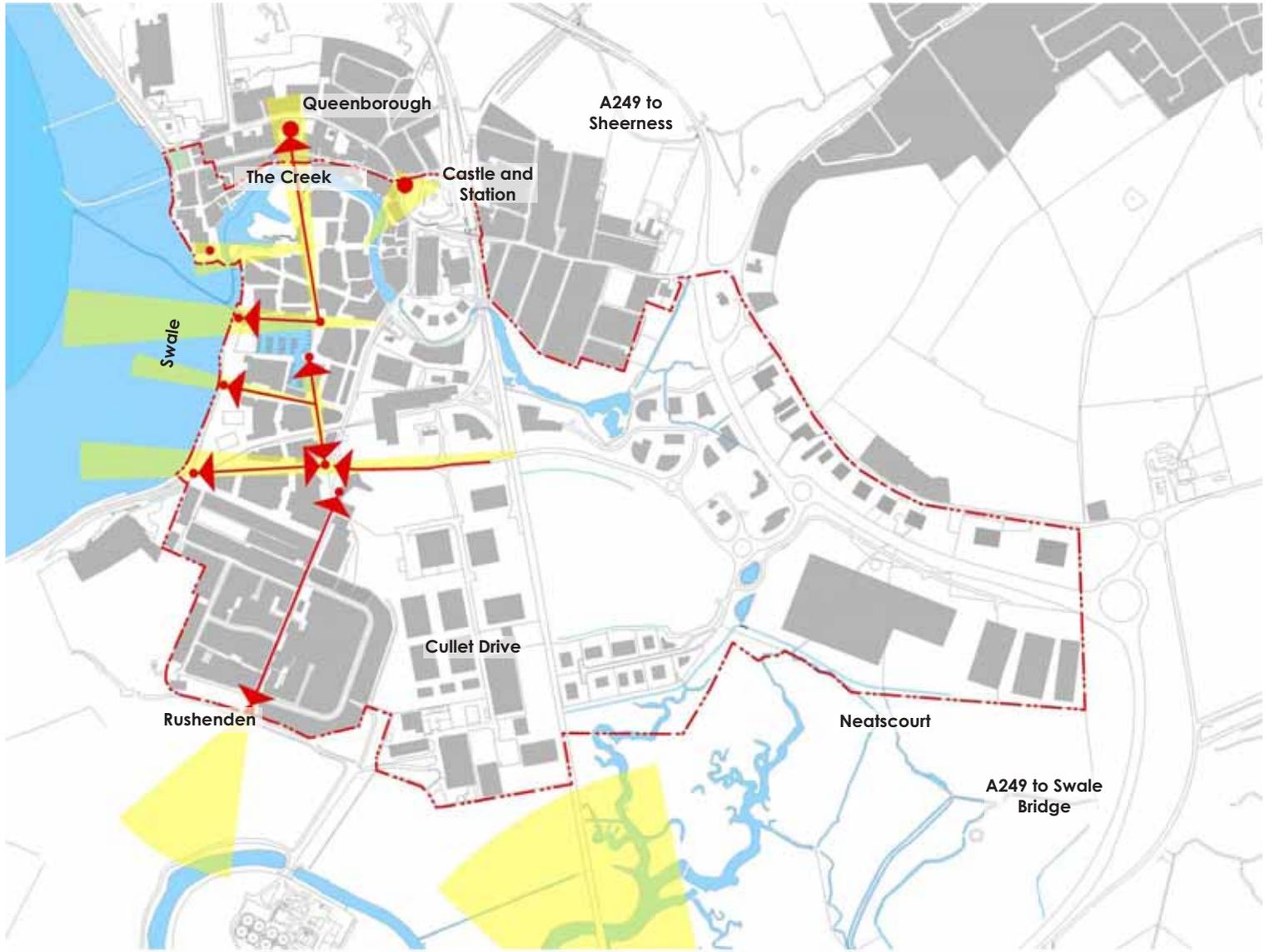
A key aspiration is to integrate the new proposals effectively into the existing build areas. Footpaths, greenspace, roads and public realm improvements will all contribute to this, as will a contributions strategy that provides funds for environmental improvements. One further way in which this will be achieved is to ensure that at key locations such as along First Avenue and at Rushenden Square the scale of buildings and quality of the public realm bridges effectively between the new and the existing. For instance First Avenue will be widened and the new dwellings designed to be in scale with the existing opposite and set within a well landscaped setting.

## *Sense of place*

To some Rushenden may have a poor sense of place or identity feeling isolated and homogenous. The introduction of new development, a central place and an effective termination to Rushenden Road will help to create variety. The physical connection and integration into the wider regeneration proposal will make Rushenden part of a bigger and exciting place.

See Character Areas for Rushenden on pages 110 and 111.

# Design Concepts & Principles : Landmarks & Views



Plan 4.1 Landmarks and Views

Key:

● Landmarks

■ Views

# Orientation, Landmarks & Views

## Principle 2: Creating Legibility - Views & Landmarks

A series of key views and potential landmarks will orientate and organise the Queenborough and Rushenden masterplan. These are shown on Plan 4.1 and are intended to capitalise on existing key landmarks such as Queenborough Church



### Views

Many of these are towards the west and the Swale. These key views are intended to open up views towards the water and the open skies above. They open up vistas between built development and key physical links across the residential areas. A key 'off plan' view is from the new Swale Crossing where wide expanses of the island are visible from the downward approach. In the vision it is important to consider the quality of these views and the treatment and management of the land that these encompass. The viewpoint of Rushenden Hill currently is one of the few vantage points locally and easier access will open it up to the wider population.

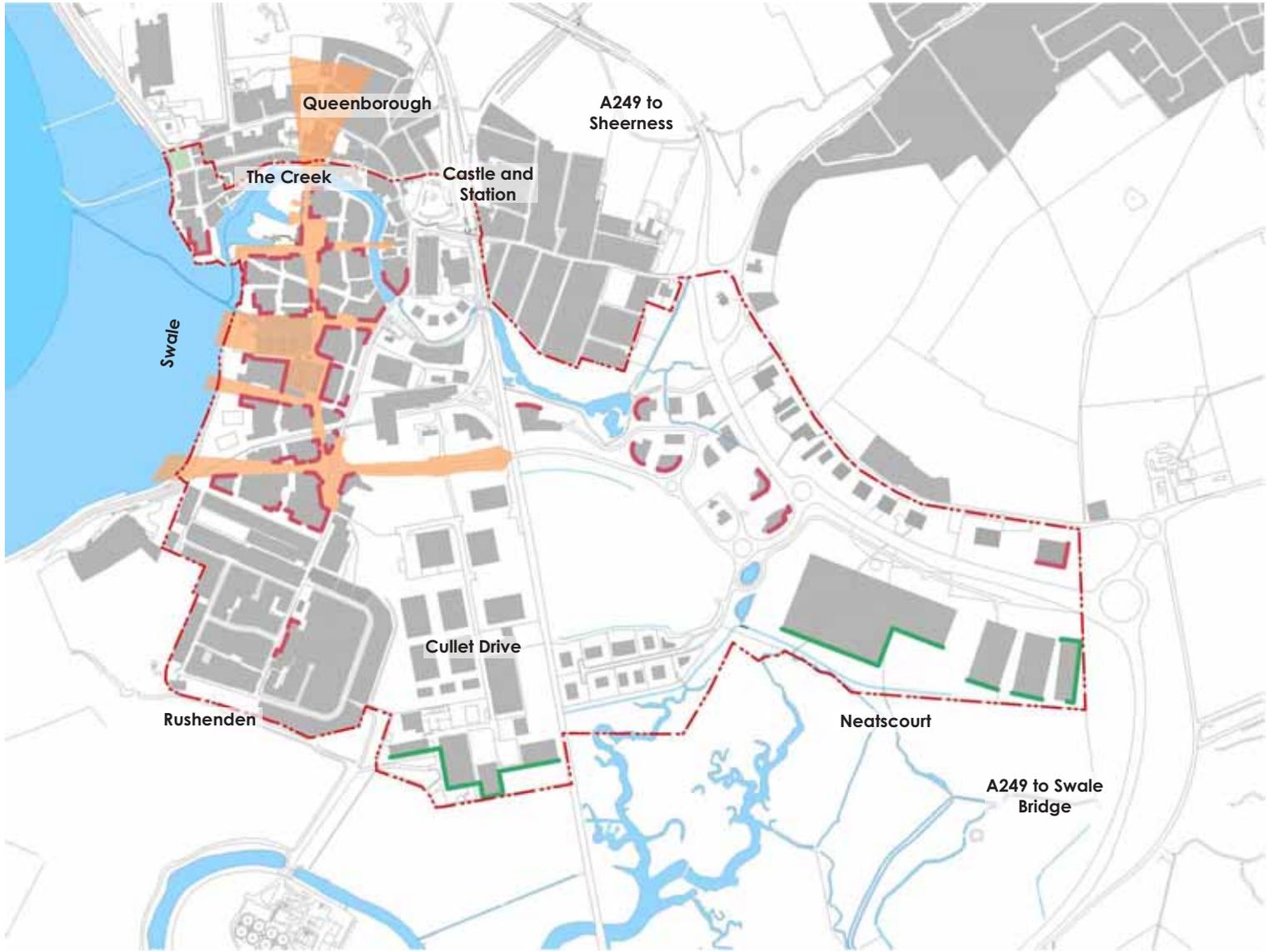
### Landmarks

Landmarks are critical to aid orientation and legibility of a place. The masterplan sets out a number of locations for potential landmarks and how existing ones can be incorporated within the plan. Landmarks might be in the form of art, built form or proposed features such as the marina. Within the masterplan they are set out on key routes and visual corridors.

The location of tall buildings is related to these principles and the incorporation of Old Queenborough and its Church is seen as critical to the meshing of old and new.



# Design Concepts & Principles: Permeability & Key Facades



Plan 4.2 Permeability & Key Facades

Key:

-  Permeability
-  Key Facades
-  Minimum Impact

# Permeability & Key Facades

## Principle 2: Creating Legibility - Permeability

A permeable place is one where built development and open space work together to control and guide movement and access. Plan 4.2 shows the masterplan intentions regarding permeability and sets out building massing and open space to create a highly legible and visually controlled place. Permeability can be controlled by changes in level, openings between buildings and well defined and designed edges.



Figure Ground

The figure ground diagram (above) shows the built form in grey and sets out a pattern for development. The residential areas are shown as a tightly knit built form with clearly defined edges and open spaces between. It has a clear relationship to adjacent existing residential areas. The Neatscourt area is less well defined but here integration with the wider landscape is more important

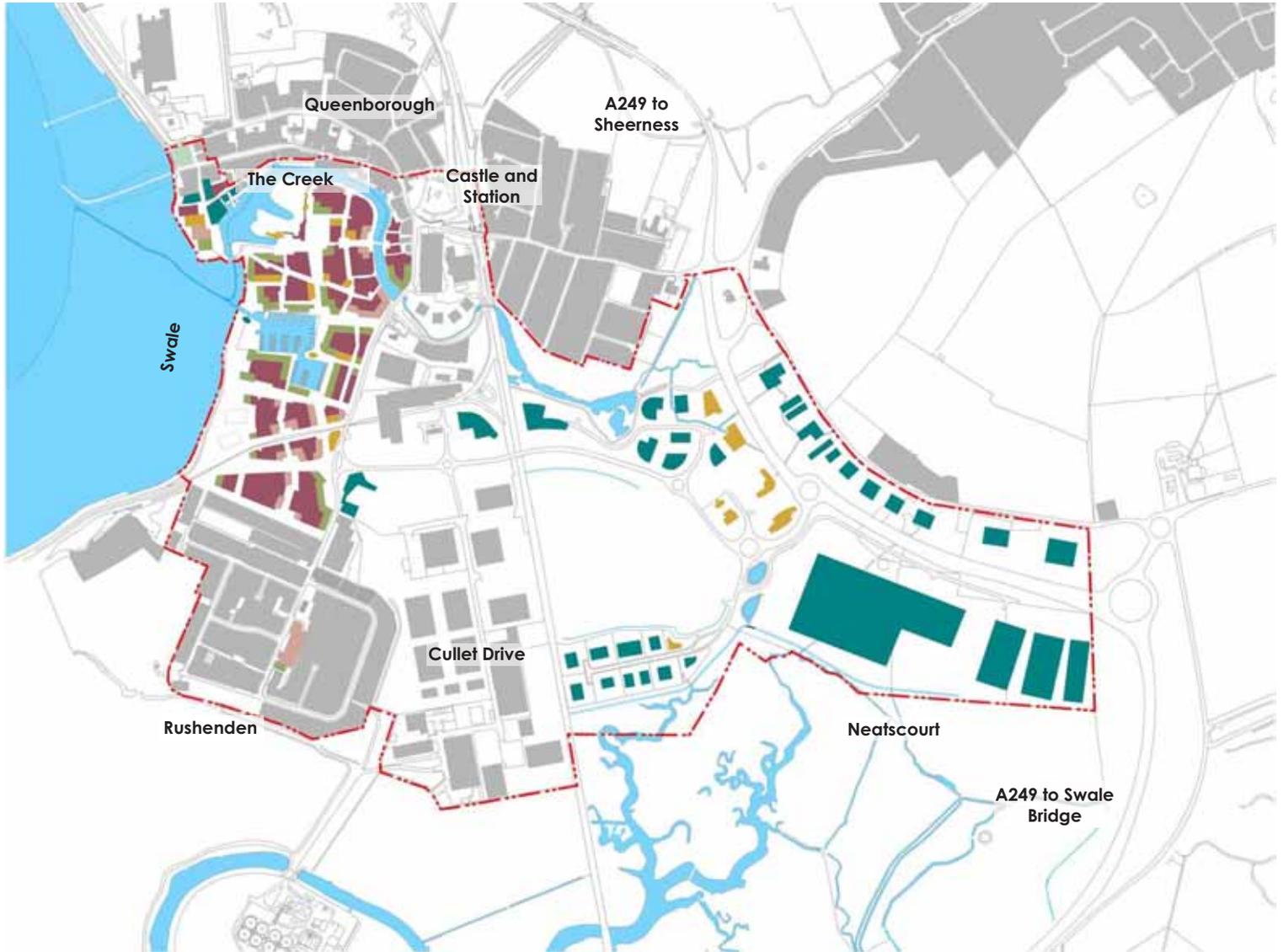


Figure Ground

### Key facades

In any development some built facades are more important than others either because they have a civic or architectural importance or because they need to be recessive and become less prominent. The plan opposite sets out these key facades. Some of the Neatscourt facades overlook the adjacent open landscape and environmentally sensitive areas. Here built form should be recessive and employ cladding, green roof and bunding to conceal mass. In other areas such as the proposed Rushenden Square at the termination of the link road facades mark a point of entry and need to respond appropriately to this with high quality and imaginative architectural treatment.

# Design Concepts & Principles: Building Heights



Plan 4.3 Building Heights



# Building Heights

## Principle 3: Grain - Height & Massing

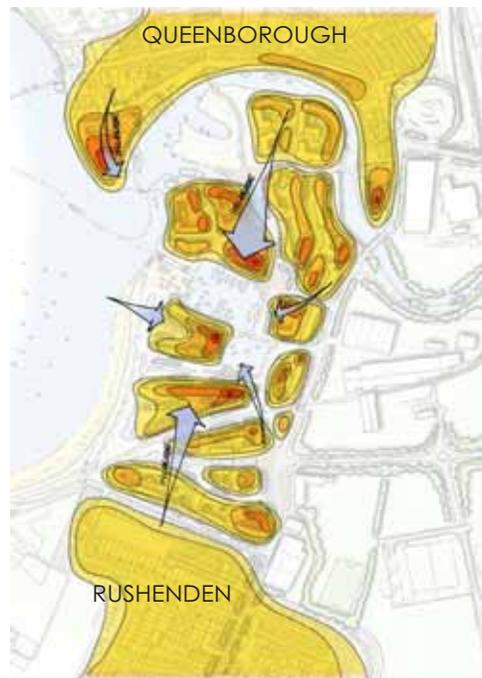
Grain is a way of describing the 'texture' of a place. A tight grain might describe a place like Whitstable and an open grain a place like Rushenden. Massing and building height is a factor here.

### Indicative Building heights

The proposed massing and building heights set out on Plan 4.3 show a range of potential heights across the masterplan area. These are guides and detailed design will be expected to refine transitions between masses. These are set out to respect adjacent existing built development such as Queenborough old town and to make the most of views and proposed features such as the marina. There is a direct relationship with legibility and permeability in that greater massing will help define the development and orientate the user. In the Neatscourt area development is generally lower in height apart from key locations where it will be an advantage to build higher for instance at gateway locations where the link road joins the A249. Here high quality architecture will be needed

During consultation exercises and events many people are interested in how high the proposed buildings will be and concerned about their potential impact. Any development should respect existing heights and avoid overwhelming existing buildings, but the buildings around the central part of the scheme, nearer the marina will be taller to gain the benefit of views across the waterspace and make a bold 'statement'.

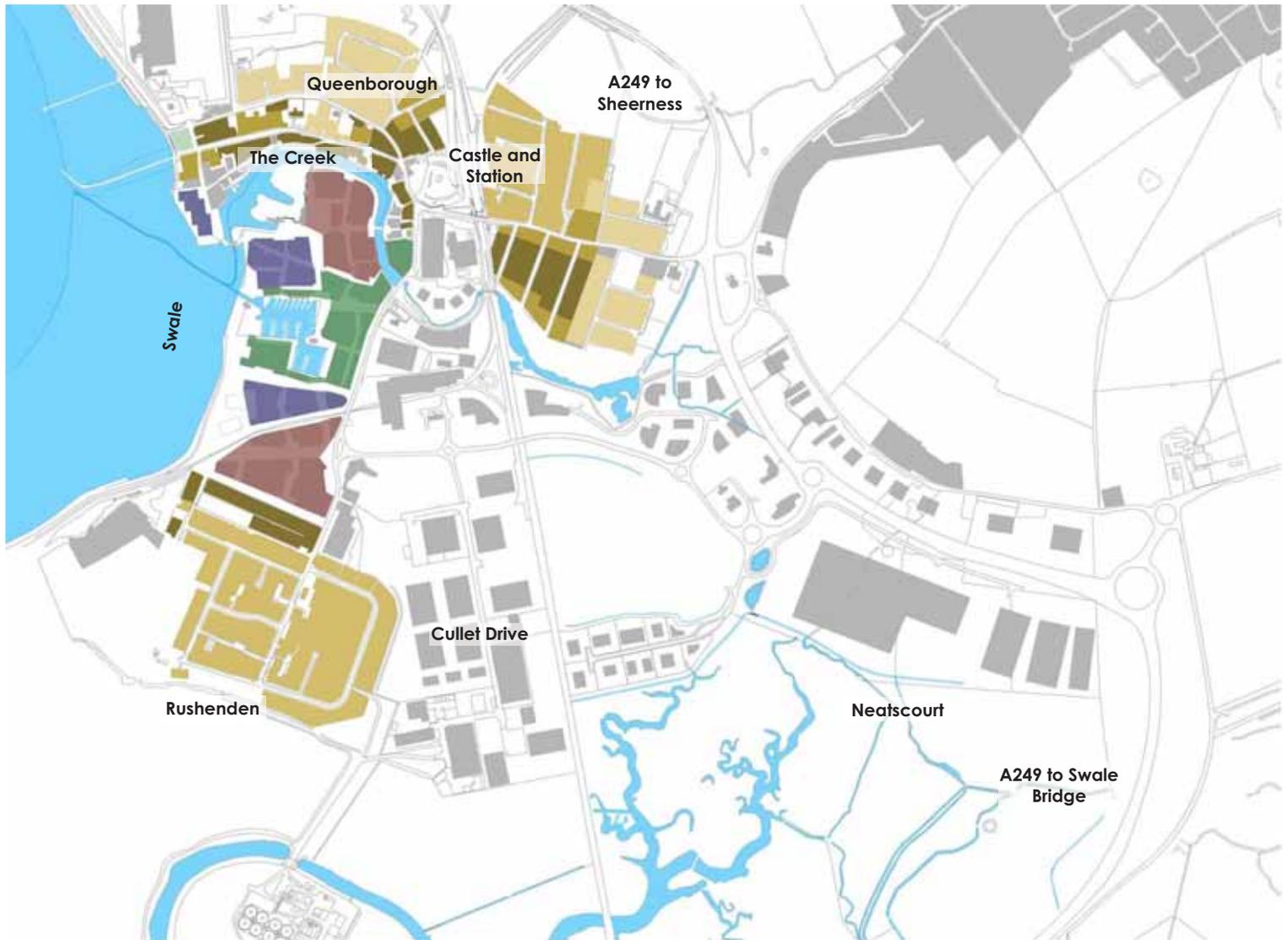
As a guide, the 'old school' building in Queenborough is the equivalent of approximately 4 modern stories and many other buildings are 2-2.5 stories tall. The diagram below illustrates the principle of massing in the western part of the masterplan.



Taller buildings do not have to be monolithic but can be highly articulated and attractive. A range of styles will be employed across the development area and the adjacent photographs show some ways of articulating mass in buildings.

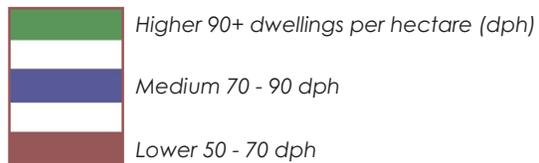


# Design Concepts & Principles: Density

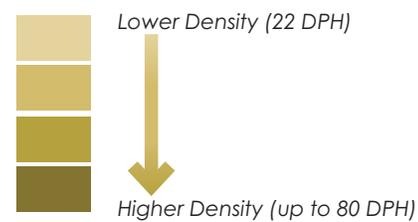


Plan 4.4 Density

**Proposed Average Densities:**



**Existing**



# Density

## Principle 3: Grain - Density

Another key generator of grain is density of development. Density is not directly related to mass for instance tower blocks need large amounts of open space around them to accommodate access, recreation and parking and are often not particularly high density.

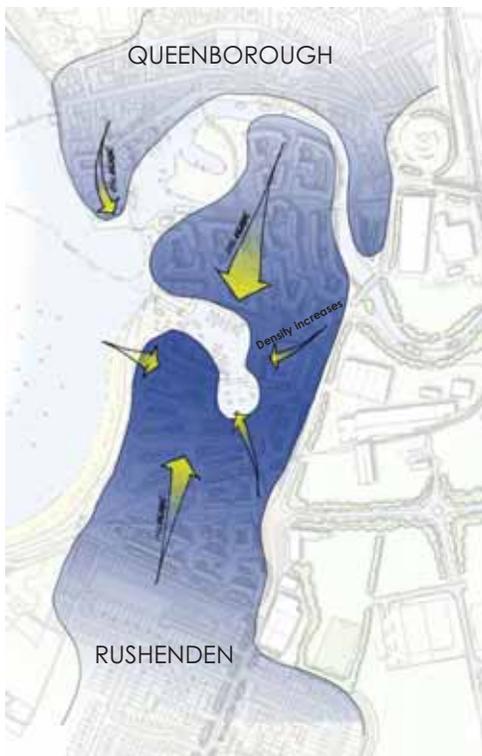
### Density of Development

Density can be expressed in a number of ways but here it is shown as dwellings per hectare or DPH.

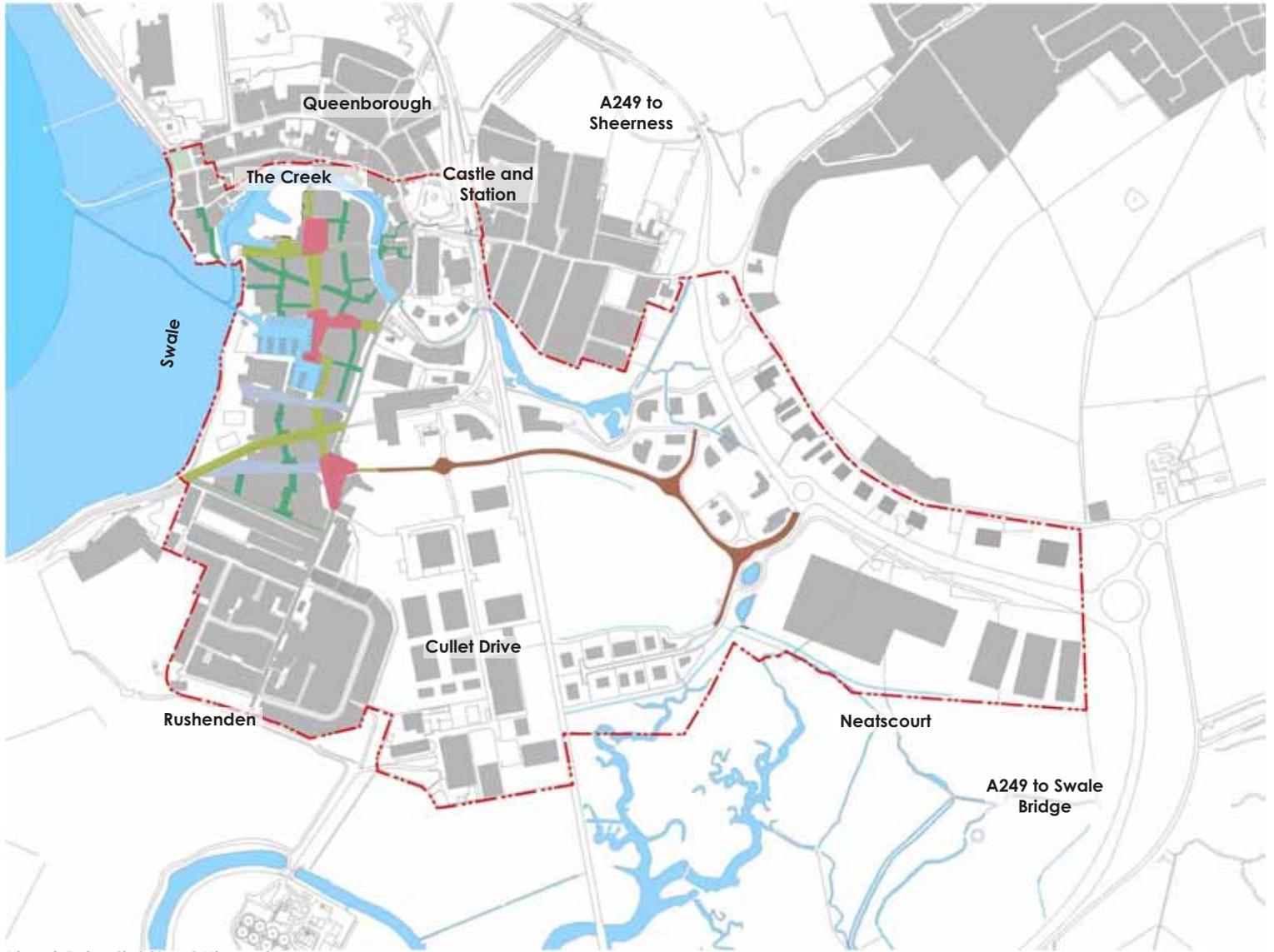
As a guide the existing density of residential areas in Queenborough and Rushenden range from approx. 22 dwellings per hectare (Rushenden) to 80 dwellings per hectare (old Queenborough). Many better residential developments aim to emulate 'historic' qualities seen in towns like Queenborough or Whitstable, which have quite high densities. Plan 4.4 shows the proposed density across the site.

In general terms the highest density development will be concentrated in the centre of the residential proposals around the marina area while lower densities are to the north and south. This is shown on the diagram to the right.

The Neatscourt area does not have a density factor applied to it - employment development traditionally does not.

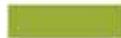
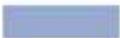


# Design Concepts & Principles: Street Hierarchy



Plan 4.5 Spatial Street Hierarchy

Key:

- |   |   |
|---|---|
|  Relief Road        |  Mews        |
|  Traditional street |  Square      |
|  Boulevard          |  SUDs street |

# Spatial Street Hierarchy

## Principle 4: Spatial Street Strategy

### Street hierarchy

The way people experience the place they live and work in as they move through it has a crucial impact upon how it is perceived and how people behave. Are the streets overlooked and safe, are they shared and thus traffic calmed and are they articulated in a particular way such as straight or kinked? Public space and streets for traffic in residential areas is becoming increasingly blurred. The Manual for Streets encourages shared streets and a better balance between pedestrians and vehicles while ensuring accessibility for all.

At Queenborough and Rushenden a hierarchy of streets and public realm is proposed across the masterplan area. These will provide a variety of experiences and spaces. The nature of a street is influenced by its width, the height of adjacent buildings and factors such as surfacing and parking arrangements. In particular the height to width ratio influences the 'feel' of the place. A number of scenarios are set out over the following pages, and in Plan 4.5, of how streets and urban spaces are anticipated in the masterplan.



- Street

A 'traditional' street with parking on one or both sides - Rushenden Road will become a street with active lived in frontages, pavements and traffic calming.



- Mews

Smaller scale shared use surfaces and intended to be a common type within residential areas, often without pavements and with parking in courts.



- Boulevard

A broader street, tree lined and often framing views or leading to major places and public spaces. Framed with taller buildings



- Square

A variety of spaces at key junctions and associated with particular uses such as the proposed school, the marina or the creekside. Not necessarily pedestrian only areas, often shared surfaces but with car free areas adjacent to retail outlets or restaurants and against water



- SUDs Street

Where possible all streets will be SUDs streets in that surface water will be moved in surface water channels into the aquifer via any necessary cleansing mechanisms such as reedbeds or petrol interceptors.



The proposed street hierarchies are:

- Path

Primarily a pedestrian route but accessible for emergency vehicles and refuse collection. Potentially with tall buildings on each side, overlooked, allows access to residential units

# Design Concepts & Principles

## Shared Streets

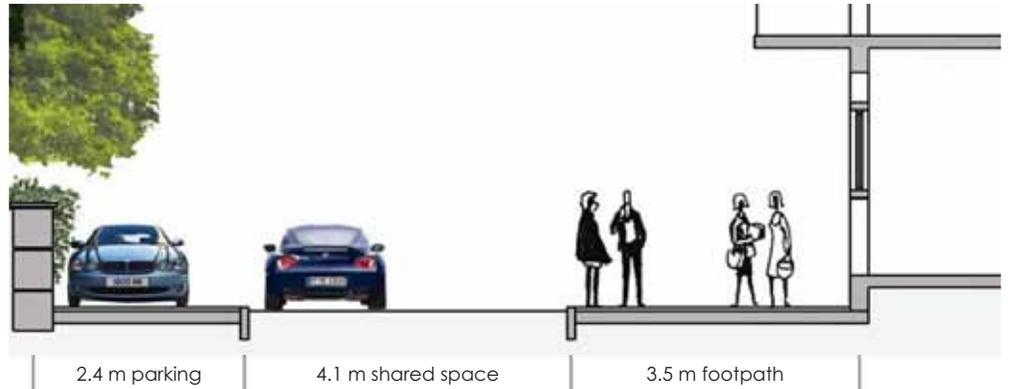
Traffic calmed and designed to mix pedestrians and vehicles. Maximum 20mph road speed. Design encourages drivers of vehicles to slow down and be aware of surroundings other users. Within the masterplan area the many of the residential streets will be shared surfaces and key areas such as Rushenden Square and adjacent to the Marina will be treated this way to emphasise arrival at an important location.

On street parking will be considered here with design of spaces carefully considered to avoid pavement/pedestrian zone parking.

NB All dimensions indicative only, to be confirmed at the time of any Planning Application, to conform with current guidance.



Typical plan of shared street



Typical section through shared street

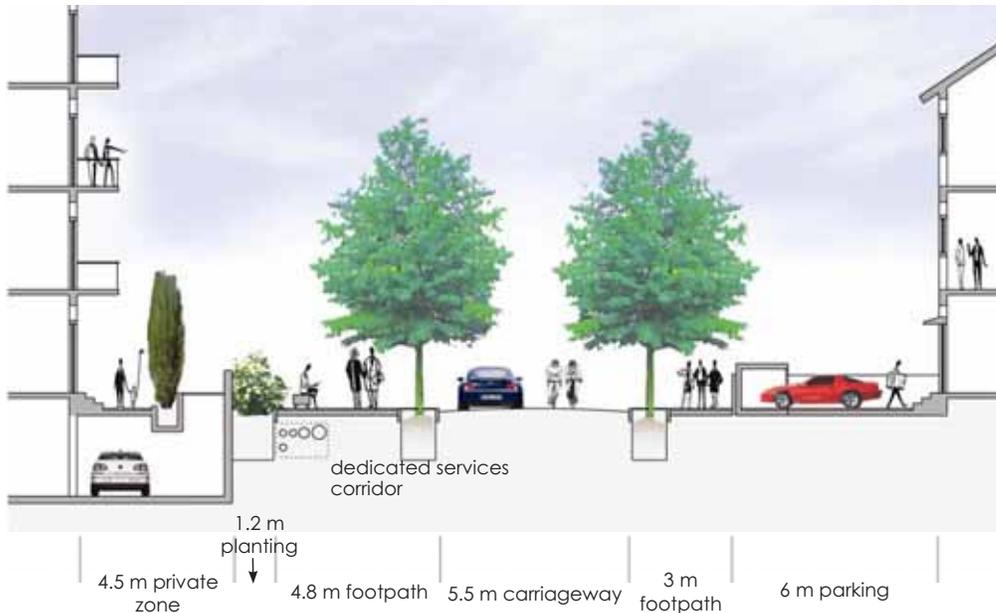


# Street Hierarchy

## Boulevard

Broader tree lined street. Separate pavements and broad planted verges. Well lit and strongly directional the boulevard will often lead to a destination such as the marina or the western end on the link road. It will be designed with coordinated service corridors to take CHP ring mains etc.

Parking may be dealt with in a number of ways including on street, central aisle and to semi-basement areas via access ramps.



Typical section through boulevard



# Design Concepts & Principles

## SUDS Streets

The suds street will collect street and roof water from adjacent buildings and channel it into nearby watercourse, swales or ponds to sustainably drain it away to existing natural water features. It may take the form of open gulleys within the road surface or, in wider areas between buildings, collect into wider swales where there are opportunities for bio-diversity and landscape treatment.



Typical section through SUDS street

Swale / drainage system



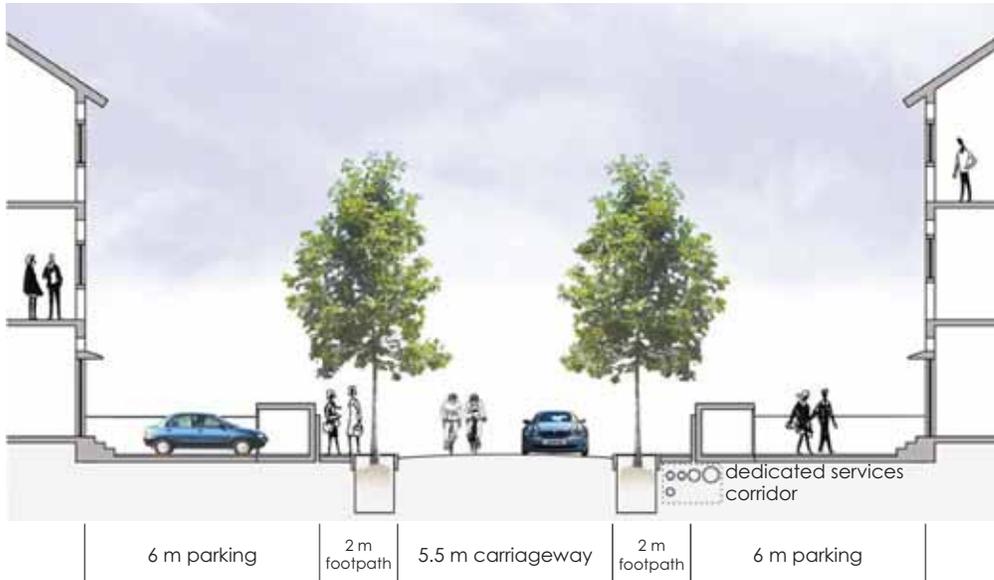
Plan 4.6 Suds

→ SUDS

# Street Hierarchy

## Traditional Street

A traditional street is one with a pavement or pavements, kerb and mainly on-street parking. Houses and buildings may sit close to the back of pavement or some distance back. The street may have tree planting and will have a dedicated service corridor. The historic streets at Queenborough are good examples of the type and the adjacent images show some other interpretations. Rushenden Road will be treated as a 'street' with the intention being to make it a more attractive and liveable environment. First Avenue will be considered in a similar way albeit widened to make access work.



Typical section through boulevard



# Design Concepts & Principles

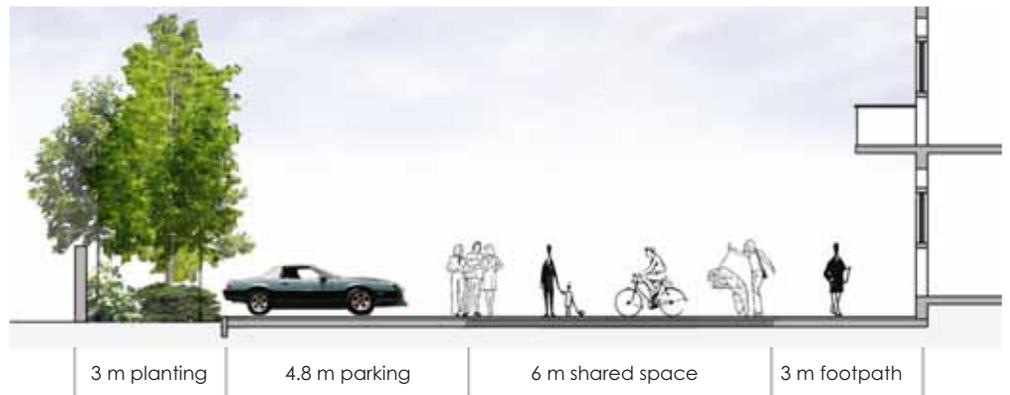
## Square

Throughout the masterplan area there are a number of key points. These may be arrival points, places of orientation or areas where shops, cafes or other activities are grouped. They will be landscaped with high quality and materials and will have impact lighting. They may have parking but will be designed to be shared surfaces and highly traffic calmed. They will be accessible to all and designed to current standards. The images below show a number of examples of squares and urban space.

Parking can be accommodated in squares either for visitors or residents. Parking in these areas will need to be carefully designed to ensure the quality of the space is maintained at all times and that pedestrian use is not limited.



Typical plan of square



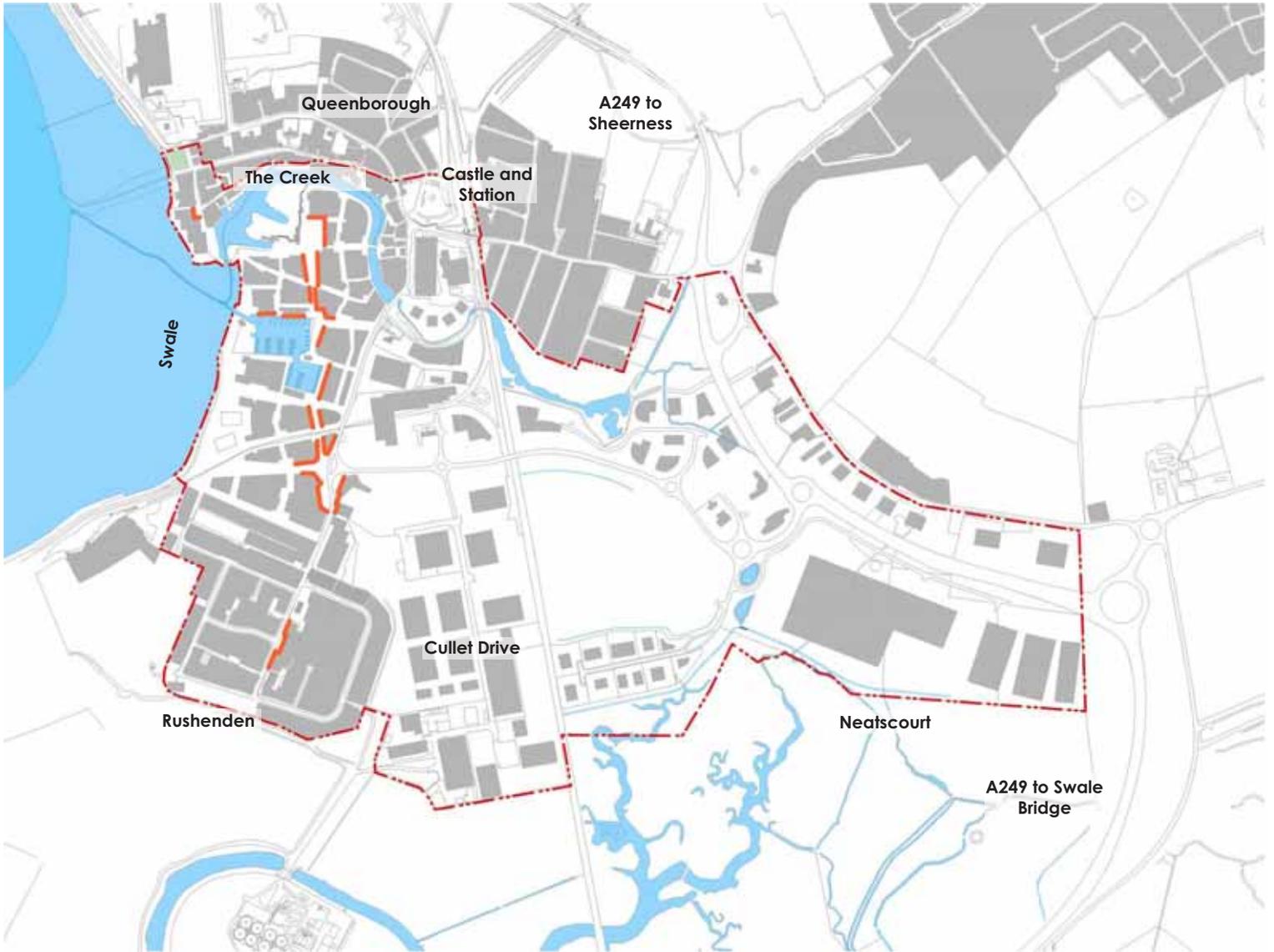
Typical section through square



# Street Hierarchy



# Design Concepts & Principles: Active Frontages



Plan 4.7 Active Frontages

— Overlooking / Active Frontages

# Activity & Movement

## Principle 5: Activity and Movement

Active frontages are important in order to create life, vibrancy and ensure activity over time. This is particularly important when creating high quality public realm and ensuring it feels safe and is used well.

Plan 4.7 sets out key active frontages. These are along main pedestrian routes and around major squares and the marina.

Existing active frontages, such as those provided by retail and commercial buildings and by community facilities, are concentrated along the two primary axes of Main Road/High Street and Rushenden Road. It will also be important to have suitable levels of activity at marina and Creek-side locations.

Active frontages will be created by ensuring retail, community, cafe, bars and 'fronts' of residential units are located along major routes and adjacent to areas of public realm. Shared surfaces will encourage pedestrian activity and 'self policing'.

## Safer places

Safety & Security are important in terms of creating an attractive environment which people are happy to use at all times and assist in terms of reducing crime or the opportunities for crime. The layout and underlying principles of a safe secure environment have been considered - in particular the layout addresses the following:

### Access & Movement

Appropriate lighting to all public areas to create an inviting and well lit environment. Good legibility i.e. people are guided and drawn through a clear series of spaces with good visual inter connectivity. Natural surveillance through active frontages such as shops and restaurants at ground level. Permeability through routes and spaces with no 'hiding' places. Routes which will be well used with 'attractors' that generate good footfall at all times.

### Structure

Clear definition between public and private areas, no blank walls or dead space, no conflict between users e.g. office / education,

### Parking

Well lit and to appropriate standards e.g. ACPO "Safer Parking" and English Partnerships "Car Parking - What Works Where"

### Surveillance

Good overlooking of spaces and routes by other uses so that 'natural surveillance' deters crime and disorder.



### Ownership

Ensure all space is 'owned' i.e. not 'space left over after planning' (SLOAP). Clearly separate public and private space

### Physical protection

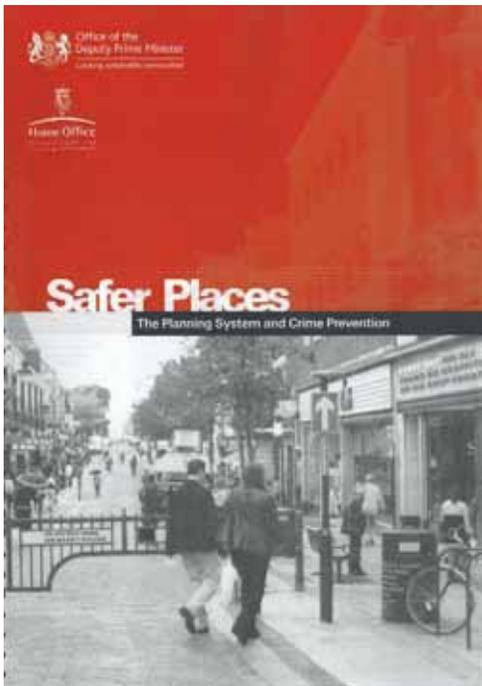
Ensure all doors, windows and gates are to appropriate standard i.e. ACPO and "Secure by Design"

### Activity

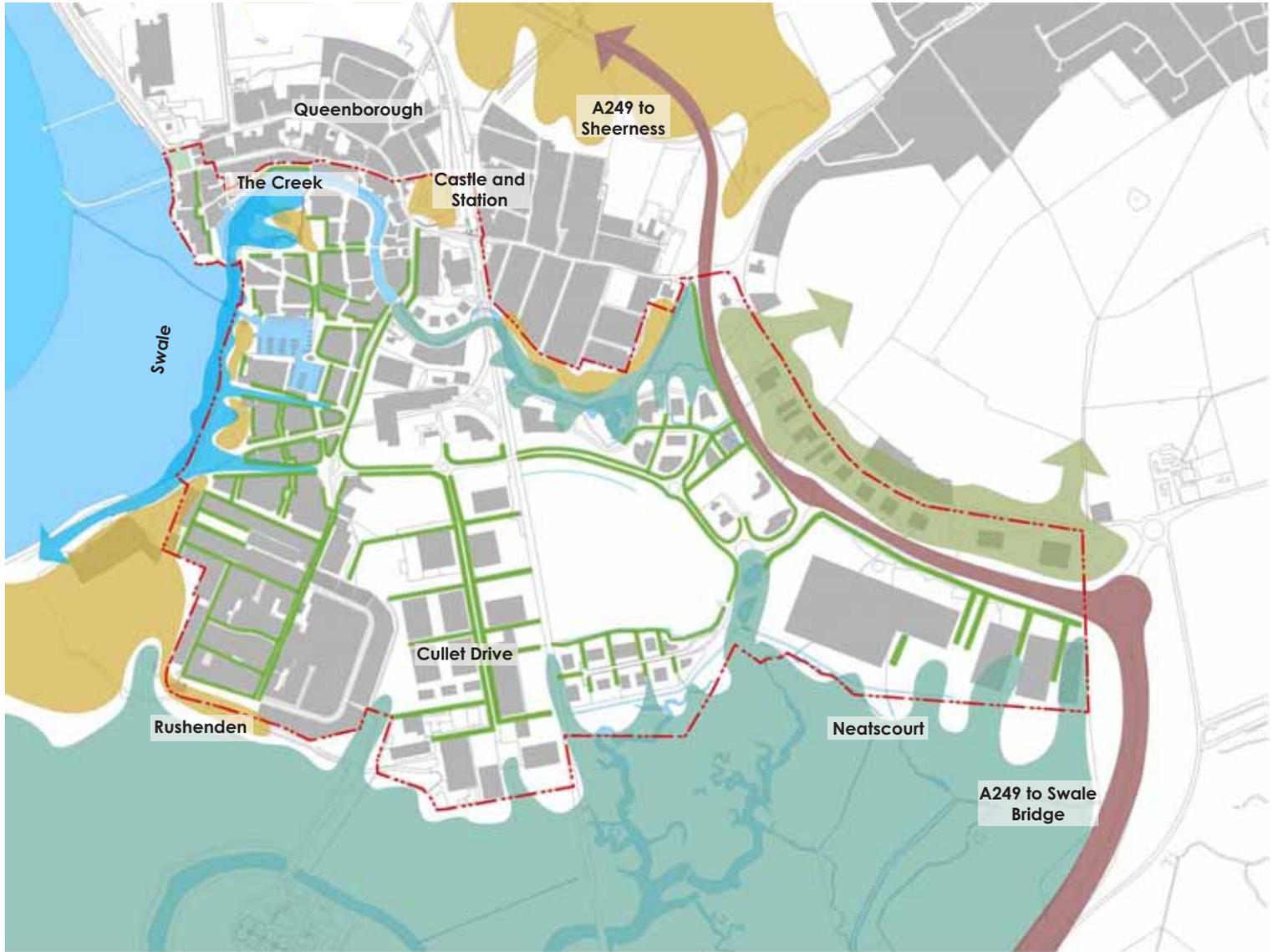
Good mix of uses over time. Attract people - the more use the less opportunity for crime.

### Management & maintenance

Easily cleaned and maintained structures and landscape. Well maintained spaces. Design out 'cues' for vandalism or graffiti eg 'hidden' or obscured places and 'backs'.



# Design Concepts & Principles: Natural Environment



**Plan 4.8 Greenspace & Natural Environment**

Key:

- |   |   |
|---|---|
|  Marshes                  |  Formal Landscape      |
|  Waterside                |  A249 Corridor         |
|  Woodland / Rising Ground |  Informal Public Space |

# Natural Environment

## Principle 6: Greenspace & Landscape Strategy

The provision of greenspace, play, biodiversity and a landscape structure to the masterplan is an important part of making the place and providing recreational facilities.

There are two aspects - a greenspace and landscape strategy and the provision of open space, play facilities and activity areas. Plan 4.8 shows a landscape strategy for the entire masterplan area. It is necessarily over arching at this scale but shows the key principles that underlay the design.

### Marshes

The local low lying marshland is a strong characteristic of the island and supports a rich habitat. Where possible it is intended that this type of landscape penetrates into the new development areas and thus blurs the boundaries between old and new. Where this existing landscape character abuts new development it is appropriate that a grassland landscape with associated swales and ditches continues into the proposed. In particular this will happen along the southern and northern boundaries on Neatscourt. Overly formal or tree based landscape is inappropriate in this setting and should not occur.



### Waterside

The waterside landscape is one where SUDs and native or semi-native planting predominates. Swales, ditches and retention ponds will be planted with reeds and other marginal aquatics. Water will be managed to retain wetland characteristics and to encourage biodiversity. Willow, birch and alder are among appropriate tree species within this setting. 'Semi-native' ornamental planting of dogwood and grasses will be used to create intensity of interest at key points.

### Woodland / rising ground

At this point the landscape starts to change from marsh to higher ground and field hedges and woodland trees. Substantial tree and native shrub planting will create a strong green edge and setting within which smaller scale employment uses can be set. In time it may be appropriate to extend this uphill to recreate the wooded hillside that will have existed here and potentially grow coppice for the potential combined heat and power facility plant.



### Formal Landscape

The formal landscape is one of regularly spaced trees, and ornamental shrub planting. It is located away from the edges of the proposed development as, within the wider setting, it is alien. Street tree planting using robust species such as lime, plane and ash will leave a lasting legacy over time. Smaller ornamental species such as apple and cherry will give seasonal impact within smaller urban spaces. It is recognised that the use of natural species should be given priority in all areas.



### A249 Corridor

The visual qualities of the A249 corridor has a critical influence on how the island is perceived and the approach to Queenborough and Rushenden. It is a simple landscape of grazed marshland, ditches and agricultural fences. It is important to maintain this condition and avoid any 'clutter' in the form of signs, advertisements or inappropriate buildings. The wide open vistas are an important characteristic and anything that detracts from these should be avoided. There may be an opportunity for art / landart in key locations where the contrast between the 'natural' and the man-made can be used to real effect.



### Informal public space

Areas such as Rushenden Hill are important as they provide valuable public open space. These areas are and can be fairly low key with mown grass paths, native planting on the higher ground and appropriate seating and interpretation. Opportunities for informal play should be exploited with naturalistic features such as logs and undulating landforms. Biodiversity can be encouraged through grassland mowing regimes and native tree and shrub planting.

# Design Concepts & Principles: Green Space



**Plan 4.9 Green Space**

Key:

- |  |                                     |   |                                 |   |                                     |
|--|-------------------------------------|---|---------------------------------|---|-------------------------------------|
|  | Existing landscape context          |  | Play                            |  | Enhancements to existing open space |
|  | Structural landscape (trees, hedge) |  | Public green open space (parks) |  | Potential 5-a-side football         |
|  | Allotments                          |  | Nature conservation areas       |   |                                     |
|  | Formal open space (sport)           |  | Proposed open space             |   |                                     |

# Green Space

## Principle 6: Greenspace

The masterplan proposes a comprehensive series of new and existing linked green spaces, sports and recreation opportunities and locations for play. In the previous chapter the masterplan sets out the quantum of open space and shows how the existing and new combined provides the necessary amount. The access diagrams (Plans 3.8 and 3.9) show how these are well connected.

The quality of provision is equally important and current thinking from the GLA, Play England and others is starting to move away from formulaic design and to site specific and a more creative approach - particularly to play.

The project delivery strategy sets out sums for the provision and principles of maintenance and how this may be arranged.



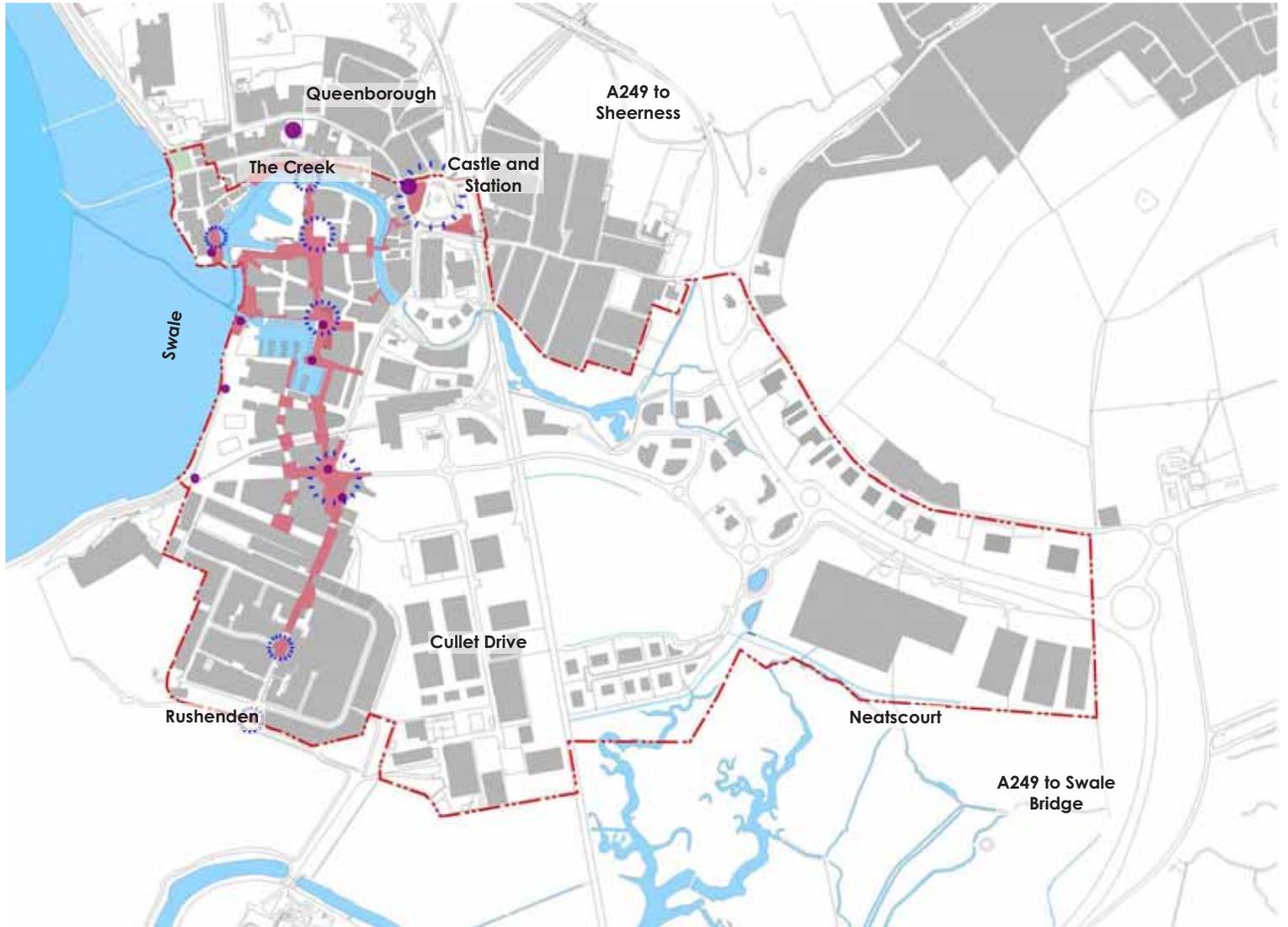
Greenspace needs to be carefully designed, flexible, attractive and integrated. Where possible active uses such as play and informal recreation should be overlooked and close to users while quieter contemplative places can be at a greater distance. It may be appropriate to design these greenspaces with community involvement and through design competition. Art will play a part in their articulation and practical matters such as access, dog walking and maintenance will need to be considered.



Opportunities for education should be explored such as nature conservation activities, bird watching and interpretation of the rich historic local area. For instance there are plans to reinterpret the castle site to make it a more practical greenspace and to interpret its past function and layout in landscape features.



# Design Concepts & Principles



Plan 4.10 Art, Culture & Community

Key:

-  Public Realm
-  Landmarks
-  Hot spots of activity

# Art, Culture & Community

## Principle 7: Art, Culture & Community

At Queenborough and Rushenden there has been a substantial investment in arts through the Arts Council's Art at the Centre initiative. Art is a strong element of the regeneration process and here the community is actively engaged in arts based initiatives. Art of various forms can be a powerful creator of place and means of interpreting history of place.

A strong art focus within regeneration should seek to fulfil these overarching objectives:

- Create identity growing from a pervasive sense of place.
- Encourage investment and economic growth.
- Strive for high standards of design in the built environment and public space.
- Create and / or strengthen partnerships with funders, statutory organisations, the community, artists, and building professionals, among others.



## Arts at the Centre

The Queenborough and Rushenden Regeneration has the unique opportunity, with the Art at the Centre initiative, to coordinate an arts strategy for the town and the community that is proactive, farreaching, and experimental. Through the monitoring inherent to the Art at the Centre programme, lessons learned from the process should be well documented and serve to expand the body of knowledge relating to the place of the arts in urban design.

At the core of the 'Art at the Centre' approach is the belief that "If artists of all types are involved at an early stage of development they can be instrumental in bringing together different agendas, identifying areas of mutual interest, producing creative solutions and enhancing the quality of urban design."

It is, therefore, highly desirable, even imperative, that the Art at the Centre programme be fully embedded within a comprehensive approach to the arts in regeneration that will become a strategy adopted by SEEDA and its partners and approved by key stakeholders. For example, the Scottish Executive, in its recent note *The Role of the Arts in Regeneration*, has emphatically stated, "It is important that arts projects and programmes are an integral part of an overall regeneration programme. If not they will remain on the periphery of the development process and their full potential will not be realised."

The Art at the Centre programme has worked hard to realise this ethic, and has already made great strides and a real impact in Queenborough. This strategy seeks to build upon that success by adopting an approach to the arts rather than a specific set of projects at specific sites.

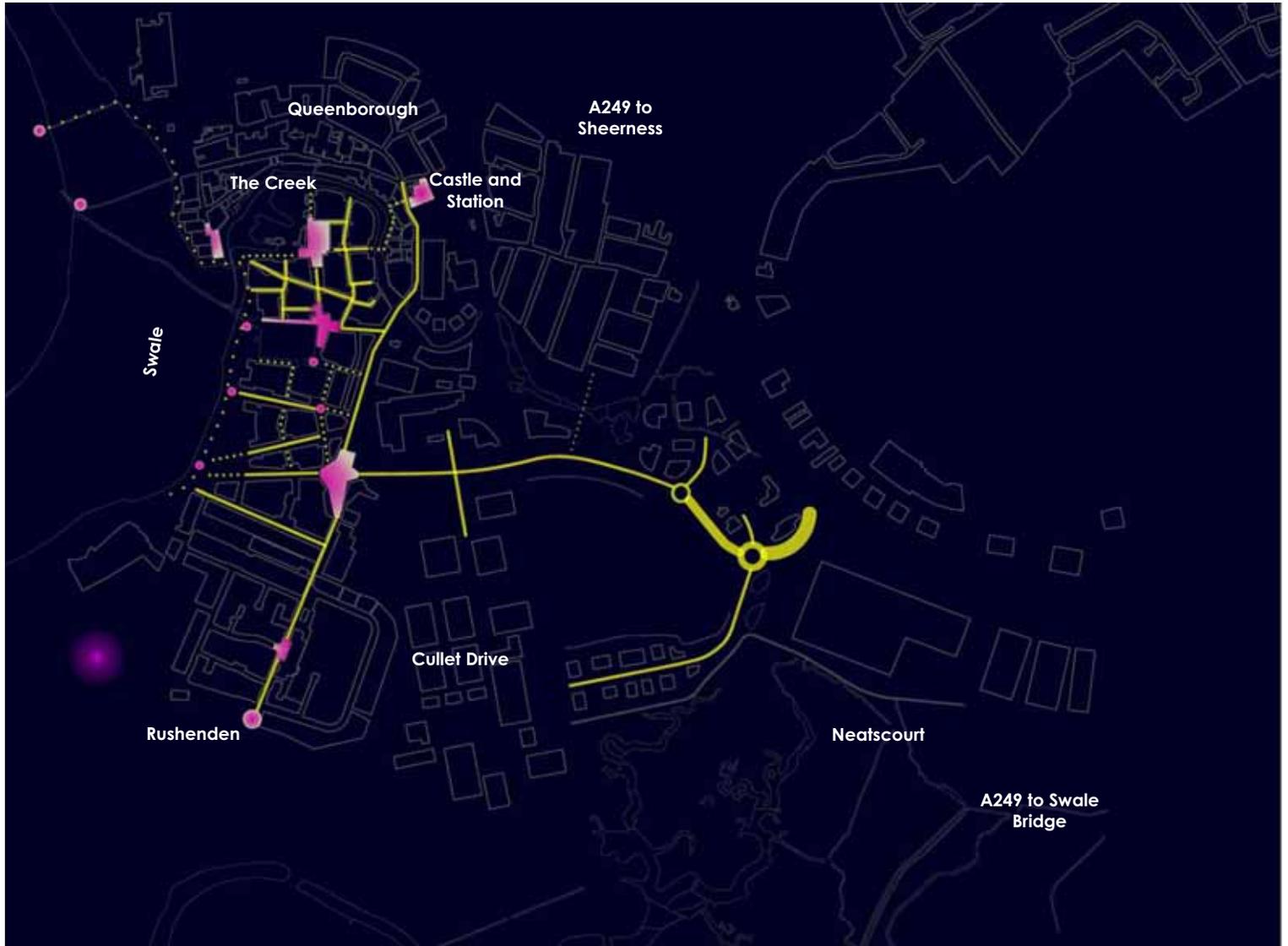


## Arts Strategy

The masterplan has a number of great opportunities for art to play a key part in the regeneration process. The plan opposite shows a number of locations where art could be employed in an integrated way to emphasis arrival, sign movement routes or interpret the area. Art may take many forms - 3D sculpture, lighting, sound, poetry, event and installation amongst many. Art should not be 'done' to a place but can be generated through competition, community involvement or artists in residence for instance. Located in key areas it can enliven, interest and educate but most importantly contribute to the making of a place.



# Design Concepts & Principles: Lighting Strategy



Plan 4.11 Lighting Strategy

Key:

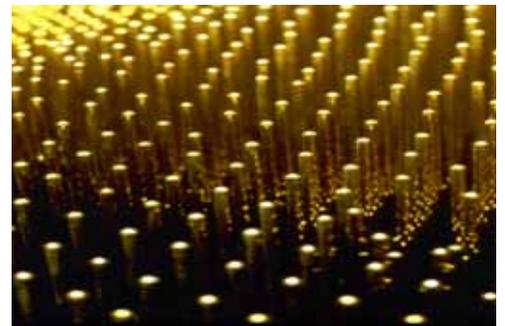
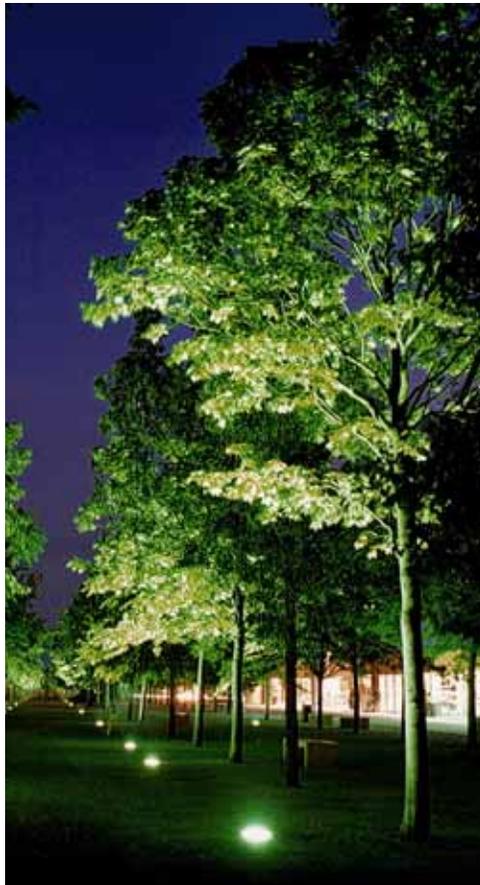
-  Primary Lighting
-  Pedestrian Way-Marking
-  Impact / Effect Lighting

# Lighting

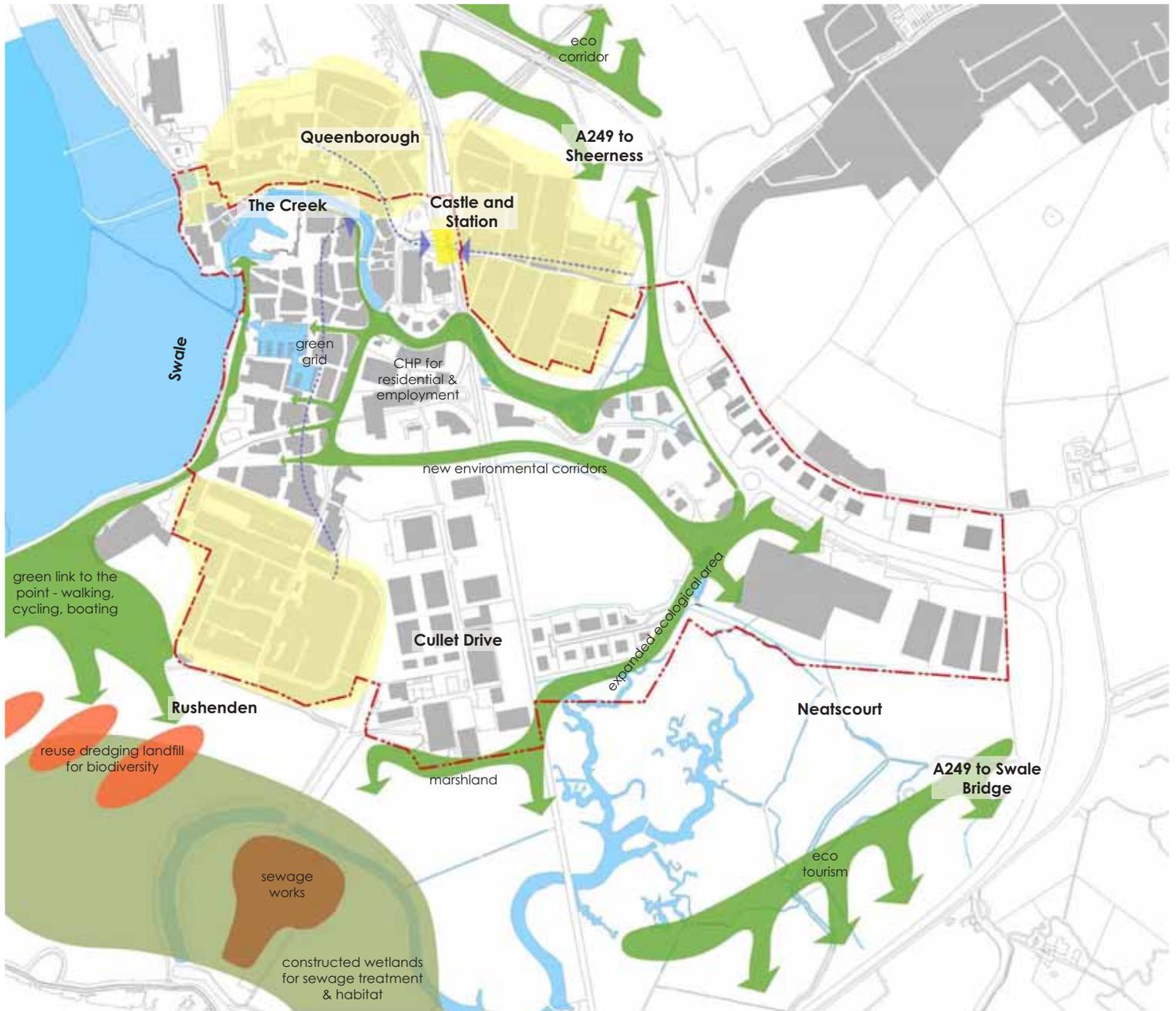
## Principle 7: Art, Culture & Community - Lighting Strategy

Lighting at Queenborough and Rushenden will operate at three or four different levels - from simple street lighting to strategically located beacons or landmark lighting projects. A few key sites should receive special attention. Building lighting projects would have great impact at Queenborough's church, Guildhall, Queenborough station, and at the old school. Certain key landscape lighting projects, such as at Rushenden Hill and the Queenborough Castle site should be considered. Sensitive and attractive lighting along the Swale, Creek, and marina will contribute greatly to the atmosphere of the waterfront areas.

Street lighting should aim to minimise glare, avoid harsh sodium lights, and provide warm light from fixtures at a pedestrian scale. Lighting in employment areas should also seek alternatives to harsh security lighting which is visible for great distances due to the flatness of the landscape. Given the sensitive landscape setting light sources close to habitats should be avoided or the design, timing, type and position should have regard to minimise any impact on nocturnal biodiversity and light spillage and pollution.



# Design Concepts & Principles



Plan 4.12 Environmental Component - Design Concept

# Sustainability



## Principle 8: Sustainable Development at Queenborough and Rushenden

Sustainability and the Sustainable Communities agenda have been at the forefront of planning for Queenborough and Rushenden from the very beginning of the process. The purpose is to provide a framework where sustainability informs and impels every stage of the design process - from inception to implementation, and finally to assessment. The practice of sustainability should extend to education, training and the motivation of clients, contractors, and communities to foster the creation and nurture the development of a political and cultural milieu that holds these principles dear.

### Ten Principles

Ten principles for sustainable development are observed in the masterplan. These are:

- maximise use of brownfield land and employ adaptive reuse;
- concentrate development;
- be fair;
- restore and enhance the environment;
- conserve natural resources;
- expand housing opportunities;
- provide transportation choice;
- increase job opportunities;
- foster sustainable business; and
- plan regionally.

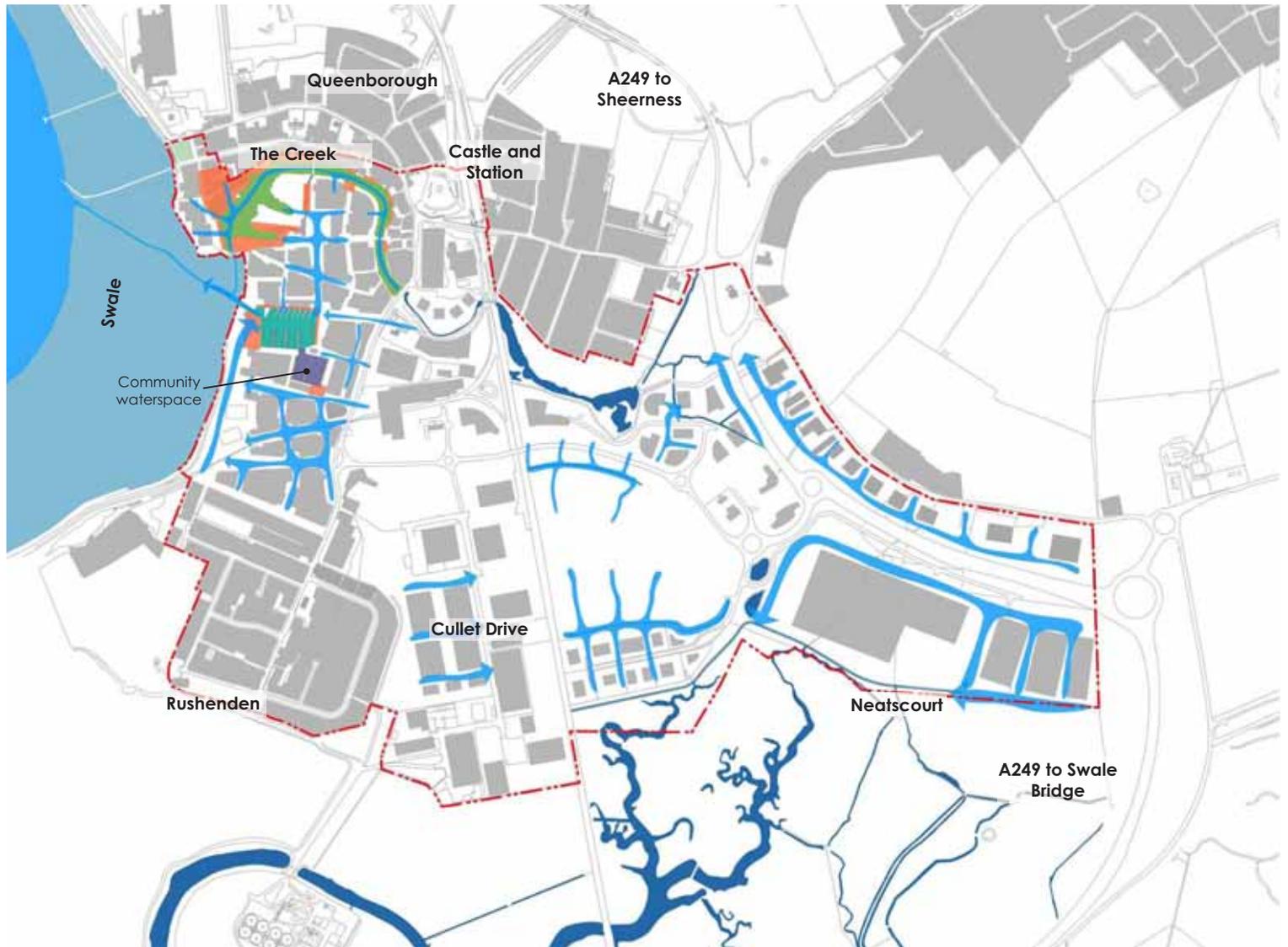
The Plan 4.12 shows the design concept for the environmental component of the sustainability programme.



These principles are explored in the supporting document "The Sustainability Charter for Queenborough and Rushenden".



# Design Concepts & Principles: Waterspace



Plan 4.13 Waterspace

- Key:
-  Creek
  -  Marina
  -  Community waterspace
  -  Attenuation / ponds
  -  SUDs
  -  Water-related activity

# Waterspace

## Principle 9: Waterspace

Waterspace at Queenborough and Rushenden can be interpreted into a number of forms but with all it plays a key part in placemaking by playing on the natural water features, managed wetlands, creek and boat related activities that predominate.



The creek is arguably the heart of Queenborough and one of its most attractive assets. There are opportunities to open up access in the masterplan however its current functions and character should be maintained.



The Swale is a great asset for wildlife and boating. These sometimes opposing elements will need to be managed in the long term. Walks along it and opportunities to use it should be encouraged. The masterplan proposes a waterside walk with potential interpretation / installation and bird watching features along its length. Features such as the all tide landing will become more important and might be brought into a wider water management strategy that might help with funding maintenance.



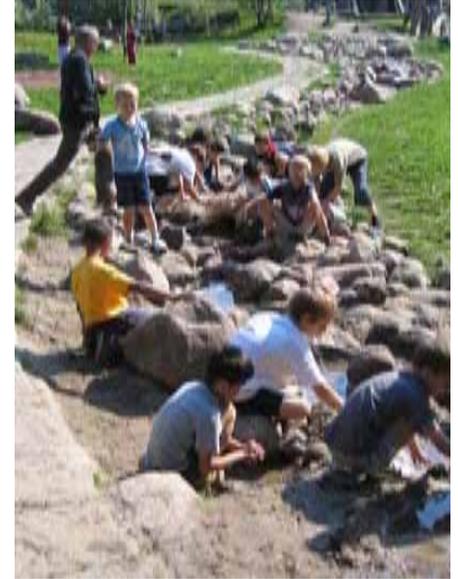
The marina will become a focus for the whole area, add value and amenity and complement the activities of the creek. It will give waterside activities a focus and become an attraction in its own right. Opportunities for play, eating and shopping will be available.



Community waterspace - historically parts of the creek were dammed and used by local people for play and recreation. The marina will consist of two basins with the smaller inner one designed for community use. This means opportunities to get close to water, take part in water related education such as sail training and launching craft



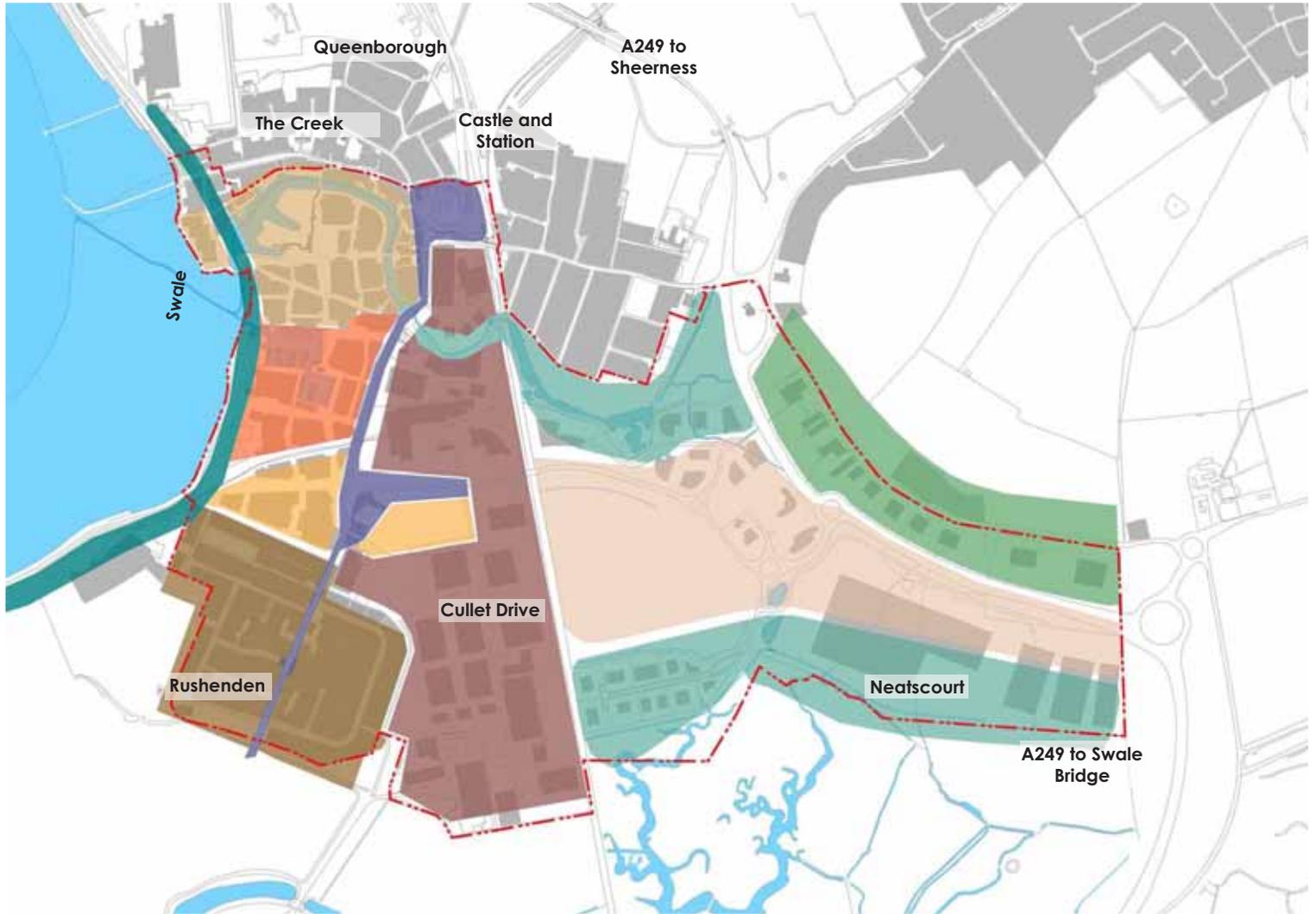
SUDS will bring water into the heart of the scheme and bring the requirements of drainage and sustainable practices into the public realm. It will create opportunities for biodiversity and community involvement in water management.



Education opportunities can be considered with decks and pond dipping areas, bird watching and principles of management for biodiversity. There may be potential for interpretation centres, hides and nature trails.



# Design Concepts & Principles: Character Areas



Plan 4.14 Character areas



# Character Areas

## Principle 10: Creating place and distinctiveness

### Character Areas

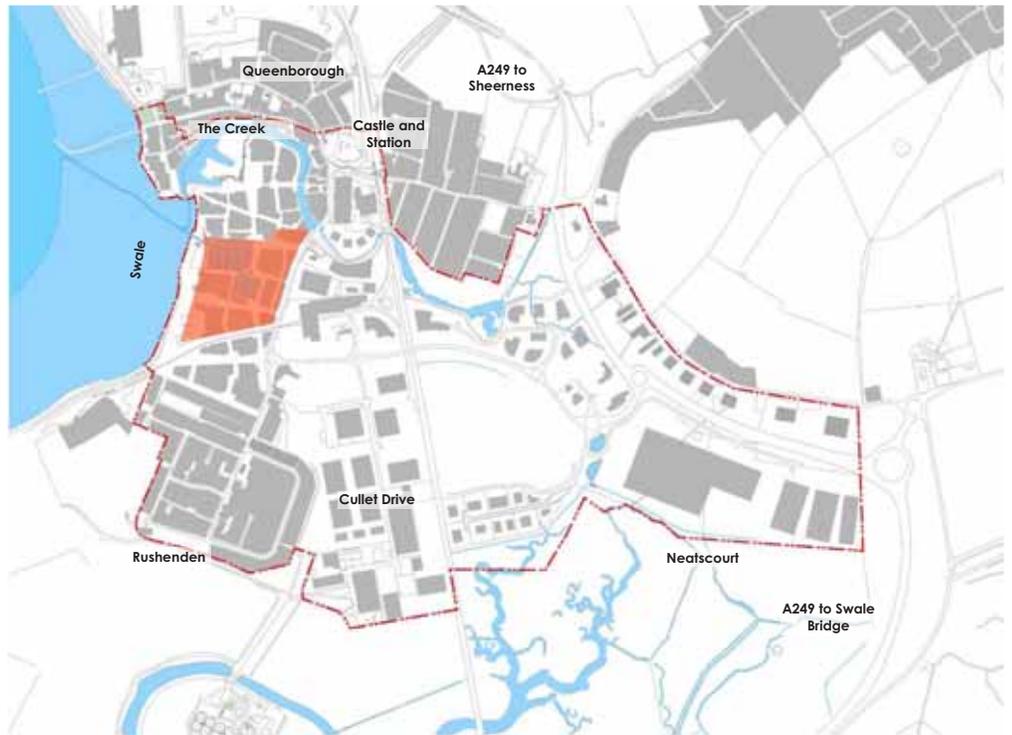
The masterplan is designed to produce a coherent place of character and identity. Within this whole there are a number of identified character areas which respond to certain situations. For instance the sensitive character of the grazing marshes demands an approach that differs from the area around the marina.

A number of character areas have been identified and these are shown on Plan 4.14. The following pages set out some imagery and drawings to suggest the type of built form and open space character envisaged. They are intended as a guide to later detail design proposals and, taken with the masterplan document, should guide this design.

# Design Concepts & Principles

## Marina

- Community waterspace area
- Commercial marina
- Waterside residential development
- Waterside public realm
- Opportunities for commercial, café, restaurant and boats related activities
- Active frontages
- Taller, denser development
- Contemporary design
- Links to waterside park



Plan 4.14.1 Character Areas - Marina



Image of potential waterside cafe



Indicative plan of marina public realm areas

# Character Areas - Marina



*Impression of marina area*



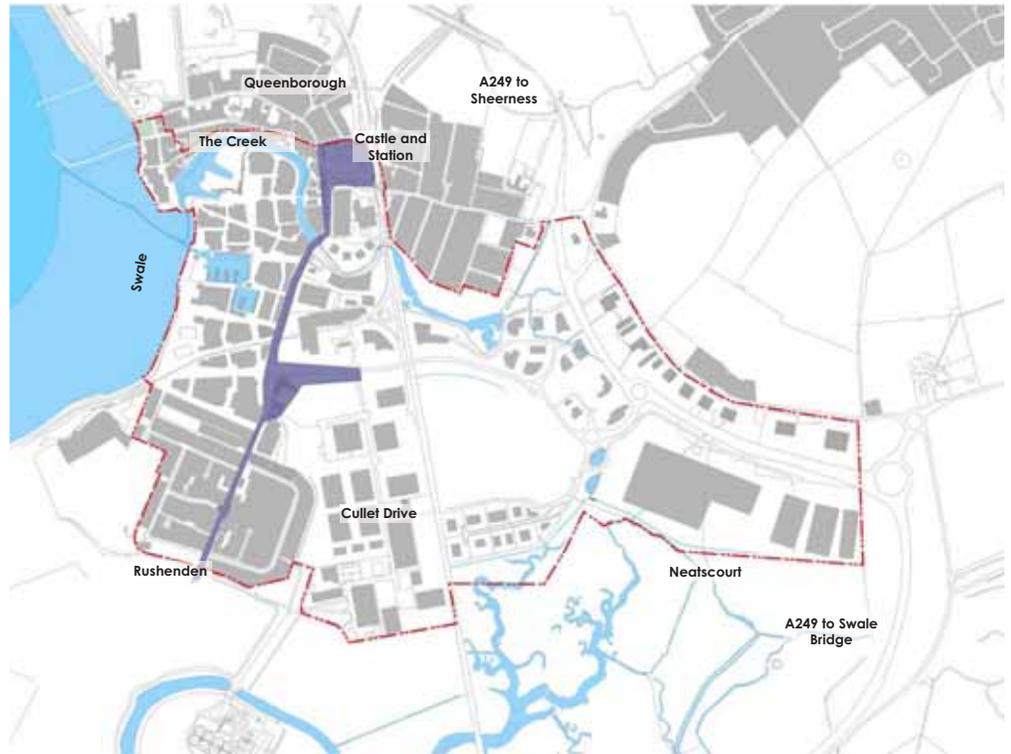
# Design Concepts & Principles

## Rushenden Street

- Human scale
- Active frontages
- Traffic calmed (20mph)
- Pedestrian friendly
- Manual for Streets compliant
- Greened
- Lived on
- Continuous from Queenborough to Rushenden
- Interspersed with public squares



Health Centre - Iwade



Plan 4.14.2 Character Areas - Rushenden Street



Sketch model of re-interpreted Castle site



Indicative plan of Rushenden Square

## Character Areas - Rushenden Street



Artists impression of pedestrian street at Rushenden Square



# Design Concepts & Principles

## Character Areas: Rushenden

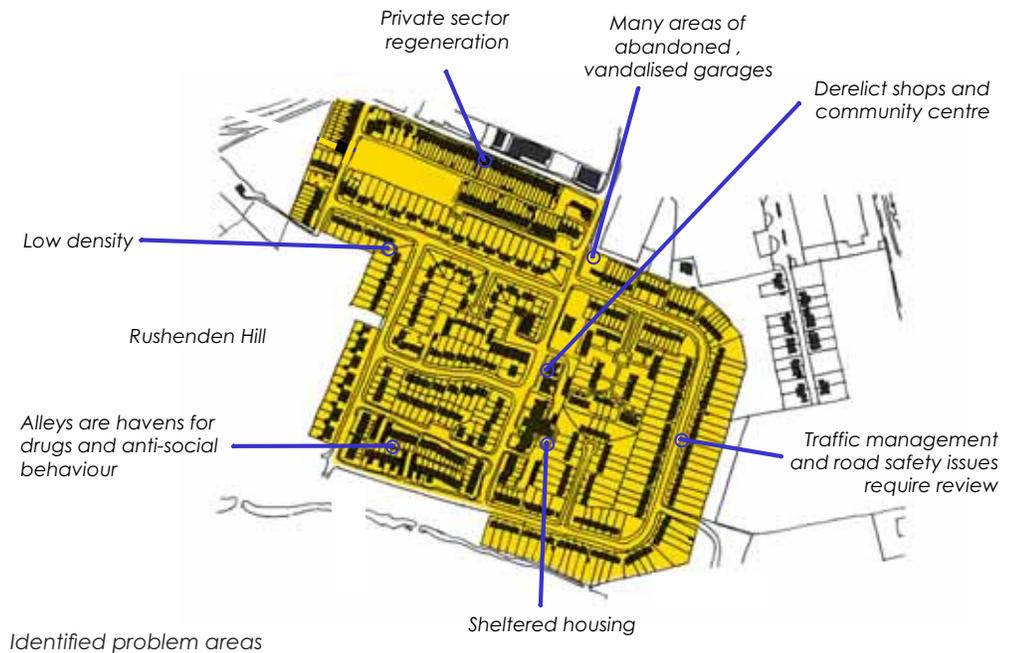
- Streetscape and public realm improvements
- Significant improvements to connectivity with wider area
- Redevelopment opportunities in some areas
- New community and retail facilities in close proximity
- Rushenden Road traffic calmed and integrated into wider proposals
- 

## Rushenden Public Realm

A major concern of strategic partners and the local community is to ensure that the regeneration programme brings together the various parts of Queenborough and Rushenden into a cohesive whole, and to ensure that local people clearly benefit from the opportunities that regeneration will bring. Among the interventions proposed to address this is a programme of environmental and public realm improvements in Rushenden, and £400,000 in Communities & Local Government Thames Gateway funding has been indicatively allocated to support this in 2008-11. This is likely to include improvements to street scene, green and other open space and public art, and will be supported by building and façade improvements funded through other sources. It will be important that all improvements made in the Rushenden area (regardless of funding source) are co-ordinated, in line with the overall master plan strategy and involve effective local consultation.



Plan 4.14.3 Character Areas - Rushenden



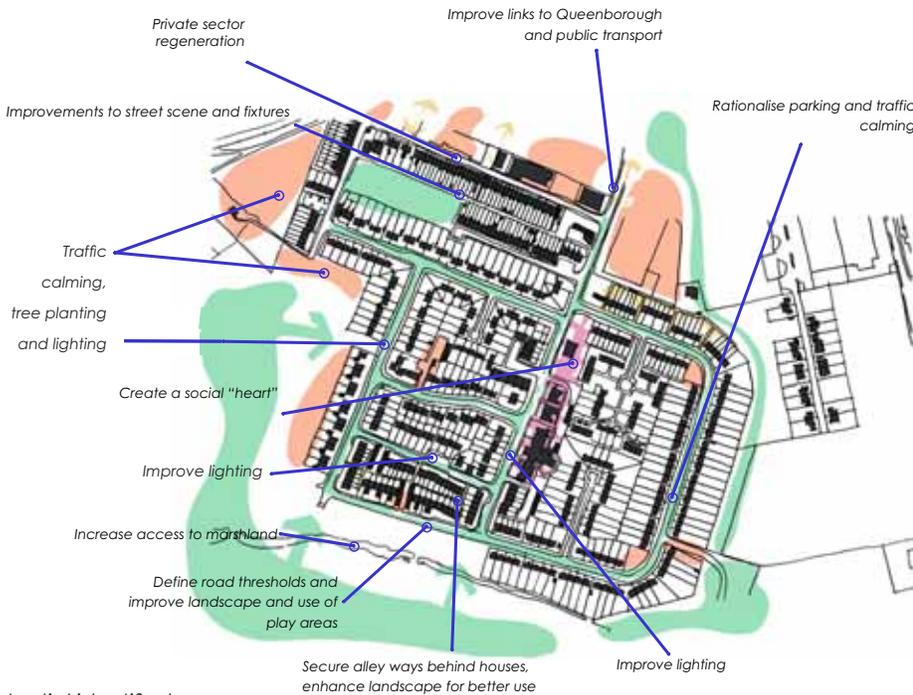
# Character Areas - Rushenden



A beacon for Rushenden Hill



Defining Rushenden, linking along Rushenden Road and creating a heart



Potential identified enhancements



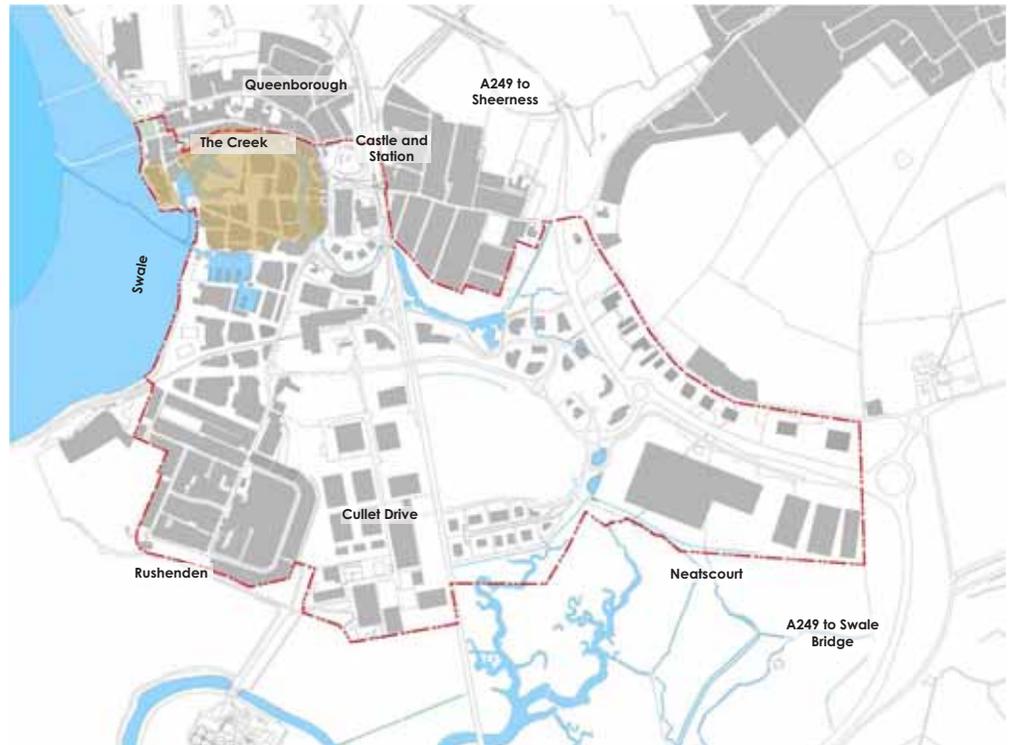
# Design Concepts & Principles

## Creekside

- Housing
- Creekside open space
- Views to Queenborough
- Strong references to the vernacular
- Contemporary design
- Connections across Creek
- Potential for hotel, commercial, café/ restaurant
- Close grained
- Central open space / square

### Note:

We gratefully acknowledge the assistance of ArtLab Architects on their input to this part of the masterplan.



Plan 4.14.4 Character Areas - Creekside



Sketch images of potential development at Creekside (Art lab Architects)

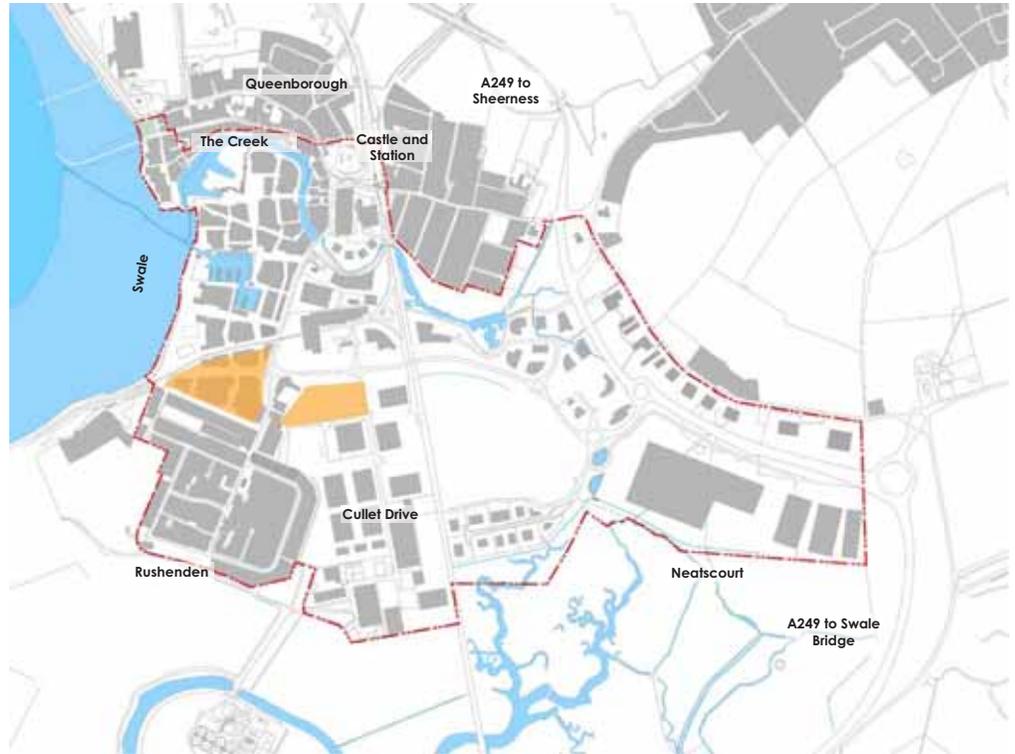
# Character Areas - Creekside



# Design Concepts & Principles

## First Avenue

- Family housing
- Relates and integrates with Rushenden
- Significant public space – Rushenden Square
- Community, commercial and education facilities
- Well connected to recreation and greenspace
- Traffic calmed and shared streets
- New primary school with community use of sports fields and buildings
- New flexible space sports hall for community use



Plan 4.14.5 Character Areas - First Avenue



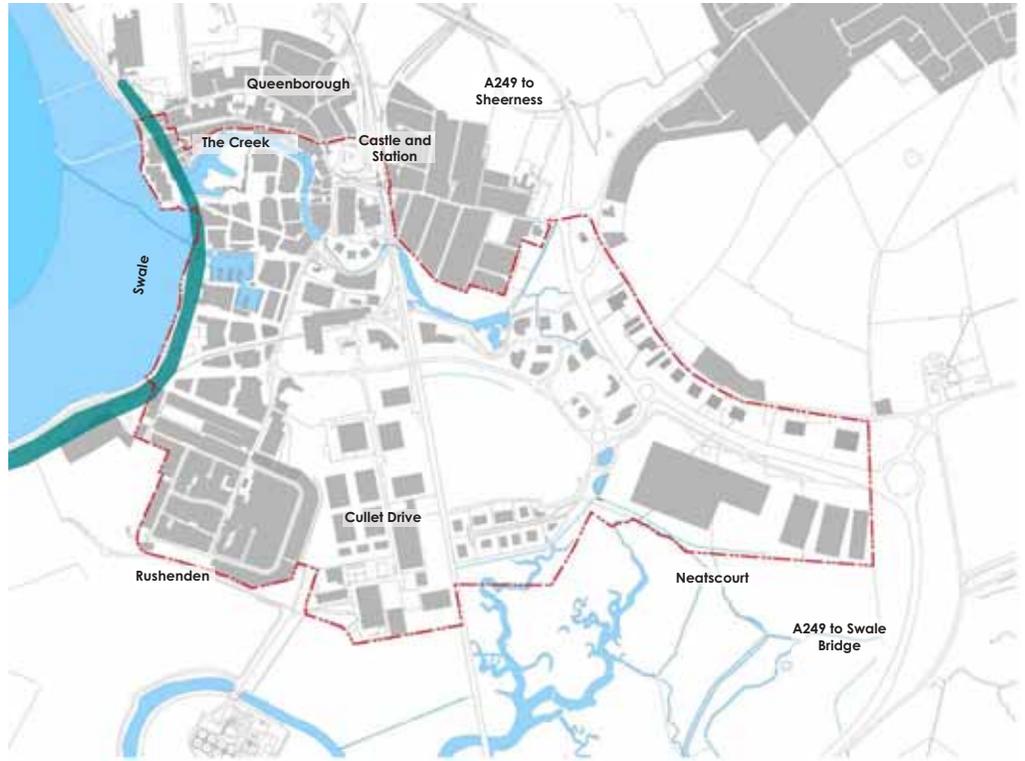
## Character Areas - First Avenue



# Design Concepts & Principles

## Swale Waterfront

- Key connecting route for pedestrians and cyclists
- Waterside greenspace
- Links Rushenden and Rushenden Hill with Queenborough and beyond
- Features opportunities for play, recreation, sport
- Landscape to encourage biodiversity
- Part of Sustainable Urban Drainage system



Plan 4.14.6 Character Areas - Swale Waterfront



Indicative plan of Swale Waterfront Park



# Character Areas - Swale Waterfront



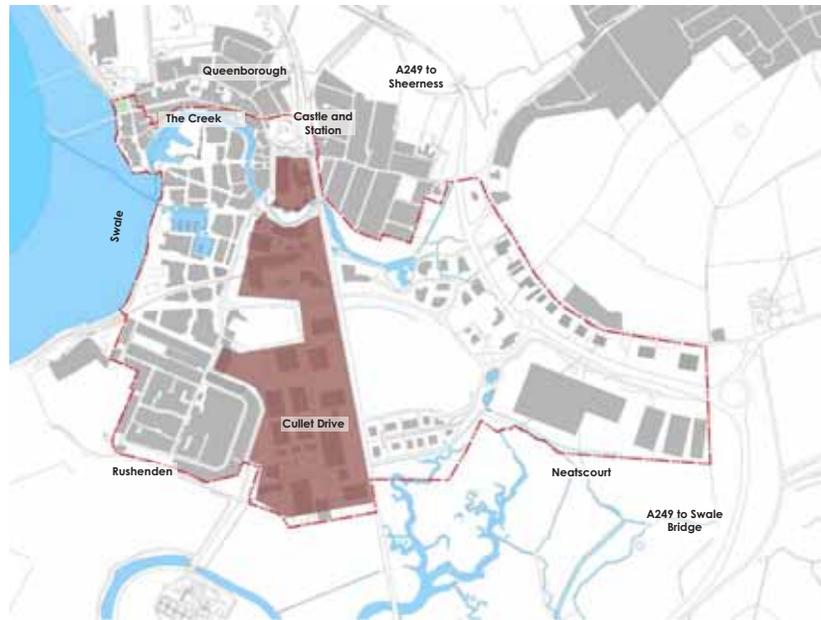
Indicative sketch of Swale Waterfront Park



# Design Concepts & Principles

## Cullet Drive

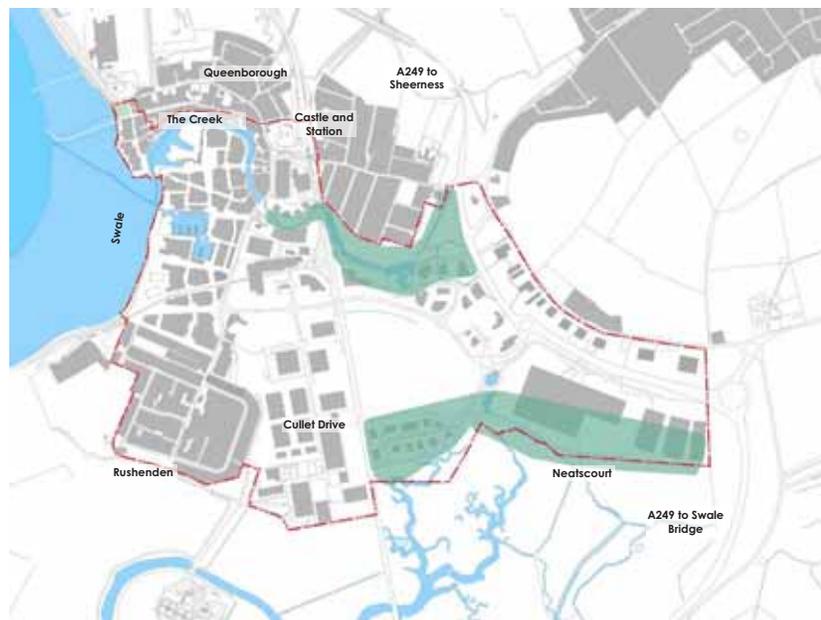
- Existing employment uses continue
- Access improved via link road
- Location for Combined Heat and Power plant
- Employment uses enhanced
- Potential redevelopment opportunities in the long term – employment, mixed, retail and residential



Plan 4.14.7 Character Areas - Cullet Drive

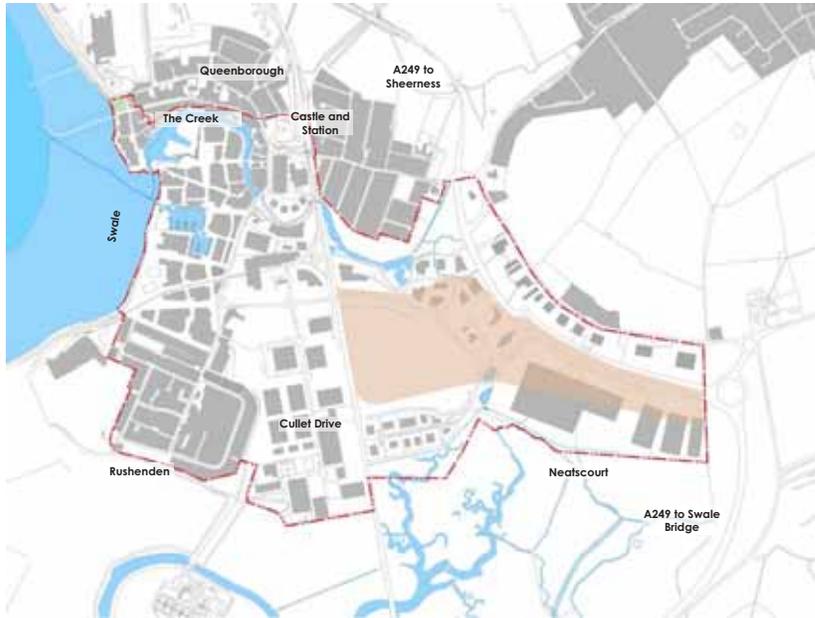
## Marshside

- Sensitive integration with marshland landscape
- Landscape buffer, no lighting
- Biodiversity corridors within scheme
- Sustainable Urban Drainage via swales returns rainwater to marsh and aquifer
- Built form recessive – designed for lowest visual impact
- Landscape treatment to encourage biodiversity and respect visual qualities of setting i.e. few trees at perimeter, managed grassland, swales, bunding to resemble dykes elsewhere on Island



Plan 4.14.8 Character Areas - Marshside

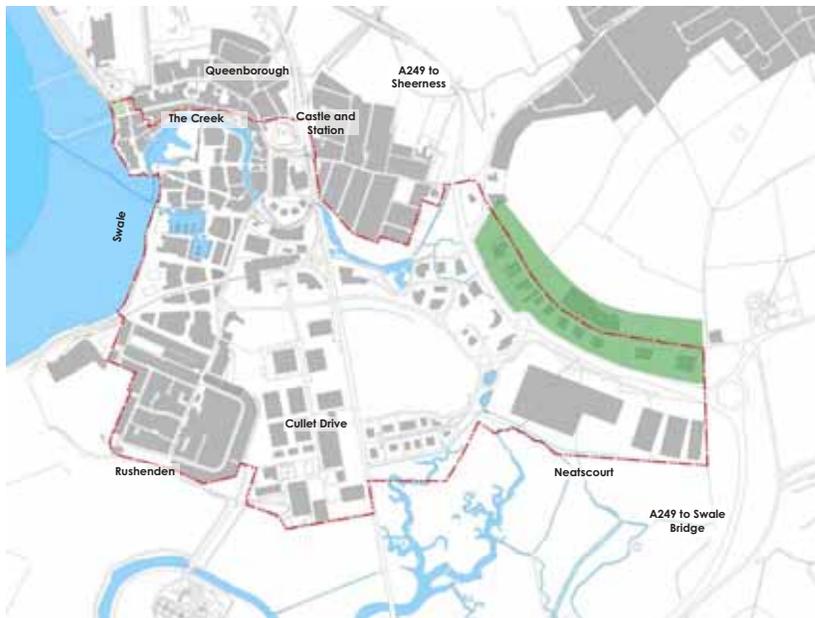
# Character Areas



Plan 4.14.9 Character Areas - Neatscourt

## Neatscourt

- Link road corridor and employment uses
- SUDs drainage systems
- High quality landscape treatment – simple and bold
- Road corridor defined
- Employment uses visual impact controlled
- “Gateway to Queenborough” therefore views contained and controlled
- “Marker” features on link road



Plan 4.14.10 Character Areas - A249 Corridor

## A249 Corridor

- Employment uses
- Smaller units accessed from old A249
- Native tree and shrub landscape
- Dense planting



